Thursday, December 17, 2009

REQUEST NUMBER: 10-990

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:10-990

Per Agreement Number:126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples

according to the schedule indicated:

SHIP DATE: 12/17/2009

TURNAROUND/REPORT DUE: 1/16/2010

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	RE12-10-7352	R	12/16/2009	
		1	RE12-10-7353	R	12/16/2009	
		1	RE12-10-7354	R	12/16/2009	
		1	RE12-10-7355	R	12/16/2009	
		1	RE12-10-7356	R	12/16/2009	
		1	RE12-10-7357	R	12/16/2009	
		1	RE12-10-7358	R	12/16/2009	
		1	RE12-10-7359	R	12/16/2009	
		1	RE12-10-7360	R	12/16/2009	

Thursday, December 17, 2009

REQUEST NUMBER: 10-990

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE12-10-7364	R	12/16/2009	
		1	RE12-10-7366	W	12/16/2009	
	SW-846:6850	1	RE12-10-7352	R	12/16/2009	
		1	RE12-10-7353	R	12/16/2009	
		1	RE12-10-7354	R	12/16/2009	
		1	RE12-10-7355	R	12/16/2009	
		1	RE12-10-7356	R	12/16/2009	
		1	RE12-10-7357	R	12/16/2009	
		1	RE12-10-7358	R	12/16/2009	
		1	RE12-10-7359	R	12/16/2009	
		1	RE12-10-7360	R	12/16/2009	
		1	RE12-10-7364	R	12/16/2009	
		1	RE12-10-7366	W	12/16/2009	
	SW-846:7470A	1	RE12-10-7366	W	12/16/2009	
	SW-846:7471A	1	RE12-10-7352	R	12/16/2009	
		1	RE12-10-7353	R	12/16/2009	
		1	RE12-10-7354	R	12/16/2009	
		1	RE12-10-7355	R	12/16/2009	
		1	RE12-10-7356	R	12/16/2009	
		1	RE12-10-7357	R	12/16/2009	
		1	RE12-10-7358	R	12/16/2009	
		1	RE12-10-7359	R	12/16/2009	
		1	RE12-10-7360	R	12/16/2009	
		1	RE12-10-7364	R	12/16/2009	
	SW-846:9012A	1	RE12-10-7352	R	12/16/2009	
		1	RE12-10-7353	R	12/16/2009	
		1	RE12-10-7354	R	12/16/2009	
		1	RE12-10-7355	R	12/16/2009	

Thursday, December 17, 2009

REQUEST NUMBER: 10-990

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9012A	1	RE12-10-7356	R	12/16/2009	
		1	RE12-10-7357	R	12/16/2009	
		1	RE12-10-7358	R	12/16/2009	
		1	RE12-10-7359	R	12/16/2009	
		1	RE12-10-7360	R	12/16/2009	
		1	RE12-10-7364	R	12/16/2009	
		1	RE12-10-7366	W	12/16/2009	

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Thursday, December 17, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-990C

LOS ALAMOS

NATIONAL LABORATORY

REQUEST NUMBER: 10-990

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 1/16/2010

TURNAROUND REQ'D: 30

General Engineering Laboratories, Inc.,
Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE12-10-7352	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7360	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7358	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7357	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7359	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7356	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7353	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7354	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7355	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7364	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7366	1	POLY	METALS+U-GEL	Nitric Acid	W
RE12-10-7366	1	POLY	SW-846:6850	Ice	W
RE12-10-7366	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:		**Date**	**Time**	**Received By:**		**Date**	**Time**
		12/17/09	3:10				
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: 2484 **EVENT NAME:** 4th Qtr. FY09 - AOC C-12-004 - Threemile Canyon

SAMPLE ID: RE12-10-7366 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		12/16/2009	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1427	SUB-MEDIA:	OTHER	
PRS ID:	C-12-004	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	12-610572	FIELD QC TYPE:	ER	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	UF	
TOP DEPTH:	0	ok	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	ok	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W	ok	EXCAVATED: YES / NO / (NA)		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: (YES) / NO / NA BOREHOLE DECLINATION: -90 BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	METALS+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 RE12-10-7357

SAMPLE COMMENTS: Rinsate

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT) TL McFarland **REVIEWED BY (PRINT)** Leroy A. Lopez

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TL McFarland	12/16/09	(Printed Name) K. Greene	12/16/09
(Signature)	1620	(Signature)	1650
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2484 **EVENT NAME:** 4th Qtr. FY09 - AOC C-12-004 - Threemile Canyon

SAMPLE ID: RE12-10-7364 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		12/16/2009	MEDIA:	QBT3	Alluv
TIME COLLECTED (HH:MM)		1330	SUB-MEDIA:	TUFF 1	NA
PRS ID:	C-12-004	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	UNK	12-610571	FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	0.0	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	0.75	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:** -90 **BOREHOLE DIRECTION:** _____

#	PRIORITY	ORDER tjm 12/16/09	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	~~8082~~+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISOPU+ISOU	1 LITER POLY tjm 12/15/09	None	Y	
1		Met+U+CLO4+CN	~~1 GAL~~ POLY 1 Liter	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE12-10-7355

Brown silty sand, some roots many cobbles

SAMPLE COMMENTS:

NA

LOCATION DESC: 4-3, south of rd

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq$ 22 dpm

$\beta\gamma \leq$ 2180 dpm

PID ambient reading 0.0 / 1.0 ppm

HE negative

COLLECTED BY (PRINT) TLMcFarland **REVIEWED BY (PRINT)** Larry A. López

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	12/16/09	(Printed Name) K. Bruce	12/16/09
(Signature) Tracy L.	1620	(Signature)	4:20
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2484 **EVENT NAME:** 4th Qtr. FY09 - AOC C-12-004 - Threemile Canyon

SAMPLE ID: RE12-10-7360 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		12/16/2009	MEDIA:	OBT3	ok
TIME COLLECTED (HH:MM)		1458	SUB-MEDIA:	TUFF I	
PRS ID:	C-12-004	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	12-610573	ok	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	2.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2.5	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	OK	EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / (NO) / NA

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** -90 **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISOPU+ISOU	1 LITER POLY tjm 12/15/09	None	Y	
1	↓	Met+U+CLO4+CN	~~1 GAL~~ POLY 1 Liter	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: Gray dry tuff

SAMPLE COMMENTS: NA

LOCATION DESC: 4.4 west side of AOC

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 27 dpm

βγ ≤ 2220 dpm

PID ambient reading 0.0 / 0.0 ppm

COLLECTED BY (PRINT) TLMcFarland **REVIEWED BY (PRINT)** Nickolas Gallegos

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	12/16/09 1620	(Printed Name) K. Greene	12/16/09 4:20
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2484 **EVENT NAME:** 4th Qtr. FY09 - AOC C-12-004 - Threemile Canyon

SAMPLE ID: RE12-10-7359 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		12/16/2009	MEDIA:	OBT3	Alh
TIME COLLECTED (HH:MM)		1449	SUB-MEDIA:	TUFF 1	NA
PRS ID:	C-12-004	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610573	ok	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	0.5	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	B	S	EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / (NO) / NA

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** -90 **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISOPU+ISOU	1 LITER POLY tjm 12/15/09	None	Y	
1	↓	Met+U+CLO4+CN	~~1 GAL~~ POLY 1 Liter	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 dry sandy silt, some organics, roots, and cobbles

SAMPLE COMMENTS: NA

LOCATION DESC: 4-4 West side of AOC

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq$ 38 dpm

$\beta\gamma \leq$ 2060 dpm

PID ambient reading 0.0 / 0.4 ppm

HE negative

COLLECTED BY (PRINT) TLMcFarland **REVIEWED BY (PRINT)** Nickolas Gallegos

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	12/16/09	(Printed Name) K. Green	12/16/09
(Signature) Tracy	1620	(Signature)	1720
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2484 **EVENT NAME:** 4th Qtr. FY09 - AOC C-12-004 - Threemile Canyon

SAMPLE ID: RE12-10-7358 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		12/16/2009	MEDIA:	OBT3	Alih
TIME COLLECTED (HH:MM)		1430	SUB-MEDIA:	TUFF 1	NA
PRS ID:	C-12-004	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610572	↓	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	2.0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2.5	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:** -90 **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY TAM 12/15/09	None	Y	
1	↓	Met+U+CLO4+C N	~~1 GAL~~ POLY 1 Liter	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 dry sandy silt

SAMPLE COMMENTS: NA

LOCATION DESC: 4-2, south of rd

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 60 dpm PID ambient / reading = 0.0 ppm / ~~0.0 ppm~~ 5.6 ppm TAM 12/16/09

BY ≤ 2320

COLLECTED BY (PRINT) Tracy A. Lopez **REVIEWED BY (PRINT)** TLMcFarland

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	12/16/09	(Printed Name) K. Gurule	12/16/09
(Signature) Tracy	1620	(Signature)	4:20
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2484 **EVENT NAME:** 4th Qtr. FY09 - AOC C-12-004 - Threemile Canyon

SAMPLE ID: RE12-10-7357 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		12/16/2009	MEDIA:	QBT3	Alluvium
TIME COLLECTED (HH:MM)		1410	SUB-MEDIA:	TUFF 1	NA
PRS ID:	C-12-004	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610572	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	0.75	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:** -90 **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISOPU+ISOU	1 LITER POLY ~~qt~~ 12/15/09	None	Y	
1	↓	Met+U+CLO4+CN	~~1 GAL~~ POLY 1 Liter	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 dry, sandy, silty soil, few cobbles, some roots

SAMPLE COMMENTS: NA

LOCATION DESC: 4-2 south of rd

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 6 dpm

BY ≤ 1976 dpm

PID ambient reading 0.0 / 4.4 ppm

HE negative

COLLECTED BY (PRINT) TLMcFarland **REVIEWED BY (PRINT)** Lorena A. Lopez

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	12/16/09	(Printed Name) K. Greene	12/16/09
(Signature)	1620	(Signature)	1620
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2484 **EVENT NAME:** 4th Qtr. FY09 - AOC C-12-004 - Threemile Canyon

SAMPLE ID: RE12-10-7356 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		12/16/2009 12/16/09 12/16/09	MEDIA:	OBT3	ok
TIME COLLECTED (HH:MM)		1350	SUB-MEDIA:	TUFF 1	
PRS ID:	C-12-004	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	12-610571	ok	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	2.0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	2.5	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	ok	EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES (NO) / NA

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** -90 **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISOPU+ISOU	1 LITER POLY 12m 12/15/09	None	Y	
1	↓	Met+U+CLO4+CN	~~1 GAL~~ POLY 1 Liter	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: Pinkish gray dry tuff

SAMPLE COMMENTS: NA

LOCATION DESC: 4-3, south of rd

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq 33$ dpm PID reading 1.5 ppm / ambient 0.2 ppm

$B\gamma \leq 2220$ dpm

COLLECTED BY (PRINT) TL McFarland **REVIEWED BY (PRINT)** Larry A. Lopez

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	12/16/09	(Printed Name) K. Gruel	12/16/09
(Signature) Tracy Tm	1620	(Signature)	1720
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2484 **EVENT NAME:** 4th Qtr. FY09 - AOC C-12-004 - Threemile Canyon

SAMPLE ID: RE12-10-7355 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		12/16/2009	MEDIA:	QBT3	All h
TIME COLLECTED (HH:MM)		1330	SUB-MEDIA:	TUFF 1	NA
PRS ID:	C-12-004	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610571	ok	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	B1+	FIELD PREP:	NA	
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	0.75	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: -90 BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISOPU+ISOU	1 LITER POLY 12H 12/15/09	None	Y	
1		Met+U+CLO4+CN	~~1 GAL~~ POLY 1 Liter	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, many cobbles

FD RE12-10-7364

SAMPLE COMMENTS: NA

LOCATION DESC: 4-3, south of rd

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 22 dpm PID ambient reading 0.0 / 10 ppm

βγ ≤ 2180 dpm HE negative

COLLECTED BY (PRINT) TLMcFarland **REVIEWED BY (PRINT)** Leary A. Lopez

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	12/16/09	(Printed Name) K. Greene	12/16/09
(Signature) Tracy McFarland	1620	(Signature)	4:20
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2484 **EVENT NAME:** 4th Qtr. FY09 - AOC C-12-004 - Threemile Canyon

SAMPLE ID: RE12-10-7354 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		12/16/2009	MEDIA:	QBT3	ok
TIME COLLECTED (HH:MM)		1240	SUB-MEDIA:	TUFF 1	↓
PRS ID:	C-12-004	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	12-610570	↓	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	
TOP DEPTH:	0	1.35	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2.70	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	B	ok	EXCAVATED: YES (NO) / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES (NO) / NA

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** -90 **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISOPU+ISOU	1 LITER POLY TJM 12/15/09	None	Y	
1	↓	Met+U+CLO4+CN	~~1 GAL~~ POLY 1 Liter	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: Pinkish gray dry stiff

SAMPLE COMMENTS: NA

LOCATION DESC: 4-5, south of rd ~15 ft

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 27 dpm PID ambient reading 0.0 / 0.7 ppm

βγ ≤ 2290 dpm

COLLECTED BY (PRINT) Lanny A. Lopez **REVIEWED BY (PRINT)** TL McFarland

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TL McFarland	12/16/09	(Printed Name) K. Greene	12/16/09
(Signature) Tracy Farland	1620	(Signature)	1626
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2484 **EVENT NAME:** 4th Qtr. FY09 - AOC C-12-004 - Threemile Canyon

SAMPLE ID: RE12-10-7353 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		12/16/2009	MEDIA:	OBT3	Alluh
TIME COLLECTED (HH:MM)		1158	SUB-MEDIA:	TUFF 1	NA
PRS ID:	C-12-004	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	12-610570	OK	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	↓
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0.75	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: ~~NT~~ -90 (TJM 12/16/09) BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISOPU+ISOU	1 LITER POLY (TJM 12/15/09)	None	Y	
1	↓	Met+U+CLO4+CN	~~1 GAL~~ POLY 1 Liter	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: Reddish brown damp silty clay, few roots, and numerous cobbles (TJM 12/16/09)

SAMPLE COMMENTS: NA

LOCATION DESC: 4-5, south of rd ~15 ft

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 22 dpm PID ambient reading 0.0 / 0.6 ppm

βγ ≤ 1959 dpm H.E negative

COLLECTED BY (PRINT) TLMcFarland **REVIEWED BY (PRINT)** Lorey A. Lopez

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	12/16/09	(Printed Name) K. Greene	12/16/09
(Signature) Tracy McFarland	1620	(Signature)	1720
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2484 **EVENT NAME:** 4th Qtr. FY09 - AOC C-12-004 - Threemile Canyon

SAMPLE ID: RE12-10-7352 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		12/16/2009	MEDIA:	QBT3	All h
TIME COLLECTED (HH:MM)		11:10	SUB-MEDIA:	TUFF 1	NA
PRS ID:	C-12-004	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610569	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	BH	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 **WATER FLOWING:** YES / (NO) / NA

BOREHOLE: (YES) / NO / NA **BOREHOLE DECLINATION:** -90 **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Regular	AM241+GS+ISO PU+ISOU	1 LITER POLY pm 12/15/09	None	Y	
1	↓	Met+U+CLO4+C N	~~1 GAL~~ POLY 1 Liter	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	
1		8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	

SAMPLE DESC: Light brown fine sandy silt

SAMPLE COMMENTS: NA

LOCATION DESC: 4-1, 4 ft south of road.

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 38 dpm PID ambient reading 0.0 / 0.0 ppm

BY ≤ 2300 dpm

COLLECTED BY (PRINT) TLMcFarland **REVIEWED BY (PRINT)** Nicolas Gallegos

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	12/16/09	(Printed Name) K. Grieve	12/16/09
(Signature) Tracy McFarland	1620	(Signature)	4:20
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

DATA VALIDATION COVER SHEET

5121-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-990 VALIDATION DATE: 02/05/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Kevin A. Lambert ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

☐ TPH-GRO	☐ HIGH EXPLOSIVES	☐ DIOXIN FURANS	☒ LCMSMS PERCHLORATES
☐ TPH-DRO	☐ METALS	☐ PCB CONGENERS	☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
☐ GENERAL CHEMISTRY	☐ RADIOCHEMISTRY	☐ LCMSMS HIGH EXPLOSIVES	

☐ OTHER (DESCRIBE): _____

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	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):

None

Reviewed by: ETM Level: 1 Date: 2/9/10

VALIDATOR'S SIGNATURE: Kevin A Lambert DATE: 02/05/10

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST

5121-2

LC/MS/MS Perchlorate Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The Internal Standard (IS) relativer retention time has shifted by more than 0.98 to 1.02 seconds.	R, PERC0	J, PERC0
☐	☒	☐	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
☐	☐	☒	3. The IS are count is <25% of the expected value.	UJ, PERC1a	J, PERC1a
☐	☐	☒	4. The IS area count is <70% but >25% of the average of that obtained from the calibration standards.	UJ, PERC1b	J, PERC1b
☐	☐	☒	5. The IS area count is >130% of the average of that obtained from the calibration standards.	UJ, PERC1c	J, PERC1c
☐	☐	☒	6. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PREC1d	R, PERC1d
☐	☒	☐	7. The sample result is ≤ 5X the concentration of the related analyte in the method blank.	U, PERC4	N/A
☐	☒	☐	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
☐	☒	☐	9. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, PERC4d	N/A
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.99.	UJ, R, PERC7a	J, PERC7a

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

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. The ICV and/or CCV were recovered outside the method limits.	UJ, R, PERC7c	J, PERC7c
☐	☒	☐	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, R, PERC7d	J, PERC7d
☐	☒	☐	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
☐	☒	☐	16. The affected analyte is considered not detected because ion abundance ratios did not meet specifications.	N/A	R, PERC8
☐	☒	☐	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
☐	☒	☐	18. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ PERC9	J-, PERC9
☐	☒	☐	19. The holding time was > 2 times the applicable holding time requirement.	R, PERC9a	J-, PERC9a
☐	☒	☐	20. The LCS percent recovery was <10%. Follow the external laboratory limits.	R, PERC12	J-, PERC12
☐	☒	☐	21. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.	UJ, PERC12a	J-, PERC12a
☐	☒	☐	22. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, PERC12b
☐	☒	☐	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
☐	☒	☐	24. The MS/MSD percent recovery was <10%	R, PERC12d	R, PERC12d
☐	☒	☐	25. The MS/MSD percent recovery was >10% but <75%	UJ, PERC12e	J, PERC12e
☐	☒	☐	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 Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	27. The MS/MSD relative percent difference was >20%.	UJ, PERC12g	J, PERC12g
☐	☐	☒	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
☐	☐	☒	29. The sample was diluted because target analytes were > the initial verification calibration.	UJ, PERC15a	J, PERC15a
☐	☐	☒	30. The Contract Required Detection Limit check standard (CRI) sample did not pass method-acceptance limits.	UJ, R, PERC16	J, PERC16
☐	☐	☒	31. The Interference Check Sample was not within ±20% of the known value.	UJ, PERC16a	J, PERC16a
☐	☐	☒	32. The required CRI sample information is missing. Contact the SMO or external laboratory for information.	R, PERC16c	R, PERC16c
☐	☒	☐	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
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, PERC88	J, PERC88

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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: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7352

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270001

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 90.2

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.554	2.22	1.17	ug/kg	J	1	24-DEC-09 15:02	per1224028a
	Perchlorate Isotope Ratio			3.02			1	24-DEC-09 15:02	per1224028a
14797-73-0	Perchlorate-101	.554	2.22	1.15	ug/kg	J	1	24-DEC-09 15:02	per1224028a
	Perchlorate-O(18)			6.02	ug/kg		1	24-DEC-09 15:02	per1224028a

^ 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 =

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

KAL
02/05/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7360

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270002

Date Filtered: 22-DEC-09

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	.563	2.25	0.563	ug/kg	U	1	24-DEC-09 15:23	per1224031a
	Perchlorate Isotope Ratio						1	24-DEC-09 15:23	per1224031a
14797-73-0	Perchlorate-101	.563	2.25	0.563	ug/kg	U	1	24-DEC-09 15:23	per1224031a
	Perchlorate-O(18)			5.69	ug/kg		1	24-DEC-09 15:23	per1224031a

^ 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 =

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

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02/05/10

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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: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7358

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270003

Date Filtered: 22-DEC-09

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	.562	2.25	1.04	ug/kg	J	1	24-DEC-09 15:30	per1224032a
	Perchlorate Isotope Ratio			2.81			1	24-DEC-09 15:30	per1224032a
14797-73-0	Perchlorate-101	.562	2.25	1.10	ug/kg	J	1	24-DEC-09 15:30	per1224032a
	Perchlorate-O(18)			6.23	ug/kg		1	24-DEC-09 15:30	per1224032a

^ 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 =

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

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02/05/10

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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: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7357

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270004

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.558	2.23	0.558	ug/kg	U	1	24-DEC-09 15:38	per1224033a
	Perchlorate Isotope Ratio						1	24-DEC-09 15:38	per1224033a
14797-73-0	Perchlorate-101	.558	2.23	0.558	ug/kg	U	1	24-DEC-09 15:38	per1224033a
	Perchlorate-O(18)			6.11	ug/kg		1	24-DEC-09 15:38	per1224033a

^ 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 =

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

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02/05/10

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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: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7359

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270005

Date Filtered: 22-DEC-09

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	.565	2.26	0.565	ug/kg	U	1	24-DEC-09 15:45	per1224034a
	Perchlorate Isotope Ratio						1	24-DEC-09 15:45	per1224034a
14797-73-0	Perchlorate-101	.565	2.26	0.565	ug/kg	U	1	24-DEC-09 15:45	per1224034a
	Perchlorate-O(18)			6.11	ug/kg		1	24-DEC-09 15:45	per1224034a

^ 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 =

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

KAL
02/05/10

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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: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7356

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270006

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.557	2.23	1.20	ug/kg	J	1	24-DEC-09 16:13	per1224038a
	Perchlorate Isotope Ratio			2.84			1	24-DEC-09 16:13	per1224038a
14797-73-0	Perchlorate-101	.557	2.23	1.26	ug/kg	J	1	24-DEC-09 16:13	per1224038a
	Perchlorate-O(18)			6.04	ug/kg		1	24-DEC-09 16:13	per1224038a

^ 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 =

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

KAL
02/05/10

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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: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7353

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270007

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 82

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.608	2.43	0.608	ug/kg	U	1	24-DEC-09 16:20	per1224039a
	Perchlorate Isotope Ratio						1	24-DEC-09 16:20	per1224039a
14797-73-0	Perchlorate-101	.608	2.43	0.608	ug/kg	U	1	24-DEC-09 16:20	per1224039a
	Perchlorate-O(18)			6.51	ug/kg		1	24-DEC-09 16:20	per1224039a

^ 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 =

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

KAL
02/05/10

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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: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7354

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270008

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 93.1

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.537	2.15	0.537	ug/kg	U	1	24-DEC-09 16:27	per1224040a
	Perchlorate Isotope Ratio						1	24-DEC-09 16:27	per1224040a
14797-73-0	Perchlorate-101	.537	2.15	0.537	ug/kg	U	1	24-DEC-09 16:27	per1224040a
	Perchlorate-O(18)			5.33	ug/kg		1	24-DEC-09 16:27	per1224040a

^ 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 =

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

KAL
02/05/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7355

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270009

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.574	2.3	0.574	ug/kg	U	1	24-DEC-09 16:34	per1224041a
	Perchlorate Isotope Ratio						1	24-DEC-09 16:34	per1224041a
14797-73-0	Perchlorate-101	.574	2.3	0.574	ug/kg	U	1	24-DEC-09 16:34	per1224041a
	Perchlorate-O(18)			5.91	ug/kg		1	24-DEC-09 16:34	per1224041a

^ 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 =

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

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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: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7364

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270010

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 88

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.569	2.28	0.569	ug/kg	U	1	24-DEC-09 16:41	per1224042a
	Perchlorate Isotope Ratio						1	24-DEC-09 16:41	per1224042a
14797-73-0	Perchlorate-101	.569	2.28	0.569	ug/kg	U	1	24-DEC-09 16:41	per1224042a
	Perchlorate-O(18)			5.83	ug/kg		1	24-DEC-09 16:41	per1224042a

^ 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 =

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

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02/05/10

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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: 935076

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE12-10-7366

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990-1

GEL Sample ID: 243272001

Date Filtered: 21-DEC-09

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	21-DEC-09 16:20	per1221041a
	Perchlorate Isotope Ratio						1	21-DEC-09 16:20	per1221041a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	21-DEC-09 16:20	per1221041a
	Perchlorate-O(18)			0.458	ug/L		1	21-DEC-09 16:20	per1221041a

^ 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 =

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

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02/05/10

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DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-990 VALIDATION DATE: 02/05/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Kevin A. Lambert ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

☐ TPH-GRO	☐ HIGH EXPLOSIVES	☐ DIOXIN FURANS	☐ LCMSMS PERCHLORATES
☐ TPH-DRO	☒ METALS	☐ PCB CONGENERS	☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
☐ GENERAL CHEMISTRY	☐ RADIOCHEMISTRY	☐ LCMSMS HIGH EXPLOSIVES	

☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

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

1. In the water MB, Sb was detected. The associated sample result was a ND and, thus, was not qualified. In the soil MB, Sb was detected. The Sb result for sample RE12-10-7357 was ≤5X the MB concentration and, thus, was qualified U,I4. All other associated sample results were NDs and, thus, were not qualified.
2. In the water ICB/CCB, Mg and Tl were detected. All associated sample results were NDs and, thus, were not qualified. In the soil ICB/CCB, Sb, K, and U were detected. The Sb result for sample -7357 and all associated U results were detects ≤5X the greatest ICB/CCB concentration and, thus, were qualified U,I4b. All other associated sample results were either NDs or detects >5X the greatest ICB/CCB concentration and, thus, were not qualified.
3. In the FR blank, K and Na were detected. All associated sample results were detects >5X the FR blank concentrations and, thus, were not qualified.
4. The soil MS %Rs for Sb, Ba, and Ca were < the laboratory LAL but ≥10%, and the soil MS %Rs for Al, Fe, Mg, and K were > the laboratory UAL. However, the associated parent sample concentrations for Al, Ca, Fe, Mg, and K were >4X the spike concentrations. Thus, no sample data were qualified as result, based on professional judgment. The associated Sb results were NDs or qualified NDs and, thus, were qualified UJ,I6a. The associated Ba results were detects and, thus, were qualified J-,I6a.
5. It should be noted that the parent samples for the water ICP and ICP-MS matrix QC analyses were performed on LANL samples from other RNs, and the parent sample raw data were not included in the data package. No sample data were qualified.

Reviewed by: ETM Level: 1 Date: 2/9/10

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

VALIDATOR'S SIGNATURE: Kevin A Lambert DATE: 02/05/10

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

Los Alamos NATIONAL LABORATORY

Yes (Check One)	No (Check One)	N/A (Check One)		Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, I16	R, I16
☐	☐	☒	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
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, I16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, I16c	R, I16c
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	9. The initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, I7c	J, I7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	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
☐	☒	☐	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 Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. Metals interference check sample percent recovery value is ≥50% and <80%	UJ, I2a	J-, I2a
☐	☒	☐	14. Metals interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☒	☐	15. Metals interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☒	☐	☐	16. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A
☐	☒	☐	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
☒	☐	☐	18. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	19. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☒	☐	20. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	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
☐	☒	☐	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☒	☐	☐	23. The associated matrix spike recovery was <the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J+, I6a
☒	☐	☐	24. The associated matrix spike recovery was > 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 Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	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
☐	☒	☐	26. The sample and the duplicate sample results were ≥5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples.	UJ, I10a	J, I10a
☐	☒	☐	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
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	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
☐	☒	☐	30. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	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
☐	☐	☒	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 Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	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
☐	☐	☒	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
☐	☐	☒	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
☐	☐	☒	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
☐	☐	☒	37. Serial dilution sample was not analyzed with the samples.	UJ, I18a	J, I18
☐	☐	☒	38. The sample result was reported as detected between the IDL and the EDL.	N/A	J, I1
☐	☒	☐	39. Duplicate, dilution, or reanalysis.	UJ, I88	J, I88
☒	☐	☐	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
☐	☒	☐	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: 10-990 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243270001 **BASIS:** Dry Weight **DATE COLLECTED** 16-DEC-09

CLIENT ID: RE12-10-7352 **LEVEL:** Low **DATE RECEIVED** 18-DEC-09

MATRIX: SOIL **%SOLIDS:** 90.2

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		7450	21900	21900	1	P	HSC	01/05/10 16:46	010510-1	935381
7440-36-0	Antimony UJ,I6a	1100	ug/Kg	UN	361	1100	1100	1	P	HSC	01/05/10 16:46	010510-1	935381
7440-38-2	Arsenic	2.07	mg/kg		0.222	1.11	1.11	2	MS	SKJ	01/06/10 18:16	100106-3	935378
7440-39-3	Barium J-,I6a	166000	ug/Kg	N	110	548	548	1	P	HSC	01/05/10 16:46	010510-1	935381
7440-41-7	Beryllium	1.09	mg/kg		0.0222	0.111	0.111	2	MS	SKJ	01/07/10 11:58	100107-4	935378
7440-43-9	Cadmium	548	ug/Kg	U	110	548	548	1	P	HSC	01/05/10 16:46	010510-1	935381
7440-70-2	Calcium	2200000	ug/Kg		8760	27400	27400	1	P	HSC	01/05/10 16:46	010510-1	935381
7440-47-3	Chromium	11800	ug/Kg		164	548	548	1	P	HSC	01/05/10 16:46	010510-1	935381
7440-48-4	Cobalt	4920	ug/Kg		164	548	548	1	P	HSC	01/05/10 16:46	010510-1	935381
7440-50-8	Copper	7690	ug/Kg		329	1100	1100	1	P	HSC	01/05/10 16:46	010510-1	935381
7439-89-6	Iron	15100000	ug/Kg		8760	27400	27400	1	P	HSC	01/05/10 16:46	010510-1	935381
7439-92-1	Lead	11100	ug/Kg		274	1100	1100	1	P	HSC	01/05/10 16:46	010510-1	935381
7439-95-4	Magnesium	2610000	ug/Kg		9310	32900	32900	1	P	HSC	01/05/10 16:46	010510-1	935381
7439-96-5	Manganese	222000	ug/Kg	*	219	1100	1100	1	P	HSC	01/05/10 16:46	010510-1	935381
7439-97-6	Mercury	19.7	ug/kg		4.31	12.7	12.7	1	AV	JXL1	01/08/10 10:16	010810S1-5	935670
7440-02-0	Nickel	8.15	mg/kg		0.111	0.443	0.443	2	MS	SKJ	01/07/10 11:58	100107-4	935378
7440-09-7	Potassium	2490000	ug/Kg		7010	27400	27400	1	P	HSC	01/05/10 16:46	010510-1	935381
7782-49-2	Selenium	1.11	mg/kg	U	0.554	1.11	1.11	2	MS	SKJ	01/06/10 18:16	100106-3	935378
7440-22-4	Silver	557	ug/Kg		110	548	548	1	P	HSC	01/05/10 16:46	010510-1	935381
7440-23-5	Sodium	283000	ug/Kg		7670	27400	27400	1	P	HSC	01/05/10 16:46	010510-1	935381
7440-28-0	Thallium	0.225	mg/kg		0.0665	0.222	0.222	2	MS	SKJ	01/06/10 18:16	100106-3	935378
7440-61-1	Uranium U,I4b	0.596	mg/kg		0.0146	0.0443	0.0443	2	MS	SKJ	01/06/10 18:16	100106-3	935378
7440-62-2	Vanadium	25000	ug/Kg		110	548	548	1	P	HSC	01/05/10 16:46	010510-1	935381
7440-66-6	Zinc	28800	ug/Kg		361	1100	1100	1	P	HSC	01/05/10 16:46	010510-1	935381

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
935378	935377	SW846 3050B	0.5	g	50	mL	12/21/09	BXA1
935381	935380	SW846 3050B	0.506	g	50	mL	12/21/09	BXA1
935670	935669	SW846 7471A Prep	0.525	g	30	mL	01/07/10	AXG2

KAL
02/05/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-990 CONTRACT: LANL01004 METHOD TYPE: SW846

SAMPLE ID: 243270002 BASIS: Dry Weight DATE COLLECTED 16-DEC-09

CLIENT ID: RE12-10-7360 LEVEL: Low DATE RECEIVED 18-DEC-09

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	17100000	ug/Kg		7550	22200	22200	1	P	HSC	01/05/10 17:21	010510-1	935381
7440-36-0	Antimony UJ,I6a	1110	ug/Kg	UN	366	1110	1110	1	P	HSC	01/05/10 17:21	010510-1	935381
7440-38-2	Arsenic	2.19	mg/kg		0.225	1.12	1.12	2	MS	SKJ	01/06/10 18:59	100106-3	935378
7440-39-3	Barium J-,I6a	143000	ug/Kg	N	111	555	555	1	P	HSC	01/05/10 17:21	010510-1	935381
7440-41-7	Beryllium	1.2	mg/kg		0.0225	0.112	0.112	2	MS	SKJ	01/06/10 18:59	100106-3	935378
7440-43-9	Cadmium	555	ug/Kg	U	111	555	555	1	P	HSC	01/05/10 17:21	010510-1	935381
7440-70-2	Calcium	2300000	ug/Kg		8880	27700	27700	1	P	HSC	01/05/10 17:21	010510-1	935381
7440-47-3	Chromium	11600	ug/Kg		166	555	555	1	P	HSC	01/05/10 17:21	010510-1	935381
7440-48-4	Cobalt	6490	ug/Kg		166	555	555	1	P	HSC	01/05/10 17:21	010510-1	935381
7440-50-8	Copper	7290	ug/Kg		333	1110	1110	1	P	HSC	01/05/10 17:21	010510-1	935381
7439-89-6	Iron	15100000	ug/Kg		8880	27700	27700	1	P	HSC	01/05/10 17:21	010510-1	935381
7439-92-1	Lead	10700	ug/Kg		277	1110	1110	1	P	HSC	01/05/10 17:21	010510-1	935381
7439-95-4	Magnesium	2320000	ug/Kg		9430	33300	33300	1	P	HSC	01/05/10 17:21	010510-1	935381
7439-96-5	Manganese	228000	ug/Kg	*	222	1110	1110	1	P	HSC	01/05/10 17:21	010510-1	935381
7439-97-6	Mercury	22.4	ug/kg		3.97	11.7	11.7	1	AV	JXL1	01/08/10 10:26	010810S1-5	935670
7440-02-0	Nickel	8.43	mg/kg		0.112	0.449	0.449	2	MS	SKJ	01/06/10 18:59	100106-3	935378
7440-09-7	Potassium	2380000	ug/Kg		7100	27700	27700	1	P	HSC	01/05/10 17:21	010510-1	935381
7782-49-2	Selenium	1.12	mg/kg	U	0.561	1.12	1.12	2	MS	SKJ	01/06/10 18:59	100106-3	935378
7440-22-4	Silver	494	ug/Kg	J	111	555	555	1	P	HSC	01/05/10 17:21	010510-1	935381
7440-23-5	Sodium	159000	ug/Kg		7770	27700	27700	1	P	HSC	01/05/10 17:21	010510-1	935381
7440-28-0	Thallium	0.194	mg/kg	J	0.0674	0.225	0.225	2	MS	SKJ	01/06/10 18:59	100106-3	935378
7440-61-1	Uranium U,I4b	0.967	mg/kg		0.0148	0.0449	0.0449	2	MS	SKJ	01/06/10 18:59	100106-3	935378
7440-62-2	Vanadium	24900	ug/Kg		111	555	555	1	P	HSC	01/05/10 17:21	010510-1	935381
7440-66-6	Zinc	28300	ug/Kg		366	1110	1110	1	P	HSC	01/05/10 17:21	010510-1	935381

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
935378	935377	SW846 3050B	0.501	g	50	mL	12/21/09	BXA1
935381	935380	SW846 3050B	0.507	g	50	mL	12/21/09	BXA1
935670	935669	SW846 7471A Prep	0.578	g	30	mL	01/07/10	AXG2

KAL
02/05/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-990 CONTRACT: LANL01004 METHOD TYPE: SW846

SAMPLE ID: 243270003 **BASIS:** Dry Weight **DATE COLLECTED** 16-DEC-09

CLIENT ID: RE12-10-7358 **LEVEL:** Low **DATE RECEIVED** 18-DEC-09

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	17900000	ug/Kg		7640	22500	22500	1	P	HSC	01/05/10 17:41	010510-1	935381
7440-36-0	Antimony UJ,I6a	1120	ug/Kg	UN	371	1120	1120	1	P	HSC	01/05/10 17:41	010510-1	935381
7440-38-2	Arsenic	2.4	mg/kg		0.225	1.12	1.12	2	MS	SKJ	01/06/10 19:05	100106-3	935378
7440-39-3	Barium J-,I6a	169000	ug/Kg	N	112	562	562	1	P	HSC	01/05/10 17:41	010510-1	935381
7440-41-7	Beryllium	1.27	mg/kg		0.0225	0.112	0.112	2	MS	SKJ	01/06/10 19:05	100106-3	935378
7440-43-9	Cadmium	562	ug/Kg	U	112	562	562	1	P	HSC	01/05/10 17:41	010510-1	935381
7440-70-2	Calcium	2060000	ug/Kg		8990	28100	28100	1	P	HSC	01/05/10 17:41	010510-1	935381
7440-47-3	Chromium	12700	ug/Kg		169	562	562	1	P	HSC	01/05/10 17:41	010510-1	935381
7440-48-4	Cobalt	5400	ug/Kg		169	562	562	1	P	HSC	01/05/10 17:41	010510-1	935381
7440-50-8	Copper	8440	ug/Kg		337	1120	1120	1	P	HSC	01/05/10 17:41	010510-1	935381
7439-89-6	Iron	15500000	ug/Kg		8990	28100	28100	1	P	HSC	01/06/10 11:56	010610A-2	935381
7439-92-1	Lead	29700	ug/Kg		281	1120	1120	1	P	HSC	01/05/10 17:41	010510-1	935381
7439-95-4	Magnesium	2490000	ug/Kg		9560	33700	33700	1	P	HSC	01/05/10 17:41	010510-1	935381
7439-96-5	Manganese	251000	ug/Kg	*	225	1120	1120	1	P	HSC	01/05/10 17:41	010510-1	935381
7439-97-6	Mercury	24.9	ug/kg		4.03	11.9	11.9	1	AV	JXL1	01/08/10 10:28	010810S1-5	935670
7440-02-0	Nickel	9.04	mg/kg		0.112	0.45	0.45	2	MS	SKJ	01/06/10 19:05	100106-3	935378
7440-09-7	Potassium	2390000	ug/Kg		7190	28100	28100	1	P	HSC	01/06/10 11:56	010610A-2	935381
7782-49-2	Selenium	1.12	mg/kg	U	0.562	1.12	1.12	2	MS	SKJ	01/06/10 19:05	100106-3	935378
7440-22-4	Silver	560	ug/Kg	J	112	562	562	1	P	HSC	01/05/10 17:41	010510-1	935381
7440-23-5	Sodium	288000	ug/Kg		7870	28100	28100	1	P	HSC	01/05/10 17:41	010510-1	935381
7440-28-0	Thallium	0.238	mg/kg		0.0674	0.225	0.225	2	MS	SKJ	01/06/10 19:05	100106-3	935378
7440-61-1	Uranium U,I4b	1.46	mg/kg		0.0148	0.045	0.045	2	MS	SKJ	01/06/10 19:05	100106-3	935378
7440-62-2	Vanadium	28700	ug/Kg		112	562	562	1	P	HSC	01/05/10 17:41	010510-1	935381
7440-66-6	Zinc	37300	ug/Kg		371	1120	1120	1	P	HSC	01/05/10 17:41	010510-1	935381

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
935378	935377	SW846 3050B	0.5	g	50	mL	12/21/09	BXA1
935381	935380	SW846 3050B	0.5	g	50	mL	12/21/09	BXA1
935670	935669	SW846 7471A Prep	0.569	g	30	mL	01/07/10	AXG2

KAL
02/05/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-990 CONTRACT: LANL01004 METHOD TYPE: SW846

SAMPLE ID: 243270004 BASIS: Dry Weight DATE COLLECTED 16-DEC-09

CLIENT ID: RE12-10-7357 LEVEL: Low DATE RECEIVED 18-DEC-09

MATRIX: SOIL %SOLIDS: 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	10900000	ug/Kg		7140	21000	21000	1	P	HSC	01/05/10 17:48	010510-1	935381
7440-36-0	Antimony U,I4	649	ug/Kg	JN	347	1050	1050	1	P	HSC	01/05/10 17:48	010510-1	935381
7440-38-2	Arsenic	2.26	mg/kg		0.19	0.949	0.949	2	MS	SKJ	01/06/10 19:12	100106-3	935378
7440-39-3	Barium J-,I6a	159000	ug/Kg	N	105	525	525	1	P	HSC	01/05/10 17:48	010510-1	935381
7440-41-7	Beryllium	0.873	mg/kg		0.019	0.0949	0.0949	2	MS	SKJ	01/06/10 19:12	100106-3	935378
7440-43-9	Cadmium	525	ug/Kg	U	105	525	525	1	P	HSC	01/05/10 17:48	010510-1	935381
7440-70-2	Calcium	2080000	ug/Kg		8410	26300	26300	1	P	HSC	01/05/10 17:48	010510-1	935381
7440-47-3	Chromium	12900	ug/Kg		158	525	525	1	P	HSC	01/05/10 17:48	010510-1	935381
7440-48-4	Cobalt	7270	ug/Kg		158	525	525	1	P	HSC	01/05/10 17:48	010510-1	935381
7440-50-8	Copper	8800	ug/Kg		315	1050	1050	1	P	HSC	01/05/10 17:48	010510-1	935381
7439-89-6	Iron	13500000	ug/Kg		8410	26300	26300	1	P	HSC	01/06/10 12:03	010610A-2	935381
7439-92-1	Lead	58600	ug/Kg		263	1050	1050	1	P	HSC	01/05/10 17:48	010510-1	935381
7439-95-4	Magnesium	1980000	ug/Kg		8930	31500	31500	1	P	HSC	01/05/10 17:48	010510-1	935381
7439-96-5	Manganese	345000	ug/Kg	*	210	1050	1050	1	P	HSC	01/05/10 17:48	010510-1	935381
7439-97-6	Mercury	14.8	ug/kg		4.53	13.3	13.3	1	AV	JXL1	01/08/10 10:30	010810S1-5	935670
7440-02-0	Nickel	7.08	mg/kg		0.0949	0.38	0.38	2	MS	SKJ	01/06/10 19:12	100106-3	935378
7440-09-7	Potassium	2000000	ug/Kg		6720	26300	26300	1	P	HSC	01/06/10 12:03	010610A-2	935381
7782-49-2	Selenium	0.949	mg/kg	U	0.474	0.949	0.949	2	MS	SKJ	01/06/10 19:12	100106-3	935378
7440-22-4	Silver	452	ug/Kg	J	105	525	525	1	P	HSC	01/05/10 17:48	010510-1	935381
7440-23-5	Sodium	127000	ug/Kg		7350	26300	26300	1	P	HSC	01/05/10 17:48	010510-1	935381
7440-28-0	Thallium	0.204	mg/kg		0.0569	0.19	0.19	2	MS	SKJ	01/06/10 19:12	100106-3	935378
7440-61-1	Uranium U,I4b	1.91	mg/kg		0.0125	0.038	0.038	2	MS	SKJ	01/06/10 19:12	100106-3	935378
7440-62-2	Vanadium	30900	ug/Kg		105	525	525	1	P	HSC	01/05/10 17:48	010510-1	935381
7440-66-6	Zinc	54900	ug/Kg		347	1050	1050	1	P	HSC	01/05/10 17:48	010510-1	935381

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
935378	935377	SW846 3050B	0.588	g	50	mL	12/21/09	BXA1
935381	935380	SW846 3050B	0.531	g	50	mL	12/21/09	BXA1
935670	935669	SW846 7471A Prep	0.503	g	30	mL	01/07/10	AXG2

KAL
02/05/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-990 CONTRACT: LANL01004 METHOD TYPE: SW846

SAMPLE ID: 243270005 **BASIS:** Dry Weight **DATE COLLECTED** 16-DEC-09

CLIENT ID: RE12-10-7359 LEVEL: Low DATE RECEIVED 18-DEC-09

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	9690000	ug/Kg		6870	20200	20200	1	P	HSC	01/05/10 17:55	010510-1	935381
7440-36-0	Antimony UJ,I6a	1010	ug/Kg	UN	333	1010	1010	1	P	HSC	01/05/10 17:55	010510-1	935381
7440-38-2	Arsenic	1.16	mg/kg		0.22	1.1	1.1	2	MS	SKJ	01/06/10 19:18	100106-3	935378
7440-39-3	Barium J-,I6a	279000	ug/Kg	N	101	505	505	1	P	HSC	01/05/10 17:55	010510-1	935381
7440-41-7	Beryllium	0.581	mg/kg		0.022	0.11	0.11	2	MS	SKJ	01/06/10 19:18	100106-3	935378
7440-43-9	Cadmium	505	ug/Kg	U	101	505	505	1	P	HSC	01/05/10 17:55	010510-1	935381
7440-70-2	Calcium	2540000	ug/Kg		8080	25300	25300	1	P	HSC	01/05/10 17:55	010510-1	935381
7440-47-3	Chromium	9160	ug/Kg		152	505	505	1	P	HSC	01/05/10 17:55	010510-1	935381
7440-48-4	Cobalt	4730	ug/Kg		152	505	505	1	P	HSC	01/05/10 17:55	010510-1	935381
7440-50-8	Copper	8270	ug/Kg		303	1010	1010	1	P	HSC	01/05/10 17:55	010510-1	935381
7439-89-6	Iron	12400000	ug/Kg		8080	25300	25300	1	P	HSC	01/06/10 12:11	010610A-2	935381
7439-92-1	Lead	10100	ug/Kg		253	1010	1010	1	P	HSC	01/05/10 17:55	010510-1	935381
7439-95-4	Magnesium	1890000	ug/Kg		8590	30300	30300	1	P	HSC	01/05/10 17:55	010510-1	935381
7439-96-5	Manganese	367000	ug/Kg	*	202	1010	1010	1	P	HSC	01/05/10 17:55	010510-1	935381
7439-97-6	Mercury	13.5	ug/kg		4.08	12	12	1	AV	JXL1	01/08/10 10:36	010810S1-5	935670
7440-02-0	Nickel	9.29	mg/kg		0.11	0.44	0.44	2	MS	SKJ	01/06/10 19:18	100106-3	935378
7440-09-7	Potassium	1360000	ug/Kg		6470	25300	25300	1	P	HSC	01/06/10 12:11	010610A-2	935381
7782-49-2	Selenium	1.1	mg/kg	U	0.55	1.1	1.1	2	MS	SKJ	01/06/10 19:18	100106-3	935378
7440-22-4	Silver	431	ug/Kg	J	101	505	505	1	P	HSC	01/05/10 17:55	010510-1	935381
7440-23-5	Sodium	122000	ug/Kg		7070	25300	25300	1	P	HSC	01/05/10 17:55	010510-1	935381
7440-28-0	Thallium	0.154	mg/kg	J	0.066	0.22	0.22	2	MS	SKJ	01/06/10 19:18	100106-3	935378
7440-61-1	Uranium U,I4b	2.86	mg/kg		0.0145	0.044	0.044	2	MS	SKJ	01/06/10 19:18	100106-3	935378
7440-62-2	Vanadium	27700	ug/Kg		101	505	505	1	P	HSC	01/05/10 17:55	010510-1	935381
7440-66-6	Zinc	23000	ug/Kg		333	1010	1010	1	P	HSC	01/05/10 17:55	010510-1	935381

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
935378	935377	SW846 3050B	0.513	g	50	mL	12/21/09	BXA1
935381	935380	SW846 3050B	0.559	g	50	mL	12/21/09	BXA1
935670	935669	SW846 7471A Prep	0.565	g	30	mL	01/07/10	AXG2

KAL
02/05/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-990 CONTRACT: LANL01004 METHOD TYPE: SW846

SAMPLE ID: 243270006 BASIS: Dry Weight DATE COLLECTED 16-DEC-09

CLIENT ID: RE12-10-7356 LEVEL: Low DATE RECEIVED 18-DEC-09

MATRIX: SOIL %SOLIDS: 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12800000	ug/Kg		6700	19700	19700	1	P	HSC	01/05/10 18:02	010510-1	935381
7440-36-0	Antimony UJ,I6a	985	ug/Kg	UN	325	985	985	1	P	HSC	01/05/10 18:02	010510-1	935381
7440-38-2	Arsenic	2.06	mg/kg		0.223	1.11	1.11	2	MS	SKJ	01/06/10 19:24	100106-3	935378
7440-39-3	Barium J-,I6a	171000	ug/Kg	N	98.5	492	492	1	P	HSC	01/05/10 18:02	010510-1	935381
7440-41-7	Beryllium	0.990	mg/kg		0.0223	0.111	0.111	2	MS	SKJ	01/07/10 12:16	100107-4	935378
7440-43-9	Cadmium	492	ug/Kg	U	98.5	492	492	1	P	HSC	01/05/10 18:02	010510-1	935381
7440-70-2	Calcium	3810000	ug/Kg		7880	24600	24600	1	P	HSC	01/05/10 18:02	010510-1	935381
7440-47-3	Chromium	13100	ug/Kg		148	492	492	1	P	HSC	01/05/10 18:02	010510-1	935381
7440-48-4	Cobalt	4560	ug/Kg		148	492	492	1	P	HSC	01/05/10 18:02	010510-1	935381
7440-50-8	Copper	5770	ug/Kg		295	985	985	1	P	HSC	01/05/10 18:02	010510-1	935381
7439-89-6	Iron	14700000	ug/Kg		7880	24600	24600	1	P	HSC	01/06/10 12:18	010610A-2	935381
7439-92-1	Lead	7800	ug/Kg		246	985	985	1	P	HSC	01/05/10 18:02	010510-1	935381
7439-95-4	Magnesium	2500000	ug/Kg		8370	29500	29500	1	P	HSC	01/05/10 18:02	010510-1	935381
7439-96-5	Manganese	221000	ug/Kg	*	197	985	985	1	P	HSC	01/05/10 18:02	010510-1	935381
7439-97-6	Mercury	27.2	ug/kg		3.98	11.7	11.7	1	AV	JXL1	01/08/10 10:38	010810S1-5	935670
7440-02-0	Nickel	7.09	mg/kg		0.111	0.446	0.446	2	MS	SKJ	01/07/10 12:16	100107-4	935378
7440-09-7	Potassium	2060000	ug/Kg		6300	24600	24600	1	P	HSC	01/06/10 12:18	010610A-2	935381
7782-49-2	Selenium	1.11	mg/kg	U	0.557	1.11	1.11	2	MS	SKJ	01/06/10 19:24	100106-3	935378
7440-22-4	Silver	638	ug/Kg		98.5	492	492	1	P	HSC	01/05/10 18:02	010510-1	935381
7440-23-5	Sodium	356000	ug/Kg		6890	24600	24600	1	P	HSC	01/05/10 18:02	010510-1	935381
7440-28-0	Thallium	0.173	mg/kg	J	0.0669	0.223	0.223	2	MS	SKJ	01/06/10 19:24	100106-3	935378
7440-61-1	Uranium U,I4b	0.578	mg/kg		0.0147	0.0446	0.0446	2	MS	SKJ	01/06/10 19:24	100106-3	935378
7440-62-2	Vanadium	19200	ug/Kg		98.5	492	492	1	P	HSC	01/05/10 18:02	010510-1	935381
7440-66-6	Zinc	33300	ug/Kg		325	985	985	1	P	HSC	01/05/10 18:02	010510-1	935381

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
935378	935377	SW846 3050B	0.5	g	50	mL	12/21/09	BXA1
935381	935380	SW846 3050B	0.566	g	50	mL	12/21/09	BXA1
935670	935669	SW846 7471A Prep	0.571	g	30	mL	01/07/10	AXG2

KAL
02/05/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-990 CONTRACT: LANL01004 METHOD TYPE: SW846

SAMPLE ID: 243270007 **BASIS:** Dry Weight **DATE COLLECTED** 16-DEC-09

CLIENT ID: RE12-10-7353 LEVEL: Low DATE RECEIVED 18-DEC-09

MATRIX: SOIL %SOLIDS: 82

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	18500000	ug/Kg		8240	24200	24200	1	P	HSC	01/05/10 18:09	010510-1	935381
7440-36-0	Antimony UJ,I6a	1210	ug/Kg	UN	400	1210	1210	1	P	HSC	01/05/10 18:09	010510-1	935381
7440-38-2	Arsenic	2.18	mg/kg		0.225	1.12	1.12	2	MS	SKJ	01/06/10 19:43	100106-3	935378
7440-39-3	Barium J-,I6a	202000	ug/Kg	N	121	606	606	1	P	HSC	01/05/10 18:09	010510-1	935381
7440-41-7	Beryllium	1.18	mg/kg		0.0225	0.112	0.112	2	MS	SKJ	01/06/10 19:43	100106-3	935378
7440-43-9	Cadmium	606	ug/Kg	U	121	606	606	1	P	HSC	01/05/10 18:09	010510-1	935381
7440-70-2	Calcium	2560000	ug/Kg		9690	30300	30300	1	P	HSC	01/05/10 18:09	010510-1	935381
7440-47-3	Chromium	33500	ug/Kg		182	606	606	1	P	HSC	01/05/10 18:09	010510-1	935381
7440-48-4	Cobalt	5070	ug/Kg		182	606	606	1	P	HSC	01/05/10 18:09	010510-1	935381
7440-50-8	Copper	10400	ug/Kg		363	1210	1210	1	P	HSC	01/05/10 18:09	010510-1	935381
7439-89-6	Iron	14400000	ug/Kg		9690	30300	30300	1	P	HSC	01/06/10 12:25	010610A-2	935381
7439-92-1	Lead	13900	ug/Kg		303	1210	1210	1	P	HSC	01/05/10 18:09	010510-1	935381
7439-95-4	Magnesium	2320000	ug/Kg		10300	36300	36300	1	P	HSC	01/05/10 18:09	010510-1	935381
7439-96-5	Manganese	223000	ug/Kg	*	242	1210	1210	1	P	HSC	01/05/10 18:09	010510-1	935381
7439-97-6	Mercury	22.4	ug/kg		4.88	14.4	14.4	1	AV	JXL1	01/08/10 10:40	010810S1-5	935670
7440-02-0	Nickel	8.5	mg/kg		0.112	0.45	0.45	2	MS	SKJ	01/06/10 19:43	100106-3	935378
7440-09-7	Potassium	2100000	ug/Kg		7750	30300	30300	1	P	HSC	01/06/10 12:25	010610A-2	935381
7782-49-2	Selenium	1.12	mg/kg	U	0.562	1.12	1.12	2	MS	SKJ	01/06/10 19:43	100106-3	935378
7440-22-4	Silver	538	ug/Kg	J	121	606	606	1	P	HSC	01/05/10 18:09	010510-1	935381
7440-23-5	Sodium	115000	ug/Kg		8480	30300	30300	1	P	HSC	01/05/10 18:09	010510-1	935381
7440-28-0	Thallium	0.201	mg/kg	J	0.0674	0.225	0.225	2	MS	SKJ	01/06/10 19:43	100106-3	935378
7440-61-1	Uranium U,I4b	1.33	mg/kg		0.0148	0.045	0.045	2	MS	SKJ	01/06/10 19:43	100106-3	935378
7440-62-2	Vanadium	28100	ug/Kg		121	606	606	1	P	HSC	01/05/10 18:09	010510-1	935381
7440-66-6	Zinc	25200	ug/Kg		400	1210	1210	1	P	HSC	01/05/10 18:09	010510-1	935381

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
935378	935377	SW846 3050B	0.541	g	50	mL	12/21/09	BXA1
935381	935380	SW846 3050B	0.502	g	50	mL	12/21/09	BXA1
935670	935669	SW846 7471A Prep	0.508	g	30	mL	01/07/10	AXG2

KAL
02/05/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-990 CONTRACT: LANL01004 METHOD TYPE: SW846

SAMPLE ID: 243270008 BASIS: Dry Weight DATE COLLECTED 16-DEC-09

CLIENT ID: RE12-10-7354 LEVEL: Low DATE RECEIVED 18-DEC-09

MATRIX: SOIL %SOLIDS: 93.1

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	10800000	ug/Kg		7270	21400	21400	1	P	HSC	01/05/10 18:16	010510-1	935381
7440-36-0	Antimony UJ,I6a	1070	ug/Kg	UN	353	1070	1070	1	P	HSC	01/05/10 18:16	010510-1	935381
7440-38-2	Arsenic	1.77	mg/kg		0.214	1.07	1.07	2	MS	SKJ	01/06/10 19:49	100106-3	935378
7440-39-3	Barium J-,I6a	166000	ug/Kg	N	107	535	535	1	P	HSC	01/05/10 18:16	010510-1	935381
7440-41-7	Beryllium	0.836	mg/kg		0.0214	0.107	0.107	2	MS	SKJ	01/06/10 19:49	100106-3	935378
7440-43-9	Cadmium	535	ug/Kg	U	107	535	535	1	P	HSC	01/05/10 18:16	010510-1	935381
7440-70-2	Calcium	1990000	ug/Kg		8550	26700	26700	1	P	HSC	01/05/10 18:16	010510-1	935381
7440-47-3	Chromium	10100	ug/Kg		160	535	535	1	P	HSC	01/05/10 18:16	010510-1	935381
7440-48-4	Cobalt	5380	ug/Kg		160	535	535	1	P	HSC	01/05/10 18:16	010510-1	935381
7440-50-8	Copper	6800	ug/Kg		321	1070	1070	1	P	HSC	01/05/10 18:16	010510-1	935381
7439-89-6	Iron	12400000	ug/Kg		8550	26700	26700	1	P	HSC	01/06/10 12:32	010610A-2	935381
7439-92-1	Lead	12400	ug/Kg		267	1070	1070	1	P	HSC	01/05/10 18:16	010510-1	935381
7439-95-4	Magnesium	1880000	ug/Kg		9090	32100	32100	1	P	HSC	01/05/10 18:16	010510-1	935381
7439-96-5	Manganese	323000	ug/Kg	*	214	1070	1070	1	P	HSC	01/05/10 18:16	010510-1	935381
7439-97-6	Mercury	13.9	ug/kg		3.69	10.8	10.8	1	AV	JXL1	01/08/10 10:42	010810S1-5	935670
7440-02-0	Nickel	6.25	mg/kg		0.107	0.429	0.429	2	MS	SKJ	01/06/10 19:49	100106-3	935378
7440-09-7	Potassium	1520000	ug/Kg		6840	26700	26700	1	P	HSC	01/06/10 12:32	010610A-2	935381
7782-49-2	Selenium	1.07	mg/kg	U	0.536	1.07	1.07	2	MS	SKJ	01/06/10 19:49	100106-3	935378
7440-22-4	Silver	618	ug/Kg		107	535	535	1	P	HSC	01/05/10 18:16	010510-1	935381
7440-23-5	Sodium	125000	ug/Kg		7490	26700	26700	1	P	HSC	01/05/10 18:16	010510-1	935381
7440-28-0	Thallium	0.169	mg/kg	J	0.0643	0.214	0.214	2	MS	SKJ	01/06/10 19:49	100106-3	935378
7440-61-1	Uranium U,I4b	2.38	mg/kg		0.0141	0.0429	0.0429	2	MS	SKJ	01/06/10 19:49	100106-3	935378
7440-62-2	Vanadium	26700	ug/Kg		107	535	535	1	P	HSC	01/05/10 18:16	010510-1	935381
7440-66-6	Zinc	22600	ug/Kg		353	1070	1070	1	P	HSC	01/05/10 18:16	010510-1	935381

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
935378	935377	SW846 3050B	0.501	g	50	mL	12/21/09	BXA1
935381	935380	SW846 3050B	0.502	g	50	mL	12/21/09	BXA1
935670	935669	SW846 7471A Prep	0.594	g	30	mL	01/07/10	AXG2

KAL
02/05/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-990 CONTRACT: LANL01004 METHOD TYPE: SW846

SAMPLE ID: 243270009 **BASIS:** Dry Weight **DATE COLLECTED** 16-DEC-09

CLIENT ID: RE12-10-7355 LEVEL: Low DATE RECEIVED 18-DEC-09

MATRIX: SOIL %SOLIDS: 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12000000	ug/Kg		7560	22200	22200	1	P	HSC	01/05/10 18:23	010510-1	935381
7440-36-0	Antimony UJ,I6a	1110	ug/Kg	UN	367	1110	1110	1	P	HSC	01/05/10 18:23	010510-1	935381
7440-38-2	Arsenic	1.46	mg/kg		0.228	1.14	1.14	2	MS	SKJ	01/06/10 19:55	100106-3	935378
7440-39-3	Barium J-,I6a	154000	ug/Kg	N	111	556	556	1	P	HSC	01/05/10 18:23	010510-1	935381
7440-41-7	Beryllium	0.865	mg/kg		0.0228	0.114	0.114	2	MS	SKJ	01/06/10 19:55	100106-3	935378
7440-43-9	Cadmium	556	ug/Kg	U	111	556	556	1	P	HSC	01/05/10 18:23	010510-1	935381
7440-70-2	Calcium	2090000	ug/Kg		8900	27800	27800	1	P	HSC	01/05/10 18:23	010510-1	935381
7440-47-3	Chromium	11700	ug/Kg		167	556	556	1	P	HSC	01/05/10 18:23	010510-1	935381
7440-48-4	Cobalt	4960	ug/Kg		167	556	556	1	P	HSC	01/05/10 18:23	010510-1	935381
7440-50-8	Copper	7650	ug/Kg		334	1110	1110	1	P	HSC	01/05/10 18:23	010510-1	935381
7439-89-6	Iron	13100000	ug/Kg		8900	27800	27800	1	P	HSC	01/06/10 12:39	010610A-2	935381
7439-92-1	Lead	12400	ug/Kg		278	1110	1110	1	P	HSC	01/05/10 18:23	010510-1	935381
7439-95-4	Magnesium	1990000	ug/Kg		9450	33400	33400	1	P	HSC	01/05/10 18:23	010510-1	935381
7439-96-5	Manganese	273000	ug/Kg	*	222	1110	1110	1	P	HSC	01/05/10 18:23	010510-1	935381
7439-97-6	Mercury	20.5	ug/kg		4.37	12.8	12.8	1	AV	JXL1	01/08/10 10:44	010810S1-5	935670
7440-02-0	Nickel	6.5	mg/kg		0.114	0.456	0.456	2	MS	SKJ	01/06/10 19:55	100106-3	935378
7440-09-7	Potassium	1690000	ug/Kg		7120	27800	27800	1	P	HSC	01/06/10 12:39	010610A-2	935381
7782-49-2	Selenium	1.14	mg/kg	U	0.57	1.14	1.14	2	MS	SKJ	01/06/10 19:55	100106-3	935378
7440-22-4	Silver	629	ug/Kg		111	556	556	1	P	HSC	01/05/10 18:23	010510-1	935381
7440-23-5	Sodium	143000	ug/Kg		7780	27800	27800	1	P	HSC	01/05/10 18:23	010510-1	935381
7440-28-0	Thallium	0.175	mg/kg	J	0.0684	0.228	0.228	2	MS	SKJ	01/06/10 19:55	100106-3	935378
7440-61-1	Uranium U,I4b	1.63	mg/kg		0.0151	0.0456	0.0456	2	MS	SKJ	01/06/10 19:55	100106-3	935378
7440-62-2	Vanadium	27800	ug/Kg		111	556	556	1	P	HSC	01/05/10 18:23	010510-1	935381
7440-66-6	Zinc	24500	ug/Kg		367	1110	1110	1	P	HSC	01/05/10 18:23	010510-1	935381

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
935378	935377	SW846 3050B	0.503	g	50	mL	12/21/09	BXA1
935381	935380	SW846 3050B	0.516	g	50	mL	12/21/09	BXA1
935670	935669	SW846 7471A Prep	0.536	g	30	mL	01/07/10	AXG2

KAL
02/05/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-990 CONTRACT: LANL01004 METHOD TYPE: SW846

SAMPLE ID: 243270010 BASIS: Dry Weight DATE COLLECTED 16-DEC-09

CLIENT ID: RE12-10-7364 LEVEL: Low DATE RECEIVED 18-DEC-09

MATRIX: SOIL %SOLIDS: 88

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	13800000	ug/Kg		7430	21800	21800	1	P	HSC	01/05/10 18:30	010510-1	935381
7440-36-0	Antimony UJ,I6a	1090	ug/Kg	UN	361	1090	1090	1	P	HSC	01/05/10 18:30	010510-1	935381
7440-38-2	Arsenic	1.64	mg/kg		0.21	1.05	1.05	2	MS	SKJ	01/06/10 20:01	100106-3	935378
7440-39-3	Barium J-,I6a	160000	ug/Kg	N	109	546	546	1	P	HSC	01/05/10 18:30	010510-1	935381
7440-41-7	Beryllium	0.829	mg/kg		0.021	0.105	0.105	2	MS	SKJ	01/06/10 20:01	100106-3	935378
7440-43-9	Cadmium	546	ug/Kg	U	109	546	546	1	P	HSC	01/05/10 18:30	010510-1	935381
7440-70-2	Calcium	2330000	ug/Kg		8740	27300	27300	1	P	HSC	01/05/10 18:30	010510-1	935381
7440-47-3	Chromium	11700	ug/Kg		164	546	546	1	P	HSC	01/05/10 18:30	010510-1	935381
7440-48-4	Cobalt	4970	ug/Kg		164	546	546	1	P	HSC	01/05/10 18:30	010510-1	935381
7440-50-8	Copper	7930	ug/Kg		328	1090	1090	1	P	HSC	01/05/10 18:30	010510-1	935381
7439-89-6	Iron	13800000	ug/Kg		8740	27300	27300	1	P	HSC	01/06/10 12:46	010610A-2	935381
7439-92-1	Lead	12900	ug/Kg		273	1090	1090	1	P	HSC	01/05/10 18:30	010510-1	935381
7439-95-4	Magnesium	2200000	ug/Kg		9290	32800	32800	1	P	HSC	01/05/10 18:30	010510-1	935381
7439-96-5	Manganese	271000	ug/Kg	*	218	1090	1090	1	P	HSC	01/05/10 18:30	010510-1	935381
7439-97-6	Mercury	28.6	ug/kg		4.21	12.4	12.4	1	AV	JXL1	01/08/10 10:46	010810S1-5	935670
7440-02-0	Nickel	6.76	mg/kg		0.105	0.421	0.421	2	MS	SKJ	01/06/10 20:01	100106-3	935378
7440-09-7	Potassium	1890000	ug/Kg		6990	27300	27300	1	P	HSC	01/06/10 12:46	010610A-2	935381
7782-49-2	Selenium	1.05	mg/kg	U	0.526	1.05	1.05	2	MS	SKJ	01/06/10 20:01	100106-3	935378
7440-22-4	Silver	733	ug/Kg		109	546	546	1	P	HSC	01/05/10 18:30	010510-1	935381
7440-23-5	Sodium	154000	ug/Kg		7650	27300	27300	1	P	HSC	01/05/10 18:30	010510-1	935381
7440-28-0	Thallium	0.176	mg/kg	J	0.0631	0.21	0.21	2	MS	SKJ	01/06/10 20:01	100106-3	935378
7440-61-1	Uranium U,I4b	1.84	mg/kg		0.0139	0.0421	0.0421	2	MS	SKJ	01/06/10 20:01	100106-3	935378
7440-62-2	Vanadium	28700	ug/Kg		109	546	546	1	P	HSC	01/05/10 18:30	010510-1	935381
7440-66-6	Zinc	25600	ug/Kg		361	1090	1090	1	P	HSC	01/05/10 18:30	010510-1	935381

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
935378	935377	SW846 3050B	0.541	g	50	mL	12/21/09	BXA1
935381	935380	SW846 3050B	0.521	g	50	mL	12/21/09	BXA1
935670	935669	SW846 7471A Prep	0.551	g	30	mL	01/07/10	AXG2

KAL
02/05/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-990-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243272001 **BASIS:** As Received **DATE COLLECTED** 16-DEC-09

CLIENT ID: RE12-10-7366 **LEVEL:** Low **DATE RECEIVED** 18-DEC-09

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	01/06/10 16:35	010610A-1	935389
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/23/09 01:18	091222-3	935396
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	01/06/10 16:35	010610A-1	935389
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	01/06/10 16:35	010610A-1	935389
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/24/09 09:41	091223-14	935396
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/23/09 01:18	091222-3	935396
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	01/06/10 16:35	010610A-1	935389
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	01/06/10 16:35	010610A-1	935389
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	01/06/10 16:35	010610A-1	935389
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	01/06/10 16:35	010610A-1	935389
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	01/06/10 16:35	010610A-1	935389
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/23/09 01:18	091222-3	935396
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	01/06/10 16:35	010610A-1	935389
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	12/23/09 01:18	091222-3	935396
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/31/09 11:18	123109W1-15	935673
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	01/06/10 16:35	010610A-1	935389
7440-09-7	Potassium	84.1	ug/L	J	50	150	150	1	P	HSC	01/06/10 16:35	010610A-1	935389
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	01/06/10 16:35	010610A-1	935389
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	01/06/10 16:35	010610A-1	935389
7440-23-5	Sodium	219	ug/L	J	100	300	300	1	P	HSC	01/06/10 16:35	010610A-1	935389
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/23/09 01:18	091222-3	935396
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/23/09 01:18	091222-3	935396
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	01/06/10 16:35	010610A-1	935389
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	01/06/10 16:35	010610A-1	935389

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
935389	935386	SW846 3005A	50	mL	50	mL	12/22/09	AXG2
935396	935394	SW846 3005A	50	mL	50	mL	12/22/09	AXG2
935673	935672	SW846 7470A Prep	20	mL	20	mL	12/30/09	BCD1

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02/05/10

DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-990 VALIDATION DATE: 02/05/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Kevin A. Lambert ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

☐ TPH-GRO	☐ HIGH EXPLOSIVES	☐ DIOXIN FURANS	☐ LCMSMS PERCHLORATES
☐ TPH-DRO	☐ METALS	☐ PCB CONGENERS	☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
☒ GENERAL CHEMISTRY	☐ RADIOCHEMISTRY	☐ LCMSMS HIGH EXPLOSIVES	

☐ OTHER (DESCRIBE): total cyanide only

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

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

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

Reviewed by: ETM Level: 1 Date: 2/9/10

VALIDATOR'S SIGNATURE: Kevin A Lambert DATE: 02/05/10

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 General Chemistry Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, I9b	R, I9b
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	6. The ICV and/or CCV were recovered outside the method specific limits.	UJ, I7c	J, I7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	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
☐	☐	☒	9. The interference check sample percent recovery value is <50%.	R, I2	J-, I2
☐	☐	☒	10. The interference check sample percent recovery value is ≥50% and <80%.	UJ, I2a	J-, I2a
☐	☐	☒	11. The interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☐	☒	12. The interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☐	☒	☐	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 Los Alamos NATIONAL LABORATORY EST. 1943

Yes (Check One)	No (Check One)	N/A (Check One)		Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
☐	☒	☐	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
☐	☒	☐	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	16. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	19. The associate matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	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 Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	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
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	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
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	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
☐	☒	☐	29. Duplicate, dilution, or reanalysis	UJ, I88	J, I88
☐	☒	☐	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
☒	☐	☐	31. Qualification of data via data validation does not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ (no qualification)

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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: January 5, 2010
Client SDG: 10-990

Client Sample ID:	RE12-10-7352	Project:	LANL01004
Sample ID:	243270001	Client ID:	LANL010
Matrix:	R		
Collect Date:	16-DEC-09 12:00		
Receive Date:	18-DEC-09		
Collector:	Client		
Moisture:	9.79%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	69.8	257	ug/kg	1	AXC2 12/29/09	1338	935219	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/29/09	1259	935217

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: January 5, 2010
Client SDG: 10-990

Client Sample ID:	RE12-10-7360	Project:	LANL01004
Sample ID:	243270002	Client ID:	LANL010
Matrix:	R		
Collect Date:	16-DEC-09 12:00		
Receive Date:	18-DEC-09		
Collector:	Client		
Moisture:	11.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	75.0	276	ug/kg	1	AXC2 12/29/09	1339	935219	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/29/09	1259	935217

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: January 5, 2010
Client SDG: 10-990

Client Sample ID:	RE12-10-7358	Project:	LANL01004
Sample ID:	243270003	Client ID:	LANL010
Matrix:	R		
Collect Date:	16-DEC-09 12:00		
Receive Date:	18-DEC-09		
Collector:	Client		
Moisture:	11%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	J	98.6	69.5	255	ug/kg	1	AXC2 12/29/09	1343	935219	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/29/09	1259	935217

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: January 5, 2010
Client SDG: 10-990

Client Sample ID:	RE12-10-7357	Project:	LANL01004
Sample ID:	243270004	Client ID:	LANL010
Matrix:	R		
Collect Date:	16-DEC-09 12:00		
Receive Date:	18-DEC-09		
Collector:	Client		
Moisture:	10.4%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	J	179	70.3	258	ug/kg	1	AXC2 12/29/09	1344	935219	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/29/09	1259	935217

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: January 5, 2010
Client SDG: 10-990

Client Sample ID:	RE12-10-7359	Project:	LANL01004
Sample ID:	243270005	Client ID:	LANL010
Matrix:	R		
Collect Date:	16-DEC-09 12:00		
Receive Date:	18-DEC-09		
Collector:	Client		
Moisture:	11.5%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	J	127	68.6	252	ug/kg	1	AXC2 12/29/09	1345	935219	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/29/09	1259	935217

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: January 5, 2010
Client SDG: 10-990

Client Sample ID:	RE12-10-7356	Project:	LANL01004
Sample ID:	243270006	Client ID:	LANL010
Matrix:	R		
Collect Date:	16-DEC-09 12:00		
Receive Date:	18-DEC-09		
Collector:	Client		
Moisture:	10.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	68.9	253	ug/kg	1	AXC2 12/29/09	1346	935219	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/29/09	1259	935217

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: January 5, 2010
Client SDG: 10-990

Client Sample ID:	RE12-10-7353	Project:	LANL01004
Sample ID:	243270007	Client ID:	LANL010
Matrix:	R		
Collect Date:	16-DEC-09 12:00		
Receive Date:	18-DEC-09		
Collector:	Client		
Moisture:	17.8%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	81.1	298	ug/kg	1	AXC2 12/29/09	1347	935219	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/29/09	1259	935217

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: January 5, 2010
Client SDG: 10-990

Client Sample ID:	RE12-10-7354	Project:	LANL01004
Sample ID:	243270008	Client ID:	LANL010
Matrix:	R		
Collect Date:	16-DEC-09 12:00		
Receive Date:	18-DEC-09		
Collector:	Client		
Moisture:	6.86%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	J	150	65.2	240	ug/kg	1	AXC2 12/29/09	1348	935219	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/29/09	1259	935217

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: January 5, 2010
Client SDG: 10-990

Client Sample ID:	RE12-10-7355	Project:	LANL01004
Sample ID:	243270009	Client ID:	LANL010
Matrix:	R		
Collect Date:	16-DEC-09 12:00		
Receive Date:	18-DEC-09		
Collector:	Client		
Moisture:	12.9%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	69.7	256	ug/kg	1	AXC2 12/29/09	1348	935219	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/29/09	1259	935217

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: January 5, 2010
Client SDG: 10-990

Client Sample ID:	RE12-10-7364	Project:	LANL01004
Sample ID:	243270010	Client ID:	LANL010
Matrix:	R		
Collect Date:	16-DEC-09 12:00		
Receive Date:	18-DEC-09		
Collector:	Client		
Moisture:	12.2%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	71.7	264	ug/kg	1	AXH3 12/24/09	1345	935222	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/24/09	1301	935221

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Company : Los Alamos National Laboratory
Address : PO Box 1663
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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: December 28, 2009
Client SDG: 10-990-1

Client Sample ID:	RE12-10-7366	Project:	LANL01004
Sample ID:	243272001	Client ID:	LANL010
Matrix:	W		
Collect Date:	16-DEC-09 12:00		
Receive Date:	18-DEC-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 12/22/09	1656	935209	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/22/09	1414	935207

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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02/05/10

Thursday, December 17, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-990C

REQUEST NUMBER: 10-990

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc.,
Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 1/16/2010

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 243270, 243272

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE12-10-7352	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7360	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7358	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7357	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7359	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7356	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7353	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7354	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7355	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7364	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7365	1	POLY	METALS+U-GEL	Nitric Acid	W
RE12-10-7366	1	POLY	SW-846 6850	Ice	W
RE12-10-7366	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:		Date	Time	Received By:		Date	Time
		12/17/09	3:10	Greg Tyler		12-18-09	0925
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

Thursday, December 17, 2009

REQUEST NUMBER: 10-990

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: 10-990
Per Agreement Number 126310011
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 12/17/2009
TURNAROUND/REPORT DUE: 1/16/2010
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	RE12-10-7352	R	12/16/2009	
		1	RE12-10-7353	R	12/16/2009	
		1	RE12-10-7354	R	12/16/2009	
		1	RE12-10-7355	R	12/16/2009	
		1	RE12-10-7356	R	12/16/2009	
		1	RE12-10-7357	R	12/16/2009	
		1	RE12-10-7358	R	12/16/2009	
		1	RE12-10-7359	R	12/16/2009	
		1	RE12-10-7360	R	12/16/2009	

Thursday, December 17, 2009

REQUEST NUMBER: 10-990

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE12-10-7364	R	12/16/2009	
		1	RE12-10-7366	W	12/16/2009	
	SW-846:6850	1	RE12-10-7352	R	12/16/2009	
		1	RE12-10-7353	R	12/16/2009	
		1	RE12-10-7354	R	12/16/2009	
		1	RE12-10-7355	R	12/16/2009	
		1	RE12-10-7356	R	12/16/2009	
		1	RE12-10-7357	R	12/16/2009	
		1	RE12-10-7358	R	12/16/2009	
		1	RE12-10-7359	R	12/16/2009	
		1	RE12-10-7360	R	12/16/2009	
		1	RE12-10-7364	R	12/16/2009	
		1	RE12-10-7366	W	12/16/2009	
	SW-846:7470A	1	RE12-10-7366	W	12/16/2009	
	SW-846:7471A	1	RE12-10-7352	R	12/16/2009	
		1	RE12-10-7353	R	12/16/2009	
		1	RE12-10-7354	R	12/16/2009	
		1	RE12-10-7355	R	12/16/2009	
		1	RE12-10-7356	R	12/16/2009	
		1	RE12-10-7357	R	12/16/2009	
		1	RE12-10-7358	R	12/16/2009	
		1	RE12-10-7359	R	12/16/2009	
		1	RE12-10-7360	R	12/16/2009	
		1	RE12-10-7364	R	12/16/2009	
	SW-846:9012A	1	RE12-10-7352	R	12/16/2009	
		1	RE12-10-7353	R	12/16/2009	
		1	RE12-10-7354	R	12/16/2009	
		1	RE12-10-7355	R	12/16/2009	

Thursday, December 17, 2009

REQUEST NUMBER: 10-990

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9012A	1	RE12-10-7356	R	12/16/2009	
		1	RE12-10-7357	R	12/16/2009	
		1	RE12-10-7358	R	12/16/2009	
		1	RE12-10-7359	R	12/16/2009	
		1	RE12-10-7360	R	12/16/2009	
		1	RE12-10-7364	R	12/16/2009	
		1	RE12-10-7366	W	12/16/2009	

Final Page of REQUEST NUMBER 10-990

GEL Laboratories LLC

a member of **The GEL Group** INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

January 04, 2010

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: 243270 243272
SDG: 10-990

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on December 18, 2009, 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,

for

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-990
Enclosures

problem solved

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 243270 and 243272
SDG: 10-990

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Miscellaneous 1057

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Case Narrative 1102
Sample Data Summary 1107

Quality Control Summary 1119
Instrument QC Data Summary 1122
Cyanide, Total 1124

General Chemistry Analysis 1143
Case Narrative 1144
Sample Data Summary 1149
Quality Control Summary 1152
Instrument QC Data Summary 1155
Cyanide, Total 1157

Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 243270 and 243272
SDG # : 10-990

January 04, 2010

Laboratory Identification:

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

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on December 18, 2009 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:

Laboratory ID	Client ID
243270001	RE12-10-7352
243270002	RE12-10-7360
243270003	RE12-10-7358
243270004	RE12-10-7357
243270005	RE12-10-7359
243270006	RE12-10-7356
243270007	RE12-10-7353
243270008	RE12-10-7354
243270009	RE12-10-7355
243270010	RE12-10-7364
243272001	RE12-10-7366

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.

for Francis

Valerie Davis

Project Manager

List of current GEL Certifications as of 04 January 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

Thursday, December 17, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-990C

LOS ALAMOS
NATIONAL LABORATORY

REQUEST NUMBER: 10-990

ATTN: Valerie Davis

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

TURNAROUND/REPORT DUE: 1/16/2010
TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 243270, 243272

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE12-10-7352	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7360	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7358	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7357	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7359	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7356	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7353	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7354	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7355	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7364	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7366	1	POLY	METALS+U-GEL	Nitric Acid	W
RE12-10-7366	1	POLY	SW-846:6850	Ice	W
RE12-10-7366	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:		Date	Time	Received By:		Date	Time
		12/17/09	3lo	Greg Tyler		12-18-09	0925
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

Thursday, December 17, 2009

REQUEST NUMBER: 10-990

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:10-990

Per Agreement Number:126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples

according to the schedule indicated:

SHIP DATE: 12/17/2009

TURNAROUND/REPORT DUE: 1/16/2010

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	RE12-10-7352	R	12/16/2009	
		1	RE12-10-7353	R	12/16/2009	
		1	RE12-10-7354	R	12/16/2009	
		1	RE12-10-7355	R	12/16/2009	
		1	RE12-10-7356	R	12/16/2009	
		1	RE12-10-7357	R	12/16/2009	
		1	RE12-10-7358	R	12/16/2009	
		1	RE12-10-7359	R	12/16/2009	
		1	RE12-10-7360	R	12/16/2009	

Thursday, December 17, 2009

REQUEST NUMBER: 10-990

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE12-10-7364	R	12/16/2009	
		1	RE12-10-7366	W	12/16/2009	
	SW-846:6850	1	RE12-10-7352	R	12/16/2009	
		1	RE12-10-7353	R	12/16/2009	
		1	RE12-10-7354	R	12/16/2009	
		1	RE12-10-7355	R	12/16/2009	
		1	RE12-10-7356	R	12/16/2009	
		1	RE12-10-7357	R	12/16/2009	
		1	RE12-10-7358	R	12/16/2009	
		1	RE12-10-7359	R	12/16/2009	
		1	RE12-10-7360	R	12/16/2009	
		1	RE12-10-7364	R	12/16/2009	
		1	RE12-10-7366	W	12/16/2009	
	SW-846:7470A	1	RE12-10-7368	W	12/16/2009	
	SW-846:7471A	1	RE12-10-7352	R	12/16/2009	
		1	RE12-10-7353	R	12/16/2009	
		1	RE12-10-7354	R	12/16/2009	
		1	RE12-10-7355	R	12/16/2009	
		1	RE12-10-7356	R	12/16/2009	
		1	RE12-10-7357	R	12/16/2009	
		1	RE12-10-7358	R	12/16/2009	
		1	RE12-10-7359	R	12/16/2009	
		1	RE12-10-7360	R	12/16/2009	
		1	RE12-10-7364	R	12/16/2009	
	SW-846:9012A	1	RE12-10-7352	R	12/16/2009	
		1	RE12-10-7353	R	12/16/2009	
		1	RE12-10-7354	R	12/16/2009	
		1	RE12-10-7355	R	12/16/2009	

Thursday, December 17, 2009

REQUEST NUMBER: 10-990

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9012A	1	RE12-10-7356	R	12/16/2009	
		1	RE12-10-7357	R	12/16/2009	
		1	RE12-10-7358	R	12/16/2009	
		1	RE12-10-7359	R	12/16/2009	
		1	RE12-10-7360	R	12/16/2009	
		1	RE12-10-7364	R	12/16/2009	
		1	RE12-10-7366	W	12/16/2009	

Final Page of REQUEST NUMBER 10-990

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL	SDG/ARCOC/Work Order: 10-990
Received By: Greg Tyler	Date Received: 12/18/09

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*: 60cpm
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within 0 ≤ 6 deg. C?	X			Preservation Method: ice bags blue ice dry ice none other 1-5C 13,15C
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?	X			Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: No time on Chain of Custody.
11	Number of containers received match number indicated on COC?			X	Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:

Fed Ex Tracking Numbers

7209 7849 2726	1C	7209 7849 2829	3C
7209 7849 2459	1C	7209 7849 2748	4C
7209 7849 2781	1C	7209 7849 2792	4C
7209 7849 2760	2C	7209 7849 2807	4C
7209 7849 2770	2C	7209 7849 2704	5C
7209 7849 2818	2C	7209 7849 2667	13C
7209 7849 2715	3C	7209 7849 2689	13C
7209 7849 2737	3C	7209 7849 2678	15C

PM (or PMA) review: Initials P. KO-NO Date 12-21-09

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: 17DEC09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17DEC09
ACTWGT: 62.0 LB MAN
CAD: 0014176/CAFE2434

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17DEC09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17DEC09
ACTWGT: 62.0 LB MAN
CAD: 0014176/CAFE2434

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MPS# 0263 7209 7849 2760
Matr# 7209 7849 2759 0201

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PRIORITY OVERNIGHT

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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: 17DEC09
ACTWGT: 56.0 LB MAN
CAD: 0014176/CAFE2434

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Part # 156148-434 NRUT V3 08-09

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: 17DEC09
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2434

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REF: 6B010AMR3A0352VA00

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3 of 3
MPS# 0283 7209 7849 2818
Mstr# 7209 7849 2792 0201

FRI - 18DEC A1
PRIORITY OVERNIGHT

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

LOS ALAMOS, NM 87545
UNITED STATES US

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CAD: 0014176/CAFE2434

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2 of 3
MPS# 0283 7209 7849 2715
Mstr# 7209 7849 2704 0201

FRI - 18DEC A1
PRIORITY OVERNIGHT

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SC-US
CHS

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17DEC09
ACTWGT: 48.0 LB MAN
CAD: 0014176/CAFE2434

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17DEC09
ACTWGT: 19.0 LB MAN
CAD: 0014176/CAFE2434

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TRK# 0201 7209 7849 2829

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Part # 156148-434 NRIT V3 09-08

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: 17DEC09
ACTWGT: 46.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
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REF: 6B010AMR3A0352VA00

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FRI - 18DEC A1
PRIORITY OVERNIGHT

TRK# 0201 7209 7849 2792
MASTER ##

29407
SC-US
CHS

X CHSA

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: 17DEC09
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

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2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR3A0352VA00

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FRI - 18DEC A1
PRIORITY OVERNIGHT

MPS# 0263 7209 7849 2748
Mstr# 7209 7849 2737 0201

29407
SC-US
CHS

XX CHSA

Part # 156148-434 NRIT V3 09-08

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: 17DEC09
ACTWGT: 11.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
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CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR3A0352VA00

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FRI - 18DEC A1
PRIORITY OVERNIGHT

MPS# 0263 7209 7849 2807
Mstr# 7209 7849 2792 0201

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17DEC09
ACTWGT: 10.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR3A0352VA00

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RADIOACTIVE SAMPLES

1 of 3
TRK# 0201 7209 7849 2704

FRI - 18DEC A1
PRIORITY OVERNIGHT

MASTER

XX CHSA

29407
SC-US
CHS

Part # 156149-434 NRIT V3 09-09

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17DEC09
ACTWGT: 32.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWM0

13c

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MPS# 0263 7209 7849 2667

FRI - 18DEC A1
PRIORITY OVERNIGHT

Matrl# 7209 7849 2656 0201

XX CHSA

29407
SC-US
CHS

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17DEC09
ACTWGT: 57.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR1A015AGWM0

13c

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PRIORITY OVERNIGHT

K# 0201 7209 7849 2689

29407
SC-US
CHS

X CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17DEC09
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2434

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GENERAL ENGINEERING LAB
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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.

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LC/MS/MS PERCHLORATE ANALYSIS

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Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-990

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:	935068
Prep Batch Number:	935067

Sample Analysis

Sample ID	Client ID
243270001	RE12-10-7352
243270002	RE12-10-7360
243270003	RE12-10-7358
243270004	RE12-10-7357
243270005	RE12-10-7359
243270006	RE12-10-7356
243270007	RE12-10-7353
243270008	RE12-10-7354
243270009	RE12-10-7355
243270010	RE12-10-7364
1202000642	Interference Check Sample (ICS)
1202000638	Method Blank (MB)
1202000639	Laboratory Control Sample (LCS)
1202000640	243270001(RE12-10-7352) Matrix Spike (MS)
1202000641	243270001(RE12-10-7352) Matrix Spike Duplicate (MSD)

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

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Preparation/Analytical Method Verification

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

Calibration Information

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

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

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

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

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

Quality Control (QC) Information

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

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

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 243270001 (RE12-10-7352) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Retention Time Standard Area Acceptance
The retention time standard areas were within the required acceptance criteria for all samples and QC.

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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

Nonconformance (NCR) Documentation
Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) 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.

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

System Configuration

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

Chromatographic Columns

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

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

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

Review Validation:

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

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

Reviewer: Herbert M Maier **Date:** 01/07/10

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SAMPLE DATA SUMMARY

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7352

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270001

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 90.2

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.554	2.22	1.17	ug/kg	J	1	24-DEC-09 15:02	per1224028a
	Perchlorate Isotope Ratio			3.02			1	24-DEC-09 15:02	per1224028a
14797-73-0	Perchlorate-101	.554	2.22	1.15	ug/kg	J	1	24-DEC-09 15:02	per1224028a
	Perchlorate-O(18)			6.02	ug/kg		1	24-DEC-09 15:02	per1224028a

^ 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 =

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

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7360

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270002

Date Filtered: 22-DEC-09

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	.563	2.25	0.563	ug/kg	U	1	24-DEC-09 15:23	per1224031a
	Perchlorate Isotope Ratio						1	24-DEC-09 15:23	per1224031a
14797-73-0	Perchlorate-101	.563	2.25	0.563	ug/kg	U	1	24-DEC-09 15:23	per1224031a
	Perchlorate-O(18)			5.69	ug/kg		1	24-DEC-09 15:23	per1224031a

^ 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 =

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

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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: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7358

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270003

Date Filtered: 22-DEC-09

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	.562	2.25	1.04	ug/kg	J	1	24-DEC-09 15:30	per1224032a
	Perchlorate Isotope Ratio			2.81			1	24-DEC-09 15:30	per1224032a
14797-73-0	Perchlorate-101	.562	2.25	1.10	ug/kg	J	1	24-DEC-09 15:30	per1224032a
	Perchlorate-O(18)			6.23	ug/kg		1	24-DEC-09 15:30	per1224032a

^ 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 =

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

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7357

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270004

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.558	2.23	0.558	ug/kg	U	1	24-DEC-09 15:38	per1224033a
	Perchlorate Isotope Ratio						1	24-DEC-09 15:38	per1224033a
14797-73-0	Perchlorate-101	.558	2.23	0.558	ug/kg	U	1	24-DEC-09 15:38	per1224033a
	Perchlorate-O(18)			6.11	ug/kg		1	24-DEC-09 15:38	per1224033a

^ 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 =

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

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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: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7359

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270005

Date Filtered: 22-DEC-09

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	.565	2.26	0.565	ug/kg	U	1	24-DEC-09 15:45	per1224034a
	Perchlorate Isotope Ratio						1	24-DEC-09 15:45	per1224034a
14797-73-0	Perchlorate-101	.565	2.26	0.565	ug/kg	U	1	24-DEC-09 15:45	per1224034a
	Perchlorate-O(18)			6.11	ug/kg		1	24-DEC-09 15:45	per1224034a

^ 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 =

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

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7356

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270006

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.557	2.23	1.20	ug/kg	J	1	24-DEC-09 16:13	per1224038a
	Perchlorate Isotope Ratio			2.84			1	24-DEC-09 16:13	per1224038a
14797-73-0	Perchlorate-101	.557	2.23	1.26	ug/kg	J	1	24-DEC-09 16:13	per1224038a
	Perchlorate-O(18)			6.04	ug/kg		1	24-DEC-09 16:13	per1224038a

^ 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 =

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

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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: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7353

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270007

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 82

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.608	2.43	0.608	ug/kg	U	1	24-DEC-09 16:20	per1224039a
	Perchlorate Isotope Ratio						1	24-DEC-09 16:20	per1224039a
14797-73-0	Perchlorate-101	.608	2.43	0.608	ug/kg	U	1	24-DEC-09 16:20	per1224039a
	Perchlorate-O(18)			6.51	ug/kg		1	24-DEC-09 16:20	per1224039a

^ 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 =

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

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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: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7354

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270008

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 93.1

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.537	2.15	0.537	ug/kg	U	1	24-DEC-09 16:27	per1224040a
	Perchlorate Isotope Ratio						1	24-DEC-09 16:27	per1224040a
14797-73-0	Perchlorate-101	.537	2.15	0.537	ug/kg	U	1	24-DEC-09 16:27	per1224040a
	Perchlorate-O(18)			5.33	ug/kg		1	24-DEC-09 16:27	per1224040a

^ 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 =

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

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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: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7355

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270009

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.574	2.3	0.574	ug/kg	U	1	24-DEC-09 16:34	per1224041a
	Perchlorate Isotope Ratio						1	24-DEC-09 16:34	per1224041a
14797-73-0	Perchlorate-101	.574	2.3	0.574	ug/kg	U	1	24-DEC-09 16:34	per1224041a
	Perchlorate-O(18)			5.91	ug/kg		1	24-DEC-09 16:34	per1224041a

^ 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 =

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

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7364

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270010

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 88

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.569	2.28	0.569	ug/kg	U	1	24-DEC-09 16:41	per1224042a
	Perchlorate Isotope Ratio						1	24-DEC-09 16:41	per1224042a
14797-73-0	Perchlorate-101	.569	2.28	0.569	ug/kg	U	1	24-DEC-09 16:41	per1224042a
	Perchlorate-O(18)			5.83	ug/kg		1	24-DEC-09 16:41	per1224042a

^ 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 =

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

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QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–990

Extract Batch Code: 935067

Date Filtered: 22–DEC–09

Matrix: SOIL

Sample ID: 1202000639

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	1.99	ug/kg	99.6		70 – 130
Perchlorate Isotope Ratio		2.96				–
Perchlorate–101	2.00	2.01	ug/kg	100		70 – 130
Perchlorate–O(18)		5.01	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.

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Form 5a

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–990

Extract Batch Code: 935067

Date Filtered: 22–DEC–09

Matrix: SOIL

Sample ID: 1202000642

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.08	ug/kg	104		70 – 130
Perchlorate Isotope Ratio		3.02				
Perchlorate–101	2.00	2.06	ug/kg	103		70 – 130
Perchlorate–O(18)		5.3	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.

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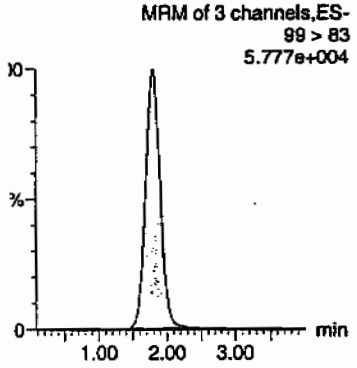
ataset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

ıst Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
rinted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

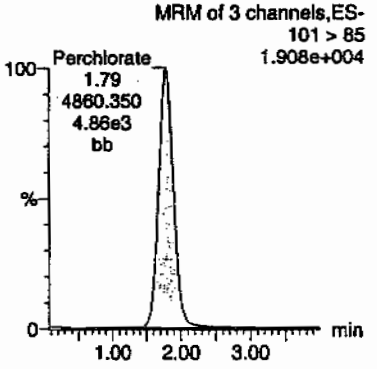
ame: per1224014a
ate: 24-Dec-2009
me: 13:24:09
: 1202000642 | LANL | 935068 | Solid | ICS | 1 |
al: 1:4,C

MM 12/26/09

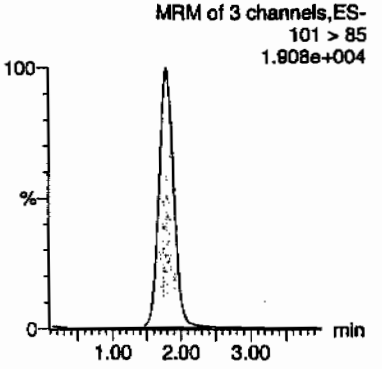
erchlorate



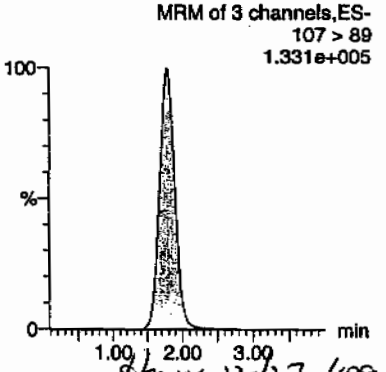
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Ann 12/27/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
02000642	Perchlorate	99 > 83	1.79	14671.082	14671.082	bb			0.2081	104.03	4.03	1668.6...	3.02
02000642	Perchlorate-101	101 > 85	1.79	4860.350	4860.350	bb			0.2061	103.07	3.07	1893.2...	
02000642	Perchlorate-O(18)	107 > 89	1.78	33807.609	33807.609	bb			0.5304	106.09	6.09	28538....	

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

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Form 6

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10-990

Extract Batch Code: 935067

Date Extracted: 22-DEC-09

GEL MS/PS ID: 1202000640

Client ID: RE12-10-7352

GEL MSD/PSD ID: 1202000641

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Recovery Limit
Perchlorate	2.22	1.17	ug/kg	3.48	104	3.48	104	.0873	30	75 – 125
Perchlorate Isotope Ratio	0	0.00		3.06		3.02		0		–
Perchlorate-101	2.22	1.15	ug/kg	3.41	102	3.44	103	.963	30	75 – 125
Perchlorate-O(18)	0	6.02	ug/kg	5.75		5.75		.0555		–

^ 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:

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Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–990

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	24–DEC–09	per1224001a	IPB001
Perchlorate–101	0.00	0	NA	24–DEC–09	per1224001a	IPB001
Perchlorate	0.00	0	NA	24–DEC–09	per1224002a	IPB001
Perchlorate–101	0.00	0	NA	24–DEC–09	per1224002a	IPB001

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iantify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Michael A. Penny

taset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

st Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
nted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

thod: C:\MassLynx\Perchlorate.PRO\MethDB\per122409a.mdb 24 Dec 2009 12:35:24
libration: C:\MassLynx\Perchlorate.PRO\CurveDB\per122409a.cdb 26 Dec 2009 09:05:13

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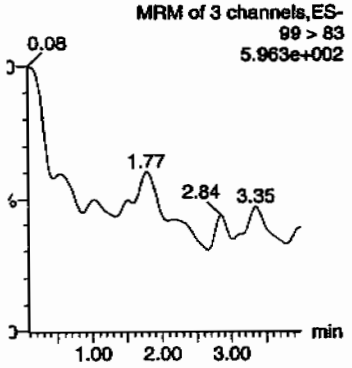
te: 24-Dec-2009
ne: 11:52:35
IPB001
il: 1:1,A

rchlorate



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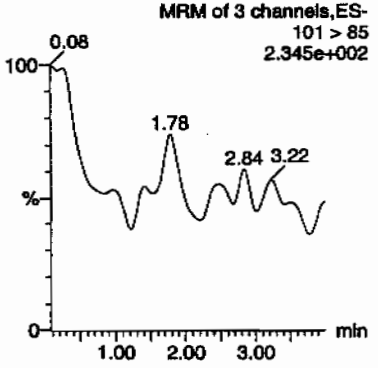
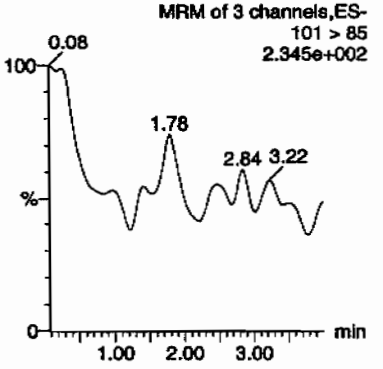
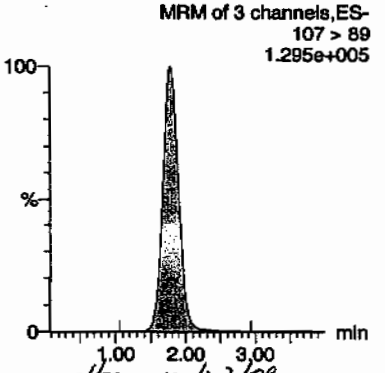


Perchlorate-101



Perchlorate-O(18)



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1001	Perchlorate	99 > 83											0.00
1001	Perchlorate-101	101 > 85											
1001	Perchlorate-O(18)	107 > 89	1.78	33547.434	33547.434	bb			0.5264	105.27	5.27	6123.4...	

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

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

iantify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Michael A. Penny

taset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

st Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
nted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

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ne: 11:59:44
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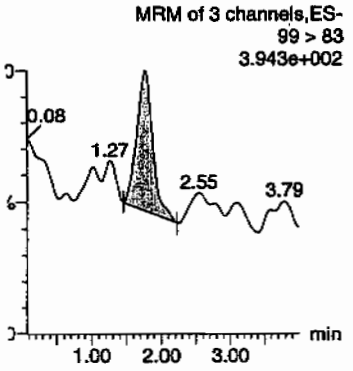
rchlorate



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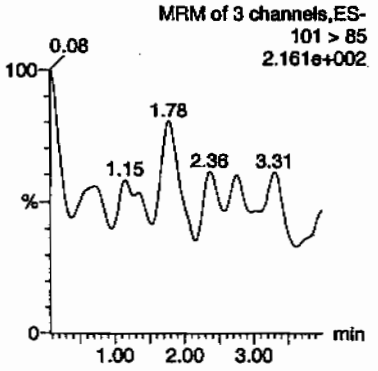

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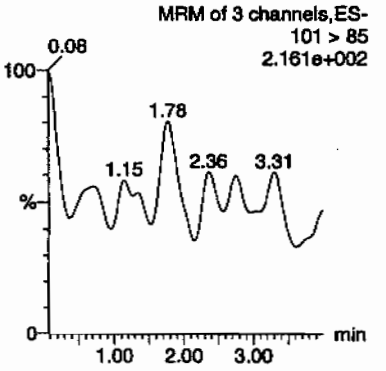
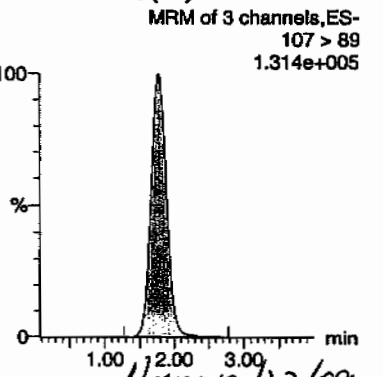


Perchlorate-O(18)



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
)001	Perchlorate	99 > 83	1.78	55.719	55.719	bb			0.0008			8.925	0.00
)001	Perchlorate-101	101 > 85											
)001	Perchlorate-O(18)	107 > 89	1.78	33985.297	33985.297	bb			0.5332	106.64	6.64	18972....	

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

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Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–990

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	24–DEC–09	per1224008a	IPB002
Perchlorate–101	0.00	0	NA	24–DEC–09	per1224008a	IPB002
Perchlorate	0.00	0	NA	24–DEC–09	per1224010a	IPB003
Perchlorate–101	0.00	0	NA	24–DEC–09	per1224010a	IPB003
Perchlorate	0.00	0	NA	24–DEC–09	per1224023a	IPB004
Perchlorate–101	0.00	0	NA	24–DEC–09	per1224023a	IPB004
Perchlorate	0.00	0	NA	24–DEC–09	per1224036a	IPB005
Perchlorate–101	0.00	0	NA	24–DEC–09	per1224036a	IPB005
Perchlorate	0.00	0	NA	24–DEC–09	per1224044a	IPB006
Perchlorate–101	0.00	0	NA	24–DEC–09	per1224044a	IPB006

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ataset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

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te: 24-Dec-2009
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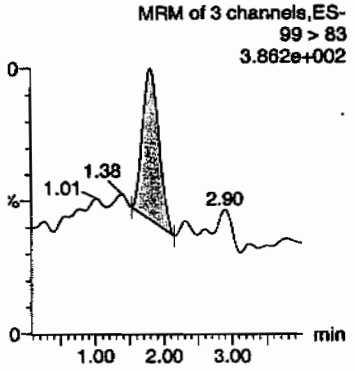
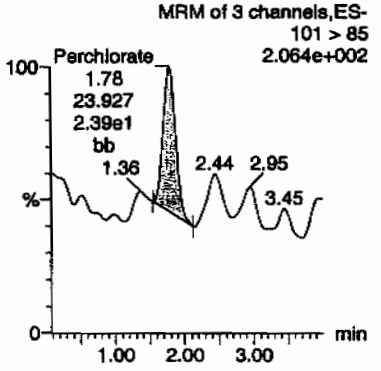
: IPB002
al: 1:1,A

rchlorate



Perchlorate



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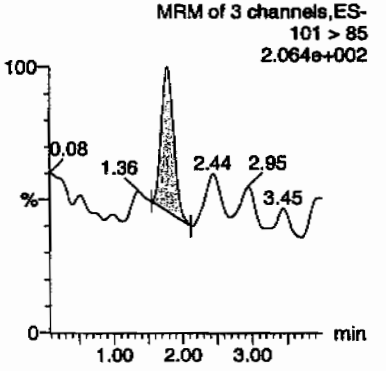
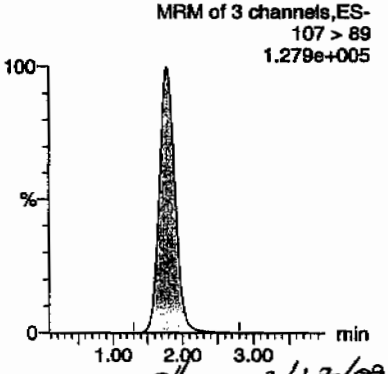


Perchlorate-O(18)



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3002	Perchlorate	99 > 83	1.81	61.953	61.953	bb			0.0009			20.035	2.59
3002	Perchlorate-101	101 > 85	1.78	23.927	23.927	bb			0.0010			10.970	
3002	Perchlorate-O(18)	107 > 89	1.78	33204.773	33204.773	bb			0.5210	104.20	4.20	3551.0...	

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

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uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Michael A. Penny

ıtaset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

.st Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
inted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

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ıte: 24-Dec-2009
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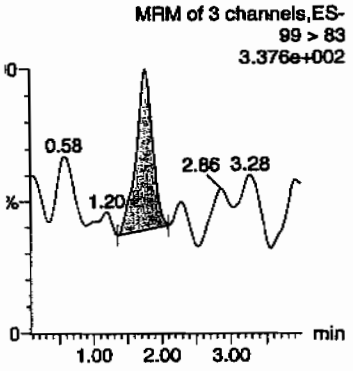
: IPB003
al: 1:1,A

rchlorate



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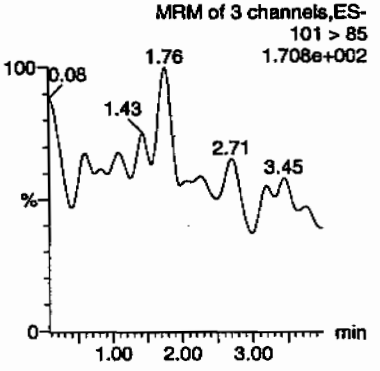

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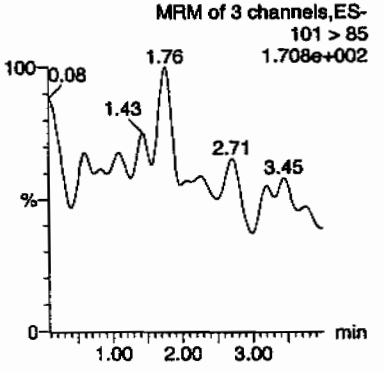
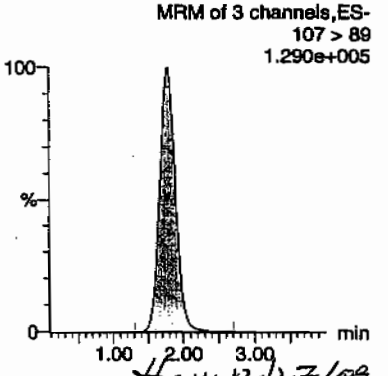


Perchlorate-O(18)



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3003	Perchlorate	99 > 83	1.77	58.566	58.566	bb			0.0008			5.769	0.00
3003	Perchlorate-101	101 > 85											
3003	Perchlorate-O(18)	107 > 89	1.78	33323.047	33323.047	bb			0.5228	104.57	4.57	8498.6...	

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

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ıantify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Michael A. Penny

ıtaset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

st Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
inted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

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ıte: 24-Dec-2009
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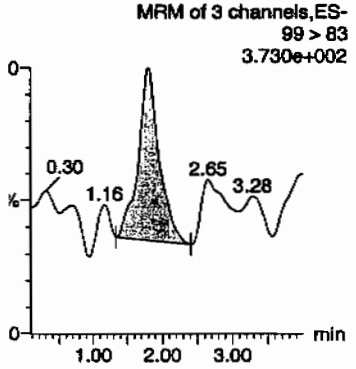
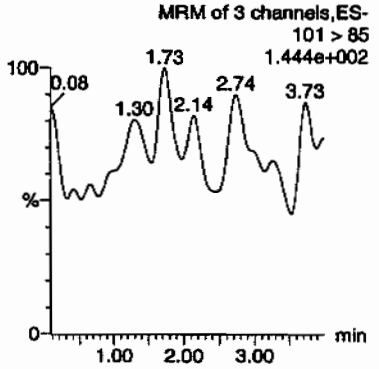
: IPB004
al: 1:1,A

rchlorate



Perchlorate



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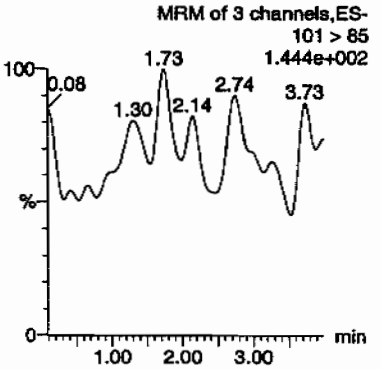

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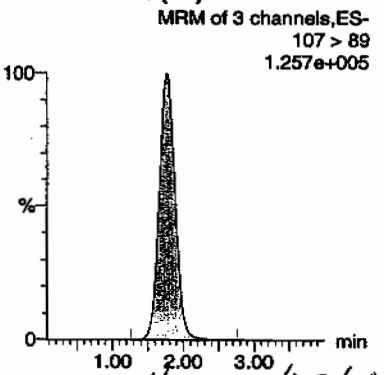

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3004	Perchlorate	99 > 83	1.79	84.027	84.027	bb			0.0012			5.724	0.00
3004	Perchlorate-101	101 > 85											
3004	Perchlorate-O(18)	107 > 89	1.77	32344.129	32344.129	bb			0.5075	101.49	1.49	10823....	

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

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ataset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

ıst Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
inted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

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ıte: 24-Dec-2009
me: 15:59:13
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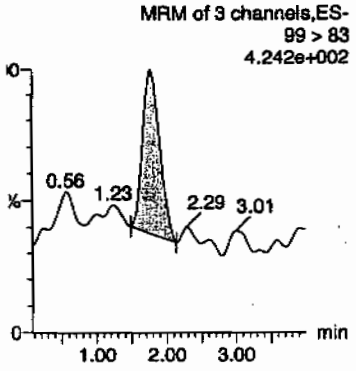
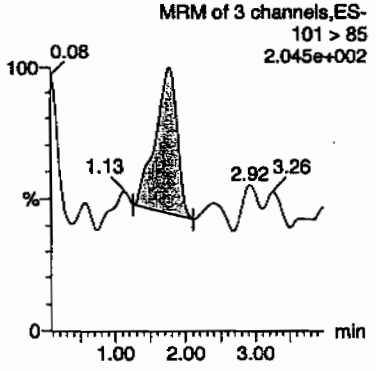
al: 1:1,A

MMT 12/26/09

ırchlorate



Perchlorate



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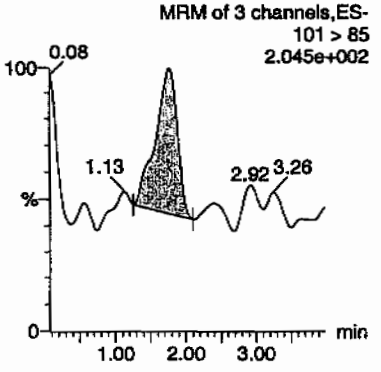
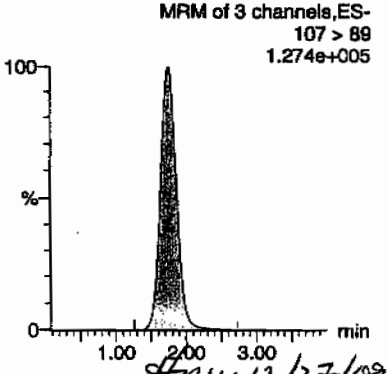


Perchlorate-O(18)



MMT 12/27/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3005	Perchlorate	99 > 83	1.77	75.287	75.287	bb			0.0011			9.598	1.87
3005	Perchlorate-101	101 > 85	1.77	40.295	40.295	bb			0.0017			9.481	
3005	Perchlorate-O(18)	107 > 89	1.76	32864.230	32864.230	bb			0.5156	103.13	3.13	7831.2...	

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

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uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Michael A. Penny

ıtaset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

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inted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

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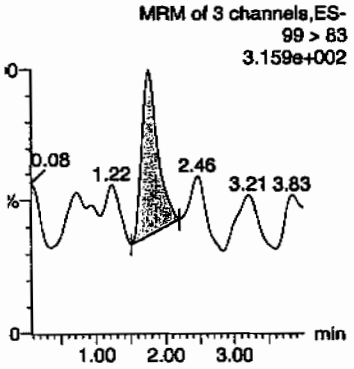
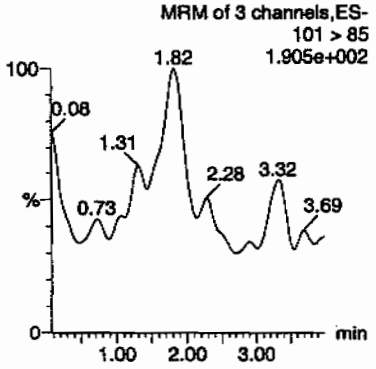
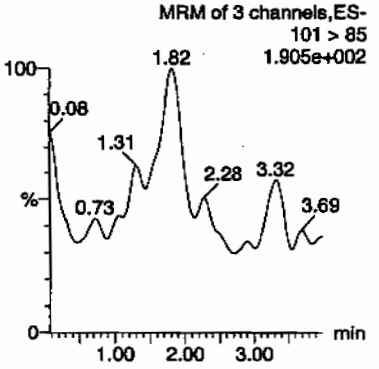
ırchlorate



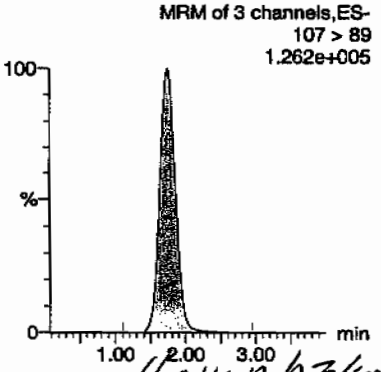
Perchlorate



Perchlorate-101



Perchlorate-O(18)



	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3006	Perchlorate	99 > 83	1.76	53.931	53.931	bb			0.0008			10.566	0.00
3006	Perchlorate-101	101 > 85											
3006	Perchlorate-O(18)	107 > 89	1.74	32620.119	32620.119	bb			0.5118	102.36	2.36	9989.8...	

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

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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

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QUATRO ULTIMA: nairb_01_08_08.cal

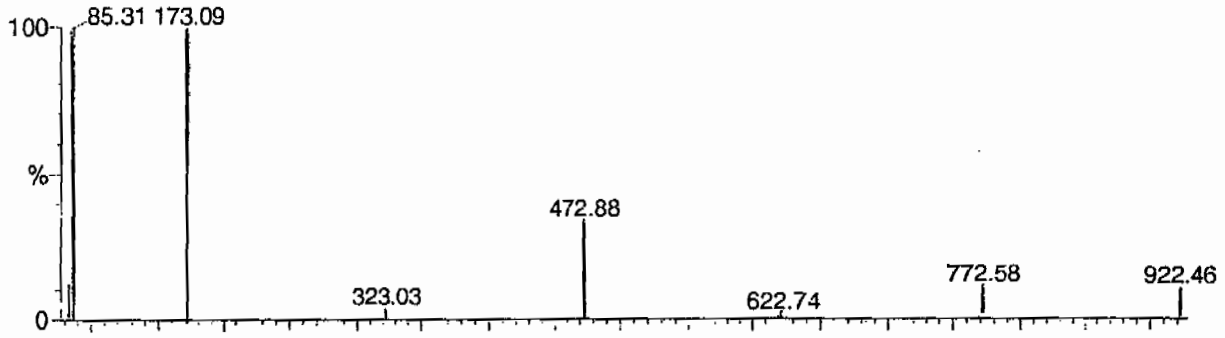
Calibration Report - MS1 Static

Printed: Tue Jan 08 12:19:12 2008

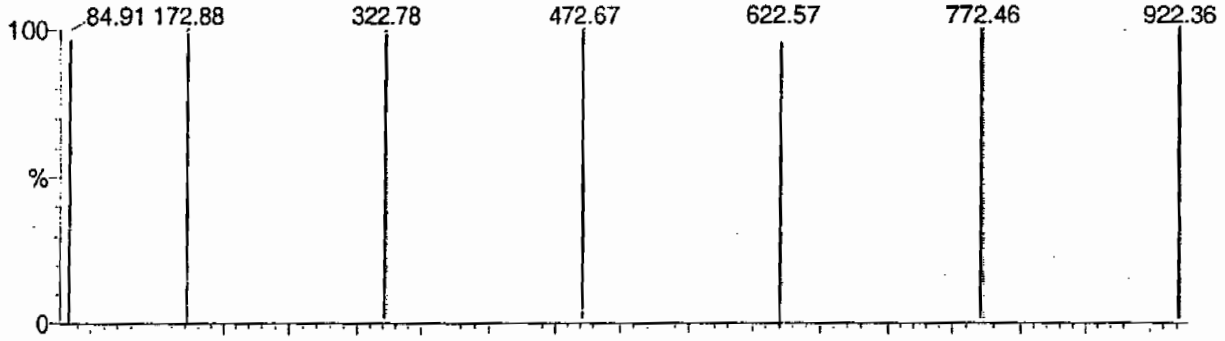
PEAKS HIGHLIGHTED BY CWW 01-09-08

Data file: STATMS1 - Uncalibrated

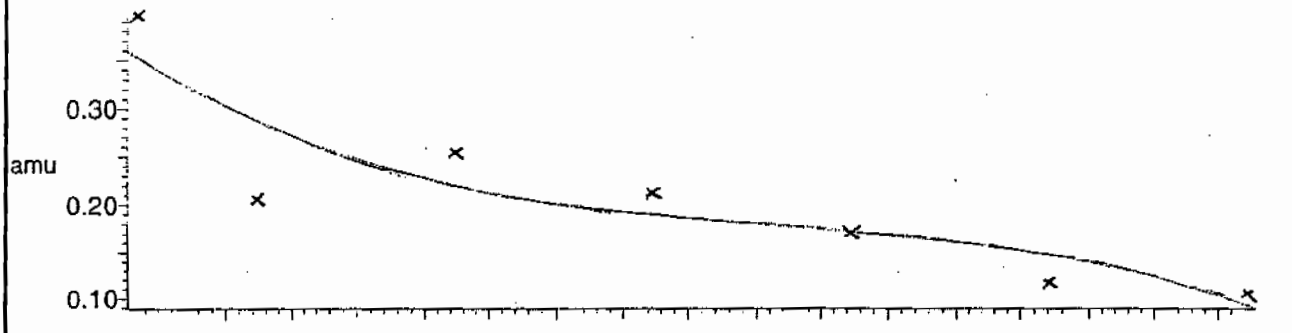
7 matches of 7 tested references



Reference file: Nairb

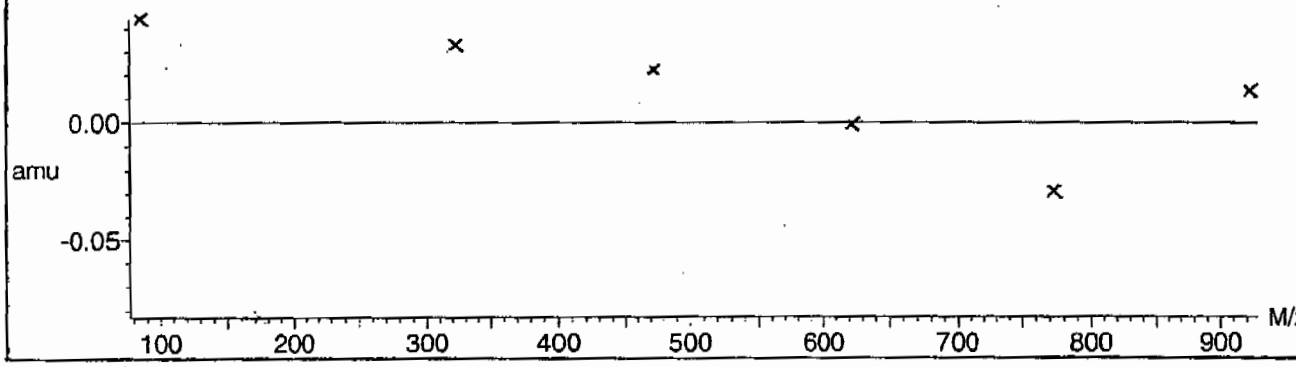


Mass difference (Raw - Ref mass)



Residuals

Mean residual = 3.212012e-2 ± 0.024108



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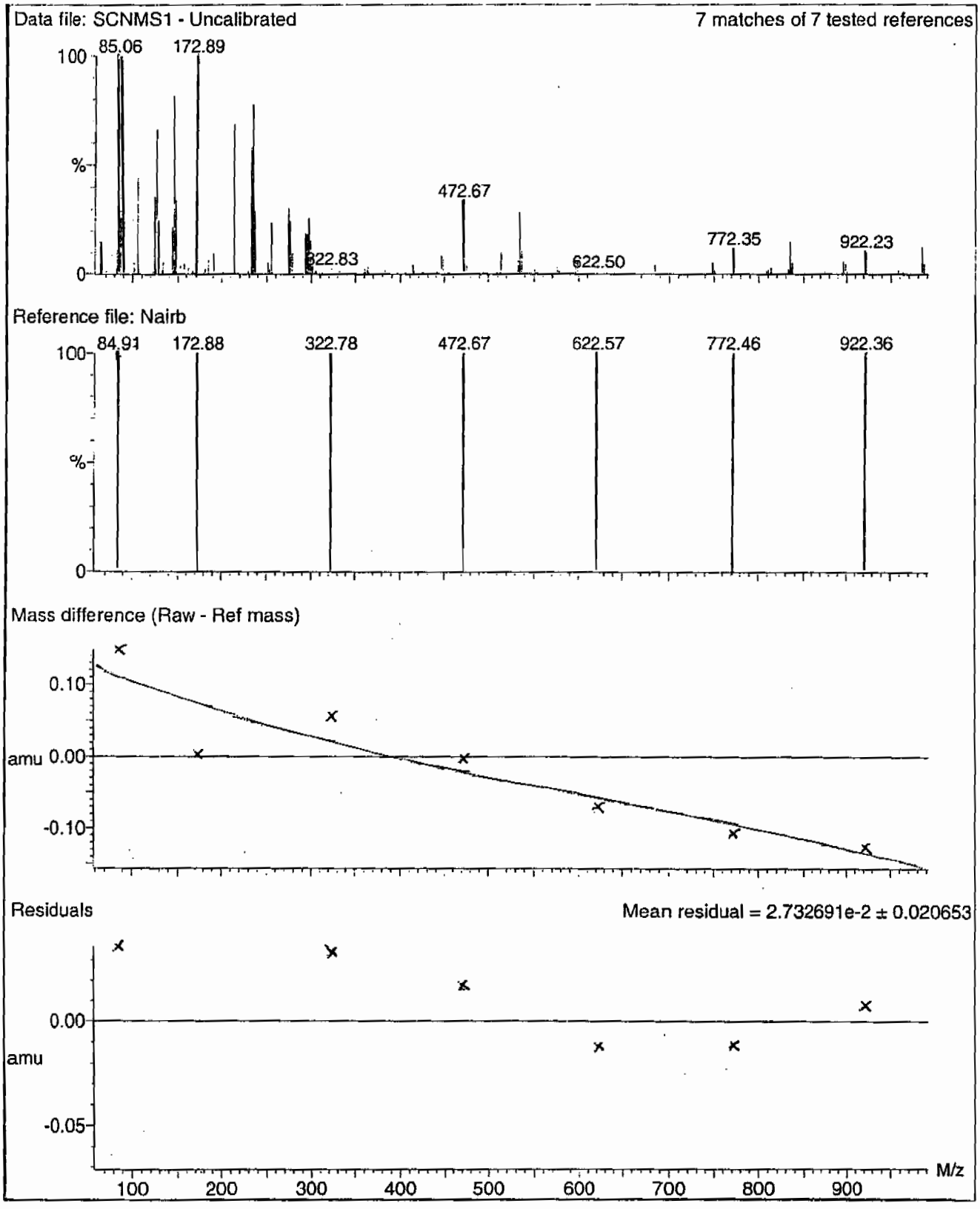
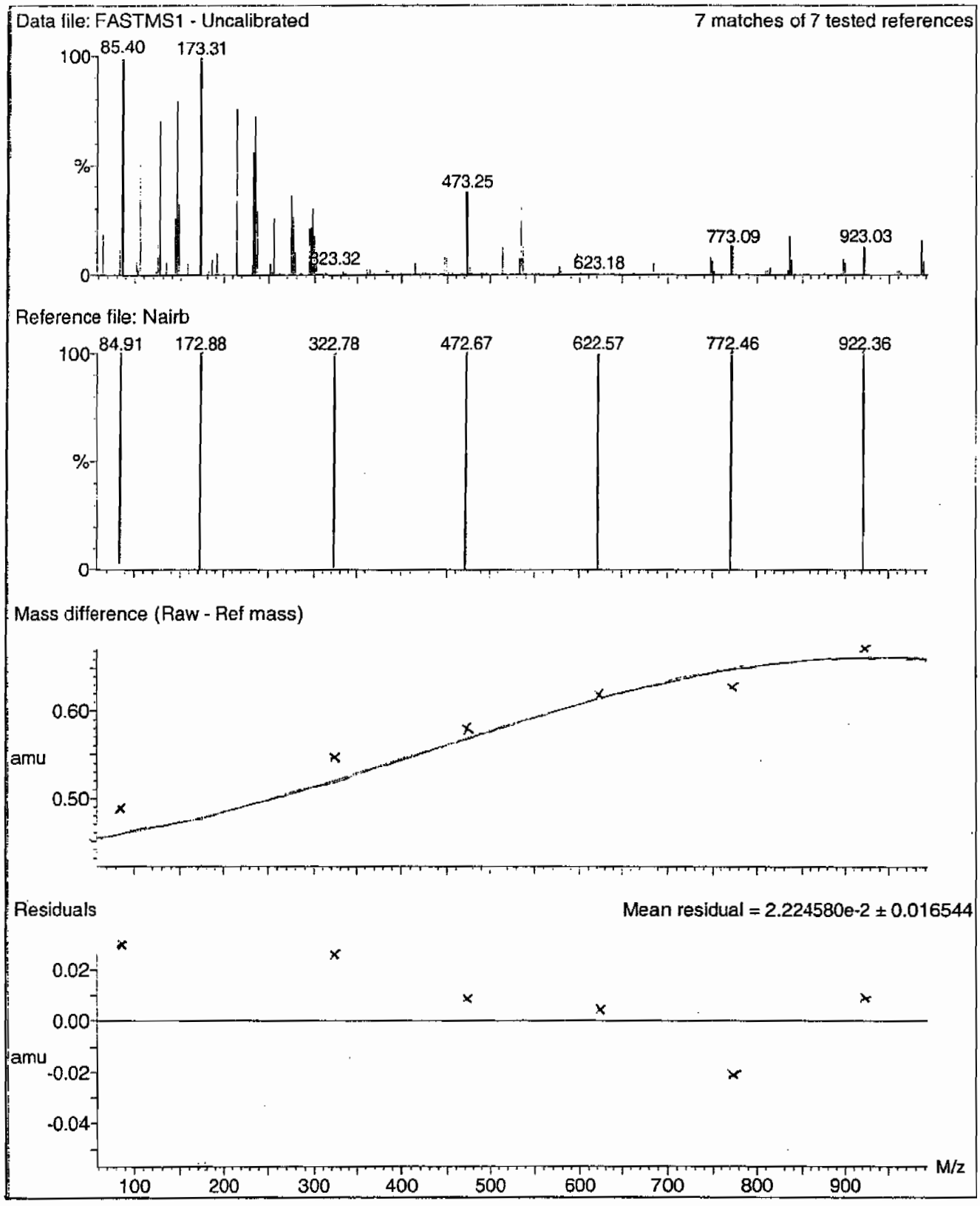
Calibration Report - MS1 Scanning

Printed: Tue Jan 08 12:20:09 2008

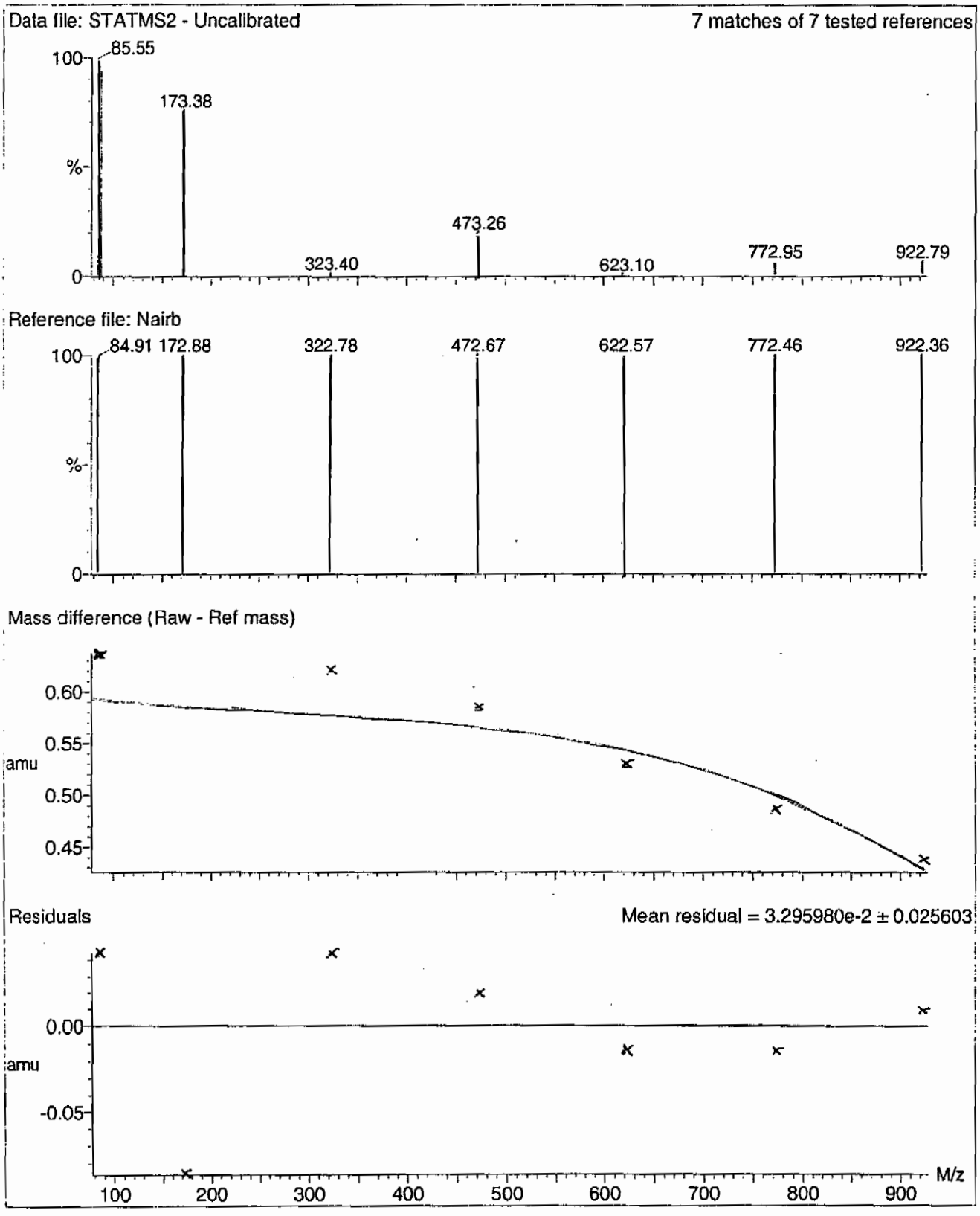


PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.



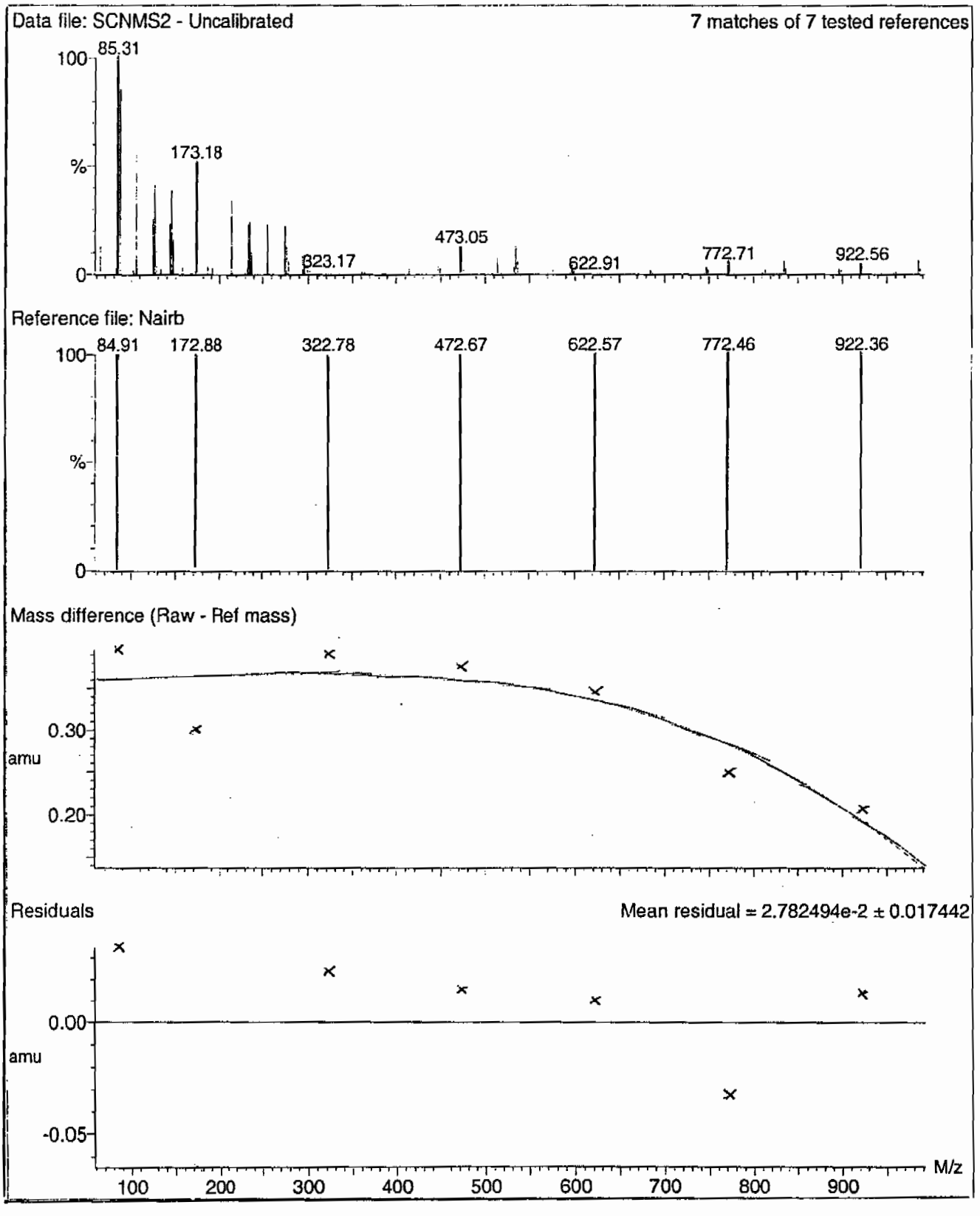
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Printed: Tue Jan 08 12:21:59 2008

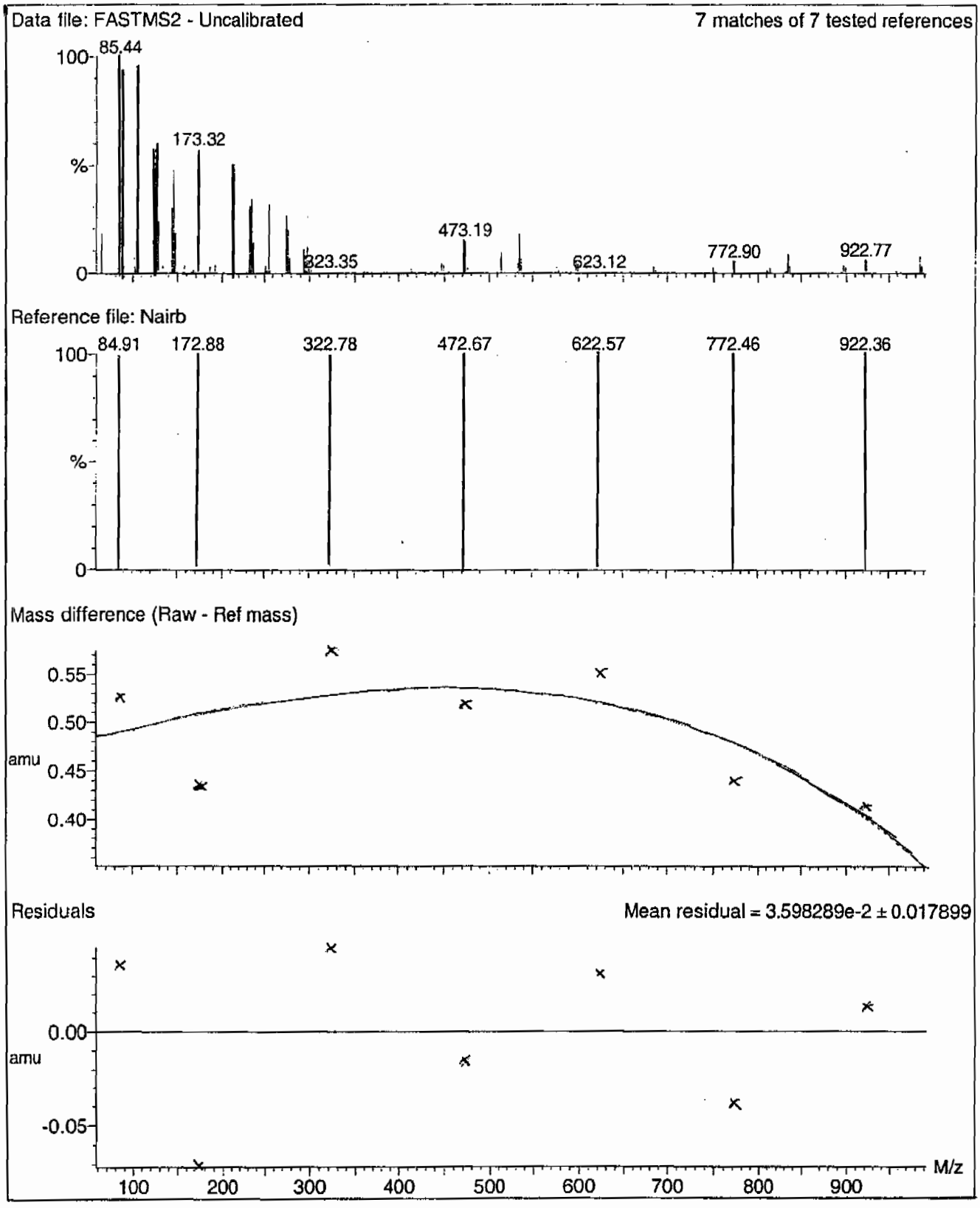


PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Printed: Tue Jan 08 12:22:56 2008



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



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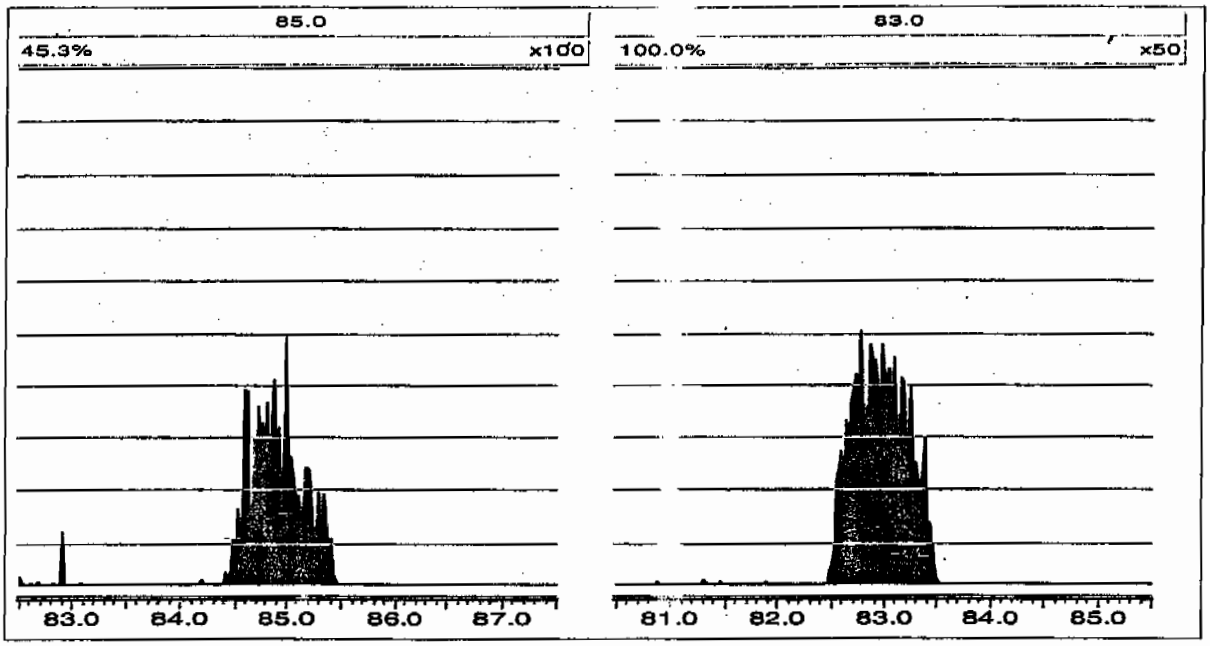
File: C:\MassLynx\Perchlorate.PRO\ACQUDB\Perchlorate.IPR

Printed: Thursday, December 24, 2009 11:50:54 Eastern Standard Time



Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–990

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	**per1224006a**	**24–DEC–09**	**32778.8**				
Lower Area Limit			**16389.4**				
Upper Area Limit			**65557.6**				
1202000638	per1224012a	24–DEC–09 13:10	31706.2	1.78	1.7935	1.008	
1202000639	per1224013a	24–DEC–09 13:17	31938.3	1.78	1.79348	1.008	
1202000642	per1224014a	24–DEC–09 13:24	33807.6	1.78	1.79348	1.008	
243270001	per1224028a	24–DEC–09 15:02	34606.5	1.76	1.76855	1.005	
1202000640	per1224029a	24–DEC–09 15:09	33038.2	1.76	1.76853	1.005	
1202000641	per1224030a	24–DEC–09 15:16	33056.6	1.76	1.7686	1.005	
243270002	per1224031a	24–DEC–09 15:23	32224.9	1.76	1.76852	1.005	
243270003	per1224032a	24–DEC–09 15:30	35316.3	1.76	1.76857	1.005	

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Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–990

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	**per1224006a**	**24–DEC–09**	**32778.8**				
Lower Area Limit			**16389.4**				
Upper Area Limit			**65557.6**				
243270004	per1224033a	24–DEC–09 15:38	34925.6	1.76	1.76863	1.005	
243270005	per1224034a	24–DEC–09 15:45	34506.8	1.76	1.7686	1.005	
243270006	per1224038a	24–DEC–09 16:13	34530.2	1.74	1.75625	1.009	
243270007	per1224039a	24–DEC–09 16:20	34112.2	1.74	1.76857	1.016	
243270008	per1224040a	24–DEC–09 16:27	31649.2	1.74	1.75628	1.009	
243270009	per1224041a	24–DEC–09 16:34	32799.6	1.76	1.7686	1.005	
243270010	per1224042a	24–DEC–09 16:41	32649.8	1.74	1.75627	1.009	

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SAMPLE DATA

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7352

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270001

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 90.2

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.554	2.22	1.17	ug/kg	J	1	24-DEC-09 15:02	per1224028a
	Perchlorate Isotope Ratio			3.02			1	24-DEC-09 15:02	per1224028a
14797-73-0	Perchlorate-101	.554	2.22	1.15	ug/kg	J	1	24-DEC-09 15:02	per1224028a
	Perchlorate-O(18)			6.02	ug/kg		1	24-DEC-09 15:02	per1224028a

^ 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 =

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

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antify Sample Report **MassLynx 4.0 SP4**
e GEL Group, LLC Analyst: Michael A. Penny

taset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

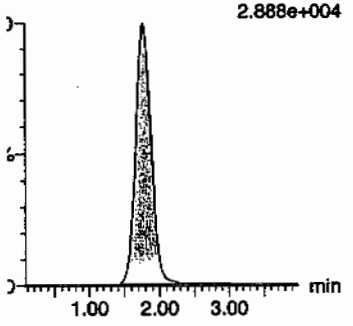
st Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
nted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

me: per1224028a
te: 24-Dec-2009
ne: 15:02:46
243270001 | LANL | 935068 | Solid | 1 | 1
il: 1:6,B

12/26/09

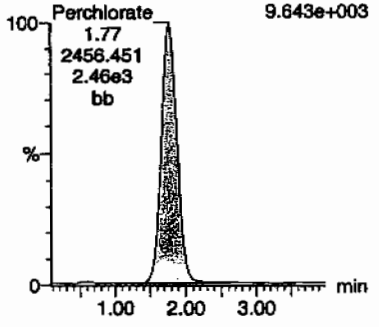
rchlorate

MRM of 3 channels,ES-
99 > 83
2.888e+004



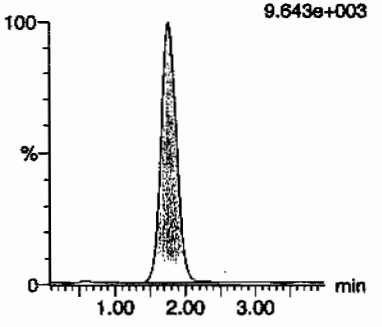
Perchlorate

MRM of 3 channels,ES-
101 > 85
9.643e+003



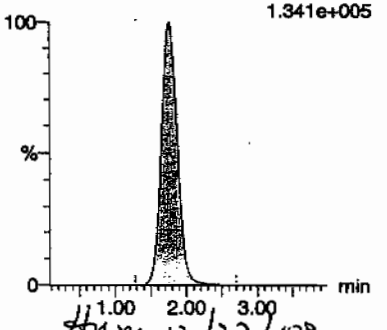
Perchlorate-101

MRM of 3 channels,ES-
101 > 85
9.643e+003



Perchlorate-O(18)

MRM of 3 channels,ES-
107 > 89
1.341e+005



HMM 12/27/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3270001	Perchlorate	99 > 83	1.77	7413.062	7413.062	bb			0.1051			306.819	3.02
3270001	Perchlorate-101	101 > 85	1.77	2456.451	2456.451	bb			0.1042			1012.6...	
3270001	Perchlorate-O(18)	107 > 89	1.76	34606.488	34606.488	bb			0.5430	108.59	8.59	1520.8...	

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

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7360

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270002

Date Filtered: 22-DEC-09

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	.563	2.25	0.563	ug/kg	U	1	24-DEC-09 15:23	per1224031a
	Perchlorate Isotope Ratio						1	24-DEC-09 15:23	per1224031a
14797-73-0	Perchlorate-101	.563	2.25	0.563	ug/kg	U	1	24-DEC-09 15:23	per1224031a
	Perchlorate-O(18)			5.69	ug/kg		1	24-DEC-09 15:23	per1224031a

^ 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 =

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

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uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Michael A. Penny

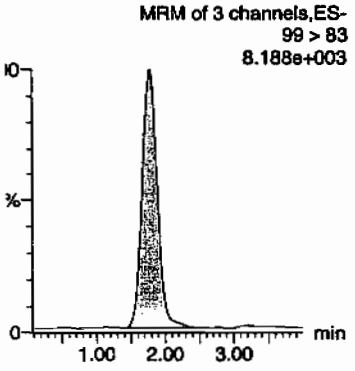
ıtaset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

.st Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
inted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

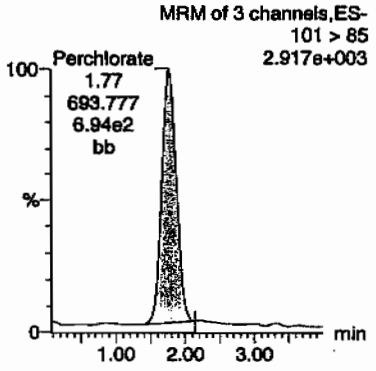
ıme: per1224031a
ıte: 24-Dec-2009
me: 15:23:56
: 243270002 | LANL/935068 | Solid | 1 |
al: 1:6,E

MDH 12/26/09

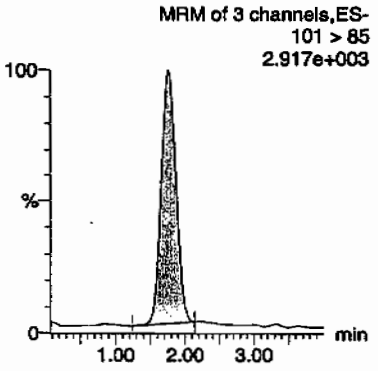
ırchlorate



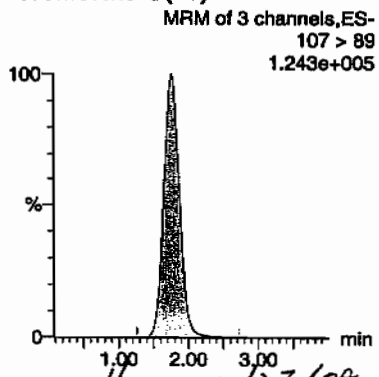
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HNM 12/27/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3270002	Perchlorate	99 > 83	1.77	2111.905	2111.905	bb			0.0300			428.362	3.04
3270002	Perchlorate-101	101 > 85	1.77	693.777	693.777	bb			0.0294			340.067	
3270002	Perchlorate-O(18)	107 > 89	1.76	32224.941	32224.941	bb			0.5056	101.12	1.12	5987.9...	

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

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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: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7358

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270003

Date Filtered: 22-DEC-09

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	.562	2.25	1.04	ug/kg	J	1	24-DEC-09 15:30	per1224032a
	Perchlorate Isotope Ratio			2.81			1	24-DEC-09 15:30	per1224032a
14797-73-0	Perchlorate-101	.562	2.25	1.10	ug/kg	J	1	24-DEC-09 15:30	per1224032a
	Perchlorate-O(18)			6.23	ug/kg		1	24-DEC-09 15:30	per1224032a

^ 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 =

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

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uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Michael A. Penny

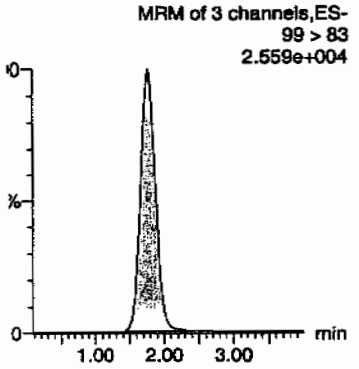
ıtaset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

st Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
inted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

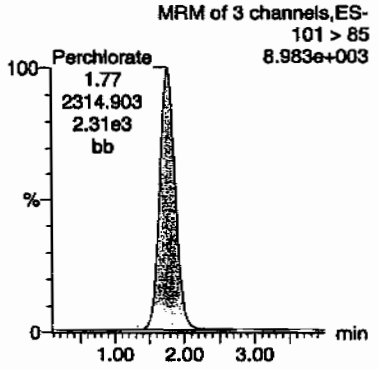
ıme: per1224032a
ıte: 24-Dec-2009
ıme: 15:30:59
: 243270003 | LANL | 935068 | Solid | 1 | 1
al: 1:6,F

12/26/09

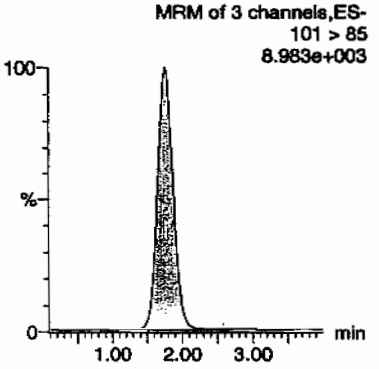
ırchlorate



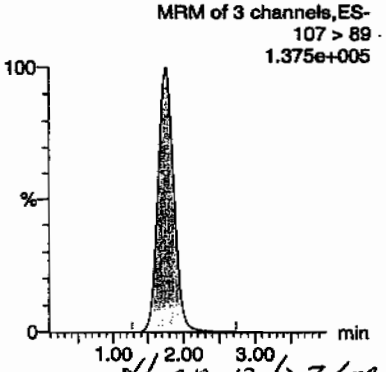
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 12/27/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3270003	Perchlorate	99 > 83	1.77	6497.485	6497.485	bb			0.0921			2079.0...	2.81
3270003	Perchlorate-101	101 > 85	1.77	2314.903	2314.903	bb			0.0982			708.928	
3270003	Perchlorate-O(18)	107 > 89	1.76	35316.277	35316.277	bb			0.5541	110.82	10.82	3336.8...	

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

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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: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7357

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270004

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.558	2.23	0.558	ug/kg	U	1	24-DEC-09 15:38	per1224033a
	Perchlorate Isotope Ratio						1	24-DEC-09 15:38	per1224033a
14797-73-0	Perchlorate-101	.558	2.23	0.558	ug/kg	U	1	24-DEC-09 15:38	per1224033a
	Perchlorate-O(18)			6.11	ug/kg		1	24-DEC-09 15:38	per1224033a

^ 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 =

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

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

ataset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

ıst Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
inted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

ame: per1224033a
ate: 24-Dec-2009
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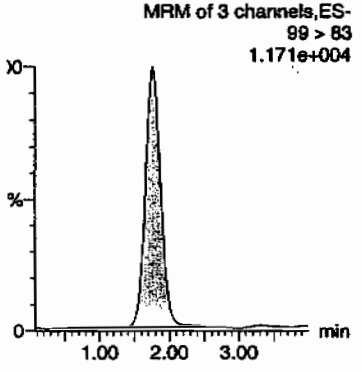
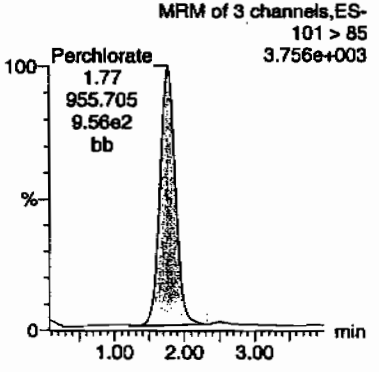
al: 1:7,A

12/26/09

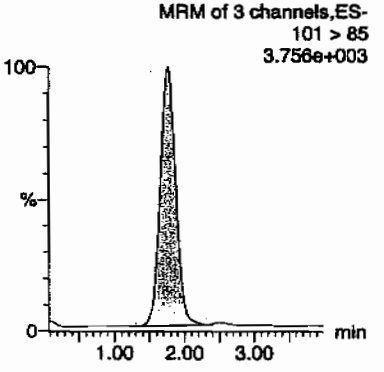
erchlorate



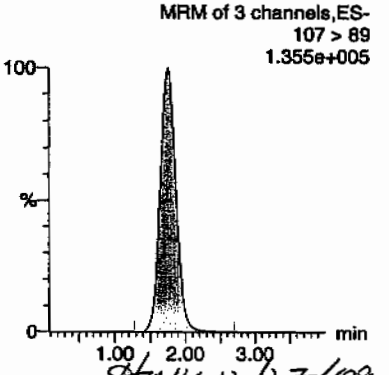
Perchlorate



Perchlorate-101



Perchlorate-O(18)



12/27/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3270004	Perchlorate	99 > 83	1.77	2971.654	2971.654	bb			0.0421			394.264	3.11
3270004	Perchlorate-101	101 > 85	1.77	955.705	955.705	bb			0.0405			331.855	
3270004	Perchlorate-O(18)	107 > 89	1.76	34925.629	34925.629	bb			0.5480	109.60	9.60	25405....	

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

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7359

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270005

Date Filtered: 22-DEC-09

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	.565	2.26	0.565	ug/kg	U	1	24-DEC-09 15:45	per1224034a
	Perchlorate Isotope Ratio						1	24-DEC-09 15:45	per1224034a
14797-73-0	Perchlorate-101	.565	2.26	0.565	ug/kg	U	1	24-DEC-09 15:45	per1224034a
	Perchlorate-O(18)			6.11	ug/kg		1	24-DEC-09 15:45	per1224034a

^ 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 =

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

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uantify Sample Report **MassLynx 4.0 SP4**
ıe GEL Group, LLC Analyst: Michael A. Penny

ıtaset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

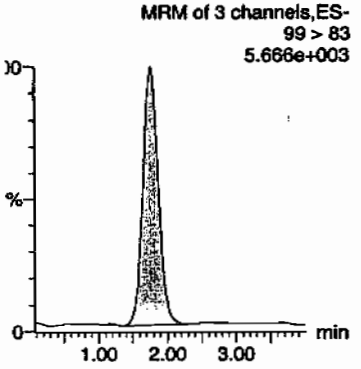
ıst Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
inted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

ıme: per1224034a
ıte: 24-Dec-2009
me: 15:45:06
: 243270005
al: 1:7,B

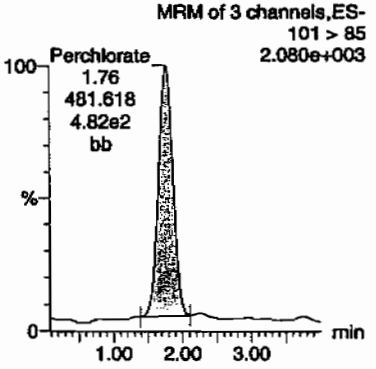
MM 12/26/09

LAUL / 935065 / Solid / 1 /

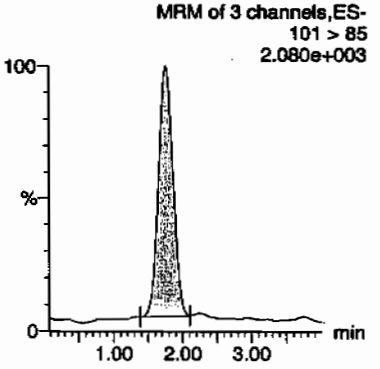
erchlorate



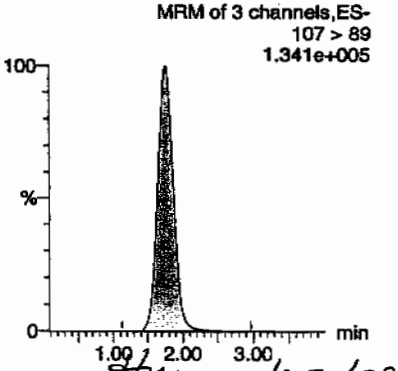
Perchlorate



Perchlorate-101



Perchlorate-O(18)



MM 12/27/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
l3270005	Perchlorate	99 > 83	1.77	1442.570	1442.570	bb			0.0205			275.571	3.00
l3270005	Perchlorate-101	101 > 85	1.76	481.618	481.618	bb			0.0204			155.377	
l3270005	Perchlorate-O(18)	107 > 89	1.76	34506.773	34506.773	bb			0.5414	108.28	8.28	9800.2...	

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

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7356

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270006

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.557	2.23	1.20	ug/kg	J	1	24-DEC-09 16:13	per1224038a
	Perchlorate Isotope Ratio			2.84			1	24-DEC-09 16:13	per1224038a
14797-73-0	Perchlorate-101	.557	2.23	1.26	ug/kg	J	1	24-DEC-09 16:13	per1224038a
	Perchlorate-O(18)			6.04	ug/kg		1	24-DEC-09 16:13	per1224038a

^ 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 =

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

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ataset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

ıst Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
rinted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

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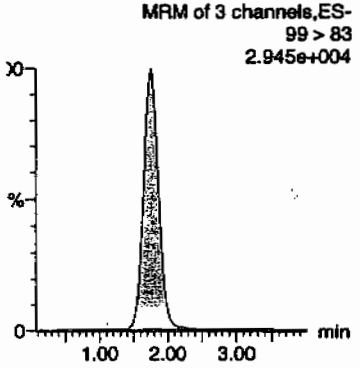
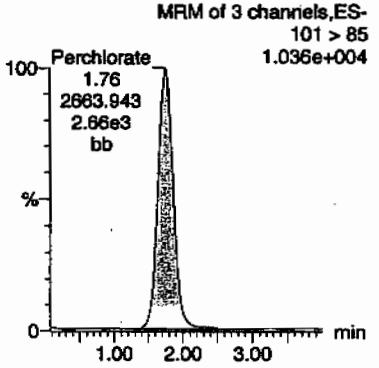
ate: 24-Dec-2009
me: 16:13:17
: 243270006 | LANC | 935068 | Solid | 1 | |
al: 1:7,C

12/26/09

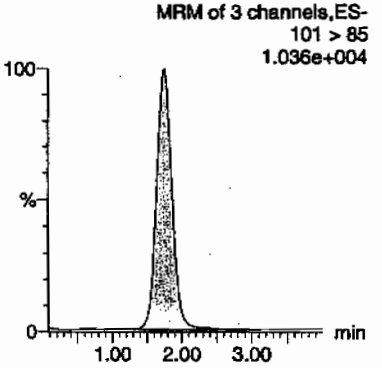
erchlorate



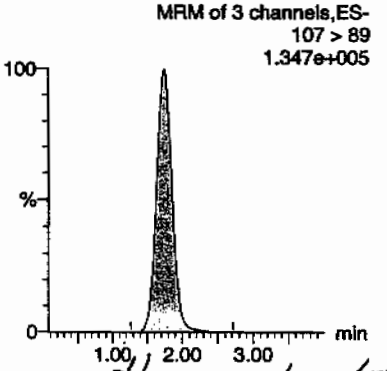
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 12/28/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3270006	Perchlorate	99 > 83	1.76	7568.231	7568.231	bb			0.1073			930.786	2.84
3270006	Perchlorate-101	101 > 85	1.76	2663.943	2663.943	bb			0.1130			669.627	
3270006	Perchlorate-O(18)	107 > 89	1.74	34530.199	34530.199	bb			0.5418	108.35	8.35	14059....	

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

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7353

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270007

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 82

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.608	2.43	0.608	ug/kg	U	1	24-DEC-09 16:20	per1224039a
	Perchlorate Isotope Ratio						1	24-DEC-09 16:20	per1224039a
14797-73-0	Perchlorate-101	.608	2.43	0.608	ug/kg	U	1	24-DEC-09 16:20	per1224039a
	Perchlorate-O(18)			6.51	ug/kg		1	24-DEC-09 16:20	per1224039a

^ 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 =

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

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ıantify Sample Report **MassLynx 4.0 SP4**
e GEL Group, LLC Analyst: Michael A. Penny

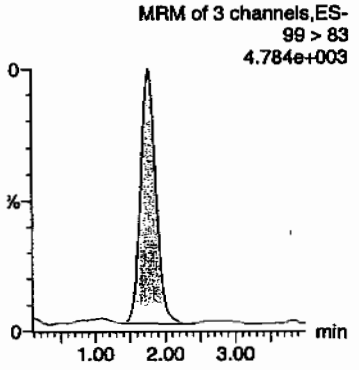
.taset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

st Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
nted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

ıme: per1224039a
ıte: 24-Dec-2009
ne: 16:20:21
: 243270007 | LANL | 935068 | Solid | 1 |
ıl: 1:7,D

MM 12/26/09

rchlorate



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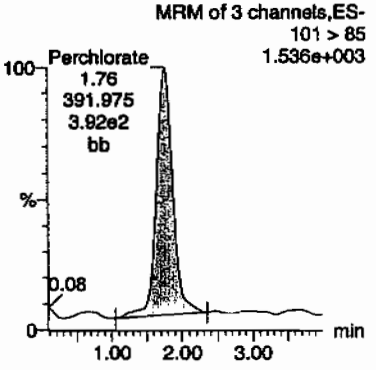
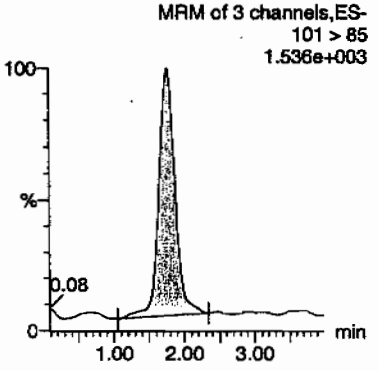
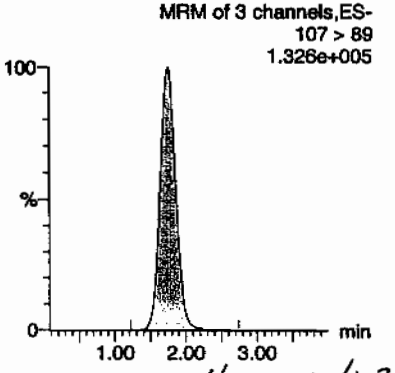


Perchlorate-101



Perchlorate-O(18)



MM 12/27/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3270007	Perchlorate	99 > 83	1.77	1197.746	1197.746	bb			0.0170			309.727	3.06
3270007	Perchlorate-101	101 > 85	1.76	391.975	391.975	bb			0.0166			310.132	
3270007	Perchlorate-O(18)	107 > 89	1.74	34112.215	34112.215	bb			0.5352	107.04	7.04	7688.9...	

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

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7354

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270008

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 93.1

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.537	2.15	0.537	ug/kg	U	1	24-DEC-09 16:27	per1224040a
	Perchlorate Isotope Ratio						1	24-DEC-09 16:27	per1224040a
14797-73-0	Perchlorate-101	.537	2.15	0.537	ug/kg	U	1	24-DEC-09 16:27	per1224040a
	Perchlorate-O(18)			5.33	ug/kg		1	24-DEC-09 16:27	per1224040a

^ 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 =

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

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uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Michael A. Penny

ataset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

ıst Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
rinted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

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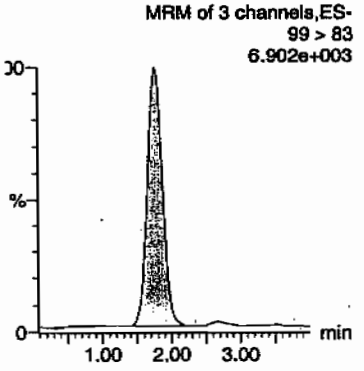
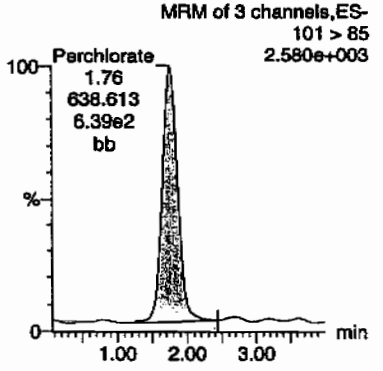
ial: 1:7,E

MMH 12/16/09

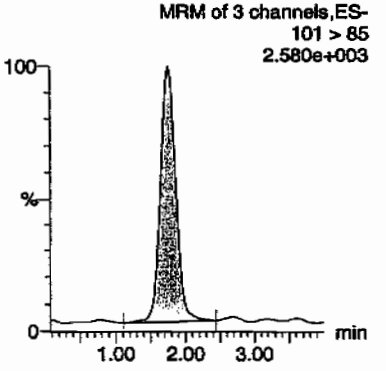
erchlorate



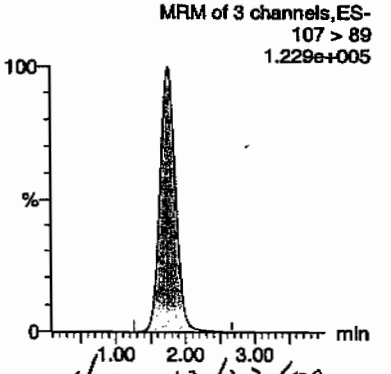
Perchlorate



Perchlorate-101



Perchlorate-O(18)



MMH 12/27/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
43270008	Perchlorate	99 > 83	1.76	1731.308	1731.308	bb			0.0246			240.390	2.71
43270008	Perchlorate-101	101 > 85	1.76	638.613	638.613	bb			0.0271			138.872	
43270008	Perchlorate-O(18)	107 > 89	1.74	31649.215	31649.215	bb			0.4966	99.31	-0.69	12811....	

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

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7355

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270009

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.574	2.3	0.574	ug/kg	U	1	24-DEC-09 16:34	per1224041a
	Perchlorate Isotope Ratio						1	24-DEC-09 16:34	per1224041a
14797-73-0	Perchlorate-101	.574	2.3	0.574	ug/kg	U	1	24-DEC-09 16:34	per1224041a
	Perchlorate-O(18)			5.91	ug/kg		1	24-DEC-09 16:34	per1224041a

^ 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 =

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

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uantify Sample Report **MassLynx 4.0 SP4**
ıe GEL Group, LLC Analyst: Michael A. Penny

ataset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

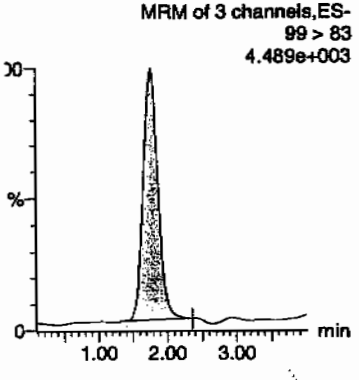
ıst Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
rinted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

ame: per1224041a
ate: 24-Dec-2009
me: 16:34:27
: 243270009
al: 1:7,F

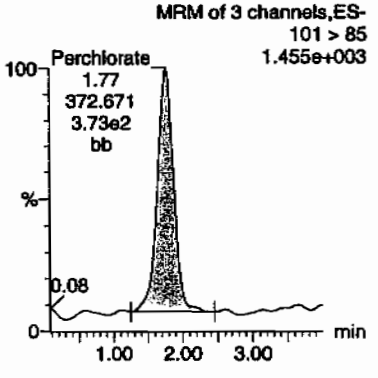
LANL 935068 Sca 1 1

12/26/09

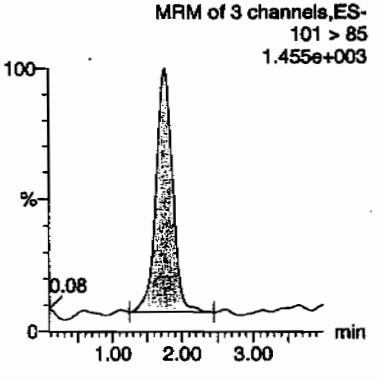
erchlorate



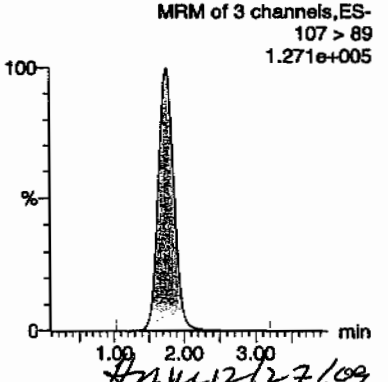
Perchlorate



Perchlorate-101



Perchlorate-O(18)



AM 12/27/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
43270009	Perchlorate	99 > 83	1.77	1089.695	1089.695	bb			0.0155			813.037	2.92
43270009	Perchlorate-101	101 > 85	1.77	372.671	372.671	bb			0.0158			140.303	
43270009	Perchlorate-O(18)	107 > 89	1.76	32799.617	32799.617	bb			0.5146	102.92	2.92	28832....	

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7364

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 243270010

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 88

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.569	2.28	0.569	ug/kg	U	1	24-DEC-09 16:41	per1224042a
	Perchlorate Isotope Ratio						1	24-DEC-09 16:41	per1224042a
14797-73-0	Perchlorate-101	.569	2.28	0.569	ug/kg	U	1	24-DEC-09 16:41	per1224042a
	Perchlorate-O(18)			5.83	ug/kg		1	24-DEC-09 16:41	per1224042a

^ 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 =

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

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Michael A. Penny

ataset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

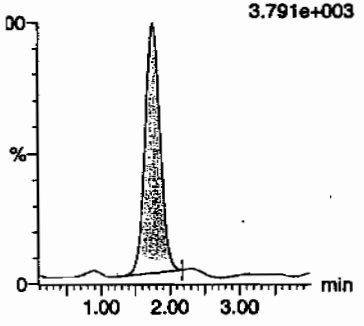
ast Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
rinted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

ame: per1224042a
ate: 24-Dec-2009
ime: 16:41:30
: 243270010
al: 1:8,A

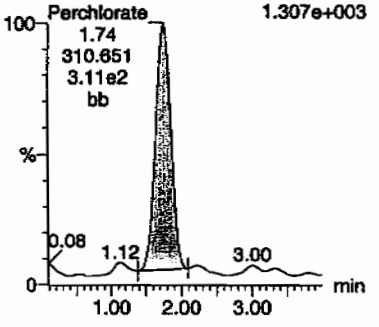
LANL | 935068 | Solid | 1 | 1

12/26/09

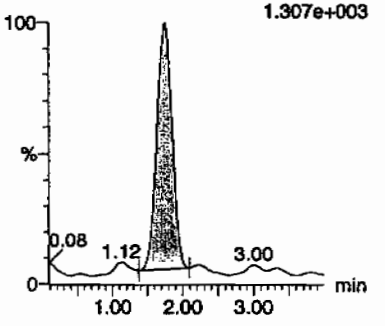
erchlorate



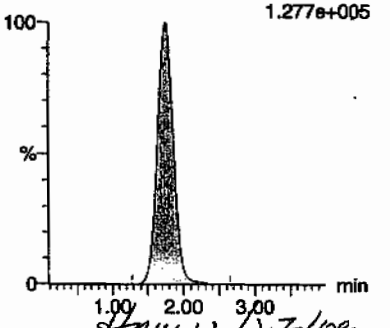
Perchlorate



Perchlorate-101



Perchlorate-O(18)



AMM 12/26/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
43270010	Perchlorate	99 > 83	1.76	932.765	932.765	bb			0.0132			162.089	3.00
43270010	Perchlorate-101	101 > 85	1.74	310.651	310.651	bb			0.0132			54.788	
43270010	Perchlorate-O(18)	107 > 89	1.74	32649.789	32649.789	bb			0.5123	102.45	2.45	11864....	

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STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-990

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 24-DEC-09

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

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 70510.42

Response Type: External Standard

Curve Type: RF

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Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-990

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 24-DEC-09

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

Parmname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 23577.58

Response Type: External Standard

Curve Type: RF

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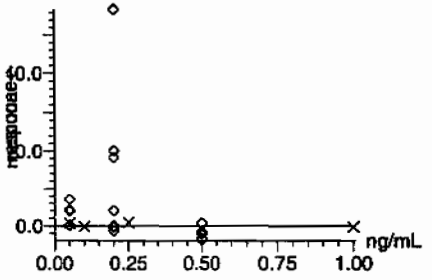
uantify Calibration Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Michael A. Penny

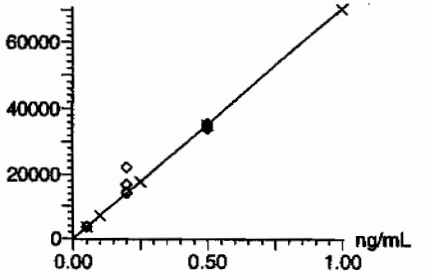
ıtaset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

.st Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
inted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

ethod: C:\MassLynx\Perchlorate.PRO\MethDB\per122409a.mdb 24 Dec 2009 12:35:24
ılibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per122409a.cdb 26 Dec 2009 09:05:13

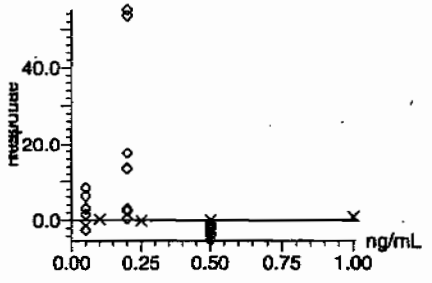
ompound name: Perchlorate
esponse Factor: 70510.4
RF SD: 566.383, % Relative SD: 0.803261
esponse type: External Std, Area
ırve type: RF

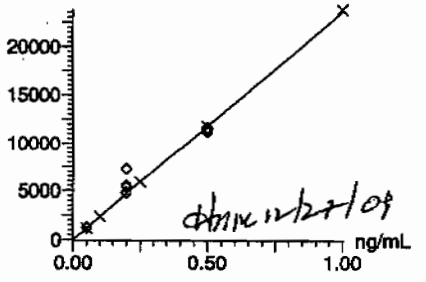




MM 12/26/09

ompound name: Perchlorate-101
esponse Factor: 23577.6
RF SD: 206.89, % Relative SD: 0.877488
esponse type: External Std, Area
ırve type: RF





MM 12/27/09

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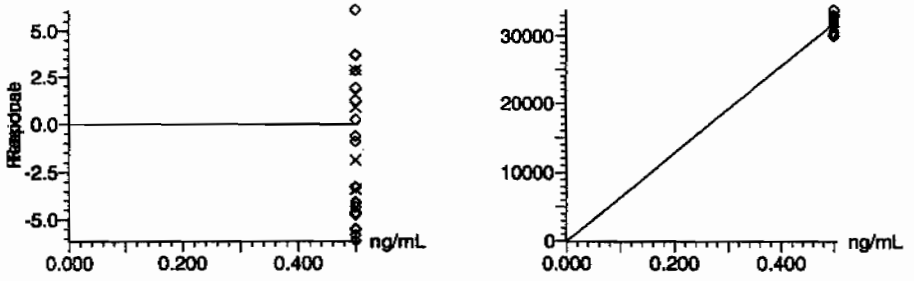
ıe GEL Group, LLC Analyst: Michael A. Penny

ataset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

ıst Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
rinted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

ompound name: Perchlorate-O(18)
esponse Factor: 63735.6
RF SD: 1638.56, % Relative SD: 2.57087
esponse type: External Std, Area
urve type: RF



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

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Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-990

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	100.73	24-DEC-09 12:48	per1224009a
Perchlorate Isotope Ratio		3.03		24-DEC-09 12:48	per1224009a
Perchlorate-101	.5	.5	99.33	24-DEC-09 12:48	per1224009a

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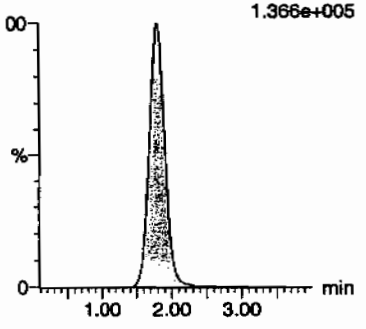
Dataset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

Last Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
Printed: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

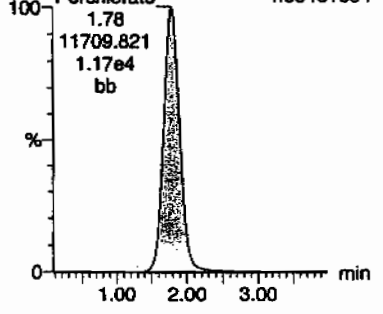
Name: per1224009a
Date: 24-Dec-2009
Time: 12:48:55
ID: WCL091218-06ICV
Vial: 1:2,A

MPT 12/26/09

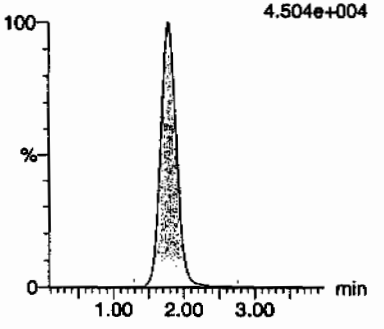
Perchlorate



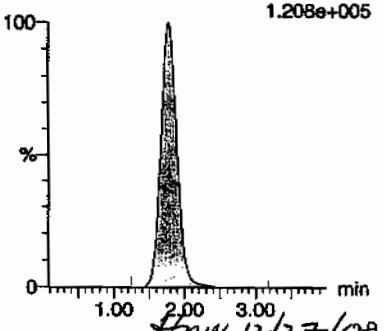
Perchlorate



Perchlorate-101



Perchlorate-O(18)



AMK 12/27/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091218-06ICV	Perchlorate	99 > 83	1.79	35512.238	35512.238	bb			0.5036	100.73	0.73	7186.1...	3.03
WCL091218-06ICV	Perchlorate-101	101 > 85	1.78	11709.821	11709.821	bb			0.4967	99.33	-0.67	3047.4...	
WCL091218-06ICV	Perchlorate-O(18)	107 > 89	1.78	31574.010	31574.010	bb			0.4954	99.08	-0.92	5177.7...	

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

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Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–990

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.48	96.26	24–DEC–09 14:20	per1224022a
Perchlorate Isotope Ratio		2.94		24–DEC–09 14:20	per1224022a
Perchlorate–101	.5	.49	97.83	24–DEC–09 14:20	per1224022a
Perchlorate	.5	.49	98.37	24–DEC–09 15:52	per1224035a
Perchlorate Isotope Ratio		3.04		24–DEC–09 15:52	per1224035a
Perchlorate–101	.5	.48	96.9	24–DEC–09 15:52	per1224035a
Perchlorate	.5	.49	98.47	24–DEC–09 16:48	per1224043a
Perchlorate Isotope Ratio		3.02		24–DEC–09 16:48	per1224043a
Perchlorate–101	.5	.49	97.61	24–DEC–09 16:48	per1224043a

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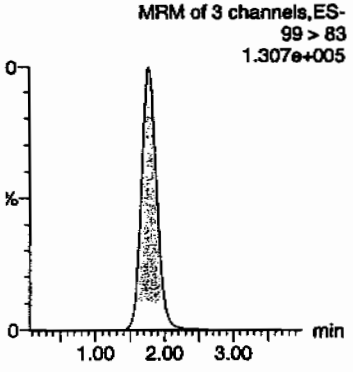
ıantify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Michael A. Penny

ıtaset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

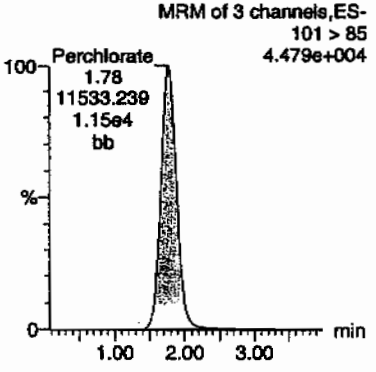
st Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
inted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

ıme: per1224022a
ıte: 24-Dec-2009
ne: 14:20:31
: WCL091218-06CCV
al: 1:2,A

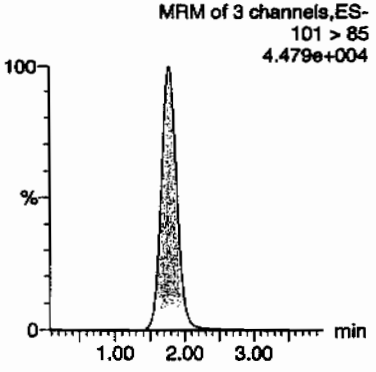
rchlorate



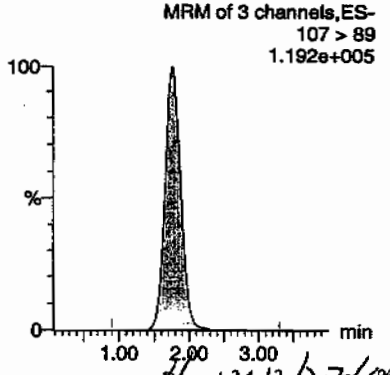
Perchlorate



Perchlorate-101



Perchlorate-O(18)



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL091218-06CCV	Perchlorate	99 > 83	1.78	33937.723	33937.723	bb			0.4813	96.26	-3.74	831.137	2.94
CL091218-06CCV	Perchlorate-101	101 > 85	1.78	11533.239	11533.239	bb			0.4892	97.83	-2.17	2372.0...	
CL091218-06CCV	Perchlorate-O(18)	107 > 89	1.77	30814.051	30814.051	bb			0.4835	96.69	-3.31	4630.1...	

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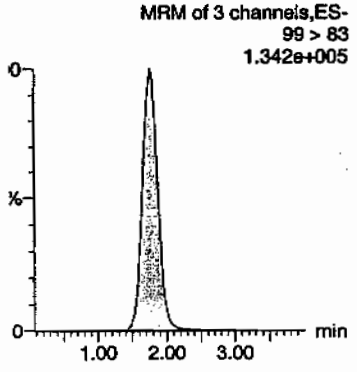
uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Michael A. Penny

ıtaset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

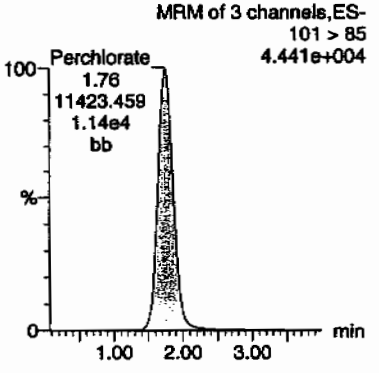
st Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
inted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

ıme: per1224035a
ıte: 24-Dec-2009
ıme: 15:52:10
: WCL091218-06CCV
al: 1:2,A

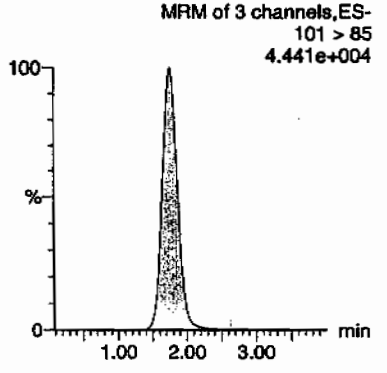
rchlorate



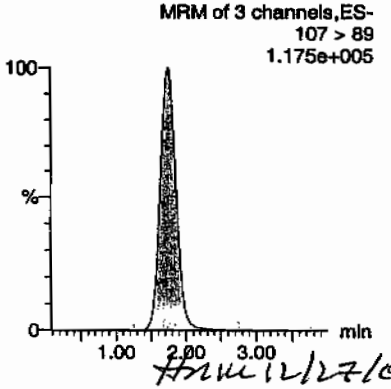
Perchlorate



Perchlorate-101



Perchlorate-O(18)



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL091218-06CCV	Perchlorate	99 > 83	1.77	34679.496	34679.496	bb			0.4918	98.37	-1.63	3289.0...	3.04
CL091218-06CCV	Perchlorate-101	101 > 85	1.76	11423.459	11423.459	bb			0.4845	96.90	-3.10	3876.6...	
CL091218-06CCV	Perchlorate-O(18)	107 > 89	1.74	30402.283	30402.283	bb			0.4770	95.40	-4.60	22039....	

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

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ataset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

ıst Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
rinted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

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ate: 24-Dec-2009
me: 16:48:35
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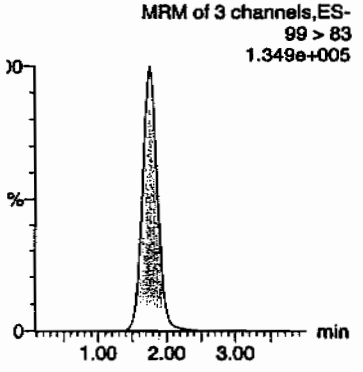
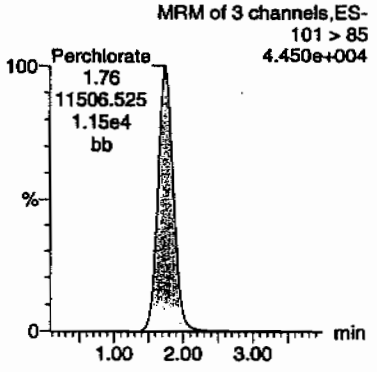
al: 1:2,A

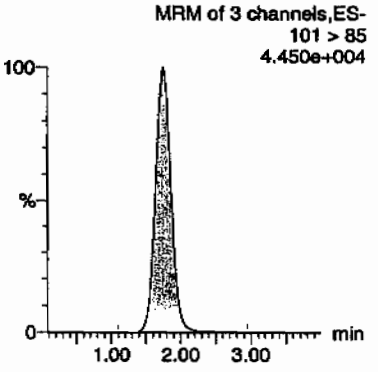
erchlorate



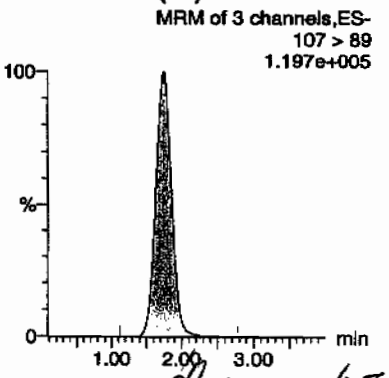
Perchlorate



Perchlorate-101



Perchlorate-O(18)



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL091218-06CCV	Perchlorate	99 > 83	1.76	34716.953	34716.953	bb			0.4924	98.47	-1.53	5930.5...	3.02
CL091218-06CCV	Perchlorate-101	101 > 85	1.76	11506.525	11506.525	bb			0.4880	97.61	-2.39	2052.1...	
CL091218-06CCV	Perchlorate-O(18)	107 > 89	1.74	30830.764	30830.764	bb			0.4837	96.75	-3.25	3469.6...	

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

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Perchlorate MDL Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-990

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	107.17	24-DEC-09 13:03	per1224011a
Perchlorate Isotope Ratio		2.96		24-DEC-09 13:03	per1224011a
Perchlorate-101	.05	.05	108.37	24-DEC-09 13:03	per1224011a
Perchlorate	.05	.05	104	24-DEC-09 14:34	per1224024a
Perchlorate Isotope Ratio		3.19		24-DEC-09 14:34	per1224024a
Perchlorate-101	.05	.05	97.61	24-DEC-09 14:34	per1224024a
Perchlorate	.05	.05	103.94	24-DEC-09 16:06	per1224037a
Perchlorate Isotope Ratio		3.06		24-DEC-09 16:06	per1224037a
Perchlorate-101	.05	.05	101.59	24-DEC-09 16:06	per1224037a
Perchlorate	.05	.05	100.17	24-DEC-09 17:02	per1224045a
Perchlorate Isotope Ratio		2.82		24-DEC-09 17:02	per1224045a

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Perchlorate MDL Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-990

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate-101	.05	.05	106.38	24-DEC-09 17:02	per1224045a

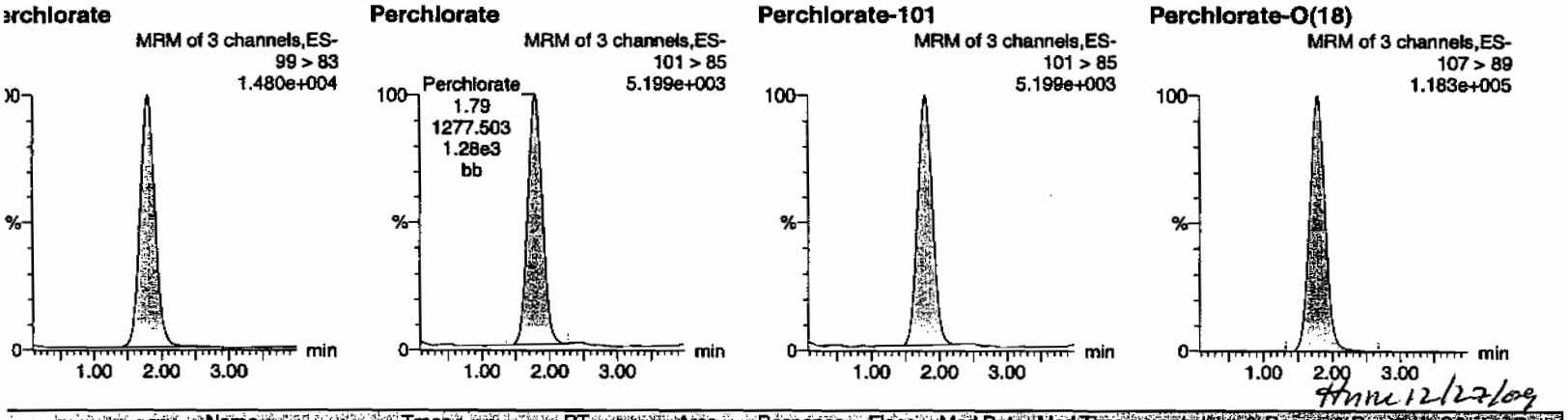
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Michael A. Penny

ataset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

ıst Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
rinted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

ame: per1224011a
ate: 24-Dec-2009
me: 13:03:01
: WCL091218-07CRI
al: 1:2,B



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL091218-07CRI	Perchlorate	99 > 83	1.79	3778.272	3778.272	bb			0.0536	107.17	7.17	716.684	2.96
CL091218-07CRI	Perchlorate-101	101 > 85	1.79	1277.503	1277.503	bb			0.0542	108.37	8.37	366.151	
CL091218-07CRI	Perchlorate-O(18)	107 > 89	1.78	30546.498	30546.498	bb			0.4793	95.85	-4.15	3199.7...	

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

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

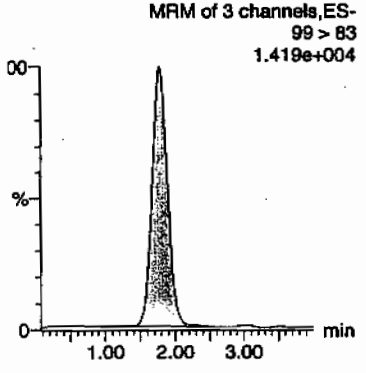
uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Michael A. Penny

ataset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

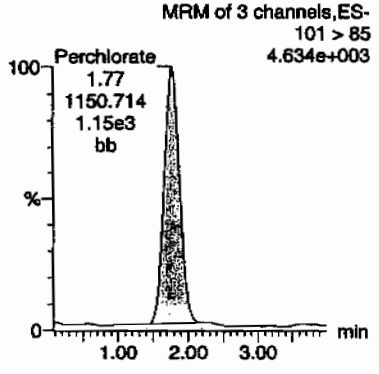
ast Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
rinted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

ame: per1224024a
ate: 24-Dec-2009
ime: 14:34:36
): WCL091218-07CRI
ial: 1:2,B

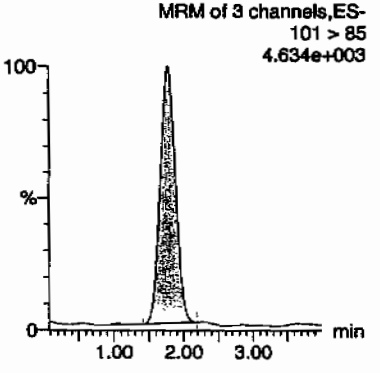
erchlorate



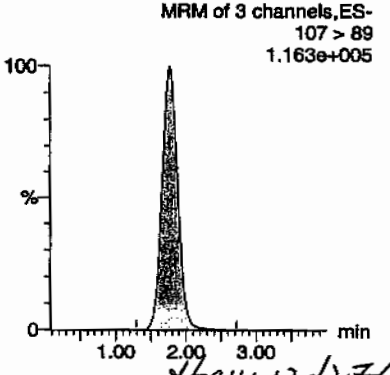
Perchlorate



Perchlorate-101



Perchlorate-O(18)



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL091218-07CRI	Perchlorate	99 > 83	1.78	3666.586	3666.586	bb			0.0520	104.00	4.00	756.805	3.19
CL091218-07CRI	Perchlorate-101	101 > 85	1.77	1150.714	1150.714	bb			0.0488	97.61	-2.39	352.318	
CL091218-07CRI	Perchlorate-O(18)	107 > 89	1.77	30017.332	30017.332	bb			0.4710	94.19	-5.81	10958....	

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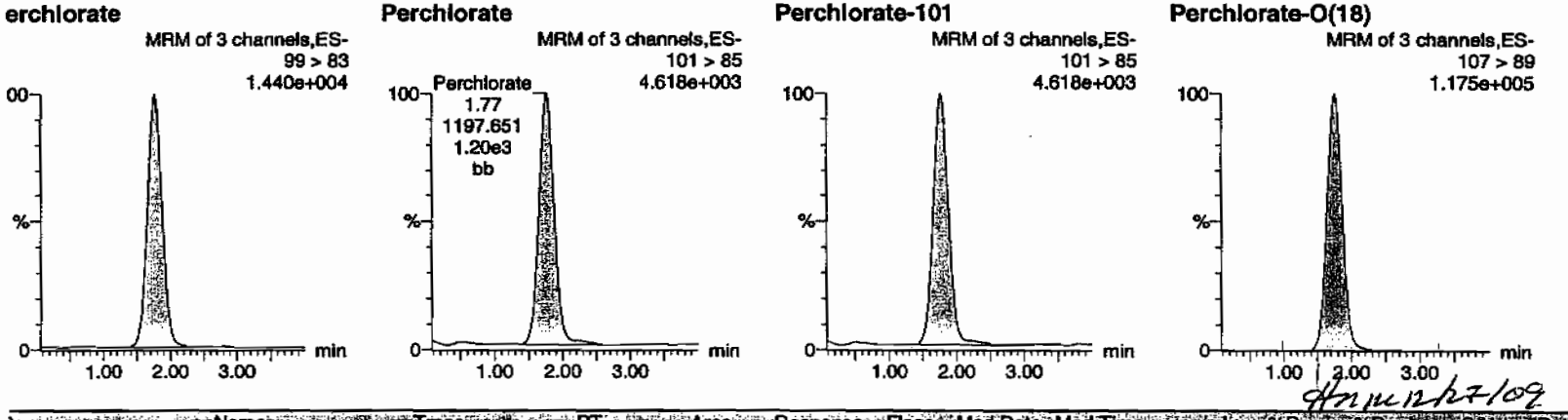
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

Last Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
Printed: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

Name: per1224037a
Date: 24-Dec-2009
Time: 16:06:15
ID: WCL091218-07CRI
Vial: 1:2,B



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091218-07CRI	Perchlorate	99 > 83	1.77	3664.350	3664.350	bb			0.0520	103.94	3.94	905.596	3.06
WCL091218-07CRI	Perchlorate-101	101 > 85	1.77	1197.651	1197.651	bb			0.0508	101.59	1.59	206.037	
WCL091218-07CRI	Perchlorate-O(18)	107 > 89	1.76	30354.973	30354.973	bb			0.4763	95.25	-4.75	8594.9...	

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

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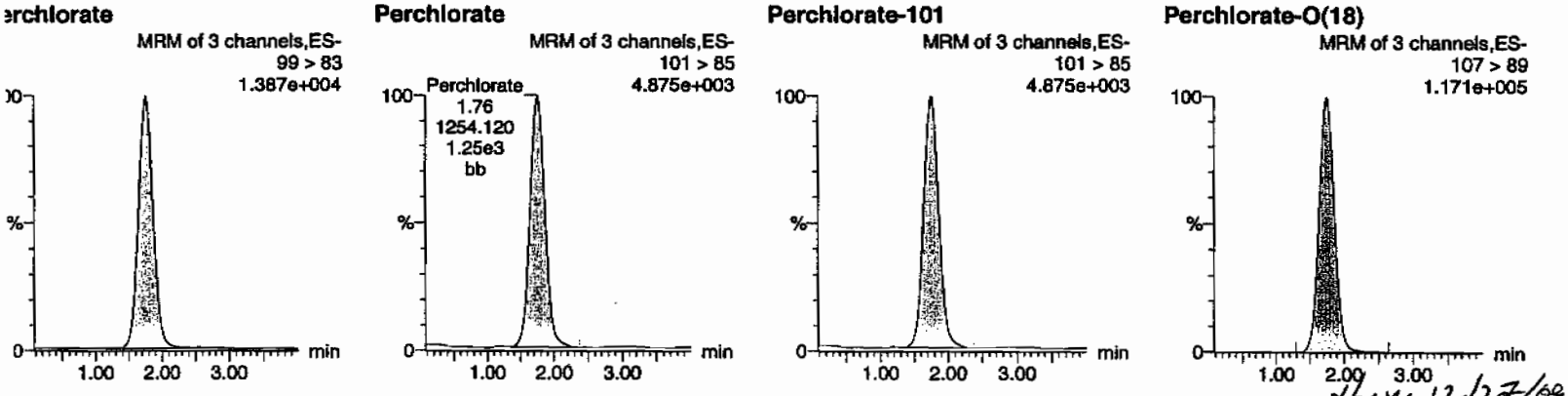
ataset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

ıst Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
rinted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

ame: per1224045a
ate: 24-Dec-2009
me: 17:02:40
: WCL091218-07CRI
al: 1:2,B



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL091218-07CRI	Perchlorate	99 > 83	1.76	3531.490	3531.490	bb			0.0501	100.17	0.17	730.657	2.82
CL091218-07CRI	Perchlorate-101	101 > 85	1.76	1254.120	1254.120	bb			0.0532	106.38	6.38	359.949	
CL091218-07CRI	Perchlorate-O(18)	107 > 89	1.74	30127.840	30127.840	bb			0.4727	94.54	-5.46	25500....	

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

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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: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
MB

Date Received: 22-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 1202000638

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	0.500	ug/kg	U	1	24-DEC-09 13:10	per1224012a
	Perchlorate Isotope Ratio						1	24-DEC-09 13:10	per1224012a
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	24-DEC-09 13:10	per1224012a
	Perchlorate-O(18)			4.97	ug/kg		1	24-DEC-09 13:10	per1224012a

^ 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 =

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

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

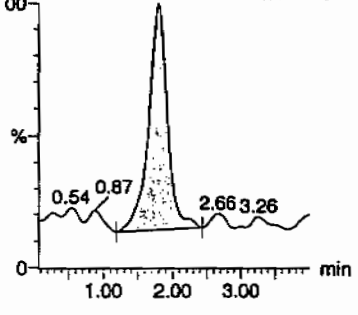
Dataset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

Last Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
Printed: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

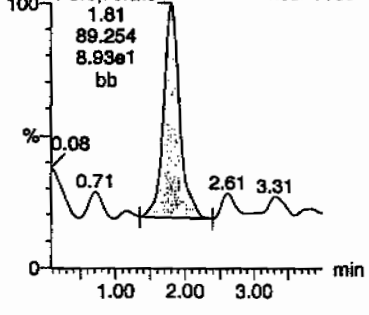
Name: per1224012a
Date: 24-Dec-2009
Time: 13:10:03
ID: 1202000638 | LALC | 935068 | Solid | MB | 1 | 1 |
Vial: 1:4,A

MM 12/26/09

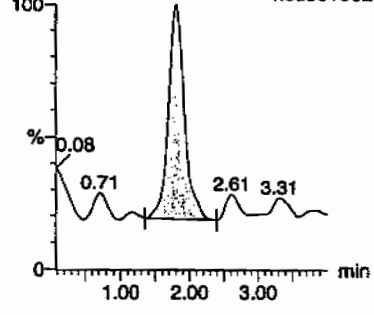
Perchlorate



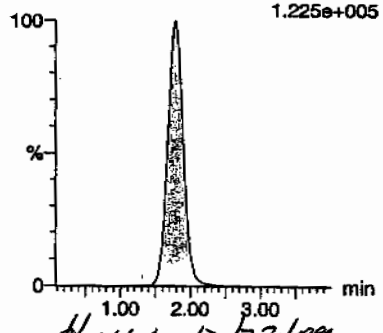
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hyun 12/22/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202000638	Perchlorate	99 > 83	1.79	237.613	237.613	bb			0.0034			33.083	2.66
1202000638	Perchlorate-101	101 > 85	1.81	89.254	89.254	bb			0.0038			24.927	
1202000638	Perchlorate-O(18)	107 > 89	1.78	31706.182	31706.182	bb			0.4975	99.49	-0.51	5181.2...	

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
LCS

Date Received: 22-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 1202000639

Date Filtered: 22-DEC-09

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	1.99	ug/kg	J	1	24-DEC-09 13:17	per1224013a
	Perchlorate Isotope Ratio			2.96			1	24-DEC-09 13:17	per1224013a
14797-73-0	Perchlorate-101	.5	2	2.01	ug/kg		1	24-DEC-09 13:17	per1224013a
	Perchlorate-O(18)			5.01	ug/kg		1	24-DEC-09 13:17	per1224013a

^ 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 =

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

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Quantity Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

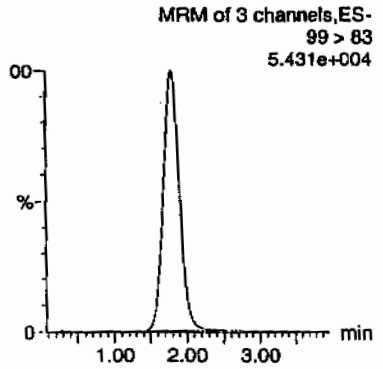
Last Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
Printed: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

Name: per1224013a
Date: 24-Dec-2009
Time: 13:17:06
ID: 1202000639
Vial: 1:4,B

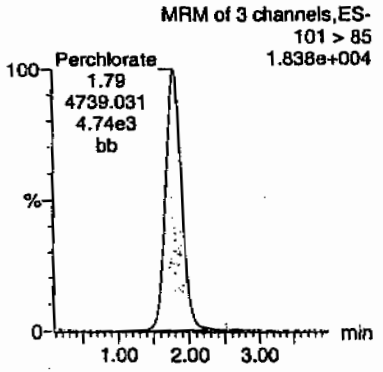
MTH 12/26/09

LYNX/935065/Solid/LC8/1/

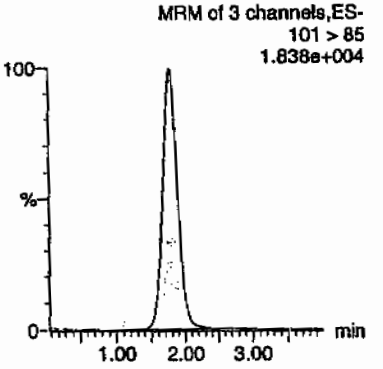
Perchlorate



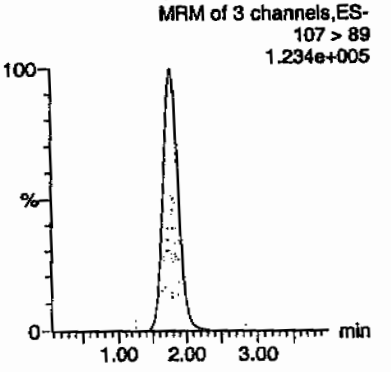
Perchlorate



Perchlorate-101



Perchlorate-O(18)



)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202000639	Perchlorate	99 > 83	1.79	14040.503	14040.503	bb			0.1991	99.56	-0.44	949.188	2.96
202000639	Perchlorate-101	101 > 85	1.79	4739.031	4739.031	bb			0.2010	100.50	0.50	883.500	
202000639	Perchlorate-O(18)	107 > 89	1.78	31938.338	31938.338	bb			0.5011	100.22	0.22	17256....	

14040.503 / 70510.4 = 0.1991 thmc 12/27/09

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

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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: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7352MS

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 1202000640

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 90.2

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.554	2.22	3.48	ug/kg		1	24-DEC-09 15:09	per1224029a
	Perchlorate Isotope Ratio			3.06			1	24-DEC-09 15:09	per1224029a
14797-73-0	Perchlorate-101	.554	2.22	3.41	ug/kg		1	24-DEC-09 15:09	per1224029a
	Perchlorate-O(18)			5.75	ug/kg		1	24-DEC-09 15:09	per1224029a

^ 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 =

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

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uantify Sample Report **MassLynx 4.0 SP4**
ıe GEL Group, LLC Analyst: Michael A. Penny

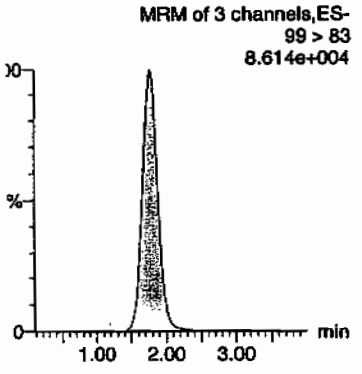
ıtaset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

ıst Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
inted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

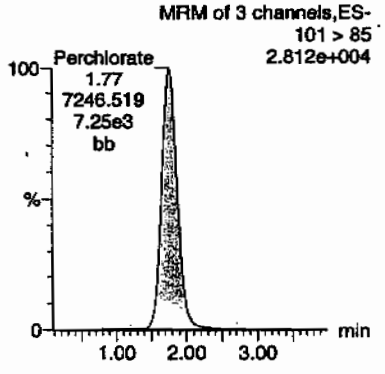
ame: per1224029a
ate: 24-Dec-2009
me: 15:09:50
: 1202000640
al: 1:6,C

LANL | 935068 | Soil | 243270001 MS | 1 | 12/26/09

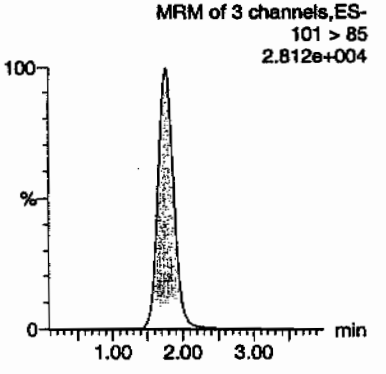
erchlorate



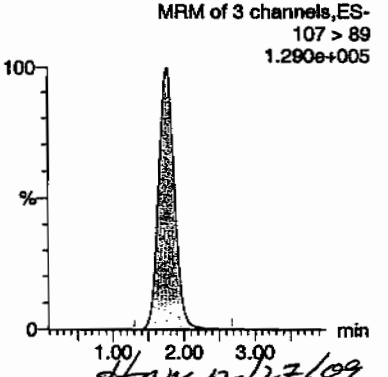
Perchlorate



Perchlorate-101



Perchlorate-O(18)



12/27/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
02000640	Perchlorate	99 > 83	1.77	22140.168	22140.168	bb			0.3140	157.00	57.00	4378.0...	3.06
02000640	Perchlorate-101	101 > 85	1.77	7246.519	7246.519	bb			0.3073	153.67	53.67	3403.2...	
02000640	Perchlorate-O(18)	107 > 89	1.76	33038.234	33038.234	bb			0.5184	103.67	3.67	3062.0...	

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

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 935067

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7352MSD

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990

GEL Sample ID: 1202000641

Date Filtered: 22-DEC-09

Injection Volume (uL): 20

%Solids: 90.2

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.554	2.22	3.48	ug/kg		1	24-DEC-09 15:16	per1224030a
	Perchlorate Isotope Ratio			3.02			1	24-DEC-09 15:16	per1224030a
14797-73-0	Perchlorate-101	.554	2.22	3.44	ug/kg		1	24-DEC-09 15:16	per1224030a
	Perchlorate-O(18)			5.75	ug/kg		1	24-DEC-09 15:16	per1224030a

^ 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 =

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

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uantify Sample Report **MassLynx 4.0 SP4**
ıe GEL Group, LLC Analyst: Michael A. Penny

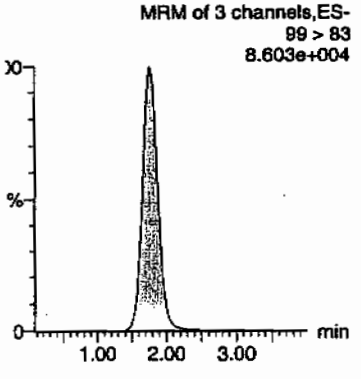
ataset: C:\MassLynx\Perchlorate.PRO\per122409a.qld

ıst Altered: Saturday, December 26, 2009 9:05:14 AM Eastern Standard Time
rinted: Saturday, December 26, 2009 9:10:01 AM Eastern Standard Time

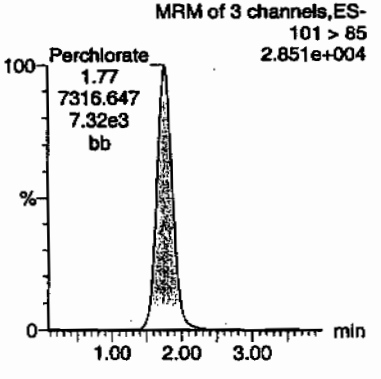
ame: per1224030a
ate: 24-Dec-2009
me: 15:16:53
: 1202000641
al: 1:6,D

LANL | 935068 | Solid | 24327200(MSD | 1 | | MM 12/26/09

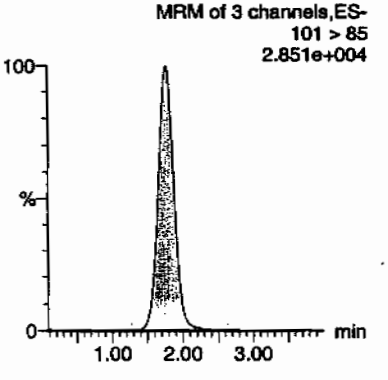
erchlorate



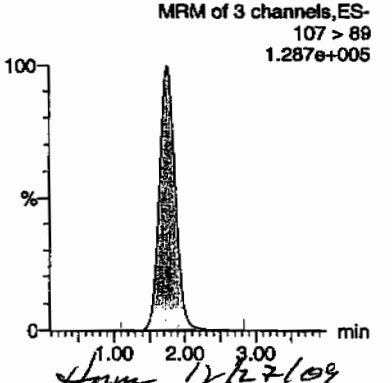
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 12/27/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
02000641	Perchlorate	99 > 83	1.77	22120.896	22120.896	bb			0.3137	156.86	56.86	4158.1...	3.02
02000641	Perchlorate-101	101 > 85	1.77	7316.647	7316.647	bb			0.3103	155.16	55.16	1878.1...	
02000641	Perchlorate-O(18)	107 > 89	1.76	33056.602	33056.602	bb			0.5187	103.73	3.73	16059....	

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

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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: 935067 **Verified by:** _____
Analyst: Lynne Russell
Method: SW846 6850 Modified

Lab SOP: GL-OA-E-067 REV# 6
Instrument: MicroMass Quatro Ultima

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202000638 MB	22-DEC-2009 16:55:46	2	20	10
1202000639 LCS	22-DEC-2009 16:55:46	2	20	10
243088001	22-DEC-2009 16:55:46	2	20	10
243088002	22-DEC-2009 16:55:46	2	20	10
243249001	22-DEC-2009 16:55:46	2	20	10
243249002	22-DEC-2009 16:55:46	2	20	10
243249003	22-DEC-2009 16:55:46	2	20	10
243249004	22-DEC-2009 16:55:46	2	20	10
243249005	22-DEC-2009 16:55:46	2	20	10
243256001	22-DEC-2009 16:55:46	2	20	10
243256002	22-DEC-2009 16:55:46	2	20	10
243256003	22-DEC-2009 16:55:46	2	20	10
243270001	22-DEC-2009 16:55:46	2	20	10
1202000640 MS (243270001)	22-DEC-2009 16:55:46	2	20	10
1202000641 MSD (243270001)	22-DEC-2009 16:55:46	2	20	10
243270002	22-DEC-2009 16:55:46	2	20	10
243270003	22-DEC-2009 16:55:46	2	20	10
243270004	22-DEC-2009 16:55:46	2	20	10
243270005	22-DEC-2009 16:55:46	2	20	10
243270006	22-DEC-2009 16:55:46	2	20	10
243270007	22-DEC-2009 16:55:46	2	20	10
243270008	22-DEC-2009 16:55:46	2	20	10
243270009	22-DEC-2009 16:55:46	2	20	10
243270010	22-DEC-2009 16:55:46	2	20	10
1202000642 ICS	22-DEC-2009 16:55:46	2	20	10

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1202000642	10 ug/L ICV/CCV Second Source	UCL091201-01.2	.4	mL
LCS	1202000639	10 ug/L ICV/CCV Second Source	UCL091201-01.2	.4	mL
MS	1202000640	10 ug/L ICV/CCV Second Source	UCL091201-01.2	.4	mL
MSD	1202000641	10 ug/L ICV/CCV Second Source	UCL091201-01.2	.4	mL

Comments:

De-salting cartridges used: 090407-1-Ba and 091027-1-H.

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GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 12/24/09
Extr. Injection Volume: 20uL
Sequence Number: per122409a
Initial Calibration Date: 12/24/09

Method: EPA 6850-Modified
Int. Std.: UCL091019-03.2
Mobile Phase Lot#: 1233781, 1233976
Standard-Samp Reagent Lot#:: 1233976

Reviewed BY: Hmc
Date: 12/27/09
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL091218-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per1224001a	IPB001	MAP	12/24/2009 11:52			1		USE	B
per1224002a	IPB001	MAP	12/24/2009 11:59			1		USE	B
per1224003a	WCLICAL-01	MAP	12/24/2009 12:06			1		USE	I
per1224004a	WCLICAL-02	MAP	12/24/2009 12:13			1		USE	I
per1224005a	WCLICAL-03	MAP	12/24/2009 12:20			1		USE	I
per1224006a	WCLICAL-04	MAP	12/24/2009 12:27			1		USE	I
per1224007a	WCLICAL-05	MAP	12/24/2009 12:34			1		USE	I
per1224008a	IPB002	MAP	12/24/2009 12:41			1		USE	B
per1224009a	WCLICV	MAP	12/24/2009 12:48			1		USE	C
per1224010a	IPB003	MAP	12/24/2009 12:55			1		USE	B
per1224011a	WCLCRI	MAP	12/24/2009 13:03			1		USE	C
per1224012a	1202000638	MAP	12/24/2009 13:10	935068	Various	1	LANL	USE	S
per1224013a	1202000639	MAP	12/24/2009 13:17	935068	Various	1	LANL	USE	S
per1224014a	1202000642	MAP	12/24/2009 13:24	935068	Various	1	LANL	USE	S
per1224015a	243088001	MAP	12/24/2009 13:31	935068	10-946	1	LANL	USE	S
per1224016a	243088002	MAP	12/24/2009 13:38	935068	10-946	1	LANL	USE	S
per1224017a	243249001	MAP	12/24/2009 13:45	935068	10-971	1	LANL	USE	S
per1224018a	243249002	MAP	12/24/2009 13:52	935068	10-971	1	LANL	USE	S
per1224019a	243249003	MAP	12/24/2009 13:59	935068	10-971	1	LANL	USE	S
per1224020a	243249004	MAP	12/24/2009 14:06	935068	10-971	1	LANL	USE	S
per1224021a	243249005	MAP	12/24/2009 14:13	935068	10-971	1	LANL	USE	S
per1224022a	WCLCCV	MAP	12/24/2009 14:20			1		USE	C
per1224023a	IPB004	MAP	12/24/2009 14:27			1		USE	B
per1224024a	WCLCRI	MAP	12/24/2009 14:34			1		USE	C
per1224025a	243256001	MAP	12/24/2009 14:41	935068	10-970	1	LANL	USE	S
per1224026a	243256002	MAP	12/24/2009 14:48	935068	10-970	1	LANL	USE	S
per1224027a	243256003	MAP	12/24/2009 14:55	935068	10-970	1	LANL	USE	S
per1224028a	243270001	MAP	12/24/2009 15:02	935068	10-990	1	LANL	USE	S
per1224029a	1202000640	MAP	12/24/2009 15:09	935068	10-990	1	LANL	USE	S

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per1224030a	1202000641	MAP	12/24/2009 15:16	935068	10-990	1	LANL	USE	S
per1224031a	243270002	MAP	12/24/2009 15:23	935068	10-990	1	LANL	USE	S
per1224032a	243270003	MAP	12/24/2009 15:30	935068	10-990	1	LANL	USE	S
per1224033a	243270004	MAP	12/24/2009 15:38	935068	10-990	1	LANL	USE	S
per1224034a	243270005	MAP	12/24/2009 15:45	935068	10-990	1	LANL	USE	S
per1224035a	WCLCCV	MAP	12/24/2009 15:52			1		USE	C
per1224036a	IPB005	MAP	12/24/2009 15:59			1		USE	B
per1224037a	WCLCRI	MAP	12/24/2009 16:06			1		USE	C
per1224038a	243270006	MAP	12/24/2009 16:13	935068	10-990	1	LANL	USE	S
per1224039a	243270007	MAP	12/24/2009 16:20	935068	10-990	1	LANL	USE	S
per1224040a	243270008	MAP	12/24/2009 16:27	935068	10-990	1	LANL	USE	S
per1224041a	243270009	MAP	12/24/2009 16:34	935068	10-990	1	LANL	USE	S
per1224042a	243270010	MAP	12/24/2009 16:41	935068	10-990	1	LANL	USE	S
per1224043a	WCLCCV	MAP	12/24/2009 16:48			1		USE	C
per1224044a	IPB006	MAP	12/24/2009 16:55			1		USE	B
per1224045a	WCLCRI	MAP	12/24/2009 17:02			1		USE	C
per1224046a	1202000643	MAP	12/24/2009 17:09	935071	Various	1	LANL	USE	S
per1224047a	1202000644	MAP	12/24/2009 17:16	935071	Various	1	LANL	USE	S
per1224048a	1202000647	MAP	12/24/2009 17:23	935071	Various	1	LANL	USE	S
per1224049a	243092001	MAP	12/24/2009 17:30	935071	10-947	1	LANL	USE	S
per1224050a	243092002	MAP	12/24/2009 17:38	935071	10-947	1	LANL	USE	S
per1224051a	243092003	MAP	12/24/2009 17:45	935071	10-947	1	LANL	USE	S
per1224052a	243267001	MAP	12/24/2009 17:52	935071	10-992	1	LANL	USE	S
per1224053a	243267002	MAP	12/24/2009 17:59	935071	10-992	1	LANL	USE	S
per1224054a	243267003	MAP	12/24/2009 18:06	935071	10-992	1	LANL	USE	S
per1224055a	243267004	MAP	12/24/2009 18:13	935071	10-992	1	LANL	USE	S
per1224056a	WCLCCV	MAP	12/24/2009 18:20			1		USE	C
per1224057a	IPB007	MAP	12/24/2009 18:28			1		USE	B
per1224058a	WCLCRI	MAP	12/24/2009 18:35			1		USE	C
per1224059a	243267005	MAP	12/24/2009 18:42	935071	10-992	1	LANL	USE	S
per1224060a	243267006	MAP	12/24/2009 18:49	935071	10-992	1	LANL	USE	S
per1224061a	243267007	MAP	12/24/2009 18:56	935071	10-992	1	LANL	USE	S
per1224062a	243267008	MAP	12/24/2009 19:03	935071	10-992	1	LANL	USE	S
per1224063a	243267009	MAP	12/24/2009 19:10	935071	10-992	1	LANL	USE	S
per1224064a	243267010	MAP	12/24/2009 19:17	935071	10-992	1	LANL	USE	S
per1224065a	243267011	MAP	12/24/2009 19:24	935071	10-992	1	LANL	USE	S
per1224066a	243267012	MAP	12/24/2009 19:31	935071	10-992	1	LANL	USE	S

per1224067a	243267013	MAP	12/24/2009 19:38	935071	10-992	1	LANL	USE	S
per1224068a	243267014	MAP	12/24/2009 19:45	935071	10-992	1	LANL	USE	S
per1224069a	WCLCCV	MAP	12/24/2009 19:52			1		USE	C
per1224070a	IPB008	MAP	12/24/2009 20:00			1		USE	B
per1224071a	WCLCRI	MAP	12/24/2009 20:07			1		USE	C
per1224072a	243273001	MAP	12/24/2009 20:14	935071	10-988	1	LANL	USE	S
per1224073a	1202000645	MAP	12/24/2009 20:21	935071	10-988	1	LANL	USE	S
per1224074a	1202000646	MAP	12/24/2009 20:28	935071	10-988	1	LANL	USE	S
per1224075a	WCLCCV	MAP	12/24/2009 20:35			1		USE	C
per1224076a	IPB009	MAP	12/24/2009 20:42			1		USE	B
per1224077a	WCLCRI	MAP	12/24/2009 20:49			1		USE	C

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Isotope Ratio Criteria

Isotope Ratio $_{35}Cl/_{37}CL$

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.

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LC/MS/MS PERCHLORATE ANALYSIS

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Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-990-1

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:	935077
Prep Batch Number:	935076

Sample Analysis

Sample ID	Client ID
243272001	RE12-10-7366
1202000659	Interference Check Sample (ICS)
1202000653	Method Blank (MB)
1202000654	Laboratory Control Sample (LCS)
1202000655	243272001(RE12-10-7366) Matrix Spike (MS)
1202000656	243272001(RE12-10-7366) 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.

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

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

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

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

Quality Control (QC) Information

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

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

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 243272001 (RE12-10-7366) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Retention Time Standard Area Acceptance
The retention time standard areas were within the required acceptance criteria for all samples and QC.

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

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Technical Information

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

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

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

Miscellaneous Information

Nonconformance (NCR) Documentation
Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) 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.

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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 Mauer **Date:** 01/07/10

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SAMPLE DATA SUMMARY

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 935076

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE12-10-7366

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990-1

GEL Sample ID: 243272001

Date Filtered: 21-DEC-09

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	21-DEC-09 16:20	per1221041a
	Perchlorate Isotope Ratio						1	21-DEC-09 16:20	per1221041a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	21-DEC-09 16:20	per1221041a
	Perchlorate-O(18)			0.458	ug/L		1	21-DEC-09 16:20	per1221041a

^ 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 =

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

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QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-990-1

Extract Batch Code: 935076

Date Filtered: 21-DEC-09

Matrix: WATER

Sample ID: 1202000654

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.188	ug/L	94.0		85 – 115
Perchlorate Isotope Ratio		2.9				–
Perchlorate-101	0.200	.193	ug/L	96.6		85 – 115
Perchlorate-O(18)		.464	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.

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Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–990–1

Extract Batch Code: 935076

Date Filtered: 21–DEC–09

Matrix: GROUND WATER

Sample ID: 1202000659

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.198	ug/L	99.1		70 – 130
Perchlorate Isotope Ratio		2.92				
Perchlorate–101	0.200	.203	ug/L	101		70 – 130
Perchlorate–O(18)		.585	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.

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Michael A. Penny

ataset: C:\MassLynx\Perchlorate.PRO\per122109a.qld

ast Altered: Tuesday, December 22, 2009 7:15:42 AM Eastern Standard Time
rinted: Tuesday, December 22, 2009 8:36:33 AM Eastern Standard Time

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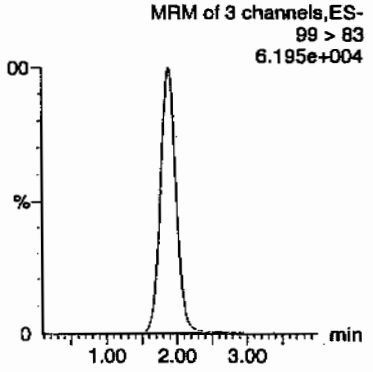
ate: 21-Dec-2009
ime: 14:12:18
): 1202000659
ial: 2:1,C

LANL | 935077 | LIQ | ICS | 1 | 1

MM 12/22/09

erchlorate



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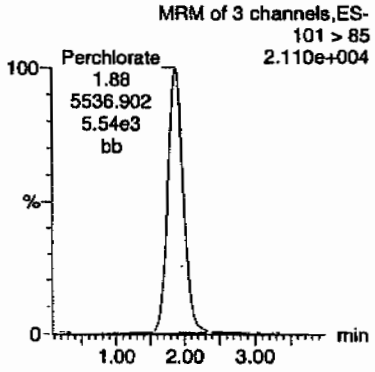

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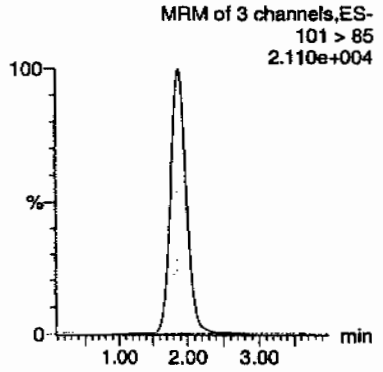
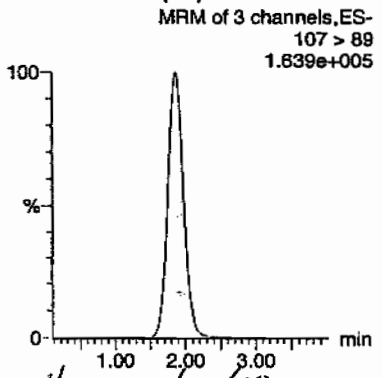


Perchlorate-O(18)



HM 12/22/09

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202000659	Perchlorate	99 > 83	1.88	16146.688	16146.688	bb			0.1982	99.10	-0.90	4138.5...	2.92
202000659	Perchlorate-101	101 > 85	1.88	5536.902	5536.902	bb			0.2029	101.46	1.46	1932.5...	
202000659	Perchlorate-O(18)	107 > 89	1.87	42702.895	42702.895	bb			0.5849	116.98	16.98	8628.4...	

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

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Form 6

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10-990-1

Extract Batch Code: 935076

Date Extracted: 21-DEC-09

GEL MS/PS ID: 1202000655

Client ID: RE12-10-7366

GEL MSD/PSD ID: 1202000656

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Recovery Limit
Perchlorate	0.200	0.00102	ug/L	0.183	91	.188	93.4	2.62	30	75 – 125
Perchlorate Isotope Ratio	0	0.00		3.04		3.01		0		–
Perchlorate-101	0.200	0.00158	ug/L	0.180	89	.186	92.4	3.72	30	75 – 125
Perchlorate-O(18)	0	0.458	ug/L	0.460		.46		.118		–

^ 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:

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Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-990-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	21-DEC-09	per1221001a	IPB001
Perchlorate-101	0.00	0	NA	21-DEC-09	per1221001a	IPB001
Perchlorate	0.00	0	NA	21-DEC-09	per1221002a	IPB001
Perchlorate-101	0.00	0	NA	21-DEC-09	per1221002a	IPB001

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uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Michael A. Penny

ataset: C:\MassLynx\Perchlorate.PRO\per122109a.qld

ıst Altered: Tuesday, December 22, 2009 7:15:42 AM Eastern Standard Time
inted: Tuesday, December 22, 2009 8:36:33 AM Eastern Standard Time

ethod: C:\MassLynx\Perchlorate.PRO\MethDB\per122109a.mdb 22 Dec 2009 07:15:33
alibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per122109a.cdb 22 Dec 2009 07:15:41

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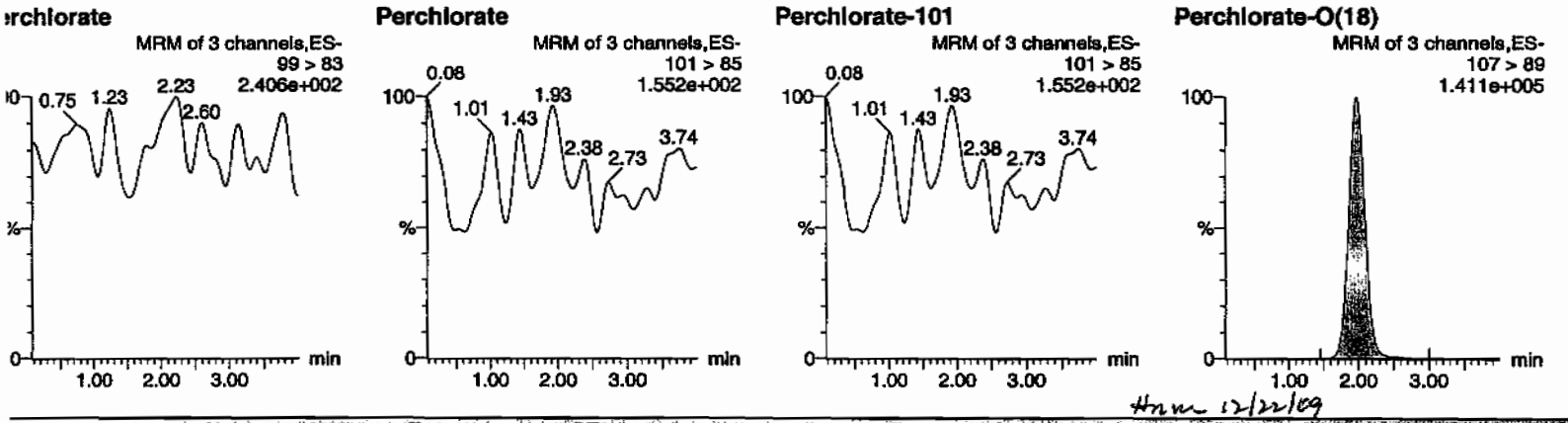

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3001	Perchlorate	99 > 83											0.00
3001	Perchlorate-101	101 > 85											
3001	Perchlorate-O(18)	107 > 89	1.98	37794.512	37794.512	bb			0.5177	103.53	3.53	13298....	

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

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ıantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Michael A. Penny

ıtaset: C:\MassLynx\Perchlorate.PRO\per122109a.qld

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inted: Tuesday, December 22, 2009 8:36:33 AM Eastern Standard Time

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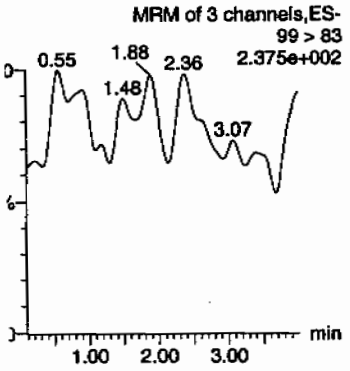
rchlorate



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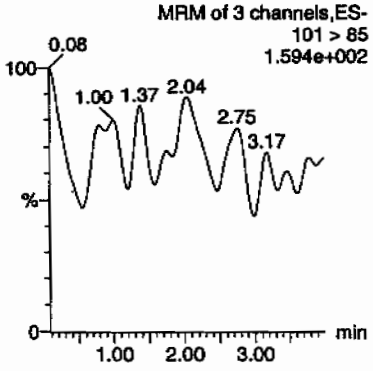

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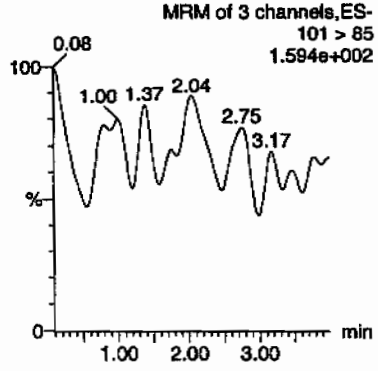
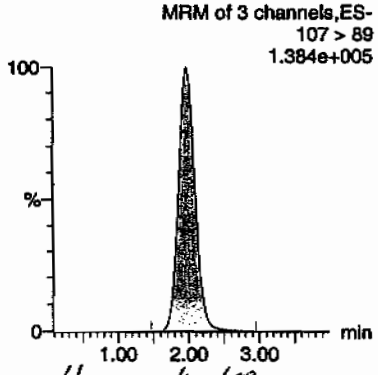


Perchlorate-O(18)



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	on Ratio
·001	Perchlorate	99 > 83											0.00
·001	Perchlorate-101	101 > 85											
·001	Perchlorate-O(18)	107 > 89	1.98	37304.773	37304.773	bb			0.5110	102.19	2.19	7940.4...	

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Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–990–1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	21–DEC–09	per1221008a	IPB002
Perchlorate–101	0.00	0	NA	21–DEC–09	per1221008a	IPB002
Perchlorate	0.00	0	NA	21–DEC–09	per1221010a	IPB003
Perchlorate–101	0.00	0	NA	21–DEC–09	per1221010a	IPB003
Perchlorate	0.00	0	NA	21–DEC–09	per1221019a	IPB004
Perchlorate–101	0.00	0	NA	21–DEC–09	per1221019a	IPB004
Perchlorate	0.00	0	NA	21–DEC–09	per1221032a	IPB005
Perchlorate–101	0.00	0	NA	21–DEC–09	per1221032a	IPB005
Perchlorate	0.00	0	NA	21–DEC–09	per1221045a	IPB006
Perchlorate–101	0.00	0	NA	21–DEC–09	per1221045a	IPB006

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ıtaset: C:\MassLynx\Perchlorate.PRO\per122109a.qld

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inted: Tuesday, December 22, 2009 8:36:33 AM Eastern Standard Time

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ıte: 21-Dec-2009
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: IPB002
al: 1:1,A

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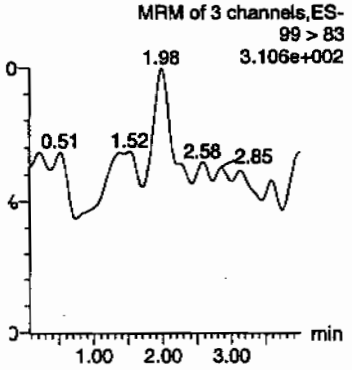
rchlorate



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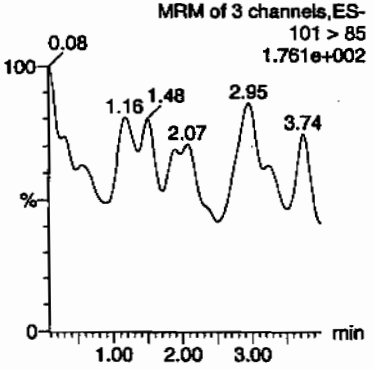

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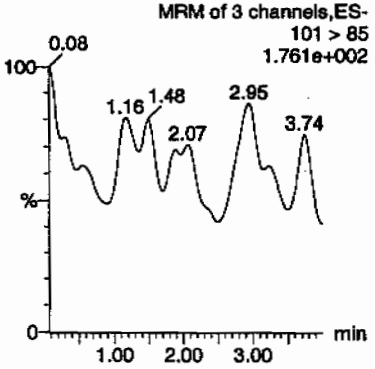

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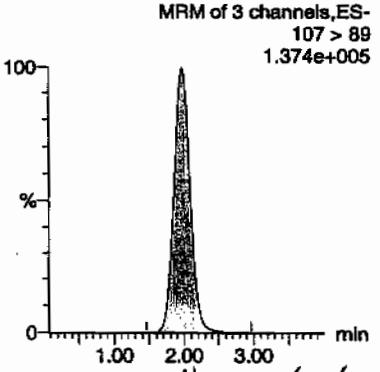

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ı002	Perchlorate-101	101 > 85											
ı002	Perchlorate-O(18)	107 > 89	1.97	36761.910	36761.910	bb			0.5035	100.70	0.70	7461.1...	

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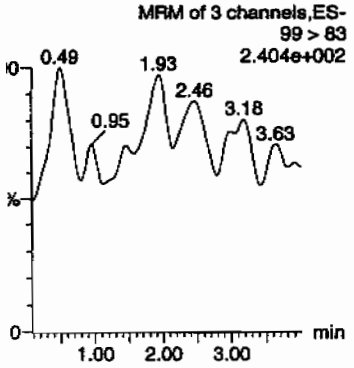
rchlorate



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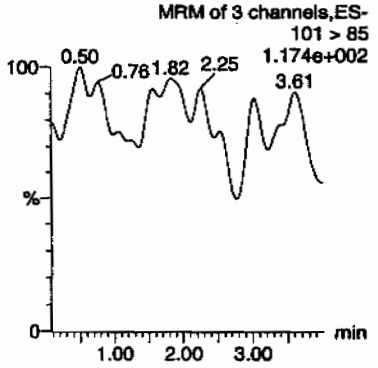

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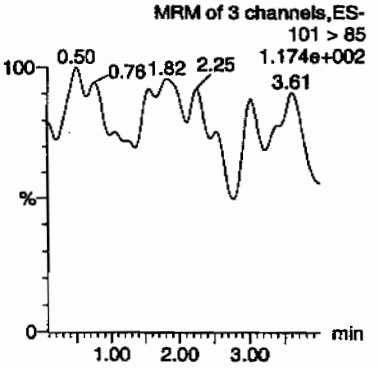

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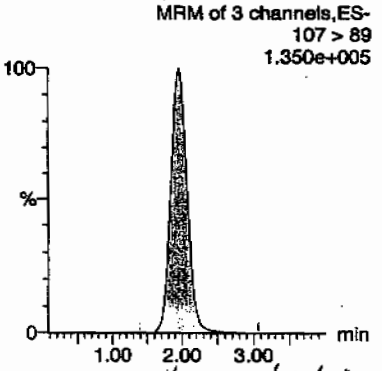

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3003	Perchlorate-101	101 > 85											
3003	Perchlorate-O(18)	107 > 89	1.96	36062.152	36062.152	bb			0.4939	98.79	-1.21	3922.3...	

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ıtaset: C:\MassLynx\Perchlorate.PRO\per122109a.qld

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inted: Tuesday, December 22, 2009 8:36:33 AM Eastern Standard Time

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ıte: 21-Dec-2009
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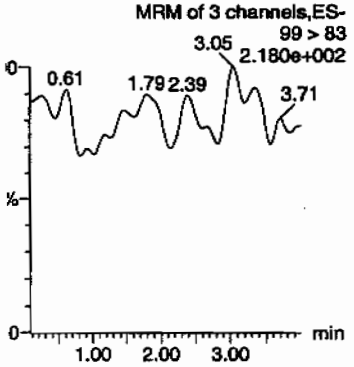
rchlorate



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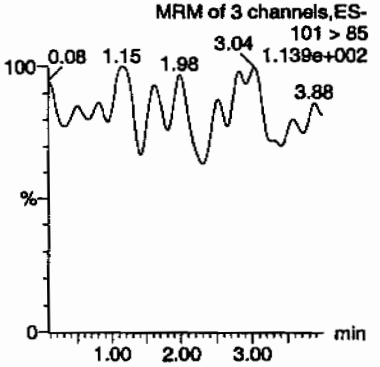

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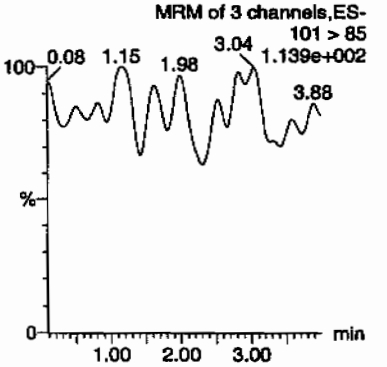
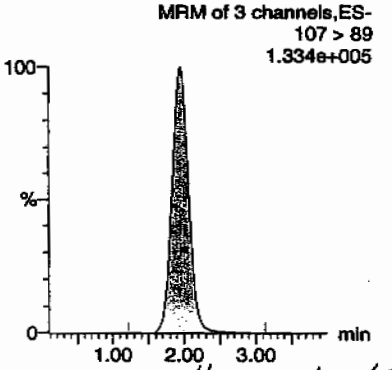


Perchlorate-O(18)



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3004	Perchlorate	99 > 83											0.00
3004	Perchlorate-101	101 > 85											
3004	Perchlorate-O(18)	107 > 89	1.94	35443.352	35443.352	bb			0.4855	97.09	-2.91	7992.8...	

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

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uantify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Michael A. Penny

taset: C:\MassLynx\Perchlorate.PRO\per122109a.qld

st Altered: Tuesday, December 22, 2009 7:15:42 AM Eastern Standard Time
inted: Tuesday, December 22, 2009 8:36:33 AM Eastern Standard Time

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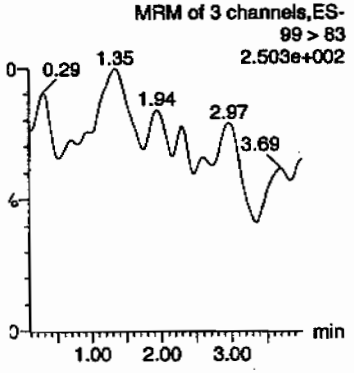
rchlorate



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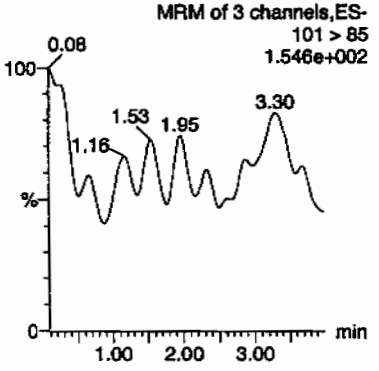
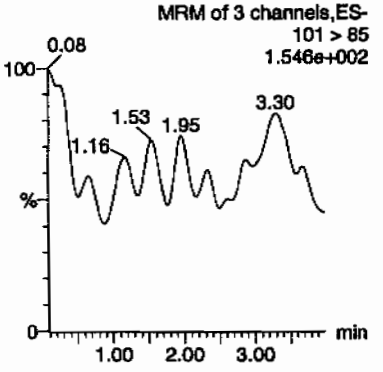
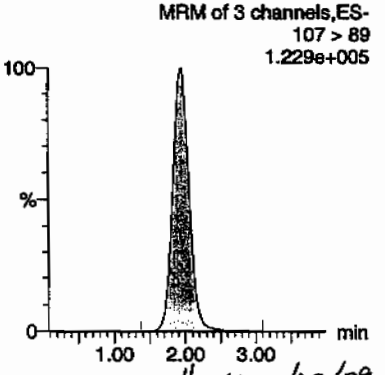


Perchlorate-101



Perchlorate-O(18)



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005	Perchlorate	99 > 83											0.00
005	Perchlorate-101	101 > 85											
005	Perchlorate-O(18)	107 > 89	1.94	32767.500	32767.500	bb			0.4488	89.76	-10.24	10101....	

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uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Michael A. Penny

ıtaset: C:\MassLynx\Perchlorate.PRO\per122109a.qld

:st Altered: Tuesday, December 22, 2009 7:15:42 AM Eastern Standard Time
inted: Tuesday, December 22, 2009 8:36:33 AM Eastern Standard Time

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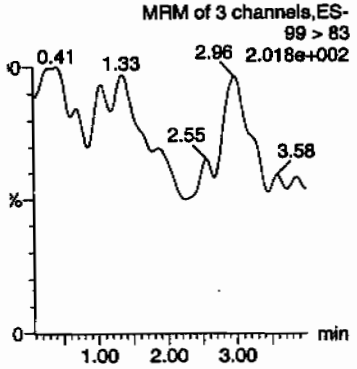
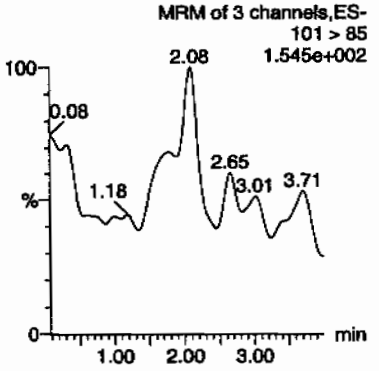
MAP 12/22/09

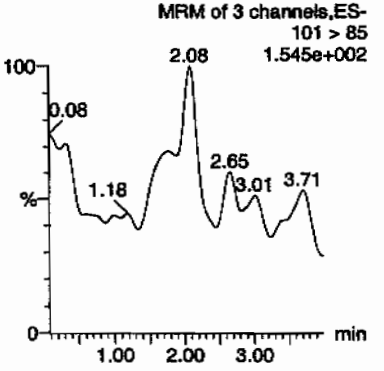
ırchlorate



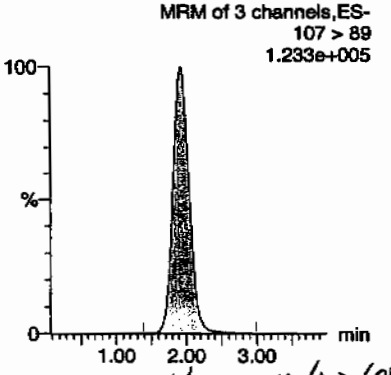
Perchlorate



Perchlorate-101



Perchlorate-O(18)



dmm 12/22/09

	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3006	Perchlorate	99 > 83											0.00
3006	Perchlorate-101	101 > 85											
3006	Perchlorate-O(18)	107 > 89	1.93	32777.246	32777.246	bb			0.4489	89.79	-10.21	4480.5...	

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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

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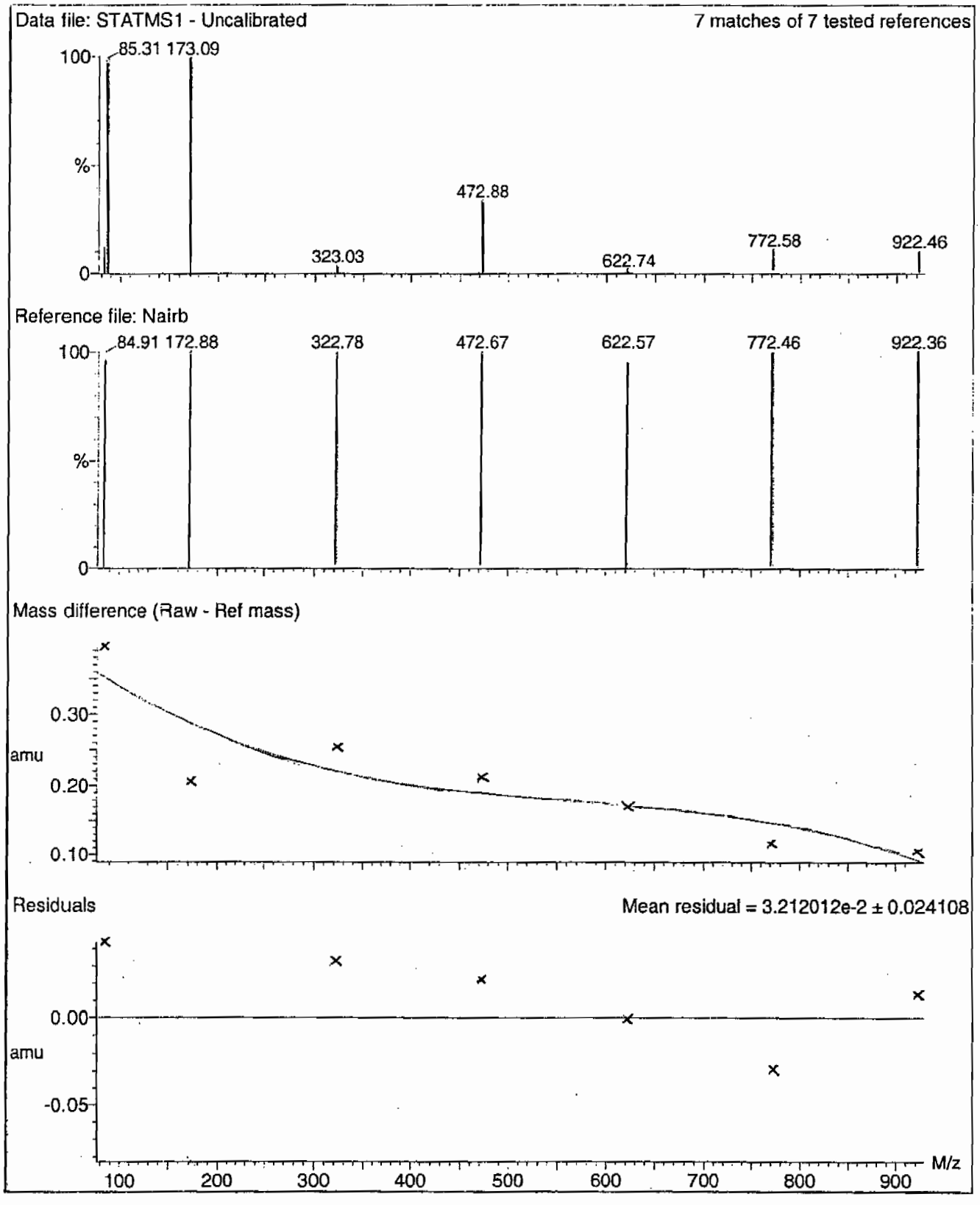
QUATTRO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

Printed: Tue Jan 08 12:19:12 2008

PEAKS HIGHLIGHTED BY CWM 01-09-08



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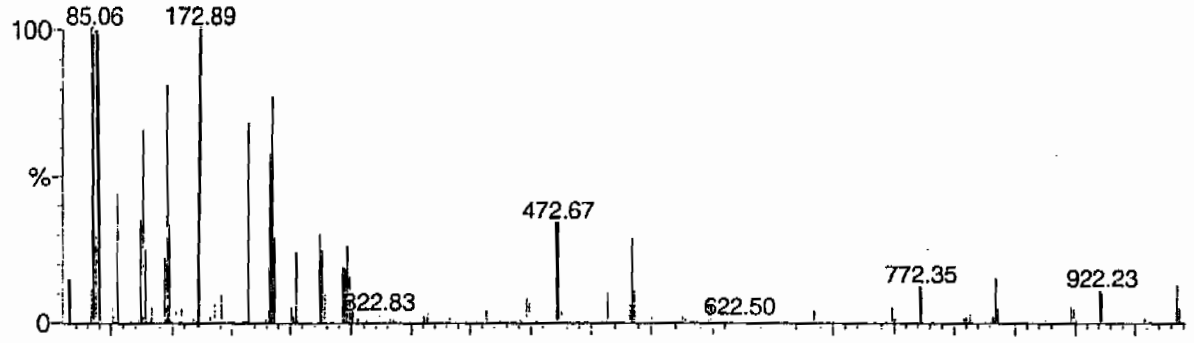
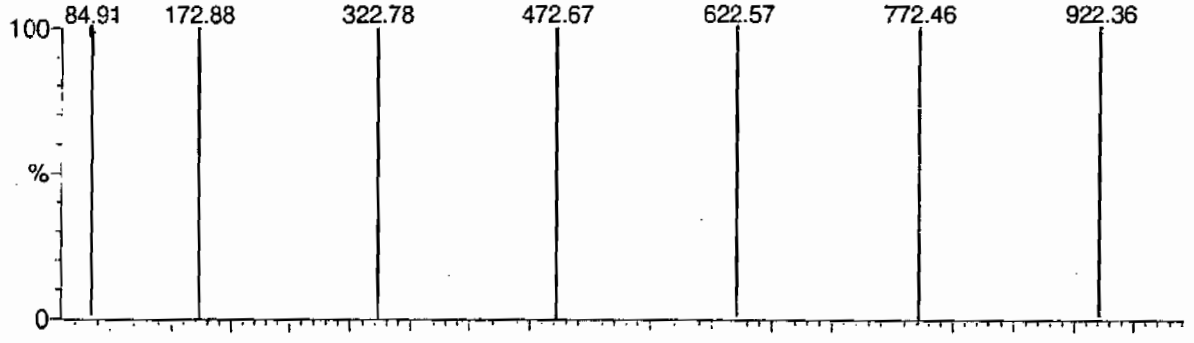
Calibration Report - MS1 Scanning

Printed: Tue Jan 08 12:20:09 2008

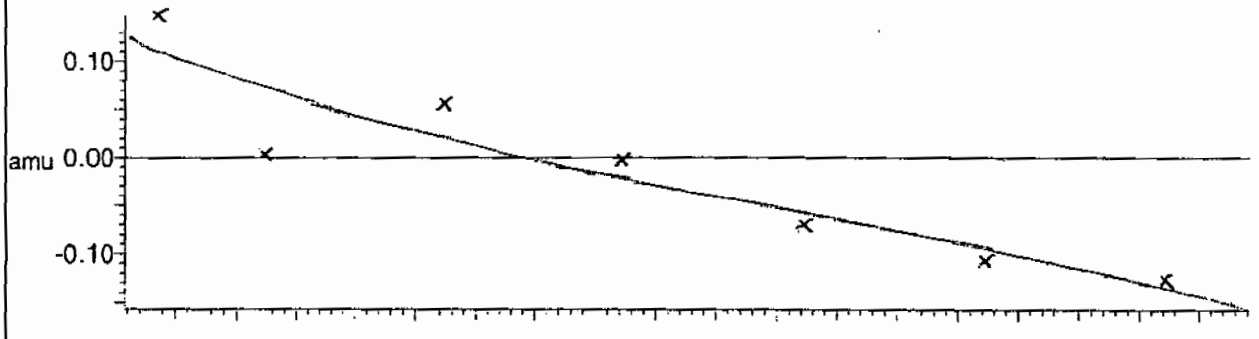
Data file: SCNMS1 - Uncalibrated 7 matches of 7 tested references



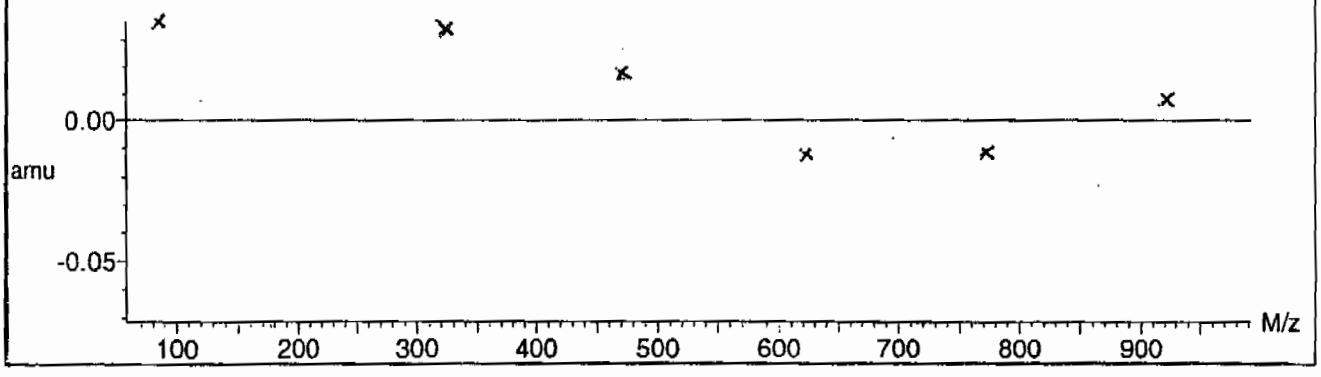
Reference file: Nairb



Mass difference (Raw - Ref mass)



Residuals Mean residual = 2.732691e-2 ± 0.020653



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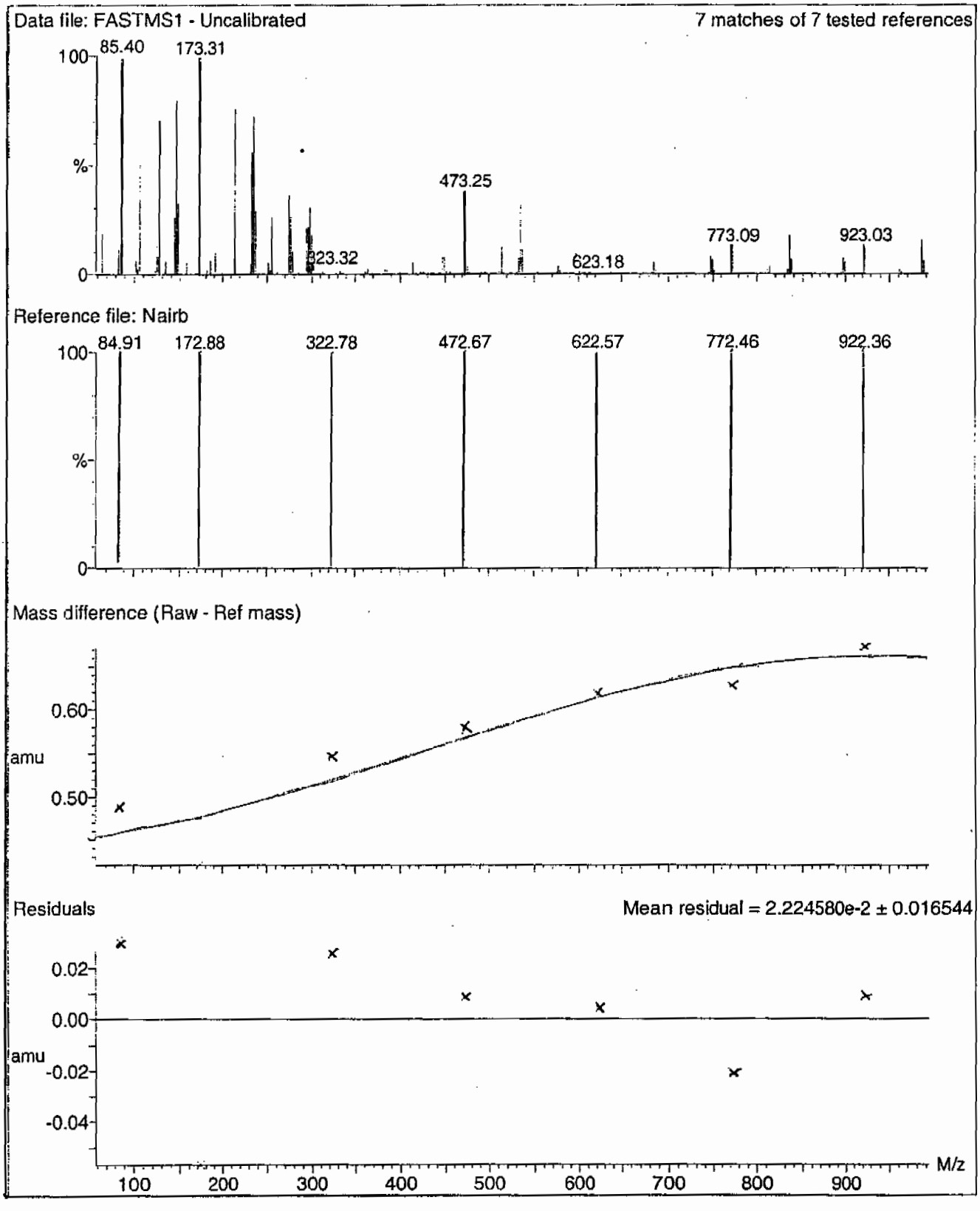
Calibration Report - MS1 Scan Speed Compensation

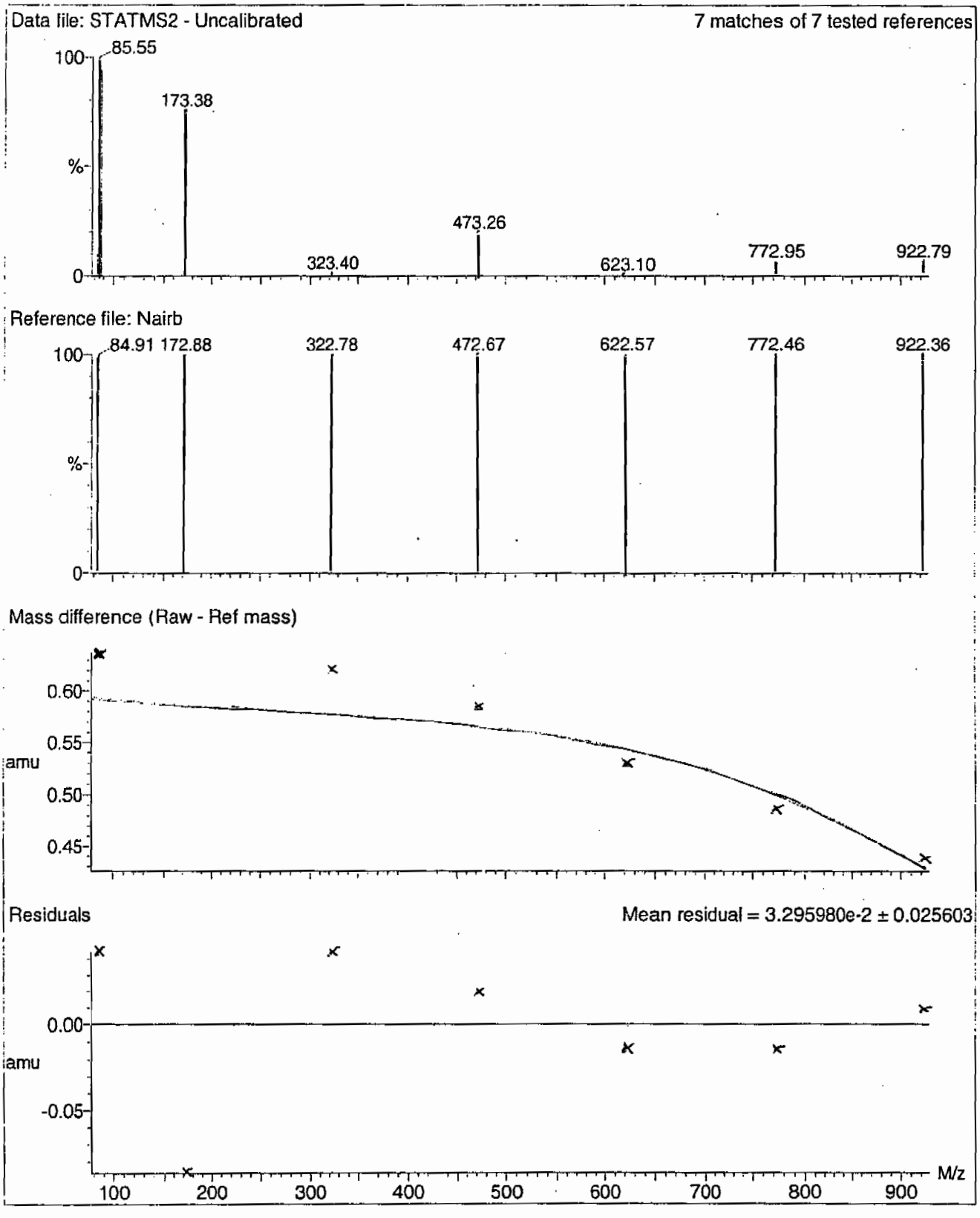
Printed: Tue Jan 08 12:21:04 2008



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

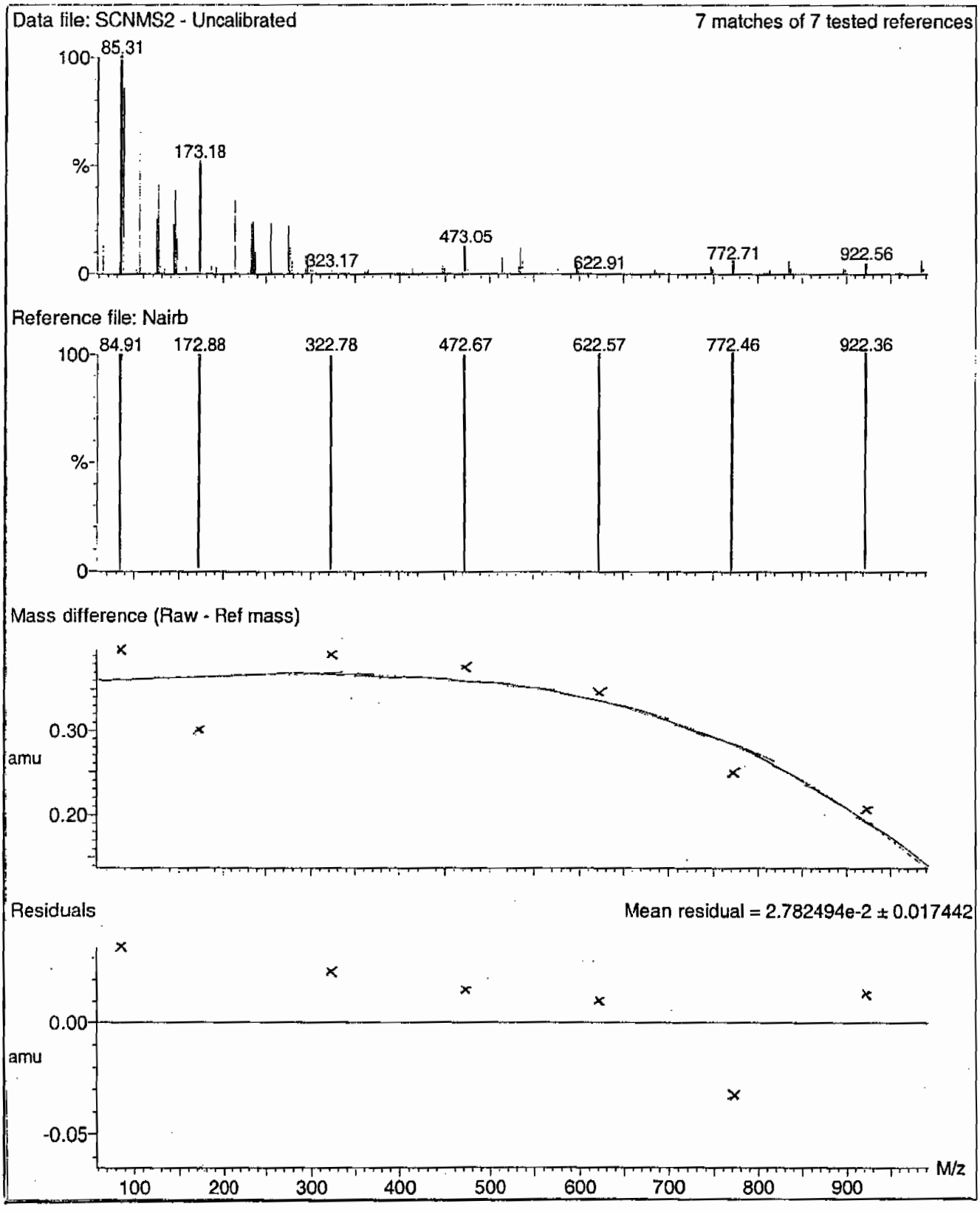
Calibration Report - MS2 Static

Printed: Tue Jan 08 12:21:59 2008



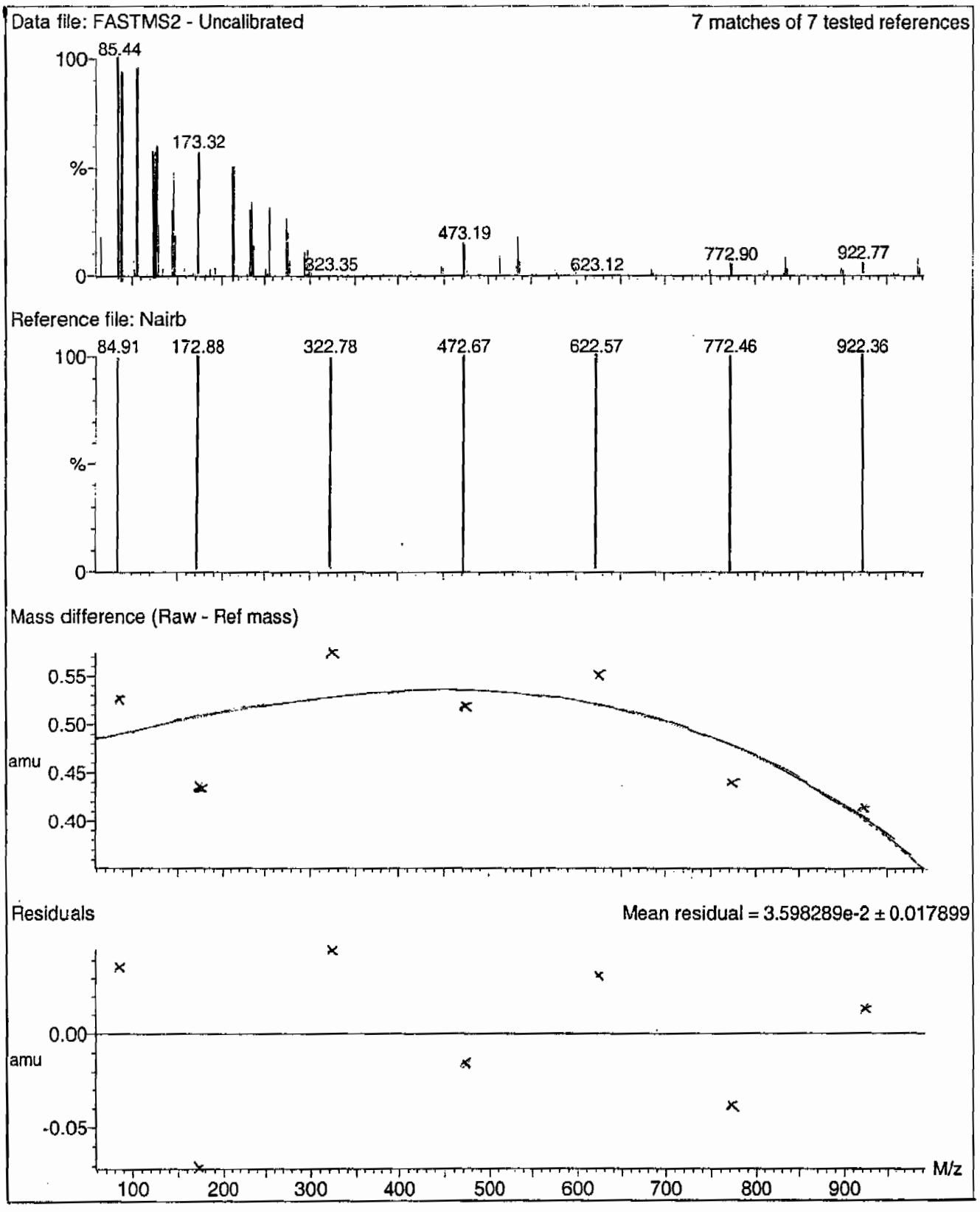
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Printed: Tue Jan 08 12:22:56 2008



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

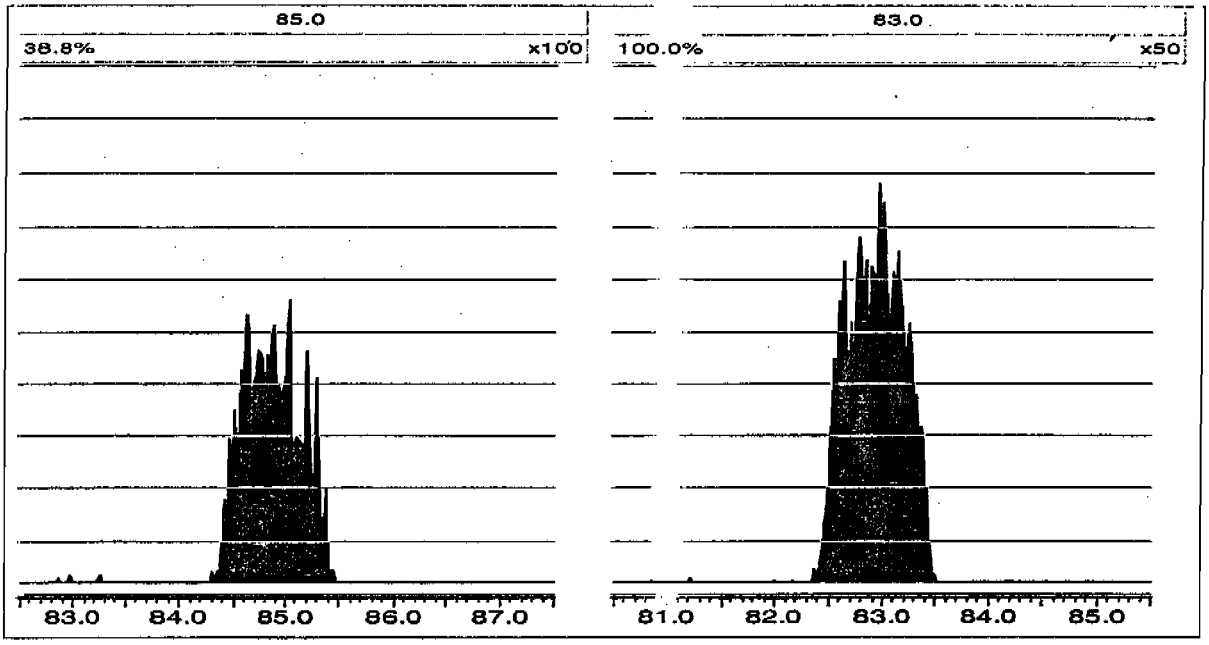
Printed: Tue Jan 08 12:23:51 2008



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

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

Printed: Monday, December 21, 2009 10:16:06 Eastern Standard Time



Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–990–1

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	**per1221006a**	**21–DEC–09**	**36095.7**				
Lower Area Limit			**18047.85**				
Upper Area Limit			**72191.4**				
1202000653	per1221021a	21–DEC–09 13:57	34588.5	1.94	1.94255	1.001	
1202000654	per1221022a	21–DEC–09 14:05	33851.6	1.95	1.96735	1.009	
1202000659	per1221023a	21–DEC–09 14:12	42702.9	1.87	1.8803	1.006	
243272001	per1221041a	21–DEC–09 16:20	33415.9	1.93	1.9549	1.013	
1202000655	per1221042a	21–DEC–09 16:27	33563.3	1.93	1.94253	1.006	
1202000656	per1221043a	21–DEC–09 16:34	33602.8	1.93	1.94257	1.007	

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SAMPLE DATA

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 935076

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE12-10-7366

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990-1

GEL Sample ID: 243272001

Date Filtered: 21-DEC-09

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	21-DEC-09 16:20	per1221041a
	Perchlorate Isotope Ratio						1	21-DEC-09 16:20	per1221041a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	21-DEC-09 16:20	per1221041a
	Perchlorate-O(18)			0.458	ug/L		1	21-DEC-09 16:20	per1221041a

^ 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 =

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

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uantify Sample Report **MassLynx 4.0 SP4**
ıe GEL Group, LLC Analyst: Michael A. Penny

ataset: C:\MassLynx\Perchlorate.PRO\per122109a.qld

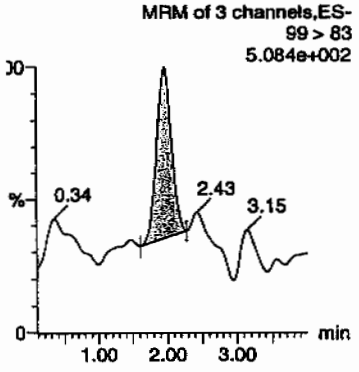
ıst Altered: Tuesday, December 22, 2009 7:15:42 AM Eastern Standard Time
rinted: Tuesday, December 22, 2009 8:36:33 AM Eastern Standard Time

ame: per1221041a
ate: 21-Dec-2009
me: 16:20:06
: 243272001
al: 2:3,F

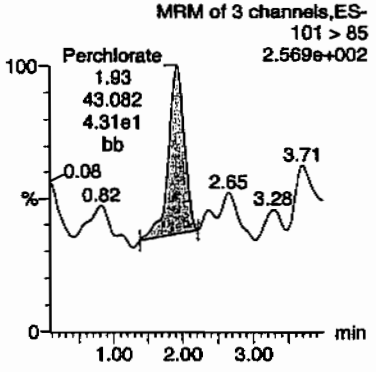
LANL | 935077 | Lab | 1 |

MATT 12/22/09

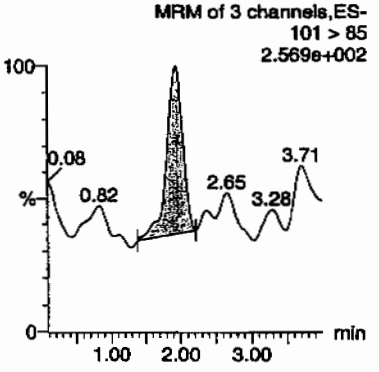
erchlorate



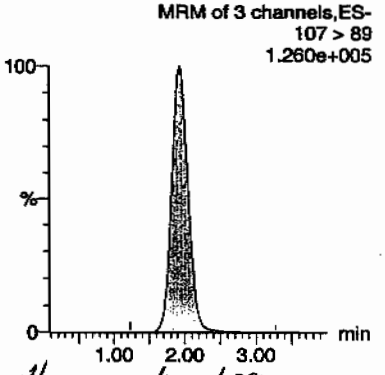
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 12/22/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
I3272001	Perchlorate	99 > 83	1.96	83.433	83.433	bb			0.0010			11.069	1.94
I3272001	Perchlorate-101	101 > 85	1.93	43.082	43.082	bb			0.0016			18.132	
I3272001	Perchlorate-O(18)	107 > 89	1.93	33415.875	33415.875	bb			0.4577	91.54	-8.46	9195.9...	

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STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-990-1

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 21-DEC-09

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

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 81464.54

Response Type: External Standard

Curve Type: RF

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Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-990-1

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 21-DEC-09

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

Parmname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 27284.9

Response Type: External Standard

Curve Type: RF

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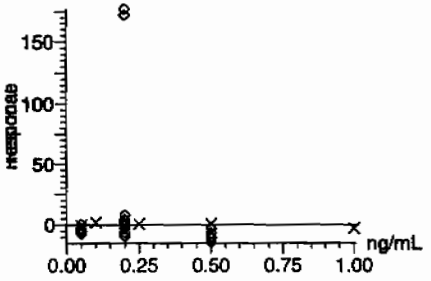
uantify Calibration Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Michael A. Penny

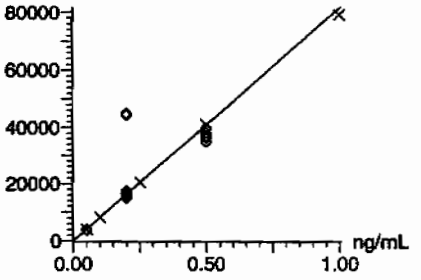
ataset: C:\MassLynx\Perchlorate.PRO\per122109a.qld

ast Altered: Tuesday, December 22, 2009 7:15:42 AM Eastern Standard Time
rinted: Tuesday, December 22, 2009 8:36:33 AM Eastern Standard Time

ethod: C:\MassLynx\Perchlorate.PRO\MethDB\per122109a.mdb 22 Dec 2009 07:15:33
alibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per122109a.cdb 22 Dec 2009 07:15:41

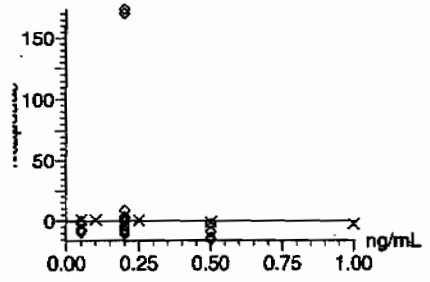
ompound name: Perchlorate
esponse Factor: 81464.6
RF SD: 1466.34, % Relative SD: 1.79997
esponse type: External Std, Area
urve type: RF

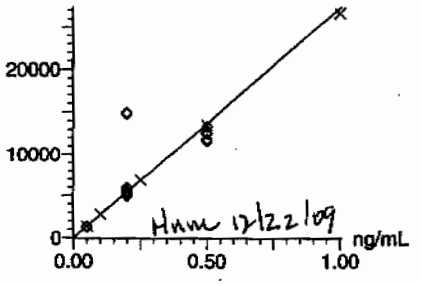




MM 12/22/09

mpound name: Perchlorate-101
sponse Factor: 27284.9
RF SD: 422.412, % Relative SD: 1.54815
sponse type: External Std, Area
rve type: RF





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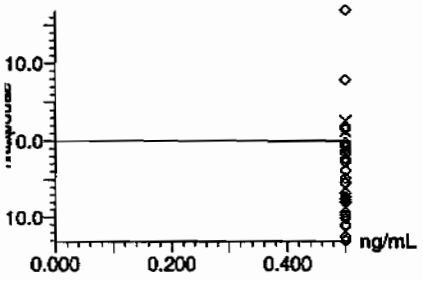
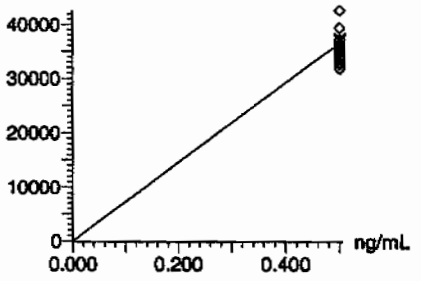
uantify Calibration Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Michael A. Penny

ıtaset: C:\MassLynx\Perchlorate.PRO\per122109a.qld

st Altered: Tuesday, December 22, 2009 7:15:42 AM Eastern Standard Time
inted: Tuesday, December 22, 2009 8:36:33 AM Eastern Standard Time

ımpound name: Perchlorate-O(18)
ısponse Factor: 73010.4
RF SD: 1338, % Relative SD: 1.83261
ısponse type: External Std, Area
ırve type: RF





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Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-990-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.49	97.68	21-DEC-09 12:32	per1221009a
Perchlorate Isotope Ratio		2.98		21-DEC-09 12:32	per1221009a
Perchlorate-101	.5	.49	97.86	21-DEC-09 12:32	per1221009a

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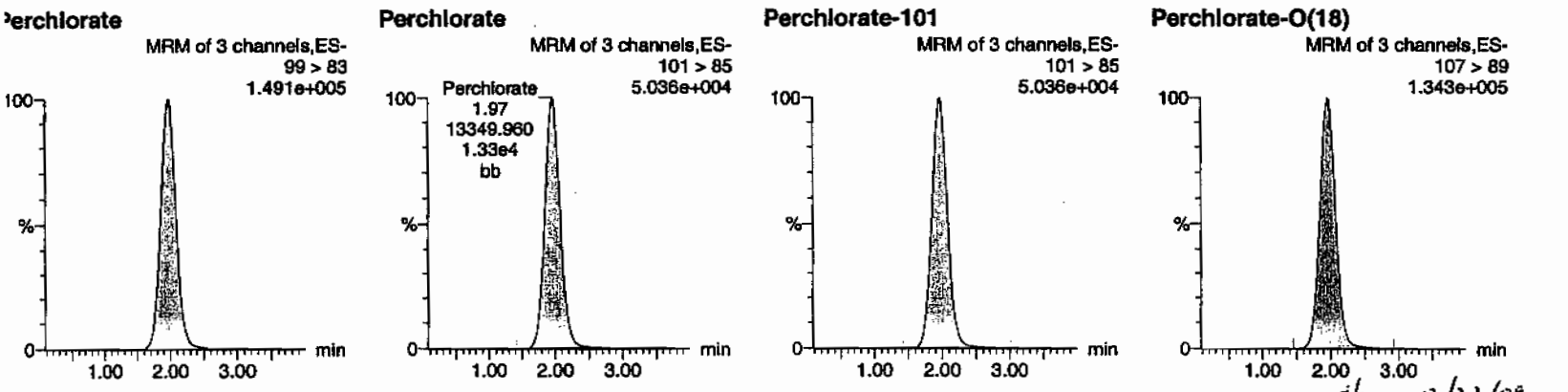
Dataset: C:\MassLynx\Perchlorate.PRO\per122109a.qld

Last Altered: Tuesday, December 22, 2009 7:15:42 AM Eastern Standard Time
Printed: Tuesday, December 22, 2009 8:36:33 AM Eastern Standard Time

Name: per1221009a
Date: 21-Dec-2009
Time: 12:32:45
ID: WCL091218-06ICV
Vial: 1:2,A

MMT 12/22/09



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL091218-06ICV	Perchlorate	99 > 83	1.97	39787.574	39787.574	bb			0.4884	97.68	-2.32	7622.0...	2.98
WCL091218-06ICV	Perchlorate-101	101 > 85	1.97	13349.960	13349.960	bb			0.4893	97.86	-2.14	8733.9...	
WCL091218-06ICV	Perchlorate-O(18)	107 > 89	1.96	35645.148	35645.148	bb			0.4882	97.64	-2.36	7439.8...	

thmm 12/22/09

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Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-990-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.45	89.62	21-DEC-09 13:36	per1221018a
Perchlorate Isotope Ratio		2.9		21-DEC-09 13:36	per1221018a
Perchlorate-101	.5	.46	92.11	21-DEC-09 13:36	per1221018a
Perchlorate	.5	.47	93.14	21-DEC-09 15:09	per1221031a
Perchlorate Isotope Ratio		3.04		21-DEC-09 15:09	per1221031a
Perchlorate-101	.5	.46	91.35	21-DEC-09 15:09	per1221031a
Perchlorate	.5	.45	90.92	21-DEC-09 16:41	per1221044a
Perchlorate Isotope Ratio		2.98		21-DEC-09 16:41	per1221044a
Perchlorate-101	.5	.46	91.03	21-DEC-09 16:41	per1221044a

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uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Michael A. Penny

ataset: C:\MassLynx\Perchlorate.PRO\per122109a.qld

ıst Altered: Tuesday, December 22, 2009 7:15:42 AM Eastern Standard Time
rinted: Tuesday, December 22, 2009 8:36:33 AM Eastern Standard Time

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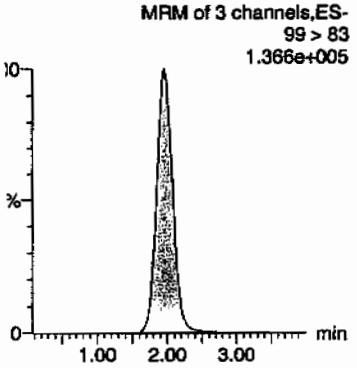
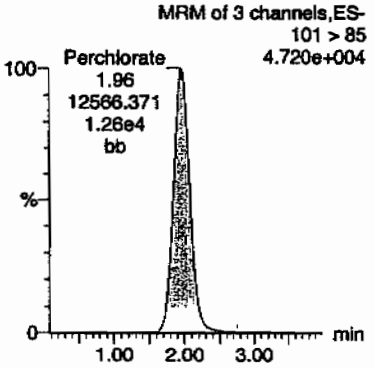
ate: 21-Dec-2009
me: 13:36:23
: WCL091218-06CCV
al: 1:2,A

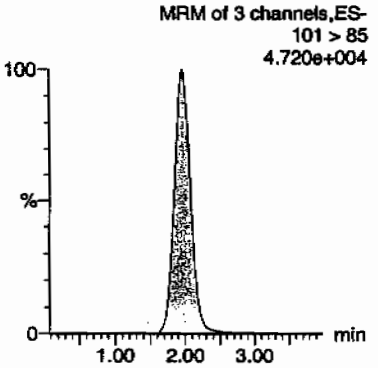
erchlorate



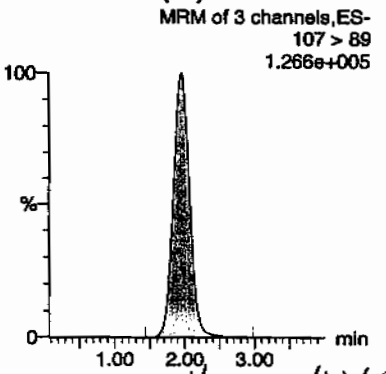
Perchlorate



Perchlorate-101



Perchlorate-O(18)



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL091218-06CCV	Perchlorate	99 > 83	1.97	36504.902	36504.902	bb			0.4481	89.62	-10.38	5402.4...	2.90
CL091218-06CCV	Perchlorate-101	101 > 85	1.96	12566.371	12566.371	bb			0.4606	92.11	-7.89	4355.9...	
CL091218-06CCV	Perchlorate-O(18)	107 > 89	1.96	33747.195	33747.195	bb			0.4622	92.44	-7.56	10354....	

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

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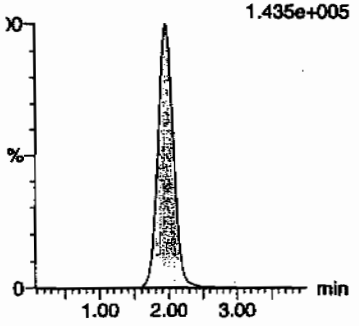
ataset: C:\MassLynx\Perchlorate.PRO\per122109a.qld

ıst Altered: Tuesday, December 22, 2009 7:15:42 AM Eastern Standard Time
rinted: Tuesday, December 22, 2009 8:36:33 AM Eastern Standard Time

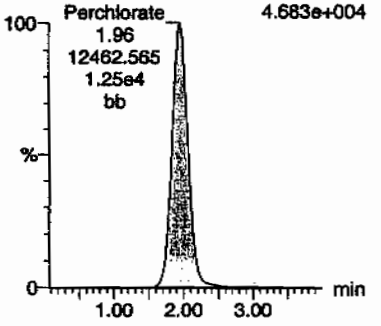
ame: per1221031a
ate: 21-Dec-2009
me: 15:09:11
: WCL091218-06CCV
al: 1:2,A

MMP 12/22/09

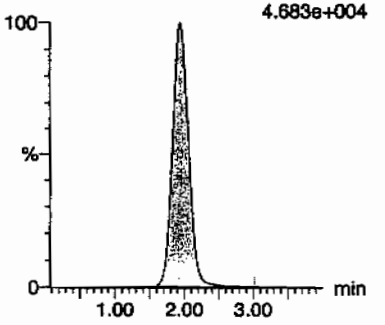
erchlorate



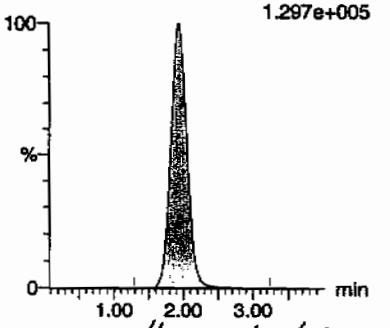
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 12/22/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL091218-06CCV	Perchlorate	99 > 83	1.96	37938.980	37938.980	bb			0.4657	93.14	-6.86	3515.9...	3.04
CL091218-06CCV	Perchlorate-101	101 > 85	1.96	12462.565	12462.565	bb			0.4568	91.35	-8.65	1653.1...	
CL091218-06CCV	Perchlorate-O(18)	107 > 89	1.94	34558.738	34558.738	bb			0.4733	94.67	-5.33	1832.9...	

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

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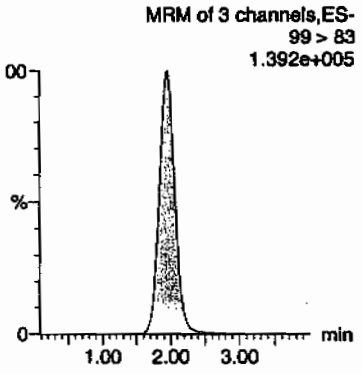
Dataset: C:\MassLynx\Perchlorate.PRO\per122109a.qld

Last Altered: Tuesday, December 22, 2009 7:15:42 AM Eastern Standard Time
Printed: Tuesday, December 22, 2009 8:36:33 AM Eastern Standard Time

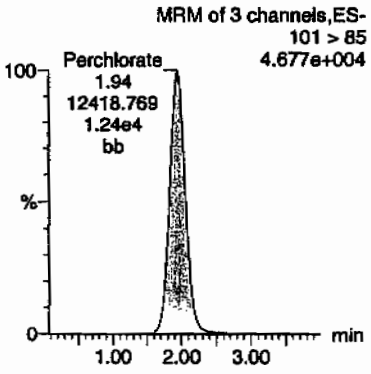
Name: per1221044a
Date: 21-Dec-2009
Time: 16:41:13
ID: WCL091218-06CCV
Vial: 1:2,A

MTP 12/22/09

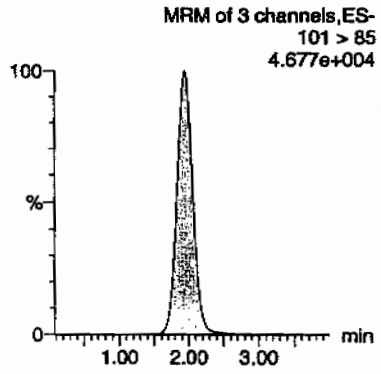
Perchlorate



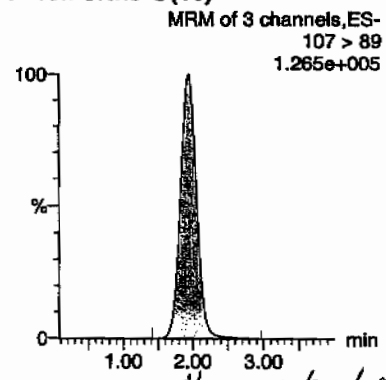
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 12/22/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Devi	S/N	Ion Ratio
CL091218-06CCV	Perchlorate	99 > 83	1.94	37033.492	37033.492	bb			0.4546	90.92	-9.08	7669.6...	2.98
CL091218-06CCV	Perchlorate-101	101 > 85	1.94	12418.769	12418.769	bb			0.4552	91.03	-8.97	3939.5...	
CL091218-06CCV	Perchlorate-O(18)	107 > 89	1.94	33700.117	33700.117	bb			0.4616	92.32	-7.68	5053.5...	

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

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Perchlorate MDL Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-990-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	100.23	21-DEC-09 12:47	per1221011a
Perchlorate Isotope Ratio		2.99		21-DEC-09 12:47	per1221011a
Perchlorate-101	.05	.05	100.08	21-DEC-09 12:47	per1221011a
Perchlorate	.05	.05	95.67	21-DEC-09 13:50	per1221020a
Perchlorate Isotope Ratio		2.91		21-DEC-09 13:50	per1221020a
Perchlorate-101	.05	.05	98.26	21-DEC-09 13:50	per1221020a
Perchlorate	.05	.05	95.47	21-DEC-09 15:23	per1221033a
Perchlorate Isotope Ratio		3.09		21-DEC-09 15:23	per1221033a
Perchlorate-101	.05	.05	92.2	21-DEC-09 15:23	per1221033a
Perchlorate	.05	.05	97.17	21-DEC-09 16:55	per1221046a
Perchlorate Isotope Ratio		3.14		21-DEC-09 16:55	per1221046a

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Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-990-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate-101	.05	.05	92.45	21-DEC-09 16:55	per1221046a

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

uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Michael A. Penny

ıtaset: C:\MassLynx\Perchlorate.PRO\per122109a.qld

ıst Altered: Tuesday, December 22, 2009 7:15:42 AM Eastern Standard Time
inted: Tuesday, December 22, 2009 8:36:33 AM Eastern Standard Time

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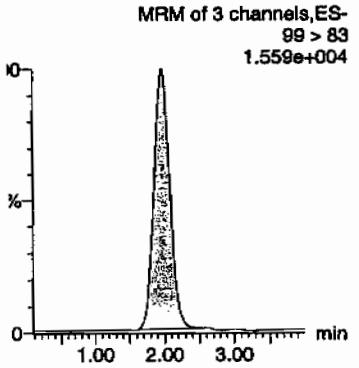
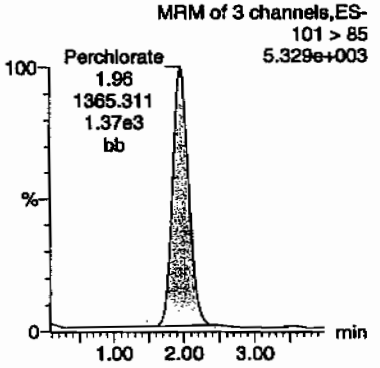
ıte: 21-Dec-2009
me: 12:47:04
: WCL091218-07CRI
al: 1:2,B

ırchlorate



Perchlorate



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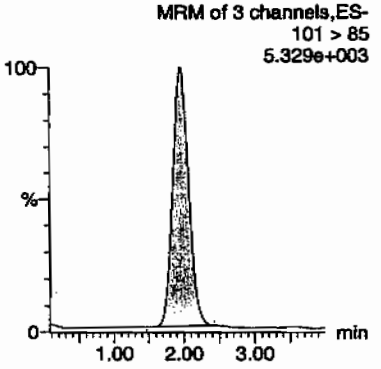
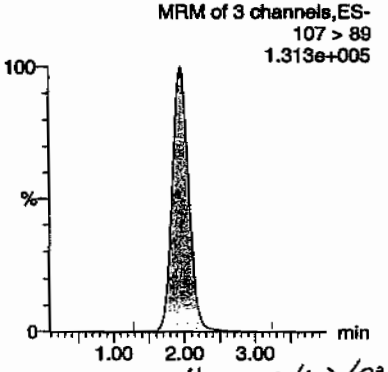


Perchlorate-O(18)



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL091218-07CRI	Perchlorate	99 > 83	1.97	4082.719	4082.719	bb			0.0501	100.23	0.23	642.632	2.99
CL091218-07CRI	Perchlorate-101	101 > 85	1.96	1365.311	1365.311	bb			0.0500	100.08	0.08	486.731	
CL091218-07CRI	Perchlorate-O(18)	107 > 89	1.96	35089.492	35089.492	bb			0.4806	96.12	-3.88	8346.0...	

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

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uantify Sample Report **MassLynx 4.0 SP4**
ıe GEL Group, LLC Analyst: Michael A. Penny

ataset: C:\MassLynx\Perchlorate.PRO\per122109a.qld

ıst Altered: Tuesday, December 22, 2009 7:15:42 AM Eastern Standard Time
inted: Tuesday, December 22, 2009 8:36:33 AM Eastern Standard Time

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me: 13:50:36
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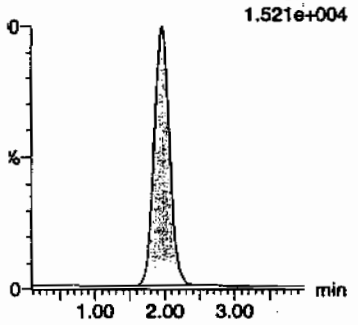
MM 12/22/09

ırchlorate



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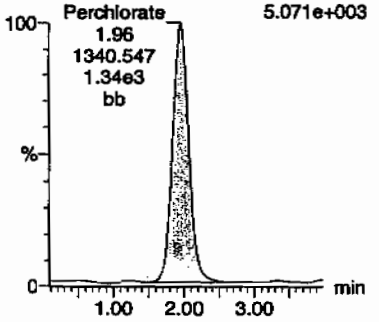
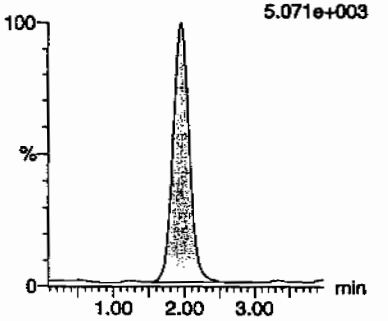
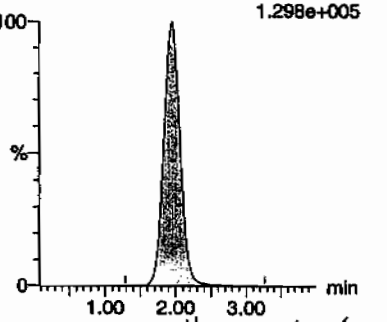


Perchlorate-101



Perchlorate-O(18)



HMM 12/22/09

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL091218-07CRI	Perchlorate	99 > 83	1.96	3896.819	3896.819	bb			0.0478	95.67	-4.33	563.831	2.91
CL091218-07CRI	Perchlorate-101	101 > 85	1.96	1340.547	1340.547	bb			0.0491	98.26	-1.74	441.127	
CL091218-07CRI	Perchlorate-O(18)	107 > 89	1.94	34496.891	34496.891	bb			0.4725	94.50	-5.50	12114....	

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ataset: C:\MassLynx\Perchlorate.PRO\per122109a.qld

ıst Altered: Tuesday, December 22, 2009 7:15:42 AM Eastern Standard Time
inted: Tuesday, December 22, 2009 8:36:33 AM Eastern Standard Time

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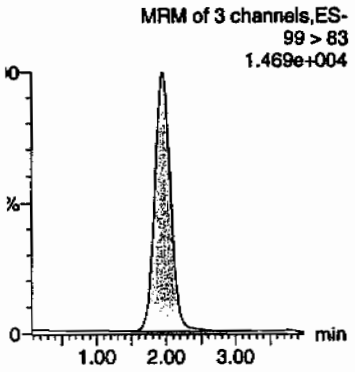
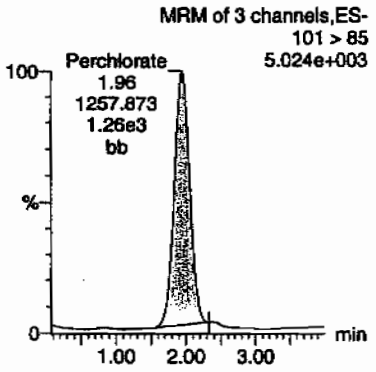
: WCL091218-07CRI
al: 1:2,B

erchlorate



Perchlorate



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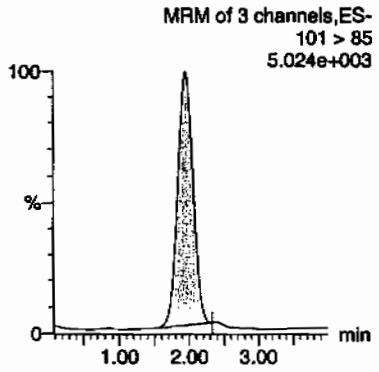
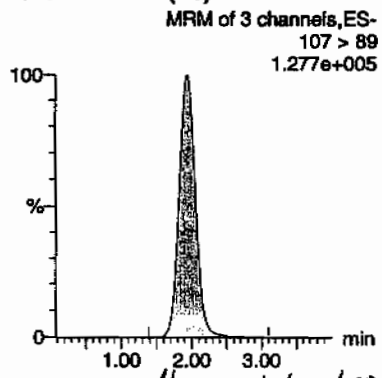


Perchlorate-O(18)



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL091218-07CRI	Perchlorate	99 > 83	1.96	3888.726	3888.726	bb			0.0477	95.47	-4.53	896.281	3.09
CL091218-07CRI	Perchlorate-101	101 > 85	1.96	1257.873	1257.873	bb			0.0461	92.20	-7.80	234.627	
CL091218-07CRI	Perchlorate-O(18)	107 > 89	1.94	34028.879	34028.879	bb			0.4661	93.22	-6.78	7197.8...	

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

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Michael A. Penny

ataset: C:\MassLynx\Perchlorate.PRO\per122109a.qld

ast Altered: Tuesday, December 22, 2009 7:15:42 AM Eastern Standard Time
rinted: Tuesday, December 22, 2009 8:36:33 AM Eastern Standard Time

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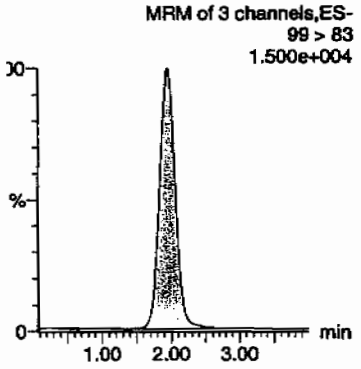
ial: 1:2,B

erchlorate



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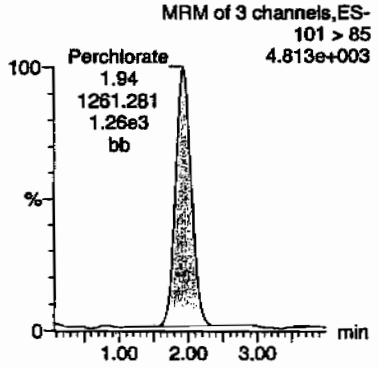

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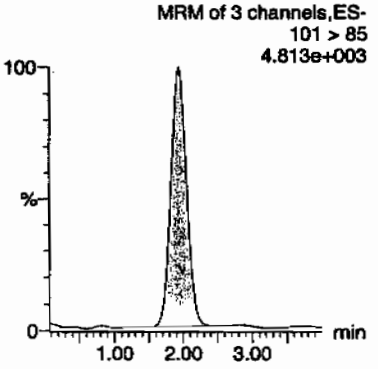
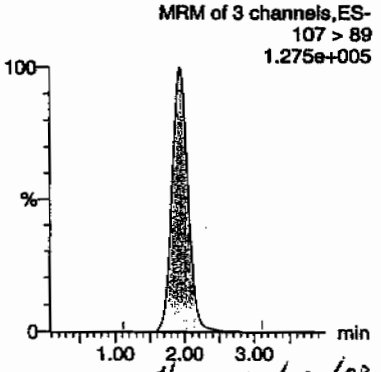


Perchlorate-O(18)



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL091218-07CRI	Perchlorate	99 > 83	1.94	3958.088	3958.088	bb			0.0486	97.17	-2.83	925.593	3.14
CL091218-07CRI	Perchlorate-101	101 > 85	1.94	1261.281	1261.281	bb			0.0462	92.45	-7.55	578.082	
CL091218-07CRI	Perchlorate-O(18)	107 > 89	1.93	33862.180	33862.180	bb			0.4638	92.76	-7.24	9569.5...	

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

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QUALITY CONTROL

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WATER

Extraction Batch ID: 935076

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
MB

Date Received: 21-DEC-09

GEL Job No (SDG): 10-990-1

GEL Sample ID: 1202000653

Date Filtered: 21-DEC-09

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	21-DEC-09 13:57	per1221021a
	Perchlorate Isotope Ratio						1	21-DEC-09 13:57	per1221021a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	21-DEC-09 13:57	per1221021a
	Perchlorate-O(18)			0.474	ug/L		1	21-DEC-09 13:57	per1221021a

^ 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 =

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

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

The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per122109a.qld

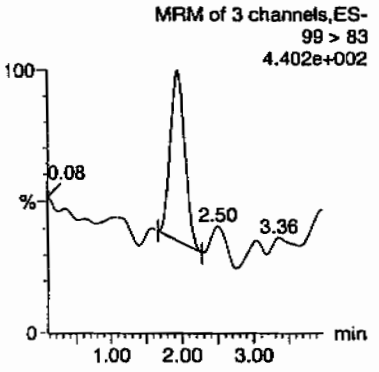
Last Altered: Tuesday, December 22, 2009 7:15:42 AM Eastern Standard Time
Printed: Tuesday, December 22, 2009 8:36:33 AM Eastern Standard Time

Name: per1221021a
Date: 21-Dec-2009
Time: 13:57:48
ID: 1202000653
Vial: 2:1,A

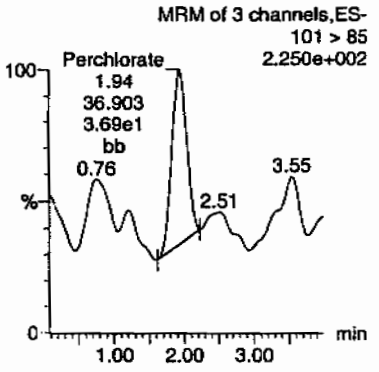
| LANL | 935077 | LCS | MB | 1 |

MM 12/22/09

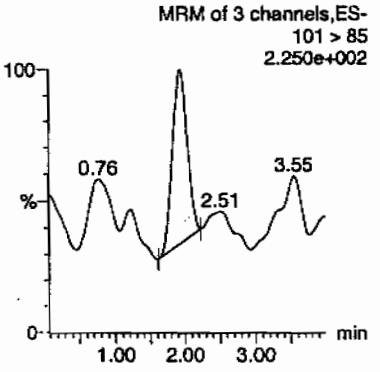
Perchlorate



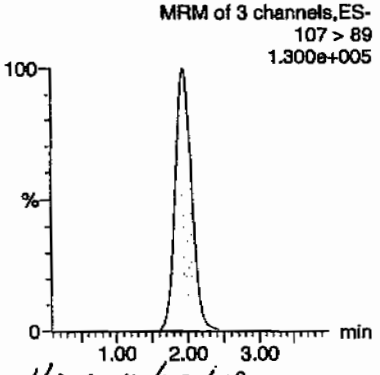
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 12/22/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202000653	Perchlorate	99 > 83	1.94	66.047	66.047	bb			0.0008			32.198	1.79
202000653	Perchlorate-101	101 > 85	1.94	36.903	36.903	bb			0.0014			12.977	
202000653	Perchlorate-O(18)	107 > 89	1.94	34588.527	34588.527	bb			0.4737	94.75	-5.25	4570.1...	

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

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WATER

Extraction Batch ID: 935076

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
LCS

Date Received: 21-DEC-09

GEL Job No (SDG): 10-990-1

GEL Sample ID: 1202000654

Date Filtered: 21-DEC-09

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	0.188	ug/L	J	1	21-DEC-09 14:05	per1221022a
	Perchlorate Isotope Ratio			2.9			1	21-DEC-09 14:05	per1221022a
14797-73-0	Perchlorate-101	.05	.2	0.193	ug/L	J	1	21-DEC-09 14:05	per1221022a
	Perchlorate-O(18)			0.464	ug/L		1	21-DEC-09 14:05	per1221022a

^ 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 =

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

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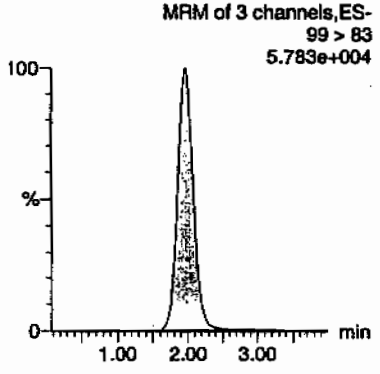
Dataset: C:\MassLynx\Perchlorate.PRO\per122109a.qld

Last Altered: Tuesday, December 22, 2009 7:15:42 AM Eastern Standard Time
Printed: Tuesday, December 22, 2009 8:36:33 AM Eastern Standard Time

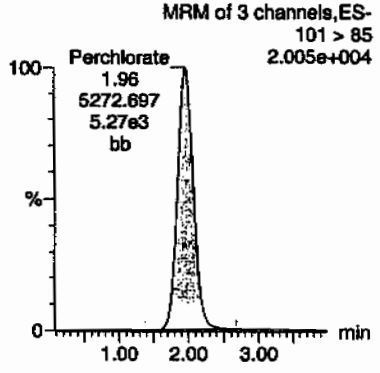
Name: per1221022a
Date: 21-Dec-2009
Time: 14:05:08
ID: 1202000654 (LANL/935077/ L22 / LCS / 1 (
Vial: 2:1,B

mm 12/22/09

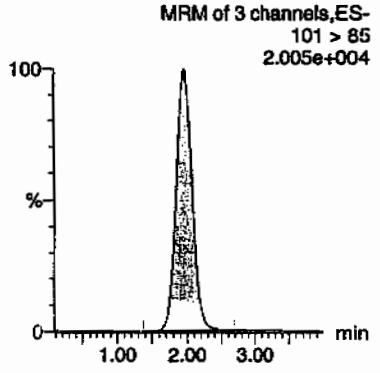
Perchlorate



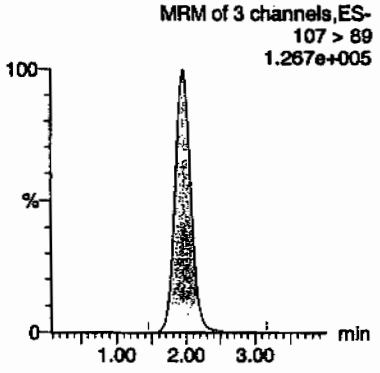
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202000654	Perchlorate	99 > 83	1.97	15319.158	15319.158	bb			0.1880	94.02	-5.98	3280.0...	2.90
202000654	Perchlorate-101	101 > 85	1.96	5272.697	5272.697	bb			0.1932	96.62	-3.38	571.411	
202000654	Perchlorate-O(18)	107 > 89	1.96	33851.551	33851.551	bb			0.4637	92.73	-7.27	7188.8...	

$\frac{15319.158}{81464.6} = 0.1880$

Hmm 12/22/09

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

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 935076

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE12-10-7366MS

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990-1

GEL Sample ID: 1202000655

Date Filtered: 21-DEC-09

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	0.183	ug/L	J	1	21-DEC-09 16:27	per1221042a
	Perchlorate Isotope Ratio			3.04			1	21-DEC-09 16:27	per1221042a
14797-73-0	Perchlorate-101	.05	.2	0.180	ug/L	J	1	21-DEC-09 16:27	per1221042a
	Perchlorate-O(18)			0.460	ug/L		1	21-DEC-09 16:27	per1221042a

^ 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 =

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

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Michael A. Penny

Dataset: C:\MassLynx\Perchlorate.PRO\per122109a.qld

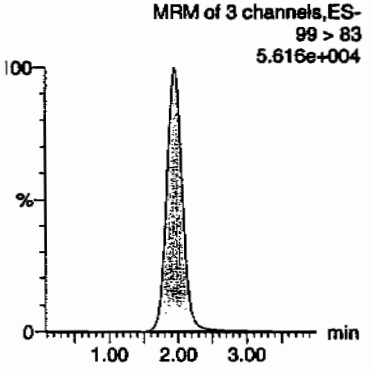
Last Altered: Tuesday, December 22, 2009 7:15:42 AM Eastern Standard Time
Printed: Tuesday, December 22, 2009 8:36:33 AM Eastern Standard Time

Name: per1221042a
Date: 21-Dec-2009
Time: 16:27:07
ID: 1202000655
Vial: 2:4,A

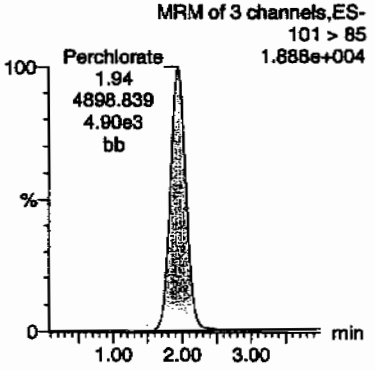
LAUC | 935077 | Lab | 243272001.us | 1 |

MM 12/22/09

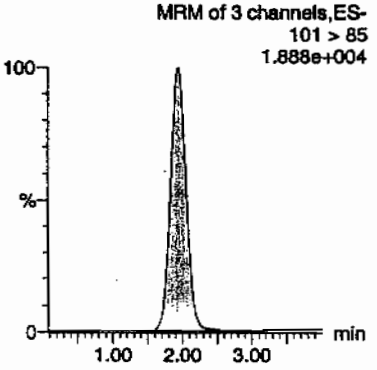
Perchlorate



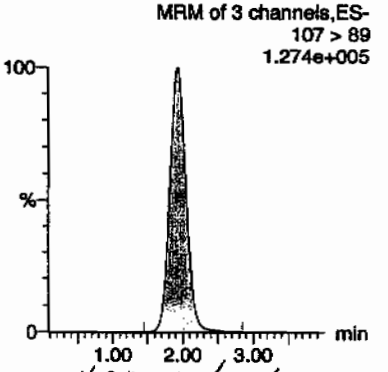
Perchlorate



Perchlorate-101



Perchlorate-O(18)



MM 12/22/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202000655	Perchlorate	99 > 83	1.94	14913.313	14913.313	bb			0.1831	91.53	-8.47	1853.1...	3.04
202000655	Perchlorate-101	101 > 85	1.94	4898.839	4898.839	bb			0.1795	89.77	-10.23	953.654	
202000655	Perchlorate-O(18)	107 > 89	1.93	33563.258	33563.258	bb			0.4597	91.94	-8.06	3466.5...	

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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: 935076

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE12-10-7366MSD

Date Received: 18-DEC-09

GEL Job No (SDG): 10-990-1

GEL Sample ID: 1202000656

Date Filtered: 21-DEC-09

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	0.188	ug/L	J	1	21-DEC-09 16:34	per1221043a
	Perchlorate Isotope Ratio			3.01			1	21-DEC-09 16:34	per1221043a
14797-73-0	Perchlorate-101	.05	.2	0.186	ug/L	J	1	21-DEC-09 16:34	per1221043a
	Perchlorate-O(18)			0.460	ug/L		1	21-DEC-09 16:34	per1221043a

^ 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per122109a.qld

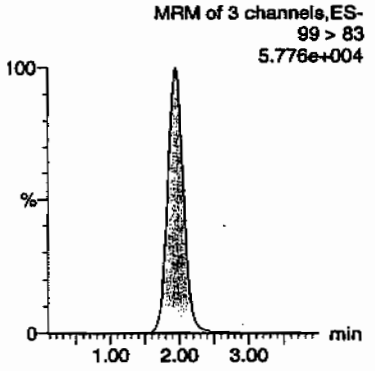
Last Altered: Tuesday, December 22, 2009 7:15:42 AM Eastern Standard Time
Printed: Tuesday, December 22, 2009 8:36:33 AM Eastern Standard Time

Name: per1221043a
Date: 21-Dec-2009
Time: 16:34:11
ID: 1202000656
Vial: 2:4,B

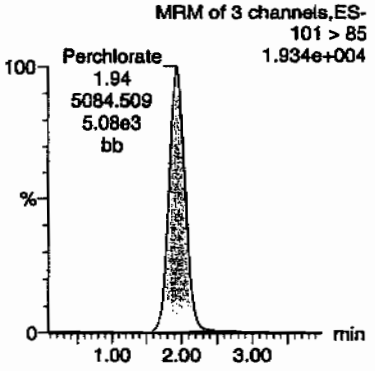
| LANL | 935077 | LCQ | 243272001.MSD | 1 |

MMP 12/22/09

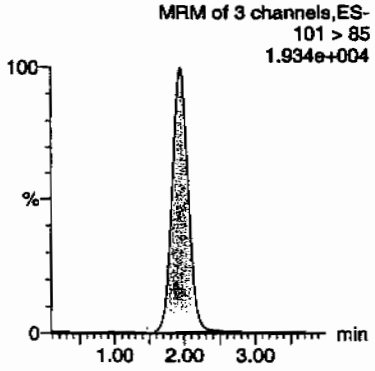
Perchlorate



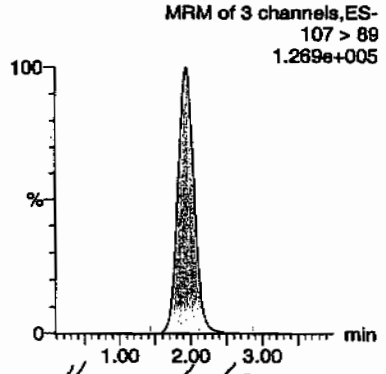
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 12/22/09

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202000656	Perchlorate	99 > 83	1.94	15309.058	15309.058	bb			0.1879	93.96	-6.04	2018.5...	3.01
202000656	Perchlorate-101	101 > 85	1.94	5084.509	5084.509	bb			0.1863	93.17	-6.83	2120.0...	
202000656	Perchlorate-O(18)	107 > 89	1.93	33602.781	33602.781	bb			0.4602	92.05	-7.95	14895....	

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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: 935076 **Verified by:** _____

Analyst: Lynne Russell

Method: SW846 6850 Modified

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

Instrument: MicroMass Quatro Ultima

Sample ID	Run Date	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1202000653 MB	21-DEC-2009 13:40:53	10	10	1
1202000654 LCS	21-DEC-2009 13:40:53	10	10	1
243085001	21-DEC-2009 13:40:53	10	10	1
243104001	21-DEC-2009 13:40:53	10	10	1
1202000657 MS (243104001)	21-DEC-2009 13:40:53	10	10	1
1202000658 MSD (243104001)	21-DEC-2009 13:40:53	10	10	1
243108001	21-DEC-2009 13:40:53	10	10	1
243108002	21-DEC-2009 13:40:53	10	10	1
243242001	21-DEC-2009 13:40:53	10	10	1
243242002	21-DEC-2009 13:40:53	10	10	1
243251001	21-DEC-2009 13:40:53	10	10	1
243255002	21-DEC-2009 13:40:53	10	10	1
243255003	21-DEC-2009 13:40:53	10	10	1
243255005	21-DEC-2009 13:40:53	10	10	1
243257001	21-DEC-2009 13:40:53	10	10	1
243257006	21-DEC-2009 13:40:53	10	10	1
243272001	21-DEC-2009 13:40:53	10	10	1
1202000655 MS (243272001)	21-DEC-2009 13:40:53	10	10	1
1202000656 MSD (243272001)	21-DEC-2009 13:40:53	10	10	1
1202000659 ICS	21-DEC-2009 13:40:53	10	10	1

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1202000659	10 ug/L ICV/CCV Second Source	UCL091201-01.2	.2	mL
LCS	1202000654	10 ug/L ICV/CCV Second Source	UCL091201-01.2	.2	mL
MS	1202000655	10 ug/L ICV/CCV Second Source	UCL091201-01.2	.2	mL
MS	1202000657	10 ug/L ICV/CCV Second Source	UCL091201-01.2	.2	mL
MSD	1202000656	10 ug/L ICV/CCV Second Source	UCL091201-01.2	.2	mL
MSD	1202000658	10 ug/L ICV/CCV Second Source	UCL091201-01.2	.2	mL
RGNT	All	500 ppm Carbonate, Bicarbonate, Chloride, Sulfate	1133543	10	mL

Comments:

De-salting cartridges used: 091027-1-H and 090407-1-Ba.

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GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 12/21/09
Extr. Injection Volume: 20uL
Sequence Number: per122109a
Initial Calibration Date: 12/21/09

Method: EPA 6850-Modified
Int. Std.: UCL091019-03.2
Mobile Phase Lot#: 1233781, 1233976
Standard-Samp Reagent Lot#:: 1233976

Reviewed BY: Hmm
Date: 12/22/09
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL091218-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per1221001a	IPB001	MAP	12/21/2009 11:36			1		USE	B
per1221002a	IPB001	MAP	12/21/2009 11:43			1		USE	B
per1221003a	WCLICAL-01	MAP	12/21/2009 11:50			1		USE	I
per1221004a	WCLICAL-02	MAP	12/21/2009 11:57			1		USE	I
per1221005a	WCLICAL-03	MAP	12/21/2009 12:04			1		USE	I
per1221006a	WCLICAL-04	MAP	12/21/2009 12:11			1		USE	I
per1221007a	WCLICAL-05	MAP	12/21/2009 12:18			1		USE	I
per1221008a	IPB002	MAP	12/21/2009 12:25			1		USE	B
per1221009a	WCLICV	MAP	12/21/2009 12:32			1		USE	C
per1221010a	IPB003	MAP	12/21/2009 12:39			1		USE	B
per1221011a	WCLCRI	MAP	12/21/2009 12:47			1		USE	C
per1221012a	1202000648	MAP	12/21/2009 12:54	935074	10-978	1	LANL	USE	S
per1221013a	1202000649	MAP	12/21/2009 13:01	935074	10-978	1	LANL	USE	S
per1221014a	1202000652	MAP	12/21/2009 13:08	935074	10-978	1	LANL	USE	S
per1221015a	243253001	MAP	12/21/2009 13:15	935074	10-978	1	LANL	USE	S
per1221016a	1202000650	MAP	12/21/2009 13:22	935074	10-978	1	LANL	USE	S
per1221017a	1202000651	MAP	12/21/2009 13:29	935074	10-978	1	LANL	USE	S
per1221018a	WCLCCV	MAP	12/21/2009 13:36			1		USE	C
per1221019a	IPB004	MAP	12/21/2009 13:43			1		USE	B
per1221020a	WCLCRI	MAP	12/21/2009 13:50			1		USE	C
per1221021a	1202000653	MAP	12/21/2009 13:57	935077	Various	1	LANL	USE	S
per1221022a	1202000654	MAP	12/21/2009 14:05	935077	Various	1	LANL	USE	S
per1221023a	1202000659	MAP	12/21/2009 14:12	935077	Various	1	LANL	USE	S
per1221024a	243085001	MAP	12/21/2009 14:19	935077	10-945	1	LANL	USE	S
per1221025a	243104001	MAP	12/21/2009 14:26	935077	10-953	1	LANL	USE	S
per1221026a	1202000657	MAP	12/21/2009 14:33	935077	10-953	1	LANL	USE	S
per1221027a	1202000658	MAP	12/21/2009 14:40	935077	10-953	1	LANL	USE	S
per1221028a	243108001	MAP	12/21/2009 14:47	935077	10-956	1	LANL	USE	S
per1221029a	243108002	MAP	12/21/2009 14:54	935077	10-956	1	LANL	USE	S

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per1221030a	243242001	MAP	12/21/2009 15:02	935077	10-967	1	LANL	USE	S
per1221031a	WCLCCV	MAP	12/21/2009 15:09			1		USE	C
per1221032a	IPB005	MAP	12/21/2009 15:16			1		USE	B
per1221033a	WCLCRI	MAP	12/21/2009 15:23			1		USE	C
per1221034a	243242002	MAP	12/21/2009 15:30	935077	10-967	1	LANL	USE	S
per1221035a	243251001	MAP	12/21/2009 15:37	935077	10-971-1	1	LANL	USE	S
per1221036a	243255002	MAP	12/21/2009 15:44	935077	10-973	1	LANL	USE	S
per1221037a	243255003	MAP	12/21/2009 15:51	935077	10-973	1	LANL	USE	S
per1221038a	243255005	MAP	12/21/2009 15:59	935077	10-973	1	LANL	USE	S
per1221039a	243257001	MAP	12/21/2009 16:06	935077	10-976	1	LANL	USE	S
per1221040a	243257006	MAP	12/21/2009 16:13	935077	10-976	1	LANL	USE	S
per1221041a	243272001	MAP	12/21/2009 16:20	935077	10-990-1	1	LANL	USE	S
per1221042a	1202000655	MAP	12/21/2009 16:27	935077	10-990-1	1	LANL	USE	S
per1221043a	1202000656	MAP	12/21/2009 16:34	935077	10-990-1	1	LANL	USE	S
per1221044a	WCLCCV	MAP	12/21/2009 16:41			1		USE	C
per1221045a	IPB006	MAP	12/21/2009 16:48			1		USE	B
per1221046a	WCLCRI	MAP	12/21/2009 16:55			1		USE	C
per1221047a	1202000628	MAP	12/21/2009 17:02	935062	Various	1	LANL	USE	S
per1221048a	1202000629	MAP	12/21/2009 17:09	935062	Various	1	LANL	USE	S
per1221049a	1202000632	MAP	12/21/2009 17:16	935062	Various	1	LANL	USE	S
per1221050a	243086001	MAP	12/21/2009 17:23	935062	10-945-1	1	LANL	USE	S
per1221051a	243086002	MAP	12/21/2009 17:30	935062	10-945-1	1	LANL	USE	S
per1221052a	243086003	MAP	12/21/2009 17:37	935062	10-945-1	1	LANL	USE	S
per1221053a	243086004	MAP	12/21/2009 17:44	935062	10-945-1	1	LANL	USE	S
per1221054a	243086005	MAP	12/21/2009 17:51	935062	10-945-1	1	LANL	USE	S
per1221055a	WCLCCV	MAP	12/21/2009 17:59			1		USE	C
per1221056a	IPB007	MAP	12/21/2009 18:06			1		USE	B
per1221057a	WCLCRI	MAP	12/21/2009 18:13			1		USE	C
per1221058a	243113001	MAP	12/21/2009 18:20	935062	10-956-1	1	LANL	USE	S
per1221059a	1202000630	MAP	12/21/2009 18:28	935062	10-956-1	1	LANL	USE	S
per1221060a	1202000631	MAP	12/21/2009 18:35	935062	10-956-1	1	LANL	USE	S
per1221061a	243113002	MAP	12/21/2009 18:42	935062	10-956-1	1	LANL	USE	S
per1221062a	243113003	MAP	12/21/2009 18:49	935062	10-956-1	1	LANL	USE	S
per1221063a	243113004	MAP	12/21/2009 18:56	935062	10-956-1	1	LANL	USE	S
per1221064a	243113005	MAP	12/21/2009 19:03	935062	10-956-1	1	LANL	USE	S
per1221065a	243113006	MAP	12/21/2009 19:10	935062	10-956-1	1	LANL	USE	S
per1221066a	243113007	MAP	12/21/2009 19:17	935062	10-956-1	1	LANL	USE	S

per1221067a	243113008	MAP	12/21/2009 19:24	935062	10-956-1	1	LANL	USE	S
per1221068a	WCLCCV	MAP	12/21/2009 19:31			1		USE	C
per1221069a	IPB008	MAP	12/21/2009 19:38			1		USE	B
per1221070a	WCLCRI	MAP	12/21/2009 19:45			1		USE	C
per1221071a	243113009	MAP	12/21/2009 19:52	935062	10-956-1	1	LANL	DUSE-RA	S
per1221072a	243113010	MAP	12/21/2009 19:59	935062	10-956-1	1	LANL	DUSE-RA	S
per1221073a	243113011	MAP	12/21/2009 20:06	935062	10-956-1	1	LANL	DUSE-RA	S
per1221074a	243113012	MAP	12/21/2009 20:14	935062	10-956-1	1	LANL	DUSE-RA	S
per1221075a	243113013	MAP	12/21/2009 20:21	935062	10-956-1	1	LANL	DUSE-RA	S
per1221076a	243113014	MAP	12/21/2009 20:28	935062	10-956-1	1	LANL	DUSE-RA	S
per1221077a	WCLCCV	MAP	12/21/2009 20:35			1		DUSE	C
per1221078a	IPB009	MAP	12/21/2009 20:42			1		DUSE	B
per1221079a	WCLCRI	MAP	12/21/2009 20:49			1		DUSE	C

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

Isotope Ratio Criteria

Isotope Ratio $_{35}Cl/_{37}CL$

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 10-990

Sample Analysis

Sample ID	Client ID
243270001	RE12-10-7352
243270002	RE12-10-7360
243270003	RE12-10-7358
243270004	RE12-10-7357
243270005	RE12-10-7359
243270006	RE12-10-7356
243270007	RE12-10-7353
243270008	RE12-10-7354
243270009	RE12-10-7355
243270010	RE12-10-7364
1202001494	Method Blank (MB) **ICP**
1202001495	Laboratory Control Sample (LCS)
1202001498	243270001(RE12-10-7352L) Serial Dilution (SD)
1202001496	243270001(RE12-10-7352D) Sample Duplicate (DUP)
1202001497	243270001(RE12-10-7352S) Matrix Spike (MS)
1202001499	243270001(RE12-10-7352SD) Matrix Spike Duplicate (MSD)
1202001488	Method Blank (MB) **ICP-MS**
1202001489	Laboratory Control Sample (LCS)
1202001492	243270001(RE12-10-7352L) Serial Dilution (SD)
1202001490	243270001(RE12-10-7352D) Sample Duplicate (DUP)

1202001491	243270001(RE12-10-7352S) Matrix Spike (MS)
1202001493	243270001(RE12-10-7352SD) Matrix Spike Duplicate (MSD)
1202002063	Method Blank (MB) **CVAA**
1202002064	Laboratory Control Sample (LCS)
1202002067	243270001(RE12-10-7352L) Serial Dilution (SD)
1202002065	243270001(RE12-10-7352D) Sample Duplicate (DUP)
1202002066	243270001(RE12-10-7352S) Matrix Spike (MS)
1202002068	243270001(RE12-10-7352SD) Matrix Spike Duplicate (MSD)

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

Method/Analysis Information

Analytical Batch:	935381, 935378 and 935670
Prep Batch :	935380, 935377 and 935669
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-009 REV# 19, GL-MA-E-014 REV# 21 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A
Prep Method :	SW846 3050B and SW846 7471A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal

standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

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

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

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verification (CCV) bracketing this SDG met the established 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 sample was selected as the quality control (QC) sample for this SDG: 243270001.

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 antimony and barium, 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 exception of antimony, as indicated by the "N" qualifier.

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 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 were diluted the standard 2x for solids on the ICPMS.

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

Miscellaneous Information

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

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

Data Exception (DER) Documentation
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following DER was generated for this SDG: 778274. 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 Parsons **Date:** 1/14/10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-990 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243270001 **BASIS:** Dry Weight **DATE COLLECTED** 16-DEC-09

CLIENT ID: RE12-10-7352 **LEVEL:** Low **DATE RECEIVED** 18-DEC-09

MATRIX: SOIL **%SOLIDS:** 90.2

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		7450	21900	21900	1	P	HSC	01/05/10 16:46	010510-1	935381
7440-36-0	Antimony	1100	ug/Kg	UN	361	1100	1100	1	P	HSC	01/05/10 16:46	010510-1	935381
7440-38-2	Arsenic	2.07	mg/kg		0.222	1.11	1.11	2	MS	SKJ	01/06/10 18:16	100106-3	935378
7440-39-3	Barium	166000	ug/Kg	N	110	548	548	1	P	HSC	01/05/10 16:46	010510-1	935381
7440-41-7	Beryllium	1.09	mg/kg		0.0222	0.111	0.111	2	MS	SKJ	01/07/10 11:58	100107-4	935378
7440-43-9	Cadmium	548	ug/Kg	U	110	548	548	1	P	HSC	01/05/10 16:46	010510-1	935381
7440-70-2	Calcium	2200000	ug/Kg		8760	27400	27400	1	P	HSC	01/05/10 16:46	010510-1	935381
7440-47-3	Chromium	11800	ug/Kg		164	548	548	1	P	HSC	01/05/10 16:46	010510-1	935381
7440-48-4	Cobalt	4920	ug/Kg		164	548	548	1	P	HSC	01/05/10 16:46	010510-1	935381
7440-50-8	Copper	7690	ug/Kg		329	1100	1100	1	P	HSC	01/05/10 16:46	010510-1	935381
7439-89-6	Iron	15100000	ug/Kg		8760	27400	27400	1	P	HSC	01/05/10 16:46	010510-1	935381
7439-92-1	Lead	11100	ug/Kg		274	1100	1100	1	P	HSC	01/05/10 16:46	010510-1	935381
7439-95-4	Magnesium	2610000	ug/Kg		9310	32900	32900	1	P	HSC	01/05/10 16:46	010510-1	935381
7439-96-5	Manganese	222000	ug/Kg	*	219	1100	1100	1	P	HSC	01/05/10 16:46	010510-1	935381
7439-97-6	Mercury	19.7	ug/kg		4.31	12.7	12.7	1	AV	JXL1	01/08/10 10:16	010810S1-5	935670
7440-02-0	Nickel	8.15	mg/kg		0.111	0.443	0.443	2	MS	SKJ	01/07/10 11:58	100107-4	935378
7440-09-7	Potassium	2490000	ug/Kg		7010	27400	27400	1	P	HSC	01/05/10 16:46	010510-1	935381
7782-49-2	Selenium	1.11	mg/kg	U	0.554	1.11	1.11	2	MS	SKJ	01/06/10 18:16	100106-3	935378
7440-22-4	Silver	557	ug/Kg		110	548	548	1	P	HSC	01/05/10 16:46	010510-1	935381
7440-23-5	Sodium	283000	ug/Kg		7670	27400	27400	1	P	HSC	01/05/10 16:46	010510-1	935381
7440-28-0	Thallium	0.225	mg/kg		0.0665	0.222	0.222	2	MS	SKJ	01/06/10 18:16	100106-3	935378
7440-61-1	Uranium	0.596	mg/kg		0.0146	0.0443	0.0443	2	MS	SKJ	01/06/10 18:16	100106-3	935378
7440-62-2	Vanadium	25000	ug/Kg		110	548	548	1	P	HSC	01/05/10 16:46	010510-1	935381
7440-66-6	Zinc	28800	ug/Kg		361	1100	1100	1	P	HSC	01/05/10 16:46	010510-1	935381

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
935378	935377	SW846 3050B	0.5	g	50	mL	12/21/09	BXA1
935381	935380	SW846 3050B	0.506	g	50	mL	12/21/09	BXA1
935670	935669	SW846 7471A Prep	0.525	g	30	mL	01/07/10	AXG2

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-990 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243270002 **BASIS:** Dry Weight **DATE COLLECTED** 16-DEC-09

CLIENT ID: RE12-10-7360 **LEVEL:** Low **DATE RECEIVED** 18-DEC-09

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	17100000	ug/Kg		7550	22200	22200	1	P	HSC	01/05/10 17:21	010510-1	935381
7440-36-0	Antimony	1110	ug/Kg	UN	366	1110	1110	1	P	HSC	01/05/10 17:21	010510-1	935381
7440-38-2	Arsenic	2.19	mg/kg		0.225	1.12	1.12	2	MS	SKJ	01/06/10 18:59	100106-3	935378
7440-39-3	Barium	143000	ug/Kg	N	111	555	555	1	P	HSC	01/05/10 17:21	010510-1	935381
7440-41-7	Beryllium	1.2	mg/kg		0.0225	0.112	0.112	2	MS	SKJ	01/06/10 18:59	100106-3	935378
7440-43-9	Cadmium	555	ug/Kg	U	111	555	555	1	P	HSC	01/05/10 17:21	010510-1	935381
7440-70-2	Calcium	2300000	ug/Kg		8880	27700	27700	1	P	HSC	01/05/10 17:21	010510-1	935381
7440-47-3	Chromium	11600	ug/Kg		166	555	555	1	P	HSC	01/05/10 17:21	010510-1	935381
7440-48-4	Cobalt	6490	ug/Kg		166	555	555	1	P	HSC	01/05/10 17:21	010510-1	935381
7440-50-8	Copper	7290	ug/Kg		333	1110	1110	1	P	HSC	01/05/10 17:21	010510-1	935381
7439-89-6	Iron	15100000	ug/Kg		8880	27700	27700	1	P	HSC	01/05/10 17:21	010510-1	935381
7439-92-1	Lead	10700	ug/Kg		277	1110	1110	1	P	HSC	01/05/10 17:21	010510-1	935381
7439-95-4	Magnesium	2320000	ug/Kg		9430	33300	33300	1	P	HSC	01/05/10 17:21	010510-1	935381
7439-96-5	Manganese	228000	ug/Kg	*	222	1110	1110	1	P	HSC	01/05/10 17:21	010510-1	935381
7439-97-6	Mercury	22.4	ug/kg		3.97	11.7	11.7	1	AV	JXL1	01/08/10 10:26	010810S1-5	935670
7440-02-0	Nickel	8.43	mg/kg		0.112	0.449	0.449	2	MS	SKJ	01/06/10 18:59	100106-3	935378
7440-09-7	Potassium	2380000	ug/Kg		7100	27700	27700	1	P	HSC	01/05/10 17:21	010510-1	935381
7782-49-2	Selenium	1.12	mg/kg	U	0.561	1.12	1.12	2	MS	SKJ	01/06/10 18:59	100106-3	935378
7440-22-4	Silver	494	ug/Kg	J	111	555	555	1	P	HSC	01/05/10 17:21	010510-1	935381
7440-23-5	Sodium	159000	ug/Kg		7770	27700	27700	1	P	HSC	01/05/10 17:21	010510-1	935381
7440-28-0	Thallium	0.194	mg/kg	J	0.0674	0.225	0.225	2	MS	SKJ	01/06/10 18:59	100106-3	935378
7440-61-1	Uranium	0.967	mg/kg		0.0148	0.0449	0.0449	2	MS	SKJ	01/06/10 18:59	100106-3	935378
7440-62-2	Vanadium	24900	ug/Kg		111	555	555	1	P	HSC	01/05/10 17:21	010510-1	935381
7440-66-6	Zinc	28300	ug/Kg		366	1110	1110	1	P	HSC	01/05/10 17:21	010510-1	935381

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
935378	935377	SW846 3050B	0.501	g	50	mL	12/21/09	BXA1
935381	935380	SW846 3050B	0.507	g	50	mL	12/21/09	BXA1
935670	935669	SW846 7471A Prep	0.578	g	30	mL	01/07/10	AXG2

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-990 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243270003 **BASIS:** Dry Weight **DATE COLLECTED** 16-DEC-09

CLIENT ID: RE12-10-7358 **LEVEL:** Low **DATE RECEIVED** 18-DEC-09

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	17900000	ug/Kg		7640	22500	22500	1	P	HSC	01/05/10 17:41	010510-1	935381
7440-36-0	Antimony	1120	ug/Kg	UN	371	1120	1120	1	P	HSC	01/05/10 17:41	010510-1	935381
7440-38-2	Arsenic	2.4	mg/kg		0.225	1.12	1.12	2	MS	SKJ	01/06/10 19:05	100106-3	935378
7440-39-3	Barium	169000	ug/Kg	N	112	562	562	1	P	HSC	01/05/10 17:41	010510-1	935381
7440-41-7	Beryllium	1.27	mg/kg		0.0225	0.112	0.112	2	MS	SKJ	01/06/10 19:05	100106-3	935378
7440-43-9	Cadmium	562	ug/Kg	U	112	562	562	1	P	HSC	01/05/10 17:41	010510-1	935381
7440-70-2	Calcium	2060000	ug/Kg		8990	28100	28100	1	P	HSC	01/05/10 17:41	010510-1	935381
7440-47-3	Chromium	12700	ug/Kg		169	562	562	1	P	HSC	01/05/10 17:41	010510-1	935381
7440-48-4	Cobalt	5400	ug/Kg		169	562	562	1	P	HSC	01/05/10 17:41	010510-1	935381
7440-50-8	Copper	8440	ug/Kg		337	1120	1120	1	P	HSC	01/05/10 17:41	010510-1	935381
7439-89-6	Iron	15500000	ug/Kg		8990	28100	28100	1	P	HSC	01/06/10 11:56	010610A-2	935381
7439-92-1	Lead	29700	ug/Kg		281	1120	1120	1	P	HSC	01/05/10 17:41	010510-1	935381
7439-95-4	Magnesium	2490000	ug/Kg		9560	33700	33700	1	P	HSC	01/05/10 17:41	010510-1	935381
7439-96-5	Manganese	251000	ug/Kg	*	225	1120	1120	1	P	HSC	01/05/10 17:41	010510-1	935381
7439-97-6	Mercury	24.9	ug/kg		4.03	11.9	11.9	1	AV	JXL1	01/08/10 10:28	010810S1-5	935670
7440-02-0	Nickel	9.04	mg/kg		0.112	0.45	0.45	2	MS	SKJ	01/06/10 19:05	100106-3	935378
7440-09-7	Potassium	2390000	ug/Kg		7190	28100	28100	1	P	HSC	01/06/10 11:56	010610A-2	935381
7782-49-2	Selenium	1.12	mg/kg	U	0.562	1.12	1.12	2	MS	SKJ	01/06/10 19:05	100106-3	935378
7440-22-4	Silver	560	ug/Kg	J	112	562	562	1	P	HSC	01/05/10 17:41	010510-1	935381
7440-23-5	Sodium	288000	ug/Kg		7870	28100	28100	1	P	HSC	01/05/10 17:41	010510-1	935381
7440-28-0	Thallium	0.238	mg/kg		0.0674	0.225	0.225	2	MS	SKJ	01/06/10 19:05	100106-3	935378
7440-61-1	Uranium	1.46	mg/kg		0.0148	0.045	0.045	2	MS	SKJ	01/06/10 19:05	100106-3	935378
7440-62-2	Vanadium	28700	ug/Kg		112	562	562	1	P	HSC	01/05/10 17:41	010510-1	935381
7440-66-6	Zinc	37300	ug/Kg		371	1120	1120	1	P	HSC	01/05/10 17:41	010510-1	935381

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
935378	935377	SW846 3050B	0.5	g	50	mL	12/21/09	BXA1
935381	935380	SW846 3050B	0.5	g	50	mL	12/21/09	BXA1
935670	935669	SW846 7471A Prep	0.569	g	30	mL	01/07/10	AXG2

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-990 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243270004 **BASIS:** Dry Weight **DATE COLLECTED** 16-DEC-09

CLIENT ID: RE12-10-7357 **LEVEL:** Low **DATE RECEIVED** 18-DEC-09

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	10900000	ug/Kg		7140	21000	21000	1	P	HSC	01/05/10 17:48	010510-1	935381
7440-36-0	Antimony	649	ug/Kg	JN	347	1050	1050	1	P	HSC	01/05/10 17:48	010510-1	935381
7440-38-2	Arsenic	2.26	mg/kg		0.19	0.949	0.949	2	MS	SKJ	01/06/10 19:12	100106-3	935378
7440-39-3	Barium	159000	ug/Kg	N	105	525	525	1	P	HSC	01/05/10 17:48	010510-1	935381
7440-41-7	Beryllium	0.873	mg/kg		0.019	0.0949	0.0949	2	MS	SKJ	01/06/10 19:12	100106-3	935378
7440-43-9	Cadmium	525	ug/Kg	U	105	525	525	1	P	HSC	01/05/10 17:48	010510-1	935381
7440-70-2	Calcium	2080000	ug/Kg		8410	26300	26300	1	P	HSC	01/05/10 17:48	010510-1	935381
7440-47-3	Chromium	12900	ug/Kg		158	525	525	1	P	HSC	01/05/10 17:48	010510-1	935381
7440-48-4	Cobalt	7270	ug/Kg		158	525	525	1	P	HSC	01/05/10 17:48	010510-1	935381
7440-50-8	Copper	8800	ug/Kg		315	1050	1050	1	P	HSC	01/05/10 17:48	010510-1	935381
7439-89-6	Iron	13500000	ug/Kg		8410	26300	26300	1	P	HSC	01/06/10 12:03	010610A-2	935381
7439-92-1	Lead	58600	ug/Kg		263	1050	1050	1	P	HSC	01/05/10 17:48	010510-1	935381
7439-95-4	Magnesium	1980000	ug/Kg		8930	31500	31500	1	P	HSC	01/05/10 17:48	010510-1	935381
7439-96-5	Manganese	345000	ug/Kg	*	210	1050	1050	1	P	HSC	01/05/10 17:48	010510-1	935381
7439-97-6	Mercury	14.8	ug/kg		4.53	13.3	13.3	1	AV	JXL1	01/08/10 10:30	010810S1-5	935670
7440-02-0	Nickel	7.08	mg/kg		0.0949	0.38	0.38	2	MS	SKJ	01/06/10 19:12	100106-3	935378
7440-09-7	Potassium	2000000	ug/Kg		6720	26300	26300	1	P	HSC	01/06/10 12:03	010610A-2	935381
7782-49-2	Selenium	0.949	mg/kg	U	0.474	0.949	0.949	2	MS	SKJ	01/06/10 19:12	100106-3	935378
7440-22-4	Silver	452	ug/Kg	J	105	525	525	1	P	HSC	01/05/10 17:48	010510-1	935381
7440-23-5	Sodium	127000	ug/Kg		7350	26300	26300	1	P	HSC	01/05/10 17:48	010510-1	935381
7440-28-0	Thallium	0.204	mg/kg		0.0569	0.19	0.19	2	MS	SKJ	01/06/10 19:12	100106-3	935378
7440-61-1	Uranium	1.91	mg/kg		0.0125	0.038	0.038	2	MS	SKJ	01/06/10 19:12	100106-3	935378
7440-62-2	Vanadium	30900	ug/Kg		105	525	525	1	P	HSC	01/05/10 17:48	010510-1	935381
7440-66-6	Zinc	54900	ug/Kg		347	1050	1050	1	P	HSC	01/05/10 17:48	010510-1	935381

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
935378	935377	SW846 3050B	0.588	g	50	mL	12/21/09	BXA1
935381	935380	SW846 3050B	0.531	g	50	mL	12/21/09	BXA1
935670	935669	SW846 7471A Prep	0.503	g	30	mL	01/07/10	AXG2

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-990 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243270005 **BASIS:** Dry Weight **DATE COLLECTED** 16-DEC-09

CLIENT ID: RE12-10-7359 **LEVEL:** Low **DATE RECEIVED** 18-DEC-09

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	9690000	ug/Kg		6870	20200	20200	1	P	HSC	01/05/10 17:55	010510-1	935381
7440-36-0	Antimony	1010	ug/Kg	UN	333	1010	1010	1	P	HSC	01/05/10 17:55	010510-1	935381
7440-38-2	Arsenic	1.16	mg/kg		0.22	1.1	1.1	2	MS	SKJ	01/06/10 19:18	100106-3	935378
7440-39-3	Barium	279000	ug/Kg	N	101	505	505	1	P	HSC	01/05/10 17:55	010510-1	935381
7440-41-7	Beryllium	0.581	mg/kg		0.022	0.11	0.11	2	MS	SKJ	01/06/10 19:18	100106-3	935378
7440-43-9	Cadmium	505	ug/Kg	U	101	505	505	1	P	HSC	01/05/10 17:55	010510-1	935381
7440-70-2	Calcium	2540000	ug/Kg		8080	25300	25300	1	P	HSC	01/05/10 17:55	010510-1	935381
7440-47-3	Chromium	9160	ug/Kg		152	505	505	1	P	HSC	01/05/10 17:55	010510-1	935381
7440-48-4	Cobalt	4730	ug/Kg		152	505	505	1	P	HSC	01/05/10 17:55	010510-1	935381
7440-50-8	Copper	8270	ug/Kg		303	1010	1010	1	P	HSC	01/05/10 17:55	010510-1	935381
7439-89-6	Iron	12400000	ug/Kg		8080	25300	25300	1	P	HSC	01/06/10 12:11	010610A-2	935381
7439-92-1	Lead	10100	ug/Kg		253	1010	1010	1	P	HSC	01/05/10 17:55	010510-1	935381
7439-95-4	Magnesium	1890000	ug/Kg		8590	30300	30300	1	P	HSC	01/05/10 17:55	010510-1	935381
7439-96-5	Manganese	367000	ug/Kg	*	202	1010	1010	1	P	HSC	01/05/10 17:55	010510-1	935381
7439-97-6	Mercury	13.5	ug/kg		4.08	12	12	1	AV	JXL1	01/08/10 10:36	010810S1-5	935670
7440-02-0	Nickel	9.29	mg/kg		0.11	0.44	0.44	2	MS	SKJ	01/06/10 19:18	100106-3	935378
7440-09-7	Potassium	1360000	ug/Kg		6470	25300	25300	1	P	HSC	01/06/10 12:11	010610A-2	935381
7782-49-2	Selenium	1.1	mg/kg	U	0.55	1.1	1.1	2	MS	SKJ	01/06/10 19:18	100106-3	935378
7440-22-4	Silver	431	ug/Kg	J	101	505	505	1	P	HSC	01/05/10 17:55	010510-1	935381
7440-23-5	Sodium	122000	ug/Kg		7070	25300	25300	1	P	HSC	01/05/10 17:55	010510-1	935381
7440-28-0	Thallium	0.154	mg/kg	J	0.066	0.22	0.22	2	MS	SKJ	01/06/10 19:18	100106-3	935378
7440-61-1	Uranium	2.86	mg/kg		0.0145	0.044	0.044	2	MS	SKJ	01/06/10 19:18	100106-3	935378
7440-62-2	Vanadium	27700	ug/Kg		101	505	505	1	P	HSC	01/05/10 17:55	010510-1	935381
7440-66-6	Zinc	23000	ug/Kg		333	1010	1010	1	P	HSC	01/05/10 17:55	010510-1	935381

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
935378	935377	SW846 3050B	0.513	g	50	mL	12/21/09	BXA1
935381	935380	SW846 3050B	0.559	g	50	mL	12/21/09	BXA1
935670	935669	SW846 7471A Prep	0.565	g	30	mL	01/07/10	AXG2

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-990 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243270006 **BASIS:** Dry Weight **DATE COLLECTED** 16-DEC-09

CLIENT ID: RE12-10-7356 **LEVEL:** Low **DATE RECEIVED** 18-DEC-09

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12800000	ug/Kg		6700	19700	19700	1	P	HSC	01/05/10 18:02	010510-1	935381
7440-36-0	Antimony	985	ug/Kg	UN	325	985	985	1	P	HSC	01/05/10 18:02	010510-1	935381
7440-38-2	Arsenic	2.06	mg/kg		0.223	1.11	1.11	2	MS	SKJ	01/06/10 19:24	100106-3	935378
7440-39-3	Barium	171000	ug/Kg	N	98.5	492	492	1	P	HSC	01/05/10 18:02	010510-1	935381
7440-41-7	Beryllium	0.990	mg/kg		0.0223	0.111	0.111	2	MS	SKJ	01/07/10 12:16	100107-4	935378
7440-43-9	Cadmium	492	ug/Kg	U	98.5	492	492	1	P	HSC	01/05/10 18:02	010510-1	935381
7440-70-2	Calcium	3810000	ug/Kg		7880	24600	24600	1	P	HSC	01/05/10 18:02	010510-1	935381
7440-47-3	Chromium	13100	ug/Kg		148	492	492	1	P	HSC	01/05/10 18:02	010510-1	935381
7440-48-4	Cobalt	4560	ug/Kg		148	492	492	1	P	HSC	01/05/10 18:02	010510-1	935381
7440-50-8	Copper	5770	ug/Kg		295	985	985	1	P	HSC	01/05/10 18:02	010510-1	935381
7439-89-6	Iron	14700000	ug/Kg		7880	24600	24600	1	P	HSC	01/06/10 12:18	010610A-2	935381
7439-92-1	Lead	7800	ug/Kg		246	985	985	1	P	HSC	01/05/10 18:02	010510-1	935381
7439-95-4	Magnesium	2500000	ug/Kg		8370	29500	29500	1	P	HSC	01/05/10 18:02	010510-1	935381
7439-96-5	Manganese	221000	ug/Kg	*	197	985	985	1	P	HSC	01/05/10 18:02	010510-1	935381
7439-97-6	Mercury	27.2	ug/kg		3.98	11.7	11.7	1	AV	JXL1	01/08/10 10:38	010810S1-5	935670
7440-02-0	Nickel	7.09	mg/kg		0.111	0.446	0.446	2	MS	SKJ	01/07/10 12:16	100107-4	935378
7440-09-7	Potassium	2060000	ug/Kg		6300	24600	24600	1	P	HSC	01/06/10 12:18	010610A-2	935381
7782-49-2	Selenium	1.11	mg/kg	U	0.557	1.11	1.11	2	MS	SKJ	01/06/10 19:24	100106-3	935378
7440-22-4	Silver	638	ug/Kg		98.5	492	492	1	P	HSC	01/05/10 18:02	010510-1	935381
7440-23-5	Sodium	356000	ug/Kg		6890	24600	24600	1	P	HSC	01/05/10 18:02	010510-1	935381
7440-28-0	Thallium	0.173	mg/kg	J	0.0669	0.223	0.223	2	MS	SKJ	01/06/10 19:24	100106-3	935378
7440-61-1	Uranium	0.578	mg/kg		0.0147	0.0446	0.0446	2	MS	SKJ	01/06/10 19:24	100106-3	935378
7440-62-2	Vanadium	19200	ug/Kg		98.5	492	492	1	P	HSC	01/05/10 18:02	010510-1	935381
7440-66-6	Zinc	33300	ug/Kg		325	985	985	1	P	HSC	01/05/10 18:02	010510-1	935381

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
935378	935377	SW846 3050B	0.5	g	50	mL	12/21/09	BXA1
935381	935380	SW846 3050B	0.566	g	50	mL	12/21/09	BXA1
935670	935669	SW846 7471A Prep	0.571	g	30	mL	01/07/10	AXG2

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-990 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243270007 **BASIS:** Dry Weight **DATE COLLECTED** 16-DEC-09

CLIENT ID: RE12-10-7353 **LEVEL:** Low **DATE RECEIVED** 18-DEC-09

MATRIX: SOIL **%SOLIDS:** 82

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	18500000	ug/Kg		8240	24200	24200	1	P	HSC	01/05/10 18:09	010510-1	935381
7440-36-0	Antimony	1210	ug/Kg	UN	400	1210	1210	1	P	HSC	01/05/10 18:09	010510-1	935381
7440-38-2	Arsenic	2.18	mg/kg		0.225	1.12	1.12	2	MS	SKJ	01/06/10 19:43	100106-3	935378
7440-39-3	Barium	202000	ug/Kg	N	121	606	606	1	P	HSC	01/05/10 18:09	010510-1	935381
7440-41-7	Beryllium	1.18	mg/kg		0.0225	0.112	0.112	2	MS	SKJ	01/06/10 19:43	100106-3	935378
7440-43-9	Cadmium	606	ug/Kg	U	121	606	606	1	P	HSC	01/05/10 18:09	010510-1	935381
7440-70-2	Calcium	2560000	ug/Kg		9690	30300	30300	1	P	HSC	01/05/10 18:09	010510-1	935381
7440-47-3	Chromium	33500	ug/Kg		182	606	606	1	P	HSC	01/05/10 18:09	010510-1	935381
7440-48-4	Cobalt	5070	ug/Kg		182	606	606	1	P	HSC	01/05/10 18:09	010510-1	935381
7440-50-8	Copper	10400	ug/Kg		363	1210	1210	1	P	HSC	01/05/10 18:09	010510-1	935381
7439-89-6	Iron	14400000	ug/Kg		9690	30300	30300	1	P	HSC	01/06/10 12:25	010610A-2	935381
7439-92-1	Lead	13900	ug/Kg		303	1210	1210	1	P	HSC	01/05/10 18:09	010510-1	935381
7439-95-4	Magnesium	2320000	ug/Kg		10300	36300	36300	1	P	HSC	01/05/10 18:09	010510-1	935381
7439-96-5	Manganese	223000	ug/Kg	*	242	1210	1210	1	P	HSC	01/05/10 18:09	010510-1	935381
7439-97-6	Mercury	22.4	ug/kg		4.88	14.4	14.4	1	AV	JXL1	01/08/10 10:40	010810S1-5	935670
7440-02-0	Nickel	8.5	mg/kg		0.112	0.45	0.45	2	MS	SKJ	01/06/10 19:43	100106-3	935378
7440-09-7	Potassium	2100000	ug/Kg		7750	30300	30300	1	P	HSC	01/06/10 12:25	010610A-2	935381
7782-49-2	Selenium	1.12	mg/kg	U	0.562	1.12	1.12	2	MS	SKJ	01/06/10 19:43	100106-3	935378
7440-22-4	Silver	538	ug/Kg	J	121	606	606	1	P	HSC	01/05/10 18:09	010510-1	935381
7440-23-5	Sodium	115000	ug/Kg		8480	30300	30300	1	P	HSC	01/05/10 18:09	010510-1	935381
7440-28-0	Thallium	0.201	mg/kg	J	0.0674	0.225	0.225	2	MS	SKJ	01/06/10 19:43	100106-3	935378
7440-61-1	Uranium	1.33	mg/kg		0.0148	0.045	0.045	2	MS	SKJ	01/06/10 19:43	100106-3	935378
7440-62-2	Vanadium	28100	ug/Kg		121	606	606	1	P	HSC	01/05/10 18:09	010510-1	935381
7440-66-6	Zinc	25200	ug/Kg		400	1210	1210	1	P	HSC	01/05/10 18:09	010510-1	935381

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
935378	935377	SW846 3050B	0.541	g	50	mL	12/21/09	BXA1
935381	935380	SW846 3050B	0.502	g	50	mL	12/21/09	BXA1
935670	935669	SW846 7471A Prep	0.508	g	30	mL	01/07/10	AXG2

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-990 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243270008 **BASIS:** Dry Weight **DATE COLLECTED** 16-DEC-09

CLIENT ID: RE12-10-7354 **LEVEL:** Low **DATE RECEIVED** 18-DEC-09

MATRIX: SOIL **%SOLIDS:** 93.1

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	10800000	ug/Kg		7270	21400	21400	1	P	HSC	01/05/10 18:16	010510-1	935381
7440-36-0	Antimony	1070	ug/Kg	UN	353	1070	1070	1	P	HSC	01/05/10 18:16	010510-1	935381
7440-38-2	Arsenic	1.77	mg/kg		0.214	1.07	1.07	2	MS	SKJ	01/06/10 19:49	100106-3	935378
7440-39-3	Barium	166000	ug/Kg	N	107	535	535	1	P	HSC	01/05/10 18:16	010510-1	935381
7440-41-7	Beryllium	0.836	mg/kg		0.0214	0.107	0.107	2	MS	SKJ	01/06/10 19:49	100106-3	935378
7440-43-9	Cadmium	535	ug/Kg	U	107	535	535	1	P	HSC	01/05/10 18:16	010510-1	935381
7440-70-2	Calcium	1990000	ug/Kg		8550	26700	26700	1	P	HSC	01/05/10 18:16	010510-1	935381
7440-47-3	Chromium	10100	ug/Kg		160	535	535	1	P	HSC	01/05/10 18:16	010510-1	935381
7440-48-4	Cobalt	5380	ug/Kg		160	535	535	1	P	HSC	01/05/10 18:16	010510-1	935381
7440-50-8	Copper	6800	ug/Kg		321	1070	1070	1	P	HSC	01/05/10 18:16	010510-1	935381
7439-89-6	Iron	12400000	ug/Kg		8550	26700	26700	1	P	HSC	01/06/10 12:32	010610A-2	935381
7439-92-1	Lead	12400	ug/Kg		267	1070	1070	1	P	HSC	01/05/10 18:16	010510-1	935381
7439-95-4	Magnesium	1880000	ug/Kg		9090	32100	32100	1	P	HSC	01/05/10 18:16	010510-1	935381
7439-96-5	Manganese	323000	ug/Kg	*	214	1070	1070	1	P	HSC	01/05/10 18:16	010510-1	935381
7439-97-6	Mercury	13.9	ug/kg		3.69	10.8	10.8	1	AV	JXL1	01/08/10 10:42	010810S1-5	935670
7440-02-0	Nickel	6.25	mg/kg		0.107	0.429	0.429	2	MS	SKJ	01/06/10 19:49	100106-3	935378
7440-09-7	Potassium	1520000	ug/Kg		6840	26700	26700	1	P	HSC	01/06/10 12:32	010610A-2	935381
7782-49-2	Selenium	1.07	mg/kg	U	0.536	1.07	1.07	2	MS	SKJ	01/06/10 19:49	100106-3	935378
7440-22-4	Silver	618	ug/Kg		107	535	535	1	P	HSC	01/05/10 18:16	010510-1	935381
7440-23-5	Sodium	125000	ug/Kg		7490	26700	26700	1	P	HSC	01/05/10 18:16	010510-1	935381
7440-28-0	Thallium	0.169	mg/kg	J	0.0643	0.214	0.214	2	MS	SKJ	01/06/10 19:49	100106-3	935378
7440-61-1	Uranium	2.38	mg/kg		0.0141	0.0429	0.0429	2	MS	SKJ	01/06/10 19:49	100106-3	935378
7440-62-2	Vanadium	26700	ug/Kg		107	535	535	1	P	HSC	01/05/10 18:16	010510-1	935381
7440-66-6	Zinc	22600	ug/Kg		353	1070	1070	1	P	HSC	01/05/10 18:16	010510-1	935381

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
935378	935377	SW846 3050B	0.501	g	50	mL	12/21/09	BXA1
935381	935380	SW846 3050B	0.502	g	50	mL	12/21/09	BXA1
935670	935669	SW846 7471A Prep	0.594	g	30	mL	01/07/10	AXG2

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-990 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243270009 **BASIS:** Dry Weight **DATE COLLECTED** 16-DEC-09

CLIENT ID: RE12-10-7355 **LEVEL:** Low **DATE RECEIVED** 18-DEC-09

MATRIX: SOIL **%SOLIDS:** 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12000000	ug/Kg		7560	22200	22200	1	P	HSC	01/05/10 18:23	010510-1	935381
7440-36-0	Antimony	1110	ug/Kg	UN	367	1110	1110	1	P	HSC	01/05/10 18:23	010510-1	935381
7440-38-2	Arsenic	1.46	mg/kg		0.228	1.14	1.14	2	MS	SKJ	01/06/10 19:55	100106-3	935378
7440-39-3	Barium	154000	ug/Kg	N	111	556	556	1	P	HSC	01/05/10 18:23	010510-1	935381
7440-41-7	Beryllium	0.865	mg/kg		0.0228	0.114	0.114	2	MS	SKJ	01/06/10 19:55	100106-3	935378
7440-43-9	Cadmium	556	ug/Kg	U	111	556	556	1	P	HSC	01/05/10 18:23	010510-1	935381
7440-70-2	Calcium	2090000	ug/Kg		8900	27800	27800	1	P	HSC	01/05/10 18:23	010510-1	935381
7440-47-3	Chromium	11700	ug/Kg		167	556	556	1	P	HSC	01/05/10 18:23	010510-1	935381
7440-48-4	Cobalt	4960	ug/Kg		167	556	556	1	P	HSC	01/05/10 18:23	010510-1	935381
7440-50-8	Copper	7650	ug/Kg		334	1110	1110	1	P	HSC	01/05/10 18:23	010510-1	935381
7439-89-6	Iron	13100000	ug/Kg		8900	27800	27800	1	P	HSC	01/06/10 12:39	010610A-2	935381
7439-92-1	Lead	12400	ug/Kg		278	1110	1110	1	P	HSC	01/05/10 18:23	010510-1	935381
7439-95-4	Magnesium	1990000	ug/Kg		9450	33400	33400	1	P	HSC	01/05/10 18:23	010510-1	935381
7439-96-5	Manganese	273000	ug/Kg	*	222	1110	1110	1	P	HSC	01/05/10 18:23	010510-1	935381
7439-97-6	Mercury	20.5	ug/kg		4.37	12.8	12.8	1	AV	JXL1	01/08/10 10:44	010810S1-5	935670
7440-02-0	Nickel	6.5	mg/kg		0.114	0.456	0.456	2	MS	SKJ	01/06/10 19:55	100106-3	935378
7440-09-7	Potassium	1690000	ug/Kg		7120	27800	27800	1	P	HSC	01/06/10 12:39	010610A-2	935381
7782-49-2	Selenium	1.14	mg/kg	U	0.57	1.14	1.14	2	MS	SKJ	01/06/10 19:55	100106-3	935378
7440-22-4	Silver	629	ug/Kg		111	556	556	1	P	HSC	01/05/10 18:23	010510-1	935381
7440-23-5	Sodium	143000	ug/Kg		7780	27800	27800	1	P	HSC	01/05/10 18:23	010510-1	935381
7440-28-0	Thallium	0.175	mg/kg	J	0.0684	0.228	0.228	2	MS	SKJ	01/06/10 19:55	100106-3	935378
7440-61-1	Uranium	1.63	mg/kg		0.0151	0.0456	0.0456	2	MS	SKJ	01/06/10 19:55	100106-3	935378
7440-62-2	Vanadium	27800	ug/Kg		111	556	556	1	P	HSC	01/05/10 18:23	010510-1	935381
7440-66-6	Zinc	24500	ug/Kg		367	1110	1110	1	P	HSC	01/05/10 18:23	010510-1	935381

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
935378	935377	SW846 3050B	0.503	g	50	mL	12/21/09	BXA1
935381	935380	SW846 3050B	0.516	g	50	mL	12/21/09	BXA1
935670	935669	SW846 7471A Prep	0.536	g	30	mL	01/07/10	AXG2

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-990 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243270010 **BASIS:** Dry Weight **DATE COLLECTED** 16-DEC-09

CLIENT ID: RE12-10-7364 **LEVEL:** Low **DATE RECEIVED** 18-DEC-09

MATRIX: SOIL **%SOLIDS:** 88

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	13800000	ug/Kg		7430	21800	21800	1	P	HSC	01/05/10 18:30	010510-1	935381
7440-36-0	Antimony	1090	ug/Kg	UN	361	1090	1090	1	P	HSC	01/05/10 18:30	010510-1	935381
7440-38-2	Arsenic	1.64	mg/kg		0.21	1.05	1.05	2	MS	SKJ	01/06/10 20:01	100106-3	935378
7440-39-3	Barium	160000	ug/Kg	N	109	546	546	1	P	HSC	01/05/10 18:30	010510-1	935381
7440-41-7	Beryllium	0.829	mg/kg		0.021	0.105	0.105	2	MS	SKJ	01/06/10 20:01	100106-3	935378
7440-43-9	Cadmium	546	ug/Kg	U	109	546	546	1	P	HSC	01/05/10 18:30	010510-1	935381
7440-70-2	Calcium	2330000	ug/Kg		8740	27300	27300	1	P	HSC	01/05/10 18:30	010510-1	935381
7440-47-3	Chromium	11700	ug/Kg		164	546	546	1	P	HSC	01/05/10 18:30	010510-1	935381
7440-48-4	Cobalt	4970	ug/Kg		164	546	546	1	P	HSC	01/05/10 18:30	010510-1	935381
7440-50-8	Copper	7930	ug/Kg		328	1090	1090	1	P	HSC	01/05/10 18:30	010510-1	935381
7439-89-6	Iron	13800000	ug/Kg		8740	27300	27300	1	P	HSC	01/06/10 12:46	010610A-2	935381
7439-92-1	Lead	12900	ug/Kg		273	1090	1090	1	P	HSC	01/05/10 18:30	010510-1	935381
7439-95-4	Magnesium	2200000	ug/Kg		9290	32800	32800	1	P	HSC	01/05/10 18:30	010510-1	935381
7439-96-5	Manganese	271000	ug/Kg	*	218	1090	1090	1	P	HSC	01/05/10 18:30	010510-1	935381
7439-97-6	Mercury	28.6	ug/kg		4.21	12.4	12.4	1	AV	JXL1	01/08/10 10:46	010810S1-5	935670
7440-02-0	Nickel	6.76	mg/kg		0.105	0.421	0.421	2	MS	SKJ	01/06/10 20:01	100106-3	935378
7440-09-7	Potassium	1890000	ug/Kg		6990	27300	27300	1	P	HSC	01/06/10 12:46	010610A-2	935381
7782-49-2	Selenium	1.05	mg/kg	U	0.526	1.05	1.05	2	MS	SKJ	01/06/10 20:01	100106-3	935378
7440-22-4	Silver	733	ug/Kg		109	546	546	1	P	HSC	01/05/10 18:30	010510-1	935381
7440-23-5	Sodium	154000	ug/Kg		7650	27300	27300	1	P	HSC	01/05/10 18:30	010510-1	935381
7440-28-0	Thallium	0.176	mg/kg	J	0.0631	0.21	0.21	2	MS	SKJ	01/06/10 20:01	100106-3	935378
7440-61-1	Uranium	1.84	mg/kg		0.0139	0.0421	0.0421	2	MS	SKJ	01/06/10 20:01	100106-3	935378
7440-62-2	Vanadium	28700	ug/Kg		109	546	546	1	P	HSC	01/05/10 18:30	010510-1	935381
7440-66-6	Zinc	25600	ug/Kg		361	1090	1090	1	P	HSC	01/05/10 18:30	010510-1	935381

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
935378	935377	SW846 3050B	0.541	g	50	mL	12/21/09	BXA1
935381	935380	SW846 3050B	0.521	g	50	mL	12/21/09	BXA1
935670	935669	SW846 7471A Prep	0.551	g	30	mL	01/07/10	AXG2

Quality Control Summary

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–990

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Aluminum	5050	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	05–JAN–10 08:41	010510–1
	Antimony	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	05–JAN–10 08:41	010510–1
	Barium	521	ug/L	500	ug/L	104.2	90.0 – 110.0	P	05–JAN–10 08:41	010510–1
	Cadmium	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	05–JAN–10 08:41	010510–1
	Calcium	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	05–JAN–10 08:41	010510–1
	Chromium	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	05–JAN–10 08:41	010510–1
	Cobalt	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	05–JAN–10 08:41	010510–1
	Copper	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	05–JAN–10 08:41	010510–1
	Iron	5080	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	05–JAN–10 08:41	010510–1
	Lead	514	ug/L	500	ug/L	102.7	90.0 – 110.0	P	05–JAN–10 08:41	010510–1
	Magnesium	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	05–JAN–10 08:41	010510–1
	Manganese	525	ug/L	500	ug/L	105.1	90.0 – 110.0	P	05–JAN–10 08:41	010510–1
	Potassium	2450	ug/L	2500	ug/L	98.2	90.0 – 110.0	P	05–JAN–10 08:41	010510–1
	Silver	265	ug/L	250	ug/L	106	90.0 – 110.0	P	05–JAN–10 08:41	010510–1
	Sodium	2500	ug/L	2500	ug/L	100	90.0 – 110.0	P	05–JAN–10 08:41	010510–1
	Vanadium	526	ug/L	500	ug/L	105.1	90.0 – 110.0	P	05–JAN–10 08:41	010510–1
	Zinc	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	05–JAN–10 08:41	010510–1
	Iron	5140	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	06–JAN–10 10:37	010610A–2
	Potassium	2480	ug/L	2500	ug/L	99.2	90.0 – 110.0	P	06–JAN–10 10:37	010610A–2
	Arsenic	48.7	ug/L	50	ug/L	97.4	90.0 – 110.0	MS	06–JAN–10 17:01	100106–3
	Beryllium	52.2	ug/L	50	ug/L	104.5	90.0 – 110.0	MS	06–JAN–10 17:01	100106–3
	Nickel	51.7	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	06–JAN–10 17:01	100106–3
	Selenium	51.8	ug/L	50	ug/L	103.7	90.0 – 110.0	MS	06–JAN–10 17:01	100106–3
	Thallium	48.4	ug/L	50	ug/L	96.8	90.0 – 110.0	MS	06–JAN–10 17:01	100106–3
	Uranium	52.3	ug/L	50	ug/L	104.5	90.0 – 110.0	MS	06–JAN–10 17:01	100106–3
	Beryllium	52.3	ug/L	50	ug/L	104.6	90.0 – 110.0	MS	07–JAN–10 11:25	100107–4
	Nickel	51.8	ug/L	50	ug/L	103.6	90.0 – 110.0	MS	07–JAN–10 11:25	100107–4
	Mercury	5.03	ug/L	5	ug/L	100.6	90.0 – 110.0	AV	08–JAN–10 10:02	010810S1–5
CCV01										
	Aluminum	5240	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	05–JAN–10 09:44	010510–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–990

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Antimony	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	05–JAN–10 09:44	010510–1
	Barium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	05–JAN–10 09:44	010510–1
	Cadmium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	05–JAN–10 09:44	010510–1
	Calcium	5230	ug/L	5000	ug/L	104.5	90.0 – 110.0	P	05–JAN–10 09:44	010510–1
	Chromium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	05–JAN–10 09:44	010510–1
	Cobalt	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	05–JAN–10 09:44	010510–1
	Copper	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	05–JAN–10 09:44	010510–1
	Iron	5300	ug/L	5000	ug/L	106	90.0 – 110.0	P	05–JAN–10 09:44	010510–1
	Lead	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	05–JAN–10 09:44	010510–1
	Magnesium	5340	ug/L	5000	ug/L	106.8	90.0 – 110.0	P	05–JAN–10 09:44	010510–1
	Manganese	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	05–JAN–10 09:44	010510–1
	Potassium	5400	ug/L	5000	ug/L	108.1	90.0 – 110.0	P	05–JAN–10 09:44	010510–1
	Silver	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	05–JAN–10 09:44	010510–1
	Sodium	11000	ug/L	10000	ug/L	109.6	90.0 – 110.0	P	05–JAN–10 09:44	010510–1
	Vanadium	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	05–JAN–10 09:44	010510–1
	Zinc	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	05–JAN–10 09:44	010510–1
	Iron	4940	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	06–JAN–10 11:40	010610A–2
	Potassium	5060	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	06–JAN–10 11:40	010610A–2
	Arsenic	46.8	ug/L	50	ug/L	93.7	90.0 – 110.0	MS	06–JAN–10 17:32	100106–3
	Beryllium	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	06–JAN–10 17:32	100106–3
	Nickel	52.3	ug/L	50	ug/L	104.5	90.0 – 110.0	MS	06–JAN–10 17:32	100106–3
	Selenium	50.5	ug/L	50	ug/L	101	90.0 – 110.0	MS	06–JAN–10 17:32	100106–3
	Thallium	48.3	ug/L	50	ug/L	96.7	90.0 – 110.0	MS	06–JAN–10 17:32	100106–3
	Uranium	51.8	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	06–JAN–10 17:32	100106–3
	Beryllium	51.7	ug/L	50	ug/L	103.4	90.0 – 110.0	MS	07–JAN–10 11:43	100107–4
	Nickel	51.5	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	07–JAN–10 11:43	100107–4
	Mercury	5	ug/L	5	ug/L	99.9	80.0 – 120.0	AV	08–JAN–10 10:08	010810S1–5
CCV02										
	Aluminum	4950	ug/L	5000	ug/L	99.1	90.0 – 110.0	P	05–JAN–10 10:05	010510–1
	Antimony	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	05–JAN–10 10:05	010510–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-990

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Barium	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	05-JAN-10 10:05	010510-1
	Cadmium	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	05-JAN-10 10:05	010510-1
	Calcium	5020	ug/L	5000	ug/L	100.4	90.0 - 110.0	P	05-JAN-10 10:05	010510-1
	Chromium	500	ug/L	500	ug/L	99.9	90.0 - 110.0	P	05-JAN-10 10:05	010510-1
	Cobalt	497	ug/L	500	ug/L	99.3	90.0 - 110.0	P	05-JAN-10 10:05	010510-1
	Copper	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	05-JAN-10 10:05	010510-1
	Iron	5110	ug/L	5000	ug/L	102.1	90.0 - 110.0	P	05-JAN-10 10:05	010510-1
	Lead	509	ug/L	500	ug/L	101.7	90.0 - 110.0	P	05-JAN-10 10:05	010510-1
	Magnesium	5110	ug/L	5000	ug/L	102.2	90.0 - 110.0	P	05-JAN-10 10:05	010510-1
	Manganese	502	ug/L	500	ug/L	100.5	90.0 - 110.0	P	05-JAN-10 10:05	010510-1
	Potassium	5040	ug/L	5000	ug/L	100.8	90.0 - 110.0	P	05-JAN-10 10:05	010510-1
	Silver	501	ug/L	500	ug/L	100.1	90.0 - 110.0	P	05-JAN-10 10:05	010510-1
	Sodium	10500	ug/L	10000	ug/L	104.7	90.0 - 110.0	P	05-JAN-10 10:05	010510-1
	Vanadium	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	05-JAN-10 10:05	010510-1
	Zinc	497	ug/L	500	ug/L	99.3	90.0 - 110.0	P	05-JAN-10 10:05	010510-1
	Iron	4840	ug/L	5000	ug/L	96.8	90.0 - 110.0	P	06-JAN-10 13:00	010610A-2
	Potassium	4810	ug/L	5000	ug/L	96.2	90.0 - 110.0	P	06-JAN-10 13:00	010610A-2
	Arsenic	49.6	ug/L	50	ug/L	99.2	90.0 - 110.0	MS	06-JAN-10 17:51	100106-3
	Beryllium	51.6	ug/L	50	ug/L	103.1	90.0 - 110.0	MS	06-JAN-10 17:51	100106-3
	Nickel	53.1	ug/L	50	ug/L	106.3	90.0 - 110.0	MS	06-JAN-10 17:51	100106-3
	Selenium	51.4	ug/L	50	ug/L	102.8	90.0 - 110.0	MS	06-JAN-10 17:51	100106-3
	Thallium	49.6	ug/L	50	ug/L	99.1	90.0 - 110.0	MS	06-JAN-10 17:51	100106-3
	Uranium	53.8	ug/L	50	ug/L	107.6	90.0 - 110.0	MS	06-JAN-10 17:51	100106-3
	Beryllium	52.8	ug/L	50	ug/L	105.7	90.0 - 110.0	MS	07-JAN-10 12:20	100107-4
	Nickel	50.4	ug/L	50	ug/L	100.7	90.0 - 110.0	MS	07-JAN-10 12:20	100107-4
	Mercury	5.16	ug/L	5	ug/L	103.2	80.0 - 120.0	AV	08-JAN-10 10:32	010810S1-5
CCV03										
	Aluminum	5040	ug/L	5000	ug/L	100.7	90.0 - 110.0	P	05-JAN-10 11:12	010510-1
	Antimony	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	05-JAN-10 11:12	010510-1
	Barium	510	ug/L	500	ug/L	102	90.0 - 110.0	P	05-JAN-10 11:12	010510-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–990

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cadmium	511	ug/L	500	ug/L	102.1	90.0 – 110.0	P	05–JAN–10 11:12	010510–1
	Calcium	5050	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	05–JAN–10 11:12	010510–1
	Chromium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	05–JAN–10 11:12	010510–1
	Cobalt	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	05–JAN–10 11:12	010510–1
	Copper	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	05–JAN–10 11:12	010510–1
	Iron	5100	ug/L	5000	ug/L	101.9	90.0 – 110.0	P	05–JAN–10 11:12	010510–1
	Lead	515	ug/L	500	ug/L	102.9	90.0 – 110.0	P	05–JAN–10 11:12	010510–1
	Magnesium	5070	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	05–JAN–10 11:12	010510–1
	Manganese	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	05–JAN–10 11:12	010510–1
	Potassium	5200	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	05–JAN–10 11:12	010510–1
	Silver	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	05–JAN–10 11:12	010510–1
	Sodium	10500	ug/L	10000	ug/L	104.6	90.0 – 110.0	P	05–JAN–10 11:12	010510–1
	Vanadium	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	05–JAN–10 11:12	010510–1
	Zinc	505	ug/L	500	ug/L	101	90.0 – 110.0	P	05–JAN–10 11:12	010510–1
	Arsenic	47.2	ug/L	50	ug/L	94.4	90.0 – 110.0	MS	06–JAN–10 18:41	100106–3
	Beryllium	50.2	ug/L	50	ug/L	100.5	90.0 – 110.0	MS	06–JAN–10 18:41	100106–3
	Nickel	51.1	ug/L	50	ug/L	102.2	90.0 – 110.0	MS	06–JAN–10 18:41	100106–3
	Selenium	51.2	ug/L	50	ug/L	102.3	90.0 – 110.0	MS	06–JAN–10 18:41	100106–3
	Thallium	49	ug/L	50	ug/L	98	90.0 – 110.0	MS	06–JAN–10 18:41	100106–3
	Uranium	52.1	ug/L	50	ug/L	104.1	90.0 – 110.0	MS	06–JAN–10 18:41	100106–3
	Mercury	5.35	ug/L	5	ug/L	106.9	80.0 – 120.0	AV	08–JAN–10 10:56	010810S1–5
CCV04										
	Aluminum	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	05–JAN–10 12:21	010510–1
	Antimony	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	05–JAN–10 12:21	010510–1
	Barium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	05–JAN–10 12:21	010510–1
	Cadmium	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	05–JAN–10 12:21	010510–1
	Calcium	5050	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	05–JAN–10 12:21	010510–1
	Chromium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	05–JAN–10 12:21	010510–1
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	05–JAN–10 12:21	010510–1
	Copper	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	05–JAN–10 12:21	010510–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-990

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Iron	5160	ug/L	5000	ug/L	103.1	90.0 - 110.0	P	05-JAN-10 12:21	010510-1
	Lead	512	ug/L	500	ug/L	102.3	90.0 - 110.0	P	05-JAN-10 12:21	010510-1
	Magnesium	5150	ug/L	5000	ug/L	102.9	90.0 - 110.0	P	05-JAN-10 12:21	010510-1
	Manganese	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	05-JAN-10 12:21	010510-1
	Potassium	5210	ug/L	5000	ug/L	104.1	90.0 - 110.0	P	05-JAN-10 12:21	010510-1
	Silver	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	05-JAN-10 12:21	010510-1
	Sodium	10500	ug/L	10000	ug/L	104.6	90.0 - 110.0	P	05-JAN-10 12:21	010510-1
	Vanadium	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	05-JAN-10 12:21	010510-1
	Zinc	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	05-JAN-10 12:21	010510-1
	Arsenic	47.9	ug/L	50	ug/L	95.8	90.0 - 110.0	MS	06-JAN-10 19:30	100106-3
	Beryllium	51	ug/L	50	ug/L	102	90.0 - 110.0	MS	06-JAN-10 19:30	100106-3
	Nickel	52.4	ug/L	50	ug/L	104.8	90.0 - 110.0	MS	06-JAN-10 19:30	100106-3
	Selenium	49.8	ug/L	50	ug/L	99.7	90.0 - 110.0	MS	06-JAN-10 19:30	100106-3
	Thallium	48.7	ug/L	50	ug/L	97.3	90.0 - 110.0	MS	06-JAN-10 19:30	100106-3
	Uranium	52.1	ug/L	50	ug/L	104.1	90.0 - 110.0	MS	06-JAN-10 19:30	100106-3
CCV05										
	Aluminum	4980	ug/L	5000	ug/L	99.6	90.0 - 110.0	P	05-JAN-10 13:25	010510-1
	Antimony	516	ug/L	500	ug/L	103.2	90.0 - 110.0	P	05-JAN-10 13:25	010510-1
	Barium	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	05-JAN-10 13:25	010510-1
	Cadmium	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	05-JAN-10 13:25	010510-1
	Calcium	5080	ug/L	5000	ug/L	101.5	90.0 - 110.0	P	05-JAN-10 13:25	010510-1
	Chromium	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	05-JAN-10 13:25	010510-1
	Cobalt	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	05-JAN-10 13:25	010510-1
	Copper	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	05-JAN-10 13:25	010510-1
	Iron	5250	ug/L	5000	ug/L	105	90.0 - 110.0	P	05-JAN-10 13:25	010510-1
	Lead	515	ug/L	500	ug/L	103.1	90.0 - 110.0	P	05-JAN-10 13:25	010510-1
	Magnesium	5180	ug/L	5000	ug/L	103.7	90.0 - 110.0	P	05-JAN-10 13:25	010510-1
	Manganese	513	ug/L	500	ug/L	102.7	90.0 - 110.0	P	05-JAN-10 13:25	010510-1
	Potassium	5270	ug/L	5000	ug/L	105.5	90.0 - 110.0	P	05-JAN-10 13:25	010510-1
	Silver	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	05-JAN-10 13:25	010510-1

METALS
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Initial and Continuing Calibration Verification

SDG No: 10–990

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Sodium	10900	ug/L	10000	ug/L	109	90.0 – 110.0	P	05–JAN–10 13:25	010510–1
	Vanadium	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	05–JAN–10 13:25	010510–1
	Zinc	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	05–JAN–10 13:25	010510–1
	Arsenic	47.6	ug/L	50	ug/L	95.2	90.0 – 110.0	MS	06–JAN–10 20:14	100106–3
	Beryllium	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	06–JAN–10 20:14	100106–3
	Nickel	52.8	ug/L	50	ug/L	105.7	90.0 – 110.0	MS	06–JAN–10 20:14	100106–3
	Selenium	51.3	ug/L	50	ug/L	102.7	90.0 – 110.0	MS	06–JAN–10 20:14	100106–3
	Thallium	49.7	ug/L	50	ug/L	99.4	90.0 – 110.0	MS	06–JAN–10 20:14	100106–3
	Uranium	54	ug/L	50	ug/L	107.9	90.0 – 110.0	MS	06–JAN–10 20:14	100106–3
CCV06										
	Aluminum	4990	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	05–JAN–10 14:27	010510–1
	Antimony	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	05–JAN–10 14:27	010510–1
	Barium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	05–JAN–10 14:27	010510–1
	Cadmium	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	05–JAN–10 14:27	010510–1
	Calcium	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	05–JAN–10 14:27	010510–1
	Chromium	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	05–JAN–10 14:27	010510–1
	Cobalt	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	05–JAN–10 14:27	010510–1
	Copper	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	05–JAN–10 14:27	010510–1
	Iron	5230	ug/L	5000	ug/L	104.6	90.0 – 110.0	P	05–JAN–10 14:27	010510–1
	Lead	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	05–JAN–10 14:27	010510–1
	Magnesium	5200	ug/L	5000	ug/L	104	90.0 – 110.0	P	05–JAN–10 14:27	010510–1
	Manganese	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	05–JAN–10 14:27	010510–1
	Potassium	5340	ug/L	5000	ug/L	106.9	90.0 – 110.0	P	05–JAN–10 14:27	010510–1
	Silver	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	05–JAN–10 14:27	010510–1
	Sodium	10400	ug/L	10000	ug/L	104.3	90.0 – 110.0	P	05–JAN–10 14:27	010510–1
	Vanadium	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	05–JAN–10 14:27	010510–1
	Zinc	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	05–JAN–10 14:27	010510–1
CCV07										
	Aluminum	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	05–JAN–10 14:58	010510–1
	Antimony	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	05–JAN–10 14:58	010510–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–990

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Barium	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	05–JAN–10 14:58	010510–1
	Cadmium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	05–JAN–10 14:58	010510–1
	Calcium	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	05–JAN–10 14:58	010510–1
	Chromium	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	05–JAN–10 14:58	010510–1
	Cobalt	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	05–JAN–10 14:58	010510–1
	Copper	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	05–JAN–10 14:58	010510–1
	Iron	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	05–JAN–10 14:58	010510–1
	Lead	505	ug/L	500	ug/L	101	90.0 – 110.0	P	05–JAN–10 14:58	010510–1
	Magnesium	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	05–JAN–10 14:58	010510–1
	Manganese	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	05–JAN–10 14:58	010510–1
	Potassium	5260	ug/L	5000	ug/L	105.1	90.0 – 110.0	P	05–JAN–10 14:58	010510–1
	Silver	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	05–JAN–10 14:58	010510–1
	Sodium	10500	ug/L	10000	ug/L	105.1	90.0 – 110.0	P	05–JAN–10 14:58	010510–1
	Vanadium	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	05–JAN–10 14:58	010510–1
	Zinc	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	05–JAN–10 14:58	010510–1
CCV08										
	Aluminum	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	05–JAN–10 16:20	010510–1
	Antimony	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	05–JAN–10 16:20	010510–1
	Barium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	05–JAN–10 16:20	010510–1
	Cadmium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	05–JAN–10 16:20	010510–1
	Calcium	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	05–JAN–10 16:20	010510–1
	Chromium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	05–JAN–10 16:20	010510–1
	Cobalt	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	05–JAN–10 16:20	010510–1
	Copper	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	05–JAN–10 16:20	010510–1
	Iron	5350	ug/L	5000	ug/L	106.9	90.0 – 110.0	P	05–JAN–10 16:20	010510–1
	Lead	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	05–JAN–10 16:20	010510–1
	Magnesium	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	05–JAN–10 16:20	010510–1
	Manganese	505	ug/L	500	ug/L	101	90.0 – 110.0	P	05–JAN–10 16:20	010510–1
	Potassium	5410	ug/L	5000	ug/L	108.3	90.0 – 110.0	P	05–JAN–10 16:20	010510–1
	Silver	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	05–JAN–10 16:20	010510–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–990

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Sodium	11000	ug/L	10000	ug/L	110.3	90.0 – 110.0	P	05–JAN–10 16:20	010510–1
	Vanadium	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	05–JAN–10 16:20	010510–1
	Zinc	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	05–JAN–10 16:20	010510–1
CCV09										
	Aluminum	4800	ug/L	5000	ug/L	95.9	90.0 – 110.0	P	05–JAN–10 17:27	010510–1
	Antimony	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	05–JAN–10 17:27	010510–1
	Barium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	05–JAN–10 17:27	010510–1
	Cadmium	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	05–JAN–10 17:27	010510–1
	Calcium	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	05–JAN–10 17:27	010510–1
	Chromium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	05–JAN–10 17:27	010510–1
	Cobalt	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	05–JAN–10 17:27	010510–1
	Copper	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	05–JAN–10 17:27	010510–1
	Iron	5240	ug/L	5000	ug/L	104.9	90.0 – 110.0	P	05–JAN–10 17:27	010510–1
	Lead	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	05–JAN–10 17:27	010510–1
	Magnesium	5100	ug/L	5000	ug/L	102	90.0 – 110.0	P	05–JAN–10 17:27	010510–1
	Manganese	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	05–JAN–10 17:27	010510–1
	Potassium	5240	ug/L	5000	ug/L	104.9	90.0 – 110.0	P	05–JAN–10 17:27	010510–1
	Silver	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	05–JAN–10 17:27	010510–1
	Sodium	10800	ug/L	10000	ug/L	108.5	90.0 – 110.0	P	05–JAN–10 17:27	010510–1
	Vanadium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	05–JAN–10 17:27	010510–1
	Zinc	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	05–JAN–10 17:27	010510–1
CCV10										
	Aluminum	5160	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	05–JAN–10 18:45	010510–1
	Antimony	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	05–JAN–10 18:45	010510–1
	Barium	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	05–JAN–10 18:45	010510–1
	Cadmium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	05–JAN–10 18:45	010510–1
	Calcium	5360	ug/L	5000	ug/L	107.2	90.0 – 110.0	P	05–JAN–10 18:45	010510–1
	Chromium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	05–JAN–10 18:45	010510–1
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	05–JAN–10 18:45	010510–1
	Copper	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	05–JAN–10 18:45	010510–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–990

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Iron	5570	ug/L	5000	ug/L	111.4	90.0 – 110.0	P	05–JAN–10 18:45	010510–1
	Lead	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	05–JAN–10 18:45	010510–1
	Magnesium	5490	ug/L	5000	ug/L	109.8	90.0 – 110.0	P	05–JAN–10 18:45	010510–1
	Manganese	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	05–JAN–10 18:45	010510–1
	Potassium	5590	ug/L	5000	ug/L	111.7	90.0 – 110.0	P	05–JAN–10 18:45	010510–1
	Silver	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	05–JAN–10 18:45	010510–1
	Sodium	10700	ug/L	10000	ug/L	107.4	90.0 – 110.0	P	05–JAN–10 18:45	010510–1
	Vanadium	512	ug/L	500	ug/L	102.3	90.0 – 110.0	P	05–JAN–10 18:45	010510–1
	Zinc	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	05–JAN–10 18:45	010510–1

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–990

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS4,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Nickel	2.25	ug/L	2	ug/L	112.3	70.0 – 130.0	MS	06–JAN–10 17:14	100106–3
	Thallium	1.07	ug/L	1	ug/L	106.6	70.0 – 130.0	MS	06–JAN–10 17:14	100106–3
	Arsenic	4.36	ug/L	5	ug/L	87.2	70.0 – 130.0	MS	06–JAN–10 17:14	100106–3
	Beryllium	.546	ug/L	.5	ug/L	109.2	70.0 – 130.0	MS	06–JAN–10 17:14	100106–3
	Uranium	.226	ug/L	.2	ug/L	113	70.0 – 130.0	MS	06–JAN–10 17:14	100106–3
	Selenium	5.88	ug/L	5	ug/L	117.6	70.0 – 130.0	MS	06–JAN–10 17:14	100106–3
	Nickel	2.25	ug/L	2	ug/L	112.4	70.0 – 130.0	MS	07–JAN–10 11:32	100107–4
	Beryllium	.499	ug/L	.5	ug/L	99.8	70.0 – 130.0	MS	07–JAN–10 11:32	100107–4
	Mercury	.183	ug/L	.2	ug/L	91.4	70.0 – 130.0	AV	08–JAN–10 10:06	010810S1–5
PQL01										
	Aluminum	203	ug/L	200	ug/L	101.4	70.0 – 130.0	P	05–JAN–10 08:54	010510–1
	Iron	94.5	ug/L	100	ug/L	94.5	70.0 – 130.0	P	05–JAN–10 08:54	010510–1
	Lead	11.5	ug/L	10	ug/L	114.5	70.0 – 130.0	P	05–JAN–10 08:54	010510–1
	Magnesium	325	ug/L	300	ug/L	108.5	70.0 – 130.0	P	05–JAN–10 08:54	010510–1
	Manganese	10.3	ug/L	10	ug/L	103.3	70.0 – 130.0	P	05–JAN–10 08:54	010510–1
	Potassium	175	ug/L	150	ug/L	116.4	70.0 – 130.0	P	05–JAN–10 08:54	010510–1
	Silver	4.67	ug/L	5	ug/L	93.3	70.0 – 130.0	P	05–JAN–10 08:54	010510–1
	Sodium	297	ug/L	300	ug/L	99.1	70.0 – 130.0	P	05–JAN–10 08:54	010510–1
	Antimony	10.9	ug/L	10	ug/L	109.4	70.0 – 130.0	P	05–JAN–10 08:54	010510–1
	Barium	5.04	ug/L	5	ug/L	100.9	70.0 – 130.0	P	05–JAN–10 08:54	010510–1
	Cadmium	4.97	ug/L	5	ug/L	99.4	70.0 – 130.0	P	05–JAN–10 08:54	010510–1
	Chromium	5.21	ug/L	5	ug/L	104.3	70.0 – 130.0	P	05–JAN–10 08:54	010510–1
	Cobalt	4.79	ug/L	5	ug/L	95.8	70.0 – 130.0	P	05–JAN–10 08:54	010510–1
	Copper	10.1	ug/L	10	ug/L	100.5	70.0 – 130.0	P	05–JAN–10 08:54	010510–1
	Vanadium	5.43	ug/L	5	ug/L	108.7	70.0 – 130.0	P	05–JAN–10 08:54	010510–1
	Zinc	9.84	ug/L	10	ug/L	98.4	70.0 – 130.0	P	05–JAN–10 08:54	010510–1
	Calcium	207	ug/L	200	ug/L	103.4	70.0 – 130.0	P	05–JAN–10 08:54	010510–1
	Iron	104	ug/L	100	ug/L	103.8	70.0 – 130.0	P	06–JAN–10 10:51	010610A–2
	Potassium	147	ug/L	150	ug/L	98.2	70.0 – 130.0	P	06–JAN–10 10:51	010610A–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–990

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	05–JAN–10 08:47	010510–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	05–JAN–10 08:47	010510–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 08:47	010510–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 08:47	010510–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–JAN–10 08:47	010510–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–JAN–10 08:47	010510–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–JAN–10 08:47	010510–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–JAN–10 08:47	010510–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–JAN–10 08:47	010510–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–JAN–10 08:47	010510–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–JAN–10 08:47	010510–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–JAN–10 08:47	010510–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	05–JAN–10 08:47	010510–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 08:47	010510–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–JAN–10 08:47	010510–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 08:47	010510–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–JAN–10 08:47	010510–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	06–JAN–10 10:44	010610A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	06–JAN–10 10:44	010610A–2
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	06–JAN–10 17:08	100106–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	06–JAN–10 17:08	100106–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	06–JAN–10 17:08	100106–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	06–JAN–10 17:08	100106–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	06–JAN–10 17:08	100106–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	06–JAN–10 17:08	100106–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	07–JAN–10 11:28	100107–4
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	07–JAN–10 11:28	100107–4
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	08–JAN–10 10:04	010810S1–5
CCB01										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	05–JAN–10 09:51	010510–1
	Antimony	6.24	+/–10	J	3.3	10.0	SOL	P	05–JAN–10 09:51	010510–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–990

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 09:51	010510–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 09:51	010510–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–JAN–10 09:51	010510–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–JAN–10 09:51	010510–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–JAN–10 09:51	010510–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–JAN–10 09:51	010510–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–JAN–10 09:51	010510–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–JAN–10 09:51	010510–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–JAN–10 09:51	010510–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–JAN–10 09:51	010510–1
	Potassium	89.69	+/–250	J	64.0	250	SOL	P	05–JAN–10 09:51	010510–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 09:51	010510–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–JAN–10 09:51	010510–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 09:51	010510–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–JAN–10 09:51	010510–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	06–JAN–10 11:47	010610A–2
	Potassium	88.07	+/–250	J	64.0	250	SOL	P	06–JAN–10 11:47	010610A–2
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	06–JAN–10 17:39	100106–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	06–JAN–10 17:39	100106–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	06–JAN–10 17:39	100106–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	06–JAN–10 17:39	100106–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	06–JAN–10 17:39	100106–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	06–JAN–10 17:39	100106–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	07–JAN–10 11:47	100107–4
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	07–JAN–10 11:47	100107–4
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	08–JAN–10 10:10	010810S1–5
CCB02										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	05–JAN–10 10:12	010510–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	05–JAN–10 10:12	010510–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 10:12	010510–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 10:12	010510–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–990

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–JAN–10 10:12	010510–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–JAN–10 10:12	010510–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–JAN–10 10:12	010510–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–JAN–10 10:12	010510–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–JAN–10 10:12	010510–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–JAN–10 10:12	010510–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–JAN–10 10:12	010510–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–JAN–10 10:12	010510–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	05–JAN–10 10:12	010510–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 10:12	010510–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–JAN–10 10:12	010510–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 10:12	010510–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–JAN–10 10:12	010510–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	06–JAN–10 13:06	010610A–2
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	06–JAN–10 13:06	010610A–2
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	06–JAN–10 17:57	100106–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	06–JAN–10 17:57	100106–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	06–JAN–10 17:57	100106–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	06–JAN–10 17:57	100106–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	06–JAN–10 17:57	100106–3
	Uranium	0.11	+/–.2	J	0.066	0.2	SOL	MS	06–JAN–10 17:57	100106–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	07–JAN–10 12:24	100107–4
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	07–JAN–10 12:24	100107–4
	Mercury	–0.084	+/–.2	J	0.068	0.2	SOL	AV	08–JAN–10 10:34	010810S1–5
CCB03										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	05–JAN–10 11:19	010510–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	05–JAN–10 11:19	010510–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 11:19	010510–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 11:19	010510–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–JAN–10 11:19	010510–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–JAN–10 11:19	010510–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–990

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–JAN–10 11:19	010510–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–JAN–10 11:19	010510–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–JAN–10 11:19	010510–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–JAN–10 11:19	010510–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–JAN–10 11:19	010510–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–JAN–10 11:19	010510–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	05–JAN–10 11:19	010510–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 11:19	010510–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–JAN–10 11:19	010510–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 11:19	010510–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–JAN–10 11:19	010510–1
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	06–JAN–10 18:47	100106–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	06–JAN–10 18:47	100106–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	06–JAN–10 18:47	100106–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	06–JAN–10 18:47	100106–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	06–JAN–10 18:47	100106–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	06–JAN–10 18:47	100106–3
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	08–JAN–10 10:58	010810S1–5
CCB04										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	05–JAN–10 12:28	010510–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	05–JAN–10 12:28	010510–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 12:28	010510–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 12:28	010510–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–JAN–10 12:28	010510–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–JAN–10 12:28	010510–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–JAN–10 12:28	010510–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–JAN–10 12:28	010510–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–JAN–10 12:28	010510–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–JAN–10 12:28	010510–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–JAN–10 12:28	010510–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–JAN–10 12:28	010510–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–990

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	05–JAN–10 12:28	010510–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 12:28	010510–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–JAN–10 12:28	010510–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 12:28	010510–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–JAN–10 12:28	010510–1
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	06–JAN–10 19:36	100106–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	06–JAN–10 19:36	100106–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	06–JAN–10 19:36	100106–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	06–JAN–10 19:36	100106–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	06–JAN–10 19:36	100106–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	06–JAN–10 19:36	100106–3
CCB05										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	05–JAN–10 13:31	010510–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	05–JAN–10 13:31	010510–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 13:31	010510–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 13:31	010510–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–JAN–10 13:31	010510–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–JAN–10 13:31	010510–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–JAN–10 13:31	010510–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–JAN–10 13:31	010510–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–JAN–10 13:31	010510–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–JAN–10 13:31	010510–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–JAN–10 13:31	010510–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–JAN–10 13:31	010510–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	05–JAN–10 13:31	010510–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 13:31	010510–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–JAN–10 13:31	010510–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 13:31	010510–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–JAN–10 13:31	010510–1
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	06–JAN–10 20:20	100106–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	06–JAN–10 20:20	100106–3

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–990

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	06–JAN–10 20:20	100106–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	06–JAN–10 20:20	100106–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	06–JAN–10 20:20	100106–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	06–JAN–10 20:20	100106–3
CCB06										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	05–JAN–10 14:34	010510–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	05–JAN–10 14:34	010510–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 14:34	010510–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 14:34	010510–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–JAN–10 14:34	010510–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–JAN–10 14:34	010510–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–JAN–10 14:34	010510–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–JAN–10 14:34	010510–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–JAN–10 14:34	010510–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–JAN–10 14:34	010510–1
	Magnesium	–92.21	+/–300	J	85.0	300	SOL	P	05–JAN–10 14:34	010510–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–JAN–10 14:34	010510–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	05–JAN–10 14:34	010510–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 14:34	010510–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–JAN–10 14:34	010510–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 14:34	010510–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–JAN–10 14:34	010510–1
CCB07										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	05–JAN–10 15:05	010510–1
	Antimony	3.71	+/–10	J	3.3	10.0	SOL	P	05–JAN–10 15:05	010510–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 15:05	010510–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 15:05	010510–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–JAN–10 15:05	010510–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–JAN–10 15:05	010510–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–JAN–10 15:05	010510–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–JAN–10 15:05	010510–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–990

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–JAN–10 15:05	010510–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–JAN–10 15:05	010510–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–JAN–10 15:05	010510–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–JAN–10 15:05	010510–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	05–JAN–10 15:05	010510–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 15:05	010510–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–JAN–10 15:05	010510–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 15:05	010510–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–JAN–10 15:05	010510–1
CCB08										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	05–JAN–10 16:27	010510–1
	Antimony	5.89	+/–10	J	3.3	10.0	SOL	P	05–JAN–10 16:27	010510–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 16:27	010510–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 16:27	010510–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–JAN–10 16:27	010510–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–JAN–10 16:27	010510–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–JAN–10 16:27	010510–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–JAN–10 16:27	010510–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–JAN–10 16:27	010510–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–JAN–10 16:27	010510–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–JAN–10 16:27	010510–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–JAN–10 16:27	010510–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	05–JAN–10 16:27	010510–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 16:27	010510–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–JAN–10 16:27	010510–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 16:27	010510–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–JAN–10 16:27	010510–1
CCB09										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	05–JAN–10 17:34	010510–1
	Antimony	4.22	+/–10	J	3.3	10.0	SOL	P	05–JAN–10 17:34	010510–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 17:34	010510–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–990

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 17:34	010510–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–JAN–10 17:34	010510–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–JAN–10 17:34	010510–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–JAN–10 17:34	010510–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–JAN–10 17:34	010510–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–JAN–10 17:34	010510–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–JAN–10 17:34	010510–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–JAN–10 17:34	010510–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–JAN–10 17:34	010510–1
	Potassium	76.9	+/–250	J	64.0	250	SOL	P	05–JAN–10 17:34	010510–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 17:34	010510–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–JAN–10 17:34	010510–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 17:34	010510–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–JAN–10 17:34	010510–1
CCB10										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	05–JAN–10 18:51	010510–1
	Antimony	3.77	+/–10	J	3.3	10.0	SOL	P	05–JAN–10 18:51	010510–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 18:51	010510–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 18:51	010510–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	05–JAN–10 18:51	010510–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	05–JAN–10 18:51	010510–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	05–JAN–10 18:51	010510–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	05–JAN–10 18:51	010510–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	05–JAN–10 18:51	010510–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	05–JAN–10 18:51	010510–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	05–JAN–10 18:51	010510–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	05–JAN–10 18:51	010510–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	05–JAN–10 18:51	010510–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 18:51	010510–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	05–JAN–10 18:51	010510–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	05–JAN–10 18:51	010510–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–990

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	05–JAN–10 18:51	010510–1

METALS
–3b–
PREPARATION BLANK SUMMARY

SDG NO. 10–990
Contract: LANL01004
Matrix: SOIL

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1202001488								
	Arsenic	0.195	mg/kg	+/–0.977	U	MS	0.195	0.977
	Beryllium	0.0195	mg/kg	+/–0.0977	U	MS	0.0195	0.0977
	Nickel	0.0977	mg/kg	+/–0.391	U	MS	0.0977	0.391
	Selenium	0.488	mg/kg	+/–0.977	U	MS	0.488	0.977
	Thallium	0.0586	mg/kg	+/–0.195	U	MS	0.0586	0.195
	Uranium	0.0129	mg/kg	+/–0.0391	U	MS	0.0129	0.0391
1202001494								
	Aluminum	6530	ug/Kg	+/–19200	U	P	6530	19200
	Antimony	520	ug/Kg	+/–960	J	P	317	960
	Barium	96	ug/Kg	+/–480	U	P	96	480
	Cadmium	96	ug/Kg	+/–480	U	P	96	480
	Calcium	7680	ug/Kg	+/–24000	U	P	7680	24000
	Chromium	144	ug/Kg	+/–480	U	P	144	480
	Cobalt	144	ug/Kg	+/–480	U	P	144	480
	Copper	288	ug/Kg	+/–960	U	P	288	960
	Iron	7680	ug/Kg	+/–24000	U	P	7680	24000
	Lead	240	ug/Kg	+/–960	U	P	240	960
	Magnesium	8160	ug/Kg	+/–28800	U	P	8160	28800
	Manganese	192	ug/Kg	+/–960	U	P	192	960
	Potassium	6140	ug/Kg	+/–24000	U	P	6140	24000
	Silver	96	ug/Kg	+/–480	U	P	96	480
	Sodium	6720	ug/Kg	+/–24000	U	P	6720	24000
	Vanadium	96	ug/Kg	+/–480	U	P	96	480
	Zinc	317	ug/Kg	+/–960	U	P	317	960
1202002063								
	Mercury	4.08	ug/kg	+/–12	U	AV	4.08	12

METALS
-4-
Interference Check Sample

SDG No: 10-990

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	506000	ug/L	500000	ug/L	101	80.0 - 120.0	05-JAN-10 09:01	010510-1
	Antimony	0.299	ug/L					05-JAN-10 09:01	010510-1
	Barium	-0.846	ug/L					05-JAN-10 09:01	010510-1
	Cadmium	-2.94	ug/L					05-JAN-10 09:01	010510-1
	Calcium	482000	ug/L	500000	ug/L	96.4	80.0 - 120.0	05-JAN-10 09:01	010510-1
	Chromium	1.44	ug/L					05-JAN-10 09:01	010510-1
	Cobalt	-1.49	ug/L					05-JAN-10 09:01	010510-1
	Copper	0.45	ug/L					05-JAN-10 09:01	010510-1
	Iron	191000	ug/L	200000	ug/L	95.7	80.0 - 120.0	05-JAN-10 09:01	010510-1
	Lead	-11.0	ug/L					05-JAN-10 09:01	010510-1
	Magnesium	487000	ug/L	500000	ug/L	97.4	80.0 - 120.0	05-JAN-10 09:01	010510-1
	Manganese	8.83	ug/L					05-JAN-10 09:01	010510-1
	Potassium	3.7	ug/L					05-JAN-10 09:01	010510-1
	Silver	3.29	ug/L					05-JAN-10 09:01	010510-1
	Sodium	11.9	ug/L					05-JAN-10 09:01	010510-1
	Vanadium	-2.87	ug/L					05-JAN-10 09:01	010510-1
	Zinc	-1.24	ug/L					05-JAN-10 09:01	010510-1
ICSAB01									
	Aluminum	517000	ug/L	500000	ug/L	103	80.0 - 120.0	05-JAN-10 09:08	010510-1
	Antimony	532	ug/L	500	ug/L	106	80.0 - 120.0	05-JAN-10 09:08	010510-1
	Barium	508	ug/L	500	ug/L	102	80.0 - 120.0	05-JAN-10 09:08	010510-1
	Cadmium	479	ug/L	500	ug/L	95.8	80.0 - 120.0	05-JAN-10 09:08	010510-1
	Calcium	486000	ug/L	500000	ug/L	97.1	80.0 - 120.0	05-JAN-10 09:08	010510-1
	Chromium	486	ug/L	500	ug/L	97.2	80.0 - 120.0	05-JAN-10 09:08	010510-1
	Cobalt	472	ug/L	500	ug/L	94.4	80.0 - 120.0	05-JAN-10 09:08	010510-1
	Copper	571	ug/L	500	ug/L	114	80.0 - 120.0	05-JAN-10 09:08	010510-1
	Iron	190000	ug/L	200000	ug/L	94.9	80.0 - 120.0	05-JAN-10 09:08	010510-1
	Lead	470	ug/L	500	ug/L	94	80.0 - 120.0	05-JAN-10 09:08	010510-1
	Magnesium	488000	ug/L	500000	ug/L	97.6	80.0 - 120.0	05-JAN-10 09:08	010510-1

METALS
-4-
Interference Check Sample

SDG No: 10-990

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Manganese	508	ug/L	500	ug/L	102	80.0 - 120.0	05-JAN-10 09:08	010510-1
	Potassium	5430	ug/L	5000	ug/L	109	80.0 - 120.0	05-JAN-10 09:08	010510-1
	Silver	277	ug/L	250	ug/L	111	80.0 - 120.0	05-JAN-10 09:08	010510-1
	Sodium	5600	ug/L	5000	ug/L	112	80.0 - 120.0	05-JAN-10 09:08	010510-1
	Vanadium	514	ug/L	500	ug/L	103	80.0 - 120.0	05-JAN-10 09:08	010510-1
	Zinc	500	ug/L	500	ug/L	99.9	80.0 - 120.0	05-JAN-10 09:08	010510-1

METALS
–4–
Interference Check Sample

SDG No: 10--990

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Iron	191000	ug/L	200000	ug/L	95.6	80.0 – 120.0	06–JAN–10 10:58	010610A–2
	Potassium	–8.89	ug/L					06–JAN–10 10:58	010610A–2
ICSAB01									
	Iron	186000	ug/L	200000	ug/L	92.9	80.0 – 120.0	06–JAN–10 11:04	010610A–2
	Potassium	5350	ug/L	5000	ug/L	107	80.0 – 120.0	06–JAN–10 11:04	010610A–2

METALS
-4-
Interference Check Sample

SDG No: 10-990

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	-0.2	ug/L					06-JAN-10 17:20	100106-3
	Beryllium	0.028	ug/L					06-JAN-10 17:20	100106-3
	Nickel	2.91	ug/L					06-JAN-10 17:20	100106-3
	Selenium	0.03	ug/L					06-JAN-10 17:20	100106-3
	Thallium	0.029	ug/L					06-JAN-10 17:20	100106-3
	Uranium	-0.006	ug/L					06-JAN-10 17:20	100106-3
ICSAB01									
	Arsenic	20.2	ug/L	20	ug/L	101	80.0 - 120.0	06-JAN-10 17:26	100106-3
	Beryllium	20.5	ug/L	20	ug/L	102	80.0 - 120.0	06-JAN-10 17:26	100106-3
	Nickel	22.6	ug/L	22.7	ug/L	99.6	80.0 - 120.0	06-JAN-10 17:26	100106-3
	Selenium	20.9	ug/L	20	ug/L	104	80.0 - 120.0	06-JAN-10 17:26	100106-3
	Thallium	18.2	ug/L	20	ug/L	90.8	80.0 - 120.0	06-JAN-10 17:26	100106-3
	Uranium	20.2	ug/L	20	ug/L	101	80.0 - 120.0	06-JAN-10 17:26	100106-3

METALS
–4–
Interference Check Sample

SDG No: 10–990

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.044	ug/L					07–JAN–10 11:36	100107–4
	Nickel	3.31	ug/L					07–JAN–10 11:36	100107–4
ICSAB01									
	Beryllium	19.9	ug/L	20	ug/L	99.3	80.0 – 120.0	07–JAN–10 11:39	100107–4
	Nickel	21.8	ug/L	22.7	ug/L	96.1	80.0 – 120.0	07–JAN–10 11:39	100107–4

METALS
-5a-

Matrix Spike Summary

SDG NO. 10-990 **Client ID** RE12-10-7352S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90.2

Sample ID: 243270001 **Spike ID:** 1202001491

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	10.3		2.07		8.03	102		MS
Beryllium	mg/kg	75-125	5.84		1.09		5.02	94.5		MS
Nickel	mg/kg	75-125	12.3		8.15		5.02	83.6		MS
Selenium	mg/kg	75-125	1.62		0.554	U	2.01	80.6		MS
Thallium	mg/kg	75-125	9.66		0.225		10	93.9		MS
Uranium	mg/kg	75-125	5.87		0.596		5.02	105		MS

METALS
-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-990 **Client ID** RE12-10-7352SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90.2

Sample ID: 243270001 **Spike ID:** 1202001493

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	10.6		2.07		8.34	102		MS
Beryllium	mg/kg	75-125	5.95		1.09		5.21	93.4		MS
Nickel	mg/kg	75-125	13.3		8.15		5.21	98.2		MS
Selenium	mg/kg	75-125	1.74		0.554	U	2.08	83.4		MS
Thallium	mg/kg	75-125	9.85		0.225		10.4	92.4		MS
Uranium	mg/kg	75-125	5.98		0.596		5.21	103		MS

METALS
-5a-

Matrix Spike Summary

SDG NO. 10-990 **Client ID** RE12-10-7352S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90.2

Sample ID: 243270001 **Spike ID:** 1202001497

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		17900000		12500000		492000	1110	N/A	P
Antimony	ug/Kg	75-125	34800		361	U	49200	70.2	N	P
Barium	ug/Kg	75-125	186000		166000		49200	41.3	N	P
Cadmium	ug/Kg	75-125	46500		110	U	49200	94.5		P
Calcium	ug/Kg		2530000		2200000		492000	66.6	N/A	P
Chromium	ug/Kg	75-125	63400		11800		49200	105		P
Cobalt	ug/Kg	75-125	51600		4920		49200	94.9		P
Copper	ug/Kg	75-125	58700		7690		49200	104		P
Iron	ug/Kg		15900000		15100000		492000	168	N/A	P
Lead	ug/Kg	75-125	57300		11100		49200	94		P
Magnesium	ug/Kg		3320000		2610000		492000	144	N/A	P
Manganese	ug/Kg		269000		222000		49200	95.6	N/A	P
Potassium	ug/Kg		3130000		2490000		492000	131	N/A	P
Silver	ug/Kg	75-125	49000		557		49200	98.4		P
Sodium	ug/Kg	75-125	767000		283000		492000	98.3		P
Vanadium	ug/Kg	75-125	73200		25000		49200	98		P
Zinc	ug/Kg	75-125	77600		28800		49200	99		P

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–990 **Client ID** RE12–10–7352SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90.2

Sample ID: 243270001 **Spike ID:** 1202001499

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Calcium	ug/Kg		2440000		2200000		534000	44.7	N/A	P
Chromium	ug/Kg	75–125	66200		11800		53400	102		P
Cobalt	ug/Kg	75–125	60000		4920		53400	103		P
Copper	ug/Kg	75–125	64000		7690		53400	105		P
Iron	ug/Kg		17100000		15100000		534000	374	N/A	P
Lead	ug/Kg	75–125	64700		11100		53400	100		P
Magnesium	ug/Kg		3480000		2610000		534000	162	N/A	P
Manganese	ug/Kg		848000		222000		53400	1170	N/A	P
Potassium	ug/Kg		3250000		2490000		534000	142	N/A	P
Silver	ug/Kg	75–125	53700		557		53400	99.5		P
Sodium	ug/Kg	75–125	847000		283000		534000	105		P
Vanadium	ug/Kg	75–125	80200		25000		53400	104		P
Zinc	ug/Kg	75–125	87000		28800		53400	109		P
Aluminum	ug/Kg		17100000		12500000		534000	868	N/A	P
Antimony	ug/Kg	75–125	39700		361	U	53400	73.9	N	P
Barium	ug/Kg	75–125	216000		166000		53400	94.2		P
Cadmium	ug/Kg	75–125	50500		110	U	53400	94.6		P

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–990 **Client ID** RE12–10–7352S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90.2

Sample ID: 243270001 **Spike ID:** 1202002066

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	146		19.7		113	113		AV

METALS
-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-990 **Client ID** RE12-10-7352SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90.2

Sample ID: 243270001 **Spike ID:** 1202002068

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	153		19.7		129	104		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–990

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE12–10–7352D

Sample ID: 243270001 **Duplicate ID:** 1202001490 **Percent Solids for Dup:** 90.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–1.08	2.07		2.3		10.8		MS
Beryllium	mg/kg	+/–20%	1.09		1.06		2.77		MS
Nickel	mg/kg	+/–20%	8.15		8.01		1.66		MS
Selenium	mg/kg		0.554	U	0.538	U			MS
Thallium	mg/kg	+/–.215	0.225		0.201	J	11.5		MS
Uranium	mg/kg	+/–20%	0.596		0.642		7.39		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–990

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE12–10–7352SD

Sample ID: 1202001491 **Duplicate ID:** 1202001493 **Percent Solids for Dup:** 90.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–20	10.3		10.6		2.79		MS
Beryllium	mg/kg	+/–20	5.84		5.95		2.01		MS
Nickel	mg/kg	+/–20	12.3		13.3		7.18		MS
Selenium	mg/kg	+/–20	1.62		1.74		7.11		MS
Thallium	mg/kg	+/–20	9.66		9.85		1.96		MS
Uranium	mg/kg	+/–20	5.87		5.98		1.94		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–990

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE12–10–7352D

Sample ID: 243270001 **Duplicate ID:** 1202001496 **Percent Solids for Dup:** 90.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20%	12500000		12200000		2.52		P
Antimony	ug/Kg		361	U	332	U			P
Barium	ug/Kg	+/–20%	166000		148000		11.1		P
Cadmium	ug/Kg		110	U	101	U			P
Calcium	ug/Kg	+/–20%	2200000		2340000		6.24		P
Chromium	ug/Kg	+/–20%	11800		11400		3.46		P
Cobalt	ug/Kg	+/–20%	4920		4240		14.8		P
Copper	ug/Kg	+/–20%	7690		7340		4.74		P
Iron	ug/Kg	+/–20%	15100000		14200000		6.05		P
Lead	ug/Kg	+/–20%	11100		10400		6.62		P
Magnesium	ug/Kg	+/–20%	2610000		2460000		5.91		P
Manganese	ug/Kg	+/–20%	222000		231000		4.04		P
Potassium	ug/Kg	+/–20%	2490000		2330000		6.71		P
Silver	ug/Kg	+/–503	557		582		4.48		P
Sodium	ug/Kg	+/–20%	283000		288000		1.48		P
Vanadium	ug/Kg	+/–20%	25000		22900		8.9		P
Zinc	ug/Kg	+/–20%	28800		27100		6.02		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–990

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE12–10–7352SD

Sample ID: 1202001497 **Duplicate ID:** 1202001499 **Percent Solids for Dup:** 90.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20	17900000		17100000		4.62		P
Antimony	ug/Kg	+/–20	34800		39700		13.3		P
Barium	ug/Kg	+/–20	186000		216000		14.9		P
Cadmium	ug/Kg	+/–20	46500		50500		8.27		P
Calcium	ug/Kg	+/–20	2530000		2440000		3.58		P
Chromium	ug/Kg	+/–20	63400		66200		4.33		P
Cobalt	ug/Kg	+/–20	51600		60000		15.1		P
Copper	ug/Kg	+/–20	58700		64000		8.57		P
Iron	ug/Kg	+/–20	15900000		17100000		7.07		P
Lead	ug/Kg	+/–20	57300		64700		12.1		P
Magnesium	ug/Kg	+/–20	3320000		3480000		4.69		P
Manganese	ug/Kg	+/–20	269000		848000		104	*	P
Potassium	ug/Kg	+/–20	3130000		3250000		3.55		P
Silver	ug/Kg	+/–20	49000		53700		9.21		P
Sodium	ug/Kg	+/–20	767000		847000		9.82		P
Vanadium	ug/Kg	+/–20	73200		80200		9.15		P
Zinc	ug/Kg	+/–20	77600		87000		11.5		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–990

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE12–10–7352D

Sample ID: 243270001 **Duplicate ID:** 1202002065 **Percent Solids for Dup:** 90.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–13	19.7		18.4		6.57		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–990

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE12–10–7352SD

Sample ID: 1202002066 **Duplicate ID:** 1202002068 **Percent Solids for Dup:** 90.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–20	146		153		4.53		AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-990

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202001489								
	Arsenic	mg/kg	104	109		104	83-120	MS
	Beryllium	mg/kg	77.6	83.7		108	81.2-126.8	MS
	Nickel	mg/kg	134	146		109	83.3-121.4	MS
	Selenium	mg/kg	286	301		105	80.2-125.9	MS
	Thallium	mg/kg	121	127		105	78-123.2	MS
	Uranium	mg/kg	2.13	2		93.9	61.9-130.7	MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-990

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202001495								
	Aluminum	ug/Kg	10500000	8660000		82.4	56-144	P
	Antimony	ug/Kg	173000	138000		79.8	71-130	P
	Barium	ug/Kg	198000	195000		98.3	80-120	P
	Cadmium	ug/Kg	60700	54900		90.5	81-120	P
	Calcium	ug/Kg	9870000	9570000		97	83-117	P
	Chromium	ug/Kg	236000	228000		96.5	80-120	P
	Cobalt	ug/Kg	91200	87500		96	81-120	P
	Copper	ug/Kg	174000	187000		108	81-118	P
	Iron	ug/Kg	18000000	18700000		104	51-149	P
	Lead	ug/Kg	86000	76100		88.5	79-121	P
	Magnesium	ug/Kg	4000000	3690000		92.2	79-122	P
	Manganese	ug/Kg	558000	512000		91.7	81-119	P
	Potassium	ug/Kg	4300000	4150000		96.6	74-127	P
	Silver	ug/Kg	30100	29700		98.7	66-134	P
	Sodium	ug/Kg	1020000	1010000		98.6	74-127	P
	Vanadium	ug/Kg	115000	116000		101	79-121	P
	Zinc	ug/Kg	594000	558000		93.9	80-121	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-990

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202002064								
	Mercury	ug/kg	5150	4980		96.6	71.6-128.3	AV

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-990 **Client ID** RE12-10-7352L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 243270001 **Serial Dilution ID:** 1202001492

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	9.33		9.95	J	6.65			MS
Beryllium	4.91		6.45		31.4			MS
Nickel	36.7		44.4		20.8			MS
Selenium	2.5	U	12.5	U				MS
Thallium	1.02		1.5	U	100			MS
Uranium	2.69		2.85		5.95			MS

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-990 **Client ID** RE12-10-7352L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 243270001 **Serial Dilution ID:** 1202001498

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	114000		116000		1.32		10	P
Antimony	3.3	U	16.5	U				P
Barium	1510		1630		7.95		10	P
Cadmium	1	U	5	U				P
Calcium	20100		20700		2.74		10	P
Chromium	108		115		6.02		10	P
Cobalt	44.9		47.6		5.9			P
Copper	70.2		77		9.69			P
Iron	138000		144000		4.35		10	P
Lead	101		113		11.4			P
Magnesium	23800		24700		3.78		10	P
Manganese	2030		2210		8.87		10	P
Potassium	22700		23200		1.98		10	P
Silver	5.08		5	U	100			P
Sodium	2590		2750		5.98			P
Vanadium	228		241		5.7		10	P
Zinc	263		281		6.65		10	P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-990 **Client ID** RE12-10-7352L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 243270001 **Serial Dilution ID:** 1202002067

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.311		.34	U	100			AV

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-990 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 935380							
1202001494	MB for batch 935380	MB	S	21-DEC-09	.521g	50mL	
1202001495	LCS for batch 935380	LCS	S	21-DEC-09	.525g	50mL	
1202001497	RE12-10-7352S	MS	S	21-DEC-09	.563g	50mL	
1202001499	RE12-10-7352SD	MSD	S	21-DEC-09	.519g	50mL	
1202001496	RE12-10-7352D	DUP	S	21-DEC-09	.551g	50mL	
243270001	RE12-10-7352	SAMPLE	S	21-DEC-09	.506g	50mL	
243270002	RE12-10-7360	SAMPLE	S	21-DEC-09	.507g	50mL	
243270003	RE12-10-7358	SAMPLE	S	21-DEC-09	.5g	50mL	
243270004	RE12-10-7357	SAMPLE	S	21-DEC-09	.531g	50mL	
243270005	RE12-10-7359	SAMPLE	S	21-DEC-09	.559g	50mL	
243270006	RE12-10-7356	SAMPLE	S	21-DEC-09	.566g	50mL	
243270007	RE12-10-7353	SAMPLE	S	21-DEC-09	.502g	50mL	
243270008	RE12-10-7354	SAMPLE	S	21-DEC-09	.502g	50mL	
243270009	RE12-10-7355	SAMPLE	S	21-DEC-09	.516g	50mL	
243270010	RE12-10-7364	SAMPLE	S	21-DEC-09	.521g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-990 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 935377							
1202001488	MB for batch 935377	MB	S	21-DEC-09	.512g	50mL	
1202001489	LCS for batch 935377	LCS	S	21-DEC-09	.519g	50mL	
1202001491	RE12-10-7352S	MS	S	21-DEC-09	.552g	50mL	
1202001493	RE12-10-7352SD	MSD	S	21-DEC-09	.532g	50mL	
1202001490	RE12-10-7352D	DUP	S	21-DEC-09	.515g	50mL	
243270001	RE12-10-7352	SAMPLE	S	21-DEC-09	.5g	50mL	
243270002	RE12-10-7360	SAMPLE	S	21-DEC-09	.501g	50mL	
243270003	RE12-10-7358	SAMPLE	S	21-DEC-09	.5g	50mL	
243270004	RE12-10-7357	SAMPLE	S	21-DEC-09	.588g	50mL	
243270005	RE12-10-7359	SAMPLE	S	21-DEC-09	.513g	50mL	
243270006	RE12-10-7356	SAMPLE	S	21-DEC-09	.5g	50mL	
243270007	RE12-10-7353	SAMPLE	S	21-DEC-09	.541g	50mL	
243270008	RE12-10-7354	SAMPLE	S	21-DEC-09	.501g	50mL	
243270009	RE12-10-7355	SAMPLE	S	21-DEC-09	.503g	50mL	
243270010	RE12-10-7364	SAMPLE	S	21-DEC-09	.541g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-990 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 935669							
1202002063	MB for batch 935669	MB	S	07-JAN-10	.5g	30mL	
1202002064	LCS for batch 935669	LCS	S	07-JAN-10	.206g	30mL	
1202002066	RE12-10-7352S	MS	S	07-JAN-10	.591g	30mL	
1202002068	RE12-10-7352SD	MSD	S	07-JAN-10	.517g	30mL	
1202002065	RE12-10-7352D	DUP	S	07-JAN-10	.513g	30mL	
243270001	RE12-10-7352	SAMPLE	S	07-JAN-10	.525g	30mL	
243270002	RE12-10-7360	SAMPLE	S	07-JAN-10	.578g	30mL	
243270003	RE12-10-7358	SAMPLE	S	07-JAN-10	.569g	30mL	
243270004	RE12-10-7357	SAMPLE	S	07-JAN-10	.503g	30mL	
243270005	RE12-10-7359	SAMPLE	S	07-JAN-10	.565g	30mL	
243270006	RE12-10-7356	SAMPLE	S	07-JAN-10	.571g	30mL	
243270007	RE12-10-7353	SAMPLE	S	07-JAN-10	.508g	30mL	
243270008	RE12-10-7354	SAMPLE	S	07-JAN-10	.594g	30mL	
243270009	RE12-10-7355	SAMPLE	S	07-JAN-10	.536g	30mL	
243270010	RE12-10-7364	SAMPLE	S	07-JAN-10	.551g	30mL	

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 05–JAN–10 **End Date:** 05–JAN–10

Client Sdg: 10–990
Method P
Data File: 010510–1

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	08:08	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S0.1	1	08:15		X		X		X		X	X	X		X		X			X		X				X	X
S0.5	1	08:21	X	X		X		X	X	X	X	X		X	X	X			X		X				X	X
SCAL	1	08:28	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S10	1	08:35	X						X				X		X							X				
ICV01	1	08:41	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICB01	1	08:47	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
PQL01	1	08:54	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSA01	1	09:01	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSAB01	1	09:08	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR01	1	09:13	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR02	1	09:19	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	09:26																								
ZZZZZZ	1	09:33																								
CCV01	1	09:44	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB01	1	09:51	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR03	1	09:58	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV02	1	10:05	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB02	1	10:12	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	10:23																								
ZZZZZZ	1	10:30																								
ZZZZZZ	1	10:36																								
ZZZZZZ	1	10:43																								
ZZZZZZ	1	10:50																								
ZZZZZZ	1	10:58																								
ZZZZZZ	5	11:05																								
CCV03	1	11:12	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB03	1	11:19	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	11:26																								
ZZZZZZ	1	11:33																								
ZZZZZZ	1	11:40																								
ZZZZZZ	1	11:47																								
ZZZZZZ	1	11:53																								
ZZZZZZ	1	12:00																								
ZZZZZZ	1	12:08																								
ZZZZZZ	1	12:14																								
CCV04	1	12:21	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB04	1	12:28	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	12:36																								
ZZZZZZ	1	12:43																								

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																						
ZZZZZZ	1	12:49																						
ZZZZZZ	1	12:56																						
ZZZZZZ	1	13:03																						
ZZZZZZ	1	13:10																						
ZZZZZZ	1	13:18																						
CCV05	1	13:25	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB05	1	13:31	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	13:38																						
ZZZZZZ	1	13:45																						
ZZZZZZ	1	13:52																						
ZZZZZZ	1	13:59																						
ZZZZZZ	5	14:06																						
ZZZZZZ	1	14:13																						
ZZZZZZ	1	14:20																						
CCV06	1	14:27	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB06	1	14:34	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV07	1	14:58	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB07	1	15:05	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	5	15:12																						
ZZZZZZ	5	15:18																						
ZZZZZZ	5	15:25																						
ZZZZZZ	25	15:32																						
ZZZZZZ	5	15:39																						
ZZZZZZ	5	15:46																						
ZZZZZZ	5	15:52																						
ZZZZZZ	5	15:59																						
ZZZZZZ	5	16:06																						
ZZZZZZ	5	16:13																						
CCV08	1	16:20	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB08	1	16:27	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202001494	1	16:33	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202001495	1	16:40	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
243270001	1	16:46	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202001496	1	16:53	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202001497	1	17:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202001499	1	17:07	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202001498	5	17:14	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
243270002	1	17:21	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV09	1	17:27	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB09	1	17:34	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
243270003	1	17:41	X	X		X		X	X	X	X	X		X	X	X					X	X			X	X
243270004	1	17:48	X	X		X		X	X	X	X	X		X	X	X					X	X			X	X
243270005	1	17:55	X	X		X		X	X	X	X	X		X	X	X					X	X			X	X
243270006	1	18:02	X	X		X		X	X	X	X	X		X	X	X					X	X			X	X
243270007	1	18:09	X	X		X		X	X	X	X	X		X	X	X					X	X			X	X
243270008	1	18:16	X	X		X		X	X	X	X	X		X	X	X					X	X			X	X
243270009	1	18:23	X	X		X		X	X	X	X	X		X	X	X					X	X			X	X
243270010	1	18:30	X	X		X		X	X	X	X	X		X	X	X					X	X			X	X
ZZZZZZ	1	18:38																								
CCV10	1	18:45	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB10	1	18:51	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 06–JAN–10 **End Date:** 06–JAN–10

Client Sdg: 10–990
Method P
Data File: 010610A–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	10:05											X						X							
S0.1	1	10:12																	X							
S0.5	1	10:18																	X							
SCAL	1	10:25											X						X							
S10	1	10:32											X													
ICV01	1	10:37											X						X							
ICB01	1	10:44											X						X							
PQL01	1	10:51											X						X							
ICSA01	1	10:58											X						X							
ICSAB01	1	11:04											X						X							
LR01	1	11:09											X						X							
LR02	1	11:15											X						X							
ZZZZZZ	1	11:22																								
ZZZZZZ	1	11:29																								
CCV01	1	11:40											X						X							
CCB01	1	11:47											X						X							
243270003	1	11:56											X						X							
243270004	1	12:03											X						X							
243270005	1	12:11											X						X							
243270006	1	12:18											X						X							
243270007	1	12:25											X						X							
243270008	1	12:32											X						X							
243270009	1	12:39											X						X							
243270010	1	12:46											X						X							
ZZZZZZ	1	12:53																								
CCV02	1	13:00											X						X							
CCB02	1	13:06											X						X							

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: MER536
Start Date: 08–JAN–10 **End Date:** 08–JAN–10

Client Sdg: 10–990
Method AV
Data File: 010810S1–5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	09:51															X									
S0.2	1	09:52															X									
S0.5	1	09:54															X									
S2.0	1	09:56															X									
S5.0	1	09:58															X									
S10	1	10:00															X									
ICV01	1	10:02															X									
ICB01	1	10:04															X									
CRDL01	1	10:06															X									
CCV01	1	10:08															X									
CCB01	1	10:10															X									
1202002063	1	10:12															X									
1202002064	10	10:14															X									
243270001	1	10:16															X									
1202002065	1	10:18															X									
1202002066	1	10:21															X									
1202002068	1	10:23															X									
1202002067	5	10:24															X									
243270002	1	10:26															X									
243270003	1	10:28															X									
243270004	1	10:30															X									
CCV02	1	10:32															X									
CCB02	1	10:34															X									
243270005	1	10:36															X									
243270006	1	10:38															X									
243270007	1	10:40															X									
243270008	1	10:42															X									
243270009	1	10:44															X									
243270010	1	10:46															X									
ZZZZZZ	1	10:48																								
ZZZZZZ	1	10:50																								
ZZZZZZ	10	10:52																								
ZZZZZZ	1	10:54																								
CCV03	1	10:56															X									
CCB03	1	10:58															X									

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS4
Start Date: 06-JAN-10 **End Date:** 06-JAN-10

Client Sdg: 10-990
Method MS
Data File: 100106-3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	16:43			X		X											X		X			X	X		
S10	1	16:49			X		X											X		X			X	X		
S100	1	16:55			X		X											X		X			X	X		
ICV01	1	17:01			X		X											X		X			X	X		
ICB01	1	17:08			X		X											X		X			X	X		
CRDL01	1	17:14			X		X											X		X			X	X		
ICSA01	1	17:20			X		X											X		X			X	X		
ICSAB01	1	17:26			X		X											X		X			X	X		
CCV01	1	17:32			X		X											X		X			X	X		
CCB01	1	17:39			X		X											X		X			X	X		
LR01	1	17:45			X		X											X		X			X	X		
CCV02	1	17:51			X		X											X		X			X	X		
CCB02	1	17:57			X		X											X		X			X	X		
1202001488	2	18:03			X															X			X	X		
1202001489	40	18:09			X															X			X	X		
243270001	2	18:16			X															X			X	X		
1202001490	2	18:22			X															X			X	X		
1202001491	2	18:28			X															X			X	X		
1202001493	2	18:34			X															X			X	X		
CCV03	1	18:41			X		X											X		X			X	X		
CCB03	1	18:47			X		X											X		X			X	X		
1202001492	10	18:53			X															X			X	X		
243270002	2	18:59			X		X											X		X			X	X		
243270003	2	19:05			X		X											X		X			X	X		
243270004	2	19:12			X		X											X		X			X	X		
243270005	2	19:18			X		X											X		X			X	X		
243270006	2	19:24			X															X			X	X		
CCV04	1	19:30			X		X											X		X			X	X		
CCB04	1	19:36			X		X											X		X			X	X		
243270007	2	19:43			X		X											X		X			X	X		
243270008	2	19:49			X		X											X		X			X	X		
243270009	2	19:55			X		X											X		X			X	X		
243270010	2	20:01			X		X											X		X			X	X		
ZZZZZZ	2	20:08																								
CCV05	1	20:14			X		X											X		X			X	X		
CCB05	1	20:20			X		X											X		X			X	X		

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS4
Start Date: 07–JAN–10
End Date: 07–JAN–10
Client Sdg: 10–990
Method MS
Data File: 100107–4

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	11:14					X											X								
S10	1	11:18					X											X								
S100	1	11:21					X											X								
ICV01	1	11:25					X											X								
ICB01	1	11:28					X											X								
CRDL01	1	11:32					X											X								
ICSA01	1	11:36					X											X								
ICSAB01	1	11:39					X											X								
CCV01	1	11:43					X											X								
CCB01	1	11:47					X											X								
1202001488	2	11:50					X											X								
1202001489	40	11:54					X											X								
243270001	2	11:58					X											X								
1202001490	2	12:01					X											X								
1202001491	2	12:05					X											X								
1202001493	2	12:09					X											X								
1202001492	10	12:12					X											X								
243270006	2	12:16					X											X								
CCV02	1	12:20					X											X								
CCB02	1	12:24					X											X								

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-990

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
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. 10–990

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 15–JUN–09

	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
MERCURY				
SOLID	Mercury		0.068	.2

METALS
–10–
Instrument Detection Limits

SDG NO. 10–990

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
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:** 10–990
Contract: LANL01004
Instrument: OPTIMA3 **Effective Dates:** 01–NOV–09
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	0.02738	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	–0.44940	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	–0.22121	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	–0.33886	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	–0.13648	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	–0.05571	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.19671	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	–0.02739	0.00000	0.00000	0.00000	0.00000
Tin	189.927	–0.00058	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: 10-990
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
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	24.5549	0.00000	0.00000
Arsenic	188.979	0.52529	0.00000	-0.67113	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.54031	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	0.38952	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	-31.5465	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.78023
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	0.63859	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	160.41
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.22870	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.35099	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.93161	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.39273	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.19810

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-990
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	42.8126
Antimony	206.836	-0.01635	0.00000	0.00000	0.00000	-22.2146
Arsenic	188.979	-0.21271	0.00000	0.00000	0.00000	1.34645
Barium	233.527	-0.03709	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.13266	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.09998	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01788	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01425	0.00000	0.00000	0.00000	-2.64232
Copper	324.752	-0.05101	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09069	0.00000	0.00000	0.00000	-2.44485
Magnesium	279.077	0.85543	0.00000	0.00000	0.00000	-20.2401
Manganese	257.61	-0.09972	0.00000	0.01862	0.00000	0.00000
Molybdenum	202.031	-0.07094	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80633	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.03176	0.00000	0.01823	12.4291	-3.60863
Selenium	196.026	-3.00009	0.00000	0.00000	0.00000	-3.17982
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.4444
Silver	328.068	-0.31825	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-5.85948	0.00000
Tin	189.927	-0.01337	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.12581	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.15211	0.00000	-0.02256	0.00000	-14.2921
Zinc	213.857	0.09548	0.00000	0.03423	0.00000	0.00000

METALS
–11–
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10–990
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01–NOV–09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
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	-0.64279	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.44040	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.33191	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.38465	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-990
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-17.4077
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	-13.8713
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	3.10491
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-990
Contract: LANL01004
Instrument: OPTIMA3 **Effective Dates:** 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	2.73145	0.00000	-2.31857	0.00000
Arsenic	188.979	-8.38419	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.24883	0.00000
Beryllium	313.107	-1.96555	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.32181	-1.76281	0.00000
Cobalt	228.616	2.12623	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.85359	-3.92851	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-7.67419	0.00000	2.18873	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.44145	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.10141	-1.94183	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
–12–
Linear Ranges

SDG NO. 10–990

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09
Uranium	20	15000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09

METALS
–12–
Linear Ranges

SDG NO. 10–990

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS4

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Uranium	1000	5000	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09

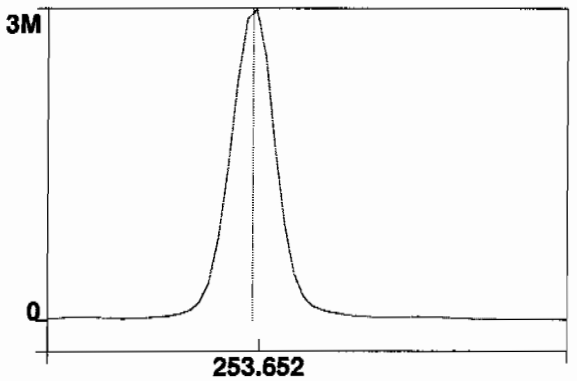
Raw Data

Method: Hg_ReAlign
Result: 011210

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1



Intensity: 3410494.7 cps
Conc:

1

1/5/2010 08:07:38 Hg ReAlign... Actual peak offset (nm): -0.009
Drift (nm): 0.000 Slit adjustment: -2

Analysis Begun

Start Time: 1/5/2010 08:08:22 **Plasma On Time: 1/4/2010 06:33:21**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\010510.sif
Batch ID:
Results Data Set: 010510
Results Library: C:\pe\Optima3\Results\Results.mdb

Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 1/4/2010 09:42:53**
IEC File: 101209.iec **MSF File:**
Method Description:

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

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 1/5/2010 08:08:23**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

	Net	Corrected	Calib.	Analysis

Repl#	Analyte	Intensity	Intensity	Conc.	Units	Time
1	Sc Radial	5065.4	5065.4	99.6	%	08:10:16
1	Y RADIAL	5321.7	5321.7	99.26	%	08:10:16
1	Al 396.153Radial†	-8.3	-8.3	[0.00]	ug/L	08:10:16
1	Ca 317.933Radial†	17.2	17.3	[0.00]	ug/L	08:10:36
1	Fe 238.204 Radial†	16.7	16.8	[0.00]	ug/L	08:10:36
1	K 766.490 Radial†	3266.8	3279.5	[0.00]	ug/L	08:10:16
1	Mg 279.077 IEC†	2.7	2.7	[0.00]	ug/L	08:10:36
1	Na 589.592 Radial†	-1702.0	-1708.6	[0.00]	ug/L	08:10:16
1	Sr 421.552†	-7.0	-7.0	[0.00]	ug/L	08:10:16
1	Sc 361.383	912226.0	912226.0	99.699	%	08:11:32
1	Y 371.029	779992.5	779992.5	99.794	%	08:11:32
1	Ag 328.068†	495.9	497.4	[0.00]	ug/L	08:11:37
1	As 188.979†	-34.1	-34.2	[0.00]	ug/L	08:11:58
1	B 249.677†	-715.4	-717.5	[0.00]	ug/L	08:11:37
1	Ba 233.527†	10.9	10.9	[0.00]	ug/L	08:11:58
1	Be 313.107†	-4442.3	-4455.7	[0.00]	ug/L	08:11:37
1	Cd 226.502†	-249.3	-250.1	[0.00]	ug/L	08:11:58
1	Co 228.616†	-88.0	-88.3	[0.00]	ug/L	08:11:58
1	Cr 267.716†	96.9	97.2	[0.00]	ug/L	08:11:37
1	Cu 324.752†	8158.4	8183.0	[0.00]	ug/L	08:11:37
1	Mn 257.610†	728.4	730.6	[0.00]	ug/L	08:11:37
1	Mo 202.031†	25.8	25.9	[0.00]	ug/L	08:11:58
1	Ni 231.604†	121.7	122.1	[0.00]	ug/L	08:11:58
1	P 214.914†	245.6	246.4	[0.00]	ug/L	08:11:58
1	Pb 220.353†	-94.0	-94.3	[0.00]	ug/L	08:11:58
1	S 181.975 Axial†	64.4	64.6	[0.00]	ug/L	08:11:58
1	Sb 206.836†	46.6	46.8	[0.00]	ug/L	08:11:58
1	Se 196.026†	-32.5	-32.6	[0.00]	ug/L	08:11:58
1	Si 251.611†	669.8	671.9	[0.00]	ug/L	08:11:58
1	Sn 189.927†	-4.0	-4.0	[0.00]	ug/L	08:11:58
1	Ti 334.940†	-1783.6	-1789.0	[0.00]	ug/L	08:11:37
1	Tl 190.801†	-48.0	-48.2	[0.00]	ug/L	08:11:58
1	U 409.014†	-2596.2	-2604.1	[0.00]	ug/L	08:11:32
1	V 292.402†	-1831.2	-1836.7	[0.00]	ug/L	08:11:37
1	Zn 213.857†	864.5	867.1	[0.00]	ug/L	08:11:58
1	SiO2†	717.1	719.3	[0.00]	ug/L	08:13:04
2	Sc Radial	5130.8	5130.8	101	%	08:10:41
2	Y RADIAL	5395.1	5395.1	100.6	%	08:10:41
2	Al 396.153Radial†	-50.9	-50.5	[0.00]	ug/L	08:10:41
2	Ca 317.933Radial†	20.1	19.9	[0.00]	ug/L	08:11:01
2	Fe 238.204 Radial†	14.2	14.1	[0.00]	ug/L	08:11:01
2	K 766.490 Radial†	3426.8	3396.3	[0.00]	ug/L	08:10:41
2	Mg 279.077 IEC†	7.6	7.6	[0.00]	ug/L	08:11:01
2	Na 589.592 Radial†	-1778.7	-1762.9	[0.00]	ug/L	08:10:41
2	Sr 421.552†	12.4	12.3	[0.00]	ug/L	08:10:41
2	Sc 361.383	917086.8	917086.8	100.23	%	08:12:03
2	Y 371.029	782613.1	782613.1	100.13	%	08:12:03
2	Ag 328.068†	549.3	548.0	[0.00]	ug/L	08:12:08
2	As 188.979†	-29.7	-29.7	[0.00]	ug/L	08:12:28
2	B 249.677†	-684.6	-683.0	[0.00]	ug/L	08:12:08
2	Ba 233.527†	10.0	9.9	[0.00]	ug/L	08:12:28
2	Be 313.107†	-4326.1	-4316.2	[0.00]	ug/L	08:12:08
2	Cd 226.502†	-255.6	-255.0	[0.00]	ug/L	08:12:28
2	Co 228.616†	-83.4	-83.2	[0.00]	ug/L	08:12:28
2	Cr 267.716†	114.3	114.1	[0.00]	ug/L	08:12:08
2	Cu 324.752†	8095.0	8076.4	[0.00]	ug/L	08:12:08
2	Mn 257.610†	653.7	652.2	[0.00]	ug/L	08:12:08
2	Mo 202.031†	13.4	13.3	[0.00]	ug/L	08:12:28
2	Ni 231.604†	121.5	121.2	[0.00]	ug/L	08:12:28
2	P 214.914†	267.5	266.8	[0.00]	ug/L	08:12:28
2	Pb 220.353†	-108.8	-108.6	[0.00]	ug/L	08:12:28
2	S 181.975 Axial†	61.1	61.0	[0.00]	ug/L	08:12:28
2	Sb 206.836†	32.8	32.7	[0.00]	ug/L	08:12:28
2	Se 196.026†	-39.8	-39.7	[0.00]	ug/L	08:12:28
2	Si 251.611†	665.2	663.7	[0.00]	ug/L	08:12:28
2	Sn 189.927†	-2.4	-2.4	[0.00]	ug/L	08:12:28
2	Ti 334.940†	-1778.9	-1774.8	[0.00]	ug/L	08:12:08
2	Tl 190.801†	-49.1	-49.0	[0.00]	ug/L	08:12:28
2	U 409.014†	-2605.3	-2599.3	[0.00]	ug/L	08:12:03
2	V 292.402†	-1774.6	-1770.5	[0.00]	ug/L	08:12:08

2	Zn 213.857†	857.6	855.6	[0.00] ug/L	08:12:28
2	SiO2†	662.8	661.3	[0.00] ug/L	08:13:09
3	Sc Radial	5059.2	5059.2	99.5 %	08:11:06
3	Y RADIAL	5366.8	5366.8	100.1 %	08:11:06
3	Al 396.153Radial†	0.2	0.2	[0.00] ug/L	08:11:06
3	Ca 317.933Radial†	17.5	17.6	[0.00] ug/L	08:11:26
3	Fe 238.204 Radial†	13.1	13.1	[0.00] ug/L	08:11:26
3	K 766.490 Radial†	3301.2	3318.1	[0.00] ug/L	08:11:06
3	Mg 279.077 IEC†	1.4	1.4	[0.00] ug/L	08:11:26
3	Na 589.592 Radial†	-1733.0	-1741.9	[0.00] ug/L	08:11:06
3	Sr 421.552†	17.0	17.1	[0.00] ug/L	08:11:06
3	Sc 361.383	915623.0	915623.0	100.07 %	08:12:33
3	Y 371.029	782209.1	782209.1	100.08 %	08:12:33
3	Ag 328.068†	493.3	492.9	[0.00] ug/L	08:12:38
3	As 188.979†	-29.8	-29.8	[0.00] ug/L	08:12:58
3	B 249.677†	-740.1	-739.5	[0.00] ug/L	08:12:38
3	Ba 233.527†	4.8	4.8	[0.00] ug/L	08:12:58
3	Be 313.107†	-4357.4	-4354.3	[0.00] ug/L	08:12:38
3	Cd 226.502†	-246.8	-246.6	[0.00] ug/L	08:12:58
3	Co 228.616†	-95.6	-95.5	[0.00] ug/L	08:12:58
3	Cr 267.716†	137.4	137.3	[0.00] ug/L	08:12:38
3	Cu 324.752†	8040.9	8035.3	[0.00] ug/L	08:12:38
3	Mn 257.610†	621.8	621.3	[0.00] ug/L	08:12:38
3	Mo 202.031†	30.6	30.6	[0.00] ug/L	08:12:58
3	Ni 231.604†	108.9	108.8	[0.00] ug/L	08:12:58
3	P 214.914†	244.7	244.5	[0.00] ug/L	08:12:58
3	Pb 220.353†	-99.4	-99.4	[0.00] ug/L	08:12:58
3	S 181.975 Axial†	61.5	61.5	[0.00] ug/L	08:12:58
3	Sb 206.836†	42.7	42.7	[0.00] ug/L	08:12:58
3	Se 196.026†	-33.5	-33.5	[0.00] ug/L	08:12:58
3	Si 251.611†	650.0	649.6	[0.00] ug/L	08:12:58
3	Sn 189.927†	18.8	18.8	[0.00] ug/L	08:12:58
3	Ti 334.940†	-1816.5	-1815.3	[0.00] ug/L	08:12:38
3	Tl 190.801†	-40.7	-40.7	[0.00] ug/L	08:12:58
3	U 409.014†	-2677.2	-2675.3	[0.00] ug/L	08:12:33
3	V 292.402†	-1794.7	-1793.5	[0.00] ug/L	08:12:38
3	Zn 213.857†	852.5	851.9	[0.00] ug/L	08:12:58
3	SiO2†	671.8	671.3	[0.00] ug/L	08:13:14

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	914978.6	2493.61	0.27%	100.00	%
Sc Radial	5085.1	39.65	0.78%	100.0	%
Y 371.029	781604.9	1410.92	0.18%	100.00	%
Y RADIAL	5361.2	36.99	0.69%	100.0	%
Ag 328.068†	512.8	30.59	5.97%	[0.00]	ug/L
Al 396.153Radial†	-19.5	27.13	138.85%	[0.00]	ug/L
As 188.979†	-31.2	2.60	8.31%	[0.00]	ug/L
B 249.677†	-713.4	28.48	3.99%	[0.00]	ug/L
Ba 233.527†	8.6	3.29	38.50%	[0.00]	ug/L
Be 313.107†	-4375.4	72.09	1.65%	[0.00]	ug/L
Ca 317.933Radial†	18.3	1.42	7.76%	[0.00]	ug/L
Cd 226.502†	-250.6	4.23	1.69%	[0.00]	ug/L
Co 228.616†	-89.0	6.20	6.97%	[0.00]	ug/L
Cr 267.716†	116.2	20.11	17.31%	[0.00]	ug/L
Cu 324.752†	8098.3	76.26	0.94%	[0.00]	ug/L
Fe 238.204 Radial†	14.7	1.91	13.00%	[0.00]	ug/L
K 766.490 Radial†	3331.3	59.50	1.79%	[0.00]	ug/L
Mg 279.077 IEC†	3.9	3.24	83.40%	[0.00]	ug/L
Mn 257.610†	668.1	56.33	8.43%	[0.00]	ug/L
Mo 202.031†	23.3	8.92	38.34%	[0.00]	ug/L
Na 589.592 Radial†	-1737.8	27.36	1.57%	[0.00]	ug/L
Ni 231.604†	117.3	7.41	6.32%	[0.00]	ug/L
P 214.914†	252.6	12.38	4.90%	[0.00]	ug/L
Pb 220.353†	-100.7	7.25	7.20%	[0.00]	ug/L
S 181.975 Axial†	62.4	1.98	3.17%	[0.00]	ug/L
Sb 206.836†	40.7	7.23	17.77%	[0.00]	ug/L
Se 196.026†	-35.3	3.85	10.91%	[0.00]	ug/L
Si 251.611†	661.7	11.28	1.70%	[0.00]	ug/L

Sn 189.927†	4.1	12.72	306.85%	[0.00] ug/L
Sr 421.552†	7.4	12.76	171.47%	[0.00] ug/L
Ti 334.940†	-1793.0	20.54	1.15%	[0.00] ug/L
Tl 190.801†	-46.0	4.55	9.90%	[0.00] ug/L
U 409.014†	-2626.2	42.56	1.62%	[0.00] ug/L
V 292.402†	-1800.2	33.59	1.87%	[0.00] ug/L
Zn 213.857†	858.2	7.89	0.92%	[0.00] ug/L
SiO2†	684.0	31.01	4.53%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 1/5/2010 08:15:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5002.2	5002.2	98.4	%	08:17:22
1	Y RADIAL	5272.5	5272.5	98.35	%	08:17:22
1	K 766.490 Radial†	8207.8	5012.5	[1000]	ug/L	08:17:17
1	Sr 421.552†	14644.1	14879.4	[100]	ug/L	08:17:22
1	Sc 361.383	896053.2	896053.2	97.932	%	08:17:49
1	Y 371.029	767141.8	767141.8	98.150	%	08:17:49
1	Ag 328.068†	23122.3	23097.8	[100]	ug/L	08:17:49
1	As 188.979†	261.4	298.1	[100]	ug/L	08:18:09
1	B 249.677†	3783.4	4576.7	[100]	ug/L	08:17:49
1	Ba 233.527†	13404.9	13679.5	[100]	ug/L	08:17:49
1	Be 313.107†	281793.6	292120.8	[100]	ug/L	08:17:49
1	Cd 226.502†	10143.8	10608.7	[100]	ug/L	08:18:09
1	Co 228.616†	5220.4	5419.6	[100]	ug/L	08:18:09
1	Cr 267.716†	9871.9	9964.2	[100]	ug/L	08:17:49
1	Cu 324.752†	40532.1	33289.9	[100]	ug/L	08:17:49
1	Mn 257.610†	94567.7	95897.0	[100]	ug/L	08:17:49
1	Mo 202.031†	1602.2	1612.8	[100]	ug/L	08:18:09
1	Ni 231.604†	4680.7	4662.2	[100]	ug/L	08:18:09
1	P 214.914†	1269.4	1043.6	[500]	ug/L	08:18:09
1	Pb 220.353†	899.5	1019.3	[100]	ug/L	08:18:09
1	S 181.975 Axial†	222.7	165.0	[200]	ug/L	08:18:09
1	Sb 206.836†	377.9	345.2	[100]	ug/L	08:18:09
1	Se 196.026†	155.2	193.8	[100]	ug/L	08:18:09
1	Si 251.611†	17401.3	17107.1	[500]	ug/L	08:17:49
1	Sn 189.927†	664.1	674.0	[100]	ug/L	08:18:09
1	Ti 334.940†	59759.7	62814.9	[100]	ug/L	08:17:49
1	Tl 190.801†	330.1	383.0	[100]	ug/L	08:18:09
1	U 409.014†	373.4	3007.5	[100]	ug/L	08:17:49
1	V 292.402†	13541.0	15627.3	[100]	ug/L	08:17:49
1	Zn 213.857†	12658.4	12067.6	[100]	ug/L	08:17:49
1	SiO2†	17678.8	17368.2	[1069.5]	ug/L	08:19:05
2	Sc Radial	5176.0	5176.0	102	%	08:17:32
2	Y RADIAL	5467.6	5467.6	102.0	%	08:17:32
2	K 766.490 Radial†	8387.8	4909.2	[1000]	ug/L	08:17:27
2	Sr 421.552†	14669.4	14404.4	[100]	ug/L	08:17:32
2	Sc 361.383	874183.4	874183.4	95.541	%	08:18:14
2	Y 371.029	747163.9	747163.9	95.594	%	08:18:14
2	Ag 328.068†	23001.1	23561.7	[100]	ug/L	08:18:14
2	As 188.979†	243.2	285.8	[100]	ug/L	08:18:34
2	B 249.677†	3870.5	4764.5	[100]	ug/L	08:18:14
2	Ba 233.527†	13496.3	14117.6	[100]	ug/L	08:18:14
2	Be 313.107†	283145.8	300734.6	[100]	ug/L	08:18:14
2	Cd 226.502†	9886.7	10598.6	[100]	ug/L	08:18:34
2	Co 228.616†	5090.0	5416.5	[100]	ug/L	08:18:34
2	Cr 267.716†	9912.4	10258.8	[100]	ug/L	08:18:14
2	Cu 324.752†	40513.0	34305.3	[100]	ug/L	08:18:14
2	Mn 257.610†	95116.3	98886.9	[100]	ug/L	08:18:14
2	Mo 202.031†	1563.3	1613.0	[100]	ug/L	08:18:34
2	Ni 231.604†	4570.4	4666.3	[100]	ug/L	08:18:34
2	P 214.914†	1241.9	1047.3	[500]	ug/L	08:18:34
2	Pb 220.353†	850.8	991.3	[100]	ug/L	08:18:34
2	S 181.975 Axial†	228.0	176.2	[200]	ug/L	08:18:34
2	Sb 206.836†	362.4	338.6	[100]	ug/L	08:18:34
2	Se 196.026†	145.4	187.5	[100]	ug/L	08:18:34
2	Si 251.611†	17488.9	17643.3	[500]	ug/L	08:18:14
2	Sn 189.927†	662.5	689.3	[100]	ug/L	08:18:34
2	Ti 334.940†	59916.5	64505.6	[100]	ug/L	08:18:14
2	Tl 190.801†	316.7	377.5	[100]	ug/L	08:18:34
2	U 409.014†	388.9	3033.2	[100]	ug/L	08:18:14

2	V 292.402†	13614.4	16050.0	[100] ug/L	08:18:14
2	Zn 213.857†	12788.3	12526.9	[100] ug/L	08:18:14
2	SiO2†	17601.7	17739.2	[1069.5] ug/L	08:19:10
3	Sc Radial	4848.9	4848.9	95.4 %	08:17:42
3	Y RADIAL	5104.6	5104.6	95.21 %	08:17:42
3	K 766.490 Radial†	8316.0	5389.8	[1000] ug/L	08:17:37
3	Sr 421.552†	14766.1	15477.9	[100] ug/L	08:17:42
3	Sc 361.383	903648.7	903648.7	98.762 %	08:18:40
3	Y 371.029	772738.2	772738.2	98.866 %	08:18:40
3	Ag 328.068†	23631.2	23414.7	[100] ug/L	08:18:40
3	As 188.979†	251.7	286.1	[100] ug/L	08:19:00
3	B 249.677†	3988.5	4751.8	[100] ug/L	08:18:40
3	Ba 233.527†	13810.9	13975.6	[100] ug/L	08:18:40
3	Be 313.107†	288891.7	296889.2	[100] ug/L	08:18:40
3	Cd 226.502†	9994.3	10370.2	[100] ug/L	08:19:00
3	Co 228.616†	5144.5	5298.0	[100] ug/L	08:19:00
3	Cr 267.716†	10036.3	10046.0	[100] ug/L	08:18:40
3	Cu 324.752†	41444.0	33865.4	[100] ug/L	08:18:40
3	Mn 257.610†	97073.4	97622.5	[100] ug/L	08:18:40
3	Mo 202.031†	1582.0	1578.6	[100] ug/L	08:19:00
3	Ni 231.604†	4594.9	4535.2	[100] ug/L	08:19:00
3	P 214.914†	1244.0	1007.0	[500] ug/L	08:19:00
3	Pb 220.353†	880.2	992.0	[100] ug/L	08:19:00
3	S 181.975 Axial†	232.6	173.1	[200] ug/L	08:19:00
3	Sb 206.836†	377.0	341.0	[100] ug/L	08:19:00
3	Se 196.026†	150.3	187.5	[100] ug/L	08:19:00
3	Si 251.611†	17770.7	17331.7	[500] ug/L	08:18:40
3	Sn 189.927†	658.8	662.9	[100] ug/L	08:19:00
3	Ti 334.940†	61415.1	63978.1	[100] ug/L	08:18:40
3	Tl 190.801†	316.7	366.7	[100] ug/L	08:19:00
3	U 409.014†	657.2	3291.7	[100] ug/L	08:18:40
3	V 292.402†	13958.3	15933.6	[100] ug/L	08:18:40
3	Zn 213.857†	12960.4	12264.7	[100] ug/L	08:18:40
3	SiO2†	17392.8	16926.9	[1069.5] ug/L	08:19:15

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	891295.1	15298.04	1.72%	97.412	%
Sc Radial	5009.0	163.63	3.27%	98.5	%
Y 371.029	762348.0	13444.25	1.76%	97.536	%
Y RADIAL	5281.5	181.67	3.44%	98.51	%
Ag 328.068†	23358.1	237.07	1.01%	[100]	ug/L
As 188.979†	290.0	7.03	2.42%	[100]	ug/L
B 249.677†	4697.7	104.97	2.23%	[100]	ug/L
Ba 233.527†	13924.2	223.50	1.61%	[100]	ug/L
Be 313.107†	296581.5	4315.16	1.45%	[100]	ug/L
Cd 226.502†	10525.8	134.89	1.28%	[100]	ug/L
Co 228.616†	5378.0	69.36	1.29%	[100]	ug/L
Cr 267.716†	10089.7	152.07	1.51%	[100]	ug/L
Cu 324.752†	33820.2	509.22	1.51%	[100]	ug/L
K 766.490 Radial†	5103.9	252.96	4.96%	[1000]	ug/L
Mn 257.610†	97468.8	1500.91	1.54%	[100]	ug/L
Mo 202.031†	1601.4	19.79	1.24%	[100]	ug/L
Ni 231.604†	4621.2	74.54	1.61%	[100]	ug/L
P 214.914†	1032.6	22.29	2.16%	[500]	ug/L
Pb 220.353†	1000.8	15.95	1.59%	[100]	ug/L
S 181.975 Axial†	171.4	5.77	3.37%	[200]	ug/L
Sb 206.836†	341.6	3.31	0.97%	[100]	ug/L
Se 196.026†	189.6	3.64	1.92%	[100]	ug/L
Si 251.611†	17360.7	269.27	1.55%	[500]	ug/L
Sn 189.927†	675.4	13.22	1.96%	[100]	ug/L
Sr 421.552†	14920.6	537.91	3.61%	[100]	ug/L
Ti 334.940†	63766.2	865.04	1.36%	[100]	ug/L
Tl 190.801†	375.7	8.33	2.22%	[100]	ug/L
U 409.014†	3110.8	157.16	5.05%	[100]	ug/L
V 292.402†	15870.3	218.36	1.38%	[100]	ug/L
Zn 213.857†	12286.4	230.44	1.88%	[100]	ug/L
SiO2†	17344.8	406.65	2.34%	[1069.5]	ug/L

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

Autosampler Location: 3
Date Collected: 1/5/2010 08:21:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	4895.3	4895.3	96.3	%	08:23:19
1	Y RADIAL	5152.9	5152.9	96.12	%	08:23:19
1	Al 396.153Radial†	5804.3	6048.9	[5000]	ug/L	08:23:19
1	Ca 317.933Radial†	3101.2	3203.2	[5000]	ug/L	08:23:39
1	K 766.490 Radial†	27563.4	25300.8	[5000]	ug/L	08:23:19
1	Mg 279.077 IEC†	166.9	169.5	[5000]	ug/L	08:23:39
1	Sr 421.552†	70559.9	73288.3	[500]	ug/L	08:23:19
1	Sc 361.383	893361.5	893361.5	97.637	%	08:24:38
1	Y 371.029	755737.9	755737.9	96.691	%	08:24:38
1	Ag 328.068†	114979.0	117248.4	[500]	ug/L	08:24:38
1	As 188.979†	1364.4	1428.7	[500]	ug/L	08:24:58
1	B 249.677†	23087.3	24359.4	[500]	ug/L	08:24:38
1	Ba 233.527†	67971.3	69607.5	[500]	ug/L	08:24:38
1	Be 313.107†	1465219.8	1505049.8	[500]	ug/L	08:24:38
1	Cd 226.502†	52578.4	54101.2	[500]	ug/L	08:24:38
1	Co 228.616†	25926.7	26643.1	[500]	ug/L	08:24:58
1	Cr 267.716†	49365.0	50443.3	[500]	ug/L	08:24:38
1	Cu 324.752†	174422.8	170545.1	[500]	ug/L	08:24:38
1	Mn 257.610†	474093.4	484897.2	[500]	ug/L	08:24:38
1	Mo 202.031†	7890.5	8058.2	[500]	ug/L	08:24:58
1	Ni 231.604†	22436.5	22862.0	[500]	ug/L	08:24:58
1	P 214.914†	5275.0	5150.1	[2500]	ug/L	08:24:58
1	Pb 220.353†	4685.5	4899.6	[500]	ug/L	08:24:58
1	S 181.975 Axial†	924.2	884.2	[1000]	ug/L	08:24:58
1	Sb 206.836†	1700.4	1700.9	[500]	ug/L	08:24:58
1	Se 196.026†	933.2	991.1	[500]	ug/L	08:24:58
1	Si 251.611†	86132.8	87555.3	[2500]	ug/L	08:24:38
1	Sn 189.927†	3311.1	3387.0	[500]	ug/L	08:24:58
1	Ti 334.940†	314124.1	323518.1	[500]	ug/L	08:24:38
1	Tl 190.801†	1748.4	1836.7	[500]	ug/L	08:24:58
1	U 409.014†	13435.4	16386.7	[500]	ug/L	08:24:38
1	V 292.402†	76477.6	80128.4	[500]	ug/L	08:24:38
1	Zn 213.857†	61187.3	61809.7	[500]	ug/L	08:24:38
1	SiO2†	86063.7	87462.2	[5347.5]	ug/L	08:25:58
2	Sc Radial	5034.4	5034.4	99.0	%	08:23:44
2	Y RADIAL	5268.1	5268.1	98.26	%	08:23:44
2	Al 396.153Radial†	5957.5	6037.1	[5000]	ug/L	08:23:44
2	Ca 317.933Radial†	3089.6	3102.4	[5000]	ug/L	08:24:04
2	K 766.490 Radial†	28112.3	25064.0	[5000]	ug/L	08:23:44
2	Mg 279.077 IEC†	163.1	160.9	[5000]	ug/L	08:24:04
2	Sr 421.552†	72423.9	73145.5	[500]	ug/L	08:23:44
2	Sc 361.383	905226.6	905226.6	98.934	%	08:25:05
2	Y 371.029	766408.4	766408.4	98.056	%	08:25:05
2	Ag 328.068†	114437.6	115157.6	[500]	ug/L	08:25:05
2	As 188.979†	1382.3	1428.4	[500]	ug/L	08:25:25
2	B 249.677†	22998.5	23959.6	[500]	ug/L	08:25:05
2	Ba 233.527†	67571.3	68290.7	[500]	ug/L	08:25:05
2	Be 313.107†	1458269.0	1478354.3	[500]	ug/L	08:25:05
2	Cd 226.502†	52224.0	53037.2	[500]	ug/L	08:25:05
2	Co 228.616†	26161.4	26532.2	[500]	ug/L	08:25:25
2	Cr 267.716†	49160.8	49574.2	[500]	ug/L	08:25:05
2	Cu 324.752†	173416.4	167186.3	[500]	ug/L	08:25:05
2	Mn 257.610†	471408.0	475818.4	[500]	ug/L	08:25:05
2	Mo 202.031†	7943.2	8005.5	[500]	ug/L	08:25:25
2	Ni 231.604†	22585.8	22711.7	[500]	ug/L	08:25:25
2	P 214.914†	5328.3	5133.1	[2500]	ug/L	08:25:25
2	Pb 220.353†	4719.9	4871.5	[500]	ug/L	08:25:25
2	S 181.975 Axial†	925.2	872.8	[1000]	ug/L	08:25:25
2	Sb 206.836†	1700.8	1678.4	[500]	ug/L	08:25:25

2	Se 196.026†	952.2	997.8	[500] ug/L	08:25:25
2	Si 251.611†	85829.4	86092.3	[2500] ug/L	08:25:05
2	Sn 189.927†	3363.0	3395.1	[500] ug/L	08:25:25
2	Ti 334.940†	312146.4	317302.2	[500] ug/L	08:25:05
2	Tl 190.801†	1770.4	1835.4	[500] ug/L	08:25:25
2	U 409.014†	13018.4	15784.9	[500] ug/L	08:25:05
2	V 292.402†	76070.9	78690.6	[500] ug/L	08:25:05
2	Zn 213.857†	60797.5	60594.3	[500] ug/L	08:25:05
2	SiO2†	86350.9	86597.2	[5347.5] ug/L	08:26:03
3	Sc Radial	5063.9	5063.9	99.6 %	08:24:09
3	Y RADIAL	5326.8	5326.8	99.36 %	08:24:09
3	Al 396.153Radial†	6030.9	6075.7	[5000] ug/L	08:24:09
3	Ca 317.933Radial†	3091.4	3086.1	[5000] ug/L	08:24:29
3	K 766.490 Radial†	28542.7	25331.1	[5000] ug/L	08:24:09
3	Mg 279.077 IEC†	162.6	159.4	[5000] ug/L	08:24:29
3	Sr 421.552†	73364.9	73665.2	[500] ug/L	08:24:09
3	Sc 361.383	912797.6	912797.6	99.762 %	08:25:33
3	Y 371.029	772410.6	772410.6	98.824 %	08:25:33
3	Ag 328.068†	115054.4	114816.5	[500] ug/L	08:25:33
3	As 188.979†	1372.7	1407.2	[500] ug/L	08:25:53
3	B 249.677†	23259.5	24028.5	[500] ug/L	08:25:33
3	Ba 233.527†	68080.5	68234.6	[500] ug/L	08:25:33
3	Be 313.107†	1467808.2	1475690.7	[500] ug/L	08:25:33
3	Cd 226.502†	52462.7	52838.6	[500] ug/L	08:25:33
3	Co 228.616†	26131.5	26283.0	[500] ug/L	08:25:53
3	Cr 267.716†	49351.1	49352.9	[500] ug/L	08:25:33
3	Cu 324.752†	174628.8	166947.8	[500] ug/L	08:25:33
3	Mn 257.610†	474694.0	475160.1	[500] ug/L	08:25:33
3	Mo 202.031†	7963.6	7959.3	[500] ug/L	08:25:53
3	Ni 231.604†	22564.1	22500.7	[500] ug/L	08:25:53
3	P 214.914†	5329.6	5089.8	[2500] ug/L	08:25:53
3	Pb 220.353†	4733.8	4845.8	[500] ug/L	08:25:53
3	S 181.975 Axial†	929.4	869.2	[1000] ug/L	08:25:53
3	Sb 206.836†	1708.8	1672.1	[500] ug/L	08:25:53
3	Se 196.026†	930.6	968.1	[500] ug/L	08:25:53
3	Si 251.611†	86250.8	85795.2	[2500] ug/L	08:25:33
3	Sn 189.927†	3342.6	3346.5	[500] ug/L	08:25:53
3	Ti 334.940†	314428.5	316972.8	[500] ug/L	08:25:33
3	Tl 190.801†	1753.6	1803.7	[500] ug/L	08:25:53
3	U 409.014†	13324.2	15982.3	[500] ug/L	08:25:33
3	V 292.402†	76598.7	78581.9	[500] ug/L	08:25:33
3	Zn 213.857†	61215.9	60504.0	[500] ug/L	08:25:33
3	SiO2†	85190.0	84709.6	[5347.5] ug/L	08:26:08

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	903795.2	9796.77	1.08%	98.778	%
Sc Radial	4997.9	90.04	1.80%	98.3	%
Y 371.029	764852.3	8444.54	1.10%	97.857	%
Y RADIAL	5249.3	88.43	1.68%	97.91	%
Ag 328.068†	115740.9	1316.69	1.14%	[500]	ug/L
Al 396.153Radial†	6053.9	19.82	0.33%	[5000]	ug/L
As 188.979†	1421.5	12.31	0.87%	[500]	ug/L
B 249.677†	24115.8	213.72	0.89%	[500]	ug/L
Ba 233.527†	68710.9	776.93	1.13%	[500]	ug/L
Be 313.107†	1486364.9	16236.26	1.09%	[500]	ug/L
Ca 317.933Radial†	3130.6	63.38	2.02%	[5000]	ug/L
Cd 226.502†	53325.7	678.94	1.27%	[500]	ug/L
Co 228.616†	26486.1	184.43	0.70%	[500]	ug/L
Cr 267.716†	49790.1	576.41	1.16%	[500]	ug/L
Cu 324.752†	168226.4	2011.60	1.20%	[500]	ug/L
K 766.490 Radial†	25232.0	146.22	0.58%	[5000]	ug/L
Mg 279.077 IEC†	163.3	5.43	3.33%	[5000]	ug/L
Mn 257.610†	478625.2	5441.62	1.14%	[500]	ug/L
Mo 202.031†	8007.7	49.46	0.62%	[500]	ug/L
Ni 231.604†	22691.5	181.53	0.80%	[500]	ug/L
P 214.914†	5124.3	31.08	0.61%	[2500]	ug/L
Pb 220.353†	4872.3	26.90	0.55%	[500]	ug/L
S 181.975 Axial†	875.4	7.82	0.89%	[1000]	ug/L

Sb 206.836†	1683.8	15.11	0.90%	[500]	ug/L
Se 196.026†	985.7	15.57	1.58%	[500]	ug/L
Si 251.611†	86480.9	942.23	1.09%	[2500]	ug/L
Sn 189.927†	3376.2	26.06	0.77%	[500]	ug/L
Sr 421.552†	73366.3	268.46	0.37%	[500]	ug/L
Ti 334.940†	319264.4	3687.55	1.16%	[500]	ug/L
Tl 190.801†	1825.3	18.68	1.02%	[500]	ug/L
U 409.014†	16051.3	306.76	1.91%	[500]	ug/L
V 292.402†	79133.6	863.17	1.09%	[500]	ug/L
Zn 213.857†	60969.3	729.17	1.20%	[500]	ug/L
SiO2†	86256.3	1407.64	1.63%	[5347.5]	ug/L

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

Autosampler Location: 4
Date Collected: 1/5/2010 08:28:19
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	4882.3	4882.3	96.0	%	08:30:32
1	Y RADIAL	5092.7	5092.7	94.99	%	08:30:32
1	Al 396.153Radial†	11957.0	12473.3	[10000]	ug/L	08:30:12
1	Ca 317.933Radial†	6171.1	6409.3	[10000]	ug/L	08:30:32
1	Fe 238.204 Radial†	1131.5	1163.8	[10000]	ug/L	08:30:32
1	K 766.490 Radial†	53266.3	52147.9	[10000]	ug/L	08:30:12
1	Mg 279.077 IEC†	320.4	329.8	[10000]	ug/L	08:30:32
1	Na 589.592 Radial†	32806.6	35907.3	[10000]	ug/L	08:30:12
1	Sr 421.552†	145495.4	151532.5	[1000]	ug/L	08:30:12
1	Sc 361.383	895459.7	895459.7	97.867	%	08:31:31
1	Y 371.029	748986.4	748986.4	95.827	%	08:31:36
1	Ag 328.068†	230307.6	234814.9	[1000]	ug/L	08:31:36
1	As 188.979†	2764.6	2856.1	[1000]	ug/L	08:31:56
1	B 249.677†	47632.1	49383.8	[1000]	ug/L	08:31:36
1	Ba 233.527†	135452.7	138396.7	[1000]	ug/L	08:31:36
1	Be 313.107†	2892361.6	2959783.5	[1000]	ug/L	08:31:31
1	Cd 226.502†	104639.9	107171.4	[1000]	ug/L	08:31:36
1	Co 228.616†	52902.2	54144.3	[1000]	ug/L	08:31:36
1	Cr 267.716†	98679.5	100714.2	[1000]	ug/L	08:31:36
1	Cu 324.752†	342074.1	341432.3	[1000]	ug/L	08:31:36
1	Mn 257.610†	931057.0	950683.7	[1000]	ug/L	08:31:31
1	Mo 202.031†	15682.3	16000.9	[1000]	ug/L	08:31:56
1	Ni 231.604†	45340.4	46211.4	[1000]	ug/L	08:31:36
1	P 214.914†	10269.9	10241.1	[5000]	ug/L	08:31:56
1	Pb 220.353†	9404.1	9709.8	[1000]	ug/L	08:31:56
1	S 181.975 Axial†	1782.9	1759.4	[2000]	ug/L	08:31:56
1	Sb 206.836†	3347.5	3379.8	[1000]	ug/L	08:31:56
1	Se 196.026†	1877.8	1954.0	[1000]	ug/L	08:31:56
1	Si 251.611†	172962.2	176070.6	[5000]	ug/L	08:31:36
1	Sn 189.927†	6661.6	6802.6	[1000]	ug/L	08:31:56
1	Ti 334.940†	622702.3	638068.7	[1000]	ug/L	08:31:31
1	Tl 190.801†	3546.3	3669.5	[1000]	ug/L	08:31:56
1	U 409.014†	31015.3	34317.6	[1000]	ug/L	08:31:36
1	V 292.402†	155654.4	160847.6	[1000]	ug/L	08:31:36
1	Zn 213.857†	121103.6	122885.2	[1000]	ug/L	08:31:36
1	SiO2†	170784.6	173823.3	[10695]	ug/L	08:33:06
2	Sc Radial	4833.8	4833.8	95.1	%	08:30:58
2	Y RADIAL	5042.6	5042.6	94.06	%	08:30:58
2	Al 396.153Radial†	12019.8	12664.3	[10000]	ug/L	08:30:38
2	Ca 317.933Radial†	6101.7	6400.7	[10000]	ug/L	08:30:58
2	Fe 238.204 Radial†	1129.6	1173.7	[10000]	ug/L	08:30:58
2	K 766.490 Radial†	53476.6	52925.8	[10000]	ug/L	08:30:38
2	Mg 279.077 IEC†	322.2	335.1	[10000]	ug/L	08:30:58
2	Na 589.592 Radial†	32786.7	36229.2	[10000]	ug/L	08:30:38
2	Sr 421.552†	146014.9	153599.4	[1000]	ug/L	08:30:38
2	Sc 361.383	896013.1	896013.1	97.927	%	08:32:03
2	Y 371.029	744345.7	744345.7	95.233	%	08:32:08
2	Ag 328.068†	229068.2	233404.0	[1000]	ug/L	08:32:08
2	As 188.979†	2743.5	2832.8	[1000]	ug/L	08:32:28
2	B 249.677†	47337.9	49053.3	[1000]	ug/L	08:32:08
2	Ba 233.527†	134463.6	137301.2	[1000]	ug/L	08:32:08
2	Be 313.107†	2898070.8	2963788.4	[1000]	ug/L	08:32:03
2	Cd 226.502†	103951.0	106401.9	[1000]	ug/L	08:32:08
2	Co 228.616†	52522.8	53723.5	[1000]	ug/L	08:32:08
2	Cr 267.716†	98108.1	100068.5	[1000]	ug/L	08:32:08
2	Cu 324.752†	339731.5	338824.2	[1000]	ug/L	08:32:08
2	Mn 257.610†	933270.2	952356.2	[1000]	ug/L	08:32:03
2	Mo 202.031†	15609.3	15916.4	[1000]	ug/L	08:32:28
2	Ni 231.604†	44962.5	45796.9	[1000]	ug/L	08:32:08

2	P 214.914†	10225.2	10189.0	[5000] ug/L	08:32:28
2	Pb 220.353†	9300.2	9597.8	[1000] ug/L	08:32:28
2	S 181.975 Axial†	1777.1	1752.3	[2000] ug/L	08:32:28
2	Sb 206.836†	3356.2	3386.5	[1000] ug/L	08:32:28
2	Se 196.026†	1877.8	1952.8	[1000] ug/L	08:32:28
2	Si 251.611†	171605.8	174576.3	[5000] ug/L	08:32:08
2	Sn 189.927†	6585.3	6720.6	[1000] ug/L	08:32:28
2	Ti 334.940†	623617.1	638609.9	[1000] ug/L	08:32:03
2	Tl 190.801†	3536.5	3657.3	[1000] ug/L	08:32:28
2	U 409.014†	30978.1	34260.1	[1000] ug/L	08:32:08
2	V 292.402†	154645.5	159719.0	[1000] ug/L	08:32:08
2	Zn 213.857†	120102.1	121786.0	[1000] ug/L	08:32:08
2	SiO2†	172455.0	175421.3	[10695] ug/L	08:33:11
3	Sc Radial	4933.7	4933.7	97.0 %	08:31:23
3	Y RADIAL	5126.5	5126.5	95.62 %	08:31:23
3	Al 396.153Radial†	11950.7	12337.0	[10000] ug/L	08:31:03
3	Ca 317.933Radial†	6222.4	6395.1	[10000] ug/L	08:31:23
3	Fe 238.204 Radial†	1151.8	1172.5	[10000] ug/L	08:31:23
3	K 766.490 Radial†	53437.7	51746.1	[10000] ug/L	08:31:03
3	Mg 279.077 IEC†	326.2	332.3	[10000] ug/L	08:31:23
3	Na 589.592 Radial†	32934.7	35683.0	[10000] ug/L	08:31:03
3	Sr 421.552†	145857.4	150325.5	[1000] ug/L	08:31:03
3	Sc 361.383	907123.5	907123.5	99.142 %	08:32:35
3	Y 371.029	745164.1	745164.1	95.338 %	08:32:40
3	Ag 328.068†	229272.3	230744.9	[1000] ug/L	08:32:40
3	As 188.979†	2768.4	2823.6	[1000] ug/L	08:33:00
3	B 249.677†	47411.2	48535.1	[1000] ug/L	08:32:40
3	Ba 233.527†	134583.4	135740.2	[1000] ug/L	08:32:40
3	Be 313.107†	2930417.9	2960168.8	[1000] ug/L	08:32:35
3	Cd 226.502†	104011.6	105162.9	[1000] ug/L	08:32:40
3	Co 228.616†	52462.8	53006.1	[1000] ug/L	08:32:40
3	Cr 267.716†	98200.9	98935.1	[1000] ug/L	08:32:40
3	Cu 324.752†	339833.0	334677.5	[1000] ug/L	08:32:40
3	Mn 257.610†	944183.9	951691.9	[1000] ug/L	08:32:35
3	Mo 202.031†	15727.0	15839.9	[1000] ug/L	08:33:00
3	Ni 231.604†	45031.8	45304.4	[1000] ug/L	08:32:40
3	P 214.914†	10292.1	10128.6	[5000] ug/L	08:33:00
3	Pb 220.353†	9411.9	9594.1	[1000] ug/L	08:33:00
3	S 181.975 Axial†	1788.8	1741.9	[2000] ug/L	08:33:00
3	Sb 206.836†	3373.6	3362.1	[1000] ug/L	08:33:00
3	Se 196.026†	1893.8	1945.5	[1000] ug/L	08:33:00
3	Si 251.611†	171824.6	172650.8	[5000] ug/L	08:32:40
3	Sn 189.927†	6655.3	6708.8	[1000] ug/L	08:33:00
3	Ti 334.940†	630922.1	638178.5	[1000] ug/L	08:32:35
3	Tl 190.801†	3546.5	3623.1	[1000] ug/L	08:33:00
3	U 409.014†	31081.8	33977.2	[1000] ug/L	08:32:40
3	V 292.402†	154799.4	157940.1	[1000] ug/L	08:32:40
3	Zn 213.857†	120132.6	120314.7	[1000] ug/L	08:32:40
3	SiO2†	168331.7	169105.4	[10695] ug/L	08:33:16

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	899532.1	6580.17	0.73%	98.312	%
Sc Radial	4883.3	49.98	1.02%	96.0	%
Y 371.029	746165.4	2477.10	0.33%	95.466	%
Y RADIAL	5087.2	42.20	0.83%	94.89	%
Ag 328.068†	232987.9	2066.66	0.89%	[1000]	ug/L
Al 396.153Radial†	12491.5	164.45	1.32%	[10000]	ug/L
As 188.979†	2837.5	16.73	0.59%	[1000]	ug/L
B 249.677†	48990.7	427.78	0.87%	[1000]	ug/L
Ba 233.527†	137146.0	1335.02	0.97%	[1000]	ug/L
Be 313.107†	2961246.9	2209.44	0.07%	[1000]	ug/L
Ca 317.933Radial†	6401.7	7.13	0.11%	[10000]	ug/L
Cd 226.502†	106245.4	1013.37	0.95%	[1000]	ug/L
Co 228.616†	53624.6	575.52	1.07%	[1000]	ug/L
Cr 267.716†	99906.0	900.64	0.90%	[1000]	ug/L
Cu 324.752†	338311.3	3406.45	1.01%	[1000]	ug/L
Fe 238.204 Radial†	1170.0	5.41	0.46%	[10000]	ug/L
K 766.490 Radial†	52273.3	599.71	1.15%	[10000]	ug/L

Mg 279.077 IEC†	332.4	2.63	0.79%	[10000] ug/L
Mn 257.610†	951577.3	842.11	0.09%	[1000] ug/L
Mo 202.031†	15919.1	80.52	0.51%	[1000] ug/L
Na 589.592 Radial†	35939.8	274.55	0.76%	[10000] ug/L
Ni 231.604†	45770.9	454.04	0.99%	[1000] ug/L
P 214.914†	10186.3	56.32	0.55%	[5000] ug/L
Pb 220.353†	9633.9	65.75	0.68%	[1000] ug/L
S 181.975 Axial†	1751.2	8.80	0.50%	[2000] ug/L
Sb 206.836†	3376.1	12.57	0.37%	[1000] ug/L
Se 196.026†	1950.8	4.61	0.24%	[1000] ug/L
Si 251.611†	174432.6	1714.44	0.98%	[5000] ug/L
Sn 189.927†	6744.0	51.11	0.76%	[1000] ug/L
Sr 421.552†	151819.1	1655.63	1.09%	[1000] ug/L
Ti 334.940†	638285.7	286.09	0.04%	[1000] ug/L
Tl 190.801†	3650.0	24.04	0.66%	[1000] ug/L
U 409.014†	34185.0	182.21	0.53%	[1000] ug/L
V 292.402†	159502.2	1465.81	0.92%	[1000] ug/L
Zn 213.857†	121662.0	1289.73	1.06%	[1000] ug/L
SiO2†	172783.3	3283.90	1.90%	[10695] ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 1/5/2010 08:35:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	4963.1	4963.1	97.6	%	08:37:41
1	Y RADIAL	5205.4	5205.4	97.09	%	08:37:41
1	Al 396.153Radial†	58774.8	60239.2	[50000]	ug/L	08:37:21
1	Ca 317.933Radial†	30345.8	31073.5	[50000]	ug/L	08:37:41
1	Fe 238.204 Radial†	2231.9	2272.1	[20000]	ug/L	08:37:41
1	Mg 279.077 IEC†	1564.8	1599.4	[50000]	ug/L	08:37:41
1	Na 589.592 Radial†	65157.3	68496.8	[20000]	ug/L	08:37:21
1	Sc 361.383	879919.5	879919.5	96.168	%	08:38:38
1	Y 371.029	742823.2	742823.2	95.038	%	08:38:38
2	Sc Radial	4790.6	4790.6	94.2	%	08:38:06
2	Y RADIAL	5038.5	5038.5	93.98	%	08:38:06
2	Al 396.153Radial†	58380.5	61988.7	[50000]	ug/L	08:37:46
2	Ca 317.933Radial†	29767.1	31578.6	[50000]	ug/L	08:38:06
2	Fe 238.204 Radial†	2186.4	2306.1	[20000]	ug/L	08:38:06
2	Mg 279.077 IEC†	1523.3	1613.0	[50000]	ug/L	08:38:06
2	Na 589.592 Radial†	64696.4	70411.0	[20000]	ug/L	08:37:46
2	Sc 361.383	887371.4	887371.4	96.983	%	08:38:44
2	Y 371.029	748897.5	748897.5	95.815	%	08:38:44
3	Sc Radial	4752.9	4752.9	93.5	%	08:38:31
3	Y RADIAL	4997.7	4997.7	93.22	%	08:38:31
3	Al 396.153Radial†	58284.3	62378.0	[50000]	ug/L	08:38:11
3	Ca 317.933Radial†	29746.5	31807.5	[50000]	ug/L	08:38:31
3	Fe 238.204 Radial†	2188.9	2327.2	[20000]	ug/L	08:38:31
3	Mg 279.077 IEC†	1528.9	1631.9	[50000]	ug/L	08:38:31
3	Na 589.592 Radial†	64449.0	70691.8	[20000]	ug/L	08:38:11
3	Sc 361.383	878703.7	878703.7	96.035	%	08:38:49
3	Y 371.029	741616.7	741616.7	94.884	%	08:38:49

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	881998.2	4692.89	0.53%	96.395	%
Sc Radial	4835.6	112.08	2.32%	95.1	%
Y 371.029	744445.8	3902.23	0.52%	95.246	%
Y RADIAL	5080.5	110.05	2.17%	94.77	%
Al 396.153Radial†	61535.3	1139.20	1.85%	[50000]	ug/L
Ca 317.933Radial†	31486.5	375.54	1.19%	[50000]	ug/L
Fe 238.204 Radial†	2301.8	27.82	1.21%	[20000]	ug/L
Mg 279.077 IEC†	1614.8	16.32	1.01%	[50000]	ug/L
Na 589.592 Radial†	69866.6	1194.49	1.71%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	232.7	0.00000	0.999997	
Al 396.153Radial	3	Lin Thru 0	0.0	1.231	0.00000	0.999995	
As 188.979	3	Lin Thru 0	0.0	2.839	0.00000	0.999998	
B 249.677	3	Lin Thru 0	0.0	48.82	0.00000	0.999975	
Ba 233.527	3	Lin Thru 0	0.0	137.2	0.00000	0.999999	
Be 313.107	3	Lin Thru 0	0.0	2964	0.00000	0.999999	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6301	0.00000	0.999995	
Cd 226.502	3	Lin Thru 0	0.0	106.3	0.00000	0.999998	
Co 228.616	3	Lin Thru 0	0.0	53.50	0.00000	0.999988	
Cr 267.716	3	Lin Thru 0	0.0	99.85	0.00000	0.999999	
Cu 324.752	3	Lin Thru 0	0.0	337.9	0.00000	0.999998	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1155	0.00000	0.999978	
K 766.490 Radial	3	Lin Thru 0	0.0	5.190	0.00000	0.999902	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0323	0.00000	0.999984
Mn 257.610	3	Lin Thru 0	0.0	952.9	0.00000	0.999995
Mo 202.031	3	Lin Thru 0	0.0	15.94	0.00000	0.999997
Na 589.592 Radia	2	Lin Thru 0	0.0	3.513	0.00000	0.999934
Ni 231.604	3	Lin Thru 0	0.0	45.70	0.00000	0.999994
P 214.914	3	Lin Thru 0	0.0	2.040	0.00000	0.999996
Pb 220.353	3	Lin Thru 0	0.0	9.659	0.00000	0.999984
S 181.975 Axial	3	Lin Thru 0	0.0	0.8754	0.00000	0.999998
Sb 206.836	3	Lin Thru 0	0.0	3.375	0.00000	0.999999
Se 196.026	3	Lin Thru 0	0.0	1.954	0.00000	0.999988
Si 251.611	3	Lin Thru 0	0.0	34.83	0.00000	0.999994
Sn 189.927	3	Lin Thru 0	0.0	6.746	0.00000	1.000000
Sr 421.552	3	Lin Thru 0	0.0	150.8	0.00000	0.999909
Ti 334.940	3	Lin Thru 0	0.0	638.3	0.00000	1.000000
Tl 190.801	3	Lin Thru 0	0.0	3.651	0.00000	0.999997
U 409.014	3	Lin Thru 0	0.0	33.75	0.00000	0.999674
V 292.402	3	Lin Thru 0	0.0	159.3	0.00000	0.999995
Zn 213.857	3	Lin Thru 0	0.0	121.7	0.00000	0.999999
SiO2	3	Lin Thru 0	0.0	16.15	0.00000	1.000000

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

Autosampler Location: 9
Date Collected: 1/5/2010 08:41:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4979.9	4979.9	97.9	%			08:42:54
1	Y RADIAL	5228.0	5228.0	97.52	%			08:42:54
1	Al 396.153Radial†	6067.3	6215.0	5024.4	ug/L	5024.4	ppb	08:42:54
1	Ca 317.933Radial†	3122.4	3170.2	5031.2	ug/L	5031.2	ppb	08:43:14
1	Fe 238.204 Radial†	591.5	589.3	5119.4	ug/L	5119.4	ppb	08:43:14
1	K 766.490 Radial†	15850.8	12854.5	2471.1	ug/L	2471.1	ppb	08:42:54
1	Mg 279.077 IEC†	169.2	168.9	5228.9	ug/L	5228.9	ppb	08:43:14
1	Na 589.592 Radial†	6838.8	8721.1	2482.2	ug/L	2482.2	ppb	08:42:54
1	Sr 421.552†	76870.0	78486.9	520.46	ug/L	520.46	ppb	08:42:54
1	Sc 361.383	903412.5	903412.5	98.736	%			08:44:12
1	Y 371.029	767729.8	767729.8	98.225	%			08:44:12
1	Ag 328.068†	60680.6	60944.7	265.15	ug/L	265.15	ppb	08:44:12
1	As 188.979†	1334.8	1383.1	491.51	ug/L	491.51	ppb	08:44:32
1	B 249.677†	24726.7	25756.7	525.57	ug/L	525.57	ppb	08:44:12
1	Ba 233.527†	70420.8	71313.8	521.01	ug/L	521.01	ppb	08:44:12
1	Be 313.107†	773370.0	787646.6	266.77	ug/L	266.77	ppb	08:44:12
1	Cd 226.502†	53373.4	54307.4	510.62	ug/L	510.62	ppb	08:44:12
1	Co 228.616†	26819.4	27251.8	509.75	ug/L	509.75	ppb	08:44:32
1	Cr 267.716†	49246.5	49760.8	499.20	ug/L	499.20	ppb	08:44:12
1	Cu 324.752†	180551.4	174764.7	517.40	ug/L	517.40	ppb	08:44:12
1	Mn 257.610†	495037.0	500706.8	525.87	ug/L	525.87	ppb	08:44:12
1	Mo 202.031†	8655.0	8742.5	548.99	ug/L	548.99	ppb	08:44:32
1	Ni 231.604†	22989.5	23166.4	506.63	ug/L	506.63	ppb	08:44:32
1	P 214.914†	5430.3	5247.3	2494.4	ug/L	2494.4	ppb	08:44:32
1	Pb 220.353†	4786.7	4948.7	514.00	ug/L	514.00	ppb	08:44:32
1	S 181.975 Axial†	2241.7	2208.0	2521.2	ug/L	2521.2	ppb	08:44:32
1	Sb 206.836†	1719.0	1700.3	512.99	ug/L	512.99	ppb	08:44:32
1	Se 196.026†	5040.3	5140.1	2647.1	ug/L	2647.1	ppb	08:44:32
1	Si 251.611†	170100.3	171616.3	4915.6	ug/L	4915.6	ppb	08:44:12
1	Sn 189.927†	3625.0	3667.3	544.24	ug/L	544.24	ppb	08:44:32
1	Ti 334.940†	317233.2	323087.7	506.01	ug/L	506.01	ppb	08:44:12
1	Tl 190.801†	1891.2	1961.3	540.51	ug/L	540.51	ppb	08:44:32
1	U 409.014†	14346.4	17156.3	506.77	ug/L	506.77	ppb	08:44:12
1	V 292.402†	79777.3	82598.9	526.09	ug/L	526.09	ppb	08:44:12
1	Zn 213.857†	63725.4	63683.1	518.87	ug/L	518.87	ppb	08:44:12
1	SiO2†	166801.7	168253.3	10391	ug/L	10391	ppb	08:45:29
2	Sc Radial	5000.1	5000.1	98.3	%			08:43:19
2	Y RADIAL	5223.0	5223.0	97.42	%			08:43:19
2	Al 396.153Radial†	6147.3	6271.4	5070.3	ug/L	5070.3	ppb	08:43:19
2	Ca 317.933Radial†	3135.2	3170.2	5031.4	ug/L	5031.4	ppb	08:43:39
2	Fe 238.204 Radial†	590.3	585.7	5088.2	ug/L	5088.2	ppb	08:43:39
2	K 766.490 Radial†	15740.4	12676.6	2436.9	ug/L	2436.9	ppb	08:43:19
2	Mg 279.077 IEC†	169.9	168.9	5231.3	ug/L	5231.3	ppb	08:43:39
2	Na 589.592 Radial†	6963.5	8819.6	2510.2	ug/L	2510.2	ppb	08:43:19
2	Sr 421.552†	77469.2	78778.8	522.40	ug/L	522.40	ppb	08:43:19
2	Sc 361.383	907952.9	907952.9	99.232	%			08:44:38
2	Y 371.029	771018.2	771018.2	98.646	%			08:44:38
2	Ag 328.068†	60894.8	60853.2	264.74	ug/L	264.74	ppb	08:44:38
2	As 188.979†	1325.9	1367.4	485.97	ug/L	485.97	ppb	08:44:58
2	B 249.677†	24957.7	25864.2	527.78	ug/L	527.78	ppb	08:44:38
2	Ba 233.527†	70791.1	71330.3	521.13	ug/L	521.13	ppb	08:44:38
2	Be 313.107†	777405.3	787796.2	266.82	ug/L	266.82	ppb	08:44:38
2	Cd 226.502†	53688.0	54354.0	511.06	ug/L	511.06	ppb	08:44:38
2	Co 228.616†	26745.2	27041.1	505.81	ug/L	505.81	ppb	08:44:58
2	Cr 267.716†	49355.9	49621.7	497.81	ug/L	497.81	ppb	08:44:38
2	Cu 324.752†	181329.1	174634.0	517.02	ug/L	517.02	ppb	08:44:38
2	Mn 257.610†	497285.4	500465.3	525.62	ug/L	525.62	ppb	08:44:38
2	Mo 202.031†	8632.8	8676.3	544.84	ug/L	544.84	ppb	08:44:58
2	Ni 231.604†	22956.0	23016.3	503.35	ug/L	503.35	ppb	08:44:58

2	P 214.914†	5434.4	5223.9	2483.0 ug/L	2483.0 ppb	08:44:58
2	Pb 220.353†	4801.1	4939.0	513.00 ug/L	513.00 ppb	08:44:58
2	S 181.975 Axial†	2257.5	2212.5	2526.4 ug/L	2526.4 ppb	08:44:58
2	Sb 206.836†	1730.8	1703.5	513.84 ug/L	513.84 ppb	08:44:58
2	Se 196.026†	5029.3	5103.5	2628.3 ug/L	2628.3 ppb	08:44:58
2	Si 251.611†	170941.4	171602.5	4915.3 ug/L	4915.3 ppb	08:44:38
2	Sn 189.927†	3624.3	3648.2	541.41 ug/L	541.41 ppb	08:44:58
2	Ti 334.940†	318806.4	323066.4	505.98 ug/L	505.98 ppb	08:44:38
2	Tl 190.801†	1885.9	1946.5	536.47 ug/L	536.47 ppb	08:44:58
2	U 409.014†	14488.4	17226.7	508.86 ug/L	508.86 ppb	08:44:38
2	V 292.402†	80065.9	82485.7	525.33 ug/L	525.33 ppb	08:44:38
2	Zn 213.857†	64066.0	63703.5	519.06 ug/L	519.06 ppb	08:44:38
2	SiO2†	168931.3	169554.5	10472 ug/L	10472 ppb	08:45:35
3	Sc Radial	5027.7	5027.7	98.9 %		08:43:44
3	Y RADIAL	5274.6	5274.6	98.39 %		08:43:44
3	Al 396.153Radial†	6152.1	6242.0	5046.3 ug/L	5046.3 ppb	08:43:44
3	Ca 317.933Radial†	3115.8	3133.1	4972.5 ug/L	4972.5 ppb	08:44:04
3	Fe 238.204 Radial†	586.2	578.2	5023.5 ug/L	5023.5 ppb	08:44:04
3	K 766.490 Radial†	15913.7	12764.2	2453.8 ug/L	2453.8 ppb	08:43:44
3	Mg 279.077 IEC†	171.9	170.0	5263.2 ug/L	5263.2 ppb	08:44:04
3	Na 589.592 Radial†	6982.4	8799.9	2504.6 ug/L	2504.6 ppb	08:43:44
3	Sr 421.552†	78034.2	78918.2	523.32 ug/L	523.32 ppb	08:43:44
3	Sc 361.383	902098.3	902098.3	98.592 %		08:45:04
3	Y 371.029	766505.3	766505.3	98.068 %		08:45:04
3	Ag 328.068†	60543.3	60895.0	264.90 ug/L	264.90 ppb	08:45:04
3	As 188.979†	1322.2	1372.3	487.71 ug/L	487.71 ppb	08:45:24
3	B 249.677†	24711.4	25777.6	526.01 ug/L	526.01 ppb	08:45:04
3	Ba 233.527†	70208.3	71202.2	520.19 ug/L	520.19 ppb	08:45:04
3	Be 313.107†	770704.9	786084.5	266.24 ug/L	266.24 ppb	08:45:04
3	Cd 226.502†	53181.5	54191.4	509.53 ug/L	509.53 ppb	08:45:04
3	Co 228.616†	26800.1	27271.7	510.13 ug/L	510.13 ppb	08:45:24
3	Cr 267.716†	49125.4	49710.7	498.70 ug/L	498.70 ppb	08:45:04
3	Cu 324.752†	180003.1	174475.0	516.54 ug/L	516.54 ppb	08:45:04
3	Mn 257.610†	493107.0	499479.6	524.58 ug/L	524.58 ppb	08:45:04
3	Mo 202.031†	8635.3	8735.3	548.53 ug/L	548.53 ppb	08:45:24
3	Ni 231.604†	22909.5	23119.3	505.60 ug/L	505.60 ppb	08:45:24
3	P 214.914†	5406.2	5230.8	2486.6 ug/L	2486.6 ppb	08:45:24
3	Pb 220.353†	4774.7	4943.6	513.48 ug/L	513.48 ppb	08:45:24
3	S 181.975 Axial†	2271.4	2241.4	2559.4 ug/L	2559.4 ppb	08:45:24
3	Sb 206.836†	1716.0	1699.8	512.85 ug/L	512.85 ppb	08:45:24
3	Se 196.026†	5050.9	5158.3	2656.1 ug/L	2656.1 ppb	08:45:24
3	Si 251.611†	169422.5	171179.8	4903.1 ug/L	4903.1 ppb	08:45:04
3	Sn 189.927†	3617.9	3665.4	543.95 ug/L	543.95 ppb	08:45:24
3	Ti 334.940†	316248.0	322556.5	505.17 ug/L	505.17 ppb	08:45:04
3	Tl 190.801†	1884.9	1957.8	539.52 ug/L	539.52 ppb	08:45:24
3	U 409.014†	14255.2	17085.0	504.67 ug/L	504.67 ppb	08:45:04
3	V 292.402†	79504.8	82440.2	525.10 ug/L	525.10 ppb	08:45:04
3	Zn 213.857†	63616.0	63666.1	518.74 ug/L	518.74 ppb	08:45:04
3	SiO2†	168011.1	169726.0	10482 ug/L	10482 ppb	08:45:40

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	904487.9	98.853	%	0.3357				0.34%
Sc Radial	5002.6	98.4	%	0.47				0.48%
Y 371.029	768417.8	98.313	%	0.2986				0.30%
Y RADIAL	5241.9	97.77	%	0.531				0.54%
Ag 328.068†	60897.6	264.93	ug/L	0.206	264.93	ppb	0.206	0.08%
QC value within limits for Ag 328.068 Recovery = 105.97%								
Al 396.153Radial†	6242.8	5047.0	ug/L	22.98	5047.0	ppb	22.98	0.46%
QC value within limits for Al 396.153Radial Recovery = 100.94%								
As 188.979†	1374.3	488.40	ug/L	2.836	488.40	ppb	2.836	0.58%
QC value within limits for As 188.979 Recovery = 97.68%								
B 249.677†	25799.5	526.45	ug/L	1.173	526.45	ppb	1.173	0.22%
QC value within limits for B 249.677 Recovery = 105.29%								
Ba 233.527†	71282.1	520.78	ug/L	0.510	520.78	ppb	0.510	0.10%
QC value within limits for Ba 233.527 Recovery = 104.16%								
Be 313.107†	787175.8	266.61	ug/L	0.321	266.61	ppb	0.321	0.12%
QC value within limits for Be 313.107 Recovery = 106.64%								
Ca 317.933Radial†	3157.8	5011.7	ug/L	33.97	5011.7	ppb	33.97	0.68%

QC value within limits for Ca 317.933Radial Recovery = 100.23%

Cd 226.502†	54284.2	510.40 ug/L	0.783	510.40 ppb	0.783	0.15%
QC value within limits for Cd 226.502 Recovery = 102.08%						
Co 228.616†	27188.2	508.56 ug/L	2.395	508.56 ppb	2.395	0.47%
QC value within limits for Co 228.616 Recovery = 101.71%						
Cr 267.716†	49697.7	498.57 ug/L	0.707	498.57 ppb	0.707	0.14%
QC value within limits for Cr 267.716 Recovery = 99.71%						
Cu 324.752†	174624.6	516.99 ug/L	0.432	516.99 ppb	0.432	0.08%
QC value within limits for Cu 324.752 Recovery = 103.40%						
Fe 238.204 Radial†	584.4	5077.0 ug/L	48.90	5077.0 ppb	48.90	0.96%
QC value within limits for Fe 238.204 Radial Recovery = 101.54%						
K 766.490 Radial†	12765.1	2453.9 ug/L	17.14	2453.9 ppb	17.14	0.70%
QC value within limits for K 766.490 Radial Recovery = 98.16%						
Mg 279.077 IEC†	169.3	5241.1 ug/L	19.11	5241.1 ppb	19.11	0.36%
QC value within limits for Mg 279.077 IEC Recovery = 104.82%						
Mn 257.610†	500217.2	525.36 ug/L	0.687	525.36 ppb	0.687	0.13%
QC value within limits for Mn 257.610 Recovery = 105.07%						
Mo 202.031†	8718.0	547.45 ug/L	2.277	547.45 ppb	2.277	0.42%
QC value within limits for Mo 202.031 Recovery = 109.49%						
Na 589.592 Radial†	8780.2	2499.0 ug/L	14.83	2499.0 ppb	14.83	0.59%
QC value within limits for Na 589.592 Radial Recovery = 99.96%						
Ni 231.604†	23100.7	505.19 ug/L	1.678	505.19 ppb	1.678	0.33%
QC value within limits for Ni 231.604 Recovery = 101.04%						
P 214.914†	5234.0	2488.0 ug/L	5.83	2488.0 ppb	5.83	0.23%
QC value within limits for P 214.914 Recovery = 99.52%						
Pb 220.353†	4943.8	513.50 ug/L	0.499	513.50 ppb	0.499	0.10%
QC value within limits for Pb 220.353 Recovery = 102.70%						
S 181.975 Axial†	2220.7	2535.7 ug/L	20.72	2535.7 ppb	20.72	0.82%
QC value within limits for S 181.975 Axial Recovery = 101.43%						
Sb 206.836†	1701.2	513.23 ug/L	0.533	513.23 ppb	0.533	0.10%
QC value within limits for Sb 206.836 Recovery = 102.65%						
Se 196.026†	5134.0	2643.8 ug/L	14.21	2643.8 ppb	14.21	0.54%
QC value within limits for Se 196.026 Recovery = 105.75%						
Si 251.611†	171466.2	4911.3 ug/L	7.14	4911.3 ppb	7.14	0.15%
QC value within limits for Si 251.611 Recovery = 98.23%						
Sn 189.927†	3660.3	543.20 ug/L	1.556	543.20 ppb	1.556	0.29%
QC value within limits for Sn 189.927 Recovery = 108.64%						
Sr 421.552†	78728.0	522.06 ug/L	1.460	522.06 ppb	1.460	0.28%
QC value within limits for Sr 421.552 Recovery = 104.41%						
Ti 334.940†	322903.5	505.72 ug/L	0.472	505.72 ppb	0.472	0.09%
QC value within limits for Ti 334.940 Recovery = 101.14%						
Tl 190.801†	1955.2	538.83 ug/L	2.109	538.83 ppb	2.109	0.39%
QC value within limits for Tl 190.801 Recovery = 107.77%						
U 409.014†	17156.0	506.77 ug/L	2.096	506.77 ppb	2.096	0.41%
QC value within limits for U 409.014 Recovery = 101.35%						
V 292.402†	82508.3	525.50 ug/L	0.518	525.50 ppb	0.518	0.10%
QC value within limits for V 292.402 Recovery = 105.10%						
Zn 213.857†	63684.2	518.89 ug/L	0.161	518.89 ppb	0.161	0.03%
QC value within limits for Zn 213.857 Recovery = 103.78%						
SiO2†	169177.9	10449 ug/L	49.9	10449 ppb	49.9	0.48%
QC value within limits for SiO2 Recovery = 97.70%						

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 1/5/2010 08:47:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5293.4	5293.4	104	%			08:49:43
1	Y RADIAL	5619.9	5619.9	104.8	%			08:49:43
1	Al 396.153Radial†	-28.0	-7.3	-5.9511	ug/L	-5.9511	ppb	08:49:43
1	Ca 317.933Radial†	21.7	2.6	4.1221	ug/L	4.1221	ppb	08:50:03
1	Fe 238.204 Radial†	15.5	0.2	1.9790	ug/L	1.9790	ppb	08:50:03
1	K 766.490 Radial†	3410.6	-54.9	-10.570	ug/L	-10.570	ppb	08:49:43
1	Mg 279.077 IEC†	3.8	-0.2	-6.0303	ug/L	-6.0303	ppb	08:50:03
1	Na 589.592 Radial†	-1791.5	16.8	4.7833	ug/L	4.7833	ppb	08:49:43
1	Sr 421.552†	10.8	3.0	0.0196	ug/L	0.0196	ppb	08:49:43
1	Sc 361.383	906750.7	906750.7	99.101	%			08:51:00
1	Y 371.029	775288.8	775288.8	99.192	%			08:51:00
1	Ag 328.068†	524.0	15.9	0.0702	ug/L	0.0702	ppb	08:51:05
1	As 188.979†	-33.2	-2.3	-0.8060	ug/L	-0.8060	ppb	08:51:25
1	B 249.677†	-485.5	223.5	4.5780	ug/L	4.5780	ppb	08:51:05
1	Ba 233.527†	10.6	2.1	0.0142	ug/L	0.0142	ppb	08:51:25
1	Be 313.107†	-4305.3	31.0	0.0104	ug/L	0.0104	ppb	08:51:05
1	Cd 226.502†	-243.2	5.2	0.0488	ug/L	0.0488	ppb	08:51:25
1	Co 228.616†	-99.3	-11.3	-0.2097	ug/L	-0.2097	ppb	08:51:25
1	Cr 267.716†	103.8	-11.4	-0.1143	ug/L	-0.1143	ppb	08:51:05
1	Cu 324.752†	8047.8	22.5	0.0668	ug/L	0.0668	ppb	08:51:05
1	Mn 257.610†	633.2	-29.1	-0.0302	ug/L	-0.0302	ppb	08:51:05
1	Mo 202.031†	27.5	4.5	0.2795	ug/L	0.2795	ppb	08:51:25
1	Ni 231.604†	131.1	15.0	0.3280	ug/L	0.3280	ppb	08:51:25
1	P 214.914†	260.3	10.1	4.9086	ug/L	4.9086	ppb	08:51:25
1	Pb 220.353†	-72.7	27.4	2.8364	ug/L	2.8364	ppb	08:51:25
1	S 181.975 Axial†	62.8	1.0	1.1669	ug/L	1.1669	ppb	08:51:25
1	Sb 206.836†	42.3	1.9	0.5754	ug/L	0.5754	ppb	08:51:25
1	Se 196.026†	-29.4	5.7	2.9019	ug/L	2.9019	ppb	08:51:25
1	Si 251.611†	695.7	40.3	1.1575	ug/L	1.1575	ppb	08:51:25
1	Sn 189.927†	0.3	-3.9	-0.5728	ug/L	-0.5728	ppb	08:51:25
1	Ti 334.940†	-1784.8	-8.0	-0.0103	ug/L	-0.0103	ppb	08:51:05
1	Tl 190.801†	-38.6	7.0	1.9234	ug/L	1.9234	ppb	08:51:25
1	U 409.014†	-2751.3	-150.1	-4.4468	ug/L	-4.4468	ppb	08:51:00
1	V 292.402†	-1891.2	-108.1	-0.6839	ug/L	-0.6839	ppb	08:51:05
1	Zn 213.857†	937.2	87.5	0.7171	ug/L	0.7171	ppb	08:51:25
1	SiO2†	681.5	3.7	0.2287	ug/L	0.2287	ppb	08:52:31
2	Sc Radial	4979.5	4979.5	97.9	%			08:50:08
2	Y RADIAL	5270.2	5270.2	98.30	%			08:50:08
2	Al 396.153Radial†	0.1	19.7	15.965	ug/L	15.965	ppb	08:50:08
2	Ca 317.933Radial†	16.2	-1.7	-2.6775	ug/L	-2.6775	ppb	08:50:28
2	Fe 238.204 Radial†	15.1	0.7	6.3744	ug/L	6.3744	ppb	08:50:28
2	K 766.490 Radial†	3565.0	309.3	59.599	ug/L	59.599	ppb	08:50:08
2	Mg 279.077 IEC†	3.6	-0.2	-5.0696	ug/L	-5.0696	ppb	08:50:28
2	Na 589.592 Radial†	-1723.1	-21.9	-6.2432	ug/L	-6.2432	ppb	08:50:08
2	Sr 421.552†	9.1	1.8	0.0120	ug/L	0.0120	ppb	08:50:08
2	Sc 361.383	961209.9	961209.9	105.05	%			08:51:30
2	Y 371.029	821420.3	821420.3	105.09	%			08:51:30
2	Ag 328.068†	532.7	-5.7	-0.0201	ug/L	-0.0201	ppb	08:51:35
2	As 188.979†	-33.3	-0.4	-0.1590	ug/L	-0.1590	ppb	08:51:55
2	B 249.677†	-470.9	265.2	5.4296	ug/L	5.4296	ppb	08:51:35
2	Ba 233.527†	17.8	8.4	0.0624	ug/L	0.0624	ppb	08:51:55
2	Be 313.107†	-4324.7	258.7	0.0875	ug/L	0.0875	ppb	08:51:35
2	Cd 226.502†	-224.6	36.7	0.3448	ug/L	0.3448	ppb	08:51:55
2	Co 228.616†	-84.1	8.9	0.1666	ug/L	0.1666	ppb	08:51:55
2	Cr 267.716†	161.7	37.7	0.3790	ug/L	0.3790	ppb	08:51:35
2	Cu 324.752†	8113.0	-375.5	-1.1108	ug/L	-1.1108	ppb	08:51:35
2	Mn 257.610†	655.9	-43.7	-0.0451	ug/L	-0.0451	ppb	08:51:35
2	Mo 202.031†	24.4	-0.0	-0.0003	ug/L	-0.0003	ppb	08:51:55
2	Ni 231.604†	111.4	-11.3	-0.2474	ug/L	-0.2474	ppb	08:51:55

2	P 214.914†	252.2	-12.5	-5.9491 ug/L	-5.9491 ppb	08:51:55
2	Pb 220.353†	-88.5	16.5	1.7139 ug/L	1.7139 ppb	08:51:55
2	S 181.975 Axial†	67.3	1.7	1.9123 ug/L	1.9123 ppb	08:51:55
2	Sb 206.836†	46.3	3.4	0.9736 ug/L	0.9736 ppb	08:51:55
2	Se 196.026†	-38.2	-1.1	-0.5240 ug/L	-0.5240 ppb	08:51:55
2	Si 251.611†	672.9	-21.2	-0.6262 ug/L	-0.6262 ppb	08:51:55
2	Sn 189.927†	-0.9	-5.0	-0.7399 ug/L	-0.7399 ppb	08:51:55
2	Ti 334.940†	-1826.6	54.3	0.0850 ug/L	0.0850 ppb	08:51:35
2	Tl 190.801†	-50.8	-2.4	-0.6621 ug/L	-0.6621 ppb	08:51:55
2	U 409.014†	-2776.1	-16.4	-0.4865 ug/L	-0.4865 ppb	08:51:30
2	V 292.402†	-1819.2	68.5	0.4279 ug/L	0.4279 ppb	08:51:35
2	Zn 213.857†	923.6	21.0	0.1752 ug/L	0.1752 ppb	08:51:55
2	SiO2†	688.3	-28.8	-1.8236 ug/L	-1.8236 ppb	08:52:36
3	Sc Radial	5055.6	5055.6	99.4 %		08:50:33
3	Y RADIAL	5317.9	5317.9	99.19 %		08:50:33
3	Al 396.153Radial†	-16.9	2.5	2.0152 ug/L	2.0152 ppb	08:50:33
3	Ca 317.933Radial†	30.7	12.6	20.059 ug/L	20.059 ppb	08:50:53
3	Fe 238.204 Radial†	13.2	-1.4	-12.142 ug/L	-12.142 ppb	08:50:53
3	K 766.490 Radial†	3622.7	312.6	60.221 ug/L	60.221 ppb	08:50:33
3	Mg 279.077 IEC†	2.5	-1.3	-41.094 ug/L	-41.094 ppb	08:50:53
3	Na 589.592 Radial†	-1706.9	20.9	5.9488 ug/L	5.9488 ppb	08:50:33
3	Sr 421.552†	-10.5	-18.0	-0.1196 ug/L	-0.1196 ppb	08:50:33
3	Sc 361.383	906282.4	906282.4	99.050 %		08:52:01
3	Y 371.029	775521.4	775521.4	99.222 %		08:52:01
3	Ag 328.068†	437.2	-71.4	-0.3102 ug/L	-0.3102 ppb	08:52:06
3	As 188.979†	-38.7	-7.8	-2.7580 ug/L	-2.7580 ppb	08:52:26
3	B 249.677†	-500.9	207.7	4.2558 ug/L	4.2558 ppb	08:52:06
3	Ba 233.527†	33.3	25.1	0.1831 ug/L	0.1831 ppb	08:52:26
3	Be 313.107†	-4387.8	-54.5	-0.0183 ug/L	-0.0183 ppb	08:52:06
3	Cd 226.502†	-240.7	7.5	0.0721 ug/L	0.0721 ppb	08:52:26
3	Co 228.616†	-88.8	-0.6	-0.0112 ug/L	-0.0112 ppb	08:52:26
3	Cr 267.716†	71.6	-43.9	-0.4395 ug/L	-0.4395 ppb	08:52:06
3	Cu 324.752†	8170.4	150.6	0.4450 ug/L	0.4450 ppb	08:52:06
3	Mn 257.610†	678.3	16.8	0.0172 ug/L	0.0172 ppb	08:52:06
3	Mo 202.031†	26.9	3.9	0.2451 ug/L	0.2451 ppb	08:52:26
3	Ni 231.604†	115.4	-0.8	-0.0179 ug/L	-0.0179 ppb	08:52:26
3	P 214.914†	266.9	16.8	8.1879 ug/L	8.1879 ppb	08:52:26
3	Pb 220.353†	-94.6	5.2	0.5421 ug/L	0.5421 ppb	08:52:26
3	S 181.975 Axial†	60.9	-0.9	-1.0050 ug/L	-1.0050 ppb	08:52:26
3	Sb 206.836†	47.4	7.2	2.1286 ug/L	2.1286 ppb	08:52:26
3	Se 196.026†	-40.3	-5.4	-2.7816 ug/L	-2.7816 ppb	08:52:26
3	Si 251.611†	684.3	29.1	0.8132 ug/L	0.8132 ppb	08:52:26
3	Sn 189.927†	0.1	-4.0	-0.5960 ug/L	-0.5960 ppb	08:52:26
3	Ti 334.940†	-1742.5	33.8	0.0539 ug/L	0.0539 ppb	08:52:06
3	Tl 190.801†	-41.2	4.3	1.1873 ug/L	1.1873 ppb	08:52:26
3	U 409.014†	-2589.6	11.8	0.3530 ug/L	0.3530 ppb	08:52:01
3	V 292.402†	-1727.8	55.8	0.3557 ug/L	0.3557 ppb	08:52:06
3	Zn 213.857†	917.8	68.4	0.5635 ug/L	0.5635 ppb	08:52:26
3	SiO2†	716.5	39.3	2.3864 ug/L	2.3864 ppb	08:52:41

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	924747.6	101.07	%	3.451				3.41%
Sc Radial	5109.5	100	%	3.2				3.20%
Y 371.029	790743.5	101.17	%	3.399				3.36%
Y RADIAL	5402.7	100.8	%	3.54				3.51%
Ag 328.068†	-20.4	-0.0867	ug/L	0.19876	-0.0867	ppb	0.19876	229.28%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	4.9	4.0097	ug/L	11.09344	4.0097	ppb	11.09344	276.66%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.5	-1.2410	ug/L	1.35304	-1.2410	ppb	1.35304	109.03%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	232.1	4.7545	ug/L	0.60646	4.7545	ppb	0.60646	12.76%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	11.9	0.0866	ug/L	0.08704	0.0866	ppb	0.08704	100.55%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	78.4	0.0265	ug/L	0.05468	0.0265	ppb	0.05468	206.03%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.5	7.1678	ug/L	11.67022	7.1678	ppb	11.67022	162.81%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              16.5      0.1552 ug/L       0.16457      0.1552 ppb       0.16457 106.02%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -1.0     -0.0181 ug/L       0.18824     -0.0181 ppb       0.18824 >999.9%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -5.9     -0.0582 ug/L       0.41213     -0.0582 ppb       0.41213 707.65%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -67.5     -0.1997 ug/L       0.81140     -0.1997 ppb       0.81140 406.31%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -0.1     -1.2628 ug/L       9.67448     -1.2628 ppb       9.67448 766.09%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       189.0      36.417 ug/L       40.6931      36.417 ppb       40.6931 111.74%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.6     -17.398 ug/L       20.5268     -17.398 ppb       20.5268 117.98%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             -18.7     -0.0194 ug/L       0.03253     -0.0194 ppb       0.03253 167.57%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              2.8       0.1747 ug/L       0.15257      0.1747 ppb       0.15257  87.32%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       5.3       1.4963 ug/L       6.72790      1.4963 ppb       6.72790 449.64%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              1.0       0.0209 ug/L       0.28969      0.0209 ppb       0.28969 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               4.8       2.3825 ug/L       7.39931      2.3825 ppb       7.39931 310.57%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             16.4       1.6975 ug/L       1.14724      1.6975 ppb       1.14724  67.58%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         0.6       0.6914 ug/L       1.51566      0.6914 ppb       1.51566 219.23%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              4.2       1.2259 ug/L       0.80672      1.2259 ppb       0.80672  65.81%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -0.3     -0.1346 ug/L       2.86169     -0.1346 ppb       2.86169 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             16.1       0.4481 ug/L       0.94622      0.4481 ppb       0.94622 211.14%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -4.3     -0.6362 ug/L       0.09050     -0.6362 ppb       0.09050  14.22%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -4.4     -0.0293 ug/L       0.07825     -0.0293 ppb       0.07825 266.88%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             26.7       0.0429 ug/L       0.04858      0.0429 ppb       0.04858 113.31%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              3.0       0.8162 ug/L       1.33206      0.8162 ppb       1.33206 163.20%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -51.5     -1.5268 ug/L       2.56340     -1.5268 ppb       2.56340 167.89%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               5.4       0.0332 ug/L       0.62208      0.0332 ppb       0.62208 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             59.0       0.4853 ug/L       0.27927      0.4853 ppb       0.27927  57.55%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    4.7       0.2638 ug/L       2.10523      0.2638 ppb       2.10523 798.02%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 1/5/2010 08:54:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5057.5	5057.5	99.5	%			08:56:46
1	Y RADIAL	5327.2	5327.2	99.37	%			08:56:46
1	Al 396.153Radial†	234.4	255.2	206.87	ug/L	206.87	ppb	08:56:46
1	Ca 317.933Radial†	145.6	128.1	203.36	ug/L	203.36	ppb	08:57:06
1	Fe 238.204 Radial†	25.8	11.2	97.320	ug/L	97.320	ppb	08:57:06
1	K 766.490 Radial†	4076.9	767.8	147.72	ug/L	147.72	ppb	08:56:46
1	Mg 279.077 IEC†	13.6	9.8	303.65	ug/L	303.65	ppb	08:57:06
1	Na 589.592 Radial†	-717.6	1016.3	289.25	ug/L	289.25	ppb	08:56:46
1	Sr 421.552†	766.4	763.1	5.0587	ug/L	5.0587	ppb	08:56:46
1	Sc 361.383	915237.9	915237.9	100.03	%			08:58:03
1	Y 371.029	781517.7	781517.7	99.989	%			08:58:03
1	Ag 328.068†	1622.3	1109.1	4.7728	ug/L	4.7728	ppb	08:58:08
1	As 188.979†	53.9	85.1	29.992	ug/L	29.992	ppb	08:58:28
1	B 249.677†	1725.9	2438.8	49.925	ug/L	49.925	ppb	08:58:08
1	Ba 233.527†	697.0	688.2	5.0291	ug/L	5.0291	ppb	08:58:28
1	Be 313.107†	10435.9	14808.3	5.0066	ug/L	5.0066	ppb	08:58:08
1	Cd 226.502†	281.5	532.0	4.9973	ug/L	4.9973	ppb	08:58:28
1	Co 228.616†	155.8	244.7	4.5897	ug/L	4.5897	ppb	08:58:28
1	Cr 267.716†	663.9	547.5	5.4777	ug/L	5.4777	ppb	08:58:08
1	Cu 324.752†	11497.5	3396.0	10.054	ug/L	10.054	ppb	08:58:08
1	Mn 257.610†	10487.3	9816.3	10.306	ug/L	10.306	ppb	08:58:08
1	Mo 202.031†	188.9	165.6	10.397	ug/L	10.397	ppb	08:58:28
1	Ni 231.604†	339.5	222.1	4.8566	ug/L	4.8566	ppb	08:58:28
1	P 214.914†	553.4	300.7	145.91	ug/L	145.91	ppb	08:58:28
1	Pb 220.353†	5.6	106.3	11.060	ug/L	11.060	ppb	08:58:28
1	S 181.975 Axial†	150.2	87.8	100.27	ug/L	100.27	ppb	08:58:28
1	Sb 206.836†	68.6	27.9	8.5218	ug/L	8.5218	ppb	08:58:28
1	Se 196.026†	32.1	67.4	34.809	ug/L	34.809	ppb	08:58:28
1	Si 251.611†	4160.4	3497.5	100.17	ug/L	100.17	ppb	08:58:08
1	Sn 189.927†	67.5	63.3	9.4102	ug/L	9.4102	ppb	08:58:28
1	Ti 334.940†	1386.8	3179.4	4.9675	ug/L	4.9675	ppb	08:58:08
1	Tl 190.801†	28.7	74.6	20.514	ug/L	20.514	ppb	08:58:28
1	U 409.014†	-943.9	1682.6	49.835	ug/L	49.835	ppb	08:58:03
1	V 292.402†	-1007.8	792.7	5.2076	ug/L	5.2076	ppb	08:58:08
1	Zn 213.857†	2060.7	1201.9	9.8156	ug/L	9.8156	ppb	08:58:28
1	SiO2†	4202.9	3517.8	217.24	ug/L	217.24	ppb	08:59:34
2	Sc Radial	5023.0	5023.0	98.8	%			08:57:11
2	Y RADIAL	5299.1	5299.1	98.84	%			08:57:11
2	Al 396.153Radial†	216.4	238.6	193.37	ug/L	193.37	ppb	08:57:11
2	Ca 317.933Radial†	146.2	129.8	205.99	ug/L	205.99	ppb	08:57:31
2	Fe 238.204 Radial†	26.7	12.4	107.29	ug/L	107.29	ppb	08:57:31
2	K 766.490 Radial†	4274.7	996.3	191.73	ug/L	191.73	ppb	08:57:11
2	Mg 279.077 IEC†	16.8	13.2	407.44	ug/L	407.44	ppb	08:57:31
2	Na 589.592 Radial†	-683.1	1046.2	297.78	ug/L	297.78	ppb	08:57:11
2	Sr 421.552†	754.2	756.1	5.0121	ug/L	5.0121	ppb	08:57:11
2	Sc 361.383	907827.6	907827.6	99.218	%			08:58:33
2	Y 371.029	776531.7	776531.7	99.351	%			08:58:33
2	Ag 328.068†	1505.5	1004.5	4.3281	ug/L	4.3281	ppb	08:58:38
2	As 188.979†	54.9	86.6	30.509	ug/L	30.509	ppb	08:58:59
2	B 249.677†	1744.7	2471.8	50.600	ug/L	50.600	ppb	08:58:38
2	Ba 233.527†	704.8	701.8	5.1292	ug/L	5.1292	ppb	08:58:59
2	Be 313.107†	10481.7	14939.7	5.0510	ug/L	5.0510	ppb	08:58:38
2	Cd 226.502†	275.9	528.6	4.9651	ug/L	4.9651	ppb	08:58:59
2	Co 228.616†	174.7	265.1	4.9708	ug/L	4.9708	ppb	08:58:59
2	Cr 267.716†	627.9	516.7	5.1698	ug/L	5.1698	ppb	08:58:38
2	Cu 324.752†	11448.5	3440.4	10.186	ug/L	10.186	ppb	08:58:38
2	Mn 257.610†	10496.5	9911.1	10.404	ug/L	10.404	ppb	08:58:38
2	Mo 202.031†	187.0	165.2	10.377	ug/L	10.377	ppb	08:58:59
2	Ni 231.604†	370.1	255.6	5.5911	ug/L	5.5911	ppb	08:58:59

2	P 214.914†	543.3	295.0	143.11 ug/L	143.11 ppb	08:58:59
2	Pb 220.353†	10.1	111.0	11.540 ug/L	11.540 ppb	08:58:59
2	S 181.975 Axial†	143.5	82.3	93.978 ug/L	93.978 ppb	08:58:59
2	Sb 206.836†	74.4	34.2	10.414 ug/L	10.414 ppb	08:58:59
2	Se 196.026†	27.9	63.4	32.792 ug/L	32.792 ppb	08:58:59
2	Si 251.611†	4190.4	3561.7	101.99 ug/L	101.99 ppb	08:58:38
2	Sn 189.927†	70.4	66.8	9.9267 ug/L	9.9267 ppb	08:58:59
2	Ti 334.940†	1402.7	3206.7	5.0108 ug/L	5.0108 ppb	08:58:38
2	Tl 190.801†	36.5	82.8	22.743 ug/L	22.743 ppb	08:58:59
2	U 409.014†	-955.3	1663.4	49.267 ug/L	49.267 ppb	08:58:33
2	V 292.402†	-966.1	826.5	5.4194 ug/L	5.4194 ppb	08:58:38
2	Zn 213.857†	2069.6	1227.7	10.019 ug/L	10.019 ppb	08:58:59
2	SiO2†	4128.3	3476.8	214.67 ug/L	214.67 ppb	08:59:39
3	Sc Radial	4964.9	4964.9	97.6 %		08:57:36
3	Y RADIAL	5253.6	5253.6	97.99 %		08:57:36
3	Al 396.153Radial†	231.4	256.6	207.95 ug/L	207.95 ppb	08:57:36
3	Ca 317.933Radial†	147.5	132.8	210.83 ug/L	210.83 ppb	08:57:56
3	Fe 238.204 Radial†	23.2	9.1	78.846 ug/L	78.846 ppb	08:57:56
3	K 766.490 Radial†	4188.5	958.6	184.47 ug/L	184.47 ppb	08:57:36
3	Mg 279.077 IEC†	12.2	8.6	265.30 ug/L	265.30 ppb	08:57:56
3	Na 589.592 Radial†	-652.5	1069.5	304.41 ug/L	304.41 ppb	08:57:36
3	Sr 421.552†	751.0	761.8	5.0500 ug/L	5.0500 ppb	08:57:36
3	Sc 361.383	918143.8	918143.8	100.35 %		08:59:04
3	Y 371.029	785430.7	785430.7	100.49 %		08:59:04
3	Ag 328.068†	1659.2	1140.7	4.8974 ug/L	4.8974 ppb	08:59:09
3	As 188.979†	41.0	72.1	25.413 ug/L	25.413 ppb	08:59:29
3	B 249.677†	1823.7	2530.8	51.813 ug/L	51.813 ppb	08:59:09
3	Ba 233.527†	690.9	679.9	4.9692 ug/L	4.9692 ppb	08:59:29
3	Be 313.107†	10518.8	14858.0	5.0233 ug/L	5.0233 ppb	08:59:09
3	Cd 226.502†	276.5	526.2	4.9442 ug/L	4.9442 ppb	08:59:29
3	Co 228.616†	168.3	256.7	4.8160 ug/L	4.8160 ppb	08:59:29
3	Cr 267.716†	617.6	499.3	4.9931 ug/L	4.9931 ppb	08:59:09
3	Cu 324.752†	11482.3	3344.5	9.9006 ug/L	9.9006 ppb	08:59:09
3	Mn 257.610†	10491.8	9787.6	10.274 ug/L	10.274 ppb	08:59:09
3	Mo 202.031†	193.2	169.2	10.625 ug/L	10.625 ppb	08:59:29
3	Ni 231.604†	337.8	219.2	4.7946 ug/L	4.7946 ppb	08:59:29
3	P 214.914†	556.9	302.4	146.81 ug/L	146.81 ppb	08:59:29
3	Pb 220.353†	12.3	113.0	11.760 ug/L	11.760 ppb	08:59:29
3	S 181.975 Axial†	145.6	82.7	94.480 ug/L	94.480 ppb	08:59:29
3	Sb 206.836†	86.9	45.9	13.884 ug/L	13.884 ppb	08:59:29
3	Se 196.026†	23.9	59.1	30.537 ug/L	30.537 ppb	08:59:29
3	Si 251.611†	4204.2	3528.0	101.02 ug/L	101.02 ppb	08:59:09
3	Sn 189.927†	71.6	67.2	9.9852 ug/L	9.9852 ppb	08:59:29
3	Ti 334.940†	1388.1	3176.4	4.9599 ug/L	4.9599 ppb	08:59:09
3	Tl 190.801†	26.1	72.0	19.784 ug/L	19.784 ppb	08:59:29
3	U 409.014†	-688.8	1939.8	57.460 ug/L	57.460 ppb	08:59:04
3	V 292.402†	-939.6	863.9	5.6748 ug/L	5.6748 ppb	08:59:09
3	Zn 213.857†	2049.4	1184.1	9.6721 ug/L	9.6721 ppb	08:59:29
3	SiO2†	4168.4	3470.1	214.25 ug/L	214.25 ppb	08:59:44

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	913736.4	99.864	%	0.5814				0.58%
Sc Radial	5015.1	98.6	%	0.92				0.93%
Y 371.029	781160.0	99.943	%	0.5707				0.57%
Y RADIAL	5293.3	98.73	%	0.692				0.70%
Ag 328.068†	1084.8	4.6661	ug/L	0.29928	4.6661	ppb	0.29928	6.41%
QC value within limits for Ag 328.068 Recovery = 93.32%								
Al 396.153Radial†	250.2	202.73	ug/L	8.122	202.73	ppb	8.122	4.01%
QC value within limits for Al 396.153Radial Recovery = 101.36%								
As 188.979†	81.3	28.638	ug/L	2.8049	28.638	ppb	2.8049	9.79%
QC value within limits for As 188.979 Recovery = 95.46%								
B 249.677†	2480.5	50.779	ug/L	0.9566	50.779	ppb	0.9566	1.88%
QC value within limits for B 249.677 Recovery = 101.56%								
Ba 233.527†	690.0	5.0425	ug/L	0.08083	5.0425	ppb	0.08083	1.60%
QC value within limits for Ba 233.527 Recovery = 100.85%								
Be 313.107†	14868.7	5.0270	ug/L	0.02243	5.0270	ppb	0.02243	0.45%
QC value within limits for Be 313.107 Recovery = 100.54%								
Ca 317.933Radial†	130.3	206.73	ug/L	3.790	206.73	ppb	3.790	1.83%

QC value within limits for Ca 317.933Radial Recovery = 103.36%

Cd 226.502†	528.9	4.9689 ug/L	0.02673	4.9689 ppb	0.02673	0.54%
QC value within limits for Cd 226.502 Recovery = 99.38%						
Co 228.616†	255.5	4.7922 ug/L	0.19163	4.7922 ppb	0.19163	4.00%
QC value within limits for Co 228.616 Recovery = 95.84%						
Cr 267.716†	521.2	5.2135 ug/L	0.24526	5.2135 ppb	0.24526	4.70%
QC value within limits for Cr 267.716 Recovery = 104.27%						
Cu 324.752†	3393.6	10.047 ug/L	0.1428	10.047 ppb	0.1428	1.42%
QC value within limits for Cu 324.752 Recovery = 100.47%						
Fe 238.204 Radial†	10.9	94.485 ug/L	14.4327	94.485 ppb	14.4327	15.28%
QC value within limits for Fe 238.204 Radial Recovery = 94.49%						
K 766.490 Radial†	907.6	174.64 ug/L	23.594	174.64 ppb	23.594	13.51%
QC value within limits for K 766.490 Radial Recovery = 116.43%						
Mg 279.077 IEC†	10.5	325.46 ug/L	73.537	325.46 ppb	73.537	22.59%
QC value within limits for Mg 279.077 IEC Recovery = 108.49%						
Mn 257.610†	9838.4	10.328 ug/L	0.0678	10.328 ppb	0.0678	0.66%
QC value within limits for Mn 257.610 Recovery = 103.28%						
Mo 202.031†	166.7	10.466 ug/L	0.1373	10.466 ppb	0.1373	1.31%
QC value within limits for Mo 202.031 Recovery = 104.66%						
Na 589.592 Radial†	1044.0	297.14 ug/L	7.600	297.14 ppb	7.600	2.56%
QC value within limits for Na 589.592 Radial Recovery = 99.05%						
Ni 231.604†	232.3	5.0808 ug/L	0.44303	5.0808 ppb	0.44303	8.72%
QC value within limits for Ni 231.604 Recovery = 101.62%						
P 214.914†	299.4	145.28 ug/L	1.933	145.28 ppb	1.933	1.33%
QC value within limits for P 214.914 Recovery = 96.85%						
Pb 220.353†	110.1	11.453 ug/L	0.3576	11.453 ppb	0.3576	3.12%
QC value within limits for Pb 220.353 Recovery = 114.53%						
S 181.975 Axial†	84.3	96.243 ug/L	3.4968	96.243 ppb	3.4968	3.63%
QC value within limits for S 181.975 Axial Recovery = 96.24%						
Sb 206.836†	36.0	10.940 ug/L	2.7194	10.940 ppb	2.7194	24.86%
QC value within limits for Sb 206.836 Recovery = 109.40%						
Se 196.026†	63.3	32.712 ug/L	2.1371	32.712 ppb	2.1371	6.53%
QC value within limits for Se 196.026 Recovery = 109.04%						
Si 251.611†	3529.1	101.06 ug/L	0.915	101.06 ppb	0.915	0.91%
QC value within limits for Si 251.611 Recovery = 101.06%						
Sn 189.927†	65.8	9.7740 ug/L	0.31645	9.7740 ppb	0.31645	3.24%
QC value within limits for Sn 189.927 Recovery = 97.74%						
Sr 421.552†	760.3	5.0403 ug/L	0.02477	5.0403 ppb	0.02477	0.49%
QC value within limits for Sr 421.552 Recovery = 100.81%						
Ti 334.940†	3187.5	4.9794 ug/L	0.02744	4.9794 ppb	0.02744	0.55%
QC value within limits for Ti 334.940 Recovery = 99.59%						
Tl 190.801†	76.5	21.013 ug/L	1.5414	21.013 ppb	1.5414	7.34%
QC value within limits for Tl 190.801 Recovery = 105.07%						
U 409.014†	1761.9	52.188 ug/L	4.5752	52.188 ppb	4.5752	8.77%
QC value within limits for U 409.014 Recovery = 104.38%						
V 292.402†	827.7	5.4339 ug/L	0.23395	5.4339 ppb	0.23395	4.31%
QC value within limits for V 292.402 Recovery = 108.68%						
Zn 213.857†	1204.6	9.8354 ug/L	0.17410	9.8354 ppb	0.17410	1.77%
QC value within limits for Zn 213.857 Recovery = 98.35%						
SiO2†	3488.2	215.39 ug/L	1.620	215.39 ppb	1.620	0.75%
QC value within limits for SiO2 Recovery = 101.12%						

All analyte(s) passed QC.

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

Autosampler Location: 13
Date Collected: 1/5/2010 09:01:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4540.6	4540.6	89.3	%			09:03:54
1	Y RADIAL	4796.0	4796.0	89.46	%			09:03:54
1	Al 396.153Radial†	569006.8	637262.8	517590	ug/L	517590	ppb	09:03:49
1	Ca 317.933Radial†	276969.4	310165.9	492250	ug/L	492250	ppb	09:03:49
1	Fe 238.204 Radial†	19734.0	22085.9	191270	ug/L	191270	ppb	09:03:54
1	K 766.490 Radial†	2956.9	-19.8	10.986	ug/L	10.986	ppb	09:03:49
1	Mg 279.077 IEC†	14096.2	15782.7	487930	ug/L	487930	ppb	09:03:54
1	Na 589.592 Radial†	-1568.8	-19.2	-5.4527	ug/L	-5.4527	ppb	09:03:54
1	Sr 421.552†	531.8	588.1	-0.6626	ug/L	-0.6626	ppb	09:03:54
1	Sc 361.383	802482.7	802482.7	87.705	%			09:04:22
1	Y 371.029	673466.6	673466.6	86.165	%			09:04:22
1	Ag 328.068†	-10551.7	-12543.7	2.8417	ug/L	2.8417	ppb	09:04:22
1	As 188.979†	-109.2	-93.2	-3.4606	ug/L	-3.4606	ppb	09:04:42
1	B 249.677†	56.0	777.3	-9.4564	ug/L	-9.4564	ppb	09:04:22
1	Ba 233.527†	-657.3	-758.0	-0.6690	ug/L	-0.6690	ppb	09:04:42
1	Be 313.107†	-4258.0	-479.5	-0.2038	ug/L	-0.2038	ppb	09:04:22
1	Cd 226.502†	1279.2	1709.2	-3.0439	ug/L	-3.0439	ppb	09:04:42
1	Co 228.616†	-21.7	64.2	-1.5301	ug/L	-1.5301	ppb	09:04:42
1	Cr 267.716†	-83.4	-211.3	1.3210	ug/L	1.3210	ppb	09:04:42
1	Cu 324.752†	4326.8	-3164.9	0.3915	ug/L	0.3915	ppb	09:04:22
1	Mn 257.610†	-385.4	-1107.5	8.8242	ug/L	8.8242	ppb	09:04:22
1	Mo 202.031†	-232.7	-288.6	0.2289	ug/L	0.2289	ppb	09:04:42
1	Ni 231.604†	239.6	155.9	3.4102	ug/L	3.4102	ppb	09:04:42
1	P 214.914†	254.3	37.4	40.061	ug/L	40.061	ppb	09:04:42
1	Pb 220.353†	-1007.8	-1048.4	-8.1278	ug/L	-8.1278	ppb	09:04:42
1	S 181.975 Axial†	91.7	42.2	-53.608	ug/L	-53.608	ppb	09:04:42
1	Sb 206.836†	76.4	46.4	1.2701	ug/L	1.2701	ppb	09:04:42
1	Se 196.026†	-1102.5	-1221.8	-16.457	ug/L	-16.457	ppb	09:04:42
1	Si 251.611†	586.6	7.1	0.7300	ug/L	0.7300	ppb	09:04:42
1	Sn 189.927†	-396.7	-456.4	-13.717	ug/L	-13.717	ppb	09:04:42
1	Ti 334.940†	-13529.4	-13633.1	4.3070	ug/L	4.3070	ppb	09:04:22
1	Tl 190.801†	-101.6	-69.9	-5.1904	ug/L	-5.1904	ppb	09:04:42
1	U 409.014†	-1415.2	1012.6	5.9469	ug/L	5.9469	ppb	09:04:22
1	V 292.402†	524.7	2398.5	-3.1997	ug/L	-3.1997	ppb	09:04:42
1	Zn 213.857†	3417.8	3038.7	-1.6660	ug/L	-1.6660	ppb	09:04:42
1	SiO2†	514.3	-97.6	-4.8959	ug/L	-4.8959	ppb	09:05:39
2	Sc Radial	4561.8	4561.8	89.7	%			09:04:04
2	Y RADIAL	4846.9	4846.9	90.41	%			09:04:04
2	Al 396.153Radial†	556425.5	620277.0	503790	ug/L	503790	ppb	09:03:59
2	Ca 317.933Radial†	271286.1	302389.2	479910	ug/L	479910	ppb	09:03:59
2	Fe 238.204 Radial†	19833.6	22094.2	191340	ug/L	191340	ppb	09:04:04
2	K 766.490 Radial†	2879.7	-121.3	-9.1362	ug/L	-9.1362	ppb	09:03:59
2	Mg 279.077 IEC†	14140.4	15758.7	487190	ug/L	487190	ppb	09:04:04
2	Na 589.592 Radial†	-1461.1	109.0	31.033	ug/L	31.033	ppb	09:04:04
2	Sr 421.552†	541.4	596.0	-0.4954	ug/L	-0.4954	ppb	09:04:04
2	Sc 361.383	791734.4	791734.4	86.530	%			09:04:47
2	Y 371.029	664944.4	664944.4	85.074	%			09:04:47
2	Ag 328.068†	-10319.0	-12438.1	3.5001	ug/L	3.5001	ppb	09:04:47
2	As 188.979†	-102.1	-86.8	-1.1794	ug/L	-1.1794	ppb	09:05:08
2	B 249.677†	114.3	845.4	-8.0704	ug/L	-8.0704	ppb	09:04:47
2	Ba 233.527†	-688.3	-804.0	-1.0011	ug/L	-1.0011	ppb	09:05:08
2	Be 313.107†	-4086.0	-346.6	-0.1584	ug/L	-0.1584	ppb	09:04:47
2	Cd 226.502†	1264.3	1711.7	-3.0271	ug/L	-3.0271	ppb	09:05:08
2	Co 228.616†	-10.0	77.5	-1.2876	ug/L	-1.2876	ppb	09:05:08
2	Cr 267.716†	-68.5	-195.3	1.4823	ug/L	1.4823	ppb	09:05:08
2	Cu 324.752†	4191.9	-3253.8	0.1322	ug/L	0.1322	ppb	09:04:47
2	Mn 257.610†	-332.8	-1052.7	8.9027	ug/L	8.9027	ppb	09:04:47
2	Mo 202.031†	-249.7	-311.9	-1.2256	ug/L	-1.2256	ppb	09:05:08
2	Ni 231.604†	247.0	168.2	3.6787	ug/L	3.6787	ppb	09:05:08

2	P 214.914†	224.1	6.4	20.167 ug/L	20.167 ppb	09:05:08
2	Pb 220.353†	-987.4	-1040.4	-10.401 ug/L	-10.401 ppb	09:05:08
2	S 181.975 Axial†	111.5	66.5	-23.107 ug/L	-23.107 ppb	09:05:08
2	Sb 206.836†	70.8	41.1	0.0612 ug/L	0.0612 ppb	09:05:08
2	Se 196.026†	-1105.6	-1242.4	-28.142 ug/L	-28.142 ppb	09:05:08
2	Si 251.611†	560.9	-13.5	0.1668 ug/L	0.1668 ppb	09:05:08
2	Sn 189.927†	-384.0	-447.9	-13.740 ug/L	-13.740 ppb	09:05:08
2	Ti 334.940†	-13196.8	-13458.0	3.9356 ug/L	3.9356 ppb	09:04:47
2	Tl 190.801†	-99.2	-68.7	-5.2281 ug/L	-5.2281 ppb	09:05:08
2	U 409.014†	-1276.9	1150.6	10.025 ug/L	10.025 ppb	09:04:47
2	V 292.402†	625.3	2522.9	-2.4597 ug/L	-2.4597 ppb	09:05:08
2	Zn 213.857†	3440.6	3118.0	-0.9943 ug/L	-0.9943 ppb	09:05:08
2	SiO2†	624.5	37.7	3.5426 ug/L	3.5426 ppb	09:05:44
3	Sc Radial	4638.9	4638.9	91.2 %		09:04:15
3	Y RADIAL	4907.0	4907.0	91.53 %		09:04:15
3	Al 396.153Radial†	558373.0	612104.1	497150 ug/L	497150 ppb	09:04:10
3	Ca 317.933Radial†	271973.7	298117.4	473130 ug/L	473130 ppb	09:04:10
3	Fe 238.204 Radial†	20162.1	22086.9	191280 ug/L	191280 ppb	09:04:15
3	K 766.490 Radial†	3016.1	-25.0	9.2594 ug/L	9.2594 ppb	09:04:10
3	Mg 279.077 IEC†	14354.5	15731.4	486340 ug/L	486340 ppb	09:04:15
3	Na 589.592 Radial†	-1552.7	35.7	10.152 ug/L	10.152 ppb	09:04:15
3	Sr 421.552†	521.8	564.5	-0.6417 ug/L	-0.6417 ppb	09:04:15
3	Sc 361.383	797081.7	797081.7	87.115 %		09:05:13
3	Y 371.029	668879.3	668879.3	85.578 %		09:05:13
3	Ag 328.068†	-10401.5	-12452.8	3.5132 ug/L	3.5132 ppb	09:05:13
3	As 188.979†	-103.8	-87.9	-1.5793 ug/L	-1.5793 ppb	09:05:33
3	B 249.677†	-40.9	666.5	-11.726 ug/L	-11.726 ppb	09:05:13
3	Ba 233.527†	-676.9	-785.5	-0.8688 ug/L	-0.8688 ppb	09:05:33
3	Be 313.107†	-4078.8	-306.7	-0.1449 ug/L	-0.1449 ppb	09:05:13
3	Cd 226.502†	1298.5	1741.1	-2.7437 ug/L	-2.7437 ppb	09:05:33
3	Co 228.616†	-26.8	58.2	-1.6450 ug/L	-1.6450 ppb	09:05:33
3	Cr 267.716†	-65.3	-191.1	1.5228 ug/L	1.5228 ppb	09:05:33
3	Cu 324.752†	4425.9	-3017.8	0.8274 ug/L	0.8274 ppb	09:05:13
3	Mn 257.610†	-463.9	-1200.5	8.7569 ug/L	8.7569 ppb	09:05:13
3	Mo 202.031†	-238.3	-296.8	-0.2847 ug/L	-0.2847 ppb	09:05:33
3	Ni 231.604†	250.0	169.6	3.7110 ug/L	3.7110 ppb	09:05:33
3	P 214.914†	232.3	14.1	21.633 ug/L	21.633 ppb	09:05:33
3	Pb 220.353†	-1014.6	-1064.0	-14.329 ug/L	-14.329 ppb	09:05:33
3	S 181.975 Axial†	83.2	33.1	-59.969 ug/L	-59.969 ppb	09:05:33
3	Sb 206.836†	69.3	38.9	-0.4339 ug/L	-0.4339 ppb	09:05:33
3	Se 196.026†	-1117.4	-1247.4	-31.539 ug/L	-31.539 ppb	09:05:33
3	Si 251.611†	575.9	-0.7	0.5185 ug/L	0.5185 ppb	09:05:33
3	Sn 189.927†	-397.6	-460.5	-16.321 ug/L	-16.321 ppb	09:05:33
3	Ti 334.940†	-13268.2	-13437.7	3.6139 ug/L	3.6139 ppb	09:05:13
3	Tl 190.801†	-101.9	-71.0	-6.0342 ug/L	-6.0342 ppb	09:05:33
3	U 409.014†	-1296.8	1137.6	9.6495 ug/L	9.6495 ppb	09:05:13
3	V 292.402†	561.0	2444.2	-2.9508 ug/L	-2.9508 ppb	09:05:33
3	Zn 213.857†	3455.0	3107.8	-1.0470 ug/L	-1.0470 ppb	09:05:33
3	SiO2†	518.5	-88.8	-4.3255 ug/L	-4.3255 ppb	09:05:49

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	797099.6	87.117	%	0.5874				0.67%
Sc Radial	4580.4	90.1	%	1.02				1.13%
Y 371.029	669096.8	85.606	%	0.5457				0.64%
Y RADIAL	4849.9	90.46	%	1.037				1.15%
Ag 328.068†	-12478.2	3.2850	ug/L	0.38396	3.2850	ppb	0.38396	11.69%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	623214.6	506180	ug/L	10423.8	506180	ppb	10423.8	2.06%
QC value within limits for Al 396.153Radial Recovery = 101.24%								
As 188.979†	-89.3	-2.0731	ug/L	1.21811	-2.0731	ppb	1.21811	58.76%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	763.1	-9.7510	ug/L	1.84562	-9.7510	ppb	1.84562	18.93%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-782.5	-0.8463	ug/L	0.16716	-0.8463	ppb	0.16716	19.75%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-377.6	-0.1690	ug/L	0.03086	-0.1690	ppb	0.03086	18.26%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	303557.5	481770	ug/L	9694.7	481770	ppb	9694.7	2.01%

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   QC value within limits for Ca 317.933Radial  Recovery = 96.35%
Cd 226.502†          1720.7     -2.9383 ug/L       0.16867     -2.9383 ppb       0.16867   5.74%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†            66.6     -1.4876 ug/L       0.18245     -1.4876 ppb       0.18245  12.27%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†          -199.2      1.4421 ug/L       0.10674      1.4421 ppb       0.10674   7.40%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†         -3145.5      0.4504 ug/L       0.35133      0.4504 ppb       0.35133  78.01%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†  22089.0      191290 ug/L          39.6      191290 ppb          39.6   0.02%
   QC value within limits for Fe 238.204 Radial  Recovery = 95.65%
K 766.490 Radial†     -55.4      3.7030 ug/L      11.15258      3.7030 ppb      11.15258 301.18%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†     15757.6      487150 ug/L         794.2      487150 ppb         794.2   0.16%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.43%
Mn 257.610†         -1120.3      8.8279 ug/L       0.07296      8.8279 ppb       0.07296   0.83%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†          -299.1     -0.4271 ug/L       0.73763     -0.4271 ppb       0.73763 172.69%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     41.8      11.911 ug/L       18.3065      11.911 ppb       18.3065 153.70%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†           164.5      3.6000 ug/L       0.16514      3.6000 ppb       0.16514   4.59%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†             19.3      27.287 ug/L       11.0867      27.287 ppb       11.0867  40.63%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†         -1050.9     -10.953 ug/L        3.1372     -10.953 ppb        3.1372  28.64%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†       47.3     -45.562 ug/L       19.7046     -45.562 ppb       19.7046  43.25%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†            42.1      0.2992 ug/L       0.87653      0.2992 ppb       0.87653 293.00%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†         -1237.2     -25.379 ug/L        7.9115     -25.379 ppb        7.9115  31.17%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†            -2.4      0.4718 ug/L       0.28448      0.4718 ppb       0.28448  60.30%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†          -455.0     -14.593 ug/L        1.4965     -14.593 ppb        1.4965  10.26%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†           582.9     -0.5999 ug/L       0.09107     -0.5999 ppb       0.09107  15.18%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†        -13509.6      3.9522 ug/L       0.34683      3.9522 ppb       0.34683   8.78%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†           -69.9     -5.4842 ug/L       0.47668     -5.4842 ppb       0.47668   8.69%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†           1100.3      8.5403 ug/L       2.25375      8.5403 ppb       2.25375  26.39%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†           2455.2     -2.8701 ug/L       0.37654     -2.8701 ppb       0.37654  13.12%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†          3088.2     -1.2358 ug/L       0.37351     -1.2358 ppb       0.37351  30.23%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                 -49.5     -1.8930 ug/L       4.71592     -1.8930 ppb       4.71592 249.13%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 1/5/2010 09:08:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4517.3	4517.3	88.8	%			09:09:57
1	Y RADIAL	4789.2	4789.2	89.33	%			09:09:57
1	Al 396.153Radial†	563619.5	634489.8	515310	ug/L	515310	ppb	09:09:52
1	Ca 317.933Radial†	270732.4	304747.0	483650	ug/L	483650	ppb	09:09:52
1	Fe 238.204 Radial†	19462.4	21894.3	189620	ug/L	189620	ppb	09:09:57
1	K 766.490 Radial†	27871.9	28044.3	5411.5	ug/L	5411.5	ppb	09:09:52
1	Mg 279.077 IEC†	14019.9	15778.4	487810	ug/L	487810	ppb	09:09:57
1	Na 589.592 Radial†	15935.4	19676.4	5600.3	ug/L	5600.3	ppb	09:09:57
1	Sr 421.552†	67509.6	75988.5	499.46	ug/L	499.46	ppb	09:09:52
1	Sc 361.383	789134.3	789134.3	86.246	%			09:10:25
1	Y 371.029	662442.4	662442.4	84.754	%			09:10:25
1	Ag 328.068†	44452.9	51029.0	277.19	ug/L	277.19	ppb	09:10:25
1	As 188.979†	1186.8	1407.3	528.54	ug/L	528.54	ppb	09:10:30
1	B 249.677†	22096.6	26333.8	513.00	ug/L	513.00	ppb	09:10:25
1	Ba 233.527†	59420.0	68887.3	507.99	ug/L	507.99	ppb	09:10:25
1	Be 313.107†	632233.5	737432.0	249.81	ug/L	249.81	ppb	09:10:25
1	Cd 226.502†	45525.4	53036.0	480.19	ug/L	480.19	ppb	09:10:30
1	Co 228.616†	21877.6	25455.4	473.38	ug/L	473.38	ppb	09:10:30
1	Cr 267.716†	41748.3	48289.8	487.77	ug/L	487.77	ppb	09:10:30
1	Cu 324.752†	170637.0	189750.5	571.16	ug/L	571.16	ppb	09:10:25
1	Mn 257.610†	410310.0	475074.7	508.39	ug/L	508.39	ppb	09:10:25
1	Mo 202.031†	6630.9	7665.1	499.08	ug/L	499.08	ppb	09:10:30
1	Ni 231.604†	18776.3	21653.3	473.54	ug/L	473.54	ppb	09:10:30
1	P 214.914†	4898.5	5427.1	2598.2	ug/L	2598.2	ppb	09:10:30
1	Pb 220.353†	3024.6	3607.7	474.33	ug/L	474.33	ppb	09:10:30
1	S 181.975 Axial†	2143.1	2422.5	2665.9	ug/L	2665.9	ppb	09:10:30
1	Sb 206.836†	1585.8	1798.0	528.12	ug/L	528.12	ppb	09:10:30
1	Se 196.026†	3337.3	3904.8	2603.1	ug/L	2603.1	ppb	09:10:30
1	Si 251.611†	160735.1	185706.1	5320.7	ug/L	5320.7	ppb	09:10:25
1	Sn 189.927†	2566.9	2972.1	493.62	ug/L	493.62	ppb	09:10:30
1	Ti 334.940†	272011.9	317183.0	521.72	ug/L	521.72	ppb	09:10:25
1	Tl 190.801†	1458.2	1736.7	492.89	ug/L	492.89	ppb	09:10:30
1	U 409.014†	13327.6	18079.2	510.93	ug/L	510.93	ppb	09:10:25
1	V 292.402†	70670.3	83740.5	515.18	ug/L	515.18	ppb	09:10:25
1	Zn 213.857†	56464.0	64610.1	500.56	ug/L	500.56	ppb	09:10:30
1	SiO2†	160466.2	185371.9	11452	ug/L	11452	ppb	09:10:58
2	Sc Radial	4536.1	4536.1	89.2	%			09:10:08
2	Y RADIAL	4830.3	4830.3	90.10	%			09:10:08
2	Al 396.153Radial†	563032.6	631195.1	512640	ug/L	512640	ppb	09:10:03
2	Ca 317.933Radial†	270471.7	303188.2	481180	ug/L	481180	ppb	09:10:03
2	Fe 238.204 Radial†	19652.0	22015.8	190680	ug/L	190680	ppb	09:10:08
2	K 766.490 Radial†	27843.5	27882.1	5380.2	ug/L	5380.2	ppb	09:10:03
2	Mg 279.077 IEC†	14131.7	15838.1	489660	ug/L	489660	ppb	09:10:08
2	Na 589.592 Radial†	16032.0	19710.1	5609.9	ug/L	5609.9	ppb	09:10:08
2	Sr 421.552†	67608.7	75783.8	498.12	ug/L	498.12	ppb	09:10:03
2	Sc 361.383	788313.9	788313.9	86.157	%			09:10:36
2	Y 371.029	661765.0	661765.0	84.667	%			09:10:36
2	Ag 328.068†	44368.0	50984.2	277.39	ug/L	277.39	ppb	09:10:36
2	As 188.979†	1174.8	1394.8	524.29	ug/L	524.29	ppb	09:10:41
2	B 249.677†	21978.0	26222.8	510.59	ug/L	510.59	ppb	09:10:36
2	Ba 233.527†	59292.1	68810.5	507.46	ug/L	507.46	ppb	09:10:36
2	Be 313.107†	631707.6	737584.6	249.86	ug/L	249.86	ppb	09:10:36
2	Cd 226.502†	45485.6	53044.8	480.17	ug/L	480.17	ppb	09:10:41
2	Co 228.616†	21832.5	25429.5	472.88	ug/L	472.88	ppb	09:10:41
2	Cr 267.716†	41642.4	48217.2	487.06	ug/L	487.06	ppb	09:10:41
2	Cu 324.752†	170246.8	189503.5	570.48	ug/L	570.48	ppb	09:10:36
2	Mn 257.610†	409849.9	475035.7	508.42	ug/L	508.42	ppb	09:10:36
2	Mo 202.031†	6602.0	7639.5	497.58	ug/L	497.58	ppb	09:10:41
2	Ni 231.604†	18787.3	21688.7	474.31	ug/L	474.31	ppb	09:10:41

2	P 214.914†	4863.5	5392.4	2579.5 ug/L	2579.5 ppb	09:10:41
2	Pb 220.353†	2989.6	3570.7	469.81 ug/L	469.81 ppb	09:10:41
2	S 181.975 Axial†	2152.2	2435.6	2681.4 ug/L	2681.4 ppb	09:10:41
2	Sb 206.836†	1586.3	1800.5	528.90 ug/L	528.90 ppb	09:10:41
2	Se 196.026†	3321.4	3890.4	2598.6 ug/L	2598.6 ppb	09:10:41
2	Si 251.611†	160441.5	185559.2	5316.5 ug/L	5316.5 ppb	09:10:36
2	Sn 189.927†	2560.4	2967.7	492.72 ug/L	492.72 ppb	09:10:41
2	Ti 334.940†	271333.5	316723.9	520.87 ug/L	520.87 ppb	09:10:36
2	Tl 190.801†	1450.6	1729.6	490.87 ug/L	490.87 ppb	09:10:41
2	U 409.014†	13118.1	17852.2	504.07 ug/L	504.07 ppb	09:10:36
2	V 292.402†	70448.7	83568.5	513.95 ug/L	513.95 ppb	09:10:36
2	Zn 213.857†	56388.5	64590.7	500.27 ug/L	500.27 ppb	09:10:41
2	SiO2†	160963.5	186142.8	11500 ug/L	11500 ppb	09:11:03
3	Sc Radial	4508.4	4508.4	88.7 %		09:10:18
3	Y RADIAL	4758.0	4758.0	88.75 %		09:10:18
3	Al 396.153Radial†	572042.1	645231.4	524040 ug/L	524040 ppb	09:10:13
3	Ca 317.933Radial†	274854.2	309992.5	491980 ug/L	491980 ppb	09:10:13
3	Fe 238.204 Radial†	19387.4	21852.6	189260 ug/L	189260 ppb	09:10:18
3	K 766.490 Radial†	28151.7	28421.2	5484.5 ug/L	5484.5 ppb	09:10:13
3	Mg 279.077 IEC†	13962.4	15744.5	486760 ug/L	486760 ppb	09:10:18
3	Na 589.592 Radial†	15861.3	19627.9	5586.5 ug/L	5586.5 ppb	09:10:18
3	Sr 421.552†	68749.4	77535.7	509.64 ug/L	509.64 ppb	09:10:13
3	Sc 361.383	791610.2	791610.2	86.517 %		09:10:47
3	Y 371.029	665455.2	665455.2	85.140 %		09:10:47
3	Ag 328.068†	44451.8	50866.6	276.25 ug/L	276.25 ppb	09:10:47
3	As 188.979†	1209.2	1428.8	536.05 ug/L	536.05 ppb	09:10:52
3	B 249.677†	22063.5	26215.4	510.63 ug/L	510.63 ppb	09:10:47
3	Ba 233.527†	59498.9	68763.0	507.07 ug/L	507.07 ppb	09:10:47
3	Be 313.107†	632228.0	735132.9	249.03 ug/L	249.03 ppb	09:10:47
3	Cd 226.502†	45339.6	52656.1	476.65 ug/L	476.65 ppb	09:10:52
3	Co 228.616†	21788.4	25273.0	469.98 ug/L	469.98 ppb	09:10:52
3	Cr 267.716†	41481.8	47830.3	483.16 ug/L	483.16 ppb	09:10:52
3	Cu 324.752†	170844.8	189371.9	570.02 ug/L	570.02 ppb	09:10:47
3	Mn 257.610†	410558.4	473873.8	507.11 ug/L	507.11 ppb	09:10:47
3	Mo 202.031†	6624.5	7633.6	497.07 ug/L	497.07 ppb	09:10:52
3	Ni 231.604†	18637.9	21425.2	468.55 ug/L	468.55 ppb	09:10:52
3	P 214.914†	4852.7	5356.4	2566.8 ug/L	2566.8 ppb	09:10:52
3	Pb 220.353†	2946.3	3506.2	465.81 ug/L	465.81 ppb	09:10:52
3	S 181.975 Axial†	2167.3	2442.7	2687.2 ug/L	2687.2 ppb	09:10:52
3	Sb 206.836†	1622.3	1834.4	538.54 ug/L	538.54 ppb	09:10:52
3	Se 196.026†	3322.2	3875.2	2587.8 ug/L	2587.8 ppb	09:10:52
3	Si 251.611†	160950.4	185372.0	5311.2 ug/L	5311.2 ppb	09:10:47
3	Sn 189.927†	2511.6	2898.9	483.64 ug/L	483.64 ppb	09:10:52
3	Ti 334.940†	272015.1	316200.3	520.62 ug/L	520.62 ppb	09:10:47
3	Tl 190.801†	1446.5	1717.9	487.99 ug/L	487.99 ppb	09:10:52
3	U 409.014†	13078.9	17743.4	501.04 ug/L	501.04 ppb	09:10:47
3	V 292.402†	70563.9	83361.2	512.79 ug/L	512.79 ppb	09:10:47
3	Zn 213.857†	56327.0	64247.1	497.66 ug/L	497.66 ppb	09:10:52
3	SiO2†	159791.2	184009.8	11368 ug/L	11368 ppb	09:11:08

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	789686.1	86.307	%	0.1876				0.22%
Sc Radial	4520.6	88.9	%	0.28				0.31%
Y 371.029	663220.9	84.854	%	0.2513				0.30%
Y RADIAL	4792.5	89.39	%	0.676				0.76%
Ag 328.068†	50960.0	276.94	ug/L	0.608	276.94	ppb	0.608	0.22%
QC value within limits for Ag 328.068 Recovery = 110.78%								
Al 396.153Radial†	636972.1	517330	ug/L	5961.6	517330	ppb	5961.6	1.15%
QC value within limits for Al 396.153Radial Recovery = 103.47%								
As 188.979†	1410.3	529.63	ug/L	5.959	529.63	ppb	5.959	1.13%
QC value within limits for As 188.979 Recovery = 105.93%								
B 249.677†	26257.3	511.40	ug/L	1.380	511.40	ppb	1.380	0.27%
QC value within limits for B 249.677 Recovery = 102.28%								
Ba 233.527†	68820.2	507.51	ug/L	0.462	507.51	ppb	0.462	0.09%
QC value within limits for Ba 233.527 Recovery = 101.50%								
Be 313.107†	736716.5	249.57	ug/L	0.465	249.57	ppb	0.465	0.19%
QC value within limits for Be 313.107 Recovery = 99.83%								
Ca 317.933Radial†	305975.9	485600	ug/L	5657.5	485600	ppb	5657.5	1.17%

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   QC value within limits for Ca 317.933Radial  Recovery = 97.12%
Cd 226.502†          52912.3      479.00 ug/L         2.037      479.00 ppb         2.037   0.43%
   QC value within limits for Cd 226.502  Recovery = 95.80%
Co 228.616†          25386.0      472.08 ug/L         1.839      472.08 ppb         1.839   0.39%
   QC value within limits for Co 228.616  Recovery = 94.42%
Cr 267.716†          48112.4      486.00 ug/L         2.482      486.00 ppb         2.482   0.51%
   QC value within limits for Cr 267.716  Recovery = 97.20%
Cu 324.752†         189542.0      570.56 ug/L         0.573      570.56 ppb         0.573   0.10%
   QC value within limits for Cu 324.752  Recovery = 114.11%
Fe 238.204 Radial†   21920.9      189850 ug/L         734.4      189850 ppb         734.4   0.39%
   QC value within limits for Fe 238.204 Radial  Recovery = 94.93%
K 766.490 Radial†    28115.9      5425.4 ug/L         53.51      5425.4 ppb         53.51   0.99%
   QC value within limits for K 766.490 Radial  Recovery = 108.51%
Mg 279.077 IEC†      15787.0      488070 ug/L        1466.1      488070 ppb        1466.1   0.30%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.61%
Mn 257.610†         474661.4      507.97 ug/L         0.746      507.97 ppb         0.746   0.15%
   QC value within limits for Mn 257.610  Recovery = 101.59%
Mo 202.031†          7646.1       497.91 ug/L         1.043      497.91 ppb         1.043   0.21%
   QC value within limits for Mo 202.031  Recovery = 99.58%
Na 589.592 Radial†   19671.5      5598.9 ug/L         11.76      5598.9 ppb         11.76   0.21%
   QC value within limits for Na 589.592 Radial  Recovery = 111.98%
Ni 231.604†          21589.1      472.13 ug/L         3.129      472.13 ppb         3.129   0.66%
   QC value within limits for Ni 231.604  Recovery = 94.43%
P 214.914†            5392.0      2581.5 ug/L         15.78      2581.5 ppb         15.78   0.61%
   QC value within limits for P 214.914  Recovery = 103.26%
Pb 220.353†          3561.5       469.98 ug/L         4.264      469.98 ppb         4.264   0.91%
   QC value within limits for Pb 220.353  Recovery = 94.00%
S 181.975 Axial†     2433.6       2678.2 ug/L         11.01      2678.2 ppb         11.01   0.41%
   QC value within limits for S 181.975 Axial  Recovery = 107.13%
Sb 206.836†          1811.0       531.85 ug/L         5.803      531.85 ppb         5.803   1.09%
   QC value within limits for Sb 206.836  Recovery = 106.37%
Se 196.026†          3890.1       2596.5 ug/L          7.88      2596.5 ppb          7.88   0.30%
   QC value within limits for Se 196.026  Recovery = 103.86%
Si 251.611†        185545.8       5316.1 ug/L          4.79      5316.1 ppb          4.79   0.09%
   QC value within limits for Si 251.611  Recovery = 106.32%
Sn 189.927†          2946.2       489.99 ug/L         5.522      489.99 ppb         5.522   1.13%
   QC value within limits for Sn 189.927  Recovery = 98.00%
Sr 421.552†         76436.0       502.41 ug/L         6.300      502.41 ppb         6.300   1.25%
   QC value within limits for Sr 421.552  Recovery = 100.48%
Ti 334.940†        316702.4       521.07 ug/L         0.576      521.07 ppb         0.576   0.11%
   QC value within limits for Ti 334.940  Recovery = 104.21%
Tl 190.801†          1728.1       490.59 ug/L         2.462      490.59 ppb         2.462   0.50%
   QC value within limits for Tl 190.801  Recovery = 98.12%
U 409.014†           17891.6      505.35 ug/L         5.070      505.35 ppb         5.070   1.00%
   QC value within limits for U 409.014  Recovery = 101.07%
V 292.402†           83556.7      513.97 ug/L         1.197      513.97 ppb         1.197   0.23%
   QC value within limits for V 292.402  Recovery = 102.79%
Zn 213.857†          64482.7      499.50 ug/L         1.596      499.50 ppb         1.596   0.32%
   QC value within limits for Zn 213.857  Recovery = 99.90%
SiO2†              185174.9       11440 ug/L          66.9       11440 ppb          66.9   0.58%
   QC value within limits for SiO2  Recovery = 106.97%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 1/5/2010 09:13:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4505.6	4505.6	88.6	%			09:15:15
1	Y RADIAL	4756.0	4756.0	88.71	%			09:15:15
1	Al 396.153Radial†	544707.3	614784.9	499330	ug/L	499330	ppb	09:15:10
1	Ca 317.933Radial†	263837.2	297752.7	472550	ug/L	472550	ppb	09:15:10
1	Fe 238.204 Radial†	45246.7	51051.5	442110	ug/L	442110	ppb	09:15:15
1	K 766.490 Radial†	4089.2	1283.9	42.490	ug/L	42.490	ppb	09:15:10
1	Mg 279.077 IEC†	13587.4	15331.0	473750	ug/L	473750	ppb	09:15:15
1	Na 589.592 Radial†	1609025.4	1817709.7	517360	ug/L	517360	ppb	09:15:10
1	Sr 421.552†	728.5	814.7	1.0229	ug/L	1.0229	ppb	09:15:15
1	Sc 361.383	744362.4	744362.4	81.353	%			09:15:43
1	Y 371.029	626793.1	626793.1	80.193	%			09:15:43
1	Ag 328.068†	-24939.2	-31168.3	-6.3608	ug/L	-6.3608	ppb	09:15:43
1	As 188.979†	-217.5	-236.1	-15.024	ug/L	-15.024	ppb	09:16:04
1	B 249.677†	907.3	1828.6	-21.211	ug/L	-21.211	ppb	09:15:43
1	Ba 233.527†	-1912.9	-2359.9	-5.9955	ug/L	-5.9955	ppb	09:16:04
1	Be 313.107†	-11092.2	-9259.2	-3.1692	ug/L	-3.1692	ppb	09:15:43
1	Cd 226.502†	3384.9	4411.4	-2.7051	ug/L	-2.7051	ppb	09:16:04
1	Co 228.616†	184.7	316.0	-0.4642	ug/L	-0.4642	ppb	09:16:04
1	Cr 267.716†	112.3	21.8	3.1340	ug/L	3.1340	ppb	09:16:04
1	Cu 324.752†	742.4	-7185.7	1.2897	ug/L	1.2897	ppb	09:15:43
1	Mn 257.610†	-26746.8	-33545.5	0.0576	ug/L	0.0576	ppb	09:15:43
1	Mo 202.031†	-523.4	-666.7	0.5502	ug/L	0.5502	ppb	09:15:43
1	Ni 231.604†	285.2	233.2	5.1003	ug/L	5.1003	ppb	09:16:04
1	P 214.914†	657.6	555.8	87.457	ug/L	87.457	ppb	09:16:04
1	Pb 220.353†	-726.4	-792.2	-6.3349	ug/L	-6.3349	ppb	09:16:04
1	S 181.975 Axial†	121.2	86.6	0.7138	ug/L	0.7138	ppb	09:16:04
1	Sb 206.836†	56.9	29.3	0.0256	ug/L	0.0256	ppb	09:16:04
1	Se 196.026†	-2650.9	-3223.2	-310.81	ug/L	-310.81	ppb	09:16:04
1	Si 251.611†	-410.2	-1165.9	-32.580	ug/L	-32.580	ppb	09:16:04
1	Sn 189.927†	-438.4	-543.0	-25.253	ug/L	-25.253	ppb	09:16:04
1	Ti 334.940†	-13311.1	-14569.2	-5.0844	ug/L	-5.0844	ppb	09:15:43
1	Tl 190.801†	-143.0	-129.9	-22.361	ug/L	-22.361	ppb	09:16:04
1	U 409.014†	427589.7	528224.3	15597	ug/L	15597	ppb	09:15:43
1	V 292.402†	1942.7	4188.2	-0.4354	ug/L	-0.4354	ppb	09:15:43
1	Zn 213.857†	6320.7	6911.3	17.632	ug/L	17.632	ppb	09:16:04
1	SiO2†	-424.0	-1205.2	-72.680	ug/L	-72.680	ppb	09:17:00
2	Sc Radial	4430.2	4430.2	87.1	%			09:15:26
2	Y RADIAL	4696.4	4696.4	87.60	%			09:15:26
2	Al 396.153Radial†	544999.2	625585.1	508100	ug/L	508100	ppb	09:15:21
2	Ca 317.933Radial†	262592.2	301392.6	478330	ug/L	478330	ppb	09:15:21
2	Fe 238.204 Radial†	44669.2	51257.9	443900	ug/L	443900	ppb	09:15:26
2	K 766.490 Radial†	4127.1	1405.9	64.185	ug/L	64.185	ppb	09:15:21
2	Mg 279.077 IEC†	13412.3	15391.1	475600	ug/L	475600	ppb	09:15:26
2	Na 589.592 Radial†	1598721.9	1836796.0	522790	ug/L	522790	ppb	09:15:21
2	Sr 421.552†	740.2	842.2	1.1518	ug/L	1.1518	ppb	09:15:26
2	Sc 361.383	760932.7	760932.7	83.164	%			09:16:09
2	Y 371.029	640309.8	640309.8	81.922	%			09:16:09
2	Ag 328.068†	-24214.1	-29628.9	1.4560	ug/L	1.4560	ppb	09:16:09
2	As 188.979†	-210.3	-221.6	-9.6442	ug/L	-9.6442	ppb	09:16:29
2	B 249.677†	875.5	1766.1	-22.729	ug/L	-22.729	ppb	09:16:09
2	Ba 233.527†	-1917.0	-2313.7	-5.6156	ug/L	-5.6156	ppb	09:16:29
2	Be 313.107†	-10782.8	-8590.3	-2.9404	ug/L	-2.9404	ppb	09:16:09
2	Cd 226.502†	3392.1	4329.5	-3.6546	ug/L	-3.6546	ppb	09:16:29
2	Co 228.616†	189.5	316.9	-0.4696	ug/L	-0.4696	ppb	09:16:29
2	Cr 267.716†	31.7	-78.1	2.4248	ug/L	2.4248	ppb	09:16:29
2	Cu 324.752†	821.5	-7110.5	1.6037	ug/L	1.6037	ppb	09:16:09
2	Mn 257.610†	-25726.4	-31602.6	2.2403	ug/L	2.2403	ppb	09:16:09
2	Mo 202.031†	-501.3	-626.0	3.2734	ug/L	3.2734	ppb	09:16:09
2	Ni 231.604†	272.9	210.8	4.6097	ug/L	4.6097	ppb	09:16:29

2	P 214.914†	628.2	502.7	62.992 ug/L	62.992 ppb	09:16:29
2	Pb 220.353†	-731.6	-779.0	-3.1490 ug/L	-3.1490 ppb	09:16:29
2	S 181.975 Axial†	133.2	97.8	11.738 ug/L	11.738 ppb	09:16:29
2	Sb 206.836†	51.5	21.3	-2.4380 ug/L	-2.4380 ppb	09:16:29
2	Se 196.026†	-2607.9	-3100.6	-241.97 ug/L	-241.97 ppb	09:16:29
2	Si 251.611†	-328.4	-1056.6	-29.502 ug/L	-29.502 ppb	09:16:29
2	Sn 189.927†	-431.6	-523.1	-21.669 ug/L	-21.669 ppb	09:16:29
2	Ti 334.940†	-12766.1	-13557.5	-2.8395 ug/L	-2.8395 ppb	09:16:09
2	Tl 190.801†	-135.7	-117.2	-18.621 ug/L	-18.621 ppb	09:16:29
2	U 409.014†	414330.1	500834.8	14785 ug/L	14785 ppb	09:16:09
2	V 292.402†	1836.8	4008.9	-3.3326 ug/L	-3.3326 ppb	09:16:09
2	Zn 213.857†	6282.1	6695.7	15.707 ug/L	15.707 ppb	09:16:29
2	SiO2†	-501.6	-1287.1	-77.882 ug/L	-77.882 ppb	09:17:06
3	Sc Radial	4310.4	4310.4	84.8 %		09:15:36
3	Y RADIAL	4579.6	4579.6	85.42 %		09:15:36
3	Al 396.153Radial†	534083.2	630094.4	511770 ug/L	511770 ppb	09:15:31
3	Ca 317.933Radial†	258174.7	304558.6	483350 ug/L	483350 ppb	09:15:31
3	Fe 238.204 Radial†	44485.4	52466.1	454360 ug/L	454360 ppb	09:15:36
3	K 766.490 Radial†	4061.1	1459.7	72.916 ug/L	72.916 ppb	09:15:31
3	Mg 279.077 IEC†	13349.4	15744.9	486530 ug/L	486530 ppb	09:15:36
3	Na 589.592 Radial†	1567100.1	1850495.5	526690 ug/L	526690 ppb	09:15:31
3	Sr 421.552†	675.5	789.4	0.7550 ug/L	0.7550 ppb	09:15:36
3	Sc 361.383	770565.3	770565.3	84.217 %		09:16:35
3	Y 371.029	648167.4	648167.4	82.928 %		09:16:35
3	Ag 328.068†	-24879.2	-30054.6	2.9464 ug/L	2.9464 ppb	09:16:35
3	As 188.979†	-234.7	-247.5	-17.132 ug/L	-17.132 ppb	09:16:55
3	B 249.677†	787.2	1648.1	-26.536 ug/L	-26.536 ppb	09:16:35
3	Ba 233.527†	-1922.2	-2290.9	-5.1859 ug/L	-5.1859 ppb	09:16:55
3	Be 313.107†	-11107.3	-8813.5	-3.0172 ug/L	-3.0172 ppb	09:16:35
3	Cd 226.502†	3405.8	4294.7	-5.0266 ug/L	-5.0266 ppb	09:16:55
3	Co 228.616†	225.7	357.0	0.1188 ug/L	0.1188 ppb	09:16:55
3	Cr 267.716†	49.1	-57.9	2.7747 ug/L	2.7747 ppb	09:16:55
3	Cu 324.752†	693.5	-7274.8	1.6510 ug/L	1.6510 ppb	09:16:35
3	Mn 257.610†	-26381.5	-31993.7	2.6696 ug/L	2.6696 ppb	09:16:35
3	Mo 202.031†	-577.8	-709.4	-0.9521 ug/L	-0.9521 ppb	09:16:35
3	Ni 231.604†	346.7	294.3	6.4369 ug/L	6.4369 ppb	09:16:55
3	P 214.914†	684.8	560.6	84.228 ug/L	84.228 ppb	09:16:55
3	Pb 220.353†	-707.8	-739.7	0.8696 ug/L	0.8696 ppb	09:16:55
3	S 181.975 Axial†	121.4	81.8	-7.2699 ug/L	-7.2699 ppb	09:16:55
3	Sb 206.836†	59.1	29.5	-0.0504 ug/L	-0.0504 ppb	09:16:55
3	Se 196.026†	-2651.3	-3112.9	-217.41 ug/L	-217.41 ppb	09:16:55
3	Si 251.611†	-456.6	-1203.9	-33.645 ug/L	-33.645 ppb	09:16:55
3	Sn 189.927†	-434.2	-519.8	-20.514 ug/L	-20.514 ppb	09:16:55
3	Ti 334.940†	-13331.7	-14037.2	-3.3831 ug/L	-3.3831 ppb	09:16:35
3	Tl 190.801†	-126.4	-104.2	-14.973 ug/L	-14.973 ppb	09:16:55
3	U 409.014†	423055.3	504967.2	14906 ug/L	14906 ppb	09:16:35
3	V 292.402†	1890.1	4044.5	-4.2897 ug/L	-4.2897 ppb	09:16:35
3	Zn 213.857†	6308.4	6632.4	14.260 ug/L	14.260 ppb	09:16:55
3	SiO2†	-476.0	-1249.2	-75.350 ug/L	-75.350 ppb	09:17:11

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	758620.1	82.911	%	1.4485				1.75%
Sc Radial	4415.4	86.8	%	1.94				2.23%
Y 371.029	638423.4	81.681	%	1.3832				1.69%
Y RADIAL	4677.3	87.24	%	1.673				1.92%
Ag 328.068†	-30283.9	-0.6528	ug/L	4.99912	-0.6528	ppb	4.99912	765.82%
Al 396.153Radial†	623488.1	506400	ug/L	6389.8	506400	ppb	6389.8	1.26%
QC value within limits for Al 396.153Radial Recovery = 101.28%								
As 188.979†	-235.1	-13.933	ug/L	3.8612	-13.933	ppb	3.8612	27.71%
B 249.677†	1747.6	-23.492	ug/L	2.7430	-23.492	ppb	2.7430	11.68%
Ba 233.527†	-2321.5	-5.5990	ug/L	0.40508	-5.5990	ppb	0.40508	7.23%
Be 313.107†	-8887.7	-3.0423	ug/L	0.11645	-3.0423	ppb	0.11645	3.83%
Ca 317.933Radial†	301234.6	478080	ug/L	5405.1	478080	ppb	5405.1	1.13%
QC value within limits for Ca 317.933Radial Recovery = 95.62%								
Cd 226.502†	4345.2	-3.7954	ug/L	1.16712	-3.7954	ppb	1.16712	30.75%
Co 228.616†	330.0	-0.2717	ug/L	0.33816	-0.2717	ppb	0.33816	124.49%
Cr 267.716†	-38.0	2.7778	ug/L	0.35462	2.7778	ppb	0.35462	12.77%
Cu 324.752†	-7190.3	1.5148	ug/L	0.19637	1.5148	ppb	0.19637	12.96%

Fe 238.204 Radial†	51591.8	446790	ug/L	6617.8	446790	ppb	6617.8	1.48%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 89.36%								
K 766.490 Radial†	1383.1	59.864	ug/L	15.6667	59.864	ppb	15.6667	26.17%
Mg 279.077 IEC†	15489.0	478630	ug/L	6909.2	478630	ppb	6909.2	1.44%
QC value within limits for Mg 279.077 IEC Recovery = 95.73%								
Mn 257.610†	-32380.6	1.6558	ug/L	1.40068	1.6558	ppb	1.40068	84.59%
Mo 202.031†	-667.4	0.9572	ug/L	2.14198	0.9572	ppb	2.14198	223.78%
Na 589.592 Radial†	1835000.4	522280	ug/L	4686.7	522280	ppb	4686.7	0.90%
QC value within limits for Na 589.592 Radial Recovery = 104.46%								
Ni 231.604†	246.1	5.3823	ug/L	0.94564	5.3823	ppb	0.94564	17.57%
P 214.914†	539.7	78.226	ug/L	13.2914	78.226	ppb	13.2914	16.99%
Pb 220.353†	-770.3	-2.8714	ug/L	3.61027	-2.8714	ppb	3.61027	125.73%
S 181.975 Axial†	88.7	1.7271	ug/L	9.54416	1.7271	ppb	9.54416	552.61%
Sb 206.836†	26.7	-0.8209	ug/L	1.40095	-0.8209	ppb	1.40095	170.65%
Se 196.026†	-3145.5	-256.73	ug/L	48.421	-256.73	ppb	48.421	18.86%
Si 251.611†	-1142.1	-31.909	ug/L	2.1515	-31.909	ppb	2.1515	6.74%
Sn 189.927†	-528.6	-22.479	ug/L	2.4712	-22.479	ppb	2.4712	10.99%
Sr 421.552†	815.4	0.9766	ug/L	0.20243	0.9766	ppb	0.20243	20.73%
Ti 334.940†	-14054.6	-3.7690	ug/L	1.17115	-3.7690	ppb	1.17115	31.07%
Tl 190.801†	-117.1	-18.652	ug/L	3.6944	-18.652	ppb	3.6944	19.81%
U 409.014†	511342.1	15096	ug/L	437.9	15096	ppb	437.9	2.90%
QC value within limits for U 409.014 Recovery = 100.64%								
V 292.402†	4080.6	-2.6859	ug/L	2.00690	-2.6859	ppb	2.00690	74.72%
Zn 213.857†	6746.5	15.866	ug/L	1.6917	15.866	ppb	1.6917	10.66%
SiO2†	-1247.2	-75.304	ug/L	2.6015	-75.304	ppb	2.6015	3.45%

QC Failed. Continue with analysis.

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

Autosampler Location: 16
Date Collected: 1/5/2010 09:19:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4807.8	4807.8	94.5	%			09:21:18
1	Y RADIAL	4996.5	4996.5	93.20	%			09:21:18
1	Al 396.153Radial†	563.5	615.6	75.558	ug/L	75.558	ppb	09:21:18
1	Ca 317.933Radial†	28.8	12.2	19.357	ug/L	19.357	ppb	09:21:38
1	Fe 238.204 Radial†	-19.7	-35.5	-4.6924	ug/L	-4.6924	ppb	09:21:38
1	K 766.490 Radial†	1438956.5	1518621.3	292500	ug/L	292500	ppb	09:21:13
1	Mg 279.077 IEC†	-6.3	-10.5	-124.67	ug/L	-124.67	ppb	09:21:38
1	Na 589.592 Radial†	-912.5	772.6	219.90	ug/L	219.90	ppb	09:21:18
1	Sr 421.552†	1379940.7	1459525.5	9679.2	ug/L	9679.2	ppb	09:21:13
1	Sc 361.383	866597.9	866597.9	94.712	%			09:22:55
1	Y 371.029	726277.9	726277.9	92.921	%			09:22:55
1	Ag 328.068†	-7699.3	-8641.9	2.5599	ug/L	2.5599	ppb	09:23:00
1	As 188.979†	28019.0	29614.4	10514	ug/L	10514	ppb	09:23:00
1	B 249.677†	234120.5	247904.5	5053.2	ug/L	5053.2	ppb	09:22:55
1	Ba 233.527†	1893492.4	1999194.3	14592	ug/L	14592	ppb	09:22:55
1	Be 313.107†	8198170.6	8660236.0	2941.7	ug/L	2941.7	ppb	09:22:49
1	Cd 226.502†	991214.4	1046802.8	9852.4	ug/L	9852.4	ppb	09:22:55
1	Co 228.616†	486164.1	513394.8	9599.0	ug/L	9599.0	ppb	09:23:00
1	Cr 267.716†	2302566.4	2430998.6	24365	ug/L	24365	ppb	09:22:55
1	Cu 324.752†	6542959.9	6900144.0	20418	ug/L	20418	ppb	09:22:49
1	Mn 257.610†	8685760.2	9170003.4	9623.4	ug/L	9623.4	ppb	09:22:49
1	Mo 202.031†	149675.1	158008.0	9913.3	ug/L	9913.3	ppb	09:23:00
1	Ni 231.604†	432469.0	456495.6	9983.4	ug/L	9983.4	ppb	09:22:55
1	P 214.914†	35178.1	36889.5	14955	ug/L	14955	ppb	09:23:00
1	Pb 220.353†	226740.6	239499.9	24804	ug/L	24804	ppb	09:23:00
1	S 181.975 Axial†	43724.0	46102.6	52664	ug/L	52664	ppb	09:23:00
1	Sb 206.836†	33485.4	35314.1	10267	ug/L	10267	ppb	09:23:00
1	Se 196.026†	19520.9	20646.0	10594	ug/L	10594	ppb	09:23:00
1	Si 251.611†	1623156.9	1713113.3	48887	ug/L	48887	ppb	09:22:55
1	Sn 189.927†	67415.9	71175.5	10551	ug/L	10551	ppb	09:23:00
1	Ti 334.940†	5986897.7	6322929.1	9896.9	ug/L	9896.9	ppb	09:22:49
1	Tl 190.801†	34534.2	36508.1	10060	ug/L	10060	ppb	09:23:00
1	U 409.014†	-1829.7	694.3	-26.415	ug/L	-26.415	ppb	09:22:55
1	V 292.402†	1527091.9	1614147.1	10257	ug/L	10257	ppb	09:22:55
1	Zn 213.857†	1655856.6	1747442.1	14267	ug/L	14267	ppb	09:22:55
1	SiO2†	1610259.0	1699473.0	104560	ug/L	104560	ppb	09:23:48
2	Sc Radial	4829.9	4829.9	95.0	%			09:21:48
2	Y RADIAL	5075.7	5075.7	94.68	%			09:21:48
2	Al 396.153Radial†	546.1	594.5	65.724	ug/L	65.724	ppb	09:21:48
2	Ca 317.933Radial†	23.9	6.9	10.927	ug/L	10.927	ppb	09:22:08
2	Fe 238.204 Radial†	-17.5	-33.1	11.885	ug/L	11.885	ppb	09:22:08
2	K 766.490 Radial†	1441317.4	1514140.6	291630	ug/L	291630	ppb	09:21:43
2	Mg 279.077 IEC†	-1.8	-5.8	18.116	ug/L	18.116	ppb	09:22:08
2	Na 589.592 Radial†	-904.5	785.5	223.57	ug/L	223.57	ppb	09:21:48
2	Sr 421.552†	1380760.9	1453708.4	9640.7	ug/L	9640.7	ppb	09:21:43
2	Sc 361.383	872883.9	872883.9	95.399	%			09:23:15
2	Y 371.029	731763.1	731763.1	93.623	%			09:23:15
2	Ag 328.068†	-7675.9	-8558.8	2.2977	ug/L	2.2977	ppb	09:23:20
2	As 188.979†	27810.6	29183.0	10362	ug/L	10362	ppb	09:23:20
2	B 249.677†	232154.9	244063.9	4974.9	ug/L	4974.9	ppb	09:23:15
2	Ba 233.527†	1877696.6	1968239.8	14366	ug/L	14366	ppb	09:23:15
2	Be 313.107†	8178002.7	8576761.6	2913.4	ug/L	2913.4	ppb	09:23:09
2	Cd 226.502†	980884.0	1028437.6	9679.5	ug/L	9679.5	ppb	09:23:15
2	Co 228.616†	482458.2	505813.7	9457.1	ug/L	9457.1	ppb	09:23:20
2	Cr 267.716†	2281295.2	2391194.2	23966	ug/L	23966	ppb	09:23:15
2	Cu 324.752†	6530636.9	6837478.0	20233	ug/L	20233	ppb	09:23:09
2	Mn 257.610†	8666319.9	9083584.4	9532.7	ug/L	9532.7	ppb	09:23:09
2	Mo 202.031†	148183.3	155306.2	9743.8	ug/L	9743.8	ppb	09:23:20
2	Ni 231.604†	427779.6	448291.9	9804.0	ug/L	9804.0	ppb	09:23:15

2	P 214.914†	34960.2	36393.5	14739 ug/L	14739 ppb	09:23:20
2	Pb 220.353†	224831.1	235774.3	24418 ug/L	24418 ppb	09:23:20
2	S 181.975 Axial†	43371.3	45400.5	51862 ug/L	51862 ppb	09:23:20
2	Sb 206.836†	33177.0	34736.3	10098 ug/L	10098 ppb	09:23:20
2	Se 196.026†	19371.0	20340.5	10438 ug/L	10438 ppb	09:23:20
2	Si 251.611†	1610579.6	1687588.0	48157 ug/L	48157 ppb	09:23:15
2	Sn 189.927†	66827.6	70046.2	10384 ug/L	10384 ppb	09:23:20
2	Ti 334.940†	5973884.6	6263767.7	9804.3 ug/L	9804.3 ppb	09:23:09
2	Tl 190.801†	34238.8	35935.9	9902.8 ug/L	9902.8 ppb	09:23:20
2	U 409.014†	-2091.4	434.0	-33.361 ug/L	-33.361 ppb	09:23:15
2	V 292.402†	1513693.2	1588491.1	10094 ug/L	10094 ppb	09:23:15
2	Zn 213.857†	1639915.5	1718142.1	14028 ug/L	14028 ppb	09:23:15
2	SiO2†	1625587.4	1703297.2	104810 ug/L	104810 ppb	09:23:55
3	Sc Radial	4788.8	4788.8	94.2 %		09:22:19
3	Y RADIAL	4983.5	4983.5	92.95 %		09:22:19
3	Al 396.153Radial†	527.8	580.0	60.336 ug/L	60.336 ppb	09:22:19
3	Ca 317.933Radial†	23.8	7.0	11.081 ug/L	11.081 ppb	09:22:39
3	Fe 238.204 Radial†	-17.2	-32.9	7.9542 ug/L	7.9542 ppb	09:22:39
3	K 766.490 Radial†	1429639.0	1514784.0	291760 ug/L	291760 ppb	09:22:14
3	Mg 279.077 IEC†	2.1	-1.7	143.27 ug/L	143.27 ppb	09:22:39
3	Na 589.592 Radial†	-959.5	718.9	204.60 ug/L	204.60 ppb	09:22:19
3	Sr 421.552†	1368969.9	1453684.1	9640.5 ug/L	9640.5 ppb	09:22:14
3	Sc 361.383	880913.4	880913.4	96.277 %		09:23:35
3	Y 371.029	738663.6	738663.6	94.506 %		09:23:35
3	Ag 328.068†	-7551.6	-8356.4	2.9087 ug/L	2.9087 ppb	09:23:40
3	As 188.979†	27541.8	28638.0	10169 ug/L	10169 ppb	09:23:40
3	B 249.677†	233155.9	242885.6	4951.1 ug/L	4951.1 ppb	09:23:35
3	Ba 233.527†	1880022.4	1952715.0	14253 ug/L	14253 ppb	09:23:35
3	Be 313.107†	8173482.6	8493929.6	2885.2 ug/L	2885.2 ppb	09:23:28
3	Cd 226.502†	982489.1	1020732.9	9607.0 ug/L	9607.0 ppb	09:23:35
3	Co 228.616†	478678.5	497278.2	9297.3 ug/L	9297.3 ppb	09:23:40
3	Cr 267.716†	2286049.4	2374335.6	23797 ug/L	23797 ppb	09:23:35
3	Cu 324.752†	6536635.9	6781311.7	20066 ug/L	20066 ppb	09:23:28
3	Mn 257.610†	8669795.2	9004391.2	9449.6 ug/L	9449.6 ppb	09:23:28
3	Mo 202.031†	147237.4	152907.8	9593.3 ug/L	9593.3 ppb	09:23:40
3	Ni 231.604†	428646.6	445105.2	9734.3 ug/L	9734.3 ppb	09:23:35
3	P 214.914†	34575.1	35659.6	14404 ug/L	14404 ppb	09:23:40
3	Pb 220.353†	223102.7	231830.9	24010 ug/L	24010 ppb	09:23:40
3	S 181.975 Axial†	42909.6	44506.6	50841 ug/L	50841 ppb	09:23:40
3	Sb 206.836†	32863.2	34093.4	9906.0 ug/L	9906.0 ppb	09:23:40
3	Se 196.026†	19205.7	19983.7	10255 ug/L	10255 ppb	09:23:40
3	Si 251.611†	1614102.3	1675858.5	47824 ug/L	47824 ppb	09:23:35
3	Sn 189.927†	66382.6	68945.5	10221 ug/L	10221 ppb	09:23:40
3	Ti 334.940†	5977823.4	6210781.0	9721.4 ug/L	9721.4 ppb	09:23:28
3	Tl 190.801†	33966.4	35325.9	9735.6 ug/L	9735.6 ppb	09:23:40
3	U 409.014†	-1916.0	636.1	-27.047 ug/L	-27.047 ppb	09:23:35
3	V 292.402†	1517697.8	1578188.0	10027 ug/L	10027 ppb	09:23:35
3	Zn 213.857†	1642991.9	1705668.8	13926 ug/L	13926 ppb	09:23:35
3	SiO2†	1619995.3	1681957.1	103490 ug/L	103490 ppb	09:24:02

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	873465.0	95.463	%	0.7842				0.82%
Sc Radial	4808.8	94.6	%	0.41				0.43%
Y 371.029	732234.8	93.684	%	0.7940				0.85%
Y RADIAL	5018.6	93.61	%	0.931				0.99%
Ag 328.068†	-8519.0	2.5888	ug/L	0.30655	2.5888	ppb	0.30655	11.84%
Al 396.153Radial†	596.7	67.206	ug/L	7.7186	67.206	ppb	7.7186	11.48%
As 188.979†	29145.2	10348	ug/L	173.0	10348	ppb	173.0	1.67%
QC value within limits for As 188.979 Recovery = 103.48%								
B 249.677†	244951.3	4993.0	ug/L	53.39	4993.0	ppb	53.39	1.07%
QC value within limits for B 249.677 Recovery = 99.86%								
Ba 233.527†	1973383.0	14404	ug/L	172.7	14404	ppb	172.7	1.20%
QC value within limits for Ba 233.527 Recovery = 96.03%								
Be 313.107†	8576975.7	2913.4	ug/L	28.23	2913.4	ppb	28.23	0.97%
QC value within limits for Be 313.107 Recovery = 97.11%								
Ca 317.933Radial†	8.7	13.788	ug/L	4.8231	13.788	ppb	4.8231	34.98%
Cd 226.502†	1031991.1	9713.0	ug/L	126.06	9713.0	ppb	126.06	1.30%
QC value within limits for Cd 226.502 Recovery = 97.13%								

Co 228.616†	505495.6	9451.2 ug/L	150.92	9451.2 ppb	150.92	1.60%
QC value within limits for Co 228.616 Recovery = 94.51%						
Cr 267.716†	2398842.8	24042 ug/L	291.6	24042 ppb	291.6	1.21%
QC value within limits for Cr 267.716 Recovery = 96.17%						
Cu 324.752†	6839644.6	20239 ug/L	175.9	20239 ppb	175.9	0.87%
QC value within limits for Cu 324.752 Recovery = 101.20%						
Fe 238.204 Radial†	-33.8	5.0488 ug/L	8.66196	5.0488 ppb	8.66196	171.57%
K 766.490 Radial†	1515848.6	291960 ug/L	466.3	291960 ppb	466.3	0.16%
QC value within limits for K 766.490 Radial Recovery = 97.32%						
Mg 279.077 IEC†	-6.0	12.239 ug/L	134.0707	12.239 ppb	134.0707	>999.9%
Mn 257.610†	9085993.0	9535.2 ug/L	86.93	9535.2 ppb	86.93	0.91%
QC value within limits for Mn 257.610 Recovery = 95.35%						
Mo 202.031†	155407.3	9750.2 ug/L	160.08	9750.2 ppb	160.08	1.64%
QC value within limits for Mo 202.031 Recovery = 97.50%						
Na 589.592 Radial†	759.0	216.02 ug/L	10.060	216.02 ppb	10.060	4.66%
Ni 231.604†	449964.2	9840.6 ug/L	128.50	9840.6 ppb	128.50	1.31%
QC value within limits for Ni 231.604 Recovery = 98.41%						
P 214.914†	36314.2	14699 ug/L	277.7	14699 ppb	277.7	1.89%
QC value within limits for P 214.914 Recovery = 98.00%						
Pb 220.353†	235701.7	24411 ug/L	397.3	24411 ppb	397.3	1.63%
QC value within limits for Pb 220.353 Recovery = 97.64%						
S 181.975 Axial†	45336.6	51789 ug/L	913.8	51789 ppb	913.8	1.76%
QC value within limits for S 181.975 Axial Recovery = 103.58%						
Sb 206.836†	34714.6	10090 ug/L	180.5	10090 ppb	180.5	1.79%
QC value within limits for Sb 206.836 Recovery = 100.90%						
Se 196.026†	20323.4	10429 ug/L	170.1	10429 ppb	170.1	1.63%
QC value within limits for Se 196.026 Recovery = 104.29%						
Si 251.611†	1692186.6	48289 ug/L	543.6	48289 ppb	543.6	1.13%
QC value within limits for Si 251.611 Recovery = 96.58%						
Sn 189.927†	70055.7	10385 ug/L	165.3	10385 ppb	165.3	1.59%
QC value within limits for Sn 189.927 Recovery = 103.85%						
Sr 421.552†	1455639.3	9653.5 ug/L	22.32	9653.5 ppb	22.32	0.23%
QC value within limits for Sr 421.552 Recovery = 96.53%						
Ti 334.940†	6265825.9	9807.5 ug/L	87.79	9807.5 ppb	87.79	0.90%
QC value within limits for Ti 334.940 Recovery = 98.08%						
Tl 190.801†	35923.3	9899.4 ug/L	162.09	9899.4 ppb	162.09	1.64%
QC value within limits for Tl 190.801 Recovery = 98.99%						
U 409.014†	588.2	-28.941 ug/L	3.8410	-28.941 ppb	3.8410	13.27%
V 292.402†	1593608.7	10126 ug/L	118.3	10126 ppb	118.3	1.17%
QC value within limits for V 292.402 Recovery = 101.26%						
Zn 213.857†	1723751.0	14074 ug/L	175.1	14074 ppb	175.1	1.24%
QC value within limits for Zn 213.857 Recovery = 93.83%						
SiO2†	1694909.1	104290 ug/L	699.1	104290 ppb	699.1	0.67%
QC value within limits for SiO2 Recovery = 97.46%						

All analyte(s) passed QC.

Analysis Begun

Start Time: 1/5/2010 09:44:47 Plasma On Time: 1/4/2010 06:33:21
Logged In Analyst: Optima3 Technique: ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\010510.sif
Batch ID:
Results Data Set: 010510
Results Library: C:\pe\Optima3\Results\Results.mdb

Method Loaded
Method Name: General Eng.2AX Method Last Saved: 1/5/2010 08:13:15
IEC File: 101209.iec MSF File:
Method Description:

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

Sequence No.: 1 Autosampler Location: 7
Sample ID: CCV Date Collected: 1/5/2010 09:44:48
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4231.3	4231.3	83.2	%			09:46:40
1	Y RADIAL	4406.6	4406.6	82.19	%			09:46:40
1	Al 396.153Radial†	5961.4	7183.9	5813.2	ug/L	5813.2	ppb	09:46:40

1	Ca 317.933Radial†	3018.4	3609.2	5728.0 ug/L	5728.0 ppb	09:47:00
1	Fe 238.204 Radial†	571.2	671.7	5833.0 ug/L	5833.0 ppb	09:47:00
1	K 766.490 Radial†	28778.2	31253.8	6012.0 ug/L	6012.0 ppb	09:46:40
1	Mg 279.077 IEC†	158.5	186.6	5775.8 ug/L	5775.8 ppb	09:47:00
1	Na 589.592 Radial†	33889.6	42465.5	12087 ug/L	12087 ppb	09:46:40
1	Sr 421.552†	73197.6	87959.8	583.28 ug/L	583.28 ppb	09:46:40
1	Sc 361.383	901641.8	901641.8	98.542 %		09:47:59
1	Y 371.029	764055.4	764055.4	97.755 %		09:47:59
1	Ag 328.068†	112485.3	113636.3	491.74 ug/L	491.74 ppb	09:47:59
1	As 188.979†	1412.8	1464.9	520.38 ug/L	520.38 ppb	09:48:19
1	B 249.677†	22995.3	24048.8	490.53 ug/L	490.53 ppb	09:47:59
1	Ba 233.527†	66250.0	67221.4	491.14 ug/L	491.14 ppb	09:47:59
1	Be 313.107†	1430781.4	1456320.5	492.37 ug/L	492.37 ppb	09:47:59
1	Cd 226.502†	51184.5	52192.2	490.64 ug/L	490.64 ppb	09:47:59
1	Co 228.616†	26059.9	26534.4	496.24 ug/L	496.24 ppb	09:48:19
1	Cr 267.716†	48272.8	48870.6	490.26 ug/L	490.26 ppb	09:47:59
1	Cu 324.752†	170150.7	164569.2	487.27 ug/L	487.27 ppb	09:47:59
1	Mn 257.610†	462606.3	468781.0	492.43 ug/L	492.43 ppb	09:47:59
1	Mo 202.031†	7928.3	8022.3	503.87 ug/L	503.87 ppb	09:48:19
1	Ni 231.604†	22562.5	22778.9	498.16 ug/L	498.16 ppb	09:48:19
1	P 214.914†	5317.9	5143.9	2447.7 ug/L	2447.7 ppb	09:48:19
1	Pb 220.353†	4728.8	4899.5	508.94 ug/L	508.94 ppb	09:48:19
1	S 181.975 Axial†	932.0	883.4	1007.9 ug/L	1007.9 ppb	09:48:19
1	Sb 206.836†	1720.1	1704.8	512.79 ug/L	512.79 ppb	09:48:19
1	Se 196.026†	932.3	981.4	521.28 ug/L	521.28 ppb	09:48:19
1	Si 251.611†	84212.1	84796.0	2422.5 ug/L	2422.5 ppb	09:47:59
1	Sn 189.927†	3342.3	3387.6	502.85 ug/L	502.85 ppb	09:48:19
1	Ti 334.940†	306491.6	312818.2	489.98 ug/L	489.98 ppb	09:47:59
1	Tl 190.801†	1762.8	1834.8	505.70 ug/L	505.70 ppb	09:48:19
1	U 409.014†	12824.5	15640.5	461.78 ug/L	461.78 ppb	09:47:59
1	V 292.402†	74906.8	77815.1	495.24 ug/L	495.24 ppb	09:47:59
1	Zn 213.857†	59643.9	59667.9	485.92 ug/L	485.92 ppb	09:47:59
1	SiO2†	84500.4	85066.3	5240.1 ug/L	5240.1 ppb	09:49:19
2	Sc Radial	4904.7	4904.7	96.5 %		09:47:05
2	Y RADIAL	5127.7	5127.7	95.64 %		09:47:05
2	Al 396.153Radial†	5811.6	6045.0	4888.3 ug/L	4888.3 ppb	09:47:05
2	Ca 317.933Radial†	3011.4	3104.0	4926.2 ug/L	4926.2 ppb	09:47:25
2	Fe 238.204 Radial†	568.4	574.6	4991.7 ug/L	4991.7 ppb	09:47:25
2	K 766.490 Radial†	28356.6	26068.6	5013.7 ug/L	5013.7 ppb	09:47:05
2	Mg 279.077 IEC†	164.3	166.4	5152.3 ug/L	5152.3 ppb	09:47:25
2	Na 589.592 Radial†	33068.1	36022.5	10253 ug/L	10253 ppb	09:47:05
2	Sr 421.552†	71334.1	73951.1	490.38 ug/L	490.38 ppb	09:47:05
2	Sc 361.383	896246.8	896246.8	97.953 %		09:48:26
2	Y 371.029	758798.3	758798.3	97.082 %		09:48:26
2	Ag 328.068†	114127.0	115999.5	501.65 ug/L	501.65 ppb	09:48:26
2	As 188.979†	1385.7	1445.9	513.65 ug/L	513.65 ppb	09:48:46
2	B 249.677†	23450.3	24653.8	503.04 ug/L	503.04 ppb	09:48:26
2	Ba 233.527†	67371.2	68770.7	502.43 ug/L	502.43 ppb	09:48:26
2	Be 313.107†	1453702.3	1488460.5	503.24 ug/L	503.24 ppb	09:48:26
2	Cd 226.502†	52123.6	53463.6	502.68 ug/L	502.68 ppb	09:48:26
2	Co 228.616†	25716.1	26342.6	492.64 ug/L	492.64 ppb	09:48:46
2	Cr 267.716†	48964.1	49871.3	500.28 ug/L	500.28 ppb	09:48:26
2	Cu 324.752†	172759.2	168271.7	498.18 ug/L	498.18 ppb	09:48:26
2	Mn 257.610†	470258.1	479418.6	503.52 ug/L	503.52 ppb	09:48:26
2	Mo 202.031†	7854.8	7995.7	502.12 ug/L	502.12 ppb	09:48:46
2	Ni 231.604†	22258.4	22606.3	494.38 ug/L	494.38 ppb	09:48:46
2	P 214.914†	5244.8	5101.8	2425.7 ug/L	2425.7 ppb	09:48:46
2	Pb 220.353†	4674.2	4872.6	506.00 ug/L	506.00 ppb	09:48:46
2	S 181.975 Axial†	907.6	864.2	986.18 ug/L	986.18 ppb	09:48:46
2	Sb 206.836†	1706.3	1701.3	511.42 ug/L	511.42 ppb	09:48:46
2	Se 196.026†	916.3	970.8	513.30 ug/L	513.30 ppb	09:48:46
2	Si 251.611†	85676.3	86805.2	2480.5 ug/L	2480.5 ppb	09:48:26
2	Sn 189.927†	3300.8	3365.6	499.50 ug/L	499.50 ppb	09:48:46
2	Ti 334.940†	311185.6	319482.5	500.37 ug/L	500.37 ppb	09:48:26
2	Tl 190.801†	1742.4	1824.8	503.06 ug/L	503.06 ppb	09:48:46
2	U 409.014†	13133.4	16034.1	473.53 ug/L	473.53 ppb	09:48:26
2	V 292.402†	75981.2	79369.5	505.10 ug/L	505.10 ppb	09:48:26
2	Zn 213.857†	60776.4	61188.5	498.48 ug/L	498.48 ppb	09:48:26
2	SiO2†	84327.7	85406.2	5261.9 ug/L	5261.9 ppb	09:49:24
3	Sc Radial	4862.4	4862.4	95.6 %		09:47:30
3	Y RADIAL	5108.3	5108.3	95.28 %		09:47:30

3	Al 396.153Radial†	5900.2	6190.1	5005.9 ug/L	5005.9 ppb	09:47:30
3	Ca 317.933Radial†	3043.4	3164.6	5022.4 ug/L	5022.4 ppb	09:47:50
3	Fe 238.204 Radial†	573.1	584.6	5078.7 ug/L	5078.7 ppb	09:47:50
3	K 766.490 Radial†	28972.9	26968.9	5187.0 ug/L	5187.0 ppb	09:47:30
3	Mg 279.077 IEC†	160.9	164.4	5089.5 ug/L	5089.5 ppb	09:47:50
3	Na 589.592 Radial†	33701.5	36983.2	10526 ug/L	10526 ppb	09:47:30
3	Sr 421.552†	72675.2	75997.1	503.95 ug/L	503.95 ppb	09:47:30
3	Sc 361.383	894970.6	894970.6	97.813 %		09:48:54
3	Y 371.029	758126.0	758126.0	96.996 %		09:48:54
3	Ag 328.068†	113680.2	115708.9	500.43 ug/L	500.43 ppb	09:48:54
3	As 188.979†	1393.6	1455.9	517.18 ug/L	517.18 ppb	09:49:14
3	B 249.677†	23403.0	24639.6	502.72 ug/L	502.72 ppb	09:48:54
3	Ba 233.527†	67203.0	68696.8	501.89 ug/L	501.89 ppb	09:48:54
3	Be 313.107†	1449867.6	1486656.3	502.63 ug/L	502.63 ppb	09:48:54
3	Cd 226.502†	52069.7	53484.3	502.87 ug/L	502.87 ppb	09:48:54
3	Co 228.616†	25956.5	26625.8	497.94 ug/L	497.94 ppb	09:49:14
3	Cr 267.716†	48968.9	49947.4	501.04 ug/L	501.04 ppb	09:48:54
3	Cu 324.752†	172154.2	167904.7	497.10 ug/L	497.10 ppb	09:48:54
3	Mn 257.610†	468838.6	478651.9	502.73 ug/L	502.73 ppb	09:48:54
3	Mo 202.031†	7910.4	8064.0	506.42 ug/L	506.42 ppb	09:49:14
3	Ni 231.604†	22451.4	22836.0	499.40 ug/L	499.40 ppb	09:49:14
3	P 214.914†	5278.4	5143.8	2446.5 ug/L	2446.5 ppb	09:49:14
3	Pb 220.353†	4732.2	4938.7	512.88 ug/L	512.88 ppb	09:49:14
3	S 181.975 Axial†	915.9	874.0	997.39 ug/L	997.39 ppb	09:49:14
3	Sb 206.836†	1705.7	1703.2	512.16 ug/L	512.16 ppb	09:49:14
3	Se 196.026†	939.5	995.8	526.37 ug/L	526.37 ppb	09:49:14
3	Si 251.611†	85373.8	86620.7	2475.1 ug/L	2475.1 ppb	09:48:54
3	Sn 189.927†	3337.8	3408.3	505.84 ug/L	505.84 ppb	09:49:14
3	Ti 334.940†	310279.0	319008.6	499.63 ug/L	499.63 ppb	09:48:54
3	Tl 190.801†	1756.9	1842.1	507.79 ug/L	507.79 ppb	09:49:14
3	U 409.014†	13175.2	16096.0	475.35 ug/L	475.35 ppb	09:48:54
3	V 292.402†	75821.8	79317.1	504.82 ug/L	504.82 ppb	09:48:54
3	Zn 213.857†	60593.0	61089.4	497.64 ug/L	497.64 ppb	09:48:54
3	SiO2†	85217.3	86438.5	5325.5 ug/L	5325.5 ppb	09:49:29

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	897619.7	98.103	%	0.3870				0.39%
Sc Radial	4666.1	91.8	%	7.42				8.08%
Y 371.029	760326.6	97.278	%	0.4154				0.43%
Y RADIAL	4880.9	91.04	%	7.664				8.42%
Ag 328.068†	115114.9	497.94	ug/L	5.406	497.94	ppb	5.406	1.09%
QC value within limits for Ag 328.068 Recovery = 99.59%								
Al 396.153Radial†	6473.0	5235.8	ug/L	503.49	5235.8	ppb	503.49	9.62%
QC value within limits for Al 396.153Radial Recovery = 104.72%								
As 188.979†	1455.6	517.07	ug/L	3.369	517.07	ppb	3.369	0.65%
QC value within limits for As 188.979 Recovery = 103.41%								
B 249.677†	24447.4	498.76	ug/L	7.134	498.76	ppb	7.134	1.43%
QC value within limits for B 249.677 Recovery = 99.75%								
Ba 233.527†	68229.7	498.48	ug/L	6.370	498.48	ppb	6.370	1.28%
QC value within limits for Ba 233.527 Recovery = 99.70%								
Be 313.107†	1477145.8	499.41	ug/L	6.105	499.41	ppb	6.105	1.22%
QC value within limits for Be 313.107 Recovery = 99.88%								
Ca 317.933Radial†	3292.6	5225.5	ug/L	437.78	5225.5	ppb	437.78	8.38%
QC value within limits for Ca 317.933Radial Recovery = 104.51%								
Cd 226.502†	53046.7	498.73	ug/L	7.007	498.73	ppb	7.007	1.40%
QC value within limits for Cd 226.502 Recovery = 99.75%								
Co 228.616†	26500.9	495.61	ug/L	2.708	495.61	ppb	2.708	0.55%
QC value within limits for Co 228.616 Recovery = 99.12%								
Cr 267.716†	49563.1	497.19	ug/L	6.017	497.19	ppb	6.017	1.21%
QC value within limits for Cr 267.716 Recovery = 99.44%								
Cu 324.752†	166915.2	494.19	ug/L	6.013	494.19	ppb	6.013	1.22%
QC value within limits for Cu 324.752 Recovery = 98.84%								
Fe 238.204 Radial†	610.3	5301.2	ug/L	462.67	5301.2	ppb	462.67	8.73%
QC value within limits for Fe 238.204 Radial Recovery = 106.02%								
K 766.490 Radial†	28097.1	5404.2	ug/L	533.46	5404.2	ppb	533.46	9.87%
QC value within limits for K 766.490 Radial Recovery = 108.08%								
Mg 279.077 IEC†	172.5	5339.2	ug/L	379.37	5339.2	ppb	379.37	7.11%
QC value within limits for Mg 279.077 IEC Recovery = 106.78%								

Mn 257.610†	475617.2	499.56 ug/L	6.187	499.56 ppb	6.187	1.24%
QC value within limits for Mn 257.610 Recovery = 99.91%						
Mo 202.031†	8027.3	504.14 ug/L	2.160	504.14 ppb	2.160	0.43%
QC value within limits for Mo 202.031 Recovery = 100.83%						
Na 589.592 Radial†	38490.4	10955 ug/L	989.3	10955 ppb	989.3	9.03%
QC value within limits for Na 589.592 Radial Recovery = 109.55%						
Ni 231.604†	22740.4	497.31 ug/L	2.615	497.31 ppb	2.615	0.53%
QC value within limits for Ni 231.604 Recovery = 99.46%						
P 214.914†	5129.9	2440.0 ug/L	12.40	2440.0 ppb	12.40	0.51%
QC value within limits for P 214.914 Recovery = 97.60%						
Pb 220.353†	4903.6	509.27 ug/L	3.452	509.27 ppb	3.452	0.68%
QC value within limits for Pb 220.353 Recovery = 101.85%						
S 181.975 Axial†	873.8	997.18 ug/L	10.884	997.18 ppb	10.884	1.09%
QC value within limits for S 181.975 Axial Recovery = 99.72%						
Sb 206.836†	1703.1	512.13 ug/L	0.685	512.13 ppb	0.685	0.13%
QC value within limits for Sb 206.836 Recovery = 102.43%						
Se 196.026†	982.7	520.32 ug/L	6.588	520.32 ppb	6.588	1.27%
QC value within limits for Se 196.026 Recovery = 104.06%						
Si 251.611†	86074.0	2459.3 ug/L	32.07	2459.3 ppb	32.07	1.30%
QC value within limits for Si 251.611 Recovery = 98.37%						
Sn 189.927†	3387.1	502.73 ug/L	3.170	502.73 ppb	3.170	0.63%
QC value within limits for Sn 189.927 Recovery = 100.55%						
Sr 421.552†	79302.7	525.87 ug/L	50.177	525.87 ppb	50.177	9.54%
QC value within limits for Sr 421.552 Recovery = 105.17%						
Ti 334.940†	317103.1	496.66 ug/L	5.797	496.66 ppb	5.797	1.17%
QC value within limits for Ti 334.940 Recovery = 99.33%						
Tl 190.801†	1833.9	505.52 ug/L	2.367	505.52 ppb	2.367	0.47%
QC value within limits for Tl 190.801 Recovery = 101.10%						
U 409.014†	15923.5	470.22 ug/L	7.367	470.22 ppb	7.367	1.57%
QC value within limits for U 409.014 Recovery = 94.04%						
V 292.402†	78833.9	501.72 ug/L	5.613	501.72 ppb	5.613	1.12%
QC value within limits for V 292.402 Recovery = 100.34%						
Zn 213.857†	60648.6	494.01 ug/L	7.024	494.01 ppb	7.024	1.42%
QC value within limits for Zn 213.857 Recovery = 98.80%						
SiO2†	85637.0	5275.8 ug/L	44.39	5275.8 ppb	44.39	0.84%
QC value within limits for SiO2 Recovery = 98.66%						

All analyte(s) passed QC.

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/5/2010 09:51:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4904.1	4904.1	96.4	%			09:53:32
1	Y RADIAL	5183.9	5183.9	96.69	%			09:53:32
1	Al 396.153Radial†	-12.4	6.7	5.4066	ug/L	5.4066	ppb	09:53:32
1	Ca 317.933Radial†	18.5	0.9	1.4683	ug/L	1.4683	ppb	09:53:52
1	Fe 238.204 Radial†	13.4	-0.8	-6.7363	ug/L	-6.7363	ppb	09:53:52
1	K 766.490 Radial†	3587.4	388.5	74.857	ug/L	74.857	ppb	09:53:32
1	Mg 279.077 IEC†	2.0	-1.8	-54.482	ug/L	-54.482	ppb	09:53:52
1	Na 589.592 Radial†	-1622.5	55.3	15.753	ug/L	15.753	ppb	09:53:32
1	Sr 421.552†	-7.4	-15.1	-0.1001	ug/L	-0.1001	ppb	09:53:32
1	Sc 361.383	877616.1	877616.1	95.917	%			09:54:49
1	Y 371.029	751602.7	751602.7	96.161	%			09:54:49
1	Ag 328.068†	387.8	-108.4	-0.4531	ug/L	-0.4531	ppb	09:54:49
1	As 188.979†	-10.5	20.3	7.1521	ug/L	7.1521	ppb	09:55:09
1	B 249.677†	-268.0	434.0	8.8900	ug/L	8.8900	ppb	09:54:49
1	Ba 233.527†	-6.0	-14.8	-0.1063	ug/L	-0.1063	ppb	09:55:09
1	Be 313.107†	-4359.3	-169.4	-0.0570	ug/L	-0.0570	ppb	09:54:49
1	Cd 226.502†	-216.7	24.6	0.2327	ug/L	0.2327	ppb	09:55:09
1	Co 228.616†	-95.8	-10.9	-0.2012	ug/L	-0.2012	ppb	09:55:09
1	Cr 267.716†	94.4	-17.8	-0.1725	ug/L	-0.1725	ppb	09:54:49
1	Cu 324.752†	7964.0	204.8	0.6055	ug/L	0.6055	ppb	09:54:49
1	Mn 257.610†	562.3	-81.8	-0.0855	ug/L	-0.0855	ppb	09:54:49
1	Mo 202.031†	33.7	11.9	0.7464	ug/L	0.7464	ppb	09:55:09
1	Ni 231.604†	138.2	26.8	0.5863	ug/L	0.5863	ppb	09:55:09
1	P 214.914†	256.9	15.3	7.3998	ug/L	7.3998	ppb	09:55:09
1	Pb 220.353†	-107.3	-11.2	-1.1546	ug/L	-1.1546	ppb	09:55:09
1	S 181.975 Axial†	69.2	9.8	11.180	ug/L	11.180	ppb	09:55:09
1	Sb 206.836†	62.4	24.3	7.2456	ug/L	7.2456	ppb	09:55:09
1	Se 196.026†	-32.0	1.9	0.9422	ug/L	0.9422	ppb	09:55:09
1	Si 251.611†	719.9	88.8	2.5094	ug/L	2.5094	ppb	09:55:09
1	Sn 189.927†	8.0	4.2	0.6247	ug/L	0.6247	ppb	09:55:09
1	Ti 334.940†	-1654.6	68.0	0.1130	ug/L	0.1130	ppb	09:54:49
1	Tl 190.801†	-50.3	-6.5	-1.7729	ug/L	-1.7729	ppb	09:55:09
1	U 409.014†	-2980.4	-481.1	-14.254	ug/L	-14.254	ppb	09:54:49
1	V 292.402†	-1613.0	118.6	0.7273	ug/L	0.7273	ppb	09:54:49
1	Zn 213.857†	903.8	84.1	0.6888	ug/L	0.6888	ppb	09:55:09
1	SiO2†	734.2	81.4	4.9535	ug/L	4.9535	ppb	09:56:06
2	Sc Radial	4864.2	4864.2	95.7	%			09:53:57
2	Y RADIAL	5129.3	5129.3	95.68	%			09:53:57
2	Al 396.153Radial†	-4.9	14.5	11.707	ug/L	11.707	ppb	09:53:57
2	Ca 317.933Radial†	15.6	-2.0	-3.1307	ug/L	-3.1307	ppb	09:54:17
2	Fe 238.204 Radial†	13.8	-0.2	-1.7397	ug/L	-1.7397	ppb	09:54:17
2	K 766.490 Radial†	3674.2	509.8	98.215	ug/L	98.215	ppb	09:53:57
2	Mg 279.077 IEC†	3.7	-0.1	-1.6716	ug/L	-1.6716	ppb	09:54:17
2	Na 589.592 Radial†	-1596.7	68.5	19.508	ug/L	19.508	ppb	09:53:57
2	Sr 421.552†	27.4	21.2	0.1409	ug/L	0.1409	ppb	09:53:57
2	Sc 361.383	875186.9	875186.9	95.651	%			09:55:15
2	Y 371.029	750060.7	750060.7	95.964	%			09:55:15
2	Ag 328.068†	593.6	107.8	0.4790	ug/L	0.4790	ppb	09:55:15
2	As 188.979†	-6.0	25.0	8.7916	ug/L	8.7916	ppb	09:55:35
2	B 249.677†	-197.2	507.2	10.389	ug/L	10.389	ppb	09:55:15
2	Ba 233.527†	10.0	1.9	0.0147	ug/L	0.0147	ppb	09:55:35
2	Be 313.107†	-4277.0	-96.0	-0.0325	ug/L	-0.0325	ppb	09:55:15
2	Cd 226.502†	-232.2	7.9	0.0744	ug/L	0.0744	ppb	09:55:35
2	Co 228.616†	-86.1	-1.0	-0.0160	ug/L	-0.0160	ppb	09:55:35
2	Cr 267.716†	104.1	-7.4	-0.0677	ug/L	-0.0677	ppb	09:55:15
2	Cu 324.752†	8009.8	275.7	0.8157	ug/L	0.8157	ppb	09:55:15
2	Mn 257.610†	565.9	-76.4	-0.0803	ug/L	-0.0803	ppb	09:55:15
2	Mo 202.031†	37.3	15.7	0.9836	ug/L	0.9836	ppb	09:55:35
2	Ni 231.604†	134.1	22.8	0.4991	ug/L	0.4991	ppb	09:55:35

2	P 214.914†	248.6	7.3	3.4812 ug/L	3.4812 ppb	09:55:35
2	Pb 220.353†	-83.4	13.5	1.4028 ug/L	1.4028 ppb	09:55:35
2	S 181.975 Axial†	69.3	10.1	11.532 ug/L	11.532 ppb	09:55:35
2	Sb 206.836†	62.5	24.7	7.3468 ug/L	7.3468 ppb	09:55:35
2	Se 196.026†	-40.0	-6.5	-3.3168 ug/L	-3.3168 ppb	09:55:35
2	Si 251.611†	711.1	81.7	2.2929 ug/L	2.2929 ppb	09:55:35
2	Sn 189.927†	9.2	5.5	0.8150 ug/L	0.8150 ppb	09:55:35
2	Ti 334.940†	-1751.3	-37.9	-0.0519 ug/L	-0.0519 ppb	09:55:15
2	Tl 190.801†	-45.5	-1.6	-0.4398 ug/L	-0.4398 ppb	09:55:35
2	U 409.014†	-3064.2	-577.3	-17.107 ug/L	-17.107 ppb	09:55:15
2	V 292.402†	-1663.3	61.3	0.3660 ug/L	0.3660 ppb	09:55:15
2	Zn 213.857†	900.4	83.1	0.6789 ug/L	0.6789 ppb	09:55:35
2	SiO2†	751.9	102.1	6.2070 ug/L	6.2070 ppb	09:56:11
3	Sc Radial	4929.8	4929.8	96.9 %		09:54:22
3	Y RADIAL	5223.7	5223.7	97.44 %		09:54:22
3	Al 396.153Radial†	-18.9	0.0	-0.0076 ug/L	-0.0076 ppb	09:54:22
3	Ca 317.933Radial†	14.7	-3.1	-4.8776 ug/L	-4.8776 ppb	09:54:43
3	Fe 238.204 Radial†	11.2	-3.2	-27.391 ug/L	-27.391 ppb	09:54:43
3	K 766.490 Radial†	3712.7	498.4	96.007 ug/L	96.007 ppb	09:54:22
3	Mg 279.077 IEC†	4.8	1.1	34.207 ug/L	34.207 ppb	09:54:43
3	Na 589.592 Radial†	-1591.0	96.7	27.514 ug/L	27.514 ppb	09:54:22
3	Sr 421.552†	6.7	-0.5	-0.0035 ug/L	-0.0035 ppb	09:54:22
3	Sc 361.383	877636.6	877636.6	95.919 %		09:55:40
3	Y 371.029	752390.5	752390.5	96.262 %		09:55:40
3	Ag 328.068†	468.3	-24.6	-0.1054 ug/L	-0.1054 ppb	09:55:40
3	As 188.979†	-7.5	23.4	8.2209 ug/L	8.2209 ppb	09:56:00
3	B 249.677†	-198.1	506.9	10.387 ug/L	10.387 ppb	09:55:40
3	Ba 233.527†	7.4	-0.9	-0.0079 ug/L	-0.0079 ppb	09:56:00
3	Be 313.107†	-4340.2	-149.5	-0.0508 ug/L	-0.0508 ppb	09:55:40
3	Cd 226.502†	-221.5	19.6	0.1873 ug/L	0.1873 ppb	09:56:00
3	Co 228.616†	-100.7	-16.0	-0.2969 ug/L	-0.2969 ppb	09:56:00
3	Cr 267.716†	86.5	-26.0	-0.2576 ug/L	-0.2576 ppb	09:55:40
3	Cu 324.752†	7992.8	234.6	0.6928 ug/L	0.6928 ppb	09:55:40
3	Mn 257.610†	569.8	-74.1	-0.0811 ug/L	-0.0811 ppb	09:55:40
3	Mo 202.031†	25.7	3.5	0.2196 ug/L	0.2196 ppb	09:56:00
3	Ni 231.604†	117.2	4.8	0.1054 ug/L	0.1054 ppb	09:56:00
3	P 214.914†	244.6	2.4	1.1253 ug/L	1.1253 ppb	09:56:00
3	Pb 220.353†	-89.3	7.6	0.7918 ug/L	0.7918 ppb	09:56:00
3	S 181.975 Axial†	58.0	-1.9	-2.1540 ug/L	-2.1540 ppb	09:56:00
3	Sb 206.836†	52.2	13.8	4.1208 ug/L	4.1208 ppb	09:56:00
3	Se 196.026†	-30.0	4.0	1.9836 ug/L	1.9836 ppb	09:56:00
3	Si 251.611†	717.9	86.7	2.4481 ug/L	2.4481 ppb	09:56:00
3	Sn 189.927†	15.7	12.2	1.8124 ug/L	1.8124 ppb	09:56:00
3	Ti 334.940†	-1819.5	-104.0	-0.1574 ug/L	-0.1574 ppb	09:55:40
3	Tl 190.801†	-44.9	-0.8	-0.2304 ug/L	-0.2304 ppb	09:56:00
3	U 409.014†	-2933.1	-431.7	-12.788 ug/L	-12.788 ppb	09:55:40
3	V 292.402†	-1783.7	-59.3	-0.3891 ug/L	-0.3891 ppb	09:55:40
3	Zn 213.857†	901.7	81.9	0.6715 ug/L	0.6715 ppb	09:56:00
3	SiO2†	737.5	84.9	5.1646 ug/L	5.1646 ppb	09:56:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	876813.2	95.829	%	0.1539				0.16%
Sc Radial	4899.3	96.3	%	0.65				0.67%
Y 371.029	751351.3	96.129	%	0.1516				0.16%
Y RADIAL	5179.0	96.60	%	0.884				0.91%
Ag 328.068†	-8.4	-0.0265	ug/L	0.47104	-0.0265	ppb	0.47104	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.1	5.7020	ug/L	5.86284	5.7020	ppb	5.86284	102.82%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	22.9	8.0549	ug/L	0.83224	8.0549	ppb	0.83224	10.33%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	482.7	9.8886	ug/L	0.86483	9.8886	ppb	0.86483	8.75%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-4.6	-0.0332	ug/L	0.06434	-0.0332	ppb	0.06434	193.91%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-138.3	-0.0467	ug/L	0.01270	-0.0467	ppb	0.01270	27.17%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.4	-2.1800	ug/L	3.27805	-2.1800	ppb	3.27805	150.37%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              17.4      0.1648 ug/L       0.08148      0.1648 ppb       0.08148  49.44%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -9.3     -0.1714 ug/L       0.14284     -0.1714 ppb       0.14284  83.35%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -17.1      -0.1659 ug/L       0.09513     -0.1659 ppb       0.09513  57.34%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            238.3      0.7047 ug/L       0.10557      0.7047 ppb       0.10557  14.98%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -1.4     -11.956 ug/L       13.5988     -11.956 ppb       13.5988 113.74%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       465.6      89.693 ug/L       12.8961      89.693 ppb       12.8961  14.38%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.2     -7.3156 ug/L      44.61309     -7.3156 ppb      44.61309 609.84%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†            -77.4      -0.0823 ug/L       0.00281     -0.0823 ppb       0.00281   3.41%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              10.4      0.6499 ug/L       0.39101      0.6499 ppb       0.39101  60.17%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       73.5      20.925 ug/L        6.0070      20.925 ppb        6.0070  28.71%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              18.1      0.3969 ug/L       0.25619      0.3969 ppb       0.25619  64.54%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                8.3      4.0021 ug/L       3.16953      4.0021 ppb       3.16953  79.20%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               3.3      0.3467 ug/L       1.33553      0.3467 ppb       1.33553 385.23%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          6.0      6.8527 ug/L       7.80209      6.8527 ppb       7.80209 113.85%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              20.9      6.2377 ug/L       1.83404      6.2377 ppb       1.83404  29.40%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -0.2     -0.1303 ug/L       2.80825     -0.1303 ppb       2.80825 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              85.7      2.4168 ug/L       0.11159      2.4168 ppb       0.11159   4.62%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               7.3      1.0841 ug/L       0.63791      1.0841 ppb       0.63791  58.84%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               1.9      0.0124 ug/L       0.12130      0.0124 ppb       0.12130 975.53%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†            -24.6      -0.0321 ug/L       0.13626     -0.0321 ppb       0.13626 424.35%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -3.0     -0.8144 ug/L       0.83674     -0.8144 ppb       0.83674 102.75%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             -496.7     -14.716 ug/L        2.1963     -14.716 ppb        2.1963  14.92%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               40.2      0.2348 ug/L       0.56964      0.2348 ppb       0.56964 242.65%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              83.0      0.6797 ug/L       0.00867      0.6797 ppb       0.00867   1.28%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    89.5      5.4417 ug/L       0.67114      5.4417 ppb       0.67114  12.33%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: LR1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 1/5/2010 09:58:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4837.2	4837.2	95.1	%			10:00:20
1	Y RADIAL	5158.1	5158.1	96.21	%			10:00:20
1	Al 396.153Radial†	-50.0	-33.0	-25.600	ug/L	-25.600	ppb	10:00:20
1	Ca 317.933Radial†	9.3	-8.4	-13.399	ug/L	-13.399	ppb	10:00:40
1	Fe 238.204 Radial†	43423.7	45634.3	395200	ug/L	395200	ppb	10:00:20
1	K 766.490 Radial†	3281.8	118.7	35.849	ug/L	35.849	ppb	10:00:20
1	Mg 279.077 IEC†	9.7	6.3	-144.90	ug/L	-144.90	ppb	10:00:40
1	Na 589.592 Radial†	-1571.0	86.3	24.565	ug/L	24.565	ppb	10:00:20
1	Sr 421.552†	43.1	37.9	0.2514	ug/L	0.2514	ppb	10:00:20
1	Sc 361.383	883558.1	883558.1	96.566	%			10:01:37
1	Y 371.029	752948.0	752948.0	96.334	%			10:01:37
1	Ag 328.068†	-28348.0	-29868.9	3.8833	ug/L	3.8833	ppb	10:01:37
1	As 188.979†	-241.6	-219.0	-16.079	ug/L	-16.079	ppb	10:01:57
1	B 249.677†	1415.5	2179.2	-7.8062	ug/L	-7.8062	ppb	10:01:37
1	Ba 233.527†	-2054.8	-2136.4	-5.4856	ug/L	-5.4856	ppb	10:01:57
1	Be 313.107†	-4198.5	27.6	0.0092	ug/L	0.0092	ppb	10:01:37
1	Cd 226.502†	3359.4	3729.4	-4.4314	ug/L	-4.4314	ppb	10:01:57
1	Co 228.616†	195.4	291.4	-0.2664	ug/L	-0.2664	ppb	10:01:57
1	Cr 267.716†	-598.5	-736.0	-0.2285	ug/L	-0.2285	ppb	10:01:57
1	Cu 324.752†	-994.6	-9128.3	-6.8515	ug/L	-6.8515	ppb	10:01:37
1	Mn 257.610†	-39777.9	-41860.5	-4.5231	ug/L	-4.5231	ppb	10:01:37
1	Mo 202.031†	-418.5	-456.6	9.2330	ug/L	9.2330	ppb	10:01:57
1	Ni 231.604†	174.6	63.4	1.3845	ug/L	1.3845	ppb	10:01:57
1	P 214.914†	788.1	563.6	-38.182	ug/L	-38.182	ppb	10:01:57
1	Pb 220.353†	216.9	325.3	1.1854	ug/L	1.1854	ppb	10:01:57
1	S 181.975 Axial†	74.3	14.5	16.608	ug/L	16.608	ppb	10:01:57
1	Sb 206.836†	25.3	-14.6	1.6885	ug/L	1.6885	ppb	10:01:57
1	Se 196.026†	-2280.1	-2325.9	-37.652	ug/L	-37.652	ppb	10:01:57
1	Si 251.611†	-644.2	-1328.8	-37.638	ug/L	-37.638	ppb	10:01:57
1	Sn 189.927†	-45.6	-51.4	-2.3319	ug/L	-2.3319	ppb	10:01:57
1	Ti 334.940†	-1749.7	-18.9	-0.0560	ug/L	-0.0560	ppb	10:01:57
1	Tl 190.801†	-65.4	-21.8	-6.3660	ug/L	-6.3660	ppb	10:01:57
1	U 409.014†	-445.5	2164.8	14.442	ug/L	14.442	ppb	10:01:37
1	V 292.402†	6628.0	8663.9	-5.9878	ug/L	-5.9878	ppb	10:01:57
1	Zn 213.857†	4969.3	4287.8	14.765	ug/L	14.765	ppb	10:01:57
1	SiO2†	-707.1	-1416.2	-86.568	ug/L	-86.568	ppb	10:02:54
2	Sc Radial	4810.2	4810.2	94.6	%			10:00:45
2	Y RADIAL	5078.4	5078.4	94.73	%			10:00:45
2	Al 396.153Radial†	-80.5	-65.6	-52.000	ug/L	-52.000	ppb	10:00:45
2	Ca 317.933Radial†	10.4	-7.3	-11.599	ug/L	-11.599	ppb	10:01:05
2	Fe 238.204 Radial†	43077.0	45524.3	394250	ug/L	394250	ppb	10:00:45
2	K 766.490 Radial†	3180.6	31.1	18.935	ug/L	18.935	ppb	10:00:45
2	Mg 279.077 IEC†	12.4	9.2	-52.720	ug/L	-52.720	ppb	10:01:05
2	Na 589.592 Radial†	-1555.5	93.4	26.585	ug/L	26.585	ppb	10:00:45
2	Sr 421.552†	57.9	53.7	0.3563	ug/L	0.3563	ppb	10:00:45
2	Sc 361.383	873661.3	873661.3	95.484	%			10:02:03
2	Y 371.029	745655.8	745655.8	95.401	%			10:02:03
2	Ag 328.068†	-27973.8	-29809.5	3.8207	ug/L	3.8207	ppb	10:02:03
2	As 188.979†	-223.4	-202.7	-10.494	ug/L	-10.494	ppb	10:02:23
2	B 249.677†	1521.4	2306.8	-5.0658	ug/L	-5.0658	ppb	10:02:03
2	Ba 233.527†	-1999.4	-2102.5	-5.2634	ug/L	-5.2634	ppb	10:02:23
2	Be 313.107†	-4274.2	-101.0	-0.0342	ug/L	-0.0342	ppb	10:02:03
2	Cd 226.502†	3342.4	3751.1	-4.1320	ug/L	-4.1320	ppb	10:02:23
2	Co 228.616†	165.0	261.7	-0.8074	ug/L	-0.8074	ppb	10:02:23
2	Cr 267.716†	-601.2	-745.9	-0.3444	ug/L	-0.3444	ppb	10:02:23
2	Cu 324.752†	-963.3	-9107.1	-6.8375	ug/L	-6.8375	ppb	10:02:03
2	Mn 257.610†	-39382.9	-41913.4	-4.6754	ug/L	-4.6754	ppb	10:02:03
2	Mo 202.031†	-421.1	-464.2	8.6634	ug/L	8.6634	ppb	10:02:23
2	Ni 231.604†	203.3	95.5	2.0875	ug/L	2.0875	ppb	10:02:23

2	P 214.914†	774.5	558.6	-39.855 ug/L	-39.855 ppb	10:02:23
2	Pb 220.353†	221.3	332.5	2.0025 ug/L	2.0025 ppb	10:02:23
2	S 181.975 Axial†	77.5	18.8	21.460 ug/L	21.460 ppb	10:02:23
2	Sb 206.836†	19.3	-20.5	-0.0551 ug/L	-0.0551 ppb	10:02:23
2	Se 196.026†	-2254.4	-2325.8	-40.338 ug/L	-40.338 ppb	10:02:23
2	Si 251.611†	-587.4	-1276.9	-36.139 ug/L	-36.139 ppb	10:02:23
2	Sn 189.927†	-34.5	-40.3	-0.7003 ug/L	-0.7003 ppb	10:02:23
2	Ti 334.940†	-1744.5	-34.0	-0.0785 ug/L	-0.0785 ppb	10:02:23
2	Tl 190.801†	-55.8	-12.5	-3.8240 ug/L	-3.8240 ppb	10:02:23
2	U 409.014†	-516.7	2085.1	12.199 ug/L	12.199 ppb	10:02:03
2	V 292.402†	6500.7	8608.3	-6.2012 ug/L	-6.2012 ppb	10:02:23
2	Zn 213.857†	4947.4	4323.1	15.096 ug/L	15.096 ppb	10:02:23
2	SiO2†	-728.1	-1446.5	-88.427 ug/L	-88.427 ppb	10:02:59
3	Sc Radial	4769.9	4769.9	93.8 %		10:01:10
3	Y RADIAL	5093.2	5093.2	95.00 %		10:01:10
3	Al 396.153Radial†	-32.4	-15.0	-10.885 ug/L	-10.885 ppb	10:01:10
3	Ca 317.933Radial†	12.2	-5.3	-8.4002 ug/L	-8.4002 ppb	10:01:30
3	Fe 238.204 Radial†	42898.2	45718.9	395930 ug/L	395930 ppb	10:01:10
3	K 766.490 Radial†	3323.3	211.6	53.779 ug/L	53.779 ppb	10:01:10
3	Mg 279.077 IEC†	14.2	11.2	8.0259 ug/L	8.0259 ppb	10:01:30
3	Na 589.592 Radial†	-1566.7	67.5	19.211 ug/L	19.211 ppb	10:01:10
3	Sr 421.552†	44.3	39.8	0.2638 ug/L	0.2638 ppb	10:01:10
3	Sc 361.383	879435.1	879435.1	96.115 %		10:02:28
3	Y 371.029	749776.4	749776.4	95.928 %		10:02:28
3	Ag 328.068†	-28274.5	-29930.0	3.8713 ug/L	3.8713 ppb	10:02:28
3	As 188.979†	-230.0	-208.1	-12.117 ug/L	-12.117 ppb	10:02:48
3	B 249.677†	1530.0	2305.2	-5.3228 ug/L	-5.3228 ppb	10:02:28
3	Ba 233.527†	-2052.3	-2143.8	-5.5197 ug/L	-5.5197 ppb	10:02:48
3	Be 313.107†	-4228.5	-24.0	-0.0082 ug/L	-0.0082 ppb	10:02:28
3	Cd 226.502†	3378.0	3765.1	-4.1687 ug/L	-4.1687 ppb	10:02:48
3	Co 228.616†	198.8	295.8	-0.1959 ug/L	-0.1959 ppb	10:02:48
3	Cr 267.716†	-622.1	-763.4	-0.4876 ug/L	-0.4876 ppb	10:02:48
3	Cu 324.752†	-976.3	-9114.0	-6.7720 ug/L	-6.7720 ppb	10:02:28
3	Mn 257.610†	-39849.0	-42127.6	-4.7333 ug/L	-4.7333 ppb	10:02:28
3	Mo 202.031†	-430.0	-470.7	8.4203 ug/L	8.4203 ppb	10:02:48
3	Ni 231.604†	209.3	100.4	2.1940 ug/L	2.1940 ppb	10:02:48
3	P 214.914†	794.8	574.3	-33.490 ug/L	-33.490 ppb	10:02:48
3	Pb 220.353†	224.9	334.7	2.1005 ug/L	2.1005 ppb	10:02:48
3	S 181.975 Axial†	68.1	8.4	9.6521 ug/L	9.6521 ppb	10:02:48
3	Sb 206.836†	26.8	-12.8	2.2184 ug/L	2.2184 ppb	10:02:48
3	Se 196.026†	-2303.0	-2360.8	-53.365 ug/L	-53.365 ppb	10:02:48
3	Si 251.611†	-650.5	-1338.5	-37.908 ug/L	-37.908 ppb	10:02:48
3	Sn 189.927†	-43.6	-49.5	-2.0421 ug/L	-2.0421 ppb	10:02:48
3	Ti 334.940†	-1746.4	-24.0	-0.0619 ug/L	-0.0619 ppb	10:02:48
3	Tl 190.801†	-54.7	-11.0	-3.4130 ug/L	-3.4130 ppb	10:02:48
3	U 409.014†	-574.9	2028.1	10.299 ug/L	10.299 ppb	10:02:28
3	V 292.402†	6685.5	8755.9	-5.5383 ug/L	-5.5383 ppb	10:02:48
3	Zn 213.857†	4991.5	4335.0	15.104 ug/L	15.104 ppb	10:02:48
3	SiO2†	-876.9	-1596.3	-97.701 ug/L	-97.701 ppb	10:03:04

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	878884.8	96.055	%	0.5433				0.57%
Sc Radial	4805.8	94.5	%	0.67				0.71%
Y 371.029	749460.1	95.887	%	0.4678				0.49%
Y RADIAL	5109.9	95.31	%	0.791				0.83%
Ag 328.068†	-29869.5	3.8584	ug/L	0.03323	3.8584	ppb	0.03323	0.86%
Al 396.153Radial†	-37.8	-29.495	ug/L	20.8324	-29.495	ppb	20.8324	70.63%
As 188.979†	-209.9	-12.897	ug/L	2.8734	-12.897	ppb	2.8734	22.28%
B 249.677†	2263.7	-6.0649	ug/L	1.51347	-6.0649	ppb	1.51347	24.95%
Ba 233.527†	-2127.6	-5.4229	ug/L	0.13916	-5.4229	ppb	0.13916	2.57%
Be 313.107†	-32.5	-0.0110	ug/L	0.02185	-0.0110	ppb	0.02185	198.07%
Ca 317.933Radial†	-7.0	-11.133	ug/L	2.5320	-11.133	ppb	2.5320	22.74%
Cd 226.502†	3748.5	-4.2440	ug/L	0.16331	-4.2440	ppb	0.16331	3.85%
Co 228.616†	283.0	-0.4232	ug/L	0.33455	-0.4232	ppb	0.33455	79.04%
Cr 267.716†	-748.4	-0.3535	ug/L	0.12978	-0.3535	ppb	0.12978	36.72%
Cu 324.752†	-9116.5	-6.8203	ug/L	0.04246	-6.8203	ppb	0.04246	0.62%
Fe 238.204 Radial†	45625.8	395130	ug/L	845.0	395130	ppb	845.0	0.21%
K 766.490 Radial†	120.5	36.188	ug/L	17.4245	36.188	ppb	17.4245	48.15%

Mg 279.077 IEC†	8.9	-63.197 ug/L	76.9978	-63.197 ppb	76.9978	121.84%
Mn 257.610†	-41967.2	-4.6439 ug/L	0.10853	-4.6439 ppb	0.10853	2.34%
Mo 202.031†	-463.9	8.7722 ug/L	0.41714	8.7722 ppb	0.41714	4.76%
Na 589.592 Radial†	82.4	23.454 ug/L	3.8103	23.454 ppb	3.8103	16.25%
Ni 231.604†	86.5	1.8887 ug/L	0.43987	1.8887 ppb	0.43987	23.29%
P 214.914†	565.5	-37.175 ug/L	3.2998	-37.175 ppb	3.2998	8.88%
Pb 220.353†	330.9	1.7628 ug/L	0.50246	1.7628 ppb	0.50246	28.50%
S 181.975 Axial†	13.9	15.907 ug/L	5.9353	15.907 ppb	5.9353	37.31%
Sb 206.836†	-15.9	1.2840 ug/L	1.18951	1.2840 ppb	1.18951	92.64%
Se 196.026†	-2337.5	-43.785 ug/L	8.4043	-43.785 ppb	8.4043	19.19%
Si 251.611†	-1314.7	-37.228 ug/L	0.9532	-37.228 ppb	0.9532	2.56%
Sn 189.927†	-47.0	-1.6914 ug/L	0.87052	-1.6914 ppb	0.87052	51.47%
Sr 421.552†	43.8	0.2905 ug/L	0.05732	0.2905 ppb	0.05732	19.73%
Ti 334.940†	-25.6	-0.0655 ug/L	0.01169	-0.0655 ppb	0.01169	17.85%
Tl 190.801†	-15.1	-4.5344 ug/L	1.59952	-4.5344 ppb	1.59952	35.28%
U 409.014†	2092.7	12.313 ug/L	2.0736	12.313 ppb	2.0736	16.84%
V 292.402†	8676.1	-5.9091 ug/L	0.33841	-5.9091 ppb	0.33841	5.73%
Zn 213.857†	4315.3	14.988 ug/L	0.1939	14.988 ppb	0.1939	1.29%
SiO2†	-1486.3	-90.899 ug/L	5.9641	-90.899 ppb	5.9641	6.56%

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

Autosampler Location: 7
Date Collected: 1/5/2010 10:05:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4880.7	4880.7	96.0	%			10:07:07
1	Y RADIAL	5143.1	5143.1	95.93	%			10:07:07
1	Al 396.153Radial†	5891.5	6157.8	4979.7	ug/L	4979.7	ppb	10:07:07
1	Ca 317.933Radial†	3016.5	3124.6	4959.0	ug/L	4959.0	ppb	10:07:27
1	Fe 238.204 Radial†	571.3	580.5	5042.9	ug/L	5042.9	ppb	10:07:27
1	K 766.490 Radial†	28308.3	26162.6	5031.7	ug/L	5031.7	ppb	10:07:07
1	Mg 279.077 IEC†	159.9	162.7	5036.4	ug/L	5036.4	ppb	10:07:27
1	Na 589.592 Radial†	33603.1	36748.2	10459	ug/L	10459	ppb	10:07:07
1	Sr 421.552†	72112.1	75124.9	498.17	ug/L	498.17	ppb	10:07:07
1	Sc 361.383	893820.7	893820.7	97.688	%			10:08:26
1	Y 371.029	756875.4	756875.4	96.836	%			10:08:26
1	Ag 328.068†	113550.6	115725.7	500.49	ug/L	500.49	ppb	10:08:26
1	As 188.979†	1387.9	1452.0	515.80	ug/L	515.80	ppb	10:08:46
1	B 249.677†	23090.0	24350.0	496.80	ug/L	496.80	ppb	10:08:26
1	Ba 233.527†	67138.1	68718.8	502.05	ug/L	502.05	ppb	10:08:26
1	Be 313.107†	1447403.3	1486040.6	502.42	ug/L	502.42	ppb	10:08:26
1	Cd 226.502†	51954.9	53435.3	502.42	ug/L	502.42	ppb	10:08:26
1	Co 228.616†	25905.3	26607.5	497.60	ug/L	497.60	ppb	10:08:46
1	Cr 267.716†	48743.0	49780.7	499.37	ug/L	499.37	ppb	10:08:26
1	Cu 324.752†	171793.7	167762.0	496.68	ug/L	496.68	ppb	10:08:26
1	Mn 257.610†	468064.7	478476.3	502.54	ug/L	502.54	ppb	10:08:26
1	Mo 202.031†	7911.8	8075.8	507.15	ug/L	507.15	ppb	10:08:46
1	Ni 231.604†	22423.3	22836.7	499.42	ug/L	499.42	ppb	10:08:46
1	P 214.914†	5284.7	5157.2	2453.1	ug/L	2453.1	ppb	10:08:46
1	Pb 220.353†	4687.4	4899.1	508.77	ug/L	508.77	ppb	10:08:46
1	S 181.975 Axial†	920.6	880.0	1004.3	ug/L	1004.3	ppb	10:08:46
1	Sb 206.836†	1680.3	1679.4	505.15	ug/L	505.15	ppb	10:08:46
1	Se 196.026†	933.4	990.7	523.69	ug/L	523.69	ppb	10:08:46
1	Si 251.611†	85187.2	86542.0	2472.8	ug/L	2472.8	ppb	10:08:26
1	Sn 189.927†	3326.2	3400.8	504.72	ug/L	504.72	ppb	10:08:46
1	Ti 334.940†	309970.8	319101.2	499.78	ug/L	499.78	ppb	10:08:26
1	Tl 190.801†	1758.5	1846.1	508.87	ug/L	508.87	ppb	10:08:46
1	U 409.014†	13024.5	15959.1	471.30	ug/L	471.30	ppb	10:08:26
1	V 292.402†	75663.1	79254.4	504.43	ug/L	504.43	ppb	10:08:26
1	Zn 213.857†	60441.3	61013.8	497.02	ug/L	497.02	ppb	10:08:26
1	SiO2†	85393.8	86731.2	5343.7	ug/L	5343.7	ppb	10:09:47
2	Sc Radial	4930.0	4930.0	96.9	%			10:07:32
2	Y RADIAL	5169.8	5169.8	96.43	%			10:07:32
2	Al 396.153Radial†	5910.3	6115.8	4945.7	ug/L	4945.7	ppb	10:07:32
2	Ca 317.933Radial†	3063.4	3141.5	4985.8	ug/L	4985.8	ppb	10:07:52
2	Fe 238.204 Radial†	581.0	584.6	5078.3	ug/L	5078.3	ppb	10:07:52
2	K 766.490 Radial†	28524.8	26091.0	5017.9	ug/L	5017.9	ppb	10:07:32
2	Mg 279.077 IEC†	162.9	164.1	5081.6	ug/L	5081.6	ppb	10:07:52
2	Na 589.592 Radial†	34018.4	36826.5	10482	ug/L	10482	ppb	10:07:32
2	Sr 421.552†	72956.8	75244.9	498.96	ug/L	498.96	ppb	10:07:32
2	Sc 361.383	892241.1	892241.1	97.515	%			10:08:54
2	Y 371.029	755937.1	755937.1	96.716	%			10:08:54
2	Ag 328.068†	113356.0	115732.0	500.52	ug/L	500.52	ppb	10:08:54
2	As 188.979†	1365.8	1431.9	508.71	ug/L	508.71	ppb	10:09:14
2	B 249.677†	22980.2	24279.2	495.35	ug/L	495.35	ppb	10:08:54
2	Ba 233.527†	66942.6	68640.0	501.47	ug/L	501.47	ppb	10:08:54
2	Be 313.107†	1443164.1	1484316.6	501.84	ug/L	501.84	ppb	10:08:54
2	Cd 226.502†	51733.7	53302.7	501.17	ug/L	501.17	ppb	10:08:54
2	Co 228.616†	25773.1	26518.9	495.94	ug/L	495.94	ppb	10:09:14
2	Cr 267.716†	48639.5	49762.8	499.19	ug/L	499.19	ppb	10:08:54
2	Cu 324.752†	171478.8	167750.4	496.65	ug/L	496.65	ppb	10:08:54
2	Mn 257.610†	466971.3	478203.4	502.26	ug/L	502.26	ppb	10:08:54
2	Mo 202.031†	7861.3	8038.3	504.81	ug/L	504.81	ppb	10:09:14
2	Ni 231.604†	22345.1	22797.2	498.56	ug/L	498.56	ppb	10:09:14

2	P 214.914†	5255.6	5136.9	2443.2 ug/L	2443.2 ppb	10:09:14
2	Pb 220.353†	4676.8	4896.8	508.52 ug/L	508.52 ppb	10:09:14
2	S 181.975 Axial†	915.8	876.8	1000.6 ug/L	1000.6 ppb	10:09:14
2	Sb 206.836†	1684.1	1686.3	507.19 ug/L	507.19 ppb	10:09:14
2	Se 196.026†	919.5	978.2	517.37 ug/L	517.37 ppb	10:09:14
2	Si 251.611†	84822.9	86322.7	2466.6 ug/L	2466.6 ppb	10:08:54
2	Sn 189.927†	3330.7	3411.5	506.31 ug/L	506.31 ppb	10:09:14
2	Ti 334.940†	309163.1	318834.7	499.36 ug/L	499.36 ppb	10:08:54
2	Tl 190.801†	1737.9	1828.1	503.96 ug/L	503.96 ppb	10:09:14
2	U 409.014†	13065.3	16024.5	473.24 ug/L	473.24 ppb	10:08:54
2	V 292.402†	75419.1	79141.3	503.69 ug/L	503.69 ppb	10:08:54
2	Zn 213.857†	60236.4	60913.3	496.20 ug/L	496.20 ppb	10:08:54
2	SiO2†	85833.9	87337.2	5381.3 ug/L	5381.3 ppb	10:09:52
3	Sc Radial	4754.2	4754.2	93.5 %		10:07:57
3	Y RADIAL	4977.6	4977.6	92.84 %		10:07:57
3	Al 396.153Radial†	5692.3	6108.0	4939.4 ug/L	4939.4 ppb	10:07:57
3	Ca 317.933Radial†	3029.8	3222.4	5114.1 ug/L	5114.1 ppb	10:08:17
3	Fe 238.204 Radial†	573.3	598.5	5198.6 ug/L	5198.6 ppb	10:08:17
3	K 766.490 Radial†	27733.2	26332.1	5064.4 ug/L	5064.4 ppb	10:07:57
3	Mg 279.077 IEC†	161.1	168.4	5213.2 ug/L	5213.2 ppb	10:08:17
3	Na 589.592 Radial†	32769.8	36788.4	10471 ug/L	10471 ppb	10:07:57
3	Sr 421.552†	70383.5	75274.8	499.16 ug/L	499.16 ppb	10:07:57
3	Sc 361.383	902090.8	902090.8	98.591 %		10:09:21
3	Y 371.029	763993.0	763993.0	97.747 %		10:09:21
3	Ag 328.068†	114589.2	115713.5	500.49 ug/L	500.49 ppb	10:09:21
3	As 188.979†	1381.7	1432.7	509.01 ug/L	509.01 ppb	10:09:41
3	B 249.677†	23405.8	24453.6	498.90 ug/L	498.90 ppb	10:09:21
3	Ba 233.527†	67749.7	68709.0	501.98 ug/L	501.98 ppb	10:09:21
3	Be 313.107†	1461046.8	1486295.5	502.51 ug/L	502.51 ppb	10:09:21
3	Cd 226.502†	52376.5	53375.4	501.84 ug/L	501.84 ppb	10:09:21
3	Co 228.616†	26058.4	26519.7	495.95 ug/L	495.95 ppb	10:09:41
3	Cr 267.716†	49277.3	49865.1	500.22 ug/L	500.22 ppb	10:09:21
3	Cu 324.752†	173515.5	167896.2	497.08 ug/L	497.08 ppb	10:09:21
3	Mn 257.610†	472006.2	478081.5	502.14 ug/L	502.14 ppb	10:09:21
3	Mo 202.031†	7941.1	8031.2	504.37 ug/L	504.37 ppb	10:09:41
3	Ni 231.604†	22519.7	22724.1	496.96 ug/L	496.96 ppb	10:09:41
3	P 214.914†	5315.5	5138.8	2443.9 ug/L	2443.9 ppb	10:09:41
3	Pb 220.353†	4729.2	4897.5	508.58 ug/L	508.58 ppb	10:09:41
3	S 181.975 Axial†	928.7	879.6	1003.8 ug/L	1003.8 ppb	10:09:41
3	Sb 206.836†	1718.0	1701.8	511.69 ug/L	511.69 ppb	10:09:41
3	Se 196.026†	935.8	984.5	520.93 ug/L	520.93 ppb	10:09:41
3	Si 251.611†	85884.3	86449.6	2470.2 ug/L	2470.2 ppb	10:09:21
3	Sn 189.927†	3342.3	3385.9	502.53 ug/L	502.53 ppb	10:09:41
3	Ti 334.940†	312653.0	318912.7	499.49 ug/L	499.49 ppb	10:09:21
3	Tl 190.801†	1766.6	1837.8	506.61 ug/L	506.61 ppb	10:09:41
3	U 409.014†	13108.1	15921.6	470.17 ug/L	470.17 ppb	10:09:21
3	V 292.402†	76305.7	79196.1	504.00 ug/L	504.00 ppb	10:09:21
3	Zn 213.857†	60937.9	60950.3	496.50 ug/L	496.50 ppb	10:09:21
3	SiO2†	85448.7	85985.5	5297.7 ug/L	5297.7 ppb	10:09:57

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	896050.9	97.931	%	0.5782				0.59%
Sc Radial	4855.0	95.5	%	1.78				1.87%
Y 371.029	758935.2	97.100	%	0.5636				0.58%
Y RADIAL	5096.8	95.07	%	1.942				2.04%
Ag 328.068†	115723.8	500.50	ug/L	0.021	500.50	ppb	0.021	0.00%
QC value within limits for Ag 328.068 Recovery = 100.10%								
Al 396.153Radial†	6127.2	4954.9	ug/L	21.68	4954.9	ppb	21.68	0.44%
QC value within limits for Al 396.153Radial Recovery = 99.10%								
As 188.979†	1438.9	511.17	ug/L	4.008	511.17	ppb	4.008	0.78%
QC value within limits for As 188.979 Recovery = 102.23%								
B 249.677†	24360.9	497.02	ug/L	1.788	497.02	ppb	1.788	0.36%
QC value within limits for B 249.677 Recovery = 99.40%								
Ba 233.527†	68689.3	501.83	ug/L	0.314	501.83	ppb	0.314	0.06%
QC value within limits for Ba 233.527 Recovery = 100.37%								
Be 313.107†	1485550.9	502.25	ug/L	0.364	502.25	ppb	0.364	0.07%
QC value within limits for Be 313.107 Recovery = 100.45%								
Ca 317.933Radial†	3162.9	5019.7	ug/L	82.91	5019.7	ppb	82.91	1.65%

QC value within limits for Ca 317.933Radial Recovery = 100.39%

Cd 226.502†	53371.1	501.81 ug/L	0.627	501.81 ppb	0.627	0.12%
QC value within limits for Cd 226.502 Recovery = 100.36%						
Co 228.616†	26548.7	496.50 ug/L	0.956	496.50 ppb	0.956	0.19%
QC value within limits for Co 228.616 Recovery = 99.30%						
Cr 267.716†	49802.8	499.60 ug/L	0.549	499.60 ppb	0.549	0.11%
QC value within limits for Cr 267.716 Recovery = 99.92%						
Cu 324.752†	167802.9	496.80 ug/L	0.244	496.80 ppb	0.244	0.05%
QC value within limits for Cu 324.752 Recovery = 99.36%						
Fe 238.204 Radial†	587.9	5106.6 ug/L	81.58	5106.6 ppb	81.58	1.60%
QC value within limits for Fe 238.204 Radial Recovery = 102.13%						
K 766.490 Radial†	26195.2	5038.0 ug/L	23.85	5038.0 ppb	23.85	0.47%
QC value within limits for K 766.490 Radial Recovery = 100.76%						
Mg 279.077 IEC†	165.1	5110.4 ug/L	91.83	5110.4 ppb	91.83	1.80%
QC value within limits for Mg 279.077 IEC Recovery = 102.21%						
Mn 257.610†	478253.7	502.31 ug/L	0.207	502.31 ppb	0.207	0.04%
QC value within limits for Mn 257.610 Recovery = 100.46%						
Mo 202.031†	8048.4	505.44 ug/L	1.495	505.44 ppb	1.495	0.30%
QC value within limits for Mo 202.031 Recovery = 101.09%						
Na 589.592 Radial†	36787.7	10471 ug/L	11.1	10471 ppb	11.1	0.11%
QC value within limits for Na 589.592 Radial Recovery = 104.71%						
Ni 231.604†	22786.0	498.31 ug/L	1.250	498.31 ppb	1.250	0.25%
QC value within limits for Ni 231.604 Recovery = 99.66%						
P 214.914†	5144.3	2446.7 ug/L	5.55	2446.7 ppb	5.55	0.23%
QC value within limits for P 214.914 Recovery = 97.87%						
Pb 220.353†	4897.8	508.62 ug/L	0.132	508.62 ppb	0.132	0.03%
QC value within limits for Pb 220.353 Recovery = 101.72%						
S 181.975 Axial†	878.8	1002.9 ug/L	2.00	1002.9 ppb	2.00	0.20%
QC value within limits for S 181.975 Axial Recovery = 100.29%						
Sb 206.836†	1689.2	508.01 ug/L	3.342	508.01 ppb	3.342	0.66%
QC value within limits for Sb 206.836 Recovery = 101.60%						
Se 196.026†	984.5	520.66 ug/L	3.168	520.66 ppb	3.168	0.61%
QC value within limits for Se 196.026 Recovery = 104.13%						
Si 251.611†	86438.1	2469.9 ug/L	3.14	2469.9 ppb	3.14	0.13%
QC value within limits for Si 251.611 Recovery = 98.80%						
Sn 189.927†	3399.4	504.52 ug/L	1.895	504.52 ppb	1.895	0.38%
QC value within limits for Sn 189.927 Recovery = 100.90%						
Sr 421.552†	75214.9	498.76 ug/L	0.526	498.76 ppb	0.526	0.11%
QC value within limits for Sr 421.552 Recovery = 99.75%						
Ti 334.940†	318949.5	499.54 ug/L	0.213	499.54 ppb	0.213	0.04%
QC value within limits for Ti 334.940 Recovery = 99.91%						
Tl 190.801†	1837.3	506.48 ug/L	2.454	506.48 ppb	2.454	0.48%
QC value within limits for Tl 190.801 Recovery = 101.30%						
U 409.014†	15968.4	471.57 ug/L	1.550	471.57 ppb	1.550	0.33%
QC value within limits for U 409.014 Recovery = 94.31%						
V 292.402†	79197.3	504.04 ug/L	0.373	504.04 ppb	0.373	0.07%
QC value within limits for V 292.402 Recovery = 100.81%						
Zn 213.857†	60959.1	496.57 ug/L	0.417	496.57 ppb	0.417	0.08%
QC value within limits for Zn 213.857 Recovery = 99.31%						
SiO2†	86684.6	5340.9 ug/L	41.91	5340.9 ppb	41.91	0.78%
QC value within limits for SiO2 Recovery = 99.88%						

All analyte(s) passed QC.

Sequence No.: 5
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/5/2010 10:12:06
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4772.3	4772.3	93.8	%			10:13:59
1	Y RADIAL	5039.4	5039.4	94.00	%			10:13:59
1	Al 396.153Radial†	-28.9	-11.2	-9.1403	ug/L	-9.1403	ppb	10:13:59
1	Ca 317.933Radial†	21.3	4.4	7.0372	ug/L	7.0372	ppb	10:14:19
1	Fe 238.204 Radial†	14.8	1.1	9.4222	ug/L	9.4222	ppb	10:14:19
1	K 766.490 Radial†	3323.0	209.6	40.390	ug/L	40.390	ppb	10:13:59
1	Mg 279.077 IEC†	4.5	0.9	28.046	ug/L	28.046	ppb	10:14:19
1	Na 589.592 Radial†	-1742.0	-118.4	-33.706	ug/L	-33.706	ppb	10:13:59
1	Sr 421.552†	-5.8	-13.6	-0.0904	ug/L	-0.0904	ppb	10:13:59
1	Sc 361.383	890499.9	890499.9	97.325	%			10:15:16
1	Y 371.029	763494.5	763494.5	97.683	%			10:15:16
1	Ag 328.068†	422.2	-79.0	-0.3241	ug/L	-0.3241	ppb	10:15:16
1	As 188.979†	-32.6	-2.3	-0.8008	ug/L	-0.8008	ppb	10:15:36
1	B 249.677†	-260.4	445.8	9.1291	ug/L	9.1291	ppb	10:15:16
1	Ba 233.527†	3.7	-4.7	-0.0338	ug/L	-0.0338	ppb	10:15:36
1	Be 313.107†	-4350.3	-94.5	-0.0319	ug/L	-0.0319	ppb	10:15:16
1	Cd 226.502†	-229.1	15.2	0.1423	ug/L	0.1423	ppb	10:15:36
1	Co 228.616†	-74.3	12.6	0.2373	ug/L	0.2373	ppb	10:15:36
1	Cr 267.716†	109.7	-3.5	-0.0300	ug/L	-0.0300	ppb	10:15:16
1	Cu 324.752†	8102.6	227.1	0.6725	ug/L	0.6725	ppb	10:15:16
1	Mn 257.610†	592.3	-59.5	-0.0620	ug/L	-0.0620	ppb	10:15:16
1	Mo 202.031†	32.3	9.9	0.6234	ug/L	0.6234	ppb	10:15:36
1	Ni 231.604†	131.2	17.5	0.3823	ug/L	0.3823	ppb	10:15:36
1	P 214.914†	266.2	20.9	10.155	ug/L	10.155	ppb	10:15:36
1	Pb 220.353†	-79.4	19.2	1.9840	ug/L	1.9840	ppb	10:15:36
1	S 181.975 Axial†	63.9	3.3	3.7363	ug/L	3.7363	ppb	10:15:36
1	Sb 206.836†	55.7	16.6	4.9295	ug/L	4.9295	ppb	10:15:36
1	Se 196.026†	-35.7	-1.4	-0.6704	ug/L	-0.6704	ppb	10:15:36
1	Si 251.611†	685.1	42.2	1.1872	ug/L	1.1872	ppb	10:15:36
1	Sn 189.927†	6.9	3.0	0.4439	ug/L	0.4439	ppb	10:15:36
1	Ti 334.940†	-1745.1	-0.1	0.0063	ug/L	0.0063	ppb	10:15:16
1	Tl 190.801†	-46.2	-1.5	-0.4163	ug/L	-0.4163	ppb	10:15:36
1	U 409.014†	-3005.0	-461.4	-13.673	ug/L	-13.673	ppb	10:15:16
1	V 292.402†	-1731.6	21.0	0.1135	ug/L	0.1135	ppb	10:15:16
1	Zn 213.857†	882.7	48.7	0.3957	ug/L	0.3957	ppb	10:15:36
1	SiO2†	722.3	58.2	3.5483	ug/L	3.5483	ppb	10:16:32
2	Sc Radial	5056.8	5056.8	99.4	%			10:14:24
2	Y RADIAL	5354.5	5354.5	99.87	%			10:14:24
2	Al 396.153Radial†	-19.0	0.4	0.2677	ug/L	0.2677	ppb	10:14:24
2	Ca 317.933Radial†	20.0	1.8	2.8692	ug/L	2.8692	ppb	10:14:44
2	Fe 238.204 Radial†	15.1	0.5	4.1344	ug/L	4.1344	ppb	10:14:44
2	K 766.490 Radial†	3406.6	94.4	18.203	ug/L	18.203	ppb	10:14:24
2	Mg 279.077 IEC†	1.1	-2.8	-86.966	ug/L	-86.966	ppb	10:14:44
2	Na 589.592 Radial†	-1790.3	-62.6	-17.816	ug/L	-17.816	ppb	10:14:24
2	Sr 421.552†	32.3	25.0	0.1660	ug/L	0.1660	ppb	10:14:24
2	Sc 361.383	883712.2	883712.2	96.583	%			10:15:41
2	Y 371.029	757869.2	757869.2	96.963	%			10:15:41
2	Ag 328.068†	405.3	-93.1	-0.3889	ug/L	-0.3889	ppb	10:15:41
2	As 188.979†	-20.2	10.3	3.6152	ug/L	3.6152	ppb	10:16:01
2	B 249.677†	-386.0	313.7	6.4254	ug/L	6.4254	ppb	10:15:41
2	Ba 233.527†	-0.3	-8.9	-0.0661	ug/L	-0.0661	ppb	10:16:01
2	Be 313.107†	-4321.3	-98.8	-0.0335	ug/L	-0.0335	ppb	10:15:41
2	Cd 226.502†	-221.1	21.7	0.2038	ug/L	0.2038	ppb	10:16:01
2	Co 228.616†	-98.3	-12.8	-0.2357	ug/L	-0.2357	ppb	10:16:01
2	Cr 267.716†	104.4	-8.1	-0.0777	ug/L	-0.0777	ppb	10:15:41
2	Cu 324.752†	8028.3	214.1	0.6338	ug/L	0.6338	ppb	10:15:41
2	Mn 257.610†	587.1	-60.2	-0.0612	ug/L	-0.0612	ppb	10:15:41
2	Mo 202.031†	44.8	23.1	1.4493	ug/L	1.4493	ppb	10:16:01
2	Ni 231.604†	133.7	21.1	0.4620	ug/L	0.4620	ppb	10:16:01

2	P 214.914†	254.2	10.6	5.1313 ug/L	5.1313 ppb	10:16:01
2	Pb 220.353†	-101.6	-4.5	-0.4644 ug/L	-0.4644 ppb	10:16:01
2	S 181.975 Axial†	56.9	-3.4	-3.9145 ug/L	-3.9145 ppb	10:16:01
2	Sb 206.836†	41.5	2.2	0.7232 ug/L	0.7232 ppb	10:16:01
2	Se 196.026†	-29.7	4.5	2.3312 ug/L	2.3312 ppb	10:16:01
2	Si 251.611†	677.7	40.0	1.1117 ug/L	1.1117 ppb	10:16:01
2	Sn 189.927†	15.6	12.0	1.7776 ug/L	1.7776 ppb	10:16:01
2	Ti 334.940†	-1772.5	-42.2	-0.0593 ug/L	-0.0593 ppb	10:15:41
2	Tl 190.801†	-39.7	4.8	1.3175 ug/L	1.3175 ppb	10:16:01
2	U 409.014†	-3027.9	-508.8	-15.078 ug/L	-15.078 ppb	10:15:41
2	V 292.402†	-1851.0	-116.3	-0.7411 ug/L	-0.7411 ppb	10:15:41
2	Zn 213.857†	904.5	78.3	0.6420 ug/L	0.6420 ppb	10:16:01
2	SiO2†	704.7	45.6	2.7432 ug/L	2.7432 ppb	10:16:37
3	Sc Radial	5041.7	5041.7	99.1 %		10:14:49
3	Y RADIAL	5302.4	5302.4	98.90 %		10:14:49
3	Al 396.153Radial†	-25.6	-6.3	-5.1578 ug/L	-5.1578 ppb	10:14:49
3	Ca 317.933Radial†	19.8	1.7	2.6553 ug/L	2.6553 ppb	10:15:09
3	Fe 238.204 Radial†	15.3	0.8	6.5408 ug/L	6.5408 ppb	10:15:09
3	K 766.490 Radial†	3510.8	209.7	40.405 ug/L	40.405 ppb	10:14:49
3	Mg 279.077 IEC†	4.6	0.7	21.998 ug/L	21.998 ppb	10:15:09
3	Na 589.592 Radial†	-1694.0	29.2	8.3199 ug/L	8.3199 ppb	10:14:49
3	Sr 421.552†	30.1	22.9	0.1521 ug/L	0.1521 ppb	10:14:49
3	Sc 361.383	883764.2	883764.2	96.589 %		10:16:07
3	Y 371.029	757317.8	757317.8	96.893 %		10:16:07
3	Ag 328.068†	497.0	1.7	0.0155 ug/L	0.0155 ppb	10:16:07
3	As 188.979†	-21.9	8.6	3.0146 ug/L	3.0146 ppb	10:16:27
3	B 249.677†	-350.0	351.0	7.1893 ug/L	7.1893 ppb	10:16:07
3	Ba 233.527†	-7.5	-16.3	-0.1191 ug/L	-0.1191 ppb	10:16:27
3	Be 313.107†	-4369.7	-148.6	-0.0504 ug/L	-0.0504 ppb	10:16:07
3	Cd 226.502†	-220.5	22.3	0.2093 ug/L	0.2093 ppb	10:16:27
3	Co 228.616†	-105.1	-19.8	-0.3678 ug/L	-0.3678 ppb	10:16:27
3	Cr 267.716†	95.6	-17.2	-0.1702 ug/L	-0.1702 ppb	10:16:07
3	Cu 324.752†	7922.7	104.3	0.3090 ug/L	0.3090 ppb	10:16:07
3	Mn 257.610†	505.7	-144.5	-0.1514 ug/L	-0.1514 ppb	10:16:07
3	Mo 202.031†	35.3	13.3	0.8323 ug/L	0.8323 ppb	10:16:27
3	Ni 231.604†	124.6	11.6	0.2544 ug/L	0.2544 ppb	10:16:27
3	P 214.914†	261.8	18.4	8.9700 ug/L	8.9700 ppb	10:16:27
3	Pb 220.353†	-85.3	12.4	1.2888 ug/L	1.2888 ppb	10:16:27
3	S 181.975 Axial†	67.6	7.6	8.6526 ug/L	8.6526 ppb	10:16:27
3	Sb 206.836†	40.9	1.6	0.5014 ug/L	0.5014 ppb	10:16:27
3	Se 196.026†	-31.8	2.3	1.2120 ug/L	1.2120 ppb	10:16:27
3	Si 251.611†	701.9	65.0	1.8397 ug/L	1.8397 ppb	10:16:27
3	Sn 189.927†	1.4	-2.7	-0.3937 ug/L	-0.3937 ppb	10:16:27
3	Ti 334.940†	-1803.0	-73.7	-0.1118 ug/L	-0.1118 ppb	10:16:07
3	Tl 190.801†	-38.0	6.6	1.8154 ug/L	1.8154 ppb	10:16:27
3	U 409.014†	-2794.0	-266.4	-7.8952 ug/L	-7.8952 ppb	10:16:07
3	V 292.402†	-1773.7	-36.1	-0.2305 ug/L	-0.2305 ppb	10:16:07
3	Zn 213.857†	885.7	58.7	0.4795 ug/L	0.4795 ppb	10:16:27
3	SiO2†	725.5	67.2	4.1001 ug/L	4.1001 ppb	10:16:42

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	885992.1	96.832	%	0.4267				0.44%
Sc Radial	4956.9	97.5	%	3.15				3.23%
Y 371.029	759560.5	97.180	%	0.4373				0.45%
Y RADIAL	5232.1	97.59	%	3.150				3.23%
Ag 328.068†	-56.8	-0.2325	ug/L	0.21717	-0.2325	ppb	0.21717	93.41%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-5.7	-4.6768	ug/L	4.72239	-4.6768	ppb	4.72239	100.97%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	5.5	1.9430	ug/L	2.39509	1.9430	ppb	2.39509	123.27%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	370.2	7.5812	ug/L	1.39381	7.5812	ppb	1.39381	18.39%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-10.0	-0.0730	ug/L	0.04308	-0.0730	ppb	0.04308	59.00%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-114.0	-0.0386	ug/L	0.01025	-0.0386	ppb	0.01025	26.56%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.6	4.1872	ug/L	2.47048	4.1872	ppb	2.47048	59.00%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†          19.7      0.1852 ug/L       0.03721      0.1852 ppb       0.03721  20.10%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†          -6.7     -0.1221 ug/L       0.31813     -0.1221 ppb       0.31813 260.59%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†          -9.6     -0.0926 ug/L       0.07125     -0.0926 ppb       0.07125  76.91%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†         181.8      0.5384 ug/L       0.19964      0.5384 ppb       0.19964  37.08%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    0.8      6.6991 ug/L       2.64745      6.6991 ppb       2.64745  39.52%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†   171.2       33.000 ug/L       12.8142      33.000 ppb       12.8142  38.83%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†      -0.4     -12.307 ug/L       64.7267     -12.307 ppb       64.7267 525.92%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†         -88.1     -0.0915 ug/L       0.05183     -0.0915 ppb       0.05183  56.64%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†          15.4      0.9683 ug/L       0.42940      0.9683 ppb       0.42940  44.34%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†  -50.6     -14.401 ug/L       21.2201     -14.401 ppb       21.2201 147.35%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†          16.7      0.3662 ug/L       0.10474      0.3662 ppb       0.10474  28.60%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†           16.7      8.0854 ug/L       2.62598      8.0854 ppb       2.62598  32.48%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†           9.0      0.9361 ug/L       1.26171      0.9361 ppb       1.26171 134.78%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†      2.5      2.8248 ug/L       6.33297      2.8248 ppb       6.33297 224.19%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†           6.8      2.0513 ug/L       2.49501      2.0513 ppb       2.49501 121.63%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†           1.8      0.9576 ug/L       1.51688      0.9576 ppb       1.51688 158.40%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†          49.1      1.3795 ug/L       0.40033      1.3795 ppb       0.40033  29.02%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†           4.1      0.6093 ug/L       1.09506      0.6093 ppb       1.09506 179.73%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†          11.4      0.0759 ug/L       0.14419      0.0759 ppb       0.14419 190.03%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†         -38.7     -0.0549 ug/L       0.05916     -0.0549 ppb       0.05916 107.74%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†           3.3      0.9055 ug/L       1.17148      0.9055 ppb       1.17148 129.37%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†         -412.2     -12.215 ug/L        3.8069     -12.215 ppb        3.8069  31.16%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†         -43.8      -0.2860 ug/L       0.43002     -0.2860 ppb       0.43002 150.35%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†          61.9      0.5058 ug/L       0.12523      0.5058 ppb       0.12523  24.76%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                57.0      3.4639 ug/L       0.68239      3.4639 ppb       0.68239  19.70%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/5/2010 11:12:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4827.3	4827.3	94.9	%			11:14:02
1	Y RADIAL	5065.6	5065.6	94.49	%			11:14:02
1	Al 396.153Radial†	5893.1	6227.4	5036.1	ug/L	5036.1	ppb	11:14:02
1	Ca 317.933Radial†	3037.4	3181.4	5049.0	ug/L	5049.0	ppb	11:14:22
1	Fe 238.204 Radial†	569.6	585.4	5085.2	ug/L	5085.2	ppb	11:14:22
1	K 766.490 Radial†	28849.0	27058.6	5204.2	ug/L	5204.2	ppb	11:14:02
1	Mg 279.077 IEC†	159.4	164.1	5080.1	ug/L	5080.1	ppb	11:14:22
1	Na 589.592 Radial†	33271.8	36786.8	10470	ug/L	10470	ppb	11:14:02
1	Sr 421.552†	71960.2	75796.4	502.62	ug/L	502.62	ppb	11:14:02
1	Sc 361.383	894898.7	894898.7	97.805	%			11:15:21
1	Y 371.029	757060.4	757060.4	96.860	%			11:15:21
1	Ag 328.068†	115615.8	117697.2	509.00	ug/L	509.00	ppb	11:15:21
1	As 188.979†	1381.4	1443.6	512.94	ug/L	512.94	ppb	11:15:41
1	B 249.677†	23630.7	24874.3	507.52	ug/L	507.52	ppb	11:15:21
1	Ba 233.527†	68291.5	69815.3	510.06	ug/L	510.06	ppb	11:15:21
1	Be 313.107†	1475366.0	1512845.9	511.48	ug/L	511.48	ppb	11:15:21
1	Cd 226.502†	52896.8	54334.3	510.87	ug/L	510.87	ppb	11:15:21
1	Co 228.616†	26105.4	26780.1	500.82	ug/L	500.82	ppb	11:15:41
1	Cr 267.716†	49726.0	50725.6	508.85	ug/L	508.85	ppb	11:15:21
1	Cu 324.752†	175555.0	171395.9	507.43	ug/L	507.43	ppb	11:15:21
1	Mn 257.610†	477527.9	487574.7	512.09	ug/L	512.09	ppb	11:15:21
1	Mo 202.031†	7950.5	8105.6	509.03	ug/L	509.03	ppb	11:15:41
1	Ni 231.604†	22564.9	22953.9	501.98	ug/L	501.98	ppb	11:15:41
1	P 214.914†	5329.8	5196.8	2470.8	ug/L	2470.8	ppb	11:15:41
1	Pb 220.353†	4726.4	4933.2	512.31	ug/L	512.31	ppb	11:15:41
1	S 181.975 Axial†	918.2	876.4	1000.2	ug/L	1000.2	ppb	11:15:41
1	Sb 206.836†	1701.6	1699.1	510.82	ug/L	510.82	ppb	11:15:41
1	Se 196.026†	942.9	999.4	528.23	ug/L	528.23	ppb	11:15:41
1	Si 251.611†	87155.9	88449.8	2527.5	ug/L	2527.5	ppb	11:15:21
1	Sn 189.927†	3336.2	3406.9	505.64	ug/L	505.64	ppb	11:15:41
1	Ti 334.940†	316452.0	325345.6	509.56	ug/L	509.56	ppb	11:15:21
1	Tl 190.801†	1763.1	1848.6	509.66	ug/L	509.66	ppb	11:15:41
1	U 409.014†	13250.3	16173.8	477.64	ug/L	477.64	ppb	11:15:21
1	V 292.402†	77128.6	80659.4	513.27	ug/L	513.27	ppb	11:15:21
1	Zn 213.857†	61534.6	62057.1	505.56	ug/L	505.56	ppb	11:15:21
1	SiO2†	86236.8	87487.8	5390.4	ug/L	5390.4	ppb	11:16:41
2	Sc Radial	4919.5	4919.5	96.7	%			11:14:27
2	Y RADIAL	5127.6	5127.6	95.64	%			11:14:27
2	Al 396.153Radial†	5966.1	6186.5	5002.9	ug/L	5002.9	ppb	11:14:27
2	Ca 317.933Radial†	3025.6	3109.2	4934.6	ug/L	4934.6	ppb	11:14:47
2	Fe 238.204 Radial†	571.7	576.2	5006.1	ug/L	5006.1	ppb	11:14:47
2	K 766.490 Radial†	29179.3	26830.4	5160.3	ug/L	5160.3	ppb	11:14:27
2	Mg 279.077 IEC†	157.1	158.5	4907.2	ug/L	4907.2	ppb	11:14:47
2	Na 589.592 Radial†	33714.8	36587.7	10414	ug/L	10414	ppb	11:14:27
2	Sr 421.552†	73197.6	75654.5	501.68	ug/L	501.68	ppb	11:14:27
2	Sc 361.383	896357.5	896357.5	97.965	%			11:15:48
2	Y 371.029	757998.8	757998.8	96.980	%			11:15:48
2	Ag 328.068†	115681.1	117571.5	508.43	ug/L	508.43	ppb	11:15:48
2	As 188.979†	1386.3	1446.3	513.86	ug/L	513.86	ppb	11:16:08
2	B 249.677†	23617.1	24821.2	506.44	ug/L	506.44	ppb	11:15:48
2	Ba 233.527†	68338.6	69749.7	509.58	ug/L	509.58	ppb	11:15:48
2	Be 313.107†	1472805.2	1507776.9	509.77	ug/L	509.77	ppb	11:15:48
2	Cd 226.502†	52797.9	54145.3	509.10	ug/L	509.10	ppb	11:15:48
2	Co 228.616†	26194.7	26827.9	501.71	ug/L	501.71	ppb	11:16:08
2	Cr 267.716†	49634.3	50549.2	507.08	ug/L	507.08	ppb	11:15:48
2	Cu 324.752†	175675.8	171227.1	506.93	ug/L	506.93	ppb	11:15:48
2	Mn 257.610†	477452.2	486702.8	511.17	ug/L	511.17	ppb	11:15:48
2	Mo 202.031†	7986.5	8129.1	510.50	ug/L	510.50	ppb	11:16:08
2	Ni 231.604†	22601.5	22953.7	501.98	ug/L	501.98	ppb	11:16:08

2	P 214.914†	5363.8	5222.6	2483.6 ug/L	2483.6 ppb	11:16:08
2	Pb 220.353†	4763.9	4963.6	515.46 ug/L	515.46 ppb	11:16:08
2	S 181.975 Axial†	929.0	885.9	1011.0 ug/L	1011.0 ppb	11:16:08
2	Sb 206.836†	1719.2	1714.2	515.41 ug/L	515.41 ppb	11:16:08
2	Se 196.026†	929.7	984.3	520.31 ug/L	520.31 ppb	11:16:08
2	Si 251.611†	87280.8	88432.3	2527.0 ug/L	2527.0 ppb	11:15:48
2	Sn 189.927†	3363.9	3429.7	509.00 ug/L	509.00 ppb	11:16:08
2	Ti 334.940†	317057.3	325436.9	509.69 ug/L	509.69 ppb	11:15:48
2	Tl 190.801†	1768.5	1851.2	510.36 ug/L	510.36 ppb	11:16:08
2	U 409.014†	13508.5	16415.4	484.81 ug/L	484.81 ppb	11:15:48
2	V 292.402†	76996.5	80396.3	511.67 ug/L	511.67 ppb	11:15:48
2	Zn 213.857†	61459.8	61878.4	504.10 ug/L	504.10 ppb	11:15:48
2	SiO2†	86952.4	88074.8	5426.7 ug/L	5426.7 ppb	11:16:46
3	Sc Radial	4753.3	4753.3	93.5 %		11:14:52
3	Y RADIAL	5028.9	5028.9	93.80 %		11:14:52
3	Al 396.153Radial†	5838.4	6265.5	5066.9 ug/L	5066.9 ppb	11:14:52
3	Ca 317.933Radial†	3051.8	3246.6	5152.5 ug/L	5152.5 ppb	11:15:12
3	Fe 238.204 Radial†	572.6	597.9	5194.0 ug/L	5194.0 ppb	11:15:12
3	K 766.490 Radial†	28615.2	27281.5	5247.2 ug/L	5247.2 ppb	11:14:52
3	Mg 279.077 IEC†	161.0	168.3	5211.4 ug/L	5211.4 ppb	11:15:12
3	Na 589.592 Radial†	32842.5	36873.0	10495 ug/L	10495 ppb	11:14:52
3	Sr 421.552†	71418.6	76396.8	506.60 ug/L	506.60 ppb	11:14:52
3	Sc 361.383	890026.9	890026.9	97.273 %		11:16:16
3	Y 371.029	752420.0	752420.0	96.266 %		11:16:16
3	Ag 328.068†	114952.9	117662.8	508.88 ug/L	508.88 ppb	11:16:16
3	As 188.979†	1379.6	1449.5	515.02 ug/L	515.02 ppb	11:16:36
3	B 249.677†	23430.4	24800.6	505.99 ug/L	505.99 ppb	11:16:16
3	Ba 233.527†	67931.1	69827.0	510.15 ug/L	510.15 ppb	11:16:16
3	Be 313.107†	1463696.8	1509106.6	510.22 ug/L	510.22 ppb	11:16:16
3	Cd 226.502†	52698.7	54426.6	511.73 ug/L	511.73 ppb	11:16:16
3	Co 228.616†	26160.8	26983.2	504.62 ug/L	504.62 ppb	11:16:36
3	Cr 267.716†	49348.1	50615.4	507.75 ug/L	507.75 ppb	11:16:16
3	Cu 324.752†	174069.1	170850.8	505.83 ug/L	505.83 ppb	11:16:16
3	Mn 257.610†	474769.2	487411.2	511.93 ug/L	511.93 ppb	11:16:16
3	Mo 202.031†	7963.9	8163.9	512.69 ug/L	512.69 ppb	11:16:36
3	Ni 231.604†	22585.0	23100.8	505.19 ug/L	505.19 ppb	11:16:36
3	P 214.914†	5351.2	5248.6	2496.5 ug/L	2496.5 ppb	11:16:36
3	Pb 220.353†	4734.7	4968.2	515.94 ug/L	515.94 ppb	11:16:36
3	S 181.975 Axial†	932.2	896.0	1022.5 ug/L	1022.5 ppb	11:16:36
3	Sb 206.836†	1699.0	1706.0	513.09 ug/L	513.09 ppb	11:16:36
3	Se 196.026†	947.5	1009.3	533.67 ug/L	533.67 ppb	11:16:36
3	Si 251.611†	86699.4	88468.3	2528.0 ug/L	2528.0 ppb	11:16:16
3	Sn 189.927†	3369.2	3459.5	513.45 ug/L	513.45 ppb	11:16:36
3	Ti 334.940†	314132.9	324732.6	508.60 ug/L	508.60 ppb	11:16:16
3	Tl 190.801†	1772.7	1868.4	515.05 ug/L	515.05 ppb	11:16:36
3	U 409.014†	13321.0	16320.7	481.98 ug/L	481.98 ppb	11:16:16
3	V 292.402†	76534.4	80480.2	512.20 ug/L	512.20 ppb	11:16:16
3	Zn 213.857†	61197.7	62055.2	505.51 ug/L	505.51 ppb	11:16:16
3	SiO2†	87910.3	89690.9	5526.5 ug/L	5526.5 ppb	11:16:51

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	893761.0	97.681	%	0.3623				0.37%
Sc Radial	4833.4	95.0	%	1.64				1.72%
Y 371.029	755826.4	96.702	%	0.3822				0.40%
Y RADIAL	5074.0	94.64	%	0.930				0.98%
Ag 328.068†	117643.9	508.77	ug/L	0.305	508.77	ppb	0.305	0.06%
QC value within limits for Ag 328.068 Recovery = 101.75%								
Al 396.153Radial†	6226.5	5035.3	ug/L	32.03	5035.3	ppb	32.03	0.64%
QC value within limits for Al 396.153Radial Recovery = 100.71%								
As 188.979†	1446.5	513.94	ug/L	1.044	513.94	ppb	1.044	0.20%
QC value within limits for As 188.979 Recovery = 102.79%								
B 249.677†	24832.0	506.65	ug/L	0.787	506.65	ppb	0.787	0.16%
QC value within limits for B 249.677 Recovery = 101.33%								
Ba 233.527†	69797.3	509.93	ug/L	0.307	509.93	ppb	0.307	0.06%
QC value within limits for Ba 233.527 Recovery = 101.99%								
Be 313.107†	1509909.8	510.49	ug/L	0.887	510.49	ppb	0.887	0.17%
QC value within limits for Be 313.107 Recovery = 102.10%								
Ca 317.933Radial†	3179.1	5045.4	ug/L	109.02	5045.4	ppb	109.02	2.16%

QC value within limits for Ca 317.933Radial Recovery = 100.91%

Cd 226.502†	54302.1	510.57 ug/L	1.341	510.57 ppb	1.341	0.26%
QC value within limits for Cd 226.502 Recovery = 102.11%						
Co 228.616†	26863.8	502.38 ug/L	1.990	502.38 ppb	1.990	0.40%
QC value within limits for Co 228.616 Recovery = 100.48%						
Cr 267.716†	50630.1	507.89 ug/L	0.895	507.89 ppb	0.895	0.18%
QC value within limits for Cr 267.716 Recovery = 101.58%						
Cu 324.752†	171157.9	506.73 ug/L	0.822	506.73 ppb	0.822	0.16%
QC value within limits for Cu 324.752 Recovery = 101.35%						
Fe 238.204 Radial†	586.5	5095.1 ug/L	94.34	5095.1 ppb	94.34	1.85%
QC value within limits for Fe 238.204 Radial Recovery = 101.90%						
K 766.490 Radial†	27056.8	5203.9 ug/L	43.43	5203.9 ppb	43.43	0.83%
QC value within limits for K 766.490 Radial Recovery = 104.08%						
Mg 279.077 IEC†	163.6	5066.3 ug/L	152.58	5066.3 ppb	152.58	3.01%
QC value within limits for Mg 279.077 IEC Recovery = 101.33%						
Mn 257.610†	487229.6	511.73 ug/L	0.491	511.73 ppb	0.491	0.10%
QC value within limits for Mn 257.610 Recovery = 102.35%						
Mo 202.031†	8132.9	510.74 ug/L	1.844	510.74 ppb	1.844	0.36%
QC value within limits for Mo 202.031 Recovery = 102.15%						
Na 589.592 Radial†	36749.1	10460 ug/L	41.7	10460 ppb	41.7	0.40%
QC value within limits for Na 589.592 Radial Recovery = 104.60%						
Ni 231.604†	23002.8	503.05 ug/L	1.856	503.05 ppb	1.856	0.37%
QC value within limits for Ni 231.604 Recovery = 100.61%						
P 214.914†	5222.7	2483.6 ug/L	12.84	2483.6 ppb	12.84	0.52%
QC value within limits for P 214.914 Recovery = 99.35%						
Pb 220.353†	4955.0	514.57 ug/L	1.970	514.57 ppb	1.970	0.38%
QC value within limits for Pb 220.353 Recovery = 102.91%						
S 181.975 Axial†	886.1	1011.2 ug/L	11.17	1011.2 ppb	11.17	1.10%
QC value within limits for S 181.975 Axial Recovery = 101.12%						
Sb 206.836†	1706.4	513.11 ug/L	2.300	513.11 ppb	2.300	0.45%
QC value within limits for Sb 206.836 Recovery = 102.62%						
Se 196.026†	997.7	527.40 ug/L	6.716	527.40 ppb	6.716	1.27%
QC value within limits for Se 196.026 Recovery = 105.48%						
Si 251.611†	88450.1	2527.5 ug/L	0.48	2527.5 ppb	0.48	0.02%
QC value within limits for Si 251.611 Recovery = 101.10%						
Sn 189.927†	3432.0	509.36 ug/L	3.916	509.36 ppb	3.916	0.77%
QC value within limits for Sn 189.927 Recovery = 101.87%						
Sr 421.552†	75949.2	503.63 ug/L	2.612	503.63 ppb	2.612	0.52%
QC value within limits for Sr 421.552 Recovery = 100.73%						
Ti 334.940†	325171.7	509.28 ug/L	0.595	509.28 ppb	0.595	0.12%
QC value within limits for Ti 334.940 Recovery = 101.86%						
Tl 190.801†	1856.1	511.69 ug/L	2.929	511.69 ppb	2.929	0.57%
QC value within limits for Tl 190.801 Recovery = 102.34%						
U 409.014†	16303.3	481.48 ug/L	3.612	481.48 ppb	3.612	0.75%
QC value within limits for U 409.014 Recovery = 96.30%						
V 292.402†	80512.0	512.38 ug/L	0.820	512.38 ppb	0.820	0.16%
QC value within limits for V 292.402 Recovery = 102.48%						
Zn 213.857†	61996.9	505.06 ug/L	0.829	505.06 ppb	0.829	0.16%
QC value within limits for Zn 213.857 Recovery = 101.01%						
SiO2†	88417.8	5447.9 ug/L	70.52	5447.9 ppb	70.52	1.29%
QC value within limits for SiO2 Recovery = 101.88%						

All analyte(s) passed QC.

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

Autosampler Location: 8
Date Collected: 1/5/2010 11:19:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4921.9	4921.9	96.8	%			11:20:54
1	Y RADIAL	5205.9	5205.9	97.10	%			11:20:54
1	Al 396.153Radial†	-26.7	-8.0	-6.5322	ug/L	-6.5322	ppb	11:20:54
1	Ca 317.933Radial†	19.7	2.1	3.3587	ug/L	3.3587	ppb	11:21:14
1	Fe 238.204 Radial†	13.4	-0.8	-7.0929	ug/L	-7.0929	ppb	11:21:14
1	K 766.490 Radial†	3410.2	192.0	36.992	ug/L	36.992	ppb	11:20:54
1	Mg 279.077 IEC†	3.5	-0.3	-9.3333	ug/L	-9.3333	ppb	11:21:14
1	Na 589.592 Radial†	-1684.9	-3.0	-0.8486	ug/L	-0.8486	ppb	11:20:54
1	Sr 421.552†	7.4	0.2	0.0014	ug/L	0.0014	ppb	11:20:54
1	Sc 361.383	894061.6	894061.6	97.714	%			11:22:11
1	Y 371.029	764731.7	764731.7	97.841	%			11:22:11
1	Ag 328.068†	504.7	3.8	0.0222	ug/L	0.0222	ppb	11:22:16
1	As 188.979†	-25.2	5.4	1.9103	ug/L	1.9103	ppb	11:22:36
1	B 249.677†	-308.9	397.3	8.1383	ug/L	8.1383	ppb	11:22:16
1	Ba 233.527†	7.3	-1.0	-0.0077	ug/L	-0.0077	ppb	11:22:36
1	Be 313.107†	-4495.7	-225.5	-0.0762	ug/L	-0.0762	ppb	11:22:16
1	Cd 226.502†	-231.0	14.1	0.1339	ug/L	0.1339	ppb	11:22:36
1	Co 228.616†	-106.1	-19.6	-0.3662	ug/L	-0.3662	ppb	11:22:36
1	Cr 267.716†	120.4	7.1	0.0738	ug/L	0.0738	ppb	11:22:16
1	Cu 324.752†	8058.5	148.8	0.4400	ug/L	0.4400	ppb	11:22:16
1	Mn 257.610†	576.6	-78.0	-0.0824	ug/L	-0.0824	ppb	11:22:16
1	Mo 202.031†	22.6	-0.2	-0.0103	ug/L	-0.0103	ppb	11:22:36
1	Ni 231.604†	126.5	12.1	0.2660	ug/L	0.2660	ppb	11:22:36
1	P 214.914†	263.8	17.4	8.4491	ug/L	8.4491	ppb	11:22:36
1	Pb 220.353†	-91.9	6.7	0.6923	ug/L	0.6923	ppb	11:22:36
1	S 181.975 Axial†	56.3	-4.8	-5.4639	ug/L	-5.4639	ppb	11:22:36
1	Sb 206.836†	42.1	2.4	0.7131	ug/L	0.7131	ppb	11:22:36
1	Se 196.026†	-37.4	-2.9	-1.5258	ug/L	-1.5258	ppb	11:22:36
1	Si 251.611†	926.9	286.9	8.2251	ug/L	8.2251	ppb	11:22:36
1	Sn 189.927†	5.6	1.5	0.2298	ug/L	0.2298	ppb	11:22:36
1	Ti 334.940†	-1801.1	-50.3	-0.0743	ug/L	-0.0743	ppb	11:22:16
1	Tl 190.801†	-46.0	-1.2	-0.3148	ug/L	-0.3148	ppb	11:22:36
1	U 409.014†	-2887.4	-328.7	-9.7395	ug/L	-9.7395	ppb	11:22:11
1	V 292.402†	-1751.1	8.1	0.0329	ug/L	0.0329	ppb	11:22:16
1	Zn 213.857†	898.0	60.8	0.4980	ug/L	0.4980	ppb	11:22:36
1	SiO2†	977.3	316.2	19.546	ug/L	19.546	ppb	11:23:42
2	Sc Radial	4827.6	4827.6	94.9	%			11:21:19
2	Y RADIAL	5078.7	5078.7	94.73	%			11:21:19
2	Al 396.153Radial†	-17.4	1.2	0.9665	ug/L	0.9665	ppb	11:21:19
2	Ca 317.933Radial†	21.2	4.1	6.5370	ug/L	6.5370	ppb	11:21:39
2	Fe 238.204 Radial†	12.1	-2.0	-17.056	ug/L	-17.056	ppb	11:21:39
2	K 766.490 Radial†	3334.8	181.4	34.948	ug/L	34.948	ppb	11:21:19
2	Mg 279.077 IEC†	4.1	0.4	11.971	ug/L	11.971	ppb	11:21:39
2	Na 589.592 Radial†	-1675.3	-26.9	-7.6503	ug/L	-7.6503	ppb	11:21:19
2	Sr 421.552†	-0.8	-8.3	-0.0552	ug/L	-0.0552	ppb	11:21:19
2	Sc 361.383	905030.1	905030.1	98.913	%			11:22:41
2	Y 371.029	772747.8	772747.8	98.867	%			11:22:41
2	Ag 328.068†	646.5	140.9	0.5969	ug/L	0.5969	ppb	11:22:46
2	As 188.979†	-30.8	0.1	0.0148	ug/L	0.0148	ppb	11:23:06
2	B 249.677†	-372.7	336.6	6.8951	ug/L	6.8951	ppb	11:22:46
2	Ba 233.527†	18.0	9.6	0.0692	ug/L	0.0692	ppb	11:23:06
2	Be 313.107†	-4458.7	-132.3	-0.0446	ug/L	-0.0446	ppb	11:22:46
2	Cd 226.502†	-245.9	2.0	0.0201	ug/L	0.0201	ppb	11:23:06
2	Co 228.616†	-82.4	5.6	0.1046	ug/L	0.1046	ppb	11:23:06
2	Cr 267.716†	167.1	52.8	0.5274	ug/L	0.5274	ppb	11:22:46
2	Cu 324.752†	8083.4	74.0	0.2181	ug/L	0.2181	ppb	11:22:46
2	Mn 257.610†	565.2	-96.7	-0.1034	ug/L	-0.1034	ppb	11:22:46
2	Mo 202.031†	18.5	-4.6	-0.2896	ug/L	-0.2896	ppb	11:23:06
2	Ni 231.604†	111.6	-4.5	-0.0988	ug/L	-0.0988	ppb	11:23:06

2	P 214.914†	255.8	6.1	2.9598 ug/L	2.9598 ppb	11:23:06
2	Pb 220.353†	-88.3	11.5	1.1898 ug/L	1.1898 ppb	11:23:06
2	S 181.975 Axial†	61.7	0.0	0.0411 ug/L	0.0411 ppb	11:23:06
2	Sb 206.836†	57.2	17.1	5.0625 ug/L	5.0625 ppb	11:23:06
2	Se 196.026†	-38.5	-3.7	-1.9236 ug/L	-1.9236 ppb	11:23:06
2	Si 251.611†	919.7	268.1	7.6887 ug/L	7.6887 ppb	11:23:06
2	Sn 189.927†	8.0	4.0	0.5909 ug/L	0.5909 ppb	11:23:06
2	Ti 334.940†	-1768.1	5.4	0.0077 ug/L	0.0077 ppb	11:22:46
2	Tl 190.801†	-45.6	-0.2	-0.0469 ug/L	-0.0469 ppb	11:23:06
2	U 409.014†	-2524.9	73.6	2.1822 ug/L	2.1822 ppb	11:22:41
2	V 292.402†	-1813.0	-32.7	-0.2026 ug/L	-0.2026 ppb	11:22:46
2	Zn 213.857†	880.0	31.5	0.2598 ug/L	0.2598 ppb	11:23:06
2	SiO2†	985.5	312.4	19.323 ug/L	19.323 ppb	11:23:47
3	Sc Radial	4879.1	4879.1	95.9 %		11:21:44
3	Y RADIAL	5168.0	5168.0	96.40 %		11:21:44
3	Al 396.153Radial†	-10.6	8.5	6.8487 ug/L	6.8487 ppb	11:21:44
3	Ca 317.933Radial†	22.0	4.7	7.4621 ug/L	7.4621 ppb	11:22:04
3	Fe 238.204 Radial†	14.8	0.8	6.7586 ug/L	6.7586 ppb	11:22:04
3	K 766.490 Radial†	3406.6	219.1	42.229 ug/L	42.229 ppb	11:21:44
3	Mg 279.077 IEC†	7.7	4.2	129.29 ug/L	129.29 ppb	11:22:04
3	Na 589.592 Radial†	-1715.5	-50.2	-14.281 ug/L	-14.281 ppb	11:21:44
3	Sr 421.552†	-8.3	-16.1	-0.1071 ug/L	-0.1071 ppb	11:21:44
3	Sc 361.383	897280.7	897280.7	98.066 %		11:23:11
3	Y 371.029	767356.9	767356.9	98.177 %		11:23:11
3	Ag 328.068†	579.8	78.5	0.3435 ug/L	0.3435 ppb	11:23:16
3	As 188.979†	-21.5	9.3	3.2895 ug/L	3.2895 ppb	11:23:36
3	B 249.677†	-438.7	266.0	5.4466 ug/L	5.4466 ppb	11:23:16
3	Ba 233.527†	7.7	-0.7	-0.0045 ug/L	-0.0045 ppb	11:23:36
3	Be 313.107†	-4418.8	-130.6	-0.0441 ug/L	-0.0441 ppb	11:23:16
3	Cd 226.502†	-226.4	19.8	0.1851 ug/L	0.1851 ppb	11:23:36
3	Co 228.616†	-77.6	9.9	0.1858 ug/L	0.1858 ppb	11:23:36
3	Cr 267.716†	123.3	9.6	0.0975 ug/L	0.0975 ppb	11:23:16
3	Cu 324.752†	8057.9	118.6	0.3513 ug/L	0.3513 ppb	11:23:16
3	Mn 257.610†	576.8	-79.8	-0.0855 ug/L	-0.0855 ppb	11:23:16
3	Mo 202.031†	30.9	8.2	0.5171 ug/L	0.5171 ppb	11:23:36
3	Ni 231.604†	110.2	-4.9	-0.1084 ug/L	-0.1084 ppb	11:23:36
3	P 214.914†	248.8	1.1	0.4668 ug/L	0.4668 ppb	11:23:36
3	Pb 220.353†	-96.7	2.2	0.2268 ug/L	0.2268 ppb	11:23:36
3	S 181.975 Axial†	58.6	-2.7	-3.0487 ug/L	-3.0487 ppb	11:23:36
3	Sb 206.836†	46.6	6.8	2.0185 ug/L	2.0185 ppb	11:23:36
3	Se 196.026†	-41.6	-7.2	-3.6433 ug/L	-3.6433 ppb	11:23:36
3	Si 251.611†	893.8	249.7	7.1450 ug/L	7.1450 ppb	11:23:36
3	Sn 189.927†	5.2	1.2	0.1744 ug/L	0.1744 ppb	11:23:36
3	Ti 334.940†	-1779.1	-21.1	-0.0313 ug/L	-0.0313 ppb	11:23:16
3	Tl 190.801†	-40.2	4.9	1.3486 ug/L	1.3486 ppb	11:23:36
3	U 409.014†	-2682.8	-109.5	-3.2459 ug/L	-3.2459 ppb	11:23:11
3	V 292.402†	-1712.4	54.1	0.3426 ug/L	0.3426 ppb	11:23:16
3	Zn 213.857†	875.9	35.0	0.2832 ug/L	0.2832 ppb	11:23:36
3	SiO2†	929.5	263.9	16.288 ug/L	16.288 ppb	11:23:52

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	898790.8	98.231	%	0.6162				0.63%
Sc Radial	4876.2	95.9	%	0.93				0.97%
Y 371.029	768278.8	98.295	%	0.5229				0.53%
Y RADIAL	5150.9	96.08	%	1.218				1.27%
Ag 328.068†	74.4	0.3209	ug/L	0.28799	0.3209	ppb	0.28799	89.75%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.5	0.4276	ug/L	6.70673	0.4276	ppb	6.70673	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.9	1.7382	ug/L	1.64410	1.7382	ppb	1.64410	94.59%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	333.3	6.8267	ug/L	1.34714	6.8267	ppb	1.34714	19.73%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.6	0.0190	ug/L	0.04351	0.0190	ppb	0.04351	228.81%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-162.8	-0.0550	ug/L	0.01840	-0.0550	ppb	0.01840	33.46%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.6	5.7859	ug/L	2.15231	5.7859	ppb	2.15231	37.20%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              12.0      0.1130 ug/L       0.08444      0.1130 ppb       0.08444  74.69%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -1.4     -0.0253 ug/L       0.29804     -0.0253 ppb       0.29804 >999.9%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              23.1      0.2329 ug/L       0.25533      0.2329 ppb       0.25533 109.62%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             113.8      0.3365 ug/L       0.11169      0.3365 ppb       0.11169  33.19%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -0.7     -5.7969 ug/L      11.96034     -5.7969 ppb      11.96034 206.32%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       197.5      38.056 ug/L        3.7552      38.056 ppb        3.7552   9.87%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           1.4      43.974 ug/L       74.6452      43.974 ppb       74.6452 169.75%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             -84.8     -0.0904 ug/L       0.01132     -0.0904 ppb       0.01132  12.52%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               1.2      0.0724 ug/L       0.40968      0.0724 ppb       0.40968 565.92%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -26.7     -7.5932 ug/L       6.71622     -7.5932 ppb       6.71622  88.45%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               0.9      0.0196 ug/L       0.21345      0.0196 ppb       0.21345 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                8.2      3.9585 ug/L       4.08379      3.9585 ppb       4.08379 103.16%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               6.8      0.7030 ug/L       0.48160      0.7030 ppb       0.48160  68.51%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -2.5     -2.8239 ug/L       2.75936     -2.8239 ppb       2.75936  97.72%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               8.8      2.5980 ug/L       2.23186      2.5980 ppb       2.23186  85.91%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -4.6     -2.3642 ug/L       1.12542     -2.3642 ppb       1.12542  47.60%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             268.2      7.6863 ug/L       0.54002      7.6863 ppb       0.54002   7.03%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               2.2      0.3317 ug/L       0.22617      0.3317 ppb       0.22617  68.18%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -8.1     -0.0536 ug/L       0.05426     -0.0536 ppb       0.05426 101.19%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -22.0     -0.0326 ug/L       0.04103     -0.0326 ppb       0.04103 125.72%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               1.2      0.3290 ug/L       0.89317      0.3290 ppb       0.89317 271.51%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -121.5     -3.6011 ug/L       5.96877     -3.6011 ppb       5.96877 165.75%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                9.8      0.0576 ug/L       0.27340      0.0576 ppb       0.27340 474.35%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              42.5      0.3470 ug/L       0.13127      0.3470 ppb       0.13127  37.83%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   297.5      18.386 ug/L        1.8203      18.386 ppb        1.8203   9.90%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 18
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/5/2010 12:21:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4829.1	4829.1	95.0	%			12:23:40
1	Y RADIAL	5057.9	5057.9	94.34	%			12:23:40
1	Al 396.153Radial†	5804.1	6131.4	4958.3	ug/L	4958.3	ppb	12:23:40
1	Ca 317.933Radial†	3002.6	3143.6	4989.1	ug/L	4989.1	ppb	12:24:00
1	Fe 238.204 Radial†	573.7	589.5	5120.8	ug/L	5120.8	ppb	12:24:00
1	K 766.490 Radial†	28822.3	27019.1	5196.6	ug/L	5196.6	ppb	12:23:40
1	Mg 279.077 IEC†	162.7	167.4	5184.3	ug/L	5184.3	ppb	12:24:00
1	Na 589.592 Radial†	33350.5	36856.5	10490	ug/L	10490	ppb	12:23:40
1	Sr 421.552†	71623.5	75413.6	500.08	ug/L	500.08	ppb	12:23:40
1	Sc 361.383	900930.0	900930.0	98.465	%			12:24:59
1	Y 371.029	762133.5	762133.5	97.509	%			12:24:59
1	Ag 328.068†	116338.4	117639.7	508.76	ug/L	508.76	ppb	12:24:59
1	As 188.979†	1381.4	1434.1	509.59	ug/L	509.59	ppb	12:25:19
1	B 249.677†	23464.8	24544.1	500.76	ug/L	500.76	ppb	12:24:59
1	Ba 233.527†	68639.4	69701.2	509.23	ug/L	509.23	ppb	12:24:59
1	Be 313.107†	1477202.6	1504612.6	508.70	ug/L	508.70	ppb	12:24:59
1	Cd 226.502†	53036.2	54113.8	508.79	ug/L	508.79	ppb	12:24:59
1	Co 228.616†	26161.7	26658.6	498.54	ug/L	498.54	ppb	12:25:19
1	Cr 267.716†	49791.8	50452.0	506.11	ug/L	506.11	ppb	12:24:59
1	Cu 324.752†	176401.5	171053.9	506.42	ug/L	506.42	ppb	12:24:59
1	Mn 257.610†	479061.9	485864.1	510.30	ug/L	510.30	ppb	12:24:59
1	Mo 202.031†	7940.5	8041.0	504.98	ug/L	504.98	ppb	12:25:19
1	Ni 231.604†	22567.5	22802.1	498.66	ug/L	498.66	ppb	12:25:19
1	P 214.914†	5340.5	5171.2	2458.4	ug/L	2458.4	ppb	12:25:19
1	Pb 220.353†	4727.5	4902.0	509.05	ug/L	509.05	ppb	12:25:19
1	S 181.975 Axial†	929.0	881.1	1005.5	ug/L	1005.5	ppb	12:25:19
1	Sb 206.836†	1681.6	1667.1	501.32	ug/L	501.32	ppb	12:25:19
1	Se 196.026†	936.3	986.2	521.60	ug/L	521.60	ppb	12:25:19
1	Si 251.611†	87339.0	88039.2	2515.8	ug/L	2515.8	ppb	12:24:59
1	Sn 189.927†	3362.3	3410.6	506.18	ug/L	506.18	ppb	12:25:19
1	Ti 334.940†	317629.9	324375.9	508.03	ug/L	508.03	ppb	12:24:59
1	Tl 190.801†	1731.8	1804.8	497.64	ug/L	497.64	ppb	12:25:19
1	U 409.014†	13517.9	16354.9	483.01	ug/L	483.01	ppb	12:24:59
1	V 292.402†	77368.7	80375.4	511.44	ug/L	511.44	ppb	12:24:59
1	Zn 213.857†	61669.8	61773.2	503.24	ug/L	503.24	ppb	12:24:59
1	SiO2†	86841.8	87511.9	5392.0	ug/L	5392.0	ppb	12:26:19
2	Sc Radial	4768.6	4768.6	93.8	%			12:24:05
2	Y RADIAL	4986.1	4986.1	93.00	%			12:24:05
2	Al 396.153Radial†	5777.7	6180.7	4998.2	ug/L	4998.2	ppb	12:24:05
2	Ca 317.933Radial†	3024.4	3206.8	5089.5	ug/L	5089.5	ppb	12:24:25
2	Fe 238.204 Radial†	571.9	595.1	5169.9	ug/L	5169.9	ppb	12:24:25
2	K 766.490 Radial†	28695.5	27268.6	5244.7	ug/L	5244.7	ppb	12:24:05
2	Mg 279.077 IEC†	160.7	167.4	5184.0	ug/L	5184.0	ppb	12:24:25
2	Na 589.592 Radial†	32920.1	36842.6	10486	ug/L	10486	ppb	12:24:05
2	Sr 421.552†	71172.0	75887.9	503.22	ug/L	503.22	ppb	12:24:05
2	Sc 361.383	897031.6	897031.6	98.039	%			12:25:26
2	Y 371.029	758782.5	758782.5	97.080	%			12:25:26
2	Ag 328.068†	116025.3	117833.8	509.60	ug/L	509.60	ppb	12:25:26
2	As 188.979†	1381.5	1440.4	511.80	ug/L	511.80	ppb	12:25:46
2	B 249.677†	23264.0	24442.8	498.67	ug/L	498.67	ppb	12:25:26
2	Ba 233.527†	68433.8	69794.4	509.91	ug/L	509.91	ppb	12:25:26
2	Be 313.107†	1473411.7	1507265.8	509.60	ug/L	509.60	ppb	12:25:26
2	Cd 226.502†	52868.3	54176.6	509.38	ug/L	509.38	ppb	12:25:26
2	Co 228.616†	26295.4	26910.5	503.25	ug/L	503.25	ppb	12:25:46
2	Cr 267.716†	49637.0	50513.9	506.73	ug/L	506.73	ppb	12:25:26
2	Cu 324.752†	175487.0	170899.8	505.97	ug/L	505.97	ppb	12:25:26
2	Mn 257.610†	477637.9	486526.0	511.00	ug/L	511.00	ppb	12:25:26
2	Mo 202.031†	7977.0	8113.3	509.52	ug/L	509.52	ppb	12:25:46
2	Ni 231.604†	22682.1	23018.6	503.40	ug/L	503.40	ppb	12:25:46

2	P 214.914†	5343.6	5197.9	2471.6 ug/L	2471.6 ppb	12:25:46
2	Pb 220.353†	4767.7	4963.8	515.47 ug/L	515.47 ppb	12:25:46
2	S 181.975 Axial†	936.9	893.2	1019.4 ug/L	1019.4 ppb	12:25:46
2	Sb 206.836†	1715.6	1709.3	513.98 ug/L	513.98 ppb	12:25:46
2	Se 196.026†	932.6	986.5	521.90 ug/L	521.90 ppb	12:25:46
2	Si 251.611†	87042.3	88122.0	2518.1 ug/L	2518.1 ppb	12:25:26
2	Sn 189.927†	3379.7	3443.1	511.02 ug/L	511.02 ppb	12:25:46
2	Ti 334.940†	316876.0	325008.8	509.03 ug/L	509.03 ppb	12:25:26
2	Tl 190.801†	1778.2	1859.7	512.68 ug/L	512.68 ppb	12:25:46
2	U 409.014†	13719.9	16620.6	490.88 ug/L	490.88 ppb	12:25:26
2	V 292.402†	77075.1	80417.4	511.78 ug/L	511.78 ppb	12:25:26
2	Zn 213.857†	61530.2	61903.1	504.28 ug/L	504.28 ppb	12:25:26
2	SiO2†	88029.1	89106.4	5490.5 ug/L	5490.5 ppb	12:26:24
3	Sc Radial	4772.3	4772.3	93.8 %		12:24:30
3	Y RADIAL	4982.6	4982.6	92.94 %		12:24:30
3	Al 396.153Radial†	5769.7	6167.5	4987.5 ug/L	4987.5 ppb	12:24:30
3	Ca 317.933Radial†	3009.9	3189.0	5061.2 ug/L	5061.2 ppb	12:24:50
3	Fe 238.204 Radial†	573.4	596.3	5180.0 ug/L	5180.0 ppb	12:24:50
3	K 766.490 Radial†	28385.4	26915.1	5176.6 ug/L	5176.6 ppb	12:24:30
3	Mg 279.077 IEC†	157.4	163.9	5073.3 ug/L	5073.3 ppb	12:24:50
3	Na 589.592 Radial†	32667.7	36547.2	10402 ug/L	10402 ppb	12:24:30
3	Sr 421.552†	70504.7	75119.6	498.13 ug/L	498.13 ppb	12:24:30
3	Sc 361.383	899448.4	899448.4	98.303 %		12:25:54
3	Y 371.029	760042.0	760042.0	97.241 %		12:25:54
3	Ag 328.068†	116092.1	117583.8	508.54 ug/L	508.54 ppb	12:25:54
3	As 188.979†	1386.0	1441.2	512.09 ug/L	512.09 ppb	12:26:14
3	B 249.677†	23326.0	24442.2	498.66 ug/L	498.66 ppb	12:25:54
3	Ba 233.527†	68770.3	69949.2	511.04 ug/L	511.04 ppb	12:25:54
3	Be 313.107†	1475480.9	1505332.4	508.95 ug/L	508.95 ppb	12:25:54
3	Cd 226.502†	53027.5	54193.7	509.54 ug/L	509.54 ppb	12:25:54
3	Co 228.616†	26249.9	26792.1	501.04 ug/L	501.04 ppb	12:26:14
3	Cr 267.716†	49769.8	50512.9	506.72 ug/L	506.72 ppb	12:25:54
3	Cu 324.752†	176280.0	171225.4	506.93 ug/L	506.93 ppb	12:25:54
3	Mn 257.610†	479629.6	487243.0	511.75 ug/L	511.75 ppb	12:25:54
3	Mo 202.031†	7962.1	8076.3	507.20 ug/L	507.20 ppb	12:26:14
3	Ni 231.604†	22615.5	22888.6	500.55 ug/L	500.55 ppb	12:26:14
3	P 214.914†	5352.3	5192.1	2468.5 ug/L	2468.5 ppb	12:26:14
3	Pb 220.353†	4729.1	4911.4	510.04 ug/L	510.04 ppb	12:26:14
3	S 181.975 Axial†	931.7	885.4	1010.4 ug/L	1010.4 ppb	12:26:14
3	Sb 206.836†	1705.9	1694.7	509.52 ug/L	509.52 ppb	12:26:14
3	Se 196.026†	942.9	994.4	525.97 ug/L	525.97 ppb	12:26:14
3	Si 251.611†	87451.3	88299.5	2523.3 ug/L	2523.3 ppb	12:25:54
3	Sn 189.927†	3353.6	3407.4	505.71 ug/L	505.71 ppb	12:26:14
3	Ti 334.940†	317869.6	325151.1	509.25 ug/L	509.25 ppb	12:25:54
3	Tl 190.801†	1764.8	1841.2	507.64 ug/L	507.64 ppb	12:26:14
3	U 409.014†	13694.8	16557.5	489.00 ug/L	489.00 ppb	12:25:54
3	V 292.402†	77447.0	80584.5	512.79 ug/L	512.79 ppb	12:25:54
3	Zn 213.857†	61678.1	61884.9	504.15 ug/L	504.15 ppb	12:25:54
3	SiO2†	86448.6	87257.3	5376.2 ug/L	5376.2 ppb	12:26:29

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	899136.7	98.269	%	0.2151				0.22%
Sc Radial	4790.0	94.2	%	0.67				0.71%
Y 371.029	760319.3	97.277	%	0.2166				0.22%
Y RADIAL	5008.9	93.43	%	0.793				0.85%
Ag 328.068†	117685.8	508.97	ug/L	0.562	508.97	ppb	0.562	0.11%
QC value within limits for Ag 328.068 Recovery = 101.79%								
Al 396.153Radial†	6159.8	4981.4	ug/L	20.66	4981.4	ppb	20.66	0.41%
QC value within limits for Al 396.153Radial Recovery = 99.63%								
As 188.979†	1438.6	511.16	ug/L	1.368	511.16	ppb	1.368	0.27%
QC value within limits for As 188.979 Recovery = 102.23%								
B 249.677†	24476.3	499.36	ug/L	1.211	499.36	ppb	1.211	0.24%
QC value within limits for B 249.677 Recovery = 99.87%								
Ba 233.527†	69814.9	510.06	ug/L	0.915	510.06	ppb	0.915	0.18%
QC value within limits for Ba 233.527 Recovery = 102.01%								
Be 313.107†	1505736.9	509.08	ug/L	0.464	509.08	ppb	0.464	0.09%
QC value within limits for Be 313.107 Recovery = 101.82%								
Ca 317.933Radial†	3179.8	5046.6	ug/L	51.76	5046.6	ppb	51.76	1.03%

QC value within limits for Ca 317.933Radial Recovery = 100.93%

Cd 226.502†	54161.4	509.24 ug/L	0.393	509.24 ppb	0.393	0.08%
QC value within limits for Cd 226.502 Recovery = 101.85%						
Co 228.616†	26787.1	500.94 ug/L	2.360	500.94 ppb	2.360	0.47%
QC value within limits for Co 228.616 Recovery = 100.19%						
Cr 267.716†	50492.9	506.52 ug/L	0.355	506.52 ppb	0.355	0.07%
QC value within limits for Cr 267.716 Recovery = 101.30%						
Cu 324.752†	171059.7	506.44 ug/L	0.482	506.44 ppb	0.482	0.10%
QC value within limits for Cu 324.752 Recovery = 101.29%						
Fe 238.204 Radial†	593.6	5156.9 ug/L	31.68	5156.9 ppb	31.68	0.61%
QC value within limits for Fe 238.204 Radial Recovery = 103.14%						
K 766.490 Radial†	27067.6	5206.0 ug/L	34.99	5206.0 ppb	34.99	0.67%
QC value within limits for K 766.490 Radial Recovery = 104.12%						
Mg 279.077 IEC†	166.2	5147.2 ug/L	64.01	5147.2 ppb	64.01	1.24%
QC value within limits for Mg 279.077 IEC Recovery = 102.94%						
Mn 257.610†	486544.4	511.02 ug/L	0.728	511.02 ppb	0.728	0.14%
QC value within limits for Mn 257.610 Recovery = 102.20%						
Mo 202.031†	8076.9	507.23 ug/L	2.271	507.23 ppb	2.271	0.45%
QC value within limits for Mo 202.031 Recovery = 101.45%						
Na 589.592 Radial†	36748.8	10459 ug/L	49.7	10459 ppb	49.7	0.48%
QC value within limits for Na 589.592 Radial Recovery = 104.59%						
Ni 231.604†	22903.1	500.87 ug/L	2.383	500.87 ppb	2.383	0.48%
QC value within limits for Ni 231.604 Recovery = 100.17%						
P 214.914†	5187.1	2466.1 ug/L	6.92	2466.1 ppb	6.92	0.28%
QC value within limits for P 214.914 Recovery = 98.65%						
Pb 220.353†	4925.8	511.52 ug/L	3.458	511.52 ppb	3.458	0.68%
QC value within limits for Pb 220.353 Recovery = 102.30%						
S 181.975 Axial†	886.6	1011.8 ug/L	7.01	1011.8 ppb	7.01	0.69%
QC value within limits for S 181.975 Axial Recovery = 101.18%						
Sb 206.836†	1690.3	508.27 ug/L	6.424	508.27 ppb	6.424	1.26%
QC value within limits for Sb 206.836 Recovery = 101.65%						
Se 196.026†	989.1	523.16 ug/L	2.442	523.16 ppb	2.442	0.47%
QC value within limits for Se 196.026 Recovery = 104.63%						
Si 251.611†	88153.6	2519.1 ug/L	3.82	2519.1 ppb	3.82	0.15%
QC value within limits for Si 251.611 Recovery = 100.76%						
Sn 189.927†	3420.4	507.64 ug/L	2.936	507.64 ppb	2.936	0.58%
QC value within limits for Sn 189.927 Recovery = 101.53%						
Sr 421.552†	75473.7	500.48 ug/L	2.571	500.48 ppb	2.571	0.51%
QC value within limits for Sr 421.552 Recovery = 100.10%						
Ti 334.940†	324845.3	508.77 ug/L	0.647	508.77 ppb	0.647	0.13%
QC value within limits for Ti 334.940 Recovery = 101.75%						
Tl 190.801†	1835.2	505.98 ug/L	7.653	505.98 ppb	7.653	1.51%
QC value within limits for Tl 190.801 Recovery = 101.20%						
U 409.014†	16511.0	487.63 ug/L	4.109	487.63 ppb	4.109	0.84%
QC value within limits for U 409.014 Recovery = 97.53%						
V 292.402†	80459.1	512.00 ug/L	0.699	512.00 ppb	0.699	0.14%
QC value within limits for V 292.402 Recovery = 102.40%						
Zn 213.857†	61853.7	503.89 ug/L	0.564	503.89 ppb	0.564	0.11%
QC value within limits for Zn 213.857 Recovery = 100.78%						
SiO2†	87958.5	5419.6 ug/L	61.94	5419.6 ppb	61.94	1.14%
QC value within limits for SiO2 Recovery = 101.35%						

All analyte(s) passed QC.

Sequence No.: 19
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/5/2010 12:28:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5257.3	5257.3	103	%			12:30:33
1	Y RADIAL	5565.7	5565.7	103.8	%			12:30:33
1	Al 396.153Radial†	-8.3	11.5	9.3041	ug/L	9.3041	ppb	12:30:33
1	Ca 317.933Radial†	21.0	2.1	3.2791	ug/L	3.2791	ppb	12:30:53
1	Fe 238.204 Radial†	11.1	-3.9	-34.182	ug/L	-34.182	ppb	12:30:53
1	K 766.490 Radial†	3230.8	-206.3	-39.764	ug/L	-39.764	ppb	12:30:33
1	Mg 279.077 IEC†	2.7	-1.3	-39.355	ug/L	-39.355	ppb	12:30:53
1	Na 589.592 Radial†	-1599.9	190.3	54.160	ug/L	54.160	ppb	12:30:33
1	Sr 421.552†	34.0	25.4	0.1684	ug/L	0.1684	ppb	12:30:33
1	Sc 361.383	895572.5	895572.5	97.879	%			12:31:49
1	Y 371.029	765576.4	765576.4	97.949	%			12:31:49
1	Ag 328.068†	580.6	80.4	0.3365	ug/L	0.3365	ppb	12:31:54
1	As 188.979†	-31.2	-0.7	-0.2461	ug/L	-0.2461	ppb	12:32:15
1	B 249.677†	-615.0	85.0	1.7460	ug/L	1.7460	ppb	12:31:54
1	Ba 233.527†	15.8	7.6	0.0558	ug/L	0.0558	ppb	12:32:15
1	Be 313.107†	-4408.9	-129.1	-0.0436	ug/L	-0.0436	ppb	12:31:54
1	Cd 226.502†	-245.2	0.1	0.0046	ug/L	0.0046	ppb	12:32:15
1	Co 228.616†	-87.8	-0.7	-0.0126	ug/L	-0.0126	ppb	12:32:15
1	Cr 267.716†	92.3	-21.9	-0.2193	ug/L	-0.2193	ppb	12:31:54
1	Cu 324.752†	8089.6	166.7	0.4914	ug/L	0.4914	ppb	12:31:54
1	Mn 257.610†	542.0	-114.3	-0.1227	ug/L	-0.1227	ppb	12:31:54
1	Mo 202.031†	27.2	4.5	0.2807	ug/L	0.2807	ppb	12:32:15
1	Ni 231.604†	133.9	19.5	0.4265	ug/L	0.4265	ppb	12:32:15
1	P 214.914†	266.2	19.3	9.4282	ug/L	9.4282	ppb	12:32:15
1	Pb 220.353†	-92.7	6.0	0.6292	ug/L	0.6292	ppb	12:32:15
1	S 181.975 Axial†	66.4	5.4	6.2158	ug/L	6.2158	ppb	12:32:15
1	Sb 206.836†	37.2	-2.7	-0.7839	ug/L	-0.7839	ppb	12:32:15
1	Se 196.026†	-41.8	-7.4	-3.8717	ug/L	-3.8717	ppb	12:32:15
1	Si 251.611†	735.2	89.4	2.5769	ug/L	2.5769	ppb	12:32:15
1	Sn 189.927†	1.7	-2.4	-0.3518	ug/L	-0.3518	ppb	12:32:15
1	Ti 334.940†	-1765.2	-10.5	-0.0159	ug/L	-0.0159	ppb	12:31:54
1	Tl 190.801†	-44.0	1.0	0.2840	ug/L	0.2840	ppb	12:32:15
1	U 409.014†	-2589.7	-19.6	-0.5759	ug/L	-0.5759	ppb	12:31:49
1	V 292.402†	-1691.1	72.5	0.4628	ug/L	0.4628	ppb	12:31:54
1	Zn 213.857†	892.7	53.8	0.4419	ug/L	0.4419	ppb	12:32:15
1	SiO2†	718.2	49.8	3.1057	ug/L	3.1057	ppb	12:33:21
2	Sc Radial	4690.1	4690.1	92.2	%			12:30:58
2	Y RADIAL	4932.8	4932.8	92.01	%			12:30:58
2	Al 396.153Radial†	-25.8	-8.5	-6.9069	ug/L	-6.9069	ppb	12:30:58
2	Ca 317.933Radial†	15.7	-1.2	-1.8785	ug/L	-1.8785	ppb	12:31:18
2	Fe 238.204 Radial†	11.6	-2.1	-18.230	ug/L	-18.230	ppb	12:31:18
2	K 766.490 Radial†	3412.6	368.7	71.035	ug/L	71.035	ppb	12:30:58
2	Mg 279.077 IEC†	2.8	-0.9	-27.217	ug/L	-27.217	ppb	12:31:18
2	Na 589.592 Radial†	-1577.9	27.0	7.6736	ug/L	7.6736	ppb	12:30:58
2	Sr 421.552†	10.4	3.9	0.0256	ug/L	0.0256	ppb	12:30:58
2	Sc 361.383	883584.8	883584.8	96.569	%			12:32:20
2	Y 371.029	754796.3	754796.3	96.570	%			12:32:20
2	Ag 328.068†	469.4	-26.7	-0.1187	ug/L	-0.1187	ppb	12:32:25
2	As 188.979†	-35.6	-5.7	-1.9979	ug/L	-1.9979	ppb	12:32:45
2	B 249.677†	-632.6	58.3	1.1956	ug/L	1.1956	ppb	12:32:25
2	Ba 233.527†	5.7	-2.6	-0.0194	ug/L	-0.0194	ppb	12:32:45
2	Be 313.107†	-4409.4	-190.7	-0.0645	ug/L	-0.0645	ppb	12:32:25
2	Cd 226.502†	-244.2	-2.2	-0.0191	ug/L	-0.0191	ppb	12:32:45
2	Co 228.616†	-80.8	5.3	0.1010	ug/L	0.1010	ppb	12:32:45
2	Cr 267.716†	109.8	-2.5	-0.0246	ug/L	-0.0246	ppb	12:32:25
2	Cu 324.752†	7975.2	160.3	0.4735	ug/L	0.4735	ppb	12:32:25
2	Mn 257.610†	549.2	-99.4	-0.1056	ug/L	-0.1056	ppb	12:32:25
2	Mo 202.031†	27.5	5.2	0.3217	ug/L	0.3217	ppb	12:32:45
2	Ni 231.604†	126.9	14.1	0.3088	ug/L	0.3088	ppb	12:32:45

2	P 214.914†	277.4	34.7	16.949 ug/L	16.949 ppb	12:32:45
2	Pb 220.353†	-90.3	7.2	0.7469 ug/L	0.7469 ppb	12:32:45
2	S 181.975 Axial†	58.4	-1.9	-2.2249 ug/L	-2.2249 ppb	12:32:45
2	Sb 206.836†	44.6	5.4	1.6477 ug/L	1.6477 ppb	12:32:45
2	Se 196.026†	-35.7	-1.7	-0.9249 ug/L	-0.9249 ppb	12:32:45
2	Si 251.611†	761.3	126.6	3.6012 ug/L	3.6012 ppb	12:32:45
2	Sn 189.927†	14.6	11.0	1.6257 ug/L	1.6257 ppb	12:32:45
2	Ti 334.940†	-1781.6	-51.8	-0.0803 ug/L	-0.0803 ppb	12:32:25
2	Tl 190.801†	-44.5	-0.1	-0.0331 ug/L	-0.0331 ppb	12:32:45
2	U 409.014†	-2613.1	-79.7	-2.3594 ug/L	-2.3594 ppb	12:32:20
2	V 292.402†	-1739.5	-1.0	-0.0041 ug/L	-0.0041 ppb	12:32:25
2	Zn 213.857†	891.6	65.1	0.5341 ug/L	0.5341 ppb	12:32:45
2	SiO2†	794.8	139.0	8.5318 ug/L	8.5318 ppb	12:33:26
3	Sc Radial	4757.7	4757.7	93.6 %		12:31:23
3	Y RADIAL	5015.1	5015.1	93.54 %		12:31:23
3	Al 396.153Radial†	-4.8	14.4	11.670 ug/L	11.670 ppb	12:31:23
3	Ca 317.933Radial†	20.4	3.6	5.7065 ug/L	5.7065 ppb	12:31:43
3	Fe 238.204 Radial†	16.4	2.9	24.929 ug/L	24.929 ppb	12:31:43
3	K 766.490 Radial†	3304.6	200.7	38.666 ug/L	38.666 ppb	12:31:23
3	Mg 279.077 IEC†	2.5	-1.2	-37.477 ug/L	-37.477 ppb	12:31:43
3	Na 589.592 Radial†	-1597.7	30.1	8.5750 ug/L	8.5750 ppb	12:31:23
3	Sr 421.552†	48.8	44.7	0.2964 ug/L	0.2964 ppb	12:31:23
3	Sc 361.383	896015.3	896015.3	97.927 %		12:32:50
3	Y 371.029	765286.8	765286.8	97.912 %		12:32:50
3	Ag 328.068†	551.1	50.0	0.2246 ug/L	0.2246 ppb	12:32:55
3	As 188.979†	-30.1	0.5	0.1901 ug/L	0.1901 ppb	12:33:15
3	B 249.677†	-558.0	143.6	2.9388 ug/L	2.9388 ppb	12:32:55
3	Ba 233.527†	4.4	-4.0	-0.0290 ug/L	-0.0290 ppb	12:33:15
3	Be 313.107†	-4310.8	-26.6	-0.0091 ug/L	-0.0091 ppb	12:32:55
3	Cd 226.502†	-242.0	3.4	0.0297 ug/L	0.0297 ppb	12:33:15
3	Co 228.616†	-108.9	-22.2	-0.4157 ug/L	-0.4157 ppb	12:33:15
3	Cr 267.716†	111.1	-2.7	-0.0259 ug/L	-0.0259 ppb	12:32:55
3	Cu 324.752†	8125.0	198.7	0.5893 ug/L	0.5893 ppb	12:32:55
3	Mn 257.610†	567.8	-88.2	-0.0894 ug/L	-0.0894 ppb	12:32:55
3	Mo 202.031†	23.3	0.5	0.0325 ug/L	0.0325 ppb	12:33:15
3	Ni 231.604†	120.2	5.4	0.1175 ug/L	0.1175 ppb	12:33:15
3	P 214.914†	255.3	8.1	3.8857 ug/L	3.8857 ppb	12:33:15
3	Pb 220.353†	-74.8	24.4	2.5221 ug/L	2.5221 ppb	12:33:15
3	S 181.975 Axial†	67.2	6.2	7.1350 ug/L	7.1350 ppb	12:33:15
3	Sb 206.836†	39.6	-0.3	-0.0716 ug/L	-0.0716 ppb	12:33:15
3	Se 196.026†	-31.4	3.2	1.7027 ug/L	1.7027 ppb	12:33:15
3	Si 251.611†	719.3	72.8	2.0739 ug/L	2.0739 ppb	12:33:15
3	Sn 189.927†	10.0	6.1	0.9064 ug/L	0.9064 ppb	12:33:15
3	Ti 334.940†	-1799.0	-44.1	-0.0676 ug/L	-0.0676 ppb	12:32:55
3	Tl 190.801†	-45.1	-0.1	-0.0294 ug/L	-0.0294 ppb	12:33:15
3	U 409.014†	-2663.6	-93.7	-2.7798 ug/L	-2.7798 ppb	12:32:50
3	V 292.402†	-1791.2	-28.8	-0.1906 ug/L	-0.1906 ppb	12:32:55
3	Zn 213.857†	885.5	46.0	0.3765 ug/L	0.3765 ppb	12:33:15
3	SiO2†	764.8	97.0	5.9726 ug/L	5.9726 ppb	12:33:31

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	891724.2	97.458	%	0.7708				0.79%
Sc Radial	4901.7	96.4	%	6.09				6.32%
Y 371.029	761886.5	97.477	%	0.7858				0.81%
Y RADIAL	5171.2	96.46	%	6.419				6.65%
Ag 328.068†	34.6	0.1475	ug/L	0.23724	0.1475	ppb	0.23724	160.88%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	5.8	4.6891	ug/L	10.11187	4.6891	ppb	10.11187	215.64%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.9	-0.6846	ug/L	1.15809	-0.6846	ppb	1.15809	169.16%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	95.6	1.9601	ug/L	0.89108	1.9601	ppb	0.89108	45.46%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.3	0.0024	ug/L	0.04646	0.0024	ppb	0.04646	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-115.4	-0.0391	ug/L	0.02797	-0.0391	ppb	0.02797	71.59%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.5	2.3690	ug/L	3.87355	2.3690	ppb	3.87355	163.51%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              0.4      0.0051 ug/L       0.02440      0.0051 ppb       0.02440 482.76%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†             -5.9     -0.1091 ug/L       0.27152     -0.1091 ppb       0.27152 248.88%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -9.0     -0.0899 ug/L       0.11200     -0.0899 ppb       0.11200 124.54%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            175.2      0.5181 ug/L       0.06236      0.5181 ppb       0.06236  12.04%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†      -1.1     -9.1612 ug/L      30.58146     -9.1612 ppb      30.58146 333.82%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†      121.0      23.312 ug/L       56.9730      23.312 ppb       56.9730 244.39%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†         -1.1     -34.683 ug/L        6.5337     -34.683 ppb        6.5337  18.84%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†           -100.6     -0.1059 ug/L       0.01666     -0.1059 ppb       0.01666  15.73%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              3.4      0.2116 ug/L       0.15652      0.2116 ppb       0.15652  73.96%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      82.5      23.470 ug/L       26.5826      23.470 ppb       26.5826 113.26%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             13.0      0.2842 ug/L       0.15596      0.2842 ppb       0.15596  54.87%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              20.7      10.088 ug/L        6.5564      10.088 ppb        6.5564  65.00%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             12.5      1.2994 ug/L       1.06055      1.2994 ppb       1.06055  81.62%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         3.2      3.7087 ug/L       5.15908      3.7087 ppb       5.15908 139.11%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              0.8      0.2641 ug/L       1.25010      0.2641 ppb       1.25010 473.39%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†             -2.0     -1.0313 ug/L       2.78869     -1.0313 ppb       2.78869 270.40%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             96.3      2.7507 ug/L       0.77836      2.7507 ppb       0.77836  28.30%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              4.9      0.7267 ug/L       1.00091      0.7267 ppb       1.00091 137.73%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             24.6      0.1634 ug/L       0.13547      0.1634 ppb       0.13547  82.89%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†            -35.5     -0.0546 ug/L       0.03410     -0.0546 ppb       0.03410  62.48%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              0.3      0.0738 ug/L       0.18200      0.0738 ppb       0.18200 246.55%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             -64.3     -1.9050 ug/L       1.17010     -1.9050 ppb       1.17010  61.42%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              14.2      0.0894 ug/L       0.33657      0.0894 ppb       0.33657 376.64%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             55.0      0.4508 ug/L       0.07916      0.4508 ppb       0.07916  17.56%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   95.3      5.8700 ug/L       2.71450      5.8700 ppb       2.71450  46.24%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/5/2010 13:25:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4740.1	4740.1	93.2	%			13:26:53
1	Y RADIAL	4932.1	4932.1	92.00	%			13:26:53
1	Al 396.153Radial†	5675.1	6107.7	4938.8	ug/L	4938.8	ppb	13:26:53
1	Ca 317.933Radial†	2987.7	3186.9	5057.8	ug/L	5057.8	ppb	13:27:13
1	Fe 238.204 Radial†	575.2	602.4	5232.4	ug/L	5232.4	ppb	13:27:13
1	K 766.490 Radial†	28577.6	27326.2	5255.6	ug/L	5255.6	ppb	13:26:53
1	Mg 279.077 IEC†	158.1	165.7	5131.0	ug/L	5131.0	ppb	13:27:13
1	Na 589.592 Radial†	33891.4	38095.9	10843	ug/L	10843	ppb	13:26:53
1	Sr 421.552†	71314.8	76497.8	507.27	ug/L	507.27	ppb	13:26:53
1	Sc 361.383	884474.8	884474.8	96.666	%			13:28:12
1	Y 371.029	748251.1	748251.1	95.733	%			13:28:12
1	Ag 328.068†	114820.6	118267.7	511.50	ug/L	511.50	ppb	13:28:12
1	As 188.979†	1355.6	1433.6	509.45	ug/L	509.45	ppb	13:28:32
1	B 249.677†	22828.5	24329.2	496.33	ug/L	496.33	ppb	13:28:12
1	Ba 233.527†	67720.3	70047.3	511.76	ug/L	511.76	ppb	13:28:12
1	Be 313.107†	1455066.0	1509623.8	510.40	ug/L	510.40	ppb	13:28:12
1	Cd 226.502†	52088.4	54135.4	508.99	ug/L	508.99	ppb	13:28:12
1	Co 228.616†	26014.1	27000.2	504.93	ug/L	504.93	ppb	13:28:32
1	Cr 267.716†	49096.2	50673.3	508.33	ug/L	508.33	ppb	13:28:12
1	Cu 324.752†	174025.8	171929.4	509.02	ug/L	509.02	ppb	13:28:12
1	Mn 257.610†	473464.2	489125.0	513.73	ug/L	513.73	ppb	13:28:12
1	Mo 202.031†	7890.5	8139.3	511.16	ug/L	511.16	ppb	13:28:32
1	Ni 231.604†	22400.3	23055.5	504.20	ug/L	504.20	ppb	13:28:32
1	P 214.914†	5279.8	5209.3	2476.5	ug/L	2476.5	ppb	13:28:32
1	Pb 220.353†	4698.2	4960.9	515.15	ug/L	515.15	ppb	13:28:32
1	S 181.975 Axial†	904.0	872.8	996.06	ug/L	996.06	ppb	13:28:32
1	Sb 206.836†	1690.3	1707.8	513.51	ug/L	513.51	ppb	13:28:32
1	Se 196.026†	924.1	991.3	524.51	ug/L	524.51	ppb	13:28:32
1	Si 251.611†	86346.6	88662.8	2533.6	ug/L	2533.6	ppb	13:28:12
1	Sn 189.927†	3315.2	3425.4	508.38	ug/L	508.38	ppb	13:28:32
1	Ti 334.940†	314680.6	327326.3	512.66	ug/L	512.66	ppb	13:28:12
1	Tl 190.801†	1747.7	1853.9	511.12	ug/L	511.12	ppb	13:28:32
1	U 409.014†	13438.9	16528.7	488.14	ug/L	488.14	ppb	13:28:12
1	V 292.402†	76312.4	80744.5	513.83	ug/L	513.83	ppb	13:28:12
1	Zn 213.857†	60649.9	61883.4	504.10	ug/L	504.10	ppb	13:28:12
1	SiO2†	85290.3	87547.8	5393.9	ug/L	5393.9	ppb	13:29:32
2	Sc Radial	4772.8	4772.8	93.9	%			13:27:18
2	Y RADIAL	5014.2	5014.2	93.53	%			13:27:18
2	Al 396.153Radial†	5802.7	6201.9	5015.1	ug/L	5015.1	ppb	13:27:18
2	Ca 317.933Radial†	3013.7	3192.6	5066.9	ug/L	5066.9	ppb	13:27:38
2	Fe 238.204 Radial†	582.1	605.5	5259.9	ug/L	5259.9	ppb	13:27:38
2	K 766.490 Radial†	28993.3	27559.0	5300.4	ug/L	5300.4	ppb	13:27:18
2	Mg 279.077 IEC†	164.4	171.3	5304.1	ug/L	5304.1	ppb	13:27:38
2	Na 589.592 Radial†	34421.8	38411.8	10933	ug/L	10933	ppb	13:27:18
2	Sr 421.552†	72662.7	77409.6	513.32	ug/L	513.32	ppb	13:27:18
2	Sc 361.383	878448.7	878448.7	96.008	%			13:28:39
2	Y 371.029	743550.3	743550.3	95.131	%			13:28:39
2	Ag 328.068†	114333.6	118575.3	512.83	ug/L	512.83	ppb	13:28:39
2	As 188.979†	1372.7	1461.0	519.12	ug/L	519.12	ppb	13:28:59
2	B 249.677†	22906.6	24572.5	501.30	ug/L	501.30	ppb	13:28:39
2	Ba 233.527†	67445.9	70242.1	513.18	ug/L	513.18	ppb	13:28:39
2	Be 313.107†	1443723.1	1508135.1	509.90	ug/L	509.90	ppb	13:28:39
2	Cd 226.502†	51832.4	54238.4	509.95	ug/L	509.95	ppb	13:28:39
2	Co 228.616†	26041.5	27213.4	508.92	ug/L	508.92	ppb	13:28:59
2	Cr 267.716†	48969.0	50889.2	510.49	ug/L	510.49	ppb	13:28:39
2	Cu 324.752†	172995.6	172091.3	509.50	ug/L	509.50	ppb	13:28:39
2	Mn 257.610†	470633.8	489536.8	514.17	ug/L	514.17	ppb	13:28:39
2	Mo 202.031†	7914.3	8220.1	516.23	ug/L	516.23	ppb	13:28:59
2	Ni 231.604†	22441.5	23257.4	508.62	ug/L	508.62	ppb	13:28:59

2	P 214.914†	5290.7	5258.1	2500.4 ug/L	2500.4 ppb	13:28:59
2	Pb 220.353†	4686.9	4982.6	517.42 ug/L	517.42 ppb	13:28:59
2	S 181.975 Axial†	920.0	895.9	1022.4 ug/L	1022.4 ppb	13:28:59
2	Sb 206.836†	1699.6	1729.6	520.05 ug/L	520.05 ppb	13:28:59
2	Se 196.026†	923.4	997.0	527.58 ug/L	527.58 ppb	13:28:59
2	Si 251.611†	85803.0	88709.3	2534.8 ug/L	2534.8 ppb	13:28:39
2	Sn 189.927†	3304.8	3438.1	510.26 ug/L	510.26 ppb	13:28:59
2	Ti 334.940†	312722.6	327520.1	512.96 ug/L	512.96 ppb	13:28:39
2	Tl 190.801†	1748.1	1866.7	514.61 ug/L	514.61 ppb	13:28:59
2	U 409.014†	13329.6	16510.2	487.58 ug/L	487.58 ppb	13:28:39
2	V 292.402†	76013.2	80974.4	515.35 ug/L	515.35 ppb	13:28:39
2	Zn 213.857†	60488.8	62146.0	506.23 ug/L	506.23 ppb	13:28:39
2	SiO2†	86643.3	89562.3	5518.4 ug/L	5518.4 ppb	13:29:37
3	Sc Radial	4759.6	4759.6	93.6 %		13:27:43
3	Y RADIAL	4984.4	4984.4	92.97 %		13:27:43
3	Al 396.153Radial†	5757.5	6170.8	4990.1 ug/L	4990.1 ppb	13:27:43
3	Ca 317.933Radial†	3025.9	3214.6	5101.8 ug/L	5101.8 ppb	13:28:03
3	Fe 238.204 Radial†	579.8	604.7	5253.0 ug/L	5253.0 ppb	13:28:03
3	K 766.490 Radial†	28747.5	27382.3	5266.4 ug/L	5266.4 ppb	13:27:43
3	Mg 279.077 IEC†	158.2	165.2	5113.5 ug/L	5113.5 ppb	13:28:03
3	Na 589.592 Radial†	34255.0	38335.5	10911 ug/L	10911 ppb	13:27:43
3	Sr 421.552†	72104.9	77028.8	510.79 ug/L	510.79 ppb	13:27:43
3	Sc 361.383	884847.8	884847.8	96.707 %		13:29:07
3	Y 371.029	748547.3	748547.3	95.771 %		13:29:07
3	Ag 328.068†	114799.5	118195.9	511.19 ug/L	511.19 ppb	13:29:07
3	As 188.979†	1350.1	1427.3	507.22 ug/L	507.22 ppb	13:29:27
3	B 249.677†	23006.5	24503.2	499.89 ug/L	499.89 ppb	13:29:07
3	Ba 233.527†	67711.5	70008.6	511.47 ug/L	511.47 ppb	13:29:07
3	Be 313.107†	1451188.4	1504979.6	508.84 ug/L	508.84 ppb	13:29:07
3	Cd 226.502†	52052.2	54075.2	508.42 ug/L	508.42 ppb	13:29:07
3	Co 228.616†	26030.5	27005.9	505.04 ug/L	505.04 ppb	13:29:27
3	Cr 267.716†	49054.7	50608.9	507.68 ug/L	507.68 ppb	13:29:07
3	Cu 324.752†	174034.1	171862.0	508.82 ug/L	508.82 ppb	13:29:07
3	Mn 257.610†	472572.0	487996.0	512.55 ug/L	512.55 ppb	13:29:07
3	Mo 202.031†	7904.8	8150.7	511.87 ug/L	511.87 ppb	13:29:27
3	Ni 231.604†	22399.9	23045.3	503.98 ug/L	503.98 ppb	13:29:27
3	P 214.914†	5305.0	5233.0	2488.2 ug/L	2488.2 ppb	13:29:27
3	Pb 220.353†	4682.2	4942.4	513.24 ug/L	513.24 ppb	13:29:27
3	S 181.975 Axial†	922.4	891.4	1017.3 ug/L	1017.3 ppb	13:29:27
3	Sb 206.836†	1691.8	1708.7	513.78 ug/L	513.78 ppb	13:29:27
3	Se 196.026†	928.5	995.4	526.69 ug/L	526.69 ppb	13:29:27
3	Si 251.611†	86087.6	88357.3	2524.8 ug/L	2524.8 ppb	13:29:07
3	Sn 189.927†	3311.8	3420.5	507.66 ug/L	507.66 ppb	13:29:27
3	Ti 334.940†	314595.5	327101.1	512.30 ug/L	512.30 ppb	13:29:07
3	Tl 190.801†	1732.3	1837.2	506.54 ug/L	506.54 ppb	13:29:27
3	U 409.014†	13592.1	16681.1	492.66 ug/L	492.66 ppb	13:29:07
3	V 292.402†	76177.6	80571.9	512.77 ug/L	512.77 ppb	13:29:07
3	Zn 213.857†	60561.6	61765.6	503.14 ug/L	503.14 ppb	13:29:07
3	SiO2†	86445.6	88705.3	5465.6 ug/L	5465.6 ppb	13:29:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	882590.4	96.460	%	0.3925				0.41%
Sc Radial	4757.5	93.6	%	0.32				0.35%
Y 371.029	746782.9	95.545	%	0.3587				0.38%
Y RADIAL	4976.9	92.83	%	0.775				0.83%
Ag 328.068†	118346.3	511.84	ug/L	0.875	511.84	ppb	0.875	0.17%
QC value within limits for Ag 328.068 Recovery = 102.37%								
Al 396.153Radial†	6160.1	4981.3	ug/L	38.89	4981.3	ppb	38.89	0.78%
QC value within limits for Al 396.153Radial Recovery = 99.63%								
As 188.979†	1440.6	511.93	ug/L	6.324	511.93	ppb	6.324	1.24%
QC value within limits for As 188.979 Recovery = 102.39%								
B 249.677†	24468.3	499.17	ug/L	2.561	499.17	ppb	2.561	0.51%
QC value within limits for B 249.677 Recovery = 99.83%								
Ba 233.527†	70099.3	512.14	ug/L	0.915	512.14	ppb	0.915	0.18%
QC value within limits for Ba 233.527 Recovery = 102.43%								
Be 313.107†	1507579.5	509.71	ug/L	0.801	509.71	ppb	0.801	0.16%
QC value within limits for Be 313.107 Recovery = 101.94%								
Ca 317.933Radial†	3198.0	5075.5	ug/L	23.25	5075.5	ppb	23.25	0.46%

QC value within limits for Ca 317.933Radial Recovery = 101.51%

Cd 226.502†	54149.7	509.12 ug/L	0.777	509.12 ppb	0.777	0.15%
QC value within limits for Cd 226.502 Recovery = 101.82%						
Co 228.616†	27073.2	506.30 ug/L	2.277	506.30 ppb	2.277	0.45%
QC value within limits for Co 228.616 Recovery = 101.26%						
Cr 267.716†	50723.8	508.83 ug/L	1.473	508.83 ppb	1.473	0.29%
QC value within limits for Cr 267.716 Recovery = 101.77%						
Cu 324.752†	171960.9	509.11 ug/L	0.349	509.11 ppb	0.349	0.07%
QC value within limits for Cu 324.752 Recovery = 101.82%						
Fe 238.204 Radial†	604.2	5248.5 ug/L	14.30	5248.5 ppb	14.30	0.27%
QC value within limits for Fe 238.204 Radial Recovery = 104.97%						
K 766.490 Radial†	27422.5	5274.1 ug/L	23.40	5274.1 ppb	23.40	0.44%
QC value within limits for K 766.490 Radial Recovery = 105.48%						
Mg 279.077 IEC†	167.4	5182.8 ug/L	105.36	5182.8 ppb	105.36	2.03%
QC value within limits for Mg 279.077 IEC Recovery = 103.66%						
Mn 257.610†	488885.9	513.48 ug/L	0.836	513.48 ppb	0.836	0.16%
QC value within limits for Mn 257.610 Recovery = 102.70%						
Mo 202.031†	8170.0	513.09 ug/L	2.746	513.09 ppb	2.746	0.54%
QC value within limits for Mo 202.031 Recovery = 102.62%						
Na 589.592 Radial†	38281.1	10896 ug/L	46.9	10896 ppb	46.9	0.43%
QC value within limits for Na 589.592 Radial Recovery = 108.96%						
Ni 231.604†	23119.4	505.60 ug/L	2.616	505.60 ppb	2.616	0.52%
QC value within limits for Ni 231.604 Recovery = 101.12%						
P 214.914†	5233.5	2488.4 ug/L	11.95	2488.4 ppb	11.95	0.48%
QC value within limits for P 214.914 Recovery = 99.54%						
Pb 220.353†	4962.0	515.27 ug/L	2.090	515.27 ppb	2.090	0.41%
QC value within limits for Pb 220.353 Recovery = 103.05%						
S 181.975 Axial†	886.7	1011.9 ug/L	13.98	1011.9 ppb	13.98	1.38%
QC value within limits for S 181.975 Axial Recovery = 101.19%						
Sb 206.836†	1715.4	515.78 ug/L	3.698	515.78 ppb	3.698	0.72%
QC value within limits for Sb 206.836 Recovery = 103.16%						
Se 196.026†	994.6	526.26 ug/L	1.579	526.26 ppb	1.579	0.30%
QC value within limits for Se 196.026 Recovery = 105.25%						
Si 251.611†	88576.5	2531.1 ug/L	5.46	2531.1 ppb	5.46	0.22%
QC value within limits for Si 251.611 Recovery = 101.24%						
Sn 189.927†	3428.0	508.77 ug/L	1.345	508.77 ppb	1.345	0.26%
QC value within limits for Sn 189.927 Recovery = 101.75%						
Sr 421.552†	76978.7	510.46 ug/L	3.037	510.46 ppb	3.037	0.59%
QC value within limits for Sr 421.552 Recovery = 102.09%						
Ti 334.940†	327315.8	512.64 ug/L	0.328	512.64 ppb	0.328	0.06%
QC value within limits for Ti 334.940 Recovery = 102.53%						
Tl 190.801†	1852.6	510.75 ug/L	4.046	510.75 ppb	4.046	0.79%
QC value within limits for Tl 190.801 Recovery = 102.15%						
U 409.014†	16573.3	489.46 ug/L	2.782	489.46 ppb	2.782	0.57%
QC value within limits for U 409.014 Recovery = 97.89%						
V 292.402†	80763.6	513.98 ug/L	1.297	513.98 ppb	1.297	0.25%
QC value within limits for V 292.402 Recovery = 102.80%						
Zn 213.857†	61931.7	504.49 ug/L	1.579	504.49 ppb	1.579	0.31%
QC value within limits for Zn 213.857 Recovery = 100.90%						
SiO2†	88605.2	5459.3 ug/L	62.48	5459.3 ppb	62.48	1.14%
QC value within limits for SiO2 Recovery = 102.09%						

All analyte(s) passed QC.

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

Autosampler Location: 8
Date Collected: 1/5/2010 13:31:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5121.6	5121.6	101	%			13:33:45
1	Y RADIAL	5384.7	5384.7	100.4	%			13:33:45
1	Al 396.153Radial†	-9.7	9.9	8.0346	ug/L	8.0346	ppb	13:33:45
1	Ca 317.933Radial†	19.4	1.0	1.5960	ug/L	1.5960	ppb	13:34:05
1	Fe 238.204 Radial†	14.0	-0.7	-6.4552	ug/L	-6.4552	ppb	13:34:05
1	K 766.490 Radial†	3374.1	18.8	3.5967	ug/L	3.5967	ppb	13:33:45
1	Mg 279.077 IEC†	2.9	-1.0	-29.624	ug/L	-29.624	ppb	13:34:05
1	Na 589.592 Radial†	-1560.1	188.8	53.737	ug/L	53.737	ppb	13:33:45
1	Sr 421.552†	-36.0	-43.2	-0.2863	ug/L	-0.2863	ppb	13:33:45
1	Sc 361.383	881755.8	881755.8	96.369	%			13:35:02
1	Y 371.029	754127.4	754127.4	96.484	%			13:35:02
1	Ag 328.068†	437.9	-58.4	-0.2454	ug/L	-0.2454	ppb	13:35:02
1	As 188.979†	-29.1	1.1	0.3837	ug/L	0.3837	ppb	13:35:22
1	B 249.677†	-647.5	41.5	0.8521	ug/L	0.8521	ppb	13:35:02
1	Ba 233.527†	20.5	12.8	0.0936	ug/L	0.0936	ppb	13:35:22
1	Be 313.107†	-4227.2	-11.1	-0.0037	ug/L	-0.0037	ppb	13:35:02
1	Cd 226.502†	-223.5	18.7	0.1762	ug/L	0.1762	ppb	13:35:22
1	Co 228.616†	-97.9	-12.6	-0.2342	ug/L	-0.2342	ppb	13:35:22
1	Cr 267.716†	135.2	24.1	0.2440	ug/L	0.2440	ppb	13:35:02
1	Cu 324.752†	7998.3	201.4	0.5957	ug/L	0.5957	ppb	13:35:02
1	Mn 257.610†	572.3	-74.1	-0.0779	ug/L	-0.0779	ppb	13:35:02
1	Mo 202.031†	26.8	4.5	0.2846	ug/L	0.2846	ppb	13:35:22
1	Ni 231.604†	121.1	8.3	0.1816	ug/L	0.1816	ppb	13:35:22
1	P 214.914†	269.5	27.0	13.160	ug/L	13.160	ppb	13:35:22
1	Pb 220.353†	-77.2	20.6	2.1387	ug/L	2.1387	ppb	13:35:22
1	S 181.975 Axial†	62.1	2.1	2.4000	ug/L	2.4000	ppb	13:35:22
1	Sb 206.836†	47.1	8.1	2.4066	ug/L	2.4066	ppb	13:35:22
1	Se 196.026†	-35.8	-1.9	-0.9717	ug/L	-0.9717	ppb	13:35:22
1	Si 251.611†	744.4	110.7	3.1748	ug/L	3.1748	ppb	13:35:22
1	Sn 189.927†	0.8	-3.3	-0.4919	ug/L	-0.4919	ppb	13:35:22
1	Ti 334.940†	-1706.1	22.6	0.0387	ug/L	0.0387	ppb	13:35:02
1	Tl 190.801†	-37.5	7.0	1.9298	ug/L	1.9298	ppb	13:35:22
1	U 409.014†	-2771.0	-249.2	-7.3833	ug/L	-7.3833	ppb	13:35:02
1	V 292.402†	-1683.7	53.1	0.3235	ug/L	0.3235	ppb	13:35:02
1	Zn 213.857†	895.8	71.4	0.5857	ug/L	0.5857	ppb	13:35:22
1	SiO2†	786.2	131.8	8.1511	ug/L	8.1511	ppb	13:36:18
2	Sc Radial	4963.7	4963.7	97.6	%			13:34:10
2	Y RADIAL	5220.7	5220.7	97.38	%			13:34:10
2	Al 396.153Radial†	-44.0	-25.5	-20.727	ug/L	-20.727	ppb	13:34:10
2	Ca 317.933Radial†	20.4	2.7	4.2709	ug/L	4.2709	ppb	13:34:30
2	Fe 238.204 Radial†	12.5	-1.8	-15.850	ug/L	-15.850	ppb	13:34:30
2	K 766.490 Radial†	3361.7	112.7	21.686	ug/L	21.686	ppb	13:34:10
2	Mg 279.077 IEC†	3.7	-0.1	-2.4344	ug/L	-2.4344	ppb	13:34:30
2	Na 589.592 Radial†	-1560.4	139.2	39.623	ug/L	39.623	ppb	13:34:10
2	Sr 421.552†	-19.4	-27.3	-0.1812	ug/L	-0.1812	ppb	13:34:10
2	Sc 361.383	894068.2	894068.2	97.715	%			13:35:27
2	Y 371.029	764836.8	764836.8	97.855	%			13:35:27
2	Ag 328.068†	444.1	-58.3	-0.2481	ug/L	-0.2481	ppb	13:35:27
2	As 188.979†	-34.4	-3.9	-1.3878	ug/L	-1.3878	ppb	13:35:48
2	B 249.677†	-587.3	112.3	2.3029	ug/L	2.3029	ppb	13:35:27
2	Ba 233.527†	-4.1	-12.7	-0.0933	ug/L	-0.0933	ppb	13:35:48
2	Be 313.107†	-4377.4	-104.3	-0.0352	ug/L	-0.0352	ppb	13:35:27
2	Cd 226.502†	-245.3	-0.4	-0.0023	ug/L	-0.0023	ppb	13:35:48
2	Co 228.616†	-90.3	-3.5	-0.0641	ug/L	-0.0641	ppb	13:35:48
2	Cr 267.716†	81.4	-32.8	-0.3262	ug/L	-0.3262	ppb	13:35:27
2	Cu 324.752†	8038.2	127.9	0.3778	ug/L	0.3778	ppb	13:35:27
2	Mn 257.610†	562.0	-92.9	-0.0991	ug/L	-0.0991	ppb	13:35:27
2	Mo 202.031†	25.8	3.1	0.1919	ug/L	0.1919	ppb	13:35:48
2	Ni 231.604†	115.9	1.3	0.0278	ug/L	0.0278	ppb	13:35:48

2	P 214.914†	251.7	5.0	2.4411 ug/L	2.4411 ppb	13:35:48
2	Pb 220.353†	-94.1	4.4	0.4516 ug/L	0.4516 ppb	13:35:48
2	S 181.975 Axial†	52.6	-8.5	-9.7327 ug/L	-9.7327 ppb	13:35:48
2	Sb 206.836†	38.1	-1.8	-0.4791 ug/L	-0.4791 ppb	13:35:48
2	Se 196.026†	-40.1	-5.7	-2.9866 ug/L	-2.9866 ppb	13:35:48
2	Si 251.611†	740.7	96.3	2.7486 ug/L	2.7486 ppb	13:35:48
2	Sn 189.927†	14.3	10.5	1.5608 ug/L	1.5608 ppb	13:35:48
2	Ti 334.940†	-1736.4	16.0	0.0296 ug/L	0.0296 ppb	13:35:27
2	Tl 190.801†	-40.5	4.5	1.2308 ug/L	1.2308 ppb	13:35:48
2	U 409.014†	-2875.6	-316.6	-9.3796 ug/L	-9.3796 ppb	13:35:27
2	V 292.402†	-1762.3	-3.3	-0.0335 ug/L	-0.0335 ppb	13:35:27
2	Zn 213.857†	874.7	36.9	0.3037 ug/L	0.3037 ppb	13:35:48
2	SiO2†	743.9	77.3	4.7551 ug/L	4.7551 ppb	13:36:23
3	Sc Radial	4901.8	4901.8	96.4 %		13:34:35
3	Y RADIAL	5115.9	5115.9	95.42 %		13:34:35
3	Al 396.153Radial†	-8.0	11.2	9.0852 ug/L	9.0852 ppb	13:34:35
3	Ca 317.933Radial†	19.0	1.5	2.3755 ug/L	2.3755 ppb	13:34:55
3	Fe 238.204 Radial†	8.8	-5.5	-47.727 ug/L	-47.727 ppb	13:34:55
3	K 766.490 Radial†	3238.0	27.8	5.3469 ug/L	5.3469 ppb	13:34:35
3	Mg 279.077 IEC†	4.8	1.1	34.584 ug/L	34.584 ppb	13:34:55
3	Na 589.592 Radial†	-1545.4	134.6	38.309 ug/L	38.309 ppb	13:34:35
3	Sr 421.552†	15.0	8.1	0.0537 ug/L	0.0537 ppb	13:34:35
3	Sc 361.383	886132.7	886132.7	96.847 %		13:35:53
3	Y 371.029	758567.1	758567.1	97.053 %		13:35:53
3	Ag 328.068†	443.3	-55.1	-0.2413 ug/L	-0.2413 ppb	13:35:53
3	As 188.979†	-25.6	4.8	1.6923 ug/L	1.6923 ppb	13:36:13
3	B 249.677†	-601.5	92.3	1.8975 ug/L	1.8975 ppb	13:35:53
3	Ba 233.527†	-7.4	-16.2	-0.1186 ug/L	-0.1186 ppb	13:36:13
3	Be 313.107†	-4321.1	-86.4	-0.0287 ug/L	-0.0287 ppb	13:35:53
3	Cd 226.502†	-241.0	1.8	0.0213 ug/L	0.0213 ppb	13:36:13
3	Co 228.616†	-85.2	1.0	0.0212 ug/L	0.0212 ppb	13:36:13
3	Cr 267.716†	86.2	-27.2	-0.2688 ug/L	-0.2688 ppb	13:35:53
3	Cu 324.752†	7874.9	33.0	0.0951 ug/L	0.0951 ppb	13:35:53
3	Mn 257.610†	520.2	-130.9	-0.1428 ug/L	-0.1428 ppb	13:35:53
3	Mo 202.031†	38.0	15.9	0.9945 ug/L	0.9945 ppb	13:36:13
3	Ni 231.604†	114.6	1.0	0.0212 ug/L	0.0212 ppb	13:36:13
3	P 214.914†	272.0	28.3	13.915 ug/L	13.915 ppb	13:36:13
3	Pb 220.353†	-82.1	16.0	1.6641 ug/L	1.6641 ppb	13:36:13
3	S 181.975 Axial†	63.3	3.0	3.4675 ug/L	3.4675 ppb	13:36:13
3	Sb 206.836†	45.1	5.8	1.7692 ug/L	1.7692 ppb	13:36:13
3	Se 196.026†	-27.8	6.6	3.2481 ug/L	3.2481 ppb	13:36:13
3	Si 251.611†	743.6	106.1	3.0258 ug/L	3.0258 ppb	13:36:13
3	Sn 189.927†	8.0	4.1	0.6067 ug/L	0.6067 ppb	13:36:13
3	Ti 334.940†	-1606.3	134.4	0.2164 ug/L	0.2164 ppb	13:35:53
3	Tl 190.801†	-50.4	-6.1	-1.6791 ug/L	-1.6791 ppb	13:36:13
3	U 409.014†	-2960.0	-430.1	-12.740 ug/L	-12.740 ppb	13:35:53
3	V 292.402†	-1723.6	20.6	0.1265 ug/L	0.1265 ppb	13:35:53
3	Zn 213.857†	904.2	75.5	0.6209 ug/L	0.6209 ppb	13:36:13
3	SiO2†	759.4	100.1	6.1531 ug/L	6.1531 ppb	13:36:28

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	887318.9	96.977	%	0.6821				0.70%
Sc Radial	4995.7	98.2	%	2.23				2.27%
Y 371.029	759177.1	97.131	%	0.6884				0.71%
Y RADIAL	5240.4	97.75	%	2.527				2.59%
Ag 328.068†	-57.3	-0.2449	ug/L	0.00344	-0.2449	ppb	0.00344	1.41%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-1.5	-1.2024	ug/L	16.91699	-1.2024	ppb	16.91699	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.7	0.2294	ug/L	1.54582	0.2294	ppb	1.54582	673.96%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	82.1	1.6842	ug/L	0.74858	1.6842	ppb	0.74858	44.45%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-5.4	-0.0394	ug/L	0.11589	-0.0394	ppb	0.11589	293.87%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-67.3	-0.0225	ug/L	0.01664	-0.0225	ppb	0.01664	73.89%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.7	2.7475	ug/L	1.37569	2.7475	ppb	1.37569	50.07%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                6.7      0.0651 ug/L       0.09698      0.0651 ppb       0.09698 149.09%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -5.0     -0.0924 ug/L       0.13005     -0.0924 ppb       0.13005 140.78%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -12.0     -0.1170 ug/L       0.31393     -0.1170 ppb       0.31393 268.34%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              120.8      0.3562 ug/L       0.25096      0.3562 ppb       0.25096  70.46%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -2.7     -23.344 ug/L       21.6326     -23.344 ppb       21.6326  92.67%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         53.1      10.210 ug/L        9.9768      10.210 ppb        9.9768  97.72%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.0       0.8420 ug/L      32.22923      0.8420 ppb      32.22923 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              -99.3     -0.1066 ug/L       0.03308     -0.1066 ppb       0.03308  31.03%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               7.9       0.4904 ug/L       0.43904      0.4904 ppb       0.43904  89.54%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       154.2      43.889 ug/L        8.5535      43.889 ppb        8.5535  19.49%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               3.5       0.0769 ug/L       0.09076      0.0769 ppb       0.09076 118.02%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                20.1      9.8389 ug/L       6.41773      9.8389 ppb       6.41773  65.23%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               13.7      1.4181 ug/L       0.87004      1.4181 ppb       0.87004  61.35%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -1.1     -1.2884 ug/L       7.33242     -1.2884 ppb       7.33242 569.10%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               4.1       1.2322 ug/L       1.51592      1.2322 ppb       1.51592 123.02%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.3     -0.2367 ug/L       3.18168     -0.2367 ppb       3.18168 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              104.4      2.9831 ug/L       0.21627      2.9831 ppb       0.21627   7.25%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               3.8       0.5585 ug/L       1.02715      0.5585 ppb       1.02715 183.91%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -20.8     -0.1380 ug/L       0.17407     -0.1380 ppb       0.17407 126.18%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               57.7      0.0949 ug/L       0.10533      0.0949 ppb       0.10533 111.01%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               1.8       0.4938 ug/L       1.91400      0.4938 ppb       1.91400 387.60%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -332.0     -9.8341 ug/L       2.70690     -9.8341 ppb       2.70690  27.53%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                23.5      0.1388 ug/L       0.17883      0.1388 ppb       0.17883 128.80%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               61.3      0.5035 ug/L       0.17386      0.5035 ppb       0.17386  34.53%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    103.1      6.3531 ug/L       1.70683      6.3531 ppb       1.70683  26.87%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 17
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/5/2010 14:27:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4728.1	4728.1	93.0	%			14:29:16
1	Y RADIAL	4923.3	4923.3	91.83	%			14:29:16
1	Al 396.153Radial†	5709.7	6160.3	4981.9	ug/L	4981.9	ppb	14:29:16
1	Ca 317.933Radial†	2984.6	3191.7	5065.5	ug/L	5065.5	ppb	14:29:36
1	Fe 238.204 Radial†	571.0	599.5	5207.0	ug/L	5207.0	ppb	14:29:36
1	K 766.490 Radial†	28796.0	27638.8	5316.0	ug/L	5316.0	ppb	14:29:16
1	Mg 279.077 IEC†	158.5	166.6	5157.5	ug/L	5157.5	ppb	14:29:36
1	Na 589.592 Radial†	32445.2	36632.6	10426	ug/L	10426	ppb	14:29:16
1	Sr 421.552†	69778.1	75039.1	497.60	ug/L	497.60	ppb	14:29:16
1	Sc 361.383	899137.3	899137.3	98.269	%			14:30:35
1	Y 371.029	759850.7	759850.7	97.217	%			14:30:35
1	Ag 328.068†	116204.2	117738.8	509.20	ug/L	509.20	ppb	14:30:35
1	As 188.979†	1343.0	1397.9	496.87	ug/L	496.87	ppb	14:30:55
1	B 249.677†	23264.6	24387.9	497.56	ug/L	497.56	ppb	14:30:35
1	Ba 233.527†	68613.8	69814.1	510.05	ug/L	510.05	ppb	14:30:35
1	Be 313.107†	1470146.0	1500422.8	507.29	ug/L	507.29	ppb	14:30:35
1	Cd 226.502†	52805.7	53986.6	507.58	ug/L	507.58	ppb	14:30:35
1	Co 228.616†	25970.4	26516.9	495.88	ug/L	495.88	ppb	14:30:55
1	Cr 267.716†	49676.1	50435.1	505.94	ug/L	505.94	ppb	14:30:35
1	Cu 324.752†	176372.2	171381.3	507.40	ug/L	507.40	ppb	14:30:35
1	Mn 257.610†	479081.6	486854.1	511.35	ug/L	511.35	ppb	14:30:35
1	Mo 202.031†	7903.7	8019.7	503.65	ug/L	503.65	ppb	14:30:55
1	Ni 231.604†	22359.3	22635.9	495.03	ug/L	495.03	ppb	14:30:55
1	P 214.914†	5266.2	5106.4	2426.3	ug/L	2426.3	ppb	14:30:55
1	Pb 220.353†	4668.6	4851.6	503.83	ug/L	503.83	ppb	14:30:55
1	S 181.975 Axial†	925.3	879.2	1003.3	ug/L	1003.3	ppb	14:30:55
1	Sb 206.836†	1682.7	1671.6	502.50	ug/L	502.50	ppb	14:30:55
1	Se 196.026†	936.5	988.3	522.92	ug/L	522.92	ppb	14:30:55
1	Si 251.611†	87312.6	88189.2	2520.1	ug/L	2520.1	ppb	14:30:35
1	Sn 189.927†	3307.0	3361.1	498.86	ug/L	498.86	ppb	14:30:55
1	Ti 334.940†	318600.0	326006.2	510.59	ug/L	510.59	ppb	14:30:35
1	Tl 190.801†	1747.9	1824.6	503.12	ug/L	503.12	ppb	14:30:55
1	U 409.014†	13711.4	16579.2	489.65	ug/L	489.65	ppb	14:30:35
1	V 292.402†	77166.9	80326.7	511.11	ug/L	511.11	ppb	14:30:35
1	Zn 213.857†	61341.0	61563.5	501.54	ug/L	501.54	ppb	14:30:35
1	SiO2†	86000.3	86831.5	5349.9	ug/L	5349.9	ppb	14:31:56
2	Sc Radial	4764.0	4764.0	93.7	%			14:29:41
2	Y RADIAL	4979.2	4979.2	92.87	%			14:29:41
2	Al 396.153Radial†	5760.7	6168.5	4988.4	ug/L	4988.4	ppb	14:29:41
2	Ca 317.933Radial†	2947.8	3128.2	4964.7	ug/L	4964.7	ppb	14:30:01
2	Fe 238.204 Radial†	565.4	588.8	5115.3	ug/L	5115.3	ppb	14:30:01
2	K 766.490 Radial†	29007.2	27630.9	5314.5	ug/L	5314.5	ppb	14:29:41
2	Mg 279.077 IEC†	158.2	165.0	5109.2	ug/L	5109.2	ppb	14:30:01
2	Na 589.592 Radial†	32604.2	36539.4	10400	ug/L	10400	ppb	14:29:41
2	Sr 421.552†	70264.9	74993.0	497.29	ug/L	497.29	ppb	14:29:41
2	Sc 361.383	893716.5	893716.5	97.676	%			14:31:03
2	Y 371.029	755863.3	755863.3	96.707	%			14:31:03
2	Ag 328.068†	115500.6	117735.7	509.16	ug/L	509.16	ppb	14:31:03
2	As 188.979†	1369.0	1432.8	509.13	ug/L	509.13	ppb	14:31:23
2	B 249.677†	23166.7	24431.2	498.45	ug/L	498.45	ppb	14:31:03
2	Ba 233.527†	68122.5	69734.6	509.47	ug/L	509.47	ppb	14:31:03
2	Be 313.107†	1461394.4	1500537.4	507.33	ug/L	507.33	ppb	14:31:03
2	Cd 226.502†	52455.7	53954.2	507.29	ug/L	507.29	ppb	14:31:03
2	Co 228.616†	26029.6	26737.8	500.02	ug/L	500.02	ppb	14:31:23
2	Cr 267.716†	49362.6	50420.7	505.79	ug/L	505.79	ppb	14:31:03
2	Cu 324.752†	175135.7	171204.1	506.87	ug/L	506.87	ppb	14:31:03
2	Mn 257.610†	475930.4	486585.1	511.06	ug/L	511.06	ppb	14:31:03
2	Mo 202.031†	7896.9	8061.5	506.26	ug/L	506.26	ppb	14:31:23
2	Ni 231.604†	22368.7	22783.5	498.25	ug/L	498.25	ppb	14:31:23

2	P 214.914†	5271.0	5143.9	2444.9 ug/L	2444.9 ppb	14:31:23
2	Pb 220.353†	4697.4	4909.9	509.88 ug/L	509.88 ppb	14:31:23
2	S 181.975 Axial†	911.3	870.6	993.56 ug/L	993.56 ppb	14:31:23
2	Sb 206.836†	1694.6	1694.2	509.35 ug/L	509.35 ppb	14:31:23
2	Se 196.026†	925.8	983.1	520.00 ug/L	520.00 ppb	14:31:23
2	Si 251.611†	86737.9	88139.8	2518.6 ug/L	2518.6 ppb	14:31:03
2	Sn 189.927†	3320.6	3395.4	503.93 ug/L	503.93 ppb	14:31:23
2	Ti 334.940†	316611.1	325936.5	510.47 ug/L	510.47 ppb	14:31:03
2	Tl 190.801†	1764.8	1852.7	510.80 ug/L	510.80 ppb	14:31:23
2	U 409.014†	13587.5	16537.0	488.41 ug/L	488.41 ppb	14:31:03
2	V 292.402†	76707.6	80332.8	511.20 ug/L	511.20 ppb	14:31:03
2	Zn 213.857†	61130.6	61726.8	502.87 ug/L	502.87 ppb	14:31:03
2	SiO2†	86556.7	87932.0	5417.9 ug/L	5417.9 ppb	14:32:01
3	Sc Radial	4609.9	4609.9	90.7 %		14:30:06
3	Y RADIAL	4831.2	4831.2	90.11 %		14:30:06
3	Al 396.153Radial†	5596.4	6192.8	5008.4 ug/L	5008.4 ppb	14:30:06
3	Ca 317.933Radial†	3009.6	3301.5	5239.8 ug/L	5239.8 ppb	14:30:26
3	Fe 238.204 Radial†	574.0	618.5	5372.3 ug/L	5372.3 ppb	14:30:26
3	K 766.490 Radial†	28469.4	28072.6	5399.6 ug/L	5399.6 ppb	14:30:06
3	Mg 279.077 IEC†	159.9	172.5	5339.0 ug/L	5339.0 ppb	14:30:26
3	Na 589.592 Radial†	31703.1	36708.7	10448 ug/L	10448 ppb	14:30:06
3	Sr 421.552†	68221.5	75246.1	498.97 ug/L	498.97 ppb	14:30:06
3	Sc 361.383	896415.2	896415.2	97.971 %		14:31:30
3	Y 371.029	757733.6	757733.6	96.946 %		14:31:30
3	Ag 328.068†	115979.5	117868.5	509.82 ug/L	509.82 ppb	14:31:30
3	As 188.979†	1323.7	1382.3	491.41 ug/L	491.41 ppb	14:31:50
3	B 249.677†	23341.3	24538.0	500.61 ug/L	500.61 ppb	14:31:30
3	Ba 233.527†	68497.8	69907.8	510.74 ug/L	510.74 ppb	14:31:30
3	Be 313.107†	1468316.1	1503098.2	508.20 ug/L	508.20 ppb	14:31:30
3	Cd 226.502†	52640.5	53981.1	507.52 ug/L	507.52 ppb	14:31:30
3	Co 228.616†	25909.9	26535.5	496.22 ug/L	496.22 ppb	14:31:50
3	Cr 267.716†	49457.8	50365.8	505.25 ug/L	505.25 ppb	14:31:30
3	Cu 324.752†	176236.2	171787.6	508.61 ug/L	508.61 ppb	14:31:30
3	Mn 257.610†	478030.1	487261.3	511.79 ug/L	511.79 ppb	14:31:30
3	Mo 202.031†	7861.9	8001.4	502.52 ug/L	502.52 ppb	14:31:50
3	Ni 231.604†	22338.7	22683.9	496.08 ug/L	496.08 ppb	14:31:50
3	P 214.914†	5266.3	5122.8	2434.0 ug/L	2434.0 ppb	14:31:50
3	Pb 220.353†	4662.5	4859.8	504.67 ug/L	504.67 ppb	14:31:50
3	S 181.975 Axial†	917.6	874.2	997.61 ug/L	997.61 ppb	14:31:50
3	Sb 206.836†	1670.2	1664.0	500.23 ug/L	500.23 ppb	14:31:50
3	Se 196.026†	924.9	979.4	518.81 ug/L	518.81 ppb	14:31:50
3	Si 251.611†	87084.6	88226.3	2521.2 ug/L	2521.2 ppb	14:31:30
3	Sn 189.927†	3291.8	3355.8	498.08 ug/L	498.08 ppb	14:31:50
3	Ti 334.940†	317925.7	326302.5	511.06 ug/L	511.06 ppb	14:31:30
3	Tl 190.801†	1725.6	1807.3	498.37 ug/L	498.37 ppb	14:31:50
3	U 409.014†	13732.7	16643.3	491.52 ug/L	491.52 ppb	14:31:30
3	V 292.402†	77043.8	80439.5	511.79 ug/L	511.79 ppb	14:31:30
3	Zn 213.857†	61422.3	61836.1	503.75 ug/L	503.75 ppb	14:31:30
3	SiO2†	86663.0	87773.6	5408.2 ug/L	5408.2 ppb	14:32:06

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	896423.0	97.972	%	0.2962				0.30%
Sc Radial	4700.7	92.4	%	1.59				1.72%
Y 371.029	757815.9	96.956	%	0.2552				0.26%
Y RADIAL	4911.2	91.61	%	1.394				1.52%
Ag 328.068†	117781.0	509.39	ug/L	0.365	509.39	ppb	0.365	0.07%
QC value within limits for Ag 328.068 Recovery = 101.88%								
Al 396.153Radial†	6173.9	4992.9	ug/L	13.79	4992.9	ppb	13.79	0.28%
QC value within limits for Al 396.153Radial Recovery = 99.86%								
As 188.979†	1404.3	499.14	ug/L	9.074	499.14	ppb	9.074	1.82%
QC value within limits for As 188.979 Recovery = 99.83%								
B 249.677†	24452.4	498.87	ug/L	1.570	498.87	ppb	1.570	0.31%
QC value within limits for B 249.677 Recovery = 99.77%								
Ba 233.527†	69818.8	510.09	ug/L	0.636	510.09	ppb	0.636	0.12%
QC value within limits for Ba 233.527 Recovery = 102.02%								
Be 313.107†	1501352.8	507.61	ug/L	0.511	507.61	ppb	0.511	0.10%
QC value within limits for Be 313.107 Recovery = 101.52%								
Ca 317.933Radial†	3207.2	5090.0	ug/L	139.14	5090.0	ppb	139.14	2.73%

QC value within limits for Ca 317.933Radial Recovery = 101.80%

Cd 226.502†	53974.0	507.46 ug/L	0.154	507.46 ppb	0.154	0.03%
QC value within limits for Cd 226.502 Recovery = 101.49%						
Co 228.616†	26596.7	497.37 ug/L	2.297	497.37 ppb	2.297	0.46%
QC value within limits for Co 228.616 Recovery = 99.47%						
Cr 267.716†	50407.2	505.66 ug/L	0.364	505.66 ppb	0.364	0.07%
QC value within limits for Cr 267.716 Recovery = 101.13%						
Cu 324.752†	171457.6	507.62 ug/L	0.892	507.62 ppb	0.892	0.18%
QC value within limits for Cu 324.752 Recovery = 101.52%						
Fe 238.204 Radial†	602.3	5231.5 ug/L	130.27	5231.5 ppb	130.27	2.49%
QC value within limits for Fe 238.204 Radial Recovery = 104.63%						
K 766.490 Radial†	27780.8	5343.4 ug/L	48.67	5343.4 ppb	48.67	0.91%
QC value within limits for K 766.490 Radial Recovery = 106.87%						
Mg 279.077 IEC†	168.0	5201.9 ug/L	121.12	5201.9 ppb	121.12	2.33%
QC value within limits for Mg 279.077 IEC Recovery = 104.04%						
Mn 257.610†	486900.2	511.40 ug/L	0.368	511.40 ppb	0.368	0.07%
QC value within limits for Mn 257.610 Recovery = 102.28%						
Mo 202.031†	8027.5	504.14 ug/L	1.921	504.14 ppb	1.921	0.38%
QC value within limits for Mo 202.031 Recovery = 100.83%						
Na 589.592 Radial†	36626.9	10425 ug/L	24.1	10425 ppb	24.1	0.23%
QC value within limits for Na 589.592 Radial Recovery = 104.25%						
Ni 231.604†	22701.1	496.45 ug/L	1.646	496.45 ppb	1.646	0.33%
QC value within limits for Ni 231.604 Recovery = 99.29%						
P 214.914†	5124.4	2435.0 ug/L	9.34	2435.0 ppb	9.34	0.38%
QC value within limits for P 214.914 Recovery = 97.40%						
Pb 220.353†	4873.8	506.12 ug/L	3.278	506.12 ppb	3.278	0.65%
QC value within limits for Pb 220.353 Recovery = 101.22%						
S 181.975 Axial†	874.7	998.17 ug/L	4.913	998.17 ppb	4.913	0.49%
QC value within limits for S 181.975 Axial Recovery = 99.82%						
Sb 206.836†	1676.6	504.03 ug/L	4.749	504.03 ppb	4.749	0.94%
QC value within limits for Sb 206.836 Recovery = 100.81%						
Se 196.026†	983.6	520.58 ug/L	2.111	520.58 ppb	2.111	0.41%
QC value within limits for Se 196.026 Recovery = 104.12%						
Si 251.611†	88185.1	2520.0 ug/L	1.28	2520.0 ppb	1.28	0.05%
QC value within limits for Si 251.611 Recovery = 100.80%						
Sn 189.927†	3370.8	500.29 ug/L	3.176	500.29 ppb	3.176	0.63%
QC value within limits for Sn 189.927 Recovery = 100.06%						
Sr 421.552†	75092.7	497.95 ug/L	0.893	497.95 ppb	0.893	0.18%
QC value within limits for Sr 421.552 Recovery = 99.59%						
Ti 334.940†	326081.7	510.71 ug/L	0.311	510.71 ppb	0.311	0.06%
QC value within limits for Ti 334.940 Recovery = 102.14%						
Tl 190.801†	1828.2	504.10 ug/L	6.271	504.10 ppb	6.271	1.24%
QC value within limits for Tl 190.801 Recovery = 100.82%						
U 409.014†	16586.5	489.86 ug/L	1.569	489.86 ppb	1.569	0.32%
QC value within limits for U 409.014 Recovery = 97.97%						
V 292.402†	80366.3	511.37 ug/L	0.367	511.37 ppb	0.367	0.07%
QC value within limits for V 292.402 Recovery = 102.27%						
Zn 213.857†	61708.8	502.72 ug/L	1.116	502.72 ppb	1.116	0.22%
QC value within limits for Zn 213.857 Recovery = 100.54%						
SiO2†	87512.4	5392.0 ug/L	36.79	5392.0 ppb	36.79	0.68%
QC value within limits for SiO2 Recovery = 100.83%						

All analyte(s) passed QC.

Sequence No.: 18
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/5/2010 14:34:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4736.5	4736.5	93.1	%			14:36:08
1	Y RADIAL	4999.3	4999.3	93.25	%			14:36:08
1	Al 396.153Radial†	-31.4	-14.1	-11.511	ug/L	-11.511	ppb	14:36:08
1	Ca 317.933Radial†	20.3	3.6	5.6407	ug/L	5.6407	ppb	14:36:28
1	Fe 238.204 Radial†	14.1	0.4	3.7532	ug/L	3.7532	ppb	14:36:28
1	K 766.490 Radial†	3474.9	399.4	76.935	ug/L	76.935	ppb	14:36:08
1	Mg 279.077 IEC†	3.7	0.0	1.3325	ug/L	1.3325	ppb	14:36:28
1	Na 589.592 Radial†	-1559.4	63.6	18.101	ug/L	18.101	ppb	14:36:08
1	Sr 421.552†	9.4	2.7	0.0175	ug/L	0.0175	ppb	14:36:08
1	Sc 361.383	884954.0	884954.0	96.719	%			14:37:25
1	Y 371.029	756875.2	756875.2	96.836	%			14:37:25
1	Ag 328.068†	301.9	-200.7	-0.8537	ug/L	-0.8537	ppb	14:37:25
1	As 188.979†	-32.1	-2.0	-0.7019	ug/L	-0.7019	ppb	14:37:45
1	B 249.677†	-574.5	119.4	2.4458	ug/L	2.4458	ppb	14:37:25
1	Ba 233.527†	19.2	11.3	0.0818	ug/L	0.0818	ppb	14:37:45
1	Be 313.107†	-4334.4	-106.1	-0.0357	ug/L	-0.0357	ppb	14:37:25
1	Cd 226.502†	-234.6	8.1	0.0752	ug/L	0.0752	ppb	14:37:45
1	Co 228.616†	-93.4	-7.6	-0.1410	ug/L	-0.1410	ppb	14:37:45
1	Cr 267.716†	102.2	-10.5	-0.1028	ug/L	-0.1028	ppb	14:37:25
1	Cu 324.752†	8089.2	265.4	0.7856	ug/L	0.7856	ppb	14:37:25
1	Mn 257.610†	511.6	-139.1	-0.1456	ug/L	-0.1456	ppb	14:37:25
1	Mo 202.031†	30.6	8.4	0.5274	ug/L	0.5274	ppb	14:37:45
1	Ni 231.604†	99.3	-14.7	-0.3212	ug/L	-0.3212	ppb	14:37:45
1	P 214.914†	269.6	26.2	12.706	ug/L	12.706	ppb	14:37:45
1	Pb 220.353†	-78.9	19.1	1.9770	ug/L	1.9770	ppb	14:37:45
1	S 181.975 Axial†	58.3	-2.1	-2.4325	ug/L	-2.4325	ppb	14:37:45
1	Sb 206.836†	57.7	19.0	5.6330	ug/L	5.6330	ppb	14:37:45
1	Se 196.026†	-31.2	3.1	1.5823	ug/L	1.5823	ppb	14:37:45
1	Si 251.611†	699.9	62.0	1.7440	ug/L	1.7440	ppb	14:37:45
1	Sn 189.927†	4.6	0.6	0.0875	ug/L	0.0875	ppb	14:37:45
1	Ti 334.940†	-1719.5	15.2	0.0288	ug/L	0.0288	ppb	14:37:25
1	Tl 190.801†	-40.2	4.4	1.2132	ug/L	1.2132	ppb	14:37:45
1	U 409.014†	-2890.1	-361.9	-10.724	ug/L	-10.724	ppb	14:37:25
1	V 292.402†	-1804.9	-65.9	-0.4274	ug/L	-0.4274	ppb	14:37:25
1	Zn 213.857†	869.1	40.4	0.3325	ug/L	0.3325	ppb	14:37:45
1	SiO2†	707.8	47.9	2.8860	ug/L	2.8860	ppb	14:38:41
2	Sc Radial	4798.6	4798.6	94.4	%			14:36:33
2	Y RADIAL	5031.6	5031.6	93.85	%			14:36:33
2	Al 396.153Radial†	-32.4	-14.8	-12.012	ug/L	-12.012	ppb	14:36:33
2	Ca 317.933Radial†	23.2	6.4	10.118	ug/L	10.118	ppb	14:36:53
2	Fe 238.204 Radial†	16.8	3.2	27.343	ug/L	27.343	ppb	14:36:53
2	K 766.490 Radial†	3475.7	352.0	67.799	ug/L	67.799	ppb	14:36:33
2	Mg 279.077 IEC†	0.2	-3.6	-112.28	ug/L	-112.28	ppb	14:36:53
2	Na 589.592 Radial†	-1564.6	79.7	22.689	ug/L	22.689	ppb	14:36:33
2	Sr 421.552†	-4.6	-12.3	-0.0818	ug/L	-0.0818	ppb	14:36:33
2	Sc 361.383	892849.2	892849.2	97.581	%			14:37:50
2	Y 371.029	763615.2	763615.2	97.698	%			14:37:50
2	Ag 328.068†	536.9	37.4	0.1710	ug/L	0.1710	ppb	14:37:50
2	As 188.979†	-36.1	-5.8	-2.0251	ug/L	-2.0251	ppb	14:38:10
2	B 249.677†	-625.2	72.7	1.4856	ug/L	1.4856	ppb	14:37:50
2	Ba 233.527†	4.9	-3.5	-0.0254	ug/L	-0.0254	ppb	14:38:10
2	Be 313.107†	-4376.4	-109.5	-0.0370	ug/L	-0.0370	ppb	14:37:50
2	Cd 226.502†	-224.9	20.1	0.1862	ug/L	0.1862	ppb	14:38:10
2	Co 228.616†	-105.5	-19.2	-0.3589	ug/L	-0.3589	ppb	14:38:10
2	Cr 267.716†	111.1	-2.3	-0.0222	ug/L	-0.0222	ppb	14:37:50
2	Cu 324.752†	8066.4	168.1	0.4987	ug/L	0.4987	ppb	14:37:50
2	Mn 257.610†	538.4	-116.3	-0.1172	ug/L	-0.1172	ppb	14:37:50
2	Mo 202.031†	20.6	-2.2	-0.1328	ug/L	-0.1328	ppb	14:38:10
2	Ni 231.604†	122.5	8.2	0.1786	ug/L	0.1786	ppb	14:38:10

2	P 214.914†	258.6	12.4	5.9705 ug/L	5.9705 ppb	14:38:10
2	Pb 220.353†	-99.0	-0.7	-0.0776 ug/L	-0.0776 ppb	14:38:10
2	S 181.975 Axial†	59.3	-1.6	-1.8624 ug/L	-1.8624 ppb	14:38:10
2	Sb 206.836†	46.9	7.3	2.1836 ug/L	2.1836 ppb	14:38:10
2	Se 196.026†	-38.2	-3.8	-1.8863 ug/L	-1.8863 ppb	14:38:10
2	Si 251.611†	730.1	86.5	2.4608 ug/L	2.4608 ppb	14:38:10
2	Sn 189.927†	9.0	5.1	0.7608 ug/L	0.7608 ppb	14:38:10
2	Ti 334.940†	-1765.1	-15.8	-0.0232 ug/L	-0.0232 ppb	14:37:50
2	Tl 190.801†	-48.8	-4.1	-1.1232 ug/L	-1.1232 ppb	14:38:10
2	U 409.014†	-2639.4	-78.6	-2.3320 ug/L	-2.3320 ppb	14:37:50
2	V 292.402†	-1793.3	-37.5	-0.2489 ug/L	-0.2489 ppb	14:37:50
2	Zn 213.857†	882.8	46.5	0.3829 ug/L	0.3829 ppb	14:38:10
2	SiO2†	764.0	99.0	6.0792 ug/L	6.0792 ppb	14:38:46
3	Sc Radial	4791.2	4791.2	94.2 %		14:36:58
3	Y RADIAL	5039.6	5039.6	94.00 %		14:36:58
3	Al 396.153Radial†	-0.9	18.6	15.047 ug/L	15.047 ppb	14:36:58
3	Ca 317.933Radial†	16.8	-0.4	-0.7026 ug/L	-0.7026 ppb	14:37:18
3	Fe 238.204 Radial†	12.3	-1.6	-14.154 ug/L	-14.154 ppb	14:37:18
3	K 766.490 Radial†	3359.3	234.1	45.094 ug/L	45.094 ppb	14:36:58
3	Mg 279.077 IEC†	-1.4	-5.4	-165.69 ug/L	-165.69 ppb	14:37:18
3	Na 589.592 Radial†	-1557.1	85.1	24.234 ug/L	24.234 ppb	14:36:58
3	Sr 421.552†	65.4	61.9	0.4108 ug/L	0.4108 ppb	14:36:58
3	Sc 361.383	879023.5	879023.5	96.070 %		14:38:16
3	Y 371.029	751922.8	751922.8	96.202 %		14:38:16
3	Ag 328.068†	515.1	23.4	0.0995 ug/L	0.0995 ppb	14:38:16
3	As 188.979†	-30.7	-0.7	-0.2425 ug/L	-0.2425 ppb	14:38:36
3	B 249.677†	-640.0	47.2	0.9698 ug/L	0.9698 ppb	14:38:16
3	Ba 233.527†	-2.4	-11.0	-0.0819 ug/L	-0.0819 ppb	14:38:36
3	Be 313.107†	-4425.2	-230.8	-0.0776 ug/L	-0.0776 ppb	14:38:16
3	Cd 226.502†	-246.7	-6.2	-0.0572 ug/L	-0.0572 ppb	14:38:36
3	Co 228.616†	-102.6	-17.8	-0.3322 ug/L	-0.3322 ppb	14:38:36
3	Cr 267.716†	101.9	-10.1	-0.1004 ug/L	-0.1004 ppb	14:38:16
3	Cu 324.752†	8011.0	240.4	0.7107 ug/L	0.7107 ppb	14:38:16
3	Mn 257.610†	545.8	-99.9	-0.1032 ug/L	-0.1032 ppb	14:38:16
3	Mo 202.031†	29.2	7.1	0.4469 ug/L	0.4469 ppb	14:38:36
3	Ni 231.604†	114.7	2.0	0.0450 ug/L	0.0450 ppb	14:38:36
3	P 214.914†	273.6	32.2	15.702 ug/L	15.702 ppb	14:38:36
3	Pb 220.353†	-95.1	1.7	0.1823 ug/L	0.1823 ppb	14:38:36
3	S 181.975 Axial†	68.8	9.2	10.519 ug/L	10.519 ppb	14:38:36
3	Sb 206.836†	39.8	0.7	0.2116 ug/L	0.2116 ppb	14:38:36
3	Se 196.026†	-27.5	6.6	3.3550 ug/L	3.3550 ppb	14:38:36
3	Si 251.611†	720.8	88.6	2.5226 ug/L	2.5226 ppb	14:38:36
3	Sn 189.927†	0.0	-4.1	-0.6114 ug/L	-0.6114 ppb	14:38:36
3	Ti 334.940†	-1641.2	84.7	0.1356 ug/L	0.1356 ppb	14:38:16
3	Tl 190.801†	-53.3	-9.6	-2.6169 ug/L	-2.6169 ppb	14:38:36
3	U 409.014†	-2737.2	-222.9	-6.6036 ug/L	-6.6036 ppb	14:38:16
3	V 292.402†	-1799.7	-73.1	-0.4671 ug/L	-0.4671 ppb	14:38:16
3	Zn 213.857†	870.1	47.5	0.3954 ug/L	0.3954 ppb	14:38:36
3	SiO2†	756.3	103.3	6.3496 ug/L	6.3496 ppb	14:38:51

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	885608.9	96.790	%	0.7581				0.78%
Sc Radial	4775.5	93.9	%	0.67				0.71%
Y 371.029	757471.1	96.912	%	0.7509				0.77%
Y RADIAL	5023.5	93.70	%	0.397				0.42%
Ag 328.068†	-46.6	-0.1944	ug/L	0.57207	-0.1944	ppb	0.57207	294.24%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-3.5	-2.8254	ug/L	15.48039	-2.8254	ppb	15.48039	547.89%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.8	-0.9898	ug/L	0.92549	-0.9898	ppb	0.92549	93.50%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	79.8	1.6337	ug/L	0.74907	1.6337	ppb	0.74907	45.85%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.1	-0.0085	ug/L	0.08315	-0.0085	ppb	0.08315	978.14%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-148.8	-0.0501	ug/L	0.02382	-0.0501	ppb	0.02382	47.52%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.2	5.0188	ug/L	5.43713	5.0188	ppb	5.43713	108.34%

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

Cd 226.502†	7.3	0.0680 ug/L	0.12189	0.0680 ppb	0.12189	179.13%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-14.9	-0.2774 ug/L	0.11883	-0.2774 ppb	0.11883	42.84%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-7.7	-0.0751 ug/L	0.04585	-0.0751 ppb	0.04585	61.06%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	224.6	0.6650 ug/L	0.14881	0.6650 ppb	0.14881	22.38%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.7	5.6473 ug/L	20.81311	5.6473 ppb	20.81311	368.55%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	328.5	63.276 ug/L	16.3954	63.276 ppb	16.3954	25.91%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-3.0	-92.210 ug/L	85.2981	-92.210 ppb	85.2981	92.50%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-118.4	-0.1220 ug/L	0.02162	-0.1220 ppb	0.02162	17.72%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	4.5	0.2805 ug/L	0.36019	0.2805 ppb	0.36019	128.42%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	76.2	21.675 ug/L	3.1898	21.675 ppb	3.1898	14.72%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-1.5	-0.0325 ug/L	0.25877	-0.0325 ppb	0.25877	795.18%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	23.6	11.459 ug/L	4.9840	11.459 ppb	4.9840	43.49%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	6.7	0.6939 ug/L	1.11880	0.6939 ppb	1.11880	161.24%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	1.8	2.0747 ug/L	7.31845	2.0747 ppb	7.31845	352.75%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	9.0	2.6761 ug/L	2.74404	2.6761 ppb	2.74404	102.54%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	2.0	1.0170 ug/L	2.66595	1.0170 ppb	2.66595	262.14%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	79.0	2.2424 ug/L	0.43277	2.2424 ppb	0.43277	19.30%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	0.5	0.0789 ug/L	0.68615	0.0789 ppb	0.68615	869.22%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	17.4	0.1155 ug/L	0.26050	0.1155 ppb	0.26050	225.46%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	28.0	0.0471 ug/L	0.08095	0.0471 ppb	0.08095	171.95%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-3.1	-0.8423 ug/L	1.93044	-0.8423 ppb	1.93044	229.18%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-221.1	-6.5532 ug/L	4.19632	-6.5532 ppb	4.19632	64.03%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-58.8	-0.3811 ug/L	0.11625	-0.3811 ppb	0.11625	30.50%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	44.8	0.3703 ug/L	0.03333	0.3703 ppb	0.03333	9.00%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	83.4	5.1049 ug/L	1.92640	5.1049 ppb	1.92640	37.74%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Analysis Begun

Start Time: 1/5/2010 14:58:28 Plasma On Time: 1/4/2010 06:33:21
Logged In Analyst: Optima3 Technique: ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601 Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\010510A.sif
Batch ID:
Results Data Set: 010510
Results Library: C:\pe\Optima3\Results\Results.mdb

Sequence No.: 1 Autosampler Location: 7
Sample ID: CCV Date Collected: 1/5/2010 14:58:29
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.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4611.9	4611.9	90.7	%			15:00:22
1	Y RADIAL	4831.3	4831.3	90.12	%			15:00:22
1	Al 396.153Radial†	5768.9	6380.3	5161.1	ug/L	5161.1	ppb	15:00:22
1	Ca 317.933Radial†	2985.5	3273.6	5195.4	ug/L	5195.4	ppb	15:00:42
1	Fe 238.204 Radial†	582.0	627.0	5445.2	ug/L	5445.2	ppb	15:00:42
1	K 766.490 Radial†	29195.0	28859.4	5551.1	ug/L	5551.1	ppb	15:00:22
1	Mg 279.077 IEC†	156.8	169.0	5232.3	ug/L	5232.3	ppb	15:00:42
1	Na 589.592 Radial†	33656.2	38847.5	11057	ug/L	11057	ppb	15:00:22
1	Sr 421.552†	71562.5	78898.1	523.19	ug/L	523.19	ppb	15:00:22
1	Sc 361.383	918968.6	918968.6	100.44	%			15:01:41
1	Y 371.029	776692.4	776692.4	99.371	%			15:01:41
1	Ag 328.068†	115008.4	113996.3	493.15	ug/L	493.15	ppb	15:01:41
1	As 188.979†	1361.2	1386.5	492.77	ug/L	492.77	ppb	15:02:01
1	B 249.677†	22919.6	23533.5	480.05	ug/L	480.05	ppb	15:01:41
1	Ba 233.527†	67826.5	67523.5	493.33	ug/L	493.33	ppb	15:01:41
1	Be 313.107†	1454582.0	1452641.9	491.14	ug/L	491.14	ppb	15:01:41
1	Cd 226.502†	52162.2	52186.3	490.62	ug/L	490.62	ppb	15:01:41
1	Co 228.616†	26058.2	26034.1	486.85	ug/L	486.85	ppb	15:02:01
1	Cr 267.716†	49167.5	48837.8	489.92	ug/L	489.92	ppb	15:01:41
1	Cu 324.752†	174170.7	165316.3	489.46	ug/L	489.46	ppb	15:01:41
1	Mn 257.610†	473950.0	471224.1	494.97	ug/L	494.97	ppb	15:01:41
1	Mo 202.031†	7899.9	7842.3	492.54	ug/L	492.54	ppb	15:02:01
1	Ni 231.604†	22418.7	22204.0	485.58	ug/L	485.58	ppb	15:02:01
1	P 214.914†	5294.1	5018.6	2385.8	ug/L	2385.8	ppb	15:02:01
1	Pb 220.353†	4702.1	4782.5	496.68	ug/L	496.68	ppb	15:02:01
1	S 181.975 Axial†	921.6	855.2	975.91	ug/L	975.91	ppb	15:02:01
1	Sb 206.836†	1692.2	1644.1	494.35	ug/L	494.35	ppb	15:02:01
1	Se 196.026†	925.0	956.3	507.22	ug/L	507.22	ppb	15:02:01
1	Si 251.611†	86235.3	85199.2	2434.4	ug/L	2434.4	ppb	15:01:41
1	Sn 189.927†	3321.3	3302.8	490.22	ug/L	490.22	ppb	15:02:01
1	Ti 334.940†	314880.0	315305.9	493.84	ug/L	493.84	ppb	15:01:41
1	Tl 190.801†	1742.6	1781.0	491.04	ug/L	491.04	ppb	15:02:01
1	U 409.014†	13527.2	16094.7	475.29	ug/L	475.29	ppb	15:01:41
1	V 292.402†	76365.9	77834.6	495.27	ug/L	495.27	ppb	15:01:41
1	Zn 213.857†	60743.2	59621.2	485.65	ug/L	485.65	ppb	15:01:41
1	SiO2†	86004.7	84947.3	5233.5	ug/L	5233.5	ppb	15:03:01
2	Sc Radial	4909.4	4909.4	96.5	%			15:00:47
2	Y RADIAL	5124.1	5124.1	95.58	%			15:00:47
2	Al 396.153Radial†	5633.0	5854.1	4733.0	ug/L	4733.0	ppb	15:00:47
2	Ca 317.933Radial†	2925.3	3011.8	4779.9	ug/L	4779.9	ppb	15:01:07
2	Fe 238.204 Radial†	562.0	567.5	4930.2	ug/L	4930.2	ppb	15:01:07
2	K 766.490 Radial†	28511.0	26200.3	5039.0	ug/L	5039.0	ppb	15:00:47
2	Mg 279.077 IEC†	152.6	154.1	4772.6	ug/L	4772.6	ppb	15:01:07
2	Na 589.592 Radial†	32625.5	35531.1	10113	ug/L	10113	ppb	15:00:47
2	Sr 421.552†	69694.7	72182.1	478.65	ug/L	478.65	ppb	15:00:47
2	Sc 361.383	890286.3	890286.3	97.301	%			15:02:08
2	Y 371.029	753345.5	753345.5	96.384	%			15:02:08

2	Ag 328.068†	114702.6	117371.1	507.53 ug/L	507.53 ppb	15:02:08
2	As 188.979†	1360.1	1429.0	507.76 ug/L	507.76 ppb	15:02:28
2	B 249.677†	22977.3	24328.0	496.35 ug/L	496.35 ppb	15:02:08
2	Ba 233.527†	67696.6	69565.6	508.23 ug/L	508.23 ppb	15:02:08
2	Be 313.107†	1450749.3	1495361.6	505.58 ug/L	505.58 ppb	15:02:08
2	Cd 226.502†	52214.5	53913.3	506.92 ug/L	506.92 ppb	15:02:08
2	Co 228.616†	26079.9	26892.2	502.92 ug/L	502.92 ppb	15:02:28
2	Cr 267.716†	49087.9	50333.2	504.91 ug/L	504.91 ppb	15:02:08
2	Cu 324.752†	173542.9	170257.9	504.06 ug/L	504.06 ppb	15:02:08
2	Mn 257.610†	472807.0	485252.3	509.65 ug/L	509.65 ppb	15:02:08
2	Mo 202.031†	7909.0	8105.1	508.98 ug/L	508.98 ppb	15:02:28
2	Ni 231.604†	22393.2	22897.0	500.74 ug/L	500.74 ppb	15:02:28
2	P 214.914†	5280.5	5174.4	2460.3 ug/L	2460.3 ppb	15:02:28
2	Pb 220.353†	4682.8	4913.4	510.21 ug/L	510.21 ppb	15:02:28
2	S 181.975 Axial†	912.0	874.9	998.49 ug/L	998.49 ppb	15:02:28
2	Sb 206.836†	1707.1	1713.8	515.19 ug/L	515.19 ppb	15:02:28
2	Se 196.026†	932.2	993.4	524.68 ug/L	524.68 ppb	15:02:28
2	Si 251.611†	85995.9	87719.3	2506.6 ug/L	2506.6 ppb	15:02:08
2	Sn 189.927†	3293.0	3380.1	501.64 ug/L	501.64 ppb	15:02:28
2	Ti 334.940†	314125.5	324630.8	508.42 ug/L	508.42 ppb	15:02:08
2	Tl 190.801†	1744.3	1838.6	506.89 ug/L	506.89 ppb	15:02:28
2	U 409.014†	13532.2	16533.8	488.34 ug/L	488.34 ppb	15:02:08
2	V 292.402†	76213.4	80127.5	509.97 ug/L	509.97 ppb	15:02:08
2	Zn 213.857†	60633.2	61456.7	500.66 ug/L	500.66 ppb	15:02:08
2	SiO2†	87012.7	88742.0	5468.2 ug/L	5468.2 ppb	15:03:06
3	Sc Radial	4725.7	4725.7	92.9 %		15:01:12
3	Y RADIAL	4936.5	4936.5	92.08 %		15:01:12
3	Al 396.153Radial†	5611.6	6058.0	4898.7 ug/L	4898.7 ppb	15:01:12
3	Ca 317.933Radial†	2978.4	3186.7	5057.5 ug/L	5057.5 ppb	15:01:32
3	Fe 238.204 Radial†	569.6	598.2	5196.3 ug/L	5196.3 ppb	15:01:32
3	K 766.490 Radial†	28113.0	26920.1	5177.6 ug/L	5177.6 ppb	15:01:12
3	Mg 279.077 IEC†	156.9	164.9	5106.5 ug/L	5106.5 ppb	15:01:32
3	Na 589.592 Radial†	32211.4	36399.3	10360 ug/L	10360 ppb	15:01:12
3	Sr 421.552†	68734.6	73955.4	490.41 ug/L	490.41 ppb	15:01:12
3	Sc 361.383	898670.2	898670.2	98.218 %		15:02:36
3	Y 371.029	759523.8	759523.8	97.175 %		15:02:36
3	Ag 328.068†	115080.1	116655.7	504.54 ug/L	504.54 ppb	15:02:36
3	As 188.979†	1358.5	1414.4	502.62 ug/L	502.62 ppb	15:02:56
3	B 249.677†	23002.1	24132.9	492.33 ug/L	492.33 ppb	15:02:36
3	Ba 233.527†	68088.4	69315.5	506.41 ug/L	506.41 ppb	15:02:36
3	Be 313.107†	1458690.7	1489537.2	503.61 ug/L	503.61 ppb	15:02:36
3	Cd 226.502†	52485.9	53688.9	504.79 ug/L	504.79 ppb	15:02:36
3	Co 228.616†	26136.9	26700.2	499.32 ug/L	499.32 ppb	15:02:56
3	Cr 267.716†	49418.7	50199.3	503.57 ug/L	503.57 ppb	15:02:36
3	Cu 324.752†	174315.9	169381.0	501.48 ug/L	501.48 ppb	15:02:36
3	Mn 257.610†	475455.7	483415.8	507.74 ug/L	507.74 ppb	15:02:36
3	Mo 202.031†	7933.3	8054.0	505.80 ug/L	505.80 ppb	15:02:56
3	Ni 231.604†	22444.4	22734.4	497.18 ug/L	497.18 ppb	15:02:56
3	P 214.914†	5299.9	5143.5	2445.5 ug/L	2445.5 ppb	15:02:56
3	Pb 220.353†	4705.6	4891.7	507.97 ug/L	507.97 ppb	15:02:56
3	S 181.975 Axial†	928.7	883.2	1007.9 ug/L	1007.9 ppb	15:02:56
3	Sb 206.836†	1696.6	1686.6	507.17 ug/L	507.17 ppb	15:02:56
3	Se 196.026†	921.9	973.9	515.51 ug/L	515.51 ppb	15:02:56
3	Si 251.611†	86401.4	87307.6	2494.8 ug/L	2494.8 ppb	15:02:36
3	Sn 189.927†	3345.0	3401.6	504.85 ug/L	504.85 ppb	15:02:56
3	Ti 334.940†	315619.7	323140.3	506.10 ug/L	506.10 ppb	15:02:36
3	Tl 190.801†	1755.2	1833.0	505.34 ug/L	505.34 ppb	15:02:56
3	U 409.014†	13390.4	16259.7	480.18 ug/L	480.18 ppb	15:02:36
3	V 292.402†	76580.6	79770.6	507.64 ug/L	507.64 ppb	15:02:36
3	Zn 213.857†	61074.7	61324.8	499.57 ug/L	499.57 ppb	15:02:36
3	SiO2†	85643.4	86513.6	5330.2 ug/L	5330.2 ppb	15:03:11

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902641.7	98.652	%	1.6118				1.63%
Sc Radial	4749.0	93.4	%	2.95				3.16%
Y 371.029	763187.2	97.644	%	1.5477				1.59%
Y RADIAL	4964.0	92.59	%	2.767				2.99%
Ag 328.068†	116007.7	501.74	ug/L	7.589	501.74	ppb	7.589	1.51%

QC value within limits for Ag 328.068 Recovery = 100.35%

Al 396.153Radial†	6097.5	4930.9 ug/L	215.85	4930.9 ppb	215.85	4.38%
QC value within limits for Al 396.153Radial Recovery = 98.62%						
As 188.979†	1410.0	501.05 ug/L	7.622	501.05 ppb	7.622	1.52%
QC value within limits for As 188.979 Recovery = 100.21%						
B 249.677†	23998.1	489.57 ug/L	8.492	489.57 ppb	8.492	1.73%
QC value within limits for B 249.677 Recovery = 97.91%						
Ba 233.527†	68801.5	502.65 ug/L	8.129	502.65 ppb	8.129	1.62%
QC value within limits for Ba 233.527 Recovery = 100.53%						
Be 313.107†	1479180.2	500.11 ug/L	7.833	500.11 ppb	7.833	1.57%
QC value within limits for Be 313.107 Recovery = 100.02%						
Ca 317.933Radial†	3157.4	5010.9 ug/L	211.65	5010.9 ppb	211.65	4.22%
QC value within limits for Ca 317.933Radial Recovery = 100.22%						
Cd 226.502†	53262.8	500.78 ug/L	8.861	500.78 ppb	8.861	1.77%
QC value within limits for Cd 226.502 Recovery = 100.16%						
Co 228.616†	26542.2	496.36 ug/L	8.429	496.36 ppb	8.429	1.70%
QC value within limits for Co 228.616 Recovery = 99.27%						
Cr 267.716†	49790.1	499.47 ug/L	8.295	499.47 ppb	8.295	1.66%
QC value within limits for Cr 267.716 Recovery = 99.89%						
Cu 324.752†	168318.4	498.33 ug/L	7.790	498.33 ppb	7.790	1.56%
QC value within limits for Cu 324.752 Recovery = 99.67%						
Fe 238.204 Radial†	597.6	5190.6 ug/L	257.59	5190.6 ppb	257.59	4.96%
QC value within limits for Fe 238.204 Radial Recovery = 103.81%						
K 766.490 Radial†	27326.6	5255.9 ug/L	264.85	5255.9 ppb	264.85	5.04%
QC value within limits for K 766.490 Radial Recovery = 105.12%						
Mg 279.077 IEC†	162.7	5037.1 ug/L	237.57	5037.1 ppb	237.57	4.72%
QC value within limits for Mg 279.077 IEC Recovery = 100.74%						
Mn 257.610†	479964.1	504.12 ug/L	7.982	504.12 ppb	7.982	1.58%
QC value within limits for Mn 257.610 Recovery = 100.82%						
Mo 202.031†	8000.5	502.44 ug/L	8.719	502.44 ppb	8.719	1.74%
QC value within limits for Mo 202.031 Recovery = 100.49%						
Na 589.592 Radial†	36926.0	10510 ug/L	489.5	10510 ppb	489.5	4.66%
QC value within limits for Na 589.592 Radial Recovery = 105.10%						
Ni 231.604†	22611.8	494.50 ug/L	7.924	494.50 ppb	7.924	1.60%
QC value within limits for Ni 231.604 Recovery = 98.90%						
P 214.914†	5112.1	2430.5 ug/L	39.41	2430.5 ppb	39.41	1.62%
QC value within limits for P 214.914 Recovery = 97.22%						
Pb 220.353†	4862.5	504.95 ug/L	7.254	504.95 ppb	7.254	1.44%
QC value within limits for Pb 220.353 Recovery = 100.99%						
S 181.975 Axial†	871.1	994.11 ug/L	16.449	994.11 ppb	16.449	1.65%
QC value within limits for S 181.975 Axial Recovery = 99.41%						
Sb 206.836†	1681.5	505.57 ug/L	10.509	505.57 ppb	10.509	2.08%
QC value within limits for Sb 206.836 Recovery = 101.11%						
Se 196.026†	974.5	515.80 ug/L	8.733	515.80 ppb	8.733	1.69%
QC value within limits for Se 196.026 Recovery = 103.16%						
Si 251.611†	86742.0	2478.6 ug/L	38.73	2478.6 ppb	38.73	1.56%
QC value within limits for Si 251.611 Recovery = 99.14%						
Sn 189.927†	3361.5	498.90 ug/L	7.687	498.90 ppb	7.687	1.54%
QC value within limits for Sn 189.927 Recovery = 99.78%						
Sr 421.552†	75011.8	497.42 ug/L	23.080	497.42 ppb	23.080	4.64%
QC value within limits for Sr 421.552 Recovery = 99.48%						
Ti 334.940†	321025.7	502.79 ug/L	7.833	502.79 ppb	7.833	1.56%
QC value within limits for Ti 334.940 Recovery = 100.56%						
Tl 190.801†	1817.5	501.09 ug/L	8.738	501.09 ppb	8.738	1.74%
QC value within limits for Tl 190.801 Recovery = 100.22%						
U 409.014†	16296.0	481.27 ug/L	6.591	481.27 ppb	6.591	1.37%
QC value within limits for U 409.014 Recovery = 96.25%						
V 292.402†	79244.2	504.29 ug/L	7.903	504.29 ppb	7.903	1.57%
QC value within limits for V 292.402 Recovery = 100.86%						
Zn 213.857†	60800.9	495.29 ug/L	8.369	495.29 ppb	8.369	1.69%
QC value within limits for Zn 213.857 Recovery = 99.06%						
SiO2†	86734.3	5344.0 ug/L	117.92	5344.0 ppb	117.92	2.21%
QC value within limits for SiO2 Recovery = 99.93%						

All analyte(s) passed QC.

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/5/2010 15:05:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4632.0	4632.0	91.1	%			15:07:14
1	Y RADIAL	4869.5	4869.5	90.83	%			15:07:14
1	Al 396.153Radial†	-16.1	1.9	1.5230	ug/L	1.5230	ppb	15:07:14
1	Ca 317.933Radial†	19.6	3.3	5.1918	ug/L	5.1918	ppb	15:07:34
1	Fe 238.204 Radial†	13.2	-0.1	-1.1618	ug/L	-1.1618	ppb	15:07:34
1	K 766.490 Radial†	3194.7	175.9	33.880	ug/L	33.880	ppb	15:07:14
1	Mg 279.077 IEC†	4.5	1.0	31.173	ug/L	31.173	ppb	15:07:34
1	Na 589.592 Radial†	-1578.1	5.4	1.5250	ug/L	1.5250	ppb	15:07:14
1	Sr 421.552†	9.8	3.3	0.0219	ug/L	0.0219	ppb	15:07:14
1	Sc 361.383	880001.1	880001.1	96.177	%			15:08:31
1	Y 371.029	752388.3	752388.3	96.262	%			15:08:31
1	Ag 328.068†	499.8	6.9	0.0359	ug/L	0.0359	ppb	15:08:31
1	As 188.979†	-36.0	-6.2	-2.1804	ug/L	-2.1804	ppb	15:08:51
1	B 249.677†	-564.1	126.9	2.5993	ug/L	2.5993	ppb	15:08:31
1	Ba 233.527†	-4.6	-13.4	-0.0966	ug/L	-0.0966	ppb	15:08:51
1	Be 313.107†	-4325.6	-122.2	-0.0414	ug/L	-0.0414	ppb	15:08:31
1	Cd 226.502†	-246.8	-6.0	-0.0561	ug/L	-0.0561	ppb	15:08:51
1	Co 228.616†	-97.5	-12.3	-0.2312	ug/L	-0.2312	ppb	15:08:51
1	Cr 267.716†	142.5	32.0	0.3229	ug/L	0.3229	ppb	15:08:31
1	Cu 324.752†	7946.0	163.6	0.4840	ug/L	0.4840	ppb	15:08:31
1	Mn 257.610†	590.0	-54.6	-0.0580	ug/L	-0.0580	ppb	15:08:31
1	Mo 202.031†	19.1	-3.4	-0.2164	ug/L	-0.2164	ppb	15:08:51
1	Ni 231.604†	120.3	7.7	0.1686	ug/L	0.1686	ppb	15:08:51
1	P 214.914†	266.7	24.7	12.054	ug/L	12.054	ppb	15:08:51
1	Pb 220.353†	-74.1	23.7	2.4485	ug/L	2.4485	ppb	15:08:51
1	S 181.975 Axial†	59.4	-0.6	-0.7407	ug/L	-0.7407	ppb	15:08:51
1	Sb 206.836†	50.1	11.4	3.3948	ug/L	3.3948	ppb	15:08:51
1	Se 196.026†	-44.5	-11.0	-5.6213	ug/L	-5.6213	ppb	15:08:51
1	Si 251.611†	674.2	39.3	1.1177	ug/L	1.1177	ppb	15:08:51
1	Sn 189.927†	10.5	6.7	1.0006	ug/L	1.0006	ppb	15:08:51
1	Ti 334.940†	-1775.3	-52.8	-0.0800	ug/L	-0.0800	ppb	15:08:31
1	Tl 190.801†	-49.0	-5.0	-1.3749	ug/L	-1.3749	ppb	15:08:51
1	U 409.014†	-2718.5	-200.3	-5.9354	ug/L	-5.9354	ppb	15:08:31
1	V 292.402†	-1673.8	59.9	0.3625	ug/L	0.3625	ppb	15:08:31
1	Zn 213.857†	895.4	72.8	0.5950	ug/L	0.5950	ppb	15:08:51
1	SiO2†	690.4	33.9	2.0739	ug/L	2.0739	ppb	15:09:48
2	Sc Radial	4768.4	4768.4	93.8	%			15:07:39
2	Y RADIAL	4978.6	4978.6	92.86	%			15:07:39
2	Al 396.153Radial†	-7.8	11.2	9.0645	ug/L	9.0645	ppb	15:07:39
2	Ca 317.933Radial†	24.3	7.6	12.128	ug/L	12.128	ppb	15:07:59
2	Fe 238.204 Radial†	12.4	-1.4	-12.412	ug/L	-12.412	ppb	15:07:59
2	K 766.490 Radial†	3164.9	43.8	8.4361	ug/L	8.4361	ppb	15:07:39
2	Mg 279.077 IEC†	2.3	-1.4	-43.790	ug/L	-43.790	ppb	15:07:59
2	Na 589.592 Radial†	-1517.4	119.6	34.034	ug/L	34.034	ppb	15:07:39
2	Sr 421.552†	-3.2	-10.8	-0.0719	ug/L	-0.0719	ppb	15:07:39
2	Sc 361.383	881705.1	881705.1	96.363	%			15:08:57
2	Y 371.029	753660.8	753660.8	96.425	%			15:08:57
2	Ag 328.068†	424.1	-72.7	-0.3127	ug/L	-0.3127	ppb	15:08:57
2	As 188.979†	-22.5	7.9	2.7633	ug/L	2.7633	ppb	15:09:17
2	B 249.677†	-653.2	35.6	0.7309	ug/L	0.7309	ppb	15:08:57
2	Ba 233.527†	4.6	-3.8	-0.0282	ug/L	-0.0282	ppb	15:09:17
2	Be 313.107†	-4371.1	-160.7	-0.0541	ug/L	-0.0541	ppb	15:08:57
2	Cd 226.502†	-226.0	16.0	0.1515	ug/L	0.1515	ppb	15:09:17
2	Co 228.616†	-103.0	-17.9	-0.3295	ug/L	-0.3295	ppb	15:09:17
2	Cr 267.716†	120.0	8.3	0.0843	ug/L	0.0843	ppb	15:08:57
2	Cu 324.752†	7993.9	197.3	0.5831	ug/L	0.5831	ppb	15:08:57
2	Mn 257.610†	558.2	-88.8	-0.0936	ug/L	-0.0936	ppb	15:08:57
2	Mo 202.031†	47.6	26.1	1.6373	ug/L	1.6373	ppb	15:09:17
2	Ni 231.604†	87.9	-26.1	-0.5715	ug/L	-0.5715	ppb	15:09:17

2	P 214.914†	251.8	8.8	4.2262 ug/L	4.2262 ppb	15:09:17
2	Pb 220.353†	-110.6	-14.1	-1.4498 ug/L	-1.4498 ppb	15:09:17
2	S 181.975 Axial†	57.2	-3.0	-3.4488 ug/L	-3.4488 ppb	15:09:17
2	Sb 206.836†	46.5	7.6	2.2939 ug/L	2.2939 ppb	15:09:17
2	Se 196.026†	-36.1	-2.1	-1.1217 ug/L	-1.1217 ppb	15:09:17
2	Si 251.611†	707.7	72.7	2.0520 ug/L	2.0520 ppb	15:09:17
2	Sn 189.927†	10.8	7.1	1.0489 ug/L	1.0489 ppb	15:09:17
2	Ti 334.940†	-1686.8	42.5	0.0698 ug/L	0.0698 ppb	15:08:57
2	Tl 190.801†	-38.8	5.7	1.5735 ug/L	1.5735 ppb	15:09:17
2	U 409.014†	-2722.3	-198.8	-5.8902 ug/L	-5.8902 ppb	15:08:57
2	V 292.402†	-1774.1	-40.9	-0.2438 ug/L	-0.2438 ppb	15:08:57
2	Zn 213.857†	890.2	65.6	0.5443 ug/L	0.5443 ppb	15:09:17
2	SiO2†	792.0	137.9	8.4622 ug/L	8.4622 ppb	15:09:53
3	Sc Radial	4665.0	4665.0	91.7 %		15:08:04
3	Y RADIAL	4934.3	4934.3	92.04 %		15:08:04
3	Al 396.153Radial†	-0.8	18.6	15.092 ug/L	15.092 ppb	15:08:04
3	Ca 317.933Radial†	14.1	-2.8	-4.5133 ug/L	-4.5133 ppb	15:08:24
3	Fe 238.204 Radial†	14.5	1.1	9.5821 ug/L	9.5821 ppb	15:08:24
3	K 766.490 Radial†	3289.1	254.1	48.965 ug/L	48.965 ppb	15:08:04
3	Mg 279.077 IEC†	0.0	-3.9	-119.16 ug/L	-119.16 ppb	15:08:24
3	Na 589.592 Radial†	-1632.9	-42.2	-12.003 ug/L	-12.003 ppb	15:08:04
3	Sr 421.552†	24.8	19.6	0.1302 ug/L	0.1302 ppb	15:08:04
3	Sc 361.383	872960.3	872960.3	95.408 %		15:09:22
3	Y 371.029	746856.7	746856.7	95.554 %		15:09:22
3	Ag 328.068†	534.9	47.9	0.2134 ug/L	0.2134 ppb	15:09:22
3	As 188.979†	-33.6	-3.9	-1.3854 ug/L	-1.3854 ppb	15:09:42
3	B 249.677†	-666.1	15.2	0.3111 ug/L	0.3111 ppb	15:09:22
3	Ba 233.527†	14.3	6.4	0.0461 ug/L	0.0461 ppb	15:09:42
3	Be 313.107†	-4293.6	-124.9	-0.0424 ug/L	-0.0424 ppb	15:09:22
3	Cd 226.502†	-238.1	1.0	0.0088 ug/L	0.0088 ppb	15:09:42
3	Co 228.616†	-87.6	-2.8	-0.0496 ug/L	-0.0496 ppb	15:09:42
3	Cr 267.716†	115.7	5.1	0.0529 ug/L	0.0529 ppb	15:09:22
3	Cu 324.752†	7892.4	174.1	0.5156 ug/L	0.5156 ppb	15:09:22
3	Mn 257.610†	561.8	-79.2	-0.0799 ug/L	-0.0799 ppb	15:09:22
3	Mo 202.031†	35.9	14.4	0.9035 ug/L	0.9035 ppb	15:09:42
3	Ni 231.604†	119.4	7.8	0.1699 ug/L	0.1699 ppb	15:09:42
3	P 214.914†	253.4	13.0	6.3019 ug/L	6.3019 ppb	15:09:42
3	Pb 220.353†	-88.6	7.8	0.8148 ug/L	0.8148 ppb	15:09:42
3	S 181.975 Axial†	55.6	-4.1	-4.6833 ug/L	-4.6833 ppb	15:09:42
3	Sb 206.836†	56.2	18.2	5.4272 ug/L	5.4272 ppb	15:09:42
3	Se 196.026†	-34.7	-1.1	-0.5155 ug/L	-0.5155 ppb	15:09:42
3	Si 251.611†	662.5	32.7	0.9040 ug/L	0.9040 ppb	15:09:42
3	Sn 189.927†	7.4	3.6	0.5319 ug/L	0.5319 ppb	15:09:42
3	Ti 334.940†	-1780.6	-73.3	-0.1120 ug/L	-0.1120 ppb	15:09:22
3	Tl 190.801†	-48.9	-5.3	-1.4580 ug/L	-1.4580 ppb	15:09:42
3	U 409.014†	-2721.8	-226.6	-6.7149 ug/L	-6.7149 ppb	15:09:22
3	V 292.402†	-1775.5	-60.7	-0.3852 ug/L	-0.3852 ppb	15:09:22
3	Zn 213.857†	880.0	64.2	0.5292 ug/L	0.5292 ppb	15:09:42
3	SiO2†	729.8	81.0	4.9409 ug/L	4.9409 ppb	15:09:58

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	878222.1	95.983	%	0.5067				0.53%
Sc Radial	4688.5	92.2	%	1.40				1.52%
Y 371.029	750968.6	96.080	%	0.4628				0.48%
Y RADIAL	4927.5	91.91	%	1.024				1.11%
Ag 328.068†	-6.0	-0.0211	ug/L	0.26763	-0.0211	ppb	0.26763	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	10.6	8.5597	ug/L	6.79839	8.5597	ppb	6.79839	79.42%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.8	-0.2675	ug/L	2.65466	-0.2675	ppb	2.65466	992.36%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	59.2	1.2138	ug/L	1.21810	1.2138	ppb	1.21810	100.36%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-3.6	-0.0262	ug/L	0.07134	-0.0262	ppb	0.07134	271.90%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-135.9	-0.0459	ug/L	0.00707	-0.0459	ppb	0.00707	15.38%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.7	4.2688	ug/L	8.35882	4.2688	ppb	8.35882	195.81%

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

Cd 226.502†	3.7	0.0348 ug/L	0.10620	0.0348 ppb	0.10620	305.59%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-11.0	-0.2034 ug/L	0.14204	-0.2034 ppb	0.14204	69.83%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	15.1	0.1534 ug/L	0.14770	0.1534 ppb	0.14770	96.32%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	178.3	0.5276 ug/L	0.05063	0.5276 ppb	0.05063	9.60%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.2	-1.3306 ug/L	10.99813	-1.3306 ppb	10.99813	826.55%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	157.9	30.427 ug/L	20.4837	30.427 ppb	20.4837	67.32%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-1.4	-43.927 ug/L	75.1684	-43.927 ppb	75.1684	171.12%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-74.2	-0.0772 ug/L	0.01796	-0.0772 ppb	0.01796	23.26%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	12.4	0.7748 ug/L	0.93354	0.7748 ppb	0.93354	120.48%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	27.6	7.8518 ug/L	23.66180	7.8518 ppb	23.66180	301.36%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-3.6	-0.0777 ug/L	0.42769	-0.0777 ppb	0.42769	550.63%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	15.5	7.5275 ug/L	4.05545	7.5275 ppb	4.05545	53.88%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	5.8	0.6045 ug/L	1.95763	0.6045 ppb	1.95763	323.84%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-2.6	-2.9576 ug/L	2.01665	-2.9576 ppb	2.01665	68.19%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	12.4	3.7053 ug/L	1.58960	3.7053 ppb	1.58960	42.90%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-4.7	-2.4195 ug/L	2.78937	-2.4195 ppb	2.78937	115.29%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	48.2	1.3579 ug/L	0.61054	1.3579 ppb	0.61054	44.96%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	5.8	0.8604 ug/L	0.28557	0.8604 ppb	0.28557	33.19%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	4.0	0.0267 ug/L	0.10114	0.0267 ppb	0.10114	378.95%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-27.8	-0.0407 ug/L	0.09708	-0.0407 ppb	0.09708	238.40%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-1.5	-0.4198 ug/L	1.72672	-0.4198 ppb	1.72672	411.32%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-208.6	-6.1802 ug/L	0.46367	-6.1802 ppb	0.46367	7.50%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-13.9	-0.0889 ug/L	0.39721	-0.0889 ppb	0.39721	446.95%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	67.5	0.5562 ug/L	0.03447	0.5562 ppb	0.03447	6.20%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	84.3	5.1590 ug/L	3.19974	5.1590 ppb	3.19974	62.02%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

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

Autosampler Location: 7
Date Collected: 1/5/2010 16:20:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4768.4	4768.4	93.8	%			16:22:08
1	Y RADIAL	4969.7	4969.7	92.70	%			16:22:08
1	Al 396.153Radial†	5689.5	6087.0	4922.5	ug/L	4922.5	ppb	16:22:08
1	Ca 317.933Radial†	2961.6	3140.1	4983.5	ug/L	4983.5	ppb	16:22:28
1	Fe 238.204 Radial†	571.8	595.1	5169.6	ug/L	5169.6	ppb	16:22:28
1	K 766.490 Radial†	29030.3	27627.5	5313.7	ug/L	5313.7	ppb	16:22:08
1	Mg 279.077 IEC†	158.1	164.7	5098.2	ug/L	5098.2	ppb	16:22:28
1	Na 589.592 Radial†	34529.0	38560.5	10975	ug/L	10975	ppb	16:22:08
1	Sr 421.552†	71604.4	76353.6	506.31	ug/L	506.31	ppb	16:22:08
1	Sc 361.383	892716.8	892716.8	97.567	%			16:23:27
1	Y 371.029	754279.6	754279.6	96.504	%			16:23:27
1	Ag 328.068†	113680.8	116002.9	501.71	ug/L	501.71	ppb	16:23:27
1	As 188.979†	1345.7	1410.5	501.23	ug/L	501.23	ppb	16:23:47
1	B 249.677†	22567.7	23843.8	486.42	ug/L	486.42	ppb	16:23:27
1	Ba 233.527†	66967.7	68629.2	501.39	ug/L	501.39	ppb	16:23:27
1	Be 313.107†	1440369.0	1480663.1	500.61	ug/L	500.61	ppb	16:23:27
1	Cd 226.502†	51809.8	53352.4	501.62	ug/L	501.62	ppb	16:23:27
1	Co 228.616†	25719.6	26450.0	494.63	ug/L	494.63	ppb	16:23:47
1	Cr 267.716†	48664.9	49762.3	499.19	ug/L	499.19	ppb	16:23:27
1	Cu 324.752†	172182.0	168377.5	498.51	ug/L	498.51	ppb	16:23:27
1	Mn 257.610†	468446.4	479460.1	503.59	ug/L	503.59	ppb	16:23:27
1	Mo 202.031†	7788.2	7959.2	499.85	ug/L	499.85	ppb	16:23:47
1	Ni 231.604†	22165.2	22600.6	494.26	ug/L	494.26	ppb	16:23:47
1	P 214.914†	5237.9	5116.0	2432.4	ug/L	2432.4	ppb	16:23:47
1	Pb 220.353†	4636.3	4852.7	503.93	ug/L	503.93	ppb	16:23:47
1	S 181.975 Axial†	924.2	884.9	1009.9	ug/L	1009.9	ppb	16:23:47
1	Sb 206.836†	1683.3	1684.6	506.47	ug/L	506.47	ppb	16:23:47
1	Se 196.026†	913.6	971.7	514.27	ug/L	514.27	ppb	16:23:47
1	Si 251.611†	85598.7	87071.5	2488.1	ug/L	2488.1	ppb	16:23:27
1	Sn 189.927†	3295.2	3373.2	500.64	ug/L	500.64	ppb	16:23:47
1	Ti 334.940†	310787.0	320330.1	501.70	ug/L	501.70	ppb	16:23:27
1	Tl 190.801†	1723.6	1812.5	499.72	ug/L	499.72	ppb	16:23:47
1	U 409.014†	13161.0	16115.4	475.92	ug/L	475.92	ppb	16:23:27
1	V 292.402†	75303.5	78981.6	502.60	ug/L	502.60	ppb	16:23:27
1	Zn 213.857†	60408.8	61057.0	497.40	ug/L	497.40	ppb	16:23:27
1	SiO2†	86087.7	87550.5	5394.6	ug/L	5394.6	ppb	16:24:47
2	Sc Radial	4766.0	4766.0	93.7	%			16:22:33
2	Y RADIAL	4983.8	4983.8	92.96	%			16:22:33
2	Al 396.153Radial†	5555.1	5946.6	4808.1	ug/L	4808.1	ppb	16:22:33
2	Ca 317.933Radial†	2957.3	3137.1	4978.7	ug/L	4978.7	ppb	16:22:53
2	Fe 238.204 Radial†	573.6	597.3	5188.8	ug/L	5188.8	ppb	16:22:53
2	K 766.490 Radial†	28525.6	27104.0	5213.0	ug/L	5213.0	ppb	16:22:33
2	Mg 279.077 IEC†	159.0	165.7	5130.9	ug/L	5130.9	ppb	16:22:53
2	Na 589.592 Radial†	33427.9	37403.6	10646	ug/L	10646	ppb	16:22:33
2	Sr 421.552†	69593.6	74245.2	492.33	ug/L	492.33	ppb	16:22:33
2	Sc 361.383	883117.5	883117.5	96.518	%			16:23:54
2	Y 371.029	746374.7	746374.7	95.493	%			16:23:54
2	Ag 328.068†	112592.4	116141.7	502.33	ug/L	502.33	ppb	16:23:54
2	As 188.979†	1365.6	1446.1	513.75	ug/L	513.75	ppb	16:24:14
2	B 249.677†	22370.2	23890.7	487.36	ug/L	487.36	ppb	16:23:54
2	Ba 233.527†	66507.3	68898.2	503.36	ug/L	503.36	ppb	16:23:54
2	Be 313.107†	1428183.0	1484084.5	501.77	ug/L	501.77	ppb	16:23:54
2	Cd 226.502†	51231.2	53330.1	501.41	ug/L	501.41	ppb	16:23:54
2	Co 228.616†	25838.3	26859.5	502.31	ug/L	502.31	ppb	16:24:14
2	Cr 267.716†	48166.0	49787.5	499.44	ug/L	499.44	ppb	16:23:54
2	Cu 324.752†	170859.5	168925.6	500.13	ug/L	500.13	ppb	16:23:54
2	Mn 257.610†	464874.7	480978.4	505.18	ug/L	505.18	ppb	16:23:54
2	Mo 202.031†	7834.3	8093.7	508.29	ug/L	508.29	ppb	16:24:14
2	Ni 231.604†	22240.5	22925.6	501.36	ug/L	501.36	ppb	16:24:14

2	P 214.914†	5253.0	5189.9	2468.4 ug/L	2468.4 ppb	16:24:14
2	Pb 220.353†	4654.6	4923.3	511.23 ug/L	511.23 ppb	16:24:14
2	S 181.975 Axial†	916.1	886.8	1012.1 ug/L	1012.1 ppb	16:24:14
2	Sb 206.836†	1693.5	1713.8	515.43 ug/L	515.43 ppb	16:24:14
2	Se 196.026†	919.5	988.0	522.68 ug/L	522.68 ppb	16:24:14
2	Si 251.611†	85043.1	87449.6	2498.8 ug/L	2498.8 ppb	16:23:54
2	Sn 189.927†	3302.8	3417.8	507.24 ug/L	507.24 ppb	16:24:14
2	Ti 334.940†	307900.3	320801.7	502.44 ug/L	502.44 ppb	16:23:54
2	Tl 190.801†	1728.3	1836.6	506.28 ug/L	506.28 ppb	16:24:14
2	U 409.014†	12983.2	16077.8	474.80 ug/L	474.80 ppb	16:23:54
2	V 292.402†	74861.8	79362.9	505.11 ug/L	505.11 ppb	16:23:54
2	Zn 213.857†	59892.6	61195.2	498.48 ug/L	498.48 ppb	16:23:54
2	SiO2†	86450.8	88885.8	5476.9 ug/L	5476.9 ppb	16:24:52
3	Sc Radial	4372.5	4372.5	86.0 %		16:22:58
3	Y RADIAL	4572.7	4572.7	85.29 %		16:22:58
3	Al 396.153Radial†	5576.7	6505.2	5262.2 ug/L	5262.2 ppb	16:22:58
3	Ca 317.933Radial†	2959.6	3423.7	5433.7 ug/L	5433.7 ppb	16:23:18
3	Fe 238.204 Radial†	575.1	654.2	5681.0 ug/L	5681.0 ppb	16:23:18
3	K 766.490 Radial†	28390.8	29686.5	5710.1 ug/L	5710.1 ppb	16:22:58
3	Mg 279.077 IEC†	158.4	180.4	5582.8 ug/L	5582.8 ppb	16:23:18
3	Na 589.592 Radial†	33149.4	40289.8	11467 ug/L	11467 ppb	16:22:58
3	Sr 421.552†	69560.1	80889.5	536.39 ug/L	536.39 ppb	16:22:58
3	Sc 361.383	891690.8	891690.8	97.455 %		16:24:22
3	Y 371.029	753515.8	753515.8	96.406 %		16:24:22
3	Ag 328.068†	113649.2	116104.6	502.31 ug/L	502.31 ppb	16:24:22
3	As 188.979†	1339.8	1406.0	499.74 ug/L	499.74 ppb	16:24:42
3	B 249.677†	22691.8	23997.8	489.51 ug/L	489.51 ppb	16:24:22
3	Ba 233.527†	67194.9	68941.3	503.69 ug/L	503.69 ppb	16:24:22
3	Be 313.107†	1442567.9	1484618.0	501.95 ug/L	501.95 ppb	16:24:22
3	Cd 226.502†	51812.9	53416.7	502.17 ug/L	502.17 ppb	16:24:22
3	Co 228.616†	25649.7	26408.5	493.85 ug/L	493.85 ppb	16:24:42
3	Cr 267.716†	48728.0	49884.4	500.42 ug/L	500.42 ppb	16:24:22
3	Cu 324.752†	172614.8	169024.7	500.45 ug/L	500.45 ppb	16:24:22
3	Mn 257.610†	469588.4	481184.4	505.44 ug/L	505.44 ppb	16:24:22
3	Mo 202.031†	7753.6	7932.8	498.25 ug/L	498.25 ppb	16:24:42
3	Ni 231.604†	22080.8	22540.2	492.93 ug/L	492.93 ppb	16:24:42
3	P 214.914†	5214.8	5098.4	2423.2 ug/L	2423.2 ppb	16:24:42
3	Pb 220.353†	4627.3	4848.9	503.56 ug/L	503.56 ppb	16:24:42
3	S 181.975 Axial†	903.0	864.3	986.21 ug/L	986.21 ppb	16:24:42
3	Sb 206.836†	1678.9	1682.1	505.59 ug/L	505.59 ppb	16:24:42
3	Se 196.026†	914.0	973.2	516.55 ug/L	516.55 ppb	16:24:42
3	Si 251.611†	85796.5	87375.4	2496.7 ug/L	2496.7 ppb	16:24:22
3	Sn 189.927†	3268.5	3349.7	497.21 ug/L	497.21 ppb	16:24:42
3	Ti 334.940†	311110.6	321028.7	502.81 ug/L	502.81 ppb	16:24:22
3	Tl 190.801†	1717.9	1808.7	498.71 ug/L	498.71 ppb	16:24:42
3	U 409.014†	13379.2	16354.9	482.95 ug/L	482.95 ppb	16:24:22
3	V 292.402†	75502.3	79274.4	504.36 ug/L	504.36 ppb	16:24:22
3	Zn 213.857†	60407.2	61126.6	497.93 ug/L	497.93 ppb	16:24:22
3	SiO2†	85295.3	86838.9	5350.3 ug/L	5350.3 ppb	16:24:58

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	889175.0	97.180	%	0.5761				0.59%
Sc Radial	4635.6	91.2	%	4.48				4.92%
Y 371.029	751390.0	96.134	%	0.5579				0.58%
Y RADIAL	4842.1	90.32	%	4.353				4.82%
Ag 328.068†	116083.1	502.12	ug/L	0.351	502.12	ppb	0.351	0.07%
QC value within limits for Ag 328.068 Recovery = 100.42%								
Al 396.153Radial†	6179.6	4997.6	ug/L	236.18	4997.6	ppb	236.18	4.73%
QC value within limits for Al 396.153Radial Recovery = 99.95%								
As 188.979†	1420.9	504.91	ug/L	7.696	504.91	ppb	7.696	1.52%
QC value within limits for As 188.979 Recovery = 100.98%								
B 249.677†	23910.8	487.76	ug/L	1.583	487.76	ppb	1.583	0.32%
QC value within limits for B 249.677 Recovery = 97.55%								
Ba 233.527†	68822.9	502.81	ug/L	1.240	502.81	ppb	1.240	0.25%
QC value within limits for Ba 233.527 Recovery = 100.56%								
Be 313.107†	1483121.9	501.44	ug/L	0.725	501.44	ppb	0.725	0.14%
QC value within limits for Be 313.107 Recovery = 100.29%								
Ca 317.933Radial†	3233.6	5132.0	ug/L	261.32	5132.0	ppb	261.32	5.09%

QC value within limits for Ca 317.933Radial Recovery = 102.64%

Cd 226.502†	53366.4	501.74 ug/L	0.393	501.74 ppb	0.393	0.08%
QC value within limits for Cd 226.502 Recovery = 100.35%						
Co 228.616†	26572.7	496.93 ug/L	4.676	496.93 ppb	4.676	0.94%
QC value within limits for Co 228.616 Recovery = 99.39%						
Cr 267.716†	49811.4	499.68 ug/L	0.650	499.68 ppb	0.650	0.13%
QC value within limits for Cr 267.716 Recovery = 99.94%						
Cu 324.752†	168775.9	499.70 ug/L	1.041	499.70 ppb	1.041	0.21%
QC value within limits for Cu 324.752 Recovery = 99.94%						
Fe 238.204 Radial†	615.6	5346.5 ug/L	289.84	5346.5 ppb	289.84	5.42%
QC value within limits for Fe 238.204 Radial Recovery = 106.93%						
K 766.490 Radial†	28139.3	5412.3 ug/L	262.84	5412.3 ppb	262.84	4.86%
QC value within limits for K 766.490 Radial Recovery = 108.25%						
Mg 279.077 IEC†	170.2	5270.6 ug/L	270.83	5270.6 ppb	270.83	5.14%
QC value within limits for Mg 279.077 IEC Recovery = 105.41%						
Mn 257.610†	480540.9	504.73 ug/L	1.003	504.73 ppb	1.003	0.20%
QC value within limits for Mn 257.610 Recovery = 100.95%						
Mo 202.031†	7995.2	502.13 ug/L	5.395	502.13 ppb	5.395	1.07%
QC value within limits for Mo 202.031 Recovery = 100.43%						
Na 589.592 Radial†	38751.3	11029 ug/L	413.4	11029 ppb	413.4	3.75%
QC value greater than the upper limit for Na 589.592 Radial Recovery = 110.29%						
Ni 231.604†	22688.8	496.18 ug/L	4.533	496.18 ppb	4.533	0.91%
QC value within limits for Ni 231.604 Recovery = 99.24%						
P 214.914†	5134.8	2441.3 ug/L	23.92	2441.3 ppb	23.92	0.98%
QC value within limits for P 214.914 Recovery = 97.65%						
Pb 220.353†	4875.0	506.24 ug/L	4.324	506.24 ppb	4.324	0.85%
QC value within limits for Pb 220.353 Recovery = 101.25%						
S 181.975 Axial†	878.7	1002.7 ug/L	14.33	1002.7 ppb	14.33	1.43%
QC value within limits for S 181.975 Axial Recovery = 100.27%						
Sb 206.836†	1693.5	509.16 ug/L	5.447	509.16 ppb	5.447	1.07%
QC value within limits for Sb 206.836 Recovery = 101.83%						
Se 196.026†	977.6	517.83 ug/L	4.345	517.83 ppb	4.345	0.84%
QC value within limits for Se 196.026 Recovery = 103.57%						
Si 251.611†	87298.8	2494.5 ug/L	5.68	2494.5 ppb	5.68	0.23%
QC value within limits for Si 251.611 Recovery = 99.78%						
Sn 189.927†	3380.2	501.70 ug/L	5.101	501.70 ppb	5.101	1.02%
QC value within limits for Sn 189.927 Recovery = 100.34%						
Sr 421.552†	77162.8	511.68 ug/L	22.514	511.68 ppb	22.514	4.40%
QC value within limits for Sr 421.552 Recovery = 102.34%						
Ti 334.940†	320720.2	502.32 ug/L	0.567	502.32 ppb	0.567	0.11%
QC value within limits for Ti 334.940 Recovery = 100.46%						
Tl 190.801†	1819.3	501.57 ug/L	4.111	501.57 ppb	4.111	0.82%
QC value within limits for Tl 190.801 Recovery = 100.31%						
U 409.014†	16182.7	477.89 ug/L	4.416	477.89 ppb	4.416	0.92%
QC value within limits for U 409.014 Recovery = 95.58%						
V 292.402†	79206.3	504.03 ug/L	1.288	504.03 ppb	1.288	0.26%
QC value within limits for V 292.402 Recovery = 100.81%						
Zn 213.857†	61126.3	497.94 ug/L	0.543	497.94 ppb	0.543	0.11%
QC value within limits for Zn 213.857 Recovery = 99.59%						
SiO2†	87758.4	5407.3 ug/L	64.28	5407.3 ppb	64.28	1.19%
QC value within limits for SiO2 Recovery = 101.12%						

QC Failed. Continue with analysis.

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

Autosampler Location: 8
Date Collected: 1/5/2010 16:27:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4865.3	4865.3	95.7	%			16:29:00
1	Y RADIAL	5073.8	5073.8	94.64	%			16:29:00
1	Al 396.153Radial†	-25.8	-7.4	-6.0285	ug/L	-6.0285	ppb	16:29:00
1	Ca 317.933Radial†	19.0	1.6	2.5890	ug/L	2.5890	ppb	16:29:20
1	Fe 238.204 Radial†	12.0	-2.1	-18.040	ug/L	-18.040	ppb	16:29:20
1	K 766.490 Radial†	3466.9	292.3	56.289	ug/L	56.289	ppb	16:29:00
1	Mg 279.077 IEC†	3.0	-0.7	-21.989	ug/L	-21.989	ppb	16:29:20
1	Na 589.592 Radial†	-1493.1	177.2	50.428	ug/L	50.428	ppb	16:29:00
1	Sr 421.552†	29.8	23.7	0.1573	ug/L	0.1573	ppb	16:29:00
1	Sc 361.383	871081.0	871081.0	95.202	%			16:30:17
1	Y 371.029	757757.2	757757.2	96.949	%			16:30:17
1	Ag 328.068†	457.8	-31.9	-0.1398	ug/L	-0.1398	ppb	16:30:17
1	As 188.979†	-27.8	2.1	0.7246	ug/L	0.7246	ppb	16:30:37
1	B 249.677†	-726.0	-49.2	-1.0048	ug/L	-1.0048	ppb	16:30:17
1	Ba 233.527†	16.6	8.9	0.0632	ug/L	0.0632	ppb	16:30:37
1	Be 313.107†	-4348.6	-192.3	-0.0651	ug/L	-0.0651	ppb	16:30:17
1	Cd 226.502†	-224.1	15.2	0.1444	ug/L	0.1444	ppb	16:30:37
1	Co 228.616†	-99.5	-15.5	-0.2871	ug/L	-0.2871	ppb	16:30:37
1	Cr 267.716†	133.7	24.3	0.2441	ug/L	0.2441	ppb	16:30:17
1	Cu 324.752†	7993.1	297.6	0.8798	ug/L	0.8798	ppb	16:30:17
1	Mn 257.610†	671.7	37.5	0.0380	ug/L	0.0380	ppb	16:30:17
1	Mo 202.031†	33.1	11.5	0.7191	ug/L	0.7191	ppb	16:30:37
1	Ni 231.604†	111.2	-0.5	-0.0114	ug/L	-0.0114	ppb	16:30:37
1	P 214.914†	262.3	22.9	11.116	ug/L	11.116	ppb	16:30:37
1	Pb 220.353†	-88.0	8.3	0.8602	ug/L	0.8602	ppb	16:30:37
1	S 181.975 Axial†	64.9	5.8	6.5714	ug/L	6.5714	ppb	16:30:37
1	Sb 206.836†	53.1	15.1	4.4656	ug/L	4.4656	ppb	16:30:37
1	Se 196.026†	-36.5	-3.0	-1.6023	ug/L	-1.6023	ppb	16:30:37
1	Si 251.611†	716.1	90.5	2.5681	ug/L	2.5681	ppb	16:30:37
1	Sn 189.927†	1.9	-2.2	-0.3246	ug/L	-0.3246	ppb	16:30:37
1	Ti 334.940†	-1773.9	-70.3	-0.1073	ug/L	-0.1073	ppb	16:30:17
1	Tl 190.801†	-52.4	-9.1	-2.4959	ug/L	-2.4959	ppb	16:30:37
1	U 409.014†	-2703.0	-213.0	-6.3084	ug/L	-6.3084	ppb	16:30:17
1	V 292.402†	-1799.8	-90.3	-0.5665	ug/L	-0.5665	ppb	16:30:17
1	Zn 213.857†	905.3	92.7	0.7626	ug/L	0.7626	ppb	16:30:37
1	SiO2†	735.0	88.1	5.3876	ug/L	5.3876	ppb	16:31:33
2	Sc Radial	4790.8	4790.8	94.2	%			16:29:25
2	Y RADIAL	4991.4	4991.4	93.10	%			16:29:25
2	Al 396.153Radial†	-17.9	0.6	0.4355	ug/L	0.4355	ppb	16:29:25
2	Ca 317.933Radial†	22.4	5.5	8.7511	ug/L	8.7511	ppb	16:29:45
2	Fe 238.204 Radial†	14.5	0.7	6.4272	ug/L	6.4272	ppb	16:29:45
2	K 766.490 Radial†	3510.3	394.6	76.027	ug/L	76.027	ppb	16:29:25
2	Mg 279.077 IEC†	3.1	-0.6	-17.430	ug/L	-17.430	ppb	16:29:45
2	Na 589.592 Radial†	-1582.9	57.7	16.422	ug/L	16.422	ppb	16:29:25
2	Sr 421.552†	28.5	22.8	0.1511	ug/L	0.1511	ppb	16:29:25
2	Sc 361.383	861117.6	861117.6	94.113	%			16:30:42
2	Y 371.029	748507.6	748507.6	95.765	%			16:30:42
2	Ag 328.068†	440.8	-44.4	-0.1819	ug/L	-0.1819	ppb	16:30:42
2	As 188.979†	-40.2	-11.5	-4.0455	ug/L	-4.0455	ppb	16:31:02
2	B 249.677†	-733.4	-65.9	-1.3499	ug/L	-1.3499	ppb	16:30:42
2	Ba 233.527†	20.9	13.6	0.0988	ug/L	0.0988	ppb	16:31:02
2	Be 313.107†	-4351.1	-247.8	-0.0837	ug/L	-0.0837	ppb	16:30:42
2	Cd 226.502†	-226.5	9.9	0.0924	ug/L	0.0924	ppb	16:31:02
2	Co 228.616†	-91.4	-8.1	-0.1498	ug/L	-0.1498	ppb	16:31:02
2	Cr 267.716†	117.5	8.6	0.0890	ug/L	0.0890	ppb	16:30:42
2	Cu 324.752†	7946.0	344.7	1.0204	ug/L	1.0204	ppb	16:30:42
2	Mn 257.610†	604.4	-25.8	-0.0261	ug/L	-0.0261	ppb	16:30:42
2	Mo 202.031†	35.8	14.8	0.9288	ug/L	0.9288	ppb	16:31:02
2	Ni 231.604†	110.0	-0.4	-0.0095	ug/L	-0.0095	ppb	16:31:02

2	P 214.914†	247.1	9.9	4.6996 ug/L	4.6996 ppb	16:31:02
2	Pb 220.353†	-91.6	3.4	0.3484 ug/L	0.3484 ppb	16:31:02
2	S 181.975 Axial†	61.9	3.4	3.9193 ug/L	3.9193 ppb	16:31:02
2	Sb 206.836†	62.4	25.6	7.6277 ug/L	7.6277 ppb	16:31:02
2	Se 196.026†	-35.5	-2.4	-1.2002 ug/L	-1.2002 ppb	16:31:02
2	Si 251.611†	718.6	101.8	2.8796 ug/L	2.8796 ppb	16:31:02
2	Sn 189.927†	7.3	3.6	0.5318 ug/L	0.5318 ppb	16:31:02
2	Ti 334.940†	-1701.5	-14.9	-0.0188 ug/L	-0.0188 ppb	16:30:42
2	Tl 190.801†	-48.3	-5.4	-1.4705 ug/L	-1.4705 ppb	16:31:02
2	U 409.014†	-2773.5	-320.7	-9.5042 ug/L	-9.5042 ppb	16:30:42
2	V 292.402†	-1736.6	-45.0	-0.2889 ug/L	-0.2889 ppb	16:30:42
2	Zn 213.857†	924.6	124.2	1.0196 ug/L	1.0196 ppb	16:31:02
2	SiO2†	749.7	112.6	6.8756 ug/L	6.8756 ppb	16:31:38
3	Sc Radial	4839.9	4839.9	95.2 %		16:29:50
3	Y RADIAL	5043.6	5043.6	94.08 %		16:29:50
3	Al 396.153Radial†	-3.6	15.7	12.769 ug/L	12.769 ppb	16:29:50
3	Ca 317.933Radial†	24.2	7.2	11.437 ug/L	11.437 ppb	16:30:10
3	Fe 238.204 Radial†	11.8	-2.2	-19.295 ug/L	-19.295 ppb	16:30:10
3	K 766.490 Radial†	3404.7	245.9	47.352 ug/L	47.352 ppb	16:29:50
3	Mg 279.077 IEC†	2.0	-1.8	-55.957 ug/L	-55.957 ppb	16:30:10
3	Na 589.592 Radial†	-1528.0	132.3	37.663 ug/L	37.663 ppb	16:29:50
3	Sr 421.552†	-1.3	-8.9	-0.0588 ug/L	-0.0588 ppb	16:29:50
3	Sc 361.383	869541.8	869541.8	95.034 %		16:31:08
3	Y 371.029	758228.3	758228.3	97.009 %		16:31:08
3	Ag 328.068†	386.0	-106.7	-0.4632 ug/L	-0.4632 ppb	16:31:08
3	As 188.979†	-36.0	-6.7	-2.3598 ug/L	-2.3598 ppb	16:31:28
3	B 249.677†	-679.8	-2.0	-0.0362 ug/L	-0.0362 ppb	16:31:08
3	Ba 233.527†	12.8	4.9	0.0333 ug/L	0.0333 ppb	16:31:28
3	Be 313.107†	-4383.2	-236.9	-0.0801 ug/L	-0.0801 ppb	16:31:08
3	Cd 226.502†	-239.2	-1.2	-0.0087 ug/L	-0.0087 ppb	16:31:28
3	Co 228.616†	-111.1	-27.9	-0.5206 ug/L	-0.5206 ppb	16:31:28
3	Cr 267.716†	115.6	5.5	0.0552 ug/L	0.0552 ppb	16:31:08
3	Cu 324.752†	8032.8	354.3	1.0474 ug/L	1.0474 ppb	16:31:08
3	Mn 257.610†	720.4	90.0	0.0936 ug/L	0.0936 ppb	16:31:08
3	Mo 202.031†	29.1	7.4	0.4609 ug/L	0.4609 ppb	16:31:28
3	Ni 231.604†	126.5	15.8	0.3461 ug/L	0.3461 ppb	16:31:28
3	P 214.914†	264.9	26.1	12.664 ug/L	12.664 ppb	16:31:28
3	Pb 220.353†	-93.4	2.5	0.2630 ug/L	0.2630 ppb	16:31:28
3	S 181.975 Axial†	54.8	-4.8	-5.4343 ug/L	-5.4343 ppb	16:31:28
3	Sb 206.836†	56.6	18.8	5.5900 ug/L	5.5900 ppb	16:31:28
3	Se 196.026†	-40.2	-7.0	-3.6277 ug/L	-3.6277 ppb	16:31:28
3	Si 251.611†	709.3	84.6	2.4055 ug/L	2.4055 ppb	16:31:28
3	Sn 189.927†	4.1	0.2	0.0246 ug/L	0.0246 ppb	16:31:28
3	Ti 334.940†	-1761.4	-60.5	-0.0916 ug/L	-0.0916 ppb	16:31:08
3	Tl 190.801†	-50.0	-6.6	-1.8167 ug/L	-1.8167 ppb	16:31:28
3	U 409.014†	-2684.8	-198.8	-5.8899 ug/L	-5.8899 ppb	16:31:08
3	V 292.402†	-1834.3	-129.9	-0.8188 ug/L	-0.8188 ppb	16:31:08
3	Zn 213.857†	920.3	110.2	0.9045 ug/L	0.9045 ppb	16:31:28
3	SiO2†	772.8	129.2	7.9446 ug/L	7.9446 ppb	16:31:43

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	867246.8	94.783	%	0.5862				0.62%
Sc Radial	4832.0	95.0	%	0.74				0.78%
Y 371.029	754831.0	96.575	%	0.7013				0.73%
Y RADIAL	5036.3	93.94	%	0.777				0.83%
Ag 328.068†	-61.0	-0.2616	ug/L	0.17578	-0.2616	ppb	0.17578	67.19%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.0	2.3920	ug/L	9.55025	2.3920	ppb	9.55025	399.26%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-5.4	-1.8935	ug/L	2.41900	-1.8935	ppb	2.41900	127.75%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-39.0	-0.7970	ug/L	0.68108	-0.7970	ppb	0.68108	85.46%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	9.1	0.0651	ug/L	0.03281	0.0651	ppb	0.03281	50.39%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-225.7	-0.0763	ug/L	0.00985	-0.0763	ppb	0.00985	12.91%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.8	7.5923	ug/L	4.53625	7.5923	ppb	4.53625	59.75%

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

Cd 226.502†	8.0	0.0760 ug/L	0.07787	0.0760 ppb	0.07787	102.40%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-17.2	-0.3192 ug/L	0.18749	-0.3192 ppb	0.18749	58.74%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	12.8	0.1294 ug/L	0.10071	0.1294 ppb	0.10071	77.82%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	332.2	0.9825 ug/L	0.09000	0.9825 ppb	0.09000	9.16%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-1.2	-10.302 ug/L	14.5017	-10.302 ppb	14.5017	140.76%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	310.9	59.889 ug/L	14.6728	59.889 ppb	14.6728	24.50%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-1.0	-31.792 ug/L	21.0516	-31.792 ppb	21.0516	66.22%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	33.9	0.0351 ug/L	0.05989	0.0351 ppb	0.05989	170.44%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	11.2	0.7029 ug/L	0.23434	0.7029 ppb	0.23434	33.34%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	122.4	34.838 ug/L	17.1778	34.838 ppb	17.1778	49.31%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	4.9	0.1084 ug/L	0.20587	0.1084 ppb	0.20587	189.89%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	19.7	9.4933 ug/L	4.22303	9.4933 ppb	4.22303	44.48%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	4.7	0.4906 ug/L	0.32300	0.4906 ppb	0.32300	65.84%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	1.5	1.6855 ug/L	6.30689	1.6855 ppb	6.30689	374.19%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	19.9	5.8945 ug/L	1.60290	5.8945 ppb	1.60290	27.19%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-4.1	-2.1434 ug/L	1.30107	-2.1434 ppb	1.30107	60.70%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	92.3	2.6178 ug/L	0.24092	2.6178 ppb	0.24092	9.20%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	0.5	0.0773 ug/L	0.43060	0.0773 ppb	0.43060	557.37%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	12.6	0.0832 ug/L	0.12301	0.0832 ppb	0.12301	147.87%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-48.6	-0.0725 ug/L	0.04721	-0.0725 ppb	0.04721	65.08%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-7.0	-1.9277 ug/L	0.52163	-1.9277 ppb	0.52163	27.06%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-244.2	-7.2342 ug/L	1.97703	-7.2342 ppb	1.97703	27.33%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-88.4	-0.5580 ug/L	0.26506	-0.5580 ppb	0.26506	47.50%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	109.0	0.8956 ug/L	0.12871	0.8956 ppb	0.12871	14.37%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	109.9	6.7359 ug/L	1.28422	6.7359 ppb	1.28422	19.07%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 15
Sample ID: 1202001494|935381|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 1/5/2010 16:33:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202001494|935381|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4786.9	4786.9	94.1	%			16:35:46
1	Y RADIAL	5051.9	5051.9	94.23	%			16:35:46
1	Al 396.153Radial†	-5.0	14.2	11.533	ug/L	11.533	ppb	16:35:46
1	Ca 317.933Radial†	20.8	3.9	6.1756	ug/L	6.1756	ppb	16:36:06
1	Fe 238.204 Radial†	22.6	9.3	80.961	ug/L	80.961	ppb	16:36:06
1	K 766.490 Radial†	3372.3	251.0	48.331	ug/L	48.331	ppb	16:35:46
1	Mg 279.077 IEC†	3.6	-0.0	-0.5583	ug/L	-0.5583	ppb	16:36:06
1	Na 589.592 Radial†	-1451.7	195.6	55.681	ug/L	55.681	ppb	16:35:46
1	Sr 421.552†	50.5	46.2	0.3064	ug/L	0.3064	ppb	16:35:46
1	Sc 361.383	871293.7	871293.7	95.226	%			16:37:03
1	Y 371.029	745969.4	745969.4	95.441	%			16:37:03
1	Ag 328.068†	518.3	31.5	0.1711	ug/L	0.1711	ppb	16:37:03
1	As 188.979†	-33.4	-3.9	-1.3523	ug/L	-1.3523	ppb	16:37:23
1	B 249.677†	-657.1	23.3	0.4664	ug/L	0.4664	ppb	16:37:03
1	Ba 233.527†	12.5	4.6	0.0361	ug/L	0.0361	ppb	16:37:23
1	Be 313.107†	-4270.4	-109.1	-0.0363	ug/L	-0.0363	ppb	16:37:03
1	Cd 226.502†	-233.6	5.3	0.0415	ug/L	0.0415	ppb	16:37:23
1	Co 228.616†	-90.4	-6.0	-0.1121	ug/L	-0.1121	ppb	16:37:23
1	Cr 267.716†	128.9	19.1	0.1963	ug/L	0.1963	ppb	16:37:03
1	Cu 324.752†	7894.8	192.4	0.5734	ug/L	0.5734	ppb	16:37:03
1	Mn 257.610†	1159.2	549.3	0.5845	ug/L	0.5845	ppb	16:37:03
1	Mo 202.031†	27.5	5.6	0.3591	ug/L	0.3591	ppb	16:37:23
1	Ni 231.604†	117.6	6.1	0.1342	ug/L	0.1342	ppb	16:37:23
1	P 214.914†	265.5	26.2	12.710	ug/L	12.710	ppb	16:37:23
1	Pb 220.353†	-87.0	9.4	0.9653	ug/L	0.9653	ppb	16:37:23
1	S 181.975 Axial†	62.7	3.5	3.9755	ug/L	3.9755	ppb	16:37:23
1	Sb 206.836†	59.4	21.6	6.4303	ug/L	6.4303	ppb	16:37:23
1	Se 196.026†	-31.7	2.0	1.2421	ug/L	1.2421	ppb	16:37:23
1	Si 251.611†	1085.0	477.7	13.691	ug/L	13.691	ppb	16:37:23
1	Sn 189.927†	10.5	6.9	1.0293	ug/L	1.0293	ppb	16:37:23
1	Ti 334.940†	-1548.3	167.1	0.2660	ug/L	0.2660	ppb	16:37:03
1	Tl 190.801†	-49.0	-5.5	-1.4902	ug/L	-1.4902	ppb	16:37:23
1	U 409.014†	-2786.7	-300.2	-8.9069	ug/L	-8.9069	ppb	16:37:03
1	V 292.402†	-1670.4	46.1	0.2646	ug/L	0.2646	ppb	16:37:03
1	Zn 213.857†	1023.5	216.6	1.7739	ug/L	1.7739	ppb	16:37:23
1	SiO2†	1166.5	541.0	33.438	ug/L	33.438	ppb	16:38:20
2	Sc Radial	4782.9	4782.9	94.1	%			16:36:11
2	Y RADIAL	4990.2	4990.2	93.08	%			16:36:11
2	Al 396.153Radial†	7.3	27.3	22.099	ug/L	22.099	ppb	16:36:11
2	Ca 317.933Radial†	19.4	2.4	3.8100	ug/L	3.8100	ppb	16:36:31
2	Fe 238.204 Radial†	20.6	7.2	62.757	ug/L	62.757	ppb	16:36:31
2	K 766.490 Radial†	3378.5	260.6	50.193	ug/L	50.193	ppb	16:36:11
2	Mg 279.077 IEC†	2.9	-0.8	-23.632	ug/L	-23.632	ppb	16:36:31
2	Na 589.592 Radial†	-1450.2	196.0	55.788	ug/L	55.788	ppb	16:36:11
2	Sr 421.552†	22.8	16.8	0.1117	ug/L	0.1117	ppb	16:36:11
2	Sc 361.383	871537.6	871537.6	95.252	%			16:37:29
2	Y 371.029	745185.2	745185.2	95.340	%			16:37:29
2	Ag 328.068†	354.3	-140.8	-0.5769	ug/L	-0.5769	ppb	16:37:29
2	As 188.979†	-36.6	-7.1	-2.5047	ug/L	-2.5047	ppb	16:37:49
2	B 249.677†	-798.3	-124.7	-2.5616	ug/L	-2.5616	ppb	16:37:29
2	Ba 233.527†	21.9	14.5	0.1062	ug/L	0.1062	ppb	16:37:49
2	Be 313.107†	-4241.0	-77.0	-0.0254	ug/L	-0.0254	ppb	16:37:29
2	Cd 226.502†	-220.0	19.6	0.1786	ug/L	0.1786	ppb	16:37:49
2	Co 228.616†	-96.9	-12.7	-0.2357	ug/L	-0.2357	ppb	16:37:49
2	Cr 267.716†	111.1	0.5	0.0086	ug/L	0.0086	ppb	16:37:29
2	Cu 324.752†	7870.0	164.0	0.4886	ug/L	0.4886	ppb	16:37:29
2	Mn 257.610†	1111.5	498.8	0.5302	ug/L	0.5302	ppb	16:37:29
2	Mo 202.031†	41.9	20.7	1.3024	ug/L	1.3024	ppb	16:37:49
2	Ni 231.604†	121.4	10.2	0.2223	ug/L	0.2223	ppb	16:37:49

2	P 214.914†	278.0	39.3	19.165 ug/L	19.165 ppb	16:37:49
2	Pb 220.353†	-87.4	9.0	0.9366 ug/L	0.9366 ppb	16:37:49
2	S 181.975 Axial†	67.2	8.1	9.2821 ug/L	9.2821 ppb	16:37:49
2	Sb 206.836†	64.3	26.8	7.9978 ug/L	7.9978 ppb	16:37:49
2	Se 196.026†	-29.9	3.9	2.2066 ug/L	2.2066 ppb	16:37:49
2	Si 251.611†	1077.7	469.7	13.441 ug/L	13.441 ppb	16:37:49
2	Sn 189.927†	17.9	14.6	2.1661 ug/L	2.1661 ppb	16:37:49
2	Ti 334.940†	-1517.3	200.0	0.3183 ug/L	0.3183 ppb	16:37:29
2	Tl 190.801†	-50.6	-7.2	-1.9612 ug/L	-1.9612 ppb	16:37:49
2	U 409.014†	-2843.8	-359.3	-10.655 ug/L	-10.655 ppb	16:37:29
2	V 292.402†	-1779.3	-67.7	-0.4378 ug/L	-0.4378 ppb	16:37:29
2	Zn 213.857†	1012.0	204.3	1.6737 ug/L	1.6737 ppb	16:37:49
2	SiO2†	1145.9	519.1	32.039 ug/L	32.039 ppb	16:38:25
3	Sc Radial	4717.4	4717.4	92.8 %		16:36:37
3	Y RADIAL	4949.9	4949.9	92.33 %		16:36:37
3	Al 396.153Radial†	-8.5	10.4	8.4388 ug/L	8.4388 ppb	16:36:37
3	Ca 317.933Radial†	24.7	8.4	13.289 ug/L	13.289 ppb	16:36:57
3	Fe 238.204 Radial†	18.3	5.0	43.451 ug/L	43.451 ppb	16:36:57
3	K 766.490 Radial†	3389.9	322.8	62.171 ug/L	62.171 ppb	16:36:37
3	Mg 279.077 IEC†	2.2	-1.5	-46.537 ug/L	-46.537 ppb	16:36:57
3	Na 589.592 Radial†	-1471.9	151.2	43.037 ug/L	43.037 ppb	16:36:37
3	Sr 421.552†	14.2	7.9	0.0522 ug/L	0.0522 ppb	16:36:37
3	Sc 361.383	875206.0	875206.0	95.653 %		16:37:54
3	Y 371.029	748194.0	748194.0	95.725 %		16:37:54
3	Ag 328.068†	330.1	-167.7	-0.7009 ug/L	-0.7009 ppb	16:37:54
3	As 188.979†	-32.9	-3.2	-1.1135 ug/L	-1.1135 ppb	16:38:14
3	B 249.677†	-741.4	-61.7	-1.2698 ug/L	-1.2698 ppb	16:37:54
3	Ba 233.527†	23.2	15.7	0.1151 ug/L	0.1151 ppb	16:38:14
3	Be 313.107†	-4235.5	-52.6	-0.0174 ug/L	-0.0174 ppb	16:37:54
3	Cd 226.502†	-246.6	-7.2	-0.0722 ug/L	-0.0722 ppb	16:38:14
3	Co 228.616†	-85.8	-0.7	-0.0130 ug/L	-0.0130 ppb	16:38:14
3	Cr 267.716†	142.1	32.3	0.3267 ug/L	0.3267 ppb	16:37:54
3	Cu 324.752†	7842.6	100.8	0.3004 ug/L	0.3004 ppb	16:37:54
3	Mn 257.610†	1123.6	506.6	0.5368 ug/L	0.5368 ppb	16:37:54
3	Mo 202.031†	28.0	6.0	0.3775 ug/L	0.3775 ppb	16:38:14
3	Ni 231.604†	119.3	7.3	0.1607 ug/L	0.1607 ppb	16:38:14
3	P 214.914†	263.5	22.9	11.154 ug/L	11.154 ppb	16:38:14
3	Pb 220.353†	-92.4	4.1	0.4236 ug/L	0.4236 ppb	16:38:14
3	S 181.975 Axial†	61.6	2.1	2.3514 ug/L	2.3514 ppb	16:38:14
3	Sb 206.836†	44.8	6.1	1.8414 ug/L	1.8414 ppb	16:38:14
3	Se 196.026†	-38.8	-5.2	-2.5483 ug/L	-2.5483 ppb	16:38:14
3	Si 251.611†	1077.9	465.2	13.326 ug/L	13.326 ppb	16:38:14
3	Sn 189.927†	11.0	7.3	1.0892 ug/L	1.0892 ppb	16:38:14
3	Ti 334.940†	-1616.7	102.8	0.1645 ug/L	0.1645 ppb	16:37:54
3	Tl 190.801†	-59.3	-16.0	-4.3898 ug/L	-4.3898 ppb	16:38:14
3	U 409.014†	-2716.3	-213.5	-6.3320 ug/L	-6.3320 ppb	16:37:54
3	V 292.402†	-1726.8	-5.0	-0.0466 ug/L	-0.0466 ppb	16:37:54
3	Zn 213.857†	1014.1	202.0	1.6570 ug/L	1.6570 ppb	16:38:14
3	SiO2†	1184.9	554.8	34.284 ug/L	34.284 ppb	16:38:30

Mean Data: 1202001494|935381|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	872679.1	95.377	%	0.2395				0.25%
Sc Radial	4762.4	93.7	%	0.77				0.82%
Y 371.029	746449.5	95.502	%	0.1997				0.21%
Y RADIAL	4997.3	93.21	%	0.959				1.03%
Ag 328.068†	-92.3	-0.3689	ug/L	0.47173	-0.3689	ppb	0.47173	127.88%
Al 396.153Radial†	17.3	14.024	ug/L	7.1624	14.024	ppb	7.1624	51.07%
As 188.979†	-4.7	-1.6568	ug/L	0.74393	-1.6568	ppb	0.74393	44.90%
B 249.677†	-54.4	-1.1217	ug/L	1.51945	-1.1217	ppb	1.51945	135.46%
Ba 233.527†	11.6	0.0858	ug/L	0.04330	0.0858	ppb	0.04330	50.47%
Be 313.107†	-79.6	-0.0264	ug/L	0.00948	-0.0264	ppb	0.00948	35.94%
Ca 317.933Radial†	4.9	7.7582	ug/L	4.93373	7.7582	ppb	4.93373	63.59%
Cd 226.502†	5.9	0.0493	ug/L	0.12558	0.0493	ppb	0.12558	254.69%
Co 228.616†	-6.5	-0.1203	ug/L	0.11158	-0.1203	ppb	0.11158	92.76%
Cr 267.716†	17.3	0.1772	ug/L	0.15994	0.1772	ppb	0.15994	90.25%
Cu 324.752†	152.4	0.4541	ug/L	0.13974	0.4541	ppb	0.13974	30.77%
Fe 238.204 Radial†	7.2	62.390	ug/L	18.7580	62.390	ppb	18.7580	30.07%
K 766.490 Radial†	278.1	53.565	ug/L	7.5111	53.565	ppb	7.5111	14.02%

Mg 279.077 IEC†	-0.8	-23.576 ug/L	22.9896	-23.576 ppb	22.9896	97.51%
Mn 257.610†	518.2	0.5505 ug/L	0.02964	0.5505 ppb	0.02964	5.38%
Mo 202.031†	10.7	0.6797 ug/L	0.53942	0.6797 ppb	0.53942	79.37%
Na 589.592 Radial†	181.0	51.502 ug/L	7.3315	51.502 ppb	7.3315	14.24%
Ni 231.604†	7.9	0.1724 ug/L	0.04520	0.1724 ppb	0.04520	26.22%
P 214.914†	29.5	14.343 ug/L	4.2479	14.343 ppb	4.2479	29.62%
Pb 220.353†	7.5	0.7752 ug/L	0.30480	0.7752 ppb	0.30480	39.32%
S 181.975 Axial†	4.6	5.2030 ug/L	3.62477	5.2030 ppb	3.62477	69.67%
Sb 206.836†	18.2	5.4232 ug/L	3.19937	5.4232 ppb	3.19937	58.99%
Se 196.026†	0.2	0.3001 ug/L	2.51353	0.3001 ppb	2.51353	837.49%
Si 251.611†	470.9	13.486 ug/L	0.1867	13.486 ppb	0.1867	1.38%
Sn 189.927†	9.6	1.4282 ug/L	0.63978	1.4282 ppb	0.63978	44.80%
Sr 421.552†	23.7	0.1568 ug/L	0.13297	0.1568 ppb	0.13297	84.82%
Ti 334.940†	156.7	0.2496 ug/L	0.07821	0.2496 ppb	0.07821	31.34%
Tl 190.801†	-9.6	-2.6137 ug/L	1.55607	-2.6137 ppb	1.55607	59.53%
U 409.014†	-291.0	-8.6314 ug/L	2.17472	-8.6314 ppb	2.17472	25.20%
V 292.402†	-8.9	-0.0732 ug/L	0.35197	-0.0732 ppb	0.35197	480.56%
Zn 213.857†	207.6	1.7015 ug/L	0.06322	1.7015 ppb	0.06322	3.72%
SiO2†	538.3	33.253 ug/L	1.1341	33.253 ppb	1.1341	3.41%

Sequence No.: 16
Sample ID: 1202001495|935381|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 1/5/2010 16:40:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202001495|935381|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4964.9	4964.9	97.6	%			16:42:53
1	Y RADIAL	5629.6	5629.6	105.0	%			16:42:53
1	Al 396.153Radial†	107823.0	110453.3	89689	ug/L	89689	ppb	16:42:33
1	Ca 317.933Radial†	61211.1	62674.9	99469	ug/L	99469	ppb	16:42:33
1	Fe 238.204 Radial†	21935.2	22451.6	194460	ug/L	194460	ppb	16:42:33
1	K 766.490 Radial†	221744.3	223782.1	43052	ug/L	43052	ppb	16:42:33
1	Mg 279.077 IEC†	1232.7	1258.7	38769	ug/L	38769	ppb	16:42:53
1	Na 589.592 Radial†	34308.1	36876.6	10496	ug/L	10496	ppb	16:42:33
1	Sr 421.552†	328895.8	336852.0	2233.0	ug/L	2233.0	ppb	16:42:33
1	Sc 361.383	918975.7	918975.7	100.44	%			16:43:55
1	Y 371.029	843963.2	843963.2	107.98	%			16:43:55
1	Ag 328.068†	57211.8	56450.2	311.20	ug/L	311.20	ppb	16:43:55
1	As 188.979†	2837.6	2856.5	1086.8	ug/L	1086.8	ppb	16:44:00
1	B 249.677†	74924.2	75311.7	1514.3	ug/L	1514.3	ppb	16:43:55
1	Ba 233.527†	280529.1	279300.4	2043.2	ug/L	2043.2	ppb	16:43:55
1	Be 313.107†	2319086.6	2313375.0	792.44	ug/L	792.44	ppb	16:43:55
1	Cd 226.502†	63860.3	63833.2	581.82	ug/L	581.82	ppb	16:44:00
1	Co 228.616†	50407.5	50277.3	925.58	ug/L	925.58	ppb	16:44:00
1	Cr 267.716†	239543.3	238385.2	2393.2	ug/L	2393.2	ppb	16:43:55
1	Cu 324.752†	672075.0	661053.5	1966.0	ug/L	1966.0	ppb	16:43:55
1	Mn 257.610†	5125712.8	5102750.3	5373.7	ug/L	5373.7	ppb	16:43:55
1	Mo 202.031†	8138.1	8079.4	525.53	ug/L	525.53	ppb	16:44:00
1	Ni 231.604†	61553.9	61168.9	1338.0	ug/L	1338.0	ppb	16:44:00
1	P 214.914†	16385.9	16062.0	7447.6	ug/L	7447.6	ppb	16:44:00
1	Pb 220.353†	7689.7	7757.0	806.98	ug/L	806.98	ppb	16:44:00
1	S 181.975 Axial†	3541.3	3463.5	3938.8	ug/L	3938.8	ppb	16:44:00
1	Sb 206.836†	5148.8	5085.7	1464.4	ug/L	1464.4	ppb	16:44:00
1	Se 196.026†	4874.3	4888.3	3078.7	ug/L	3078.7	ppb	16:44:00
1	Si 251.611†	1215125.6	1209178.6	34693	ug/L	34693	ppb	16:43:55
1	Sn 189.927†	6851.5	6817.5	1023.6	ug/L	1023.6	ppb	16:44:00
1	Ti 334.940†	3858743.5	3843752.8	6026.0	ug/L	6026.0	ppb	16:43:55
1	Tl 190.801†	4208.6	4236.3	1232.7	ug/L	1232.7	ppb	16:44:00
1	U 409.014†	-9086.4	-6420.6	-219.33	ug/L	-219.33	ppb	16:43:55
1	V 292.402†	198427.6	199364.7	1222.5	ug/L	1222.5	ppb	16:43:55
1	Zn 213.857†	720561.6	716569.3	5864.4	ug/L	5864.4	ppb	16:43:55
1	SiO2†	1217965.2	1211983.6	74983	ug/L	74983	ppb	16:44:34
2	Sc Radial	4997.0	4997.0	98.3	%			16:43:18
2	Y RADIAL	5694.5	5694.5	106.2	%			16:43:18
2	Al 396.153Radial†	110747.2	112720.3	91530	ug/L	91530	ppb	16:42:58
2	Ca 317.933Radial†	62678.5	63765.9	101200	ug/L	101200	ppb	16:42:58
2	Fe 238.204 Radial†	22449.3	22830.6	197750	ug/L	197750	ppb	16:42:58
2	K 766.490 Radial†	227929.5	228618.8	43984	ug/L	43984	ppb	16:42:58
2	Mg 279.077 IEC†	1242.3	1260.3	38817	ug/L	38817	ppb	16:43:18
2	Na 589.592 Radial†	35045.3	37401.3	10645	ug/L	10645	ppb	16:42:58
2	Sr 421.552†	337734.0	343684.0	2278.3	ug/L	2278.3	ppb	16:42:58
2	Sc 361.383	922051.4	922051.4	100.77	%			16:44:09
2	Y 371.029	845416.1	845416.1	108.16	%			16:44:09
2	Ag 328.068†	57334.1	56381.5	311.97	ug/L	311.97	ppb	16:44:09
2	As 188.979†	2803.4	2813.1	1072.0	ug/L	1072.0	ppb	16:44:14
2	B 249.677†	75449.2	75583.9	1519.5	ug/L	1519.5	ppb	16:44:09
2	Ba 233.527†	281722.2	279552.6	2045.1	ug/L	2045.1	ppb	16:44:09
2	Be 313.107†	2324074.0	2310622.1	791.52	ug/L	791.52	ppb	16:44:09
2	Cd 226.502†	63326.6	63091.4	574.50	ug/L	574.50	ppb	16:44:14
2	Co 228.616†	50118.3	49822.8	917.01	ug/L	917.01	ppb	16:44:14
2	Cr 267.716†	240015.0	238057.7	2390.0	ug/L	2390.0	ppb	16:44:09
2	Cu 324.752†	675008.9	661732.9	1968.2	ug/L	1968.2	ppb	16:44:09
2	Mn 257.610†	5143449.5	5103327.6	5374.6	ug/L	5374.6	ppb	16:44:09
2	Mo 202.031†	8068.1	7983.0	519.80	ug/L	519.80	ppb	16:44:14
2	Ni 231.604†	61048.7	60463.1	1322.5	ug/L	1322.5	ppb	16:44:14

2	P 214.914†	16282.2	15904.7	7368.1 ug/L	7368.1 ppb	16:44:14
2	Pb 220.353†	7637.9	7680.1	799.15 ug/L	799.15 ppb	16:44:14
2	S 181.975 Axial†	3519.4	3430.0	3900.2 ug/L	3900.2 ppb	16:44:14
2	Sb 206.836†	5065.0	4985.5	1434.6 ug/L	1434.6 ppb	16:44:14
2	Se 196.026†	4835.9	4834.1	3060.6 ug/L	3060.6 ppb	16:44:14
2	Si 251.611†	1219132.4	1209119.0	34692 ug/L	34692 ppb	16:44:09
2	Sn 189.927†	6849.3	6792.6	1020.1 ug/L	1020.1 ppb	16:44:14
2	Ti 334.940†	3874753.9	3846824.8	6030.9 ug/L	6030.9 ppb	16:44:09
2	Tl 190.801†	4143.6	4157.8	1211.4 ug/L	1211.4 ppb	16:44:14
2	U 409.014†	-8929.9	-6235.2	-214.24 ug/L	-214.24 ppb	16:44:09
2	V 292.402†	198798.5	199073.8	1220.1 ug/L	1220.1 ppb	16:44:09
2	Zn 213.857†	722342.2	715943.1	5859.2 ug/L	5859.2 ppb	16:44:09
2	SiO2†	1226688.9	1216595.3	75268 ug/L	75268 ppb	16:44:40
3	Sc Radial	5015.3	5015.3	98.6 %		16:43:44
3	Y RADIAL	5685.9	5685.9	106.1 %		16:43:44
3	Al 396.153Radial†	111056.5	112621.0	91450 ug/L	91450 ppb	16:43:24
3	Ca 317.933Radial†	62681.4	63535.2	100830 ug/L	100830 ppb	16:43:24
3	Fe 238.204 Radial†	22474.7	22772.7	197240 ug/L	197240 ppb	16:43:24
3	K 766.490 Radial†	227773.8	227611.2	43790 ug/L	43790 ppb	16:43:24
3	Mg 279.077 IEC†	1239.5	1252.8	38587 ug/L	38587 ppb	16:43:44
3	Na 589.592 Radial†	34860.8	37083.6	10555 ug/L	10555 ppb	16:43:24
3	Sr 421.552†	337167.7	341850.9	2266.1 ug/L	2266.1 ppb	16:43:24
3	Sc 361.383	924588.5	924588.5	101.05 %		16:44:23
3	Y 371.029	848294.7	848294.7	108.53 %		16:44:23
3	Ag 328.068†	57627.8	56516.0	312.38 ug/L	312.38 ppb	16:44:23
3	As 188.979†	2813.8	2815.8	1072.9 ug/L	1072.9 ppb	16:44:28
3	B 249.677†	75565.1	75493.0	1517.7 ug/L	1517.7 ppb	16:44:23
3	Ba 233.527†	281810.5	278872.9	2040.1 ug/L	2040.1 ppb	16:44:23
3	Be 313.107†	2329615.1	2309777.1	791.23 ug/L	791.23 ppb	16:44:23
3	Cd 226.502†	63406.8	62998.3	573.68 ug/L	573.68 ppb	16:44:28
3	Co 228.616†	50125.2	49693.2	914.60 ug/L	914.60 ppb	16:44:28
3	Cr 267.716†	240678.3	238060.6	2390.0 ug/L	2390.0 ppb	16:44:23
3	Cu 324.752†	677472.7	662333.0	1970.0 ug/L	1970.0 ppb	16:44:23
3	Mn 257.610†	5148863.9	5094680.0	5365.5 ug/L	5365.5 ppb	16:44:23
3	Mo 202.031†	8061.7	7954.6	517.97 ug/L	517.97 ppb	16:44:28
3	Ni 231.604†	61180.6	60427.3	1321.7 ug/L	1321.7 ppb	16:44:28
3	P 214.914†	16221.8	15800.6	7317.0 ug/L	7317.0 ppb	16:44:28
3	Pb 220.353†	7587.4	7609.3	791.84 ug/L	791.84 ppb	16:44:28
3	S 181.975 Axial†	3503.4	3404.6	3871.2 ug/L	3871.2 ppb	16:44:28
3	Sb 206.836†	5133.6	5039.5	1450.3 ug/L	1450.3 ppb	16:44:28
3	Se 196.026†	4857.6	4842.4	3063.4 ug/L	3063.4 ppb	16:44:28
3	Si 251.611†	1221504.4	1208146.7	34664 ug/L	34664 ppb	16:44:23
3	Sn 189.927†	6780.1	6705.4	1007.2 ug/L	1007.2 ppb	16:44:28
3	Ti 334.940†	3882477.9	3843917.5	6026.3 ug/L	6026.3 ppb	16:44:23
3	Tl 190.801†	4175.0	4177.6	1216.7 ug/L	1216.7 ppb	16:44:28
3	U 409.014†	-8787.4	-6069.8	-209.28 ug/L	-209.28 ppb	16:44:23
3	V 292.402†	199529.7	199256.0	1221.3 ug/L	1221.3 ppb	16:44:23
3	Zn 213.857†	723391.9	715015.0	5851.6 ug/L	5851.6 ppb	16:44:23
3	SiO2†	1231079.6	1217600.1	75330 ug/L	75330 ppb	16:44:46

Mean Data: 1202001495|935381|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	921871.9	100.75	%	0.307				0.30%
Sc Radial	4992.4	98.2	%	0.50				0.51%
Y 371.029	845891.3	108.22	%	0.282				0.26%
Y RADIAL	5670.0	105.8	%	0.66				0.62%
Ag 328.068†	56449.2	311.85	ug/L	0.599	311.85	ppb	0.599	0.19%
Al 396.153Radial†	111931.5	90890	ug/L	1040.7	90890	ppb	1040.7	1.15%
As 188.979†	2828.5	1077.2	ug/L	8.28	1077.2	ppb	8.28	0.77%
B 249.677†	75462.9	1517.2	ug/L	2.62	1517.2	ppb	2.62	0.17%
Ba 233.527†	279242.0	2042.8	ug/L	2.50	2042.8	ppb	2.50	0.12%
Be 313.107†	2311258.1	791.73	ug/L	0.633	791.73	ppb	0.633	0.08%
Ca 317.933Radial†	63325.3	100500	ug/L	912.5	100500	ppb	912.5	0.91%
Cd 226.502†	63307.6	576.67	ug/L	4.481	576.67	ppb	4.481	0.78%
Co 228.616†	49931.1	919.06	ug/L	5.770	919.06	ppb	5.770	0.63%
Cr 267.716†	238167.8	2391.1	ug/L	1.86	2391.1	ppb	1.86	0.08%
Cu 324.752†	661706.4	1968.1	ug/L	1.97	1968.1	ppb	1.97	0.10%
Fe 238.204 Radial†	22685.0	196480	ug/L	1767.7	196480	ppb	1767.7	0.90%
K 766.490 Radial†	226670.7	43608	ug/L	491.7	43608	ppb	491.7	1.13%

Mg 279.077 IEC†	1257.3	38724 ug/L	121.5	38724 ppb	121.5	0.31%
Mn 257.610†	5100252.6	5371.3 ug/L	5.02	5371.3 ppb	5.02	0.09%
Mo 202.031†	8005.6	521.10 ug/L	3.946	521.10 ppb	3.946	0.76%
Na 589.592 Radial†	37120.5	10565 ug/L	75.2	10565 ppb	75.2	0.71%
Ni 231.604†	60686.4	1327.4 ug/L	9.15	1327.4 ppb	9.15	0.69%
P 214.914†	15922.5	7377.6 ug/L	65.82	7377.6 ppb	65.82	0.89%
Pb 220.353†	7682.1	799.32 ug/L	7.574	799.32 ppb	7.574	0.95%
S 181.975 Axial†	3432.7	3903.4 ug/L	33.93	3903.4 ppb	33.93	0.87%
Sb 206.836†	5036.9	1449.7 ug/L	14.92	1449.7 ppb	14.92	1.03%
Se 196.026†	4854.9	3067.6 ug/L	9.71	3067.6 ppb	9.71	0.32%
Si 251.611†	1208814.8	34683 ug/L	16.6	34683 ppb	16.6	0.05%
Sn 189.927†	6771.9	1017.0 ug/L	8.66	1017.0 ppb	8.66	0.85%
Sr 421.552†	340795.6	2259.1 ug/L	23.44	2259.1 ppb	23.44	1.04%
Ti 334.940†	3844831.7	6027.8 ug/L	2.74	6027.8 ppb	2.74	0.05%
Tl 190.801†	4190.6	1220.3 ug/L	11.12	1220.3 ppb	11.12	0.91%
U 409.014†	-6241.9	-214.28 ug/L	5.026	-214.28 ppb	5.026	2.35%
V 292.402†	199231.5	1221.3 ug/L	1.20	1221.3 ppb	1.20	0.10%
Zn 213.857†	715842.5	5858.4 ug/L	6.44	5858.4 ppb	6.44	0.11%
SiO2†	1215393.0	75194 ug/L	185.3	75194 ppb	185.3	0.25%

Sequence No.: 17
Sample ID: 243270001|935381|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 1/5/2010 16:46:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243270001|935381|1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4990.7	4990.7	98.1	%			16:49:10
1	Y RADIAL	5645.3	5645.3	105.3	%			16:49:10
1	Al 396.153Radial†	135257.0	137835.0	111950	ug/L	111950	ppb	16:48:50
1	Ca 317.933Radial†	12261.0	12474.7	19798	ug/L	19798	ppb	16:48:50
1	Fe 238.204 Radial†	15371.5	15647.6	135510	ug/L	135510	ppb	16:48:50
1	K 766.490 Radial†	117060.8	115943.8	22329	ug/L	22329	ppb	16:48:50
1	Mg 279.077 IEC†	759.8	770.3	23705	ug/L	23705	ppb	16:49:10
1	Na 589.592 Radial†	7080.6	8952.3	2548.0	ug/L	2548.0	ppb	16:48:50
1	Sr 421.552†	42095.6	42884.5	284.22	ug/L	284.22	ppb	16:48:50
1	Sc 361.383	924414.7	924414.7	101.03	%			16:50:08
1	Y 371.029	847836.5	847836.5	108.47	%			16:50:08
1	Ag 328.068†	-9310.4	-9728.1	4.3706	ug/L	4.3706	ppb	16:50:08
1	As 188.979†	-60.8	-29.0	43.486	ug/L	43.486	ppb	16:50:28
1	B 249.677†	1559.3	2256.8	28.107	ug/L	28.107	ppb	16:50:08
1	Ba 233.527†	208908.8	206767.8	1510.8	ug/L	1510.8	ppb	16:50:08
1	Be 313.107†	-498.4	3882.1	8.9778	ug/L	8.9778	ppb	16:50:08
1	Cd 226.502†	1074.7	1314.3	-1.1355	ug/L	-1.1355	ppb	16:50:28
1	Co 228.616†	2864.8	2924.6	45.065	ug/L	45.065	ppb	16:50:28
1	Cr 267.716†	10690.6	10465.3	107.75	ug/L	107.75	ppb	16:50:28
1	Cu 324.752†	29784.5	21382.2	70.185	ug/L	70.185	ppb	16:50:08
1	Mn 257.610†	1939998.8	1919528.0	2027.5	ug/L	2027.5	ppb	16:50:08
1	Mo 202.031†	-60.8	-83.5	7.7523	ug/L	7.7523	ppb	16:50:28
1	Ni 231.604†	3726.3	3571.0	78.109	ug/L	78.109	ppb	16:50:28
1	P 214.914†	1472.8	1205.2	509.07	ug/L	509.07	ppb	16:50:28
1	Pb 220.353†	740.7	833.8	100.27	ug/L	100.27	ppb	16:50:28
1	S 181.975 Axial†	590.0	521.6	573.83	ug/L	573.83	ppb	16:50:28
1	Sb 206.836†	97.5	55.8	2.6242	ug/L	2.6242	ppb	16:50:28
1	Se 196.026†	-782.7	-739.5	27.849	ug/L	27.849	ppb	16:50:28
1	Si 251.611†	1171791.5	1159168.6	33276	ug/L	33276	ppb	16:50:08
1	Sn 189.927†	-115.9	-118.8	-13.686	ug/L	-13.686	ppb	16:50:28
1	Ti 334.940†	2514088.2	2490218.4	3902.2	ug/L	3902.2	ppb	16:50:08
1	Tl 190.801†	-220.0	-171.8	-3.0995	ug/L	-3.0995	ppb	16:50:28
1	U 409.014†	-9954.0	-7226.2	-231.38	ug/L	-231.38	ppb	16:50:08
1	V 292.402†	38872.5	40275.9	228.00	ug/L	228.00	ppb	16:50:08
1	Zn 213.857†	34283.0	33074.8	263.30	ug/L	263.30	ppb	16:50:08
1	SiO2†	1175207.7	1162527.7	71962	ug/L	71962	ppb	16:51:29
2	Sc Radial	4886.5	4886.5	96.1	%			16:49:35
2	Y RADIAL	5533.9	5533.9	103.2	%			16:49:35
2	Al 396.153Radial†	137237.2	142835.3	116010	ug/L	116010	ppb	16:49:15
2	Ca 317.933Radial†	12399.1	12884.9	20449	ug/L	20449	ppb	16:49:15
2	Fe 238.204 Radial†	15608.5	16228.3	140540	ug/L	140540	ppb	16:49:15
2	K 766.490 Radial†	118614.7	120105.0	23131	ug/L	23131	ppb	16:49:15
2	Mg 279.077 IEC†	747.1	773.6	23803	ug/L	23803	ppb	16:49:35
2	Na 589.592 Radial†	7231.1	9262.8	2636.4	ug/L	2636.4	ppb	16:49:15
2	Sr 421.552†	42784.6	44516.3	295.03	ug/L	295.03	ppb	16:49:15
2	Sc 361.383	917675.0	917675.0	100.29	%			16:50:35
2	Y 371.029	842444.3	842444.3	107.78	%			16:50:35
2	Ag 328.068†	-9310.2	-9795.6	5.7587	ug/L	5.7587	ppb	16:50:35
2	As 188.979†	-67.9	-36.5	41.619	ug/L	41.619	ppb	16:50:55
2	B 249.677†	1536.7	2245.6	27.209	ug/L	27.209	ppb	16:50:35
2	Ba 233.527†	207434.2	206816.2	1511.3	ug/L	1511.3	ppb	16:50:35
2	Be 313.107†	-438.8	3937.9	8.9945	ug/L	8.9945	ppb	16:50:35
2	Cd 226.502†	1075.6	1323.1	-1.5554	ug/L	-1.5554	ppb	16:50:55
2	Co 228.616†	2869.1	2949.7	45.463	ug/L	45.463	ppb	16:50:55
2	Cr 267.716†	10702.2	10554.6	108.74	ug/L	108.74	ppb	16:50:55
2	Cu 324.752†	29512.4	21327.4	70.279	ug/L	70.279	ppb	16:50:35
2	Mn 257.610†	1926002.6	1919675.3	2028.2	ug/L	2028.2	ppb	16:50:35
2	Mo 202.031†	-70.7	-93.7	7.5904	ug/L	7.5904	ppb	16:50:55
2	Ni 231.604†	3737.9	3609.6	78.954	ug/L	78.954	ppb	16:50:55

2	P 214.914†	1430.2	1173.4	490.85 ug/L	490.85 ppb	16:50:55
2	Pb 220.353†	760.9	859.4	103.40 ug/L	103.40 ppb	16:50:55
2	S 181.975 Axial†	611.4	547.2	602.26 ug/L	602.26 ppb	16:50:55
2	Sb 206.836†	89.3	48.4	0.3635 ug/L	0.3635 ppb	16:50:55
2	Se 196.026†	-794.2	-756.6	34.139 ug/L	34.139 ppb	16:50:55
2	Si 251.611†	1162453.8	1158376.5	33253 ug/L	33253 ppb	16:50:35
2	Sn 189.927†	-112.4	-116.2	-13.164 ug/L	-13.164 ppb	16:50:55
2	Ti 334.940†	2495040.2	2489502.1	3901.2 ug/L	3901.2 ppb	16:50:35
2	Tl 190.801†	-230.0	-183.4	-6.1536 ug/L	-6.1536 ppb	16:50:55
2	U 409.014†	-10030.2	-7374.5	-236.41 ug/L	-236.41 ppb	16:50:35
2	V 292.402†	38706.6	40393.1	227.96 ug/L	227.96 ppb	16:50:35
2	Zn 213.857†	34006.6	33048.5	262.82 ug/L	262.82 ppb	16:50:35
2	SiO2†	1181474.5	1177319.0	72878 ug/L	72878 ppb	16:51:35
3	Sc Radial	4959.5	4959.5	97.5 %		16:50:00
3	Y RADIAL	5605.0	5605.0	104.5 %		16:50:00
3	Al 396.153Radial†	136752.3	140235.8	113900 ug/L	113900 ppb	16:49:40
3	Ca 317.933Radial†	12326.7	12620.7	20030 ug/L	20030 ppb	16:49:40
3	Fe 238.204 Radial†	15546.6	15925.8	137920 ug/L	137920 ppb	16:49:40
3	K 766.490 Radial†	117973.6	117630.6	22654 ug/L	22654 ppb	16:49:40
3	Mg 279.077 IEC†	762.6	778.0	23942 ug/L	23942 ppb	16:50:00
3	Na 589.592 Radial†	7133.6	9052.1	2576.4 ug/L	2576.4 ppb	16:49:40
3	Sr 421.552†	42658.2	43731.3	289.83 ug/L	289.83 ppb	16:49:40
3	Sc 361.383	927054.4	927054.4	101.32 %		16:51:02
3	Y 371.029	850527.9	850527.9	108.82 %		16:51:02
3	Ag 328.068†	-9350.1	-9741.1	5.1182 ug/L	5.1182 ppb	16:51:02
3	As 188.979†	-69.1	-37.0	41.048 ug/L	41.048 ppb	16:51:22
3	B 249.677†	1521.8	2215.4	26.941 ug/L	26.941 ppb	16:51:02
3	Ba 233.527†	209917.8	207174.9	1513.9 ug/L	1513.9 ppb	16:51:02
3	Be 313.107†	-385.6	3994.8	9.0198 ug/L	9.0198 ppb	16:51:02
3	Cd 226.502†	1054.4	1291.2	-1.5938 ug/L	-1.5938 ppb	16:51:22
3	Co 228.616†	2828.2	2880.3	44.198 ug/L	44.198 ppb	16:51:22
3	Cr 267.716†	10703.2	10447.6	107.62 ug/L	107.62 ppb	16:51:22
3	Cu 324.752†	29844.1	21357.1	70.233 ug/L	70.233 ppb	16:51:02
3	Mn 257.610†	1947710.4	1921671.6	2030.0 ug/L	2030.0 ppb	16:51:02
3	Mo 202.031†	-75.8	-98.1	7.0642 ug/L	7.0642 ppb	16:51:22
3	Ni 231.604†	3708.2	3542.5	77.487 ug/L	77.487 ppb	16:51:22
3	P 214.914†	1448.8	1177.3	494.17 ug/L	494.17 ppb	16:51:22
3	Pb 220.353†	731.1	822.3	99.307 ug/L	99.307 ppb	16:51:22
3	S 181.975 Axial†	611.1	540.7	595.30 ug/L	595.30 ppb	16:51:22
3	Sb 206.836†	100.9	58.9	3.5367 ug/L	3.5367 ppb	16:51:22
3	Se 196.026†	-794.5	-748.8	30.270 ug/L	30.270 ppb	16:51:22
3	Si 251.611†	1175108.8	1159140.2	33276 ug/L	33276 ppb	16:51:02
3	Sn 189.927†	-102.0	-104.8	-11.549 ug/L	-11.549 ppb	16:51:22
3	Ti 334.940†	2522550.9	2491485.3	3904.2 ug/L	3904.2 ppb	16:51:02
3	Tl 190.801†	-212.2	-163.5	-0.7351 ug/L	-0.7351 ppb	16:51:22
3	U 409.014†	-9953.3	-7197.4	-230.83 ug/L	-230.83 ppb	16:51:02
3	V 292.402†	39070.4	40361.7	228.17 ug/L	228.17 ppb	16:51:02
3	Zn 213.857†	34356.2	33050.4	262.97 ug/L	262.97 ppb	16:51:02
3	SiO2†	1168262.5	1152360.7	71333 ug/L	71333 ppb	16:51:40

Mean Data: 243270001|935381|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	923048.0	100.88	%	0.529				0.52%
Sc Radial	4945.6	97.3	%	1.05				1.08%
Y 371.029	846936.3	108.36	%	0.527				0.49%
Y RADIAL	5594.7	104.4	%	1.05				1.01%
Ag 328.068†	-9754.9	5.0825	ug/L	0.69472	5.0825	ppb	0.69472	13.67%
Al 396.153Radial†	140302.0	113950	ug/L	2031.2	113950	ppb	2031.2	1.78%
As 188.979†	-34.1	42.051	ug/L	1.2754	42.051	ppb	1.2754	3.03%
B 249.677†	2239.2	27.419	ug/L	0.6105	27.419	ppb	0.6105	2.23%
Ba 233.527†	206919.6	1512.0	ug/L	1.63	1512.0	ppb	1.63	0.11%
Be 313.107†	3938.3	8.9974	ug/L	0.02113	8.9974	ppb	0.02113	0.23%
Ca 317.933Radial†	12660.1	20092	ug/L	330.0	20092	ppb	330.0	1.64%
Cd 226.502†	1309.5	-1.4282	ug/L	0.25420	-1.4282	ppb	0.25420	17.80%
Co 228.616†	2918.2	44.909	ug/L	0.6467	44.909	ppb	0.6467	1.44%
Cr 267.716†	10489.1	108.03	ug/L	0.612	108.03	ppb	0.612	0.57%
Cu 324.752†	21355.6	70.232	ug/L	0.0472	70.232	ppb	0.0472	0.07%
Fe 238.204 Radial†	15933.9	137990	ug/L	2515.4	137990	ppb	2515.4	1.82%
K 766.490 Radial†	117893.2	22705	ug/L	403.5	22705	ppb	403.5	1.78%

Mg 279.077 IEC†	773.9	23817	ug/L	119.3	23817	ppb	119.3	0.50%
Mn 257.610†	1920291.7	2028.6	ug/L	1.29	2028.6	ppb	1.29	0.06%
Mo 202.031†	-91.8	7.4690	ug/L	0.35975	7.4690	ppb	0.35975	4.82%
Na 589.592 Radial†	9089.1	2586.9	ug/L	45.12	2586.9	ppb	45.12	1.74%
Ni 231.604†	3574.4	78.183	ug/L	0.7361	78.183	ppb	0.7361	0.94%
P 214.914†	1185.3	498.03	ug/L	9.700	498.03	ppb	9.700	1.95%
Pb 220.353†	838.5	100.99	ug/L	2.143	100.99	ppb	2.143	2.12%
S 181.975 Axial†	536.5	590.46	ug/L	14.816	590.46	ppb	14.816	2.51%
Sb 206.836†	54.4	2.1748	ug/L	1.63363	2.1748	ppb	1.63363	75.12%
Se 196.026†	-748.3	30.752	ug/L	3.1726	30.752	ppb	3.1726	10.32%
Si 251.611†	1158895.1	33269	ug/L	13.0	33269	ppb	13.0	0.04%
Sn 189.927†	-113.3	-12.800	ug/L	1.1140	-12.800	ppb	1.1140	8.70%
Sr 421.552†	43710.7	289.69	ug/L	5.409	289.69	ppb	5.409	1.87%
Ti 334.940†	2490401.9	3902.5	ug/L	1.56	3902.5	ppb	1.56	0.04%
Tl 190.801†	-172.9	-3.3294	ug/L	2.71656	-3.3294	ppb	2.71656	81.59%
U 409.014†	-7266.0	-232.87	ug/L	3.074	-232.87	ppb	3.074	1.32%
V 292.402†	40343.6	228.04	ug/L	0.110	228.04	ppb	0.110	0.05%
Zn 213.857†	33057.9	263.03	ug/L	0.248	263.03	ppb	0.248	0.09%
SiO2†	1164069.1	72058	ug/L	776.9	72058	ppb	776.9	1.08%

Sequence No.: 18
Sample ID: 1202001496|935381|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 1/5/2010 16:53:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202001496|935381|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4955.9	4955.9	97.5	%			16:56:03
1	Y RADIAL	5690.8	5690.8	106.1	%			16:56:03
1	Al 396.153Radial†	146491.2	150329.0	122100	ug/L	122100	ppb	16:55:43
1	Ca 317.933Radial†	14469.9	14828.8	23534	ug/L	23534	ppb	16:55:43
1	Fe 238.204 Radial†	16076.3	16480.6	142730	ug/L	142730	ppb	16:55:43
1	K 766.490 Radial†	121722.6	121564.0	23409	ug/L	23409	ppb	16:55:43
1	Mg 279.077 IEC†	776.9	793.3	24411	ug/L	24411	ppb	16:56:03
1	Na 589.592 Radial†	8234.7	10187.2	2899.5	ug/L	2899.5	ppb	16:55:43
1	Sr 421.552†	47341.7	48568.2	321.88	ug/L	321.88	ppb	16:55:43
1	Sc 361.383	934760.7	934760.7	102.16	%			16:57:02
1	Y 371.029	871719.3	871719.3	111.53	%			16:57:02
1	Ag 328.068†	-9486.6	-9798.6	6.4442	ug/L	6.4442	ppb	16:57:02
1	As 188.979†	-58.5	-26.1	45.947	ug/L	45.947	ppb	16:57:22
1	B 249.677†	1563.9	2244.2	26.900	ug/L	26.900	ppb	16:57:02
1	Ba 233.527†	206028.7	201660.0	1473.8	ug/L	1473.8	ppb	16:57:02
1	Be 313.107†	598.5	4961.2	9.4161	ug/L	9.4161	ppb	16:57:02
1	Cd 226.502†	1088.0	1315.6	-1.8402	ug/L	-1.8402	ppb	16:57:22
1	Co 228.616†	2734.3	2765.4	41.888	ug/L	41.888	ppb	16:57:22
1	Cr 267.716†	11334.6	10978.6	113.03	ug/L	113.03	ppb	16:57:22
1	Cu 324.752†	30959.6	22206.2	72.991	ug/L	72.991	ppb	16:57:02
1	Mn 257.610†	2227168.8	2179367.8	2300.9	ug/L	2300.9	ppb	16:57:02
1	Mo 202.031†	-63.1	-85.0	8.3480	ug/L	8.3480	ppb	16:57:22
1	Ni 231.604†	4117.8	3913.3	85.601	ug/L	85.601	ppb	16:57:22
1	P 214.914†	1614.7	1327.9	566.48	ug/L	566.48	ppb	16:57:22
1	Pb 220.353†	752.9	837.7	102.35	ug/L	102.35	ppb	16:57:22
1	S 181.975 Axial†	646.1	570.1	627.17	ug/L	627.17	ppb	16:57:22
1	Sb 206.836†	112.3	69.2	6.2224	ug/L	6.2224	ppb	16:57:22
1	Se 196.026†	-782.7	-730.8	54.292	ug/L	54.292	ppb	16:57:22
1	Si 251.611†	1192347.5	1166452.5	33485	ug/L	33485	ppb	16:57:02
1	Sn 189.927†	-113.1	-114.9	-12.610	ug/L	-12.610	ppb	16:57:22
1	Ti 334.940†	2566806.2	2514278.6	3940.1	ug/L	3940.1	ppb	16:57:02
1	Tl 190.801†	-233.5	-182.6	-3.8598	ug/L	-3.8598	ppb	16:57:22
1	U 409.014†	-10777.0	-7922.7	-252.93	ug/L	-252.93	ppb	16:57:02
1	V 292.402†	39410.7	40376.9	227.47	ug/L	227.47	ppb	16:57:02
1	Zn 213.857†	35491.7	33882.4	269.49	ug/L	269.49	ppb	16:57:02
1	SiO2†	1191331.4	1165435.6	72142	ug/L	72142	ppb	16:58:23
2	Sc Radial	5031.7	5031.7	98.9	%			16:56:29
2	Y RADIAL	5769.6	5769.6	107.6	%			16:56:29
2	Al 396.153Radial†	144270.7	145822.8	118440	ug/L	118440	ppb	16:56:09
2	Ca 317.933Radial†	14233.9	14366.9	22801	ug/L	22801	ppb	16:56:09
2	Fe 238.204 Radial†	15817.3	15970.6	138310	ug/L	138310	ppb	16:56:09
2	K 766.490 Radial†	119332.7	117269.1	22581	ug/L	22581	ppb	16:56:09
2	Mg 279.077 IEC†	790.4	795.0	24466	ug/L	24466	ppb	16:56:29
2	Na 589.592 Radial†	8004.4	9827.2	2797.0	ug/L	2797.0	ppb	16:56:09
2	Sr 421.552†	46609.5	47097.1	312.13	ug/L	312.13	ppb	16:56:09
2	Sc 361.383	929055.5	929055.5	101.54	%			16:57:29
2	Y 371.029	866093.5	866093.5	110.81	%			16:57:29
2	Ag 328.068†	-9448.2	-9817.8	4.8933	ug/L	4.8933	ppb	16:57:29
2	As 188.979†	-51.8	-19.8	47.445	ug/L	47.445	ppb	16:57:49
2	B 249.677†	1488.7	2179.5	26.159	ug/L	26.159	ppb	16:57:29
2	Ba 233.527†	204589.6	201481.2	1472.4	ug/L	1472.4	ppb	16:57:29
2	Be 313.107†	513.6	4881.3	9.3836	ug/L	9.3836	ppb	16:57:29
2	Cd 226.502†	1131.8	1365.3	-0.9307	ug/L	-0.9307	ppb	16:57:49
2	Co 228.616†	2738.8	2786.3	42.340	ug/L	42.340	ppb	16:57:49
2	Cr 267.716†	11446.3	11156.6	114.73	ug/L	114.73	ppb	16:57:49
2	Cu 324.752†	30760.9	22196.6	72.737	ug/L	72.737	ppb	16:57:29
2	Mn 257.610†	2210967.9	2176799.6	2297.8	ug/L	2297.8	ppb	16:57:29
2	Mo 202.031†	-100.2	-122.0	5.6030	ug/L	5.6030	ppb	16:57:49
2	Ni 231.604†	4117.1	3937.4	86.128	ug/L	86.128	ppb	16:57:49

2	P 214.914†	1605.1	1328.2	568.90 ug/L	568.90 ppb	16:57:49
2	Pb 220.353†	754.7	843.9	102.53 ug/L	102.53 ppb	16:57:49
2	S 181.975 Axial†	650.5	578.3	637.26 ug/L	637.26 ppb	16:57:49
2	Sb 206.836†	89.5	47.5	-0.3011 ug/L	-0.3011 ppb	16:57:49
2	Se 196.026†	-789.8	-742.6	35.056 ug/L	35.056 ppb	16:57:49
2	Si 251.611†	1184207.9	1165603.2	33461 ug/L	33461 ppb	16:57:29
2	Sn 189.927†	-117.5	-119.9	-13.490 ug/L	-13.490 ppb	16:57:49
2	Ti 334.940†	2549329.5	2512495.4	3937.3 ug/L	3937.3 ppb	16:57:29
2	Tl 190.801†	-234.4	-184.9	-4.6455 ug/L	-4.6455 ppb	16:57:49
2	U 409.014†	-10791.5	-8001.7	-254.72 ug/L	-254.72 ppb	16:57:29
2	V 292.402†	38969.2	40179.0	226.87 ug/L	226.87 ppb	16:57:29
2	Zn 213.857†	35269.0	33876.4	269.66 ug/L	269.66 ppb	16:57:29
2	SiO2†	1181203.8	1162622.3	71968 ug/L	71968 ppb	16:58:29
3	Sc Radial	4945.8	4945.8	97.3 %		16:56:54
3	Y RADIAL	5675.1	5675.1	105.9 %		16:56:54
3	Al 396.153Radial†	146593.4	150741.7	122430 ug/L	122430 ppb	16:56:34
3	Ca 317.933Radial†	14437.3	14825.7	23529 ug/L	23529 ppb	16:56:34
3	Fe 238.204 Radial†	16104.7	16543.6	143270 ug/L	143270 ppb	16:56:34
3	K 766.490 Radial†	121239.7	121323.0	23363 ug/L	23363 ppb	16:56:34
3	Mg 279.077 IEC†	777.0	795.0	24464 ug/L	24464 ppb	16:56:54
3	Na 589.592 Radial†	8154.5	10122.0	2880.9 ug/L	2880.9 ppb	16:56:34
3	Sr 421.552†	47259.8	48583.4	321.98 ug/L	321.98 ppb	16:56:34
3	Sc 361.383	934533.0	934533.0	102.14 %		16:57:56
3	Y 371.029	871784.3	871784.3	111.54 %		16:57:56
3	Ag 328.068†	-9626.5	-9937.9	6.0263 ug/L	6.0263 ppb	16:57:56
3	As 188.979†	-62.2	-29.7	44.760 ug/L	44.760 ppb	16:58:16
3	B 249.677†	1529.5	2210.9	26.144 ug/L	26.144 ppb	16:57:56
3	Ba 233.527†	205900.4	201583.5	1473.3 ug/L	1473.3 ppb	16:57:56
3	Be 313.107†	636.8	4998.8	9.4291 ug/L	9.4291 ppb	16:57:56
3	Cd 226.502†	1093.0	1320.7	-1.8472 ug/L	-1.8472 ppb	16:58:16
3	Co 228.616†	2751.5	2782.9	42.205 ug/L	42.205 ppb	16:58:16
3	Cr 267.716†	11343.7	10990.2	113.15 ug/L	113.15 ppb	16:58:16
3	Cu 324.752†	30970.8	22224.5	73.073 ug/L	73.073 ppb	16:57:56
3	Mn 257.610†	2227163.8	2179893.9	2301.5 ug/L	2301.5 ppb	16:57:56
3	Mo 202.031†	-72.5	-94.2	7.8203 ug/L	7.8203 ppb	16:58:16
3	Ni 231.604†	4065.0	3862.6	84.492 ug/L	84.492 ppb	16:58:16
3	P 214.914†	1631.1	1344.4	574.21 ug/L	574.21 ppb	16:58:16
3	Pb 220.353†	767.4	852.1	103.87 ug/L	103.87 ppb	16:58:16
3	S 181.975 Axial†	648.0	572.1	629.40 ug/L	629.40 ppb	16:58:16
3	Sb 206.836†	80.9	38.5	-2.9096 ug/L	-2.9096 ppb	16:58:16
3	Se 196.026†	-784.5	-732.8	54.940 ug/L	54.940 ppb	16:58:16
3	Si 251.611†	1192325.7	1166715.4	33493 ug/L	33493 ppb	16:57:56
3	Sn 189.927†	-117.8	-119.4	-13.277 ug/L	-13.277 ppb	16:58:16
3	Ti 334.940†	2566283.6	2514379.0	3940.3 ug/L	3940.3 ppb	16:57:56
3	Tl 190.801†	-231.6	-180.8	-3.3664 ug/L	-3.3664 ppb	16:58:16
3	U 409.014†	-10738.1	-7887.1	-251.95 ug/L	-251.95 ppb	16:57:56
3	V 292.402†	39357.8	40334.5	227.12 ug/L	227.12 ppb	16:57:56
3	Zn 213.857†	35535.8	33934.0	269.89 ug/L	269.89 ppb	16:57:56
3	SiO2†	1192476.6	1166841.0	72229 ug/L	72229 ppb	16:58:34

Mean Data: 1202001496|935381|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	932783.1	101.95	%	0.353				0.35%
Sc Radial	4977.8	97.9	%	0.92				0.94%
Y 371.029	869865.7	111.29	%	0.418				0.38%
Y RADIAL	5711.8	106.5	%	0.94				0.89%
Ag 328.068†	-9851.5	5.7879	ug/L	0.80245	5.7879	ppb	0.80245	13.86%
Al 396.153Radial†	148964.5	120990	ug/L	2216.1	120990	ppb	2216.1	1.83%
As 188.979†	-25.2	46.051	ug/L	1.3455	46.051	ppb	1.3455	2.92%
B 249.677†	2211.5	26.401	ug/L	0.4319	26.401	ppb	0.4319	1.64%
Ba 233.527†	201574.9	1473.2	ug/L	0.71	1473.2	ppb	0.71	0.05%
Be 313.107†	4947.1	9.4096	ug/L	0.02342	9.4096	ppb	0.02342	0.25%
Ca 317.933Radial†	14673.8	23288	ug/L	421.9	23288	ppb	421.9	1.81%
Cd 226.502†	1333.8	-1.5394	ug/L	0.52711	-1.5394	ppb	0.52711	34.24%
Co 228.616†	2778.2	42.144	ug/L	0.2316	42.144	ppb	0.2316	0.55%
Cr 267.716†	11041.8	113.64	ug/L	0.949	113.64	ppb	0.949	0.84%
Cu 324.752†	22209.1	72.934	ug/L	0.1752	72.934	ppb	0.1752	0.24%
Fe 238.204 Radial†	16331.6	141440	ug/L	2721.2	141440	ppb	2721.2	1.92%
K 766.490 Radial†	120052.0	23118	ug/L	465.2	23118	ppb	465.2	2.01%

Mg 279.077 IEC†	794.4	24447	ug/L	31.2	24447	ppb	31.2	0.13%
Mn 257.610†	2178687.1	2300.1	ug/L	2.01	2300.1	ppb	2.01	0.09%
Mo 202.031†	-100.4	7.2571	ug/L	1.45661	7.2571	ppb	1.45661	20.07%
Na 589.592 Radial†	10045.4	2859.1	ug/L	54.59	2859.1	ppb	54.59	1.91%
Ni 231.604†	3904.4	85.407	ug/L	0.8353	85.407	ppb	0.8353	0.98%
P 214.914†	1333.5	569.86	ug/L	3.952	569.86	ppb	3.952	0.69%
Pb 220.353†	844.6	102.92	ug/L	0.829	102.92	ppb	0.829	0.81%
S 181.975 Axial†	573.5	631.28	ug/L	5.301	631.28	ppb	5.301	0.84%
Sb 206.836†	51.7	1.0039	ug/L	4.70380	1.0039	ppb	4.70380	468.55%
Se 196.026†	-735.4	48.096	ug/L	11.2977	48.096	ppb	11.2977	23.49%
Si 251.611†	1166257.0	33480	ug/L	16.5	33480	ppb	16.5	0.05%
Sn 189.927†	-118.1	-13.126	ug/L	0.4590	-13.126	ppb	0.4590	3.50%
Sr 421.552†	48082.9	318.66	ug/L	5.658	318.66	ppb	5.658	1.78%
Ti 334.940†	2513717.7	3939.2	ug/L	1.68	3939.2	ppb	1.68	0.04%
Tl 190.801†	-182.8	-3.9572	ug/L	0.64510	-3.9572	ppb	0.64510	16.30%
U 409.014†	-7937.2	-253.20	ug/L	1.406	-253.20	ppb	1.406	0.56%
V 292.402†	40296.8	227.15	ug/L	0.304	227.15	ppb	0.304	0.13%
Zn 213.857†	33897.6	269.68	ug/L	0.201	269.68	ppb	0.201	0.07%
SiO2†	1164966.3	72113	ug/L	132.6	72113	ppb	132.6	0.18%

Sequence No.: 19
Sample ID: 1202001497|935381|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 1/5/2010 17:00:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202001497|935381|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4955.9	4955.9	97.5	%			17:02:58
1	Y RADIAL	5597.8	5597.8	104.4	%			17:02:58
1	Al 396.153Radial†	220263.3	226028.0	183560	ug/L	183560	ppb	17:02:38
1	Ca 317.933Radial†	15953.6	16351.5	25951	ug/L	25951	ppb	17:02:38
1	Fe 238.204 Radial†	18406.3	18871.7	163450	ug/L	163450	ppb	17:02:38
1	K 766.490 Radial†	165811.0	166804.6	32128	ug/L	32128	ppb	17:02:38
1	Mg 279.077 IEC†	1073.9	1098.1	33828	ug/L	33828	ppb	17:02:58
1	Na 589.592 Radial†	25264.1	27660.8	7872.8	ug/L	7872.8	ppb	17:02:38
1	Sr 421.552†	113910.7	116874.4	774.84	ug/L	774.84	ppb	17:02:38
1	Sc 361.383	910515.0	910515.0	99.512	%			17:03:59
1	Y 371.029	827166.2	827166.2	105.83	%			17:03:59
1	Ag 328.068†	102638.3	102628.7	498.08	ug/L	498.08	ppb	17:03:59
1	As 188.979†	1306.7	1344.3	542.18	ug/L	542.18	ppb	17:04:04
1	B 249.677†	24350.5	25183.3	492.74	ug/L	492.74	ppb	17:03:59
1	Ba 233.527†	257203.7	258456.0	1889.4	ug/L	1889.4	ppb	17:03:59
1	Be 313.107†	1460779.9	1472316.4	507.09	ug/L	507.09	ppb	17:03:59
1	Cd 226.502†	51577.1	52080.6	473.90	ug/L	473.90	ppb	17:04:04
1	Co 228.616†	28633.1	28862.5	527.87	ug/L	527.87	ppb	17:04:04
1	Cr 267.716†	63688.6	63884.6	644.00	ug/L	644.00	ppb	17:03:59
1	Cu 324.752†	205678.1	198588.2	595.98	ug/L	595.98	ppb	17:03:59
1	Mn 257.610†	2581050.9	2593035.7	2736.9	ug/L	2736.9	ppb	17:03:59
1	Mo 202.031†	7280.5	7292.9	473.22	ug/L	473.22	ppb	17:04:04
1	Ni 231.604†	26901.5	26916.1	588.66	ug/L	588.66	ppb	17:04:04
1	P 214.914†	2804.6	2565.7	1100.6	ug/L	1100.6	ppb	17:04:04
1	Pb 220.353†	5261.9	5388.4	586.31	ug/L	586.31	ppb	17:04:04
1	S 181.975 Axial†	5024.3	4986.5	5660.1	ug/L	5660.1	ppb	17:04:04
1	Sb 206.836†	1236.3	1201.7	344.10	ug/L	344.10	ppb	17:04:04
1	Se 196.026†	39.2	74.6	534.34	ug/L	534.34	ppb	17:04:04
1	Si 251.611†	1173709.4	1178801.5	33827	ug/L	33827	ppb	17:03:59
1	Sn 189.927†	3257.4	3269.2	489.62	ug/L	489.62	ppb	17:04:04
1	Ti 334.940†	3322480.7	3340561.3	5234.3	ug/L	5234.3	ppb	17:03:59
1	Tl 190.801†	1526.3	1579.7	489.33	ug/L	489.33	ppb	17:04:04
1	U 409.014†	6227.3	8884.1	241.46	ug/L	241.46	ppb	17:03:59
1	V 292.402†	119724.7	122111.9	743.73	ug/L	743.73	ppb	17:03:59
1	Zn 213.857†	98046.8	97669.3	788.27	ug/L	788.27	ppb	17:03:59
1	SiO2†	1179052.1	1184148.1	73273	ug/L	73273	ppb	17:04:39
2	Sc Radial	4999.0	4999.0	98.3	%			17:03:23
2	Y RADIAL	5632.0	5632.0	105.1	%			17:03:23
2	Al 396.153Radial†	220020.7	223830.5	181780	ug/L	181780	ppb	17:03:03
2	Ca 317.933Radial†	15885.4	16140.8	25616	ug/L	25616	ppb	17:03:03
2	Fe 238.204 Radial†	18355.2	18656.8	161590	ug/L	161590	ppb	17:03:03
2	K 766.490 Radial†	165577.1	165098.3	31799	ug/L	31799	ppb	17:03:03
2	Mg 279.077 IEC†	1077.2	1091.9	33638	ug/L	33638	ppb	17:03:23
2	Na 589.592 Radial†	25165.5	27336.8	7780.6	ug/L	7780.6	ppb	17:03:03
2	Sr 421.552†	113949.9	115905.5	768.42	ug/L	768.42	ppb	17:03:03
2	Sc 361.383	913394.2	913394.2	99.827	%			17:04:13
2	Y 371.029	830673.4	830673.4	106.28	%			17:04:13
2	Ag 328.068†	102995.4	102661.3	497.60	ug/L	497.60	ppb	17:04:13
2	As 188.979†	1300.1	1333.6	538.11	ug/L	538.11	ppb	17:04:18
2	B 249.677†	24540.0	25296.0	495.31	ug/L	495.31	ppb	17:04:13
2	Ba 233.527†	257937.8	258376.7	1888.8	ug/L	1888.8	ppb	17:04:13
2	Be 313.107†	1465609.6	1472527.2	507.17	ug/L	507.17	ppb	17:04:13
2	Cd 226.502†	51733.8	52074.1	474.02	ug/L	474.02	ppb	17:04:18
2	Co 228.616†	28575.6	28714.1	525.12	ug/L	525.12	ppb	17:04:18
2	Cr 267.716†	63874.9	63869.5	643.81	ug/L	643.81	ppb	17:04:13
2	Cu 324.752†	206634.4	198894.6	596.79	ug/L	596.79	ppb	17:04:13
2	Mn 257.610†	2586797.9	2590617.0	2734.2	ug/L	2734.2	ppb	17:04:13
2	Mo 202.031†	7285.8	7275.2	471.93	ug/L	471.93	ppb	17:04:18
2	Ni 231.604†	27035.2	26964.8	589.73	ug/L	589.73	ppb	17:04:18

2	P 214.914†	2729.4	2481.5	1060.0 ug/L	1060.0 ppb	17:04:18
2	Pb 220.353†	5243.7	5353.5	582.45 ug/L	582.45 ppb	17:04:18
2	S 181.975 Axial†	5034.0	4980.3	5653.4 ug/L	5653.4 ppb	17:04:18
2	Sb 206.836†	1285.7	1247.2	357.50 ug/L	357.50 ppb	17:04:18
2	Se 196.026†	47.1	82.4	532.72 ug/L	532.72 ppb	17:04:18
2	Si 251.611†	1176091.3	1177469.7	33789 ug/L	33789 ppb	17:04:13
2	Sn 189.927†	3237.1	3238.6	485.01 ug/L	485.01 ppb	17:04:18
2	Ti 334.940†	3333798.5	3341374.4	5235.6 ug/L	5235.6 ppb	17:04:13
2	Tl 190.801†	1502.1	1550.7	481.33 ug/L	481.33 ppb	17:04:18
2	U 409.014†	6367.8	9005.1	245.28 ug/L	245.28 ppb	17:04:13
2	V 292.402†	120116.9	122125.5	744.08 ug/L	744.08 ppb	17:04:13
2	Zn 213.857†	98246.9	97559.1	787.46 ug/L	787.46 ppb	17:04:13
2	SiO2†	1194742.2	1196130.6	74015 ug/L	74015 ppb	17:04:44
3	Sc Radial	4964.6	4964.6	97.6 %		17:03:48
3	Y RADIAL	5605.6	5605.6	104.6 %		17:03:48
3	Al 396.153Radial†	217518.8	222818.5	180950 ug/L	180950 ppb	17:03:28
3	Ca 317.933Radial†	15693.6	16056.3	25482 ug/L	25482 ppb	17:03:28
3	Fe 238.204 Radial†	18138.5	18564.1	160780 ug/L	160780 ppb	17:03:28
3	K 766.490 Radial†	163308.8	163941.7	31576 ug/L	31576 ppb	17:03:28
3	Mg 279.077 IEC†	1067.6	1089.7	33570 ug/L	33570 ppb	17:03:48
3	Na 589.592 Radial†	24811.3	27151.4	7727.8 ug/L	7727.8 ppb	17:03:28
3	Sr 421.552†	112464.6	115187.1	763.66 ug/L	763.66 ppb	17:03:28
3	Sc 361.383	919802.1	919802.1	100.53 %		17:04:27
3	Y 371.029	835535.6	835535.6	106.90 %		17:04:27
3	Ag 328.068†	103627.0	102570.8	496.94 ug/L	496.94 ppb	17:04:27
3	As 188.979†	1300.5	1324.9	534.91 ug/L	534.91 ppb	17:04:32
3	B 249.677†	24615.3	25199.6	493.45 ug/L	493.45 ppb	17:04:27
3	Ba 233.527†	259636.1	258266.0	1887.9 ug/L	1887.9 ppb	17:04:27
3	Be 313.107†	1475412.8	1472051.1	507.00 ug/L	507.00 ppb	17:04:27
3	Cd 226.502†	51596.2	51576.2	469.41 ug/L	469.41 ppb	17:04:32
3	Co 228.616†	28507.5	28446.9	520.13 ug/L	520.13 ppb	17:04:32
3	Cr 267.716†	64348.1	63894.4	644.05 ug/L	644.05 ppb	17:04:27
3	Cu 324.752†	207772.9	198585.1	595.83 ug/L	595.83 ppb	17:04:27
3	Mn 257.610†	2605464.9	2591133.8	2734.7 ug/L	2734.7 ppb	17:04:27
3	Mo 202.031†	7265.0	7203.6	467.36 ug/L	467.36 ppb	17:04:32
3	Ni 231.604†	26842.5	26584.4	581.41 ug/L	581.41 ppb	17:04:32
3	P 214.914†	2766.0	2498.9	1069.0 ug/L	1069.0 ppb	17:04:32
3	Pb 220.353†	5243.9	5317.2	578.56 ug/L	578.56 ppb	17:04:32
3	S 181.975 Axial†	4977.9	4889.4	5549.7 ug/L	5549.7 ppb	17:04:32
3	Sb 206.836†	1297.4	1249.8	358.06 ug/L	358.06 ppb	17:04:32
3	Se 196.026†	24.9	60.1	518.85 ug/L	518.85 ppb	17:04:32
3	Si 251.611†	1184559.2	1177685.6	33796 ug/L	33796 ppb	17:04:27
3	Sn 189.927†	3205.6	3184.6	476.99 ug/L	476.99 ppb	17:04:32
3	Ti 334.940†	3354912.0	3339111.8	5232.0 ug/L	5232.0 ppb	17:04:27
3	Tl 190.801†	1537.7	1575.6	488.14 ug/L	488.14 ppb	17:04:32
3	U 409.014†	6338.1	8931.1	243.18 ug/L	243.18 ppb	17:04:27
3	V 292.402†	120870.6	122037.0	743.58 ug/L	743.58 ppb	17:04:27
3	Zn 213.857†	98980.3	97603.0	787.92 ug/L	787.92 ppb	17:04:27
3	SiO2†	1197201.2	1190239.0	73651 ug/L	73651 ppb	17:04:50

Mean Data: 1202001497|935381|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	914570.4	99.955	%	0.5196				0.52%
Sc Radial	4973.2	97.8	%	0.45				0.46%
Y 371.029	831125.0	106.34	%	0.538				0.51%
Y RADIAL	5611.8	104.7	%	0.33				0.32%
Ag 328.068†	102620.2	497.54	ug/L	0.570	497.54	ppb	0.570	0.11%
Al 396.153Radial†	224225.7	182100	ug/L	1332.6	182100	ppb	1332.6	0.73%
As 188.979†	1334.3	538.40	ug/L	3.644	538.40	ppb	3.644	0.68%
B 249.677†	25226.3	493.83	ug/L	1.323	493.83	ppb	1.323	0.27%
Ba 233.527†	258366.2	1888.7	ug/L	0.73	1888.7	ppb	0.73	0.04%
Be 313.107†	1472298.3	507.09	ug/L	0.084	507.09	ppb	0.084	0.02%
Ca 317.933Radial†	16182.9	25683	ug/L	241.3	25683	ppb	241.3	0.94%
Cd 226.502†	51910.3	472.44	ug/L	2.625	472.44	ppb	2.625	0.56%
Co 228.616†	28674.5	524.37	ug/L	3.924	524.37	ppb	3.924	0.75%
Cr 267.716†	63882.8	643.96	ug/L	0.124	643.96	ppb	0.124	0.02%
Cu 324.752†	198689.3	596.20	ug/L	0.516	596.20	ppb	0.516	0.09%
Fe 238.204 Radial†	18697.5	161940	ug/L	1366.8	161940	ppb	1366.8	0.84%
K 766.490 Radial†	165281.5	31834	ug/L	277.6	31834	ppb	277.6	0.87%

Mg 279.077 IEC†	1093.2	33679 ug/L	133.4	33679 ppb	133.4	0.40%
Mn 257.610†	2591595.5	2735.3 ug/L	1.46	2735.3 ppb	1.46	0.05%
Mo 202.031†	7257.2	470.84 ug/L	3.076	470.84 ppb	3.076	0.65%
Na 589.592 Radial†	27383.0	7793.7 ug/L	73.39	7793.7 ppb	73.39	0.94%
Ni 231.604†	26821.7	586.60 ug/L	4.528	586.60 ppb	4.528	0.77%
P 214.914†	2515.4	1076.6 ug/L	21.33	1076.6 ppb	21.33	1.98%
Pb 220.353†	5353.0	582.44 ug/L	3.876	582.44 ppb	3.876	0.67%
S 181.975 Axial†	4952.1	5621.1 ug/L	61.88	5621.1 ppb	61.88	1.10%
Sb 206.836†	1232.9	353.22 ug/L	7.904	353.22 ppb	7.904	2.24%
Se 196.026†	72.4	528.64 ug/L	8.511	528.64 ppb	8.511	1.61%
Si 251.611†	1177985.6	33804 ug/L	20.4	33804 ppb	20.4	0.06%
Sn 189.927†	3230.8	483.87 ug/L	6.391	483.87 ppb	6.391	1.32%
Sr 421.552†	115989.0	768.98 ug/L	5.613	768.98 ppb	5.613	0.73%
Ti 334.940†	3340349.1	5234.0 ug/L	1.80	5234.0 ppb	1.80	0.03%
Tl 190.801†	1568.7	486.27 ug/L	4.313	486.27 ppb	4.313	0.89%
U 409.014†	8940.1	243.30 ug/L	1.913	243.30 ppb	1.913	0.79%
V 292.402†	122091.4	743.80 ug/L	0.257	743.80 ppb	0.257	0.03%
Zn 213.857†	97610.5	787.88 ug/L	0.406	787.88 ppb	0.406	0.05%
SiO2†	1190172.6	73646 ug/L	371.1	73646 ppb	371.1	0.50%

Sequence No.: 20
Sample ID: 1202001499|935381|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 1/5/2010 17:07:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202001499|935381|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4943.5	4943.5	97.2	%			17:09:14
1	Y RADIAL	5546.1	5546.1	103.4	%			17:09:14
1	Al 396.153Radial†	191217.3	196716.8	159750	ug/L	159750	ppb	17:08:54
1	Ca 317.933Radial†	14055.1	14439.7	22917	ug/L	22917	ppb	17:09:14
1	Fe 238.204 Radial†	17976.7	18477.2	160030	ug/L	160030	ppb	17:08:54
1	K 766.490 Radial†	156726.3	157886.5	30342	ug/L	30342	ppb	17:08:54
1	Mg 279.077 IEC†	1032.7	1058.4	32604	ug/L	32604	ppb	17:09:14
1	Na 589.592 Radial†	25382.6	27847.8	7926.0	ug/L	7926.0	ppb	17:08:54
1	Sr 421.552†	112797.3	116022.4	769.22	ug/L	769.22	ppb	17:08:54
1	Sc 361.383	918786.5	918786.5	100.42	%			17:10:20
1	Y 371.029	832994.1	832994.1	106.57	%			17:10:20
1	Ag 328.068†	104996.7	104048.7	503.14	ug/L	503.14	ppb	17:10:20
1	As 188.979†	1300.2	1326.1	536.31	ug/L	536.31	ppb	17:10:40
1	B 249.677†	24886.6	25496.9	499.53	ug/L	499.53	ppb	17:10:20
1	Ba 233.527†	277706.3	276546.8	2021.2	ug/L	2021.2	ppb	17:10:20
1	Be 313.107†	1475609.0	1473868.8	507.87	ug/L	507.87	ppb	17:10:20
1	Cd 226.502†	51883.1	51918.7	472.71	ug/L	472.71	ppb	17:10:20
1	Co 228.616†	30820.8	30782.1	563.58	ug/L	563.58	ppb	17:10:40
1	Cr 267.716†	61902.1	61529.4	620.38	ug/L	620.38	ppb	17:10:20
1	Cu 324.752†	208438.3	199476.2	598.43	ug/L	598.43	ppb	17:10:20
1	Mn 257.610†	7621339.7	7589085.4	7979.7	ug/L	7979.7	ppb	17:10:13
1	Mo 202.031†	7290.1	7236.6	469.36	ug/L	469.36	ppb	17:10:40
1	Ni 231.604†	26890.5	26661.8	583.07	ug/L	583.07	ppb	17:10:40
1	P 214.914†	2767.2	2503.2	1064.0	ug/L	1064.0	ppb	17:10:40
1	Pb 220.353†	5570.4	5648.1	608.13	ug/L	608.13	ppb	17:10:40
1	S 181.975 Axial†	4901.9	4819.2	5473.7	ug/L	5473.7	ppb	17:10:40
1	Sb 206.836†	1331.3	1285.1	369.33	ug/L	369.33	ppb	17:10:40
1	Se 196.026†	78.5	113.4	541.87	ug/L	541.87	ppb	17:10:40
1	Si 251.611†	1223516.0	1217783.4	34947	ug/L	34947	ppb	17:10:20
1	Sn 189.927†	3195.4	3178.1	475.73	ug/L	475.73	ppb	17:10:40
1	Ti 334.940†	3436725.7	3424275.4	5365.3	ug/L	5365.3	ppb	17:10:13
1	Tl 190.801†	1396.5	1436.6	481.00	ug/L	481.00	ppb	17:10:40
1	U 409.014†	5163.3	7768.2	208.86	ug/L	208.86	ppb	17:10:20
1	V 292.402†	122011.2	123305.7	751.47	ug/L	751.47	ppb	17:10:20
1	Zn 213.857†	102228.1	100946.2	815.44	ug/L	815.44	ppb	17:10:20
1	SiO2†	1228289.0	1222514.5	75650	ug/L	75650	ppb	17:11:54
2	Sc Radial	4957.9	4957.9	97.5	%			17:09:39
2	Y RADIAL	5568.3	5568.3	103.9	%			17:09:39
2	Al 396.153Radial†	192916.7	197887.5	160710	ug/L	160710	ppb	17:09:19
2	Ca 317.933Radial†	14020.7	14362.3	22794	ug/L	22794	ppb	17:09:39
2	Fe 238.204 Radial†	18108.6	18558.7	160740	ug/L	160740	ppb	17:09:19
2	K 766.490 Radial†	157767.2	158485.1	30458	ug/L	30458	ppb	17:09:19
2	Mg 279.077 IEC†	1029.3	1051.9	32401	ug/L	32401	ppb	17:09:39
2	Na 589.592 Radial†	25501.1	27893.3	7939.0	ug/L	7939.0	ppb	17:09:19
2	Sr 421.552†	113714.6	116625.7	773.22	ug/L	773.22	ppb	17:09:19
2	Sc 361.383	923597.5	923597.5	100.94	%			17:10:54
2	Y 371.029	836392.9	836392.9	107.01	%			17:10:54
2	Ag 328.068†	105617.1	104118.7	503.68	ug/L	503.68	ppb	17:10:54
2	As 188.979†	1290.6	1309.8	530.26	ug/L	530.26	ppb	17:11:14
2	B 249.677†	24939.4	25420.0	497.87	ug/L	497.87	ppb	17:10:54
2	Ba 233.527†	279656.7	277038.5	2024.8	ug/L	2024.8	ppb	17:10:54
2	Be 313.107†	1484967.7	1475485.7	508.32	ug/L	508.32	ppb	17:10:54
2	Cd 226.502†	52315.0	52077.4	474.13	ug/L	474.13	ppb	17:10:54
2	Co 228.616†	30869.6	30670.5	561.59	ug/L	561.59	ppb	17:11:14
2	Cr 267.716†	62182.1	61485.7	619.95	ug/L	619.95	ppb	17:10:54
2	Cu 324.752†	209925.2	199867.9	599.63	ug/L	599.63	ppb	17:10:54
2	Mn 257.610†	7591269.6	7519761.0	7907.0	ug/L	7907.0	ppb	17:10:47
2	Mo 202.031†	7309.0	7217.5	468.23	ug/L	468.23	ppb	17:11:14
2	Ni 231.604†	26941.5	26572.8	581.13	ug/L	581.13	ppb	17:11:14

2	P 214.914†	2736.3	2458.2	1041.6 ug/L	1041.6 ppb	17:11:14
2	Pb 220.353†	5556.9	5605.7	603.89 ug/L	603.89 ppb	17:11:14
2	S 181.975 Axial†	4919.2	4810.9	5464.0 ug/L	5464.0 ppb	17:11:14
2	Sb 206.836†	1355.3	1301.9	374.46 ug/L	374.46 ppb	17:11:14
2	Se 196.026†	70.0	104.6	539.51 ug/L	539.51 ppb	17:11:14
2	Si 251.611†	1232062.9	1219903.8	35008 ug/L	35008 ppb	17:10:54
2	Sn 189.927†	3221.3	3187.1	477.07 ug/L	477.07 ppb	17:11:14
2	Ti 334.940†	3423335.5	3393182.5	5316.6 ug/L	5316.6 ppb	17:10:47
2	Tl 190.801†	1398.9	1431.8	478.92 ug/L	478.92 ppb	17:11:14
2	U 409.014†	5381.5	7957.5	214.39 ug/L	214.39 ppb	17:10:54
2	V 292.402†	122833.0	123487.0	752.54 ug/L	752.54 ppb	17:10:54
2	Zn 213.857†	102771.0	100953.7	815.49 ug/L	815.49 ppb	17:10:54
2	SiO2†	1222620.6	1210527.3	74908 ug/L	74908 ppb	17:12:00
3	Sc Radial	4965.1	4965.1	97.6 %		17:10:04
3	Y RADIAL	5567.2	5567.2	103.8 %		17:10:04
3	Al 396.153Radial†	192817.4	197496.2	160390 ug/L	160390 ppb	17:09:44
3	Ca 317.933Radial†	14057.6	14379.1	22821 ug/L	22821 ppb	17:10:04
3	Fe 238.204 Radial†	18040.0	18461.3	159900 ug/L	159900 ppb	17:09:44
3	K 766.490 Radial†	157816.8	158299.0	30422 ug/L	30422 ppb	17:09:44
3	Mg 279.077 IEC†	1037.4	1058.6	32609 ug/L	32609 ppb	17:10:04
3	Na 589.592 Radial†	25451.3	27804.1	7913.6 ug/L	7913.6 ppb	17:09:44
3	Sr 421.552†	113449.1	116183.1	770.29 ug/L	770.29 ppb	17:09:44
3	Sc 361.383	924853.2	924853.2	101.08 %		17:11:28
3	Y 371.029	837148.0	837148.0	107.11 %		17:11:28
3	Ag 328.068†	105439.5	103800.9	502.02 ug/L	502.02 ppb	17:11:28
3	As 188.979†	1290.3	1307.8	529.51 ug/L	529.51 ppb	17:11:48
3	B 249.677†	25039.2	25485.3	499.32 ug/L	499.32 ppb	17:11:28
3	Ba 233.527†	279304.0	276313.4	2019.5 ug/L	2019.5 ppb	17:11:28
3	Be 313.107†	1483717.3	1472251.1	507.25 ug/L	507.25 ppb	17:11:28
3	Cd 226.502†	52198.9	51892.2	472.47 ug/L	472.47 ppb	17:11:28
3	Co 228.616†	30882.5	30641.8	561.04 ug/L	561.04 ppb	17:11:48
3	Cr 267.716†	62208.3	61428.0	619.35 ug/L	619.35 ppb	17:11:28
3	Cu 324.752†	209788.5	199450.3	598.35 ug/L	598.35 ppb	17:11:28
3	Mn 257.610†	7621515.4	7539472.9	7927.6 ug/L	7927.6 ppb	17:11:21
3	Mo 202.031†	7328.8	7227.3	468.76 ug/L	468.76 ppb	17:11:48
3	Ni 231.604†	27007.2	26601.5	581.76 ug/L	581.76 ppb	17:11:48
3	P 214.914†	2764.3	2482.2	1054.1 ug/L	1054.1 ppb	17:11:48
3	Pb 220.353†	5584.5	5625.6	605.96 ug/L	605.96 ppb	17:11:48
3	S 181.975 Axial†	4904.2	4789.5	5439.6 ug/L	5439.6 ppb	17:11:48
3	Sb 206.836†	1348.1	1293.0	371.82 ug/L	371.82 ppb	17:11:48
3	Se 196.026†	69.5	104.1	536.74 ug/L	536.74 ppb	17:11:48
3	Si 251.611†	1230575.7	1216775.2	34918 ug/L	34918 ppb	17:11:28
3	Sn 189.927†	3238.1	3199.4	478.88 ug/L	478.88 ppb	17:11:48
3	Ti 334.940†	3434539.2	3399661.9	5326.7 ug/L	5326.7 ppb	17:11:21
3	Tl 190.801†	1418.2	1449.0	483.82 ug/L	483.82 ppb	17:11:48
3	U 409.014†	5335.3	7904.5	212.92 ug/L	212.92 ppb	17:11:28
3	V 292.402†	122597.9	123089.2	750.17 ug/L	750.17 ppb	17:11:28
3	Zn 213.857†	102726.6	100771.6	814.02 ug/L	814.02 ppb	17:11:28
3	SiO2†	1220747.9	1207030.0	74691 ug/L	74691 ppb	17:12:06

Mean Data: 1202001499|935381|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	922412.4	100.81	%	0.350				0.35%
Sc Radial	4955.5	97.5	%	0.22				0.22%
Y 371.029	835511.6	106.90	%	0.283				0.26%
Y RADIAL	5560.5	103.7	%	0.23				0.23%
Ag 328.068†	103989.5	502.95	ug/L	0.845	502.95	ppb	0.845	0.17%
Al 396.153Radial†	197366.8	160280	ug/L	484.1	160280	ppb	484.1	0.30%
As 188.979†	1314.5	532.02	ug/L	3.727	532.02	ppb	3.727	0.70%
B 249.677†	25467.4	498.90	ug/L	0.905	498.90	ppb	0.905	0.18%
Ba 233.527†	276632.9	2021.8	ug/L	2.71	2021.8	ppb	2.71	0.13%
Be 313.107†	1473868.5	507.82	ug/L	0.538	507.82	ppb	0.538	0.11%
Ca 317.933Radial†	14393.7	22844	ug/L	64.6	22844	ppb	64.6	0.28%
Cd 226.502†	51962.7	473.11	ug/L	0.897	473.11	ppb	0.897	0.19%
Co 228.616†	30698.1	562.07	ug/L	1.337	562.07	ppb	1.337	0.24%
Cr 267.716†	61481.0	619.89	ug/L	0.513	619.89	ppb	0.513	0.08%
Cu 324.752†	199598.1	598.80	ug/L	0.715	598.80	ppb	0.715	0.12%
Fe 238.204 Radial†	18499.0	160220	ug/L	452.5	160220	ppb	452.5	0.28%
K 766.490 Radial†	158223.5	30407	ug/L	59.6	30407	ppb	59.6	0.20%

Mg 279.077 IEC†	1056.3	32538 ug/L	118.6	32538 ppb	118.6	0.36%
Mn 257.610†	7549439.8	7938.1 ug/L	37.46	7938.1 ppb	37.46	0.47%
Mo 202.031†	7227.1	468.78 ug/L	0.567	468.78 ppb	0.567	0.12%
Na 589.592 Radial†	27848.4	7926.2 ug/L	12.71	7926.2 ppb	12.71	0.16%
Ni 231.604†	26612.0	581.99 ug/L	0.993	581.99 ppb	0.993	0.17%
P 214.914†	2481.2	1053.2 ug/L	11.27	1053.2 ppb	11.27	1.07%
Pb 220.353†	5626.5	605.99 ug/L	2.117	605.99 ppb	2.117	0.35%
S 181.975 Axial†	4806.5	5459.1 ug/L	17.56	5459.1 ppb	17.56	0.32%
Sb 206.836†	1293.3	371.87 ug/L	2.563	371.87 ppb	2.563	0.69%
Se 196.026†	107.4	539.37 ug/L	2.568	539.37 ppb	2.568	0.48%
Si 251.611†	1218154.1	34958 ug/L	45.9	34958 ppb	45.9	0.13%
Sn 189.927†	3188.2	477.23 ug/L	1.581	477.23 ppb	1.581	0.33%
Sr 421.552†	116277.1	770.91 ug/L	2.073	770.91 ppb	2.073	0.27%
Ti 334.940†	3405706.6	5336.2 ug/L	25.70	5336.2 ppb	25.70	0.48%
Tl 190.801†	1439.1	481.25 ug/L	2.457	481.25 ppb	2.457	0.51%
U 409.014†	7876.8	212.06 ug/L	2.861	212.06 ppb	2.861	1.35%
V 292.402†	123294.0	751.40 ug/L	1.187	751.40 ppb	1.187	0.16%
Zn 213.857†	100890.5	814.99 ug/L	0.832	814.99 ppb	0.832	0.10%
SiO2†	1213357.3	75083 ug/L	502.8	75083 ppb	502.8	0.67%

Sequence No.: 21
Sample ID: 1202001498|935381|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 1/5/2010 17:14:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202001498|935381|5

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4754.1	4754.1	93.5	%			17:16:09
1	Y RADIAL	5017.6	5017.6	93.59	%			17:16:09
1	Al 396.153Radial†	26525.9	28392.2	23060	ug/L	23060	ppb	17:16:09
1	Ca 317.933Radial†	2462.3	2615.5	4150.9	ug/L	4150.9	ppb	17:16:29
1	Fe 238.204 Radial†	3146.8	3351.2	29022	ug/L	29022	ppb	17:16:29
1	K 766.490 Radial†	25654.4	24109.1	4642.7	ug/L	4642.7	ppb	17:16:09
1	Mg 279.077 IEC†	155.3	162.2	4992.8	ug/L	4992.8	ppb	17:16:29
1	Na 589.592 Radial†	189.3	1940.3	552.23	ug/L	552.23	ppb	17:16:09
1	Sr 421.552†	8160.9	8721.7	57.802	ug/L	57.802	ppb	17:16:09
1	Sc 361.383	871807.7	871807.7	95.282	%			17:17:26
1	Y 371.029	768141.8	768141.8	98.278	%			17:17:26
1	Ag 328.068†	-1482.7	-2068.9	1.0065	ug/L	1.0065	ppb	17:17:26
1	As 188.979†	-45.6	-16.6	5.6099	ug/L	5.6099	ppb	17:17:46
1	B 249.677†	-101.1	607.3	8.5590	ug/L	8.5590	ppb	17:17:26
1	Ba 233.527†	42632.3	44734.9	326.87	ug/L	326.87	ppb	17:17:26
1	Be 313.107†	-3683.6	509.4	1.8032	ug/L	1.8032	ppb	17:17:26
1	Cd 226.502†	18.3	269.7	-0.3534	ug/L	-0.3534	ppb	17:17:46
1	Co 228.616†	505.0	618.9	9.5268	ug/L	9.5268	ppb	17:17:46
1	Cr 267.716†	2229.1	2223.3	22.898	ug/L	22.898	ppb	17:17:46
1	Cu 324.752†	12275.5	4785.2	15.640	ug/L	15.640	ppb	17:17:26
1	Mn 257.610†	399631.3	418752.5	442.26	ug/L	442.26	ppb	17:17:26
1	Mo 202.031†	7.4	-15.6	1.8058	ug/L	1.8058	ppb	17:17:46
1	Ni 231.604†	851.6	776.5	16.984	ug/L	16.984	ppb	17:17:46
1	P 214.914†	514.1	287.0	122.72	ug/L	122.72	ppb	17:17:46
1	Pb 220.353†	79.8	184.4	21.874	ug/L	21.874	ppb	17:17:46
1	S 181.975 Axial†	171.8	118.0	130.20	ug/L	130.20	ppb	17:17:46
1	Sb 206.836†	51.9	13.8	1.1015	ug/L	1.1015	ppb	17:17:46
1	Se 196.026†	-177.2	-150.6	9.8301	ug/L	9.8301	ppb	17:17:46
1	Si 251.611†	235909.4	246929.6	7088.7	ug/L	7088.7	ppb	17:17:26
1	Sn 189.927†	-38.1	-44.1	-5.7050	ug/L	-5.7050	ppb	17:17:46
1	Ti 334.940†	503067.6	529771.9	830.17	ug/L	830.17	ppb	17:17:26
1	Tl 190.801†	-74.0	-31.7	0.7094	ug/L	0.7094	ppb	17:17:46
1	U 409.014†	-4275.9	-1861.4	-58.851	ug/L	-58.851	ppb	17:17:26
1	V 292.402†	6452.1	8571.8	48.480	ug/L	48.480	ppb	17:17:26
1	Zn 213.857†	7516.2	7030.2	55.953	ug/L	55.953	ppb	17:17:46
1	SiO2†	234064.5	244971.1	15164	ug/L	15164	ppb	17:18:42
2	Sc Radial	4735.3	4735.3	93.1	%			17:16:34
2	Y RADIAL	5008.0	5008.0	93.41	%			17:16:34
2	Al 396.153Radial†	26570.3	28552.8	23191	ug/L	23191	ppb	17:16:34
2	Ca 317.933Radial†	2456.6	2619.8	4157.8	ug/L	4157.8	ppb	17:16:54
2	Fe 238.204 Radial†	3128.1	3344.5	28965	ug/L	28965	ppb	17:16:54
2	K 766.490 Radial†	25605.2	24165.6	4653.6	ug/L	4653.6	ppb	17:16:34
2	Mg 279.077 IEC†	152.5	159.9	4919.8	ug/L	4919.8	ppb	17:16:54
2	Na 589.592 Radial†	156.8	1906.2	542.54	ug/L	542.54	ppb	17:16:34
2	Sr 421.552†	8240.8	8842.2	58.601	ug/L	58.601	ppb	17:16:34
2	Sc 361.383	869185.4	869185.4	94.995	%			17:17:51
2	Y 371.029	765613.5	765613.5	97.954	%			17:17:51
2	Ag 328.068†	-1593.7	-2190.4	0.4638	ug/L	0.4638	ppb	17:17:51
2	As 188.979†	-34.7	-5.3	9.5548	ug/L	9.5548	ppb	17:18:11
2	B 249.677†	-135.7	570.5	7.8131	ug/L	7.8131	ppb	17:17:51
2	Ba 233.527†	42301.0	44521.1	325.31	ug/L	325.31	ppb	17:17:51
2	Be 313.107†	-3628.3	556.0	1.8149	ug/L	1.8149	ppb	17:17:51
2	Cd 226.502†	23.5	275.3	-0.2948	ug/L	-0.2948	ppb	17:18:11
2	Co 228.616†	501.5	616.9	9.4936	ug/L	9.4936	ppb	17:18:11
2	Cr 267.716†	2231.4	2232.8	22.992	ug/L	22.992	ppb	17:18:11
2	Cu 324.752†	12101.9	4641.2	15.211	ug/L	15.211	ppb	17:17:51
2	Mn 257.610†	397640.0	417921.7	441.38	ug/L	441.38	ppb	17:17:51
2	Mo 202.031†	10.8	-11.9	2.0281	ug/L	2.0281	ppb	17:18:11
2	Ni 231.604†	862.2	790.3	17.286	ug/L	17.286	ppb	17:18:11

2	P 214.914†	499.1	272.8	115.96 ug/L	115.96 ppb	17:18:11
2	Pb 220.353†	85.2	190.4	22.529 ug/L	22.529 ppb	17:18:11
2	S 181.975 Axial†	163.3	109.5	120.52 ug/L	120.52 ppb	17:18:11
2	Sb 206.836†	42.7	4.3	-1.7021 ug/L	-1.7021 ppb	17:18:11
2	Se 196.026†	-185.6	-160.1	4.8495 ug/L	4.8495 ppb	17:18:11
2	Si 251.611†	234859.8	246571.7	7078.4 ug/L	7078.4 ppb	17:17:51
2	Sn 189.927†	-33.5	-39.4	-5.0108 ug/L	-5.0108 ppb	17:18:11
2	Ti 334.940†	500332.2	528485.3	828.15 ug/L	828.15 ppb	17:17:51
2	Tl 190.801†	-81.7	-40.1	-1.5930 ug/L	-1.5930 ppb	17:18:11
2	U 409.014†	-4355.2	-1958.4	-61.720 ug/L	-61.720 ppb	17:17:51
2	V 292.402†	6294.9	8426.8	47.577 ug/L	47.577 ppb	17:17:51
2	Zn 213.857†	7547.2	7086.7	56.421 ug/L	56.421 ppb	17:18:11
2	SiO2†	235974.8	247723.2	15335 ug/L	15335 ppb	17:18:48
3	Sc Radial	4828.4	4828.4	95.0 %		17:16:59
3	Y RADIAL	5117.4	5117.4	95.45 %		17:16:59
3	Al 396.153Radial†	26967.2	28420.4	23083 ug/L	23083 ppb	17:16:59
3	Ca 317.933Radial†	2455.0	2567.2	4074.4 ug/L	4074.4 ppb	17:17:19
3	Fe 238.204 Radial†	3119.3	3270.4	28323 ug/L	28323 ppb	17:17:19
3	K 766.490 Radial†	25806.8	23847.5	4592.3 ug/L	4592.3 ppb	17:16:59
3	Mg 279.077 IEC†	154.8	159.1	4895.9 ug/L	4895.9 ppb	17:17:19
3	Na 589.592 Radial†	195.2	1943.3	553.10 ug/L	553.10 ppb	17:16:59
3	Sr 421.552†	8295.5	8729.1	57.851 ug/L	57.851 ppb	17:16:59
3	Sc 361.383	869855.9	869855.9	95.068 %		17:18:17
3	Y 371.029	765584.3	765584.3	97.950 %		17:18:17
3	Ag 328.068†	-1546.4	-2139.4	0.4717 ug/L	0.4717 ppb	17:18:17
3	As 188.979†	-44.0	-15.0	6.0417 ug/L	6.0417 ppb	17:18:37
3	B 249.677†	-216.1	486.1	6.1700 ug/L	6.1700 ppb	17:18:17
3	Ba 233.527†	42420.8	44612.8	325.96 ug/L	325.96 ppb	17:18:17
3	Be 313.107†	-3667.8	517.4	1.8032 ug/L	1.8032 ppb	17:18:17
3	Cd 226.502†	20.0	271.6	-0.2662 ug/L	-0.2662 ppb	17:18:37
3	Co 228.616†	502.4	617.5	9.5108 ug/L	9.5108 ppb	17:18:37
3	Cr 267.716†	2219.6	2218.5	22.838 ug/L	22.838 ppb	17:18:37
3	Cu 324.752†	12197.9	4732.4	15.448 ug/L	15.448 ppb	17:18:17
3	Mn 257.610†	398492.9	418496.2	441.92 ug/L	441.92 ppb	17:18:17
3	Mo 202.031†	4.3	-18.8	1.5365 ug/L	1.5365 ppb	17:18:37
3	Ni 231.604†	833.1	758.9	16.601 ug/L	16.601 ppb	17:18:37
3	P 214.914†	519.8	294.2	126.88 ug/L	126.88 ppb	17:18:37
3	Pb 220.353†	91.4	196.8	23.222 ug/L	23.222 ppb	17:18:37
3	S 181.975 Axial†	163.0	109.1	120.03 ug/L	120.03 ppb	17:18:37
3	Sb 206.836†	51.9	13.9	1.1168 ug/L	1.1168 ppb	17:18:37
3	Se 196.026†	-177.2	-151.1	7.5742 ug/L	7.5742 ppb	17:18:37
3	Si 251.611†	235295.9	246839.9	7086.1 ug/L	7086.1 ppb	17:18:17
3	Sn 189.927†	-38.2	-44.3	-5.7512 ug/L	-5.7512 ppb	17:18:37
3	Ti 334.940†	501104.2	528891.4	828.79 ug/L	828.79 ppb	17:18:17
3	Tl 190.801†	-76.1	-34.1	0.0425 ug/L	0.0425 ppb	17:18:37
3	U 409.014†	-4315.7	-1913.3	-60.302 ug/L	-60.302 ppb	17:18:17
3	V 292.402†	6421.6	8554.9	48.475 ug/L	48.475 ppb	17:18:17
3	Zn 213.857†	7479.9	7009.7	55.827 ug/L	55.827 ppb	17:18:37
3	SiO2†	239279.0	251007.3	15538 ug/L	15538 ppb	17:18:53

Mean Data: 1202001498|935381|5

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	870283.0	95.115	%	0.1489				0.16%
Sc Radial	4772.6	93.9	%	0.97				1.03%
Y 371.029	766446.5	98.061	%	0.1879				0.19%
Y RADIAL	5047.7	94.15	%	1.130				1.20%
Ag 328.068†	-2132.9	0.6473	ug/L	0.31108	0.6473	ppb	0.31108	48.05%
Al 396.153Radial†	28455.1	23111	ug/L	69.7	23111	ppb	69.7	0.30%
As 188.979†	-12.3	7.0688	ug/L	2.16376	7.0688	ppb	2.16376	30.61%
B 249.677†	554.6	7.5140	ug/L	1.22227	7.5140	ppb	1.22227	16.27%
Ba 233.527†	44622.9	326.04	ug/L	0.784	326.04	ppb	0.784	0.24%
Be 313.107†	527.6	1.8071	ug/L	0.00679	1.8071	ppb	0.00679	0.38%
Ca 317.933Radial†	2600.8	4127.7	ug/L	46.31	4127.7	ppb	46.31	1.12%
Cd 226.502†	272.2	-0.3048	ug/L	0.04444	-0.3048	ppb	0.04444	14.58%
Co 228.616†	617.8	9.5104	ug/L	0.01662	9.5104	ppb	0.01662	0.17%
Cr 267.716†	2224.9	22.909	ug/L	0.0773	22.909	ppb	0.0773	0.34%
Cu 324.752†	4719.6	15.433	ug/L	0.2148	15.433	ppb	0.2148	1.39%
Fe 238.204 Radial†	3322.0	28770	ug/L	388.3	28770	ppb	388.3	1.35%
K 766.490 Radial†	24040.7	4629.6	ug/L	32.72	4629.6	ppb	32.72	0.71%

Mg 279.077 IEC†	160.4	4936.2 ug/L	50.47	4936.2 ppb	50.47	1.02%
Mn 257.610†	418390.1	441.85 ug/L	0.442	441.85 ppb	0.442	0.10%
Mo 202.031†	-15.4	1.7901 ug/L	0.24617	1.7901 ppb	0.24617	13.75%
Na 589.592 Radial†	1929.9	549.29 ug/L	5.866	549.29 ppb	5.866	1.07%
Ni 231.604†	775.2	16.957 ug/L	0.3436	16.957 ppb	0.3436	2.03%
P 214.914†	284.7	121.85 ug/L	5.507	121.85 ppb	5.507	4.52%
Pb 220.353†	190.6	22.541 ug/L	0.6739	22.541 ppb	0.6739	2.99%
S 181.975 Axial†	112.2	123.58 ug/L	5.738	123.58 ppb	5.738	4.64%
Sb 206.836†	10.6	0.1721 ug/L	1.62305	0.1721 ppb	1.62305	943.35%
Se 196.026†	-153.9	7.4179 ug/L	2.49397	7.4179 ppb	2.49397	33.62%
Si 251.611†	246780.4	7084.4 ug/L	5.36	7084.4 ppb	5.36	0.08%
Sn 189.927†	-42.6	-5.4890 ug/L	0.41478	-5.4890 ppb	0.41478	7.56%
Sr 421.552†	8764.3	58.085 ug/L	0.4479	58.085 ppb	0.4479	0.77%
Ti 334.940†	529049.5	829.04 ug/L	1.030	829.04 ppb	1.030	0.12%
Tl 190.801†	-35.3	-0.2804 ug/L	1.18468	-0.2804 ppb	1.18468	422.56%
U 409.014†	-1911.1	-60.291 ug/L	1.4344	-60.291 ppb	1.4344	2.38%
V 292.402†	8517.8	48.177 ug/L	0.5201	48.177 ppb	0.5201	1.08%
Zn 213.857†	7042.2	56.067 ug/L	0.3131	56.067 ppb	0.3131	0.56%
SiO2†	247900.5	15346 ug/L	187.1	15346 ppb	187.1	1.22%

Sequence No.: 22
Sample ID: 243270002|935381|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 45
Date Collected: 1/5/2010 17:21:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243270002|935381|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4901.7	4901.7	96.4	%			17:23:16
1	Y RADIAL	5858.5	5858.5	109.3	%			17:23:16
1	Al 396.153Radial†	184345.1	191263.5	155350	ug/L	155350	ppb	17:22:56
1	Ca 317.933Radial†	12672.4	13128.4	20836	ug/L	20836	ppb	17:22:56
1	Fe 238.204 Radial†	15218.2	15773.1	136600	ug/L	136600	ppb	17:22:56
1	K 766.490 Radial†	110914.5	111734.1	21524	ug/L	21524	ppb	17:22:56
1	Mg 279.077 IEC†	655.0	675.6	20778	ug/L	20778	ppb	17:23:16
1	Na 589.592 Radial†	3205.5	5063.3	1441.1	ug/L	1441.1	ppb	17:22:56
1	Sr 421.552†	32714.8	33931.6	224.83	ug/L	224.83	ppb	17:22:56
1	Sc 361.383	922743.7	922743.7	100.85	%			17:24:14
1	Y 371.029	896791.2	896791.2	114.74	%			17:24:14
1	Ag 328.068†	-9243.3	-9678.3	4.9413	ug/L	4.9413	ppb	17:24:14
1	As 188.979†	-85.4	-53.4	40.348	ug/L	40.348	ppb	17:24:34
1	B 249.677†	1447.4	2148.6	25.708	ug/L	25.708	ppb	17:24:14
1	Ba 233.527†	177363.5	175862.4	1285.6	ug/L	1285.6	ppb	17:24:14
1	Be 313.107†	-3286.4	1116.7	9.2886	ug/L	9.2886	ppb	17:24:14
1	Cd 226.502†	1064.3	1306.0	-1.3181	ug/L	-1.3181	ppb	17:24:34
1	Co 228.616†	3677.4	3735.5	58.760	ug/L	58.760	ppb	17:24:34
1	Cr 267.716†	10379.3	10175.8	104.87	ug/L	104.87	ppb	17:24:34
1	Cu 324.752†	28242.8	19906.9	65.874	ug/L	65.874	ppb	17:24:14
1	Mn 257.610†	1962030.0	1944850.9	2054.2	ug/L	2054.2	ppb	17:24:14
1	Mo 202.031†	-72.9	-95.6	7.0954	ug/L	7.0954	ppb	17:24:34
1	Ni 231.604†	4043.7	3892.3	85.131	ug/L	85.131	ppb	17:24:34
1	P 214.914†	1669.9	1403.3	620.74	ug/L	620.74	ppb	17:24:34
1	Pb 220.353†	600.7	696.4	95.687	ug/L	95.687	ppb	17:24:34
1	S 181.975 Axial†	416.0	350.2	369.45	ug/L	369.45	ppb	17:24:34
1	Sb 206.836†	108.4	66.8	3.0431	ug/L	3.0431	ppb	17:24:34
1	Se 196.026†	-776.4	-734.6	37.763	ug/L	37.763	ppb	17:24:34
1	Si 251.611†	1294773.8	1283216.3	36839	ug/L	36839	ppb	17:24:14
1	Sn 189.927†	-104.2	-107.4	-11.847	ug/L	-11.847	ppb	17:24:34
1	Ti 334.940†	2916924.5	2894170.8	4535.1	ug/L	4535.1	ppb	17:24:14
1	Tl 190.801†	-237.2	-189.3	-1.7383	ug/L	-1.7383	ppb	17:24:34
1	U 409.014†	-10860.8	-8143.2	-258.68	ug/L	-258.68	ppb	17:24:14
1	V 292.402†	38206.8	39685.5	223.31	ug/L	223.31	ppb	17:24:14
1	Zn 213.857†	33179.3	32041.9	254.82	ug/L	254.82	ppb	17:24:14
1	SiO2†	1296156.4	1284565.0	79519	ug/L	79519	ppb	17:25:35
2	Sc Radial	4874.0	4874.0	95.8	%			17:23:41
2	Y RADIAL	5822.9	5822.9	108.6	%			17:23:41
2	Al 396.153Radial†	180843.6	188696.5	153260	ug/L	153260	ppb	17:23:21
2	Ca 317.933Radial†	12465.3	12987.0	20611	ug/L	20611	ppb	17:23:21
2	Fe 238.204 Radial†	14966.5	15600.1	135100	ug/L	135100	ppb	17:23:21
2	K 766.490 Radial†	109314.1	110717.8	21328	ug/L	21328	ppb	17:23:21
2	Mg 279.077 IEC†	659.2	683.9	21035	ug/L	21035	ppb	17:23:41
2	Na 589.592 Radial†	3129.8	5003.1	1424.0	ug/L	1424.0	ppb	17:23:21
2	Sr 421.552†	32172.2	33558.3	222.36	ug/L	222.36	ppb	17:23:21
2	Sc 361.383	910773.5	910773.5	99.540	%			17:24:41
2	Y 371.029	884766.1	884766.1	113.20	%			17:24:41
2	Ag 328.068†	-9231.0	-9786.4	3.9846	ug/L	3.9846	ppb	17:24:41
2	As 188.979†	-65.8	-34.9	46.706	ug/L	46.706	ppb	17:25:02
2	B 249.677†	1543.1	2263.6	28.263	ug/L	28.263	ppb	17:24:41
2	Ba 233.527†	175628.4	176430.7	1289.7	ug/L	1289.7	ppb	17:24:41
2	Be 313.107†	-3205.8	1154.8	9.3174	ug/L	9.3174	ppb	17:24:41
2	Cd 226.502†	1066.4	1322.0	-1.0176	ug/L	-1.0176	ppb	17:25:02
2	Co 228.616†	3646.9	3752.8	59.086	ug/L	59.086	ppb	17:25:02
2	Cr 267.716†	10306.2	10237.6	105.47	ug/L	105.47	ppb	17:25:02
2	Cu 324.752†	27771.7	19801.7	65.487	ug/L	65.487	ppb	17:24:41
2	Mn 257.610†	1940288.1	1948578.5	2058.0	ug/L	2058.0	ppb	17:24:41
2	Mo 202.031†	-85.4	-109.1	6.1039	ug/L	6.1039	ppb	17:25:02
2	Ni 231.604†	4015.2	3916.4	85.657	ug/L	85.657	ppb	17:25:02

2	P 214.914†	1666.9	1422.0	630.52 ug/L	630.52 ppb	17:25:02
2	Pb 220.353†	612.3	715.9	97.360 ug/L	97.360 ppb	17:25:02
2	S 181.975 Axial†	423.7	363.3	384.83 ug/L	384.83 ppb	17:25:02
2	Sb 206.836†	109.0	68.8	3.6940 ug/L	3.6940 ppb	17:25:02
2	Se 196.026†	-779.7	-748.0	26.333 ug/L	26.333 ppb	17:25:02
2	Si 251.611†	1279768.3	1285015.4	36890 ug/L	36890 ppb	17:24:41
2	Sn 189.927†	-81.9	-86.4	-8.7775 ug/L	-8.7775 ppb	17:25:02
2	Ti 334.940†	2884244.6	2899354.4	4543.2 ug/L	4543.2 ppb	17:24:41
2	Tl 190.801†	-222.4	-177.5	1.4980 ug/L	1.4980 ppb	17:25:02
2	U 409.014†	-10714.7	-8137.9	-258.34 ug/L	-258.34 ppb	17:24:41
2	V 292.402†	37915.6	39890.9	224.81 ug/L	224.81 ppb	17:24:41
2	Zn 213.857†	32851.7	32145.2	255.74 ug/L	255.74 ppb	17:24:41
2	SiO2†	1286143.4	1291397.6	79942 ug/L	79942 ppb	17:25:41
3	Sc Radial	4875.0	4875.0	95.9 %		17:24:06
3	Y RADIAL	5822.9	5822.9	108.6 %		17:24:06
3	Al 396.153Radial†	182610.1	190500.0	154730 ug/L	154730 ppb	17:23:46
3	Ca 317.933Radial†	12591.3	13115.7	20816 ug/L	20816 ppb	17:23:46
3	Fe 238.204 Radial†	15098.4	15734.5	136260 ug/L	136260 ppb	17:23:46
3	K 766.490 Radial†	110100.9	111514.9	21481 ug/L	21481 ppb	17:23:46
3	Mg 279.077 IEC†	652.6	676.8	20815 ug/L	20815 ppb	17:24:06
3	Na 589.592 Radial†	3179.0	5053.8	1438.4 ug/L	1438.4 ppb	17:23:46
3	Sr 421.552†	32472.6	33864.7	224.39 ug/L	224.39 ppb	17:23:46
3	Sc 361.383	924446.3	924446.3	101.03 %		17:25:08
3	Y 371.029	898368.1	898368.1	114.94 %		17:25:08
3	Ag 328.068†	-9358.9	-9775.9	4.4170 ug/L	4.4170 ppb	17:25:08
3	As 188.979†	-71.4	-39.5	45.270 ug/L	45.270 ppb	17:25:29
3	B 249.677†	1536.2	2233.9	27.503 ug/L	27.503 ppb	17:25:08
3	Ba 233.527†	178156.6	176323.5	1289.0 ug/L	1289.0 ppb	17:25:08
3	Be 313.107†	-3179.9	1228.1	9.3392 ug/L	9.3392 ppb	17:25:08
3	Cd 226.502†	1046.4	1286.3	-1.4699 ug/L	-1.4699 ppb	17:25:29
3	Co 228.616†	3629.3	3681.1	57.735 ug/L	57.735 ppb	17:25:29
3	Cr 267.716†	10321.0	10099.1	104.10 ug/L	104.10 ppb	17:25:29
3	Cu 324.752†	28239.2	19851.7	65.694 ug/L	65.694 ppb	17:25:08
3	Mn 257.610†	1967357.2	1946540.6	2056.0 ug/L	2056.0 ppb	17:25:08
3	Mo 202.031†	-81.2	-103.7	6.5568 ug/L	6.5568 ppb	17:25:29
3	Ni 231.604†	4024.2	3865.7	84.549 ug/L	84.549 ppb	17:25:29
3	P 214.914†	1684.5	1414.6	626.40 ug/L	626.40 ppb	17:25:29
3	Pb 220.353†	607.0	701.5	96.100 ug/L	96.100 ppb	17:25:29
3	S 181.975 Axial†	423.8	357.1	377.44 ug/L	377.44 ppb	17:25:29
3	Sb 206.836†	91.6	50.0	-1.9023 ug/L	-1.9023 ppb	17:25:29
3	Se 196.026†	-777.9	-734.6	36.727 ug/L	36.727 ppb	17:25:29
3	Si 251.611†	1297651.7	1283700.1	36853 ug/L	36853 ppb	17:25:08
3	Sn 189.927†	-97.8	-100.9	-10.890 ug/L	-10.890 ppb	17:25:29
3	Ti 334.940†	2926585.1	2898405.7	4541.8 ug/L	4541.8 ppb	17:25:08
3	Tl 190.801†	-244.0	-195.6	-3.4245 ug/L	-3.4245 ppb	17:25:29
3	U 409.014†	-10968.2	-8229.7	-261.20 ug/L	-261.20 ppb	17:25:08
3	V 292.402†	38450.7	39857.1	224.42 ug/L	224.42 ppb	17:25:08
3	Zn 213.857†	33302.3	32103.0	255.34 ug/L	255.34 ppb	17:25:08
3	SiO2†	1303573.8	1289539.4	79827 ug/L	79827 ppb	17:25:47

Mean Data: 243270002|935381|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	919321.2	100.47	%	0.814				0.81%
Sc Radial	4883.6	96.0	%	0.31				0.32%
Y 371.029	893308.5	114.29	%	0.952				0.83%
Y RADIAL	5834.8	108.8	%	0.38				0.35%
Ag 328.068†	-9746.9	4.4477	ug/L	0.47910	4.4477	ppb	0.47910	10.77%
Al 396.153Radial†	190153.3	154440	ug/L	1070.6	154440	ppb	1070.6	0.69%
As 188.979†	-42.6	44.108	ug/L	3.3345	44.108	ppb	3.3345	7.56%
B 249.677†	2215.4	27.158	ug/L	1.3117	27.158	ppb	1.3117	4.83%
Ba 233.527†	176205.5	1288.1	ug/L	2.19	1288.1	ppb	2.19	0.17%
Be 313.107†	1166.5	9.3150	ug/L	0.02540	9.3150	ppb	0.02540	0.27%
Ca 317.933Radial†	13077.1	20754	ug/L	124.2	20754	ppb	124.2	0.60%
Cd 226.502†	1304.7	-1.2685	ug/L	0.23019	-1.2685	ppb	0.23019	18.15%
Co 228.616†	3723.1	58.527	ug/L	0.7049	58.527	ppb	0.7049	1.20%
Cr 267.716†	10170.9	104.81	ug/L	0.685	104.81	ppb	0.685	0.65%
Cu 324.752†	19853.4	65.685	ug/L	0.1940	65.685	ppb	0.1940	0.30%
Fe 238.204 Radial†	15702.5	135990	ug/L	786.3	135990	ppb	786.3	0.58%
K 766.490 Radial†	111322.3	21444	ug/L	103.2	21444	ppb	103.2	0.48%

Mg 279.077 IEC†	678.8	20876 ug/L	139.0	20876 ppb	139.0	0.67%
Mn 257.610†	1946656.7	2056.1 ug/L	1.88	2056.1 ppb	1.88	0.09%
Mo 202.031†	-102.8	6.5853 ug/L	0.49637	6.5853 ppb	0.49637	7.54%
Na 589.592 Radial†	5040.1	1434.5 ug/L	9.21	1434.5 ppb	9.21	0.64%
Ni 231.604†	3891.4	85.112 ug/L	0.5546	85.112 ppb	0.5546	0.65%
P 214.914†	1413.3	625.89 ug/L	4.911	625.89 ppb	4.911	0.78%
Pb 220.353†	704.6	96.382 ug/L	0.8714	96.382 ppb	0.8714	0.90%
S 181.975 Axial†	356.8	377.24 ug/L	7.693	377.24 ppb	7.693	2.04%
Sb 206.836†	61.9	1.6116 ug/L	3.06050	1.6116 ppb	3.06050	189.91%
Se 196.026†	-739.1	33.607 ug/L	6.3213	33.607 ppb	6.3213	18.81%
Si 251.611†	1283977.3	36860 ug/L	26.8	36860 ppb	26.8	0.07%
Sn 189.927†	-98.3	-10.505 ug/L	1.5706	-10.505 ppb	1.5706	14.95%
Sr 421.552†	33784.9	223.86 ug/L	1.319	223.86 ppb	1.319	0.59%
Ti 334.940†	2897310.3	4540.1 ug/L	4.32	4540.1 ppb	4.32	0.10%
Tl 190.801†	-187.5	-1.2216 ug/L	2.50156	-1.2216 ppb	2.50156	204.78%
U 409.014†	-8170.3	-259.41 ug/L	1.563	-259.41 ppb	1.563	0.60%
V 292.402†	39811.2	224.18 ug/L	0.779	224.18 ppb	0.779	0.35%
Zn 213.857†	32096.7	255.30 ug/L	0.459	255.30 ppb	0.459	0.18%
SiO2†	1288500.7	79763 ug/L	218.8	79763 ppb	218.8	0.27%

Sequence No.: 23
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 1/5/2010 17:27:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4955.4	4955.4	97.4	%			17:29:49
1	Y RADIAL	5111.3	5111.3	95.34	%			17:29:49
1	Al 396.153Radial†	5714.8	5883.9	4757.2	ug/L	4757.2	ppb	17:29:49
1	Ca 317.933Radial†	2993.7	3053.8	4846.6	ug/L	4846.6	ppb	17:30:09
1	Fe 238.204 Radial†	592.0	592.8	5149.4	ug/L	5149.4	ppb	17:30:09
1	K 766.490 Radial†	29609.2	27052.8	5203.0	ug/L	5203.0	ppb	17:29:49
1	Mg 279.077 IEC†	158.8	159.1	4925.4	ug/L	4925.4	ppb	17:30:09
1	Na 589.592 Radial†	35287.3	37948.5	10801	ug/L	10801	ppb	17:29:49
1	Sr 421.552†	72764.3	74661.0	495.09	ug/L	495.09	ppb	17:29:49
1	Sc 361.383	894014.4	894014.4	97.709	%			17:31:08
1	Y 371.029	755072.3	755072.3	96.605	%			17:31:08
1	Ag 328.068†	114290.9	116458.2	503.66	ug/L	503.66	ppb	17:31:08
1	As 188.979†	1373.6	1437.0	510.56	ug/L	510.56	ppb	17:31:29
1	B 249.677†	22911.9	24162.6	492.94	ug/L	492.94	ppb	17:31:08
1	Ba 233.527†	67484.2	69058.1	504.52	ug/L	504.52	ppb	17:31:08
1	Be 313.107†	1446716.0	1485016.2	502.08	ug/L	502.08	ppb	17:31:08
1	Cd 226.502†	52116.1	53588.8	503.85	ug/L	503.85	ppb	17:31:08
1	Co 228.616†	26132.0	26833.7	501.83	ug/L	501.83	ppb	17:31:29
1	Cr 267.716†	48876.2	49906.1	500.63	ug/L	500.63	ppb	17:31:08
1	Cu 324.752†	172993.5	168951.8	500.21	ug/L	500.21	ppb	17:31:08
1	Mn 257.610†	471029.6	481407.0	505.63	ug/L	505.63	ppb	17:31:08
1	Mo 202.031†	7916.9	8079.2	507.38	ug/L	507.38	ppb	17:31:29
1	Ni 231.604†	22475.3	22885.0	500.47	ug/L	500.47	ppb	17:31:29
1	P 214.914†	5324.7	5197.0	2471.9	ug/L	2471.9	ppb	17:31:29
1	Pb 220.353†	4683.9	4894.5	508.23	ug/L	508.23	ppb	17:31:29
1	S 181.975 Axial†	935.5	895.0	1021.5	ug/L	1021.5	ppb	17:31:29
1	Sb 206.836†	1693.6	1692.7	509.02	ug/L	509.02	ppb	17:31:29
1	Se 196.026†	941.2	998.5	527.96	ug/L	527.96	ppb	17:31:29
1	Si 251.611†	86328.6	87691.2	2505.8	ug/L	2505.8	ppb	17:31:08
1	Sn 189.927†	3314.4	3388.0	502.81	ug/L	502.81	ppb	17:31:29
1	Ti 334.940†	312331.8	321448.9	503.44	ug/L	503.44	ppb	17:31:08
1	Tl 190.801†	1761.6	1848.9	509.66	ug/L	509.66	ppb	17:31:29
1	U 409.014†	13505.1	16448.0	485.77	ug/L	485.77	ppb	17:31:08
1	V 292.402†	75683.3	79258.3	504.46	ug/L	504.46	ppb	17:31:08
1	Zn 213.857†	60698.4	61263.5	499.06	ug/L	499.06	ppb	17:31:08
1	SiO2†	87325.4	88689.2	5464.8	ug/L	5464.8	ppb	17:32:29
2	Sc Radial	4874.7	4874.7	95.9	%			17:30:14
2	Y RADIAL	5015.1	5015.1	93.55	%			17:30:14
2	Al 396.153Radial†	5637.9	5900.8	4771.2	ug/L	4771.2	ppb	17:30:14
2	Ca 317.933Radial†	3007.2	3118.8	4949.7	ug/L	4949.7	ppb	17:30:35
2	Fe 238.204 Radial†	597.7	608.8	5288.2	ug/L	5288.2	ppb	17:30:35
2	K 766.490 Radial†	29220.5	27150.4	5221.8	ug/L	5221.8	ppb	17:30:14
2	Mg 279.077 IEC†	160.7	163.7	5069.1	ug/L	5069.1	ppb	17:30:35
2	Na 589.592 Radial†	34914.1	38158.9	10861	ug/L	10861	ppb	17:30:14
2	Sr 421.552†	71906.4	75002.6	497.35	ug/L	497.35	ppb	17:30:14
2	Sc 361.383	898187.2	898187.2	98.165	%			17:31:36
2	Y 371.029	758152.4	758152.4	96.999	%			17:31:36
2	Ag 328.068†	114808.0	116441.6	503.64	ug/L	503.64	ppb	17:31:36
2	As 188.979†	1356.7	1413.3	502.24	ug/L	502.24	ppb	17:31:56
2	B 249.677†	23162.8	24309.2	495.93	ug/L	495.93	ppb	17:31:36
2	Ba 233.527†	67895.6	69156.4	505.25	ug/L	505.25	ppb	17:31:36
2	Be 313.107†	1453884.7	1485440.0	502.23	ug/L	502.23	ppb	17:31:36
2	Cd 226.502†	52176.1	53402.1	502.08	ug/L	502.08	ppb	17:31:36
2	Co 228.616†	26029.0	26604.6	497.52	ug/L	497.52	ppb	17:31:56
2	Cr 267.716†	48988.1	49787.7	499.45	ug/L	499.45	ppb	17:31:36
2	Cu 324.752†	174091.8	169248.2	501.09	ug/L	501.09	ppb	17:31:36
2	Mn 257.610†	474004.8	482198.2	506.47	ug/L	506.47	ppb	17:31:36
2	Mo 202.031†	7856.4	7980.0	501.17	ug/L	501.17	ppb	17:31:56
2	Ni 231.604†	22390.2	22691.4	496.24	ug/L	496.24	ppb	17:31:56

2	P 214.914†	5284.5	5130.7	2439.0 ug/L	2439.0 ppb	17:31:56
2	Pb 220.353†	4676.8	4865.0	505.16 ug/L	505.16 ppb	17:31:56
2	S 181.975 Axial†	920.7	875.6	999.22 ug/L	999.22 ppb	17:31:56
2	Sb 206.836†	1670.3	1660.8	499.40 ug/L	499.40 ppb	17:31:56
2	Se 196.026†	942.6	995.6	526.82 ug/L	526.82 ppb	17:31:56
2	Si 251.611†	86825.3	87786.8	2508.6 ug/L	2508.6 ppb	17:31:36
2	Sn 189.927†	3296.7	3354.2	497.81 ug/L	497.81 ppb	17:31:56
2	Ti 334.940†	314153.3	321819.3	504.03 ug/L	504.03 ppb	17:31:36
2	Tl 190.801†	1737.3	1815.7	500.60 ug/L	500.60 ppb	17:31:56
2	U 409.014†	13514.1	16392.9	484.13 ug/L	484.13 ppb	17:31:36
2	V 292.402†	76203.2	79428.1	505.42 ug/L	505.42 ppb	17:31:36
2	Zn 213.857†	61008.2	61290.5	499.29 ug/L	499.29 ppb	17:31:36
2	SiO2†	86482.8	87415.6	5386.2 ug/L	5386.2 ppb	17:32:34
3	Sc Radial	4778.2	4778.2	94.0 %		17:30:40
3	Y RADIAL	4999.1	4999.1	93.25 %		17:30:40
3	Al 396.153Radial†	5629.0	6010.1	4859.7 ug/L	4859.7 ppb	17:30:40
3	Ca 317.933Radial†	2987.8	3161.5	5017.5 ug/L	5017.5 ppb	17:31:00
3	Fe 238.204 Radial†	586.8	609.8	5296.9 ug/L	5296.9 ppb	17:31:00
3	K 766.490 Radial†	29055.5	27590.3	5306.5 ug/L	5306.5 ppb	17:30:40
3	Mg 279.077 IEC†	164.4	171.1	5297.9 ug/L	5297.9 ppb	17:31:00
3	Na 589.592 Radial†	34277.7	38216.9	10877 ug/L	10877 ppb	17:30:40
3	Sr 421.552†	70946.9	75496.0	500.63 ug/L	500.63 ppb	17:30:40
3	Sc 361.383	895081.4	895081.4	97.825 %		17:32:03
3	Y 371.029	755948.1	755948.1	96.717 %		17:32:03
3	Ag 328.068†	114302.1	116330.2	503.16 ug/L	503.16 ppb	17:32:03
3	As 188.979†	1368.8	1430.5	508.29 ug/L	508.29 ppb	17:32:23
3	B 249.677†	23051.9	24277.8	495.27 ug/L	495.27 ppb	17:32:03
3	Ba 233.527†	67488.9	68980.6	503.96 ug/L	503.96 ppb	17:32:03
3	Be 313.107†	1447474.8	1484026.9	501.75 ug/L	501.75 ppb	17:32:03
3	Cd 226.502†	51956.6	53362.2	501.70 ug/L	501.70 ppb	17:32:03
3	Co 228.616†	26184.4	26855.5	502.23 ug/L	502.23 ppb	17:32:23
3	Cr 267.716†	48768.9	49736.9	498.94 ug/L	498.94 ppb	17:32:03
3	Cu 324.752†	173178.1	168929.6	500.15 ug/L	500.15 ppb	17:32:03
3	Mn 257.610†	471419.9	481231.3	505.45 ug/L	505.45 ppb	17:32:03
3	Mo 202.031†	7934.2	8087.3	507.90 ug/L	507.90 ppb	17:32:23
3	Ni 231.604†	22494.1	22876.8	500.29 ug/L	500.29 ppb	17:32:23
3	P 214.914†	5304.2	5169.6	2458.4 ug/L	2458.4 ppb	17:32:23
3	Pb 220.353†	4715.6	4921.2	511.01 ug/L	511.01 ppb	17:32:23
3	S 181.975 Axial†	928.8	887.1	1012.4 ug/L	1012.4 ppb	17:32:23
3	Sb 206.836†	1697.1	1694.1	509.57 ug/L	509.57 ppb	17:32:23
3	Se 196.026†	950.3	1006.7	532.58 ug/L	532.58 ppb	17:32:23
3	Si 251.611†	86341.6	87599.2	2503.1 ug/L	2503.1 ppb	17:32:03
3	Sn 189.927†	3338.8	3408.9	505.94 ug/L	505.94 ppb	17:32:23
3	Ti 334.940†	312713.0	321457.4	503.47 ug/L	503.47 ppb	17:32:03
3	Tl 190.801†	1749.3	1834.1	505.61 ug/L	505.61 ppb	17:32:23
3	U 409.014†	13237.1	16157.6	477.15 ug/L	477.15 ppb	17:32:03
3	V 292.402†	75659.7	79141.8	503.71 ug/L	503.71 ppb	17:32:03
3	Zn 213.857†	60647.2	61137.2	498.00 ug/L	498.00 ppb	17:32:03
3	SiO2†	85796.0	87019.2	5361.3 ug/L	5361.3 ppb	17:32:39

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	895761.0	97.900	%	0.2369				0.24%
Sc Radial	4869.5	95.8	%	1.74				1.82%
Y 371.029	756391.0	96.774	%	0.2031				0.21%
Y RADIAL	5041.8	94.04	%	1.132				1.20%
Ag 328.068†	116410.0	503.49	ug/L	0.282	503.49	ppb	0.282	0.06%
QC value within limits for Ag 328.068 Recovery = 100.70%								
Al 396.153Radial†	5931.6	4796.0	ug/L	55.57	4796.0	ppb	55.57	1.16%
QC value within limits for Al 396.153Radial Recovery = 95.92%								
As 188.979†	1426.9	507.03	ug/L	4.304	507.03	ppb	4.304	0.85%
QC value within limits for As 188.979 Recovery = 101.41%								
B 249.677†	24249.9	494.71	ug/L	1.575	494.71	ppb	1.575	0.32%
QC value within limits for B 249.677 Recovery = 98.94%								
Ba 233.527†	69065.0	504.58	ug/L	0.644	504.58	ppb	0.644	0.13%
QC value within limits for Ba 233.527 Recovery = 100.92%								
Be 313.107†	1484827.7	502.02	ug/L	0.245	502.02	ppb	0.245	0.05%
QC value within limits for Be 313.107 Recovery = 100.40%								
Ca 317.933Radial†	3111.3	4937.9	ug/L	86.05	4937.9	ppb	86.05	1.74%

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   QC value within limits for Ca 317.933Radial  Recovery = 98.76%
Cd 226.502†          53451.0      502.54 ug/L         1.147      502.54 ppb          1.147   0.23%
   QC value within limits for Cd 226.502  Recovery = 100.51%
Co 228.616†          26764.6      500.53 ug/L         2.609      500.53 ppb          2.609   0.52%
   QC value within limits for Co 228.616  Recovery = 100.11%
Cr 267.716†          49810.2      499.67 ug/L         0.867      499.67 ppb          0.867   0.17%
   QC value within limits for Cr 267.716  Recovery = 99.93%
Cu 324.752†         169043.2      500.48 ug/L         0.528      500.48 ppb          0.528   0.11%
   QC value within limits for Cu 324.752  Recovery = 100.10%
Fe 238.204 Radial†     603.8      5244.8 ug/L         82.80      5244.8 ppb          82.80   1.58%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.90%
K 766.490 Radial†    27264.5      5243.8 ug/L         55.16      5243.8 ppb          55.16   1.05%
   QC value within limits for K 766.490 Radial  Recovery = 104.88%
Mg 279.077 IEC†        164.6      5097.5 ug/L        187.86      5097.5 ppb         187.86   3.69%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.95%
Mn 257.610†         481612.2      505.85 ug/L         0.544      505.85 ppb          0.544   0.11%
   QC value within limits for Mn 257.610  Recovery = 101.17%
Mo 202.031†          8048.8       505.48 ug/L         3.746      505.48 ppb          3.746   0.74%
   QC value within limits for Mo 202.031  Recovery = 101.10%
Na 589.592 Radial†   38108.1       10846 ug/L          40.2       10846 ppb           40.2   0.37%
   QC value within limits for Na 589.592 Radial  Recovery = 108.46%
Ni 231.604†          22817.7      499.00 ug/L         2.394      499.00 ppb          2.394   0.48%
   QC value within limits for Ni 231.604  Recovery = 99.80%
P 214.914†            5165.7      2456.4 ug/L         16.49      2456.4 ppb          16.49   0.67%
   QC value within limits for P 214.914  Recovery = 98.26%
Pb 220.353†           4893.5      508.13 ug/L         2.928      508.13 ppb          2.928   0.58%
   QC value within limits for Pb 220.353  Recovery = 101.63%
S 181.975 Axial†       885.9      1011.0 ug/L         11.18      1011.0 ppb          11.18   1.11%
   QC value within limits for S 181.975 Axial  Recovery = 101.10%
Sb 206.836†           1682.5      506.00 ug/L         5.718      506.00 ppb          5.718   1.13%
   QC value within limits for Sb 206.836  Recovery = 101.20%
Se 196.026†           1000.3      529.12 ug/L         3.048      529.12 ppb          3.048   0.58%
   QC value within limits for Se 196.026  Recovery = 105.82%
Si 251.611†          87692.4      2505.8 ug/L          2.78      2505.8 ppb           2.78   0.11%
   QC value within limits for Si 251.611  Recovery = 100.23%
Sn 189.927†           3383.7      502.19 ug/L         4.097      502.19 ppb          4.097   0.82%
   QC value within limits for Sn 189.927  Recovery = 100.44%
Sr 421.552†          75053.2      497.69 ug/L         2.783      497.69 ppb          2.783   0.56%
   QC value within limits for Sr 421.552  Recovery = 99.54%
Ti 334.940†         321575.2      503.65 ug/L         0.331      503.65 ppb          0.331   0.07%
   QC value within limits for Ti 334.940  Recovery = 100.73%
Tl 190.801†           1832.9      505.29 ug/L         4.539      505.29 ppb          4.539   0.90%
   QC value within limits for Tl 190.801  Recovery = 101.06%
U 409.014†           16332.8      482.35 ug/L         4.576      482.35 ppb          4.576   0.95%
   QC value within limits for U 409.014  Recovery = 96.47%
V 292.402†           79276.1      504.53 ug/L         0.857      504.53 ppb          0.857   0.17%
   QC value within limits for V 292.402  Recovery = 100.91%
Zn 213.857†          61230.4      498.78 ug/L         0.688      498.78 ppb          0.688   0.14%
   QC value within limits for Zn 213.857  Recovery = 99.76%
SiO2†                87708.0      5404.1 ug/L         54.03      5404.1 ppb          54.03   1.00%
   QC value within limits for SiO2  Recovery = 101.06%
All analyte(s) passed QC.
```

Sequence No.: 24
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 1/5/2010 17:34:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4715.9	4715.9	92.7	%			17:36:40
1	Y RADIAL	4940.3	4940.3	92.15	%			17:36:40
1	Al 396.153Radial†	-13.2	5.3	4.2801	ug/L	4.2801	ppb	17:36:40
1	Ca 317.933Radial†	17.8	0.9	1.4523	ug/L	1.4523	ppb	17:37:00
1	Fe 238.204 Radial†	12.9	-0.8	-6.5758	ug/L	-6.5758	ppb	17:37:00
1	K 766.490 Radial†	3568.9	517.0	99.612	ug/L	99.612	ppb	17:36:40
1	Mg 279.077 IEC†	1.9	-1.9	-57.835	ug/L	-57.835	ppb	17:37:00
1	Na 589.592 Radial†	-1581.9	32.0	9.1066	ug/L	9.1066	ppb	17:36:40
1	Sr 421.552†	33.5	28.7	0.1904	ug/L	0.1904	ppb	17:36:40
1	Sc 361.383	865495.9	865495.9	94.592	%			17:37:57
1	Y 371.029	753269.8	753269.8	96.375	%			17:37:57
1	Ag 328.068†	465.1	-21.1	-0.0859	ug/L	-0.0859	ppb	17:37:57
1	As 188.979†	-32.0	-2.6	-0.9136	ug/L	-0.9136	ppb	17:38:17
1	B 249.677†	-539.8	142.7	2.9247	ug/L	2.9247	ppb	17:37:57
1	Ba 233.527†	13.0	5.2	0.0370	ug/L	0.0370	ppb	17:38:17
1	Be 313.107†	-4425.6	-303.2	-0.1026	ug/L	-0.1026	ppb	17:37:57
1	Cd 226.502†	-237.7	-0.7	-0.0059	ug/L	-0.0059	ppb	17:38:17
1	Co 228.616†	-102.4	-19.3	-0.3590	ug/L	-0.3590	ppb	17:38:17
1	Cr 267.716†	140.1	31.9	0.3217	ug/L	0.3217	ppb	17:37:57
1	Cu 324.752†	7979.5	337.5	0.9983	ug/L	0.9983	ppb	17:37:57
1	Mn 257.610†	590.6	-43.7	-0.0454	ug/L	-0.0454	ppb	17:37:57
1	Mo 202.031†	32.6	11.2	0.6996	ug/L	0.6996	ppb	17:38:17
1	Ni 231.604†	112.9	2.0	0.0436	ug/L	0.0436	ppb	17:38:17
1	P 214.914†	275.3	38.4	18.680	ug/L	18.680	ppb	17:38:17
1	Pb 220.353†	-81.0	15.1	1.5627	ug/L	1.5627	ppb	17:38:17
1	S 181.975 Axial†	67.1	8.6	9.8162	ug/L	9.8162	ppb	17:38:17
1	Sb 206.836†	54.4	16.8	4.9864	ug/L	4.9864	ppb	17:38:17
1	Se 196.026†	-34.1	-0.7	-0.3812	ug/L	-0.3812	ppb	17:38:17
1	Si 251.611†	685.1	62.5	1.7476	ug/L	1.7476	ppb	17:38:17
1	Sn 189.927†	7.5	3.8	0.5576	ug/L	0.5576	ppb	17:38:17
1	Ti 334.940†	-1770.0	-78.2	-0.1183	ug/L	-0.1183	ppb	17:37:57
1	Tl 190.801†	-47.6	-4.4	-1.1901	ug/L	-1.1901	ppb	17:38:17
1	U 409.014†	-2793.8	-327.3	-9.6982	ug/L	-9.6982	ppb	17:37:57
1	V 292.402†	-1749.7	-49.5	-0.3198	ug/L	-0.3198	ppb	17:37:57
1	Zn 213.857†	867.6	59.0	0.4856	ug/L	0.4856	ppb	17:38:17
1	SiO2†	700.6	56.7	3.4061	ug/L	3.4061	ppb	17:39:13
2	Sc Radial	4997.4	4997.4	98.3	%			17:37:05
2	Y RADIAL	5243.9	5243.9	97.81	%			17:37:05
2	Al 396.153Radial†	-24.3	-5.2	-4.2412	ug/L	-4.2412	ppb	17:37:05
2	Ca 317.933Radial†	16.5	-1.4	-2.2724	ug/L	-2.2724	ppb	17:37:25
2	Fe 238.204 Radial†	13.0	-1.5	-12.893	ug/L	-12.893	ppb	17:37:25
2	K 766.490 Radial†	3469.2	198.8	38.290	ug/L	38.290	ppb	17:37:05
2	Mg 279.077 IEC†	-1.5	-5.4	-166.90	ug/L	-166.90	ppb	17:37:25
2	Na 589.592 Radial†	-1575.8	134.3	38.221	ug/L	38.221	ppb	17:37:05
2	Sr 421.552†	21.3	14.2	0.0943	ug/L	0.0943	ppb	17:37:05
2	Sc 361.383	866973.9	866973.9	94.753	%			17:38:23
2	Y 371.029	755356.7	755356.7	96.642	%			17:38:23
2	Ag 328.068†	352.3	-141.0	-0.6028	ug/L	-0.6028	ppb	17:38:23
2	As 188.979†	-35.5	-6.2	-2.1945	ug/L	-2.1945	ppb	17:38:43
2	B 249.677†	-562.4	119.8	2.4556	ug/L	2.4556	ppb	17:38:23
2	Ba 233.527†	4.0	-4.3	-0.0318	ug/L	-0.0318	ppb	17:38:43
2	Be 313.107†	-4438.8	-309.2	-0.1042	ug/L	-0.1042	ppb	17:38:23
2	Cd 226.502†	-251.0	-14.3	-0.1332	ug/L	-0.1332	ppb	17:38:43
2	Co 228.616†	-85.6	-1.4	-0.0258	ug/L	-0.0258	ppb	17:38:43
2	Cr 267.716†	75.7	-36.3	-0.3605	ug/L	-0.3605	ppb	17:38:23
2	Cu 324.752†	7987.4	331.4	0.9800	ug/L	0.9800	ppb	17:38:23
2	Mn 257.610†	635.9	3.1	0.0050	ug/L	0.0050	ppb	17:38:23
2	Mo 202.031†	19.2	-3.0	-0.1913	ug/L	-0.1913	ppb	17:38:43
2	Ni 231.604†	121.2	10.6	0.2319	ug/L	0.2319	ppb	17:38:43

2	P 214.914†	249.7	10.9	5.2291 ug/L	5.2291 ppb	17:38:43
2	Pb 220.353†	-69.4	27.5	2.8440 ug/L	2.8440 ppb	17:38:43
2	S 181.975 Axial†	63.1	4.2	4.7798 ug/L	4.7798 ppb	17:38:43
2	Sb 206.836†	51.4	13.5	4.0231 ug/L	4.0231 ppb	17:38:43
2	Se 196.026†	-43.3	-10.4	-5.3440 ug/L	-5.3440 ppb	17:38:43
2	Si 251.611†	693.1	69.8	1.9924 ug/L	1.9924 ppb	17:38:43
2	Sn 189.927†	8.5	4.8	0.7152 ug/L	0.7152 ppb	17:38:43
2	Ti 334.940†	-1658.5	42.7	0.0710 ug/L	0.0710 ppb	17:38:23
2	Tl 190.801†	-47.2	-3.8	-1.0492 ug/L	-1.0492 ppb	17:38:43
2	U 409.014†	-2780.0	-307.6	-9.1139 ug/L	-9.1139 ppb	17:38:23
2	V 292.402†	-1716.1	-10.9	-0.0905 ug/L	-0.0905 ppb	17:38:23
2	Zn 213.857†	873.9	64.1	0.5304 ug/L	0.5304 ppb	17:38:43
2	SiO2†	705.6	60.7	3.7292 ug/L	3.7292 ppb	17:39:18
3	Sc Radial	4744.2	4744.2	93.3 %		17:37:30
3	Y RADIAL	4984.5	4984.5	92.97 %		17:37:30
3	Al 396.153Radial†	-31.8	-14.6	-11.862 ug/L	-11.862 ppb	17:37:30
3	Ca 317.933Radial†	19.5	2.6	4.1385 ug/L	4.1385 ppb	17:37:50
3	Fe 238.204 Radial†	9.8	-4.2	-36.512 ug/L	-36.512 ppb	17:37:50
3	K 766.490 Radial†	3557.4	481.7	92.791 ug/L	92.791 ppb	17:37:30
3	Mg 279.077 IEC†	4.4	0.8	25.232 ug/L	25.232 ppb	17:37:50
3	Na 589.592 Radial†	-1575.7	48.9	13.905 ug/L	13.905 ppb	17:37:30
3	Sr 421.552†	-8.4	-16.5	-0.1093 ug/L	-0.1093 ppb	17:37:30
3	Sc 361.383	864320.0	864320.0	94.463 %		17:38:48
3	Y 371.029	752164.1	752164.1	96.233 %		17:38:48
3	Ag 328.068†	386.0	-104.1	-0.4522 ug/L	-0.4522 ppb	17:38:48
3	As 188.979†	-37.9	-8.8	-3.1232 ug/L	-3.1232 ppb	17:39:08
3	B 249.677†	-504.4	179.4	3.6795 ug/L	3.6795 ppb	17:38:48
3	Ba 233.527†	9.1	1.1	0.0064 ug/L	0.0064 ppb	17:39:08
3	Be 313.107†	-4383.2	-264.7	-0.0896 ug/L	-0.0896 ppb	17:38:48
3	Cd 226.502†	-218.4	19.3	0.1857 ug/L	0.1857 ppb	17:39:08
3	Co 228.616†	-87.8	-4.0	-0.0728 ug/L	-0.0728 ppb	17:39:08
3	Cr 267.716†	53.0	-60.0	-0.5992 ug/L	-0.5992 ppb	17:38:48
3	Cu 324.752†	8058.2	432.3	1.2773 ug/L	1.2773 ppb	17:38:48
3	Mn 257.610†	687.7	60.0	0.0588 ug/L	0.0588 ppb	17:38:48
3	Mo 202.031†	24.7	2.8	0.1750 ug/L	0.1750 ppb	17:39:08
3	Ni 231.604†	125.4	15.4	0.3364 ug/L	0.3364 ppb	17:39:08
3	P 214.914†	262.6	25.4	12.272 ug/L	12.272 ppb	17:39:08
3	Pb 220.353†	-72.9	23.6	2.4421 ug/L	2.4421 ppb	17:39:08
3	S 181.975 Axial†	56.0	-3.0	-3.4816 ug/L	-3.4816 ppb	17:39:08
3	Sb 206.836†	50.0	12.2	3.6358 ug/L	3.6358 ppb	17:39:08
3	Se 196.026†	-36.2	-3.0	-1.6546 ug/L	-1.6546 ppb	17:39:08
3	Si 251.611†	730.8	111.9	3.1782 ug/L	3.1782 ppb	17:39:08
3	Sn 189.927†	7.2	3.5	0.5157 ug/L	0.5157 ppb	17:39:08
3	Ti 334.940†	-1780.2	-91.5	-0.1382 ug/L	-0.1382 ppb	17:38:48
3	Tl 190.801†	-42.2	1.3	0.3639 ug/L	0.3639 ppb	17:39:08
3	U 409.014†	-2824.5	-363.8	-10.776 ug/L	-10.776 ppb	17:38:48
3	V 292.402†	-1763.0	-66.0	-0.4266 ug/L	-0.4266 ppb	17:38:48
3	Zn 213.857†	865.5	58.0	0.4739 ug/L	0.4739 ppb	17:39:08
3	SiO2†	714.8	72.7	4.4230 ug/L	4.4230 ppb	17:39:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	865596.6	94.603	%	0.1453				0.15%
Sc Radial	4819.2	94.8	%	3.05				3.22%
Y 371.029	753596.9	96.417	%	0.2074				0.22%
Y RADIAL	5056.2	94.31	%	3.059				3.24%
Ag 328.068†	-88.8	-0.3803	ug/L	0.26581	-0.3803	ppb	0.26581	69.90%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-4.8	-3.9411	ug/L	8.07528	-3.9411	ppb	8.07528	204.90%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-5.9	-2.0771	ug/L	1.10947	-2.0771	ppb	1.10947	53.41%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	147.3	3.0199	ug/L	0.61750	3.0199	ppb	0.61750	20.45%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.7	0.0039	ug/L	0.03450	0.0039	ppb	0.03450	892.51%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-292.4	-0.0988	ug/L	0.00800	-0.0988	ppb	0.00800	8.09%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.7	1.1061	ug/L	3.21945	1.1061	ppb	3.21945	291.06%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              1.4      0.0155 ug/L       0.16056      0.0155 ppb       0.16056 >999.9%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†             -8.2     -0.1525 ug/L       0.18034     -0.1525 ppb       0.18034 118.23%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -21.5     -0.2127 ug/L       0.47791     -0.2127 ppb       0.47791 224.70%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            367.1      1.0852 ug/L       0.16666      1.0852 ppb       0.16666  15.36%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†      -2.2    -18.660 ug/L       15.7794     -18.660 ppb       15.7794  84.56%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†      399.2      76.898 ug/L       33.6087      76.898 ppb       33.6087  43.71%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†         -2.2    -66.502 ug/L       96.3605     -66.502 ppb       96.3605 144.90%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              6.5      0.0062 ug/L       0.05214      0.0062 ppb       0.05214 847.31%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              3.7      0.2277 ug/L       0.44780      0.2277 ppb       0.44780 196.63%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      71.7      20.411 ug/L       15.6093      20.411 ppb       15.6093  76.48%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              9.3      0.2039 ug/L       0.14840      0.2039 ppb       0.14840  72.77%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              24.9      12.060 ug/L        6.7279      12.060 ppb        6.7279  55.78%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             22.0      2.2830 ug/L       0.65531      2.2830 ppb       0.65531  28.70%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         3.2      3.7048 ug/L       6.71378      3.7048 ppb       6.71378 181.22%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†             14.2      4.2151 ug/L       0.69550      4.2151 ppb       0.69550  16.50%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†             -4.7     -2.4599 ug/L       2.57752     -2.4599 ppb       2.57752 104.78%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             81.4      2.3061 ug/L       0.76513      2.3061 ppb       0.76513  33.18%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              4.0      0.5962 ug/L       0.10517      0.5962 ppb       0.10517  17.64%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              8.8      0.0585 ug/L       0.15302      0.0585 ppb       0.15302 261.69%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†            -42.3     -0.0618 ug/L       0.11545     -0.0618 ppb       0.11545 186.66%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -2.3     -0.6251 ug/L       0.85944     -0.6251 ppb       0.85944 137.48%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†            -332.9     -9.8626 ug/L       0.84300     -9.8626 ppb       0.84300   8.55%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†            -42.1      -0.2790 ug/L       0.17173     -0.2790 ppb       0.17173  61.55%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             60.4      0.4966 ug/L       0.02980      0.4966 ppb       0.02980   6.00%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   63.4      3.8528 ug/L       0.51961      3.8528 ppb       0.51961  13.49%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 25
Sample ID: 243270003|935381|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 1/5/2010 17:41:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243270003|935381|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4925.3	4925.3	96.9	%			17:43:46
1	Y RADIAL	5654.6	5654.6	105.5	%			17:43:46
1	Al 396.153Radial†	189527.4	195698.0	158950	ug/L	158950	ppb	17:43:26
1	Ca 317.933Radial†	11221.6	11567.6	18358	ug/L	18358	ppb	17:43:26
1	Fe 238.204 Radial†	15864.7	16364.9	141720	ug/L	141720	ppb	17:43:26
1	K 766.490 Radial†	114825.7	115221.0	22194	ug/L	22194	ppb	17:43:26
1	Mg 279.077 IEC†	699.6	718.4	22095	ug/L	22095	ppb	17:43:46
1	Na 589.592 Radial†	7054.4	9021.2	2567.6	ug/L	2567.6	ppb	17:43:26
1	Sr 421.552†	36000.0	37160.9	246.27	ug/L	246.27	ppb	17:43:26
1	Sc 361.383	925888.3	925888.3	101.19	%			17:44:45
1	Y 371.029	864348.6	864348.6	110.59	%			17:44:45
1	Ag 328.068†	-9643.1	-10042.3	5.2159	ug/L	5.2159	ppb	17:44:50
1	As 188.979†	-57.1	-25.2	59.091	ug/L	59.091	ppb	17:45:10
1	B 249.677†	1259.9	1958.4	21.159	ug/L	21.159	ppb	17:44:50
1	Ba 233.527†	207267.7	204816.9	1496.9	ug/L	1496.9	ppb	17:44:50
1	Be 313.107†	-7403.6	-2941.0	9.7983	ug/L	9.7983	ppb	17:44:50
1	Cd 226.502†	1138.3	1375.4	-1.1814	ug/L	-1.1814	ppb	17:45:10
1	Co 228.616†	3167.4	3219.0	47.094	ug/L	47.094	ppb	17:45:10
1	Cr 267.716†	11071.8	10825.2	111.51	ug/L	111.51	ppb	17:45:10
1	Cu 324.752†	31303.9	22836.8	74.806	ug/L	74.806	ppb	17:44:50
1	Mn 257.610†	2139756.9	2113876.2	2232.1	ug/L	2232.1	ppb	17:44:45
1	Mo 202.031†	-66.6	-89.1	7.9921	ug/L	7.9921	ppb	17:45:10
1	Ni 231.604†	3737.2	3575.8	78.212	ug/L	78.212	ppb	17:45:10
1	P 214.914†	1744.7	1471.6	649.93	ug/L	649.93	ppb	17:45:10
1	Pb 220.353†	2226.2	2300.7	262.17	ug/L	262.17	ppb	17:45:10
1	S 181.975 Axial†	735.7	664.6	727.93	ug/L	727.93	ppb	17:45:10
1	Sb 206.836†	124.4	82.2	4.9471	ug/L	4.9471	ppb	17:45:10
1	Se 196.026†	-801.2	-756.5	41.880	ug/L	41.880	ppb	17:45:10
1	Si 251.611†	1277594.4	1261878.8	36226	ug/L	36226	ppb	17:44:45
1	Sn 189.927†	-95.3	-98.4	-10.689	ug/L	-10.689	ppb	17:45:10
1	Ti 334.940†	3544351.5	3504381.5	5490.9	ug/L	5490.9	ppb	17:44:45
1	Tl 190.801†	-243.3	-194.5	5.2769	ug/L	5.2769	ppb	17:45:10
1	U 409.014†	-9360.4	-6623.9	-214.32	ug/L	-214.32	ppb	17:44:50
1	V 292.402†	43572.6	44859.4	254.08	ug/L	254.08	ppb	17:44:50
1	Zn 213.857†	42714.3	41352.8	331.03	ug/L	331.03	ppb	17:44:50
1	SiO2†	1279764.8	1264001.4	78245	ug/L	78245	ppb	17:46:20
2	Sc Radial	4866.6	4866.6	95.7	%			17:44:11
2	Y RADIAL	5597.1	5597.1	104.4	%			17:44:11
2	Al 396.153Radial†	189185.0	197698.8	160570	ug/L	160570	ppb	17:43:51
2	Ca 317.933Radial†	11178.3	11662.0	18508	ug/L	18508	ppb	17:43:51
2	Fe 238.204 Radial†	15842.4	16539.1	143230	ug/L	143230	ppb	17:43:51
2	K 766.490 Radial†	114518.9	116329.4	22408	ug/L	22408	ppb	17:43:51
2	Mg 279.077 IEC†	690.6	717.8	22075	ug/L	22075	ppb	17:44:11
2	Na 589.592 Radial†	7097.1	9153.6	2605.3	ug/L	2605.3	ppb	17:43:51
2	Sr 421.552†	35960.6	37567.8	248.97	ug/L	248.97	ppb	17:43:51
2	Sc 361.383	918924.4	918924.4	100.43	%			17:45:17
2	Y 371.029	857441.8	857441.8	109.70	%			17:45:17
2	Ag 328.068†	-9539.7	-10011.5	5.8448	ug/L	5.8448	ppb	17:45:22
2	As 188.979†	-43.2	-11.8	64.018	ug/L	64.018	ppb	17:45:42
2	B 249.677†	1328.8	2036.4	22.554	ug/L	22.554	ppb	17:45:22
2	Ba 233.527†	204673.6	203786.2	1489.4	ug/L	1489.4	ppb	17:45:22
2	Be 313.107†	-7755.2	-3346.5	9.6498	ug/L	9.6498	ppb	17:45:22
2	Cd 226.502†	1186.8	1432.2	-0.7974	ug/L	-0.7974	ppb	17:45:42
2	Co 228.616†	3197.4	3272.7	48.084	ug/L	48.084	ppb	17:45:42
2	Cr 267.716†	11077.7	10913.9	112.42	ug/L	112.42	ppb	17:45:42
2	Cu 324.752†	30912.7	22681.7	74.424	ug/L	74.424	ppb	17:45:22
2	Mn 257.610†	2121321.1	2111544.2	2229.8	ug/L	2229.8	ppb	17:45:17
2	Mo 202.031†	-64.8	-87.8	8.2213	ug/L	8.2213	ppb	17:45:42
2	Ni 231.604†	3748.4	3614.9	79.067	ug/L	79.067	ppb	17:45:42

2	P 214.914†	1752.3	1492.2	659.46 ug/L	659.46 ppb	17:45:42
2	Pb 220.353†	2224.0	2315.1	263.90 ug/L	263.90 ppb	17:45:42
2	S 181.975 Axial†	734.0	668.5	732.01 ug/L	732.01 ppb	17:45:42
2	Sb 206.836†	126.2	84.9	5.7635 ug/L	5.7635 ppb	17:45:42
2	Se 196.026†	-807.7	-768.9	40.079 ug/L	40.079 ppb	17:45:42
2	Si 251.611†	1267248.9	1261145.7	36205 ug/L	36205 ppb	17:45:17
2	Sn 189.927†	-80.2	-84.0	-8.5204 ug/L	-8.5204 ppb	17:45:42
2	Ti 334.940†	3513880.3	3500584.9	5485.0 ug/L	5485.0 ppb	17:45:17
2	Tl 190.801†	-259.6	-212.5	0.3259 ug/L	0.3259 ppb	17:45:42
2	U 409.014†	-9337.6	-6671.3	-215.91 ug/L	-215.91 ppb	17:45:22
2	V 292.402†	42995.5	44611.2	252.30 ug/L	252.30 ppb	17:45:22
2	Zn 213.857†	42132.8	41093.7	328.82 ug/L	328.82 ppb	17:45:22
2	SiO2†	1266755.9	1260632.5	78037 ug/L	78037 ppb	17:46:26
3	Sc Radial	4871.0	4871.0	95.8 %		17:44:36
3	Y RADIAL	5602.8	5602.8	104.5 %		17:44:36
3	Al 396.153Radial†	185604.3	193783.5	157390 ug/L	157390 ppb	17:44:16
3	Ca 317.933Radial†	10927.4	11389.6	18076 ug/L	18076 ppb	17:44:16
3	Fe 238.204 Radial†	15491.6	16158.0	139930 ug/L	139930 ppb	17:44:16
3	K 766.490 Radial†	112314.2	113920.5	21943 ug/L	21943 ppb	17:44:16
3	Mg 279.077 IEC†	694.0	720.6	22165 ug/L	22165 ppb	17:44:36
3	Na 589.592 Radial†	6835.8	8874.1	2525.7 ug/L	2525.7 ppb	17:44:16
3	Sr 421.552†	35075.5	36610.0	242.62 ug/L	242.62 ppb	17:44:16
3	Sc 361.383	906440.1	906440.1	99.067 %		17:45:49
3	Y 371.029	846132.3	846132.3	108.26 %		17:45:49
3	Ag 328.068†	-9620.1	-10223.5	3.8707 ug/L	3.8707 ppb	17:45:54
3	As 188.979†	-59.3	-28.7	57.587 ug/L	57.587 ppb	17:46:14
3	B 249.677†	1350.4	2076.5	23.810 ug/L	23.810 ppb	17:45:54
3	Ba 233.527†	206232.5	208166.6	1521.2 ug/L	1521.2 ppb	17:45:54
3	Be 313.107†	-7695.4	-3392.5	9.6416 ug/L	9.6416 ppb	17:45:54
3	Cd 226.502†	1177.9	1439.6	-0.3975 ug/L	-0.3975 ppb	17:46:14
3	Co 228.616†	3197.8	3316.9	48.962 ug/L	48.962 ppb	17:46:14
3	Cr 267.716†	11060.1	11048.0	113.72 ug/L	113.72 ppb	17:46:14
3	Cu 324.752†	31096.0	23290.7	76.057 ug/L	76.057 ppb	17:45:54
3	Mn 257.610†	2094102.6	2113160.6	2231.2 ug/L	2231.2 ppb	17:45:49
3	Mo 202.031†	-69.5	-93.5	7.5488 ug/L	7.5488 ppb	17:46:14
3	Ni 231.604†	3773.4	3691.6	80.745 ug/L	80.745 ppb	17:46:14
3	P 214.914†	1745.3	1509.1	669.03 ug/L	669.03 ppb	17:46:14
3	Pb 220.353†	2216.4	2338.0	265.82 ug/L	265.82 ppb	17:46:14
3	S 181.975 Axial†	726.0	670.5	734.95 ug/L	734.95 ppb	17:46:14
3	Sb 206.836†	89.4	49.5	-4.7914 ug/L	-4.7914 ppb	17:46:14
3	Se 196.026†	-812.1	-784.5	22.187 ug/L	22.187 ppb	17:46:14
3	Si 251.611†	1249772.7	1260883.6	36197 ug/L	36197 ppb	17:45:49
3	Sn 189.927†	-98.4	-103.5	-11.504 ug/L	-11.504 ppb	17:46:14
3	Ti 334.940†	3468501.0	3502966.6	5488.7 ug/L	5488.7 ppb	17:45:49
3	Tl 190.801†	-263.5	-220.0	-1.7996 ug/L	-1.7996 ppb	17:46:14
3	U 409.014†	-9494.2	-6957.4	-223.98 ug/L	-223.98 ppb	17:45:54
3	V 292.402†	43466.9	45676.6	259.47 ug/L	259.47 ppb	17:45:54
3	Zn 213.857†	42463.5	42005.3	336.47 ug/L	336.47 ppb	17:45:54
3	SiO2†	1275376.4	1286706.3	79651 ug/L	79651 ppb	17:46:32

Mean Data: 243270003|935381|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	917084.3	100.23	%	1.077				1.07%
Sc Radial	4887.6	96.1	%	0.64				0.67%
Y 371.029	855974.2	109.51	%	1.177				1.07%
Y RADIAL	5618.2	104.8	%	0.59				0.56%
Ag 328.068†	-10092.4	4.9771	ug/L	1.00845	4.9771	ppb	1.00845	20.26%
Al 396.153Radial†	195726.8	158970	ug/L	1590.1	158970	ppb	1590.1	1.00%
As 188.979†	-21.9	60.232	ug/L	3.3638	60.232	ppb	3.3638	5.58%
B 249.677†	2023.8	22.507	ug/L	1.3263	22.507	ppb	1.3263	5.89%
Ba 233.527†	205589.9	1502.5	ug/L	16.66	1502.5	ppb	16.66	1.11%
Be 313.107†	-3226.7	9.6966	ug/L	0.08821	9.6966	ppb	0.08821	0.91%
Ca 317.933Radial†	11539.7	18314	ug/L	219.5	18314	ppb	219.5	1.20%
Cd 226.502†	1415.8	-0.7921	ug/L	0.39198	-0.7921	ppb	0.39198	49.49%
Co 228.616†	3269.5	48.047	ug/L	0.9349	48.047	ppb	0.9349	1.95%
Cr 267.716†	10929.0	112.55	ug/L	1.112	112.55	ppb	1.112	0.99%
Cu 324.752†	22936.4	75.095	ug/L	0.8545	75.095	ppb	0.8545	1.14%
Fe 238.204 Radial†	16354.0	141630	ug/L	1652.0	141630	ppb	1652.0	1.17%
K 766.490 Radial†	115157.0	22181	ug/L	232.5	22181	ppb	232.5	1.05%

Mg 279.077 IEC†	718.9	22112 ug/L	47.2	22112 ppb	47.2	0.21%
Mn 257.610†	2112860.3	2231.0 ug/L	1.16	2231.0 ppb	1.16	0.05%
Mo 202.031†	-90.1	7.9207 ug/L	0.34188	7.9207 ppb	0.34188	4.32%
Na 589.592 Radial†	9016.3	2566.2 ug/L	39.79	2566.2 ppb	39.79	1.55%
Ni 231.604†	3627.5	79.341 ug/L	1.2886	79.341 ppb	1.2886	1.62%
P 214.914†	1491.0	659.47 ug/L	9.551	659.47 ppb	9.551	1.45%
Pb 220.353†	2317.9	263.96 ug/L	1.828	263.96 ppb	1.828	0.69%
S 181.975 Axial†	667.9	731.63 ug/L	3.526	731.63 ppb	3.526	0.48%
Sb 206.836†	72.2	1.9731 ug/L	5.87240	1.9731 ppb	5.87240	297.63%
Se 196.026†	-770.0	34.715 ug/L	10.8870	34.715 ppb	10.8870	31.36%
Si 251.611†	1261302.7	36209 ug/L	14.8	36209 ppb	14.8	0.04%
Sn 189.927†	-95.3	-10.238 ug/L	1.5420	-10.238 ppb	1.5420	15.06%
Sr 421.552†	37112.9	245.95 ug/L	3.186	245.95 ppb	3.186	1.30%
Ti 334.940†	3502644.3	5488.2 ug/L	3.00	5488.2 ppb	3.00	0.05%
Tl 190.801†	-209.0	1.2677 ug/L	3.63106	1.2677 ppb	3.63106	286.43%
U 409.014†	-6750.9	-218.07 ug/L	5.180	-218.07 ppb	5.180	2.38%
V 292.402†	45049.1	255.28 ug/L	3.732	255.28 ppb	3.732	1.46%
Zn 213.857†	41483.9	332.11 ug/L	3.934	332.11 ppb	3.934	1.18%
SiO2†	1270446.7	78644 ug/L	878.2	78644 ppb	878.2	1.12%

Sequence No.: 26
Sample ID: 243270004|935381|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 1/5/2010 17:48:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243270004|935381|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4908.8	4908.8	96.5	%			17:50:57
1	Y RADIAL	5595.3	5595.3	104.4	%			17:50:57
1	Al 396.153Radial†	122009.3	126410.8	102670	ug/L	102670	ppb	17:50:37
1	Ca 317.933Radial†	11994.9	12407.5	19691	ug/L	19691	ppb	17:50:37
1	Fe 238.204 Radial†	15231.7	15764.1	136520	ug/L	136520	ppb	17:50:37
1	K 766.490 Radial†	101374.1	101683.7	19565	ug/L	19565	ppb	17:50:37
1	Mg 279.077 IEC†	595.3	612.8	18836	ug/L	18836	ppb	17:50:57
1	Na 589.592 Radial†	2386.4	4209.9	1198.2	ug/L	1198.2	ppb	17:50:37
1	Sr 421.552†	35604.2	36875.5	244.37	ug/L	244.37	ppb	17:50:37
1	Sc 361.383	876528.3	876528.3	95.798	%			17:52:00
1	Y 371.029	834155.2	834155.2	106.72	%			17:52:00
1	Ag 328.068†	-9092.1	-10003.8	3.7985	ug/L	3.7985	ppb	17:52:00
1	As 188.979†	-91.7	-64.5	52.437	ug/L	52.437	ppb	17:52:20
1	B 249.677†	1440.8	2217.4	27.092	ug/L	27.092	ppb	17:52:00
1	Ba 233.527†	198122.8	206805.2	1511.3	ug/L	1511.3	ppb	17:52:00
1	Be 313.107†	-21575.1	-18146.1	6.5373	ug/L	6.5373	ppb	17:52:00
1	Cd 226.502†	1200.0	1503.2	0.5415	ug/L	0.5415	ppb	17:52:20
1	Co 228.616†	4222.3	4496.6	69.025	ug/L	69.025	ppb	17:52:20
1	Cr 267.716†	11493.8	11881.8	122.08	ug/L	122.08	ppb	17:52:20
1	Cu 324.752†	32713.5	26050.2	84.049	ug/L	84.049	ppb	17:52:00
1	Mn 257.610†	2998849.2	3129730.3	3297.7	ug/L	3297.7	ppb	17:51:55
1	Mo 202.031†	-81.8	-108.6	6.2696	ug/L	6.2696	ppb	17:52:20
1	Ni 231.604†	3587.4	3627.5	79.326	ug/L	79.326	ppb	17:52:20
1	P 214.914†	2296.3	2144.5	963.32	ug/L	963.32	ppb	17:52:20
1	Pb 220.353†	4959.1	5277.3	558.13	ug/L	558.13	ppb	17:52:20
1	S 181.975 Axial†	724.6	694.1	772.64	ug/L	772.64	ppb	17:52:20
1	Sb 206.836†	138.6	104.0	9.9858	ug/L	9.9858	ppb	17:52:20
1	Se 196.026†	-763.8	-762.0	18.337	ug/L	18.337	ppb	17:52:20
1	Si 251.611†	1193318.8	1245003.9	35742	ug/L	35742	ppb	17:51:55
1	Sn 189.927†	-120.3	-129.7	-15.304	ug/L	-15.304	ppb	17:52:20
1	Ti 334.940†	3937085.6	4111585.0	6442.2	ug/L	6442.2	ppb	17:51:55
1	Tl 190.801†	-286.4	-253.0	1.0551	ug/L	1.0551	ppb	17:52:20
1	U 409.014†	-9412.2	-7198.8	-230.72	ug/L	-230.72	ppb	17:52:00
1	V 292.402†	47513.0	51397.5	294.75	ug/L	294.75	ppb	17:52:00
1	Zn 213.857†	62859.5	64758.7	523.68	ug/L	523.68	ppb	17:52:00
1	SiO2†	1200709.7	1252696.7	77547	ug/L	77547	ppb	17:53:30
2	Sc Radial	4918.6	4918.6	96.7	%			17:51:22
2	Y RADIAL	5630.5	5630.5	105.0	%			17:51:22
2	Al 396.153Radial†	122132.7	126286.0	102570	ug/L	102570	ppb	17:51:02
2	Ca 317.933Radial†	11979.4	12366.6	19627	ug/L	19627	ppb	17:51:02
2	Fe 238.204 Radial†	15264.3	15766.2	136540	ug/L	136540	ppb	17:51:02
2	K 766.490 Radial†	101756.2	101869.0	19601	ug/L	19601	ppb	17:51:02
2	Mg 279.077 IEC†	596.3	612.6	18827	ug/L	18827	ppb	17:51:22
2	Na 589.592 Radial†	2428.5	4248.5	1209.2	ug/L	1209.2	ppb	17:51:02
2	Sr 421.552†	35636.7	36835.4	244.10	ug/L	244.10	ppb	17:51:02
2	Sc 361.383	870131.8	870131.8	95.099	%			17:52:32
2	Y 371.029	826282.4	826282.4	105.72	%			17:52:32
2	Ag 328.068†	-8982.4	-9958.1	3.9877	ug/L	3.9877	ppb	17:52:32
2	As 188.979†	-81.9	-54.9	55.342	ug/L	55.342	ppb	17:52:52
2	B 249.677†	1381.2	2165.8	26.032	ug/L	26.032	ppb	17:52:32
2	Ba 233.527†	195963.6	206055.1	1505.8	ug/L	1505.8	ppb	17:52:32
2	Be 313.107†	-21503.3	-18236.1	6.3905	ug/L	6.3905	ppb	17:52:32
2	Cd 226.502†	1224.5	1538.2	0.8683	ug/L	0.8683	ppb	17:52:52
2	Co 228.616†	4216.2	4522.5	69.631	ug/L	69.631	ppb	17:52:52
2	Cr 267.716†	11520.5	11998.1	123.24	ug/L	123.24	ppb	17:52:52
2	Cu 324.752†	32206.4	25768.1	83.215	ug/L	83.215	ppb	17:52:32
2	Mn 257.610†	2955349.9	3107001.1	3273.9	ug/L	3273.9	ppb	17:52:26
2	Mo 202.031†	-88.5	-116.4	5.7876	ug/L	5.7876	ppb	17:52:52
2	Ni 231.604†	3571.8	3638.6	79.569	ug/L	79.569	ppb	17:52:52

2	P 214.914†	2284.8	2150.0	966.12 ug/L	966.12 ppb	17:52:52
2	Pb 220.353†	4958.6	5314.9	562.00 ug/L	562.00 ppb	17:52:52
2	S 181.975 Axial†	741.1	716.9	798.74 ug/L	798.74 ppb	17:52:52
2	Sb 206.836†	125.9	91.7	6.4873 ug/L	6.4873 ppb	17:52:52
2	Se 196.026†	-758.7	-762.6	18.096 ug/L	18.096 ppb	17:52:52
2	Si 251.611†	1173612.8	1233439.3	35410 ug/L	35410 ppb	17:52:26
2	Sn 189.927†	-113.5	-123.5	-14.386 ug/L	-14.386 ppb	17:52:52
2	Ti 334.940†	3872374.8	4073750.7	6383.0 ug/L	6383.0 ppb	17:52:26
2	Tl 190.801†	-285.2	-253.9	0.1973 ug/L	0.1973 ppb	17:52:52
2	U 409.014†	-9011.2	-6849.5	-220.37 ug/L	-220.37 ppb	17:52:32
2	V 292.402†	46966.3	51187.2	293.51 ug/L	293.51 ppb	17:52:32
2	Zn 213.857†	62024.6	64363.1	520.43 ug/L	520.43 ppb	17:52:32
2	SiO2†	1184334.0	1244690.8	77052 ug/L	77052 ppb	17:53:36
3	Sc Radial	4832.8	4832.8	95.0 %		17:51:47
3	Y RADIAL	5537.2	5537.2	103.3 %		17:51:47
3	Al 396.153Radial†	122645.9	129069.1	104830 ug/L	104830 ppb	17:51:27
3	Ca 317.933Radial†	12078.1	12690.4	20141 ug/L	20141 ppb	17:51:27
3	Fe 238.204 Radial†	15318.5	16103.7	139460 ug/L	139460 ppb	17:51:27
3	K 766.490 Radial†	102133.3	104134.7	20038 ug/L	20038 ppb	17:51:27
3	Mg 279.077 IEC†	587.4	614.2	18876 ug/L	18876 ppb	17:51:47
3	Na 589.592 Radial†	2434.4	4299.3	1223.7 ug/L	1223.7 ppb	17:51:27
3	Sr 421.552†	35749.3	37608.4	249.22 ug/L	249.22 ppb	17:51:27
3	Sc 361.383	878050.1	878050.1	95.964 %		17:53:03
3	Y 371.029	835432.6	835432.6	106.89 %		17:53:03
3	Ag 328.068†	-9026.6	-9919.1	5.1224 ug/L	5.1224 ppb	17:53:03
3	As 188.979†	-95.6	-68.3	51.150 ug/L	51.150 ppb	17:53:23
3	B 249.677†	1372.9	2144.0	25.200 ug/L	25.200 ppb	17:53:03
3	Ba 233.527†	198226.8	206555.2	1509.6 ug/L	1509.6 ppb	17:53:03
3	Be 313.107†	-21651.4	-18186.6	6.4318 ug/L	6.4318 ppb	17:53:03
3	Cd 226.502†	1212.0	1513.6	0.3441 ug/L	0.3441 ppb	17:53:23
3	Co 228.616†	4218.3	4484.7	68.862 ug/L	68.862 ppb	17:53:23
3	Cr 267.716†	11489.8	11856.9	121.87 ug/L	121.87 ppb	17:53:23
3	Cu 324.752†	32738.6	26017.2	84.101 ug/L	84.101 ppb	17:53:03
3	Mn 257.610†	2987630.2	3112614.2	3280.1 ug/L	3280.1 ppb	17:52:58
3	Mo 202.031†	-73.6	-100.0	7.0929 ug/L	7.0929 ppb	17:53:23
3	Ni 231.604†	3563.8	3596.3	78.645 ug/L	78.645 ppb	17:53:23
3	P 214.914†	2266.4	2109.1	944.33 ug/L	944.33 ppb	17:53:23
3	Pb 220.353†	4907.4	5214.5	551.87 ug/L	551.87 ppb	17:53:23
3	S 181.975 Axial†	728.6	696.9	775.42 ug/L	775.42 ppb	17:53:23
3	Sb 206.836†	112.8	76.8	2.0443 ug/L	2.0443 ppb	17:53:23
3	Se 196.026†	-747.6	-743.7	36.482 ug/L	36.482 ppb	17:53:23
3	Si 251.611†	1187153.1	1236419.9	35495 ug/L	35495 ppb	17:52:58
3	Sn 189.927†	-128.0	-137.5	-16.370 ug/L	-16.370 ppb	17:53:23
3	Ti 334.940†	3915296.2	4081756.5	6395.5 ug/L	6395.5 ppb	17:52:58
3	Tl 190.801†	-276.1	-241.8	3.7231 ug/L	3.7231 ppb	17:53:23
3	U 409.014†	-8995.9	-6748.0	-217.73 ug/L	-217.73 ppb	17:53:03
3	V 292.402†	47402.6	51196.4	293.13 ug/L	293.13 ppb	17:53:03
3	Zn 213.857†	62877.2	64663.5	522.75 ug/L	522.75 ppb	17:53:03
3	SiO2†	1185101.2	1234259.5	76406 ug/L	76406 ppb	17:53:41

Mean Data: 243270004|935381|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	874903.4	95.620	%	0.4592				0.48%
Sc Radial	4886.8	96.1	%	0.92				0.96%
Y 371.029	831956.7	106.44	%	0.634				0.60%
Y RADIAL	5587.7	104.2	%	0.88				0.84%
Ag 328.068†	-9960.3	4.3029	ug/L	0.71605	4.3029	ppb	0.71605	16.64%
Al 396.153Radial†	127255.3	103360	ug/L	1276.8	103360	ppb	1276.8	1.24%
As 188.979†	-62.6	52.976	ug/L	2.1474	52.976	ppb	2.1474	4.05%
B 249.677†	2175.7	26.108	ug/L	0.9484	26.108	ppb	0.9484	3.63%
Ba 233.527†	206471.8	1508.9	ug/L	2.79	1508.9	ppb	2.79	0.19%
Be 313.107†	-18189.6	6.4532	ug/L	0.07574	6.4532	ppb	0.07574	1.17%
Ca 317.933Radial†	12488.2	19820	ug/L	279.9	19820	ppb	279.9	1.41%
Cd 226.502†	1518.3	0.5846	ug/L	0.26473	0.5846	ppb	0.26473	45.28%
Co 228.616†	4501.3	69.173	ug/L	0.4052	69.173	ppb	0.4052	0.59%
Cr 267.716†	11912.3	122.40	ug/L	0.735	122.40	ppb	0.735	0.60%
Cu 324.752†	25945.2	83.789	ug/L	0.4972	83.789	ppb	0.4972	0.59%
Fe 238.204 Radial†	15878.0	137510	ug/L	1692.5	137510	ppb	1692.5	1.23%
K 766.490 Radial†	102562.4	19735	ug/L	263.2	19735	ppb	263.2	1.33%

Mg 279.077 IEC†	613.2	18846	ug/L	26.2	18846	ppb	26.2	0.14%
Mn 257.610†	3116448.5	3283.9	ug/L	12.38	3283.9	ppb	12.38	0.38%
Mo 202.031†	-108.3	6.3834	ug/L	0.66002	6.3834	ppb	0.66002	10.34%
Na 589.592 Radial†	4252.6	1210.4	ug/L	12.76	1210.4	ppb	12.76	1.05%
Ni 231.604†	3620.8	79.180	ug/L	0.4792	79.180	ppb	0.4792	0.61%
P 214.914†	2134.5	957.92	ug/L	11.856	957.92	ppb	11.856	1.24%
Pb 220.353†	5268.9	557.33	ug/L	5.112	557.33	ppb	5.112	0.92%
S 181.975 Axial†	702.6	782.26	ug/L	14.334	782.26	ppb	14.334	1.83%
Sb 206.836†	90.9	6.1724	ug/L	3.98010	6.1724	ppb	3.98010	64.48%
Se 196.026†	-756.1	24.305	ug/L	10.5462	24.305	ppb	10.5462	43.39%
Si 251.611†	1238287.7	35549	ug/L	172.4	35549	ppb	172.4	0.49%
Sn 189.927†	-130.2	-15.353	ug/L	0.9933	-15.353	ppb	0.9933	6.47%
Sr 421.552†	37106.5	245.90	ug/L	2.883	245.90	ppb	2.883	1.17%
Ti 334.940†	4089030.7	6406.9	ug/L	31.24	6406.9	ppb	31.24	0.49%
Tl 190.801†	-249.5	1.6585	ug/L	1.83870	1.6585	ppb	1.83870	110.87%
U 409.014†	-6932.1	-222.94	ug/L	6.865	-222.94	ppb	6.865	3.08%
V 292.402†	51260.4	293.80	ug/L	0.850	293.80	ppb	0.850	0.29%
Zn 213.857†	64595.1	522.29	ug/L	1.674	522.29	ppb	1.674	0.32%
SiO2†	1243882.4	77002	ug/L	572.6	77002	ppb	572.6	0.74%

Sequence No.: 27
Sample ID: 243270005|935381|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 48
Date Collected: 1/5/2010 17:55:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243270005|935381|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4975.2	4975.2	97.8	%			17:58:06
1	Y RADIAL	5707.3	5707.3	106.5	%			17:58:06
1	Al 396.153Radial†	114370.6	116917.0	94961	ug/L	94961	ppb	17:57:46
1	Ca 317.933Radial†	15383.0	15704.7	24924	ug/L	24924	ppb	17:57:46
1	Fe 238.204 Radial†	13765.7	14055.2	121720	ug/L	121720	ppb	17:57:46
1	K 766.490 Radial†	71658.6	69910.5	13438	ug/L	13438	ppb	17:57:46
1	Mg 279.077 IEC†	589.7	598.8	18414	ug/L	18414	ppb	17:58:06
1	Na 589.592 Radial†	2427.9	4219.3	1200.9	ug/L	1200.9	ppb	17:57:46
1	Sr 421.552†	35735.2	36517.3	241.94	ug/L	241.94	ppb	17:57:46
1	Sc 361.383	927602.3	927602.3	101.38	%			17:59:05
1	Y 371.029	867678.4	867678.4	111.01	%			17:59:05
1	Ag 328.068†	-8244.9	-8645.5	4.4763	ug/L	4.4763	ppb	17:59:05
1	As 188.979†	-109.8	-77.1	35.532	ug/L	35.532	ppb	17:59:25
1	B 249.677†	953.5	1653.9	17.580	ug/L	17.580	ppb	17:59:05
1	Ba 233.527†	378560.8	373400.4	2725.0	ug/L	2725.0	ppb	17:59:05
1	Be 313.107†	-21423.2	-16756.3	4.6192	ug/L	4.6192	ppb	17:59:05
1	Cd 226.502†	1030.8	1267.3	-0.2004	ug/L	-0.2004	ppb	17:59:25
1	Co 228.616†	3061.5	3108.8	46.434	ug/L	46.434	ppb	17:59:25
1	Cr 267.716†	8936.6	8698.8	89.874	ug/L	89.874	ppb	17:59:25
1	Cu 324.752†	33679.5	25122.9	80.550	ug/L	80.550	ppb	17:59:05
1	Mn 257.610†	3444228.2	3396687.7	3576.4	ug/L	3576.4	ppb	17:59:05
1	Mo 202.031†	-88.4	-110.5	4.7376	ug/L	4.7376	ppb	17:59:25
1	Ni 231.604†	3619.7	3453.1	75.527	ug/L	75.527	ppb	17:59:25
1	P 214.914†	4874.3	4555.3	2154.9	ug/L	2154.9	ppb	17:59:25
1	Pb 220.353†	772.2	862.4	100.53	ug/L	100.53	ppb	17:59:25
1	S 181.975 Axial†	589.7	519.3	574.50	ug/L	574.50	ppb	17:59:25
1	Sb 206.836†	121.5	79.2	6.5649	ug/L	6.5649	ppb	17:59:25
1	Se 196.026†	-715.9	-670.9	21.040	ug/L	21.040	ppb	17:59:25
1	Si 251.611†	1190069.1	1173211.8	33683	ug/L	33683	ppb	17:59:05
1	Sn 189.927†	-149.0	-151.1	-18.137	ug/L	-18.137	ppb	17:59:25
1	Ti 334.940†	3380566.4	3336353.3	5228.1	ug/L	5228.1	ppb	17:59:05
1	Tl 190.801†	-288.9	-239.1	-2.8274	ug/L	-2.8274	ppb	17:59:25
1	U 409.014†	-9080.3	-6330.5	-203.07	ug/L	-203.07	ppb	17:59:05
1	V 292.402†	45576.2	46756.1	269.25	ug/L	269.25	ppb	17:59:05
1	Zn 213.857†	29695.2	28432.9	226.07	ug/L	226.07	ppb	17:59:25
1	SiO2†	1190726.6	1173838.1	72669	ug/L	72669	ppb	18:00:25
2	Sc Radial	4974.5	4974.5	97.8	%			17:58:31
2	Y RADIAL	5698.9	5698.9	106.3	%			17:58:31
2	Al 396.153Radial†	116096.7	118698.4	96408	ug/L	96408	ppb	17:58:11
2	Ca 317.933Radial†	15624.0	15953.3	25319	ug/L	25319	ppb	17:58:11
2	Fe 238.204 Radial†	13948.5	14244.1	123360	ug/L	123360	ppb	17:58:11
2	K 766.490 Radial†	72970.0	71261.6	13697	ug/L	13697	ppb	17:58:11
2	Mg 279.077 IEC†	598.0	607.4	18679	ug/L	18679	ppb	17:58:31
2	Na 589.592 Radial†	2437.1	4229.1	1203.7	ug/L	1203.7	ppb	17:58:11
2	Sr 421.552†	36466.7	37270.4	246.93	ug/L	246.93	ppb	17:58:11
2	Sc 361.383	911604.2	911604.2	99.631	%			17:59:32
2	Y 371.029	854961.4	854961.4	109.39	%			17:59:32
2	Ag 328.068†	-8303.4	-8846.9	4.1818	ug/L	4.1818	ppb	17:59:32
2	As 188.979†	-111.4	-80.6	35.607	ug/L	35.607	ppb	17:59:52
2	B 249.677†	807.1	1523.5	14.689	ug/L	14.689	ppb	17:59:32
2	Ba 233.527†	380859.8	382261.1	2789.6	ug/L	2789.6	ppb	17:59:32
2	Be 313.107†	-21674.6	-17379.4	4.6567	ug/L	4.6567	ppb	17:59:32
2	Cd 226.502†	1037.6	1292.0	-0.1302	ug/L	-0.1302	ppb	17:59:52
2	Co 228.616†	3077.8	3178.1	47.467	ug/L	47.467	ppb	17:59:52
2	Cr 267.716†	8954.0	8870.9	91.640	ug/L	91.640	ppb	17:59:52
2	Cu 324.752†	33837.2	25864.2	82.827	ug/L	82.827	ppb	17:59:32
2	Mn 257.610†	3467974.5	3480143.6	3664.2	ug/L	3664.2	ppb	17:59:32
2	Mo 202.031†	-95.8	-119.4	4.3328	ug/L	4.3328	ppb	17:59:52
2	Ni 231.604†	3648.8	3545.0	77.537	ug/L	77.537	ppb	17:59:52

2	P 214.914†	4899.6	4665.1	2207.5 ug/L	2207.5 ppb	17:59:52
2	Pb 220.353†	764.6	868.2	101.32 ug/L	101.32 ppb	17:59:52
2	S 181.975 Axial†	589.3	529.1	585.42 ug/L	585.42 ppb	17:59:52
2	Sb 206.836†	89.5	49.2	-2.7221 ug/L	-2.7221 ppb	17:59:52
2	Se 196.026†	-716.0	-683.4	19.570 ug/L	19.570 ppb	17:59:52
2	Si 251.611†	1196532.6	1200300.0	34460 ug/L	34460 ppb	17:59:32
2	Sn 189.927†	-148.4	-153.1	-18.367 ug/L	-18.367 ppb	17:59:52
2	Ti 334.940†	3402422.6	3416810.1	5354.1 ug/L	5354.1 ppb	17:59:32
2	Tl 190.801†	-281.0	-236.1	-0.5103 ug/L	-0.5103 ppb	17:59:52
2	U 409.014†	-8938.1	-6344.9	-203.70 ug/L	-203.70 ppb	17:59:32
2	V 292.402†	45987.3	47957.8	276.40 ug/L	276.40 ppb	17:59:32
2	Zn 213.857†	29840.3	29092.6	231.38 ug/L	231.38 ppb	17:59:52
2	SiO2†	1179464.8	1183146.7	73246 ug/L	73246 ppb	18:00:31
3	Sc Radial	4881.4	4881.4	96.0 %		17:58:56
3	Y RADIAL	5606.2	5606.2	104.6 %		17:58:56
3	Al 396.153Radial†	114054.2	118832.6	96517 ug/L	96517 ppb	17:58:36
3	Ca 317.933Radial†	15332.8	15954.3	25320 ug/L	25320 ppb	17:58:36
3	Fe 238.204 Radial†	13729.0	14287.2	123730 ug/L	123730 ppb	17:58:36
3	K 766.490 Radial†	71578.2	71233.5	13692 ug/L	13692 ppb	17:58:36
3	Mg 279.077 IEC†	595.0	615.9	18941 ug/L	18941 ppb	17:58:56
3	Na 589.592 Radial†	2437.6	4277.1	1217.4 ug/L	1217.4 ppb	17:58:36
3	Sr 421.552†	35711.0	37193.6	246.42 ug/L	246.42 ppb	17:58:36
3	Sc 361.383	914602.3	914602.3	99.959 %		17:59:59
3	Y 371.029	857542.4	857542.4	109.72 %		17:59:59
3	Ag 328.068†	-8366.3	-8882.5	4.1504 ug/L	4.1504 ppb	17:59:59
3	As 188.979†	-105.8	-74.6	37.526 ug/L	37.526 ppb	18:00:19
3	B 249.677†	935.2	1649.0	17.212 ug/L	17.212 ppb	17:59:59
3	Ba 233.527†	380100.5	380248.3	2774.9 ug/L	2774.9 ppb	17:59:59
3	Be 313.107†	-21490.6	-17124.1	4.6902 ug/L	4.6902 ppb	17:59:59
3	Cd 226.502†	1040.9	1291.9	-0.1702 ug/L	-0.1702 ppb	18:00:19
3	Co 228.616†	3029.7	3119.9	46.423 ug/L	46.423 ppb	18:00:19
3	Cr 267.716†	8855.9	8743.4	90.368 ug/L	90.368 ppb	18:00:19
3	Cu 324.752†	33754.9	25670.5	82.273 ug/L	82.273 ppb	17:59:59
3	Mn 257.610†	3461005.0	3461760.8	3644.9 ug/L	3644.9 ppb	17:59:59
3	Mo 202.031†	-101.7	-125.0	4.0165 ug/L	4.0165 ppb	18:00:19
3	Ni 231.604†	3564.9	3449.0	75.438 ug/L	75.438 ppb	18:00:19
3	P 214.914†	4802.2	4551.6	2151.7 ug/L	2151.7 ppb	18:00:19
3	Pb 220.353†	729.7	830.7	97.430 ug/L	97.430 ppb	18:00:19
3	S 181.975 Axial†	571.9	509.8	563.36 ug/L	563.36 ppb	18:00:19
3	Sb 206.836†	110.4	69.7	3.4437 ug/L	3.4437 ppb	18:00:19
3	Se 196.026†	-715.7	-680.7	22.047 ug/L	22.047 ppb	18:00:19
3	Si 251.611†	1195187.4	1195017.4	34309 ug/L	34309 ppb	17:59:59
3	Sn 189.927†	-156.4	-160.6	-19.477 ug/L	-19.477 ppb	18:00:19
3	Ti 334.940†	3396517.6	3399707.9	5327.3 ug/L	5327.3 ppb	17:59:59
3	Tl 190.801†	-251.3	-205.4	7.5736 ug/L	7.5736 ppb	18:00:19
3	U 409.014†	-8954.6	-6332.0	-203.37 ug/L	-203.37 ppb	17:59:59
3	V 292.402†	46026.5	47845.7	275.67 ug/L	275.67 ppb	17:59:59
3	Zn 213.857†	29304.4	28458.3	226.15 ug/L	226.15 ppb	18:00:19
3	SiO2†	1195784.6	1195592.6	74016 ug/L	74016 ppb	18:00:37

Mean Data: 243270005|935381|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	917936.3	100.32	%	0.929				0.93%
Sc Radial	4943.7	97.2	%	1.06				1.09%
Y 371.029	860060.7	110.04	%	0.860				0.78%
Y RADIAL	5670.8	105.8	%	1.05				0.99%
Ag 328.068†	-8791.6	4.2695	ug/L	0.17981	4.2695	ppb	0.17981	4.21%
Al 396.153Radial†	118149.3	95962	ug/L	868.5	95962	ppb	868.5	0.91%
As 188.979†	-77.4	36.222	ug/L	1.1302	36.222	ppb	1.1302	3.12%
B 249.677†	1608.8	16.493	ug/L	1.5736	16.493	ppb	1.5736	9.54%
Ba 233.527†	378636.6	2763.2	ug/L	33.89	2763.2	ppb	33.89	1.23%
Be 313.107†	-17086.6	4.6554	ug/L	0.03551	4.6554	ppb	0.03551	0.76%
Ca 317.933Radial†	15870.7	25188	ug/L	228.3	25188	ppb	228.3	0.91%
Cd 226.502†	1283.7	-0.1669	ug/L	0.03517	-0.1669	ppb	0.03517	21.07%
Co 228.616†	3135.6	46.775	ug/L	0.5994	46.775	ppb	0.5994	1.28%
Cr 267.716†	8771.0	90.628	ug/L	0.9113	90.628	ppb	0.9113	1.01%
Cu 324.752†	25552.6	81.883	ug/L	1.1875	81.883	ppb	1.1875	1.45%
Fe 238.204 Radial†	14195.5	122940	ug/L	1068.5	122940	ppb	1068.5	0.87%
K 766.490 Radial†	70801.9	13609	ug/L	148.3	13609	ppb	148.3	1.09%

Mg 279.077 IEC†	607.4	18678 ug/L	263.7	18678 ppb	263.7	1.41%
Mn 257.610†	3446197.4	3628.5 ug/L	46.11	3628.5 ppb	46.11	1.27%
Mo 202.031†	-118.3	4.3623 ug/L	0.36146	4.3623 ppb	0.36146	8.29%
Na 589.592 Radial†	4241.8	1207.3 ug/L	8.81	1207.3 ppb	8.81	0.73%
Ni 231.604†	3482.4	76.167 ug/L	1.1873	76.167 ppb	1.1873	1.56%
P 214.914†	4590.7	2171.3 ug/L	31.36	2171.3 ppb	31.36	1.44%
Pb 220.353†	853.8	99.759 ug/L	2.0549	99.759 ppb	2.0549	2.06%
S 181.975 Axial†	519.4	574.42 ug/L	11.032	574.42 ppb	11.032	1.92%
Sb 206.836†	66.0	2.4288 ug/L	4.72592	2.4288 ppb	4.72592	194.57%
Se 196.026†	-678.3	20.886 ug/L	1.2459	20.886 ppb	1.2459	5.97%
Si 251.611†	1189509.7	34151 ug/L	412.3	34151 ppb	412.3	1.21%
Sn 189.927†	-155.0	-18.660 ug/L	0.7165	-18.660 ppb	0.7165	3.84%
Sr 421.552†	36993.7	245.10 ug/L	2.746	245.10 ppb	2.746	1.12%
Ti 334.940†	3384290.4	5303.2 ug/L	66.41	5303.2 ppb	66.41	1.25%
Tl 190.801†	-226.9	1.4120 ug/L	5.46042	1.4120 ppb	5.46042	386.73%
U 409.014†	-6335.8	-203.38 ug/L	0.319	-203.38 ppb	0.319	0.16%
V 292.402†	47519.9	273.78 ug/L	3.937	273.78 ppb	3.937	1.44%
Zn 213.857†	28661.2	227.87 ug/L	3.041	227.87 ppb	3.041	1.33%
SiO2†	1184192.5	73310 ug/L	675.7	73310 ppb	675.7	0.92%

Sequence No.: 28
Sample ID: 243270006|935381|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 49
Date Collected: 1/5/2010 18:02:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243270006|935381|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4900.2	4900.2	96.4	%			18:05:01
1	Y RADIAL	5477.7	5477.7	102.2	%			18:05:01
1	Al 396.153Radial†	156184.1	162097.4	131660	ug/L	131660	ppb	18:04:41
1	Ca 317.933Radial†	23750.1	24628.1	39086	ug/L	39086	ppb	18:04:41
1	Fe 238.204 Radial†	17481.7	18126.8	156980	ug/L	156980	ppb	18:04:41
1	K 766.490 Radial†	111588.7	112468.4	21657	ug/L	21657	ppb	18:04:41
1	Mg 279.077 IEC†	806.1	832.6	25615	ug/L	25615	ppb	18:05:01
1	Na 589.592 Radial†	10693.2	12834.5	3653.0	ug/L	3653.0	ppb	18:04:41
1	Sr 421.552†	45976.0	47703.5	316.00	ug/L	316.00	ppb	18:04:41
1	Sc 361.383	911153.2	911153.2	99.582	%			18:06:00
1	Y 371.029	822641.5	822641.5	105.25	%			18:06:00
1	Ag 328.068†	-10045.9	-10600.8	7.4571	ug/L	7.4571	ppb	18:06:00
1	As 188.979†	-56.5	-25.5	41.999	ug/L	41.999	ppb	18:06:20
1	B 249.677†	1010.7	1728.3	14.435	ug/L	14.435	ppb	18:06:00
1	Ba 233.527†	236063.9	237046.5	1732.0	ug/L	1732.0	ppb	18:06:00
1	Be 313.107†	5086.4	9483.1	9.4468	ug/L	9.4468	ppb	18:06:00
1	Cd 226.502†	1187.6	1443.2	-2.0615	ug/L	-2.0615	ppb	18:06:20
1	Co 228.616†	2818.3	2919.1	46.278	ug/L	46.278	ppb	18:06:20
1	Cr 267.716†	13015.6	12954.1	133.03	ug/L	133.03	ppb	18:06:20
1	Cu 324.752†	25171.4	17178.8	58.842	ug/L	58.842	ppb	18:06:00
1	Mn 257.610†	2117497.2	2125719.3	2246.0	ug/L	2246.0	ppb	18:06:00
1	Mo 202.031†	-92.0	-115.7	7.7885	ug/L	7.7885	ppb	18:06:20
1	Ni 231.604†	4277.4	4178.0	91.392	ug/L	91.392	ppb	18:06:20
1	P 214.914†	1492.6	1246.3	520.45	ug/L	520.45	ppb	18:06:20
1	Pb 220.353†	479.2	581.9	76.850	ug/L	76.850	ppb	18:06:20
1	S 181.975 Axial†	679.2	619.7	681.98	ug/L	681.98	ppb	18:06:20
1	Sb 206.836†	83.4	43.1	-0.2371	ug/L	-0.2371	ppb	18:06:20
1	Se 196.026†	-893.4	-861.9	29.747	ug/L	29.747	ppb	18:06:20
1	Si 251.611†	1270275.2	1274946.7	36601	ug/L	36601	ppb	18:06:00
1	Sn 189.927†	-169.0	-173.9	-19.544	ug/L	-19.544	ppb	18:06:20
1	Ti 334.940†	2018454.7	2028722.2	3180.3	ug/L	3180.3	ppb	18:06:00
1	Tl 190.801†	-198.0	-152.9	-1.5783	ug/L	-1.5783	ppb	18:06:20
1	U 409.014†	-12306.4	-9731.8	-308.37	ug/L	-308.37	ppb	18:06:00
1	V 292.402†	33478.6	35419.4	194.90	ug/L	194.90	ppb	18:06:00
1	Zn 213.857†	42909.2	42231.2	337.28	ug/L	337.28	ppb	18:06:00
1	SiO2†	1282298.2	1286997.9	79670	ug/L	79670	ppb	18:07:20
2	Sc Radial	4973.0	4973.0	97.8	%			18:05:26
2	Y RADIAL	5548.7	5548.7	103.5	%			18:05:26
2	Al 396.153Radial†	154224.0	157719.4	128100	ug/L	128100	ppb	18:05:06
2	Ca 317.933Radial†	23534.6	24046.8	38164	ug/L	38164	ppb	18:05:06
2	Fe 238.204 Radial†	17276.8	17651.5	152870	ug/L	152870	ppb	18:05:06
2	K 766.490 Radial†	110669.5	109832.4	21149	ug/L	21149	ppb	18:05:06
2	Mg 279.077 IEC†	810.9	825.3	25393	ug/L	25393	ppb	18:05:26
2	Na 589.592 Radial†	10554.4	12530.0	3566.3	ug/L	3566.3	ppb	18:05:06
2	Sr 421.552†	45415.5	46431.6	307.57	ug/L	307.57	ppb	18:05:06
2	Sc 361.383	921258.7	921258.7	100.69	%			18:06:27
2	Y 371.029	830395.3	830395.3	106.24	%			18:06:27
2	Ag 328.068†	-10294.5	-10737.1	5.5006	ug/L	5.5006	ppb	18:06:27
2	As 188.979†	-32.9	-1.4	49.842	ug/L	49.842	ppb	18:06:47
2	B 249.677†	988.3	1694.9	14.297	ug/L	14.297	ppb	18:06:27
2	Ba 233.527†	238891.8	237254.7	1733.4	ug/L	1733.4	ppb	18:06:27
2	Be 313.107†	5397.3	9735.9	9.5321	ug/L	9.5321	ppb	18:06:27
2	Cd 226.502†	1182.4	1424.9	-1.8224	ug/L	-1.8224	ppb	18:06:47
2	Co 228.616†	2843.3	2912.9	46.221	ug/L	46.221	ppb	18:06:47
2	Cr 267.716†	13016.2	12811.3	131.52	ug/L	131.52	ppb	18:06:47
2	Cu 324.752†	25422.9	17151.4	58.550	ug/L	58.550	ppb	18:06:27
2	Mn 257.610†	2142748.1	2127473.2	2247.4	ug/L	2247.4	ppb	18:06:27
2	Mo 202.031†	-101.4	-123.9	6.8766	ug/L	6.8766	ppb	18:06:47
2	Ni 231.604†	4258.2	4111.8	89.945	ug/L	89.945	ppb	18:06:47

2	P 214.914†	1513.5	1250.6	524.77 ug/L	524.77 ppb	18:06:47
2	Pb 220.353†	516.9	614.1	79.717 ug/L	79.717 ppb	18:06:47
2	S 181.975 Axial†	678.3	611.3	673.07 ug/L	673.07 ppb	18:06:47
2	Sb 206.836†	84.7	43.5	-0.0051 ug/L	-0.0051 ppb	18:06:47
2	Se 196.026†	-891.3	-850.0	23.504 ug/L	23.504 ppb	18:06:47
2	Si 251.611†	1285548.4	1276123.2	36635 ug/L	36635 ppb	18:06:27
2	Sn 189.927†	-147.1	-150.3	-16.196 ug/L	-16.196 ppb	18:06:47
2	Ti 334.940†	2040866.4	2028747.0	3180.3 ug/L	3180.3 ppb	18:06:27
2	Tl 190.801†	-206.8	-159.4	-3.4630 ug/L	-3.4630 ppb	18:06:47
2	U 409.014†	-12057.8	-9349.3	-296.52 ug/L	-296.52 ppb	18:06:27
2	V 292.402†	33881.9	35451.1	195.74 ug/L	195.74 ppb	18:06:27
2	Zn 213.857†	43514.0	42359.2	338.56 ug/L	338.56 ppb	18:06:27
2	SiO2†	1292342.1	1282848.3	79413 ug/L	79413 ppb	18:07:26
3	Sc Radial	4902.4	4902.4	96.4 %		18:05:51
3	Y RADIAL	5470.7	5470.7	102.0 %		18:05:51
3	Al 396.153Radial†	154653.4	160436.2	130310 ug/L	130310 ppb	18:05:31
3	Ca 317.933Radial†	23669.2	24533.0	38935 ug/L	38935 ppb	18:05:31
3	Fe 238.204 Radial†	17309.5	17939.8	155360 ug/L	155360 ppb	18:05:31
3	K 766.490 Radial†	111100.1	111909.0	21549 ug/L	21549 ppb	18:05:31
3	Mg 279.077 IEC†	794.8	820.5	25242 ug/L	25242 ppb	18:05:51
3	Na 589.592 Radial†	10602.8	12735.7	3624.8 ug/L	3624.8 ppb	18:05:31
3	Sr 421.552†	45538.3	47227.8	312.84 ug/L	312.84 ppb	18:05:31
3	Sc 361.383	908320.9	908320.9	99.272 %		18:06:54
3	Y 371.029	819154.1	819154.1	104.80 %		18:06:54
3	Ag 328.068†	-10118.1	-10705.0	6.4695 ug/L	6.4695 ppb	18:06:54
3	As 188.979†	-46.1	-15.2	45.392 ug/L	45.392 ppb	18:07:14
3	B 249.677†	893.6	1613.5	12.298 ug/L	12.298 ppb	18:06:54
3	Ba 233.527†	236119.6	237841.7	1737.7 ug/L	1737.7 ppb	18:06:54
3	Be 313.107†	5021.5	9433.7	9.4326 ug/L	9.4326 ppb	18:06:54
3	Cd 226.502†	1182.5	1441.8	-1.9131 ug/L	-1.9131 ppb	18:07:14
3	Co 228.616†	2813.9	2923.5	46.385 ug/L	46.385 ppb	18:07:14
3	Cr 267.716†	13012.3	12991.5	133.37 ug/L	133.37 ppb	18:07:14
3	Cu 324.752†	25012.9	17097.9	58.520 ug/L	58.520 ppb	18:06:54
3	Mn 257.610†	2115150.6	2129986.0	2250.3 ug/L	2250.3 ppb	18:06:54
3	Mo 202.031†	-78.6	-102.4	8.4650 ug/L	8.4650 ppb	18:07:14
3	Ni 231.604†	4226.1	4139.7	90.555 ug/L	90.555 ppb	18:07:14
3	P 214.914†	1492.4	1250.8	523.59 ug/L	523.59 ppb	18:07:14
3	Pb 220.353†	521.2	625.8	81.221 ug/L	81.221 ppb	18:07:14
3	S 181.975 Axial†	680.2	622.8	685.85 ug/L	685.85 ppb	18:07:14
3	Sb 206.836†	81.6	41.5	-0.6284 ug/L	-0.6284 ppb	18:07:14
3	Se 196.026†	-895.0	-866.3	22.660 ug/L	22.660 ppb	18:07:14
3	Si 251.611†	1267400.4	1276028.3	36632 ug/L	36632 ppb	18:06:54
3	Sn 189.927†	-151.1	-156.3	-16.983 ug/L	-16.983 ppb	18:07:14
3	Ti 334.940†	2012994.3	2029541.9	3181.6 ug/L	3181.6 ppb	18:06:54
3	Tl 190.801†	-201.6	-157.1	-2.7386 ug/L	-2.7386 ppb	18:07:14
3	U 409.014†	-12219.0	-9682.3	-306.70 ug/L	-306.70 ppb	18:06:54
3	V 292.402†	33387.4	35432.3	195.23 ug/L	195.23 ppb	18:06:54
3	Zn 213.857†	42861.5	42317.5	338.09 ug/L	338.09 ppb	18:06:54
3	SiO2†	1291816.8	1300601.5	80512 ug/L	80512 ppb	18:07:32

Mean Data: 243270006|935381|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	913577.6	99.847	%	0.7433				0.74%
Sc Radial	4925.2	96.9	%	0.81				0.84%
Y 371.029	824063.6	105.43	%	0.736				0.70%
Y RADIAL	5499.0	102.6	%	0.80				0.78%
Ag 328.068†	-10681.0	6.4757	ug/L	0.97826	6.4757	ppb	0.97826	15.11%
Al 396.153Radial†	160084.3	130020	ug/L	1795.1	130020	ppb	1795.1	1.38%
As 188.979†	-14.0	45.744	ug/L	3.9331	45.744	ppb	3.9331	8.60%
B 249.677†	1678.9	13.677	ug/L	1.1958	13.677	ppb	1.1958	8.74%
Ba 233.527†	237381.0	1734.4	ug/L	3.00	1734.4	ppb	3.00	0.17%
Be 313.107†	9550.9	9.4705	ug/L	0.05384	9.4705	ppb	0.05384	0.57%
Ca 317.933Radial†	24402.6	38729	ug/L	494.9	38729	ppb	494.9	1.28%
Cd 226.502†	1436.6	-1.9323	ug/L	0.12068	-1.9323	ppb	0.12068	6.25%
Co 228.616†	2918.5	46.295	ug/L	0.0837	46.295	ppb	0.0837	0.18%
Cr 267.716†	12919.0	132.64	ug/L	0.985	132.64	ppb	0.985	0.74%
Cu 324.752†	17142.7	58.637	ug/L	0.1777	58.637	ppb	0.1777	0.30%
Fe 238.204 Radial†	17906.0	155070	ug/L	2073.3	155070	ppb	2073.3	1.34%
K 766.490 Radial†	111403.3	21452	ug/L	267.8	21452	ppb	267.8	1.25%

Mg 279.077 IEC†	826.2	25417	ug/L	187.8	25417	ppb	187.8	0.74%
Mn 257.610†	2127726.2	2247.9	ug/L	2.20	2247.9	ppb	2.20	0.10%
Mo 202.031†	-114.0	7.7100	ug/L	0.79710	7.7100	ppb	0.79710	10.34%
Na 589.592 Radial†	12700.1	3614.7	ug/L	44.22	3614.7	ppb	44.22	1.22%
Ni 231.604†	4143.2	90.631	ug/L	0.7266	90.631	ppb	0.7266	0.80%
P 214.914†	1249.2	522.94	ug/L	2.235	522.94	ppb	2.235	0.43%
Pb 220.353†	607.3	79.262	ug/L	2.2209	79.262	ppb	2.2209	2.80%
S 181.975 Axial†	617.9	680.30	ug/L	6.558	680.30	ppb	6.558	0.96%
Sb 206.836†	42.7	-0.2902	ug/L	0.31502	-0.2902	ppb	0.31502	108.56%
Se 196.026†	-859.4	25.304	ug/L	3.8709	25.304	ppb	3.8709	15.30%
Si 251.611†	1275699.4	36623	ug/L	18.8	36623	ppb	18.8	0.05%
Sn 189.927†	-160.2	-17.574	ug/L	1.7507	-17.574	ppb	1.7507	9.96%
Sr 421.552†	47121.0	312.14	ug/L	4.258	312.14	ppb	4.258	1.36%
Ti 334.940†	2029003.7	3180.7	ug/L	0.74	3180.7	ppb	0.74	0.02%
Tl 190.801†	-156.5	-2.5933	ug/L	0.95071	-2.5933	ppb	0.95071	36.66%
U 409.014†	-9587.8	-303.86	ug/L	6.416	-303.86	ppb	6.416	2.11%
V 292.402†	35434.3	195.29	ug/L	0.421	195.29	ppb	0.421	0.22%
Zn 213.857†	42302.6	337.97	ug/L	0.648	337.97	ppb	0.648	0.19%
SiO2†	1290149.2	79865	ug/L	574.9	79865	ppb	574.9	0.72%

Sequence No.: 29
Sample ID: 243270007|935381|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 50
Date Collected: 1/5/2010 18:09:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243270007|935381|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4900.6	4900.6	96.4	%			18:11:57
1	Y RADIAL	5522.0	5522.0	103.0	%			18:11:57
1	Al 396.153Radial†	181112.6	187952.1	152660	ug/L	152660	ppb	18:11:37
1	Ca 317.933Radial†	12822.2	13286.8	21087	ug/L	21087	ppb	18:11:37
1	Fe 238.204 Radial†	13969.0	14480.3	125400	ug/L	125400	ppb	18:11:37
1	K 766.490 Radial†	93170.7	93347.9	17984	ug/L	17984	ppb	18:11:37
1	Mg 279.077 IEC†	603.4	622.2	19136	ug/L	19136	ppb	18:11:57
1	Na 589.592 Radial†	1615.2	3413.8	971.63	ug/L	971.63	ppb	18:11:37
1	Sr 421.552†	31784.3	32973.8	218.48	ug/L	218.48	ppb	18:11:37
1	Sc 361.383	909619.4	909619.4	99.414	%			18:12:56
1	Y 371.029	832030.9	832030.9	106.45	%			18:12:56
1	Ag 328.068†	-8378.6	-8940.7	4.3508	ug/L	4.3508	ppb	18:12:56
1	As 188.979†	-87.1	-56.4	40.776	ug/L	40.776	ppb	18:13:16
1	B 249.677†	838.1	1556.4	15.105	ug/L	15.105	ppb	18:12:56
1	Ba 233.527†	226989.5	228318.3	1667.7	ug/L	1667.7	ppb	18:12:56
1	Be 313.107†	-6655.9	-2319.7	8.8524	ug/L	8.8524	ppb	18:12:56
1	Cd 226.502†	951.0	1207.2	-1.0857	ug/L	-1.0857	ppb	18:13:16
1	Co 228.616†	2783.5	2888.9	42.420	ug/L	42.420	ppb	18:13:16
1	Cr 267.716†	27258.3	27302.7	276.19	ug/L	276.19	ppb	18:12:56
1	Cu 324.752†	34565.6	26671.0	85.319	ug/L	85.319	ppb	18:12:56
1	Mn 257.610†	1737143.7	1746710.4	1845.2	ug/L	1845.2	ppb	18:12:56
1	Mo 202.031†	-58.2	-81.9	6.8843	ug/L	6.8843	ppb	18:13:16
1	Ni 231.604†	6969.7	6893.4	150.81	ug/L	150.81	ppb	18:13:16
1	P 214.914†	2183.5	1943.8	890.56	ug/L	890.56	ppb	18:13:16
1	Pb 220.353†	777.2	882.5	115.25	ug/L	115.25	ppb	18:13:16
1	S 181.975 Axial†	480.2	420.7	450.50	ug/L	450.50	ppb	18:13:16
1	Sb 206.836†	114.6	74.6	0.0194	ug/L	0.0194	ppb	18:13:16
1	Se 196.026†	-729.2	-698.2	23.465	ug/L	23.465	ppb	18:13:16
1	Si 251.611†	1156935.8	1163090.4	33391	ug/L	33391	ppb	18:12:56
1	Sn 189.927†	-126.0	-130.9	-15.447	ug/L	-15.447	ppb	18:13:16
1	Ti 334.940†	3108979.1	3129089.2	4903.1	ug/L	4903.1	ppb	18:12:56
1	Tl 190.801†	-244.4	-199.9	-3.0452	ug/L	-3.0452	ppb	18:13:16
1	U 409.014†	-8995.6	-6422.4	-206.61	ug/L	-206.61	ppb	18:12:56
1	V 292.402†	38816.7	40845.6	231.90	ug/L	231.90	ppb	18:12:56
1	Zn 213.857†	27117.0	26418.6	208.82	ug/L	208.82	ppb	18:13:16
1	SiO2†	1186156.7	1192461.2	73819	ug/L	73819	ppb	18:14:17
2	Sc Radial	4885.3	4885.3	96.1	%			18:12:22
2	Y RADIAL	5509.6	5509.6	102.8	%			18:12:22
2	Al 396.153Radial†	183396.3	190915.7	155060	ug/L	155060	ppb	18:12:02
2	Ca 317.933Radial†	12982.3	13494.9	21417	ug/L	21417	ppb	18:12:02
2	Fe 238.204 Radial†	14195.7	14761.6	127840	ug/L	127840	ppb	18:12:02
2	K 766.490 Radial†	94115.7	94633.2	18232	ug/L	18232	ppb	18:12:02
2	Mg 279.077 IEC†	603.2	623.9	19186	ug/L	19186	ppb	18:12:22
2	Na 589.592 Radial†	1518.9	3318.8	944.58	ug/L	944.58	ppb	18:12:02
2	Sr 421.552†	32100.8	33406.1	221.34	ug/L	221.34	ppb	18:12:02
2	Sc 361.383	921325.1	921325.1	100.69	%			18:13:23
2	Y 371.029	842608.8	842608.8	107.80	%			18:13:23
2	Ag 328.068†	-8527.3	-8981.3	4.9777	ug/L	4.9777	ppb	18:13:23
2	As 188.979†	-74.7	-43.0	45.810	ug/L	45.810	ppb	18:13:43
2	B 249.677†	995.8	1702.3	17.772	ug/L	17.772	ppb	18:13:23
2	Ba 233.527†	229390.8	227802.1	1664.0	ug/L	1664.0	ppb	18:13:23
2	Be 313.107†	-6711.6	-2289.9	8.8464	ug/L	8.8464	ppb	18:13:23
2	Cd 226.502†	984.4	1228.2	-1.1323	ug/L	-1.1323	ppb	18:13:43
2	Co 228.616†	2790.9	2860.7	41.870	ug/L	41.870	ppb	18:13:43
2	Cr 267.716†	27691.1	27384.2	277.05	ug/L	277.05	ppb	18:13:23
2	Cu 324.752†	35101.7	26761.6	85.711	ug/L	85.711	ppb	18:13:23
2	Mn 257.610†	1756432.5	1743665.5	1842.3	ug/L	1842.3	ppb	18:13:23
2	Mo 202.031†	-72.2	-95.0	6.2931	ug/L	6.2931	ppb	18:13:43
2	Ni 231.604†	6975.7	6810.3	149.00	ug/L	149.00	ppb	18:13:43

2	P 214.914†	2201.4	1933.6	884.40 ug/L	884.40 ppb	18:13:43
2	Pb 220.353†	797.6	892.9	116.67 ug/L	116.67 ppb	18:13:43
2	S 181.975 Axial†	474.6	408.9	436.60 ug/L	436.60 ppb	18:13:43
2	Sb 206.836†	125.3	83.8	2.7194 ug/L	2.7194 ppb	18:13:43
2	Se 196.026†	-717.0	-676.7	41.803 ug/L	41.803 ppb	18:13:43
2	Si 251.611†	1170698.2	1161972.2	33358 ug/L	33358 ppb	18:13:23
2	Sn 189.927†	-116.9	-120.2	-13.800 ug/L	-13.800 ppb	18:13:43
2	Ti 334.940†	3143735.6	3123873.2	4894.9 ug/L	4894.9 ppb	18:13:23
2	Tl 190.801†	-252.6	-204.9	-4.4422 ug/L	-4.4422 ppb	18:13:43
2	U 409.014†	-8783.4	-6096.7	-197.27 ug/L	-197.27 ppb	18:13:23
2	V 292.402†	39336.8	40866.0	231.67 ug/L	231.67 ppb	18:13:23
2	Zn 213.857†	27293.6	26247.4	207.30 ug/L	207.30 ppb	18:13:43
2	SiO2†	1173586.0	1164817.9	72107 ug/L	72107 ppb	18:14:23
3	Sc Radial	4899.1	4899.1	96.3 %		18:12:47
3	Y RADIAL	5512.1	5512.1	102.8 %		18:12:47
3	Al 396.153Radial†	179556.3	186393.9	151390 ug/L	151390 ppb	18:12:27
3	Ca 317.933Radial†	12659.1	13121.5	20825 ug/L	20825 ppb	18:12:27
3	Fe 238.204 Radial†	13854.4	14365.8	124410 ug/L	124410 ppb	18:12:27
3	K 766.490 Radial†	92088.8	92254.3	17773 ug/L	17773 ppb	18:12:27
3	Mg 279.077 IEC†	605.0	624.1	19195 ug/L	19195 ppb	18:12:47
3	Na 589.592 Radial†	1504.1	3299.0	938.96 ug/L	938.96 ppb	18:12:27
3	Sr 421.552†	31550.7	32741.3	216.94 ug/L	216.94 ppb	18:12:27
3	Sc 361.383	918803.0	918803.0	100.42 %		18:13:50
3	Y 371.029	839774.6	839774.6	107.44 %		18:13:50
3	Ag 328.068†	-8466.9	-8944.4	4.0045 ug/L	4.0045 ppb	18:13:50
3	As 188.979†	-64.1	-32.6	48.954 ug/L	48.954 ppb	18:14:10
3	B 249.677†	832.0	1541.9	14.942 ug/L	14.942 ppb	18:13:50
3	Ba 233.527†	228497.4	227537.8	1661.9 ug/L	1661.9 ppb	18:13:50
3	Be 313.107†	-6598.5	-2195.7	8.8822 ug/L	8.8822 ppb	18:13:50
3	Cd 226.502†	947.3	1194.0	-1.1121 ug/L	-1.1121 ppb	18:14:10
3	Co 228.616†	2755.1	2832.6	41.388 ug/L	41.388 ppb	18:14:10
3	Cr 267.716†	27571.5	27340.6	276.56 ug/L	276.56 ppb	18:13:50
3	Cu 324.752†	34958.4	26714.7	85.398 ug/L	85.398 ppb	18:13:50
3	Mn 257.610†	1750076.2	1742123.7	1840.3 ug/L	1840.3 ppb	18:13:50
3	Mo 202.031†	-82.2	-105.1	5.3313 ug/L	5.3313 ppb	18:14:10
3	Ni 231.604†	6957.7	6811.4	149.02 ug/L	149.02 ppb	18:14:10
3	P 214.914†	2178.8	1917.2	877.89 ug/L	877.89 ppb	18:14:10
3	Pb 220.353†	769.4	866.9	113.44 ug/L	113.44 ppb	18:14:10
3	S 181.975 Axial†	468.8	404.4	432.22 ug/L	432.22 ppb	18:14:10
3	Sb 206.836†	124.3	83.1	2.5672 ug/L	2.5672 ppb	18:14:10
3	Se 196.026†	-725.8	-687.5	25.960 ug/L	25.960 ppb	18:14:10
3	Si 251.611†	1166811.2	1161292.8	33339 ug/L	33339 ppb	18:13:50
3	Sn 189.927†	-112.5	-116.1	-13.307 ug/L	-13.307 ppb	18:14:10
3	Ti 334.940†	3136438.8	3125176.9	4896.9 ug/L	4896.9 ppb	18:13:50
3	Tl 190.801†	-225.8	-178.9	2.5889 ug/L	2.5889 ppb	18:14:10
3	U 409.014†	-9014.5	-6350.8	-204.37 ug/L	-204.37 ppb	18:13:50
3	V 292.402†	39165.9	40803.1	231.77 ug/L	231.77 ppb	18:13:50
3	Zn 213.857†	27176.5	26205.2	207.13 ug/L	207.13 ppb	18:14:10
3	SiO2†	1173739.5	1168170.0	72315 ug/L	72315 ppb	18:14:28

Mean Data: 243270007|935381|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	916582.5	100.18	%	0.673				0.67%
Sc Radial	4895.0	96.3	%	0.17				0.17%
Y 371.029	838138.1	107.23	%	0.701				0.65%
Y RADIAL	5514.6	102.9	%	0.12				0.12%
Ag 328.068†	-8955.5	4.4443	ug/L	0.49330	4.4443	ppb	0.49330	11.10%
Al 396.153Radial†	188420.6	153040	ug/L	1865.7	153040	ppb	1865.7	1.22%
As 188.979†	-44.0	45.180	ug/L	4.1252	45.180	ppb	4.1252	9.13%
B 249.677†	1600.2	15.940	ug/L	1.5892	15.940	ppb	1.5892	9.97%
Ba 233.527†	227886.0	1664.5	ug/L	2.90	1664.5	ppb	2.90	0.17%
Be 313.107†	-2268.4	8.8603	ug/L	0.01918	8.8603	ppb	0.01918	0.22%
Ca 317.933Radial†	13301.1	21110	ug/L	297.0	21110	ppb	297.0	1.41%
Cd 226.502†	1209.8	-1.1101	ug/L	0.02338	-1.1101	ppb	0.02338	2.11%
Co 228.616†	2860.7	41.893	ug/L	0.5164	41.893	ppb	0.5164	1.23%
Cr 267.716†	27342.5	276.60	ug/L	0.430	276.60	ppb	0.430	0.16%
Cu 324.752†	26715.8	85.476	ug/L	0.2076	85.476	ppb	0.2076	0.24%
Fe 238.204 Radial†	14535.9	125880	ug/L	1763.8	125880	ppb	1763.8	1.40%
K 766.490 Radial†	93411.8	17996	ug/L	229.7	17996	ppb	229.7	1.28%

Mg 279.077 IEC†	623.4	19172	ug/L	32.0	19172	ppb	32.0	0.17%
Mn 257.610†	1744166.5	1842.6	ug/L	2.47	1842.6	ppb	2.47	0.13%
Mo 202.031†	-94.0	6.1696	ug/L	0.78379	6.1696	ppb	0.78379	12.70%
Na 589.592 Radial†	3343.8	951.72	ug/L	17.466	951.72	ppb	17.466	1.84%
Ni 231.604†	6838.4	149.61	ug/L	1.043	149.61	ppb	1.043	0.70%
P 214.914†	1931.5	884.28	ug/L	6.335	884.28	ppb	6.335	0.72%
Pb 220.353†	880.8	115.12	ug/L	1.620	115.12	ppb	1.620	1.41%
S 181.975 Axial†	411.3	439.77	ug/L	9.543	439.77	ppb	9.543	2.17%
Sb 206.836†	80.5	1.7686	ug/L	1.51685	1.7686	ppb	1.51685	85.76%
Se 196.026†	-687.5	30.409	ug/L	9.9458	30.409	ppb	9.9458	32.71%
Si 251.611†	1162118.5	33363	ug/L	26.0	33363	ppb	26.0	0.08%
Sn 189.927†	-122.4	-14.185	ug/L	1.1210	-14.185	ppb	1.1210	7.90%
Sr 421.552†	33040.4	218.92	ug/L	2.235	218.92	ppb	2.235	1.02%
Ti 334.940†	3126046.5	4898.3	ug/L	4.25	4898.3	ppb	4.25	0.09%
Tl 190.801†	-194.6	-1.6328	ug/L	3.72221	-1.6328	ppb	3.72221	227.96%
U 409.014†	-6289.9	-202.75	ug/L	4.877	-202.75	ppb	4.877	2.41%
V 292.402†	40838.2	231.78	ug/L	0.113	231.78	ppb	0.113	0.05%
Zn 213.857†	26290.4	207.75	ug/L	0.932	207.75	ppb	0.932	0.45%
SiO2†	1175149.7	72747	ug/L	934.0	72747	ppb	934.0	1.28%

Sequence No.: 30
Sample ID: 243270008|935381|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 51
Date Collected: 1/5/2010 18:16:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243270008|935381|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4861.3	4861.3	95.6	%			18:18:52
1	Y RADIAL	5531.5	5531.5	103.2	%			18:18:52
1	Al 396.153Radial†	115650.8	120994.5	98272	ug/L	98272	ppb	18:18:32
1	Ca 317.933Radial†	10956.5	11442.7	18160	ug/L	18160	ppb	18:18:32
1	Fe 238.204 Radial†	13496.2	14102.8	122130	ug/L	122130	ppb	18:18:32
1	K 766.490 Radial†	77346.8	77576.2	14923	ug/L	14923	ppb	18:18:32
1	Mg 279.077 IEC†	533.1	553.7	17020	ug/L	17020	ppb	18:18:52
1	Na 589.592 Radial†	2180.1	4018.3	1143.7	ug/L	1143.7	ppb	18:18:32
1	Sr 421.552†	29608.9	30964.6	205.18	ug/L	205.18	ppb	18:18:32
1	Sc 361.383	921070.4	921070.4	100.67	%			18:19:51
1	Y 371.029	854809.5	854809.5	109.37	%			18:19:51
1	Ag 328.068†	-8144.7	-8603.6	4.8034	ug/L	4.8034	ppb	18:19:56
1	As 188.979†	-87.8	-56.0	44.255	ug/L	44.255	ppb	18:20:16
1	B 249.677†	693.6	1402.4	12.363	ug/L	12.363	ppb	18:19:56
1	Ba 233.527†	213174.6	211756.2	1546.9	ug/L	1546.9	ppb	18:19:56
1	Be 313.107†	-16780.0	-12293.7	6.4122	ug/L	6.4122	ppb	18:19:56
1	Cd 226.502†	985.1	1229.2	-0.6045	ug/L	-0.6045	ppb	18:20:16
1	Co 228.616†	3271.9	3339.2	49.897	ug/L	49.897	ppb	18:20:16
1	Cr 267.716†	9261.2	9083.8	93.698	ug/L	93.698	ppb	18:20:16
1	Cu 324.752†	27601.4	19320.6	63.402	ug/L	63.402	ppb	18:19:56
1	Mn 257.610†	2883918.0	2864176.2	3017.7	ug/L	3017.7	ppb	18:19:51
1	Mo 202.031†	-75.5	-98.3	5.5406	ug/L	5.5406	ppb	18:20:16
1	Ni 231.604†	3309.1	3169.8	69.326	ug/L	69.326	ppb	18:20:16
1	P 214.914†	3004.1	2731.6	1264.5	ug/L	1264.5	ppb	18:20:16
1	Pb 220.353†	902.1	996.9	115.18	ug/L	115.18	ppb	18:20:16
1	S 181.975 Axial†	505.4	439.7	482.97	ug/L	482.97	ppb	18:20:16
1	Sb 206.836†	106.3	64.9	1.8306	ug/L	1.8306	ppb	18:20:16
1	Se 196.026†	-685.5	-645.6	35.491	ug/L	35.491	ppb	18:20:16
1	Si 251.611†	1035501.9	1027991.6	29512	ug/L	29512	ppb	18:19:51
1	Sn 189.927†	-110.2	-113.6	-13.268	ug/L	-13.268	ppb	18:20:16
1	Ti 334.940†	3450643.6	3429614.6	5373.8	ug/L	5373.8	ppb	18:19:51
1	Tl 190.801†	-258.3	-210.6	2.9228	ug/L	2.9228	ppb	18:20:16
1	U 409.014†	-8596.5	-5913.4	-190.77	ug/L	-190.77	ppb	18:19:56
1	V 292.402†	42023.8	43546.1	248.87	ug/L	248.87	ppb	18:19:56
1	Zn 213.857†	27588.3	26547.6	210.67	ug/L	210.67	ppb	18:20:16
1	SiO2†	1036929.0	1029387.0	63724	ug/L	63724	ppb	18:21:26
2	Sc Radial	4670.4	4670.4	91.8	%			18:19:17
2	Y RADIAL	5348.1	5348.1	99.76	%			18:19:17
2	Al 396.153Radial†	117446.3	127895.9	103880	ug/L	103880	ppb	18:18:57
2	Ca 317.933Radial†	11087.5	12053.9	19130	ug/L	19130	ppb	18:18:57
2	Fe 238.204 Radial†	13642.5	14839.4	128510	ug/L	128510	ppb	18:18:57
2	K 766.490 Radial†	78382.7	82012.4	15779	ug/L	15779	ppb	18:18:57
2	Mg 279.077 IEC†	546.1	590.7	18159	ug/L	18159	ppb	18:19:17
2	Na 589.592 Radial†	2270.1	4209.5	1198.1	ug/L	1198.1	ppb	18:18:57
2	Sr 421.552†	29937.3	32588.5	215.94	ug/L	215.94	ppb	18:18:57
2	Sc 361.383	915470.9	915470.9	100.05	%			18:20:23
2	Y 371.029	849948.0	849948.0	108.74	%			18:20:23
2	Ag 328.068†	-8125.1	-8633.5	6.8037	ug/L	6.8037	ppb	18:20:28
2	As 188.979†	-84.8	-53.5	46.256	ug/L	46.256	ppb	18:20:48
2	B 249.677†	693.2	1406.2	11.592	ug/L	11.592	ppb	18:20:28
2	Ba 233.527†	214300.5	214176.8	1564.7	ug/L	1564.7	ppb	18:20:28
2	Be 313.107†	-16819.8	-12435.3	6.4026	ug/L	6.4026	ppb	18:20:28
2	Cd 226.502†	962.3	1212.4	-1.3997	ug/L	-1.3997	ppb	18:20:48
2	Co 228.616†	3293.5	3380.7	50.547	ug/L	50.547	ppb	18:20:48
2	Cr 267.716†	9308.0	9186.9	94.849	ug/L	94.849	ppb	18:20:48
2	Cu 324.752†	27619.8	19506.7	64.278	ug/L	64.278	ppb	18:20:28
2	Mn 257.610†	2873133.5	2870920.4	3025.3	ug/L	3025.3	ppb	18:20:23
2	Mo 202.031†	-77.3	-100.6	6.0082	ug/L	6.0082	ppb	18:20:48
2	Ni 231.604†	3322.9	3203.8	70.068	ug/L	70.068	ppb	18:20:48

2	P 214.914†	3005.9	2751.7	1271.0 ug/L	1271.0 ppb	18:20:48
2	Pb 220.353†	919.1	1019.3	118.23 ug/L	118.23 ppb	18:20:48
2	S 181.975 Axial†	505.4	442.7	485.32 ug/L	485.32 ppb	18:20:48
2	Sb 206.836†	99.7	58.9	-0.0832 ug/L	-0.0832 ppb	18:20:48
2	Se 196.026†	-683.1	-647.5	53.700 ug/L	53.700 ppb	18:20:48
2	Si 251.611†	1032275.1	1031058.2	29600 ug/L	29600 ppb	18:20:23
2	Sn 189.927†	-118.0	-122.1	-14.332 ug/L	-14.332 ppb	18:20:48
2	Ti 334.940†	3442088.9	3442031.0	5393.3 ug/L	5393.3 ppb	18:20:23
2	Tl 190.801†	-253.4	-207.4	4.1489 ug/L	4.1489 ppb	18:20:48
2	U 409.014†	-8408.4	-5777.6	-187.55 ug/L	-187.55 ppb	18:20:28
2	V 292.402†	42351.1	44128.6	251.57 ug/L	251.57 ppb	18:20:28
2	Zn 213.857†	27667.4	26794.3	212.32 ug/L	212.32 ppb	18:20:48
2	SiO2†	1024358.0	1023123.2	63336 ug/L	63336 ppb	18:21:32
3	Sc Radial	4885.9	4885.9	96.1 %		18:19:42
3	Y RADIAL	5579.2	5579.2	104.1 %		18:19:42
3	Al 396.153Radial†	118488.8	123338.7	100180 ug/L	100180 ppb	18:19:22
3	Ca 317.933Radial†	11212.7	11651.6	18492 ug/L	18492 ppb	18:19:22
3	Fe 238.204 Radial†	13787.5	14334.9	124140 ug/L	124140 ppb	18:19:22
3	K 766.490 Radial†	78901.3	78786.5	15157 ug/L	15157 ppb	18:19:22
3	Mg 279.077 IEC†	551.7	570.3	17530 ug/L	17530 ppb	18:19:42
3	Na 589.592 Radial†	2242.8	4072.0	1159.0 ug/L	1159.0 ppb	18:19:22
3	Sr 421.552†	30307.3	31535.4	208.96 ug/L	208.96 ppb	18:19:22
3	Sc 361.383	915453.1	915453.1	100.05 %		18:20:55
3	Y 371.029	850097.9	850097.9	108.76 %		18:20:55
3	Ag 328.068†	-8035.7	-8544.3	5.7247 ug/L	5.7247 ppb	18:21:00
3	As 188.979†	-92.5	-61.2	42.806 ug/L	42.806 ppb	18:21:20
3	B 249.677†	604.5	1317.6	10.357 ug/L	10.357 ppb	18:21:00
3	Ba 233.527†	211778.8	211660.5	1546.3 ug/L	1546.3 ppb	18:21:00
3	Be 313.107†	-16723.7	-12339.7	6.4145 ug/L	6.4145 ppb	18:21:00
3	Cd 226.502†	972.7	1222.8	-0.8651 ug/L	-0.8651 ppb	18:21:20
3	Co 228.616†	3285.6	3372.9	50.479 ug/L	50.479 ppb	18:21:20
3	Cr 267.716†	9304.1	9183.1	94.728 ug/L	94.728 ppb	18:21:20
3	Cu 324.752†	27324.8	19212.3	63.184 ug/L	63.184 ppb	18:21:00
3	Mn 257.610†	2867684.0	2865529.4	3019.3 ug/L	3019.3 ppb	18:20:55
3	Mo 202.031†	-67.6	-90.9	6.1974 ug/L	6.1974 ppb	18:21:20
3	Ni 231.604†	3334.9	3215.9	70.333 ug/L	70.333 ppb	18:21:20
3	P 214.914†	3007.8	2753.7	1274.4 ug/L	1274.4 ppb	18:21:20
3	Pb 220.353†	880.5	980.8	113.77 ug/L	113.77 ppb	18:21:20
3	S 181.975 Axial†	495.2	432.6	474.44 ug/L	474.44 ppb	18:21:20
3	Sb 206.836†	95.1	54.4	-1.3423 ug/L	-1.3423 ppb	18:21:20
3	Se 196.026†	-679.1	-643.4	42.669 ug/L	42.669 ppb	18:21:20
3	Si 251.611†	1031026.5	1029830.3	29565 ug/L	29565 ppb	18:20:55
3	Sn 189.927†	-107.5	-111.6	-12.910 ug/L	-12.910 ppb	18:21:20
3	Ti 334.940†	3435376.5	3435388.7	5382.9 ug/L	5382.9 ppb	18:20:55
3	Tl 190.801†	-264.7	-218.6	0.8603 ug/L	0.8603 ppb	18:21:20
3	U 409.014†	-8465.1	-5834.5	-188.68 ug/L	-188.68 ppb	18:21:00
3	V 292.402†	41815.5	43594.0	248.88 ug/L	248.88 ppb	18:21:00
3	Zn 213.857†	27607.1	26734.6	212.07 ug/L	212.07 ppb	18:21:20
3	SiO2†	1031454.1	1030235.4	63777 ug/L	63777 ppb	18:21:38

Mean Data: 243270008|935381|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	917331.5	100.26	%	0.354				0.35%
Sc Radial	4805.9	94.5	%	2.32				2.46%
Y 371.029	851618.5	108.96	%	0.354				0.32%
Y RADIAL	5486.3	102.3	%	2.28				2.22%
Ag 328.068†	-8593.8	5.7773	ug/L	1.00120	5.7773	ppb	1.00120	17.33%
Al 396.153Radial†	124076.4	100780	ug/L	2850.3	100780	ppb	2850.3	2.83%
As 188.979†	-56.9	44.439	ug/L	1.7326	44.439	ppb	1.7326	3.90%
B 249.677†	1375.4	11.437	ug/L	1.0117	11.437	ppb	1.0117	8.85%
Ba 233.527†	212531.1	1552.6	ug/L	10.47	1552.6	ppb	10.47	0.67%
Be 313.107†	-12356.2	6.4098	ug/L	0.00628	6.4098	ppb	0.00628	0.10%
Ca 317.933Radial†	11716.0	18594	ug/L	493.0	18594	ppb	493.0	2.65%
Cd 226.502†	1221.4	-0.9564	ug/L	0.40541	-0.9564	ppb	0.40541	42.39%
Co 228.616†	3364.3	50.308	ug/L	0.3576	50.308	ppb	0.3576	0.71%
Cr 267.716†	9151.2	94.425	ug/L	0.6325	94.425	ppb	0.6325	0.67%
Cu 324.752†	19346.6	63.621	ug/L	0.5790	63.621	ppb	0.5790	0.91%
Fe 238.204 Radial†	14425.7	124930	ug/L	3261.4	124930	ppb	3261.4	2.61%
K 766.490 Radial†	79458.4	15286	ug/L	442.2	15286	ppb	442.2	2.89%

Mg 279.077 IEC†	571.6	17570	ug/L	570.5	17570	ppb	570.5	3.25%
Mn 257.610†	2866875.3	3020.8	ug/L	4.06	3020.8	ppb	4.06	0.13%
Mo 202.031†	-96.6	5.9154	ug/L	0.33811	5.9154	ppb	0.33811	5.72%
Na 589.592 Radial†	4099.9	1166.9	ug/L	28.07	1166.9	ppb	28.07	2.41%
Ni 231.604†	3196.5	69.909	ug/L	0.5219	69.909	ppb	0.5219	0.75%
P 214.914†	2745.7	1269.9	ug/L	5.02	1269.9	ppb	5.02	0.40%
Pb 220.353†	999.0	115.73	ug/L	2.280	115.73	ppb	2.280	1.97%
S 181.975 Axial†	438.3	480.91	ug/L	5.722	480.91	ppb	5.722	1.19%
Sb 206.836†	59.4	0.1351	ug/L	1.59764	0.1351	ppb	1.59764	>999.9%
Se 196.026†	-645.5	43.953	ug/L	9.1722	43.953	ppb	9.1722	20.87%
Si 251.611†	1029626.7	29559	ug/L	44.2	29559	ppb	44.2	0.15%
Sn 189.927†	-115.8	-13.504	ug/L	0.7396	-13.504	ppb	0.7396	5.48%
Sr 421.552†	31696.2	210.03	ug/L	5.459	210.03	ppb	5.459	2.60%
Ti 334.940†	3435678.1	5383.3	ug/L	9.76	5383.3	ppb	9.76	0.18%
Tl 190.801†	-212.2	2.6440	ug/L	1.66191	2.6440	ppb	1.66191	62.86%
U 409.014†	-5841.8	-189.00	ug/L	1.632	-189.00	ppb	1.632	0.86%
V 292.402†	43756.3	249.77	ug/L	1.555	249.77	ppb	1.555	0.62%
Zn 213.857†	26692.2	211.69	ug/L	0.892	211.69	ppb	0.892	0.42%
SiO2†	1027581.9	63612	ug/L	240.8	63612	ppb	240.8	0.38%

Sequence No.: 31
Sample ID: 243270009|935381|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 52
Date Collected: 1/5/2010 18:23:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243270009|935381|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4877.0	4877.0	95.9	%			18:26:02
1	Y RADIAL	5612.4	5612.4	104.7	%			18:26:02
1	Al 396.153Radial†	126710.0	132136.1	107320	ug/L	107320	ppb	18:25:42
1	Ca 317.933Radial†	11292.4	11756.0	18658	ug/L	18658	ppb	18:25:42
1	Fe 238.204 Radial†	13858.1	14434.8	125010	ug/L	125010	ppb	18:25:42
1	K 766.490 Radial†	82257.1	82435.7	15868	ug/L	15868	ppb	18:25:42
1	Mg 279.077 IEC†	558.1	578.0	17770	ug/L	17770	ppb	18:26:02
1	Na 589.592 Radial†	2625.4	4475.2	1273.7	ug/L	1273.7	ppb	18:25:42
1	Sr 421.552†	30523.5	31818.5	210.84	ug/L	210.84	ppb	18:25:42
1	Sc 361.383	915515.4	915515.4	100.06	%			18:27:00
1	Y 371.029	858585.0	858585.0	109.85	%			18:27:00
1	Ag 328.068†	-8061.3	-8569.4	5.9005	ug/L	5.9005	ppb	18:27:06
1	As 188.979†	-94.2	-62.9	42.775	ug/L	42.775	ppb	18:27:26
1	B 249.677†	843.3	1556.1	15.145	ug/L	15.145	ppb	18:27:06
1	Ba 233.527†	187693.4	187574.8	1370.8	ug/L	1370.8	ppb	18:27:06
1	Be 313.107†	-15786.5	-11401.8	6.8312	ug/L	6.8312	ppb	18:27:06
1	Cd 226.502†	989.0	1239.0	-0.7970	ug/L	-0.7970	ppb	18:27:26
1	Co 228.616†	2951.4	3038.7	44.026	ug/L	44.026	ppb	18:27:26
1	Cr 267.716†	10224.7	10102.5	103.95	ug/L	103.95	ppb	18:27:26
1	Cu 324.752†	28920.3	20805.1	67.941	ug/L	67.941	ppb	18:27:06
1	Mn 257.610†	2330328.4	2328293.9	2455.5	ug/L	2455.5	ppb	18:27:00
1	Mo 202.031†	-80.2	-103.5	5.4911	ug/L	5.4911	ppb	18:27:26
1	Ni 231.604†	3456.9	3337.5	73.000	ug/L	73.000	ppb	18:27:26
1	P 214.914†	2497.3	2243.2	1025.1	ug/L	1025.1	ppb	18:27:26
1	Pb 220.353†	836.0	936.3	110.69	ug/L	110.69	ppb	18:27:26
1	S 181.975 Axial†	549.1	486.4	534.54	ug/L	534.54	ppb	18:27:26
1	Sb 206.836†	101.5	60.7	-0.0547	ug/L	-0.0547	ppb	18:27:26
1	Se 196.026†	-710.8	-675.1	29.700	ug/L	29.700	ppb	18:27:26
1	Si 251.611†	1173384.1	1172034.3	33648	ug/L	33648	ppb	18:27:00
1	Sn 189.927†	-116.3	-120.4	-14.183	ug/L	-14.183	ppb	18:27:26
1	Ti 334.940†	3468175.1	3467934.5	5433.8	ug/L	5433.8	ppb	18:27:00
1	Tl 190.801†	-253.3	-207.2	1.2945	ug/L	1.2945	ppb	18:27:26
1	U 409.014†	-8596.5	-5965.2	-192.68	ug/L	-192.68	ppb	18:27:06
1	V 292.402†	41568.0	43343.8	247.10	ug/L	247.10	ppb	18:27:06
1	Zn 213.857†	28398.3	27523.4	218.48	ug/L	218.48	ppb	18:27:26
1	SiO2†	1160769.0	1159404.4	71774	ug/L	71774	ppb	18:28:36
2	Sc Radial	4856.2	4856.2	95.5	%			18:26:27
2	Y RADIAL	5591.0	5591.0	104.3	%			18:26:27
2	Al 396.153Radial†	127742.2	133783.6	108660	ug/L	108660	ppb	18:26:07
2	Ca 317.933Radial†	11333.8	11849.9	18806	ug/L	18806	ppb	18:26:07
2	Fe 238.204 Radial†	14010.6	14656.4	126930	ug/L	126930	ppb	18:26:07
2	K 766.490 Radial†	82898.3	83474.9	16068	ug/L	16068	ppb	18:26:07
2	Mg 279.077 IEC†	561.2	583.8	17945	ug/L	17945	ppb	18:26:27
2	Na 589.592 Radial†	2683.4	4547.7	1294.4	ug/L	1294.4	ppb	18:26:07
2	Sr 421.552†	30789.5	32233.5	213.59	ug/L	213.59	ppb	18:26:07
2	Sc 361.383	902959.8	902959.8	98.686	%			18:27:32
2	Y 371.029	847117.3	847117.3	108.38	%			18:27:32
2	Ag 328.068†	-8198.6	-8820.5	5.4861	ug/L	5.4861	ppb	18:27:38
2	As 188.979†	-91.8	-61.8	43.456	ug/L	43.456	ppb	18:27:58
2	B 249.677†	669.6	1391.9	11.525	ug/L	11.525	ppb	18:27:38
2	Ba 233.527†	189083.9	191592.1	1400.1	ug/L	1400.1	ppb	18:27:38
2	Be 313.107†	-15879.2	-11715.2	6.7234	ug/L	6.7234	ppb	18:27:38
2	Cd 226.502†	979.3	1243.0	-0.9514	ug/L	-0.9514	ppb	18:27:58
2	Co 228.616†	2945.4	3073.6	44.667	ug/L	44.667	ppb	18:27:58
2	Cr 267.716†	10218.8	10238.6	105.36	ug/L	105.36	ppb	18:27:58
2	Cu 324.752†	29108.8	21398.0	69.793	ug/L	69.793	ppb	18:27:38
2	Mn 257.610†	2298954.4	2328886.5	2456.4	ug/L	2456.4	ppb	18:27:32
2	Mo 202.031†	-76.1	-100.4	5.8659	ug/L	5.8659	ppb	18:27:58
2	Ni 231.604†	3424.5	3352.7	73.331	ug/L	73.331	ppb	18:27:58

2	P 214.914†	2471.1	2251.4	1027.7 ug/L	1027.7 ppb	18:27:58
2	Pb 220.353†	819.4	931.1	110.30 ug/L	110.30 ppb	18:27:58
2	S 181.975 Axial†	539.7	484.5	532.13 ug/L	532.13 ppb	18:27:58
2	Sb 206.836†	120.5	81.4	6.0679 ug/L	6.0679 ppb	18:27:58
2	Se 196.026†	-706.1	-680.2	32.814 ug/L	32.814 ppb	18:27:58
2	Si 251.611†	1157057.7	1171797.0	33641 ug/L	33641 ppb	18:27:32
2	Sn 189.927†	-109.3	-115.0	-13.329 ug/L	-13.329 ppb	18:27:58
2	Ti 334.940†	3419952.4	3467266.6	5432.8 ug/L	5432.8 ppb	18:27:32
2	Tl 190.801†	-262.9	-220.4	-2.2997 ug/L	-2.2997 ppb	18:27:58
2	U 409.014†	-8648.0	-6136.9	-198.01 ug/L	-198.01 ppb	18:27:38
2	V 292.402†	41858.7	44216.1	252.28 ug/L	252.28 ppb	18:27:38
2	Zn 213.857†	28348.3	27867.5	221.20 ug/L	221.20 ppb	18:27:58
2	SiO2†	1169579.7	1184463.4	73325 ug/L	73325 ppb	18:28:42
3	Sc Radial	4811.7	4811.7	94.6 %		18:26:52
3	Y RADIAL	5536.9	5536.9	103.3 %		18:26:52
3	Al 396.153Radial†	126731.0	133953.1	108800 ug/L	108800 ppb	18:26:32
3	Ca 317.933Radial†	11218.5	11837.8	18787 ug/L	18787 ppb	18:26:32
3	Fe 238.204 Radial†	13797.6	14567.1	126150 ug/L	126150 ppb	18:26:32
3	K 766.490 Radial†	81896.2	83219.4	16019 ug/L	16019 ppb	18:26:32
3	Mg 279.077 IEC†	555.7	583.4	17933 ug/L	17933 ppb	18:26:52
3	Na 589.592 Radial†	2617.0	4503.6	1281.8 ug/L	1281.8 ppb	18:26:32
3	Sr 421.552†	30545.9	32274.5	213.86 ug/L	213.86 ppb	18:26:32
3	Sc 361.383	907089.0	907089.0	99.138 %		18:28:05
3	Y 371.029	850896.7	850896.7	108.87 %		18:28:05
3	Ag 328.068†	-8149.8	-8733.4	5.5879 ug/L	5.5879 ppb	18:28:10
3	As 188.979†	-103.7	-73.4	39.354 ug/L	39.354 ppb	18:28:30
3	B 249.677†	689.9	1409.3	11.983 ug/L	11.983 ppb	18:28:10
3	Ba 233.527†	187454.4	189076.3	1381.7 ug/L	1381.7 ppb	18:28:10
3	Be 313.107†	-15760.7	-11522.4	6.8126 ug/L	6.8126 ppb	18:28:10
3	Cd 226.502†	972.8	1231.9	-0.9781 ug/L	-0.9781 ppb	18:28:30
3	Co 228.616†	2988.9	3103.9	45.211 ug/L	45.211 ppb	18:28:30
3	Cr 267.716†	10339.1	10312.8	106.08 ug/L	106.08 ppb	18:28:30
3	Cu 324.752†	28899.8	21052.9	68.733 ug/L	68.733 ppb	18:28:10
3	Mn 257.610†	2314480.4	2333943.0	2461.6 ug/L	2461.6 ppb	18:28:05
3	Mo 202.031†	-72.5	-96.4	6.0425 ug/L	6.0425 ppb	18:28:30
3	Ni 231.604†	3456.9	3369.6	73.700 ug/L	73.700 ppb	18:28:30
3	P 214.914†	2505.8	2275.0	1040.2 ug/L	1040.2 ppb	18:28:30
3	Pb 220.353†	853.4	961.6	113.55 ug/L	113.55 ppb	18:28:30
3	S 181.975 Axial†	556.3	498.8	548.35 ug/L	548.35 ppb	18:28:30
3	Sb 206.836†	111.6	71.8	3.1567 ug/L	3.1567 ppb	18:28:30
3	Se 196.026†	-720.2	-691.2	24.949 ug/L	24.949 ppb	18:28:30
3	Si 251.611†	1165663.5	1175140.4	33737 ug/L	33737 ppb	18:28:05
3	Sn 189.927†	-113.2	-118.4	-13.846 ug/L	-13.846 ppb	18:28:30
3	Ti 334.940†	3443361.2	3475103.6	5445.1 ug/L	5445.1 ppb	18:28:05
3	Tl 190.801†	-258.0	-214.3	-0.5015 ug/L	-0.5015 ppb	18:28:30
3	U 409.014†	-8591.0	-6039.5	-195.03 ug/L	-195.03 ppb	18:28:10
3	V 292.402†	41570.5	43732.3	249.36 ug/L	249.36 ppb	18:28:10
3	Zn 213.857†	28640.5	28031.4	222.58 ug/L	222.58 ppb	18:28:30
3	SiO2†	1163393.6	1172828.5	72605 ug/L	72605 ppb	18:28:48

Mean Data: 243270009|935381|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	908521.4	99.294	%	0.6994				0.70%
Sc Radial	4848.3	95.3	%	0.66				0.69%
Y 371.029	852199.6	109.03	%	0.748				0.69%
Y RADIAL	5580.1	104.1	%	0.73				0.70%
Ag 328.068†	-8707.8	5.6582	ug/L	0.21593	5.6582	ppb	0.21593	3.82%
Al 396.153Radial†	133290.9	108260	ug/L	815.2	108260	ppb	815.2	0.75%
As 188.979†	-66.0	41.862	ug/L	2.1986	41.862	ppb	2.1986	5.25%
B 249.677†	1452.5	12.884	ug/L	1.9713	12.884	ppb	1.9713	15.30%
Ba 233.527†	189414.4	1384.2	ug/L	14.82	1384.2	ppb	14.82	1.07%
Be 313.107†	-11546.4	6.7890	ug/L	0.05762	6.7890	ppb	0.05762	0.85%
Ca 317.933Radial†	11814.6	18750	ug/L	81.1	18750	ppb	81.1	0.43%
Cd 226.502†	1237.9	-0.9088	ug/L	0.09780	-0.9088	ppb	0.09780	10.76%
Co 228.616†	3072.1	44.635	ug/L	0.5932	44.635	ppb	0.5932	1.33%
Cr 267.716†	10218.0	105.13	ug/L	1.084	105.13	ppb	1.084	1.03%
Cu 324.752†	21085.3	68.822	ug/L	0.9295	68.822	ppb	0.9295	1.35%
Fe 238.204 Radial†	14552.7	126030	ug/L	965.5	126030	ppb	965.5	0.77%
K 766.490 Radial†	83043.3	15985	ug/L	104.4	15985	ppb	104.4	0.65%

Mg 279.077 IEC†	581.7	17882	ug/L	97.9	17882	ppb	97.9	0.55%
Mn 257.610†	2330374.5	2457.8	ug/L	3.28	2457.8	ppb	3.28	0.13%
Mo 202.031†	-100.1	5.7998	ug/L	0.28159	5.7998	ppb	0.28159	4.86%
Na 589.592 Radial†	4508.8	1283.3	ug/L	10.40	1283.3	ppb	10.40	0.81%
Ni 231.604†	3353.3	73.343	ug/L	0.3503	73.343	ppb	0.3503	0.48%
P 214.914†	2256.5	1031.0	ug/L	8.05	1031.0	ppb	8.05	0.78%
Pb 220.353†	943.0	111.51	ug/L	1.774	111.51	ppb	1.774	1.59%
S 181.975 Axial†	489.9	538.34	ug/L	8.752	538.34	ppb	8.752	1.63%
Sb 206.836†	71.3	3.0566	ug/L	3.06251	3.0566	ppb	3.06251	100.19%
Se 196.026†	-682.1	29.154	ug/L	3.9606	29.154	ppb	3.9606	13.58%
Si 251.611†	1172990.6	33675	ug/L	53.6	33675	ppb	53.6	0.16%
Sn 189.927†	-117.9	-13.786	ug/L	0.4297	-13.786	ppb	0.4297	3.12%
Sr 421.552†	32108.8	212.76	ug/L	1.672	212.76	ppb	1.672	0.79%
Ti 334.940†	3470101.6	5437.2	ug/L	6.81	5437.2	ppb	6.81	0.13%
Tl 190.801†	-214.0	-0.5022	ug/L	1.79712	-0.5022	ppb	1.79712	357.82%
U 409.014†	-6047.2	-195.24	ug/L	2.672	-195.24	ppb	2.672	1.37%
V 292.402†	43764.1	249.58	ug/L	2.599	249.58	ppb	2.599	1.04%
Zn 213.857†	27807.4	220.75	ug/L	2.087	220.75	ppb	2.087	0.95%
SiO2†	1172232.1	72568	ug/L	776.4	72568	ppb	776.4	1.07%

Sequence No.: 32
Sample ID: 243270010|935381|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 1/5/2010 18:30:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243270010|935381|1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4829.1	4829.1	95.0	%			18:33:11
1	Y RADIAL	5688.5	5688.5	106.1	%			18:33:11
1	Al 396.153Radial†	150344.8	158336.5	128600	ug/L	128600	ppb	18:32:51
1	Ca 317.933Radial†	12987.6	13658.1	21676	ug/L	21676	ppb	18:32:51
1	Fe 238.204 Radial†	15349.6	16148.8	139850	ug/L	139850	ppb	18:32:51
1	K 766.490 Radial†	94339.8	96010.9	18485	ug/L	18485	ppb	18:32:51
1	Mg 279.077 IEC†	630.0	659.5	20277	ug/L	20277	ppb	18:33:11
1	Na 589.592 Radial†	3128.8	5032.5	1432.3	ug/L	1432.3	ppb	18:32:51
1	Sr 421.552†	35152.5	37009.0	245.23	ug/L	245.23	ppb	18:32:51
1	Sc 361.383	901348.9	901348.9	98.510	%			18:34:09
1	Y 371.029	866833.7	866833.7	110.90	%			18:34:09
1	Ag 328.068†	-8831.6	-9478.0	7.0165	ug/L	7.0165	ppb	18:34:15
1	As 188.979†	-89.5	-59.6	47.492	ug/L	47.492	ppb	18:34:35
1	B 249.677†	767.9	1492.9	11.876	ug/L	11.876	ppb	18:34:15
1	Ba 233.527†	201054.1	204085.8	1491.5	ug/L	1491.5	ppb	18:34:15
1	Be 313.107†	-12574.0	-8388.7	8.1444	ug/L	8.1444	ppb	18:34:15
1	Cd 226.502†	1076.5	1343.4	-1.2978	ug/L	-1.2978	ppb	18:34:35
1	Co 228.616†	3014.4	3148.9	45.604	ug/L	45.604	ppb	18:34:35
1	Cr 267.716†	10425.6	10467.1	107.91	ug/L	107.91	ppb	18:34:35
1	Cu 324.752†	30298.7	22658.6	74.183	ug/L	74.183	ppb	18:34:15
1	Mn 257.610†	2335948.5	2370603.3	2501.4	ug/L	2501.4	ppb	18:34:09
1	Mo 202.031†	-101.9	-126.8	5.4520	ug/L	5.4520	ppb	18:34:35
1	Ni 231.604†	3516.0	3451.8	75.498	ug/L	75.498	ppb	18:34:35
1	P 214.914†	2539.6	2325.4	1059.7	ug/L	1059.7	ppb	18:34:35
1	Pb 220.353†	867.2	981.0	118.88	ug/L	118.88	ppb	18:34:35
1	S 181.975 Axial†	621.1	568.1	623.65	ug/L	623.65	ppb	18:34:35
1	Sb 206.836†	103.8	64.6	0.2589	ug/L	0.2589	ppb	18:34:35
1	Se 196.026†	-768.2	-744.6	39.519	ug/L	39.519	ppb	18:34:35
1	Si 251.611†	1236184.1	1254215.3	36007	ug/L	36007	ppb	18:34:09
1	Sn 189.927†	-125.3	-131.3	-15.273	ug/L	-15.273	ppb	18:34:35
1	Ti 334.940†	3509362.8	3564222.4	5584.9	ug/L	5584.9	ppb	18:34:09
1	Tl 190.801†	-271.9	-230.0	-3.0058	ug/L	-3.0058	ppb	18:34:35
1	U 409.014†	-8998.7	-6508.6	-210.66	ug/L	-210.66	ppb	18:34:15
1	V 292.402†	44518.3	46991.7	267.59	ug/L	267.59	ppb	18:34:15
1	Zn 213.857†	30438.4	30040.5	238.28	ug/L	238.28	ppb	18:34:15
1	SiO2†	1252191.4	1270442.3	78647	ug/L	78647	ppb	18:35:45
2	Sc Radial	4896.4	4896.4	96.3	%			18:33:36
2	Y RADIAL	5758.5	5758.5	107.4	%			18:33:36
2	Al 396.153Radial†	146901.2	152581.9	123930	ug/L	123930	ppb	18:33:16
2	Ca 317.933Radial†	12621.7	13089.8	20774	ug/L	20774	ppb	18:33:16
2	Fe 238.204 Radial†	14914.3	15474.3	134010	ug/L	134010	ppb	18:33:16
2	K 766.490 Radial†	92232.9	92456.0	17800	ug/L	17800	ppb	18:33:16
2	Mg 279.077 IEC†	636.1	656.7	20194	ug/L	20194	ppb	18:33:36
2	Na 589.592 Radial†	2947.9	4799.3	1366.0	ug/L	1366.0	ppb	18:33:16
2	Sr 421.552†	34262.2	35575.1	235.73	ug/L	235.73	ppb	18:33:16
2	Sc 361.383	917300.5	917300.5	100.25	%			18:34:41
2	Y 371.029	879721.6	879721.6	112.55	%			18:34:41
2	Ag 328.068†	-8817.0	-9307.4	5.7795	ug/L	5.7795	ppb	18:34:47
2	As 188.979†	-93.7	-62.2	44.978	ug/L	44.978	ppb	18:35:07
2	B 249.677†	745.6	1457.1	11.917	ug/L	11.917	ppb	18:34:47
2	Ba 233.527†	198870.4	198358.5	1449.6	ug/L	1449.6	ppb	18:34:47
2	Be 313.107†	-12368.6	-7961.9	8.1264	ug/L	8.1264	ppb	18:34:47
2	Cd 226.502†	1087.4	1335.2	-0.7911	ug/L	-0.7911	ppb	18:35:07
2	Co 228.616†	3068.4	3149.6	45.861	ug/L	45.861	ppb	18:35:07
2	Cr 267.716†	10524.9	10382.1	106.94	ug/L	106.94	ppb	18:35:07
2	Cu 324.752†	30115.4	21940.9	71.761	ug/L	71.761	ppb	18:34:47
2	Mn 257.610†	2339372.6	2332783.0	2461.1	ug/L	2461.1	ppb	18:34:41
2	Mo 202.031†	-78.0	-101.1	6.5018	ug/L	6.5018	ppb	18:35:07
2	Ni 231.604†	3555.7	3429.4	75.008	ug/L	75.008	ppb	18:35:07

2	P 214.914†	2596.8	2337.6	1069.2 ug/L	1069.2 ppb	18:35:07
2	Pb 220.353†	868.2	966.7	116.83 ug/L	116.83 ppb	18:35:07
2	S 181.975 Axial†	612.8	548.9	602.59 ug/L	602.59 ppb	18:35:07
2	Sb 206.836†	101.4	60.4	-0.6546 ug/L	-0.6546 ppb	18:35:07
2	Se 196.026†	-775.4	-738.1	25.320 ug/L	25.320 ppb	18:35:07
2	Si 251.611†	1240360.9	1236559.5	35500 ug/L	35500 ppb	18:34:41
2	Sn 189.927†	-116.1	-119.9	-13.756 ug/L	-13.756 ppb	18:35:07
2	Ti 334.940†	3518722.5	3511608.7	5502.4 ug/L	5502.4 ppb	18:34:41
2	Tl 190.801†	-254.5	-207.9	2.0634 ug/L	2.0634 ppb	18:35:07
2	U 409.014†	-9144.4	-6495.1	-209.52 ug/L	-209.52 ppb	18:34:47
2	V 292.402†	44071.1	45759.8	260.85 ug/L	260.85 ppb	18:34:47
2	Zn 213.857†	30185.5	29250.9	232.10 ug/L	232.10 ppb	18:34:47
2	SiO2†	1257862.0	1253994.1	77629 ug/L	77629 ppb	18:35:51
3	Sc Radial	4859.7	4859.7	95.6 %		18:34:01
3	Y RADIAL	5732.3	5732.3	106.9 %		18:34:01
3	Al 396.153Radial†	149908.3	156880.9	127420 ug/L	127420 ppb	18:33:41
3	Ca 317.933Radial†	12955.1	13537.8	21485 ug/L	21485 ppb	18:33:41
3	Fe 238.204 Radial†	15259.8	15952.9	138160 ug/L	138160 ppb	18:33:41
3	K 766.490 Radial†	94070.1	95102.0	18310 ug/L	18310 ppb	18:33:41
3	Mg 279.077 IEC†	621.2	646.2	19865 ug/L	19865 ppb	18:34:01
3	Na 589.592 Radial†	3122.1	5004.7	1424.4 ug/L	1424.4 ppb	18:33:41
3	Sr 421.552†	35050.9	36669.2	242.98 ug/L	242.98 ppb	18:33:41
3	Sc 361.383	922387.6	922387.6	100.81 %		18:35:14
3	Y 371.029	885811.7	885811.7	113.33 %		18:35:14
3	Ag 328.068†	-8822.5	-9264.4	7.3405 ug/L	7.3405 ppb	18:35:19
3	As 188.979†	-94.1	-62.1	46.194 ug/L	46.194 ppb	18:35:39
3	B 249.677†	816.6	1523.4	12.728 ug/L	12.728 ppb	18:35:19
3	Ba 233.527†	200163.3	198546.9	1451.1 ug/L	1451.1 ppb	18:35:19
3	Be 313.107†	-12373.6	-7898.8	8.2781 ug/L	8.2781 ppb	18:35:19
3	Cd 226.502†	1104.7	1346.4	-1.1007 ug/L	-1.1007 ppb	18:35:39
3	Co 228.616†	3045.9	3110.5	44.928 ug/L	44.928 ppb	18:35:39
3	Cr 267.716†	10439.0	10239.0	105.58 ug/L	105.58 ppb	18:35:39
3	Cu 324.752†	30213.5	21872.5	71.770 ug/L	71.770 ppb	18:35:19
3	Mn 257.610†	2379933.3	2360148.8	2490.2 ug/L	2490.2 ppb	18:35:14
3	Mo 202.031†	-91.1	-113.6	6.1155 ug/L	6.1155 ppb	18:35:39
3	Ni 231.604†	3536.7	3391.0	74.168 ug/L	74.168 ppb	18:35:39
3	P 214.914†	2576.5	2303.2	1050.2 ug/L	1050.2 ppb	18:35:39
3	Pb 220.353†	882.4	976.1	118.24 ug/L	118.24 ppb	18:35:39
3	S 181.975 Axial†	643.2	575.7	632.53 ug/L	632.53 ppb	18:35:39
3	Sb 206.836†	113.0	71.4	2.3875 ug/L	2.3875 ppb	18:35:39
3	Se 196.026†	-767.9	-726.4	43.755 ug/L	43.755 ppb	18:35:39
3	Si 251.611†	1261500.4	1250705.8	35906 ug/L	35906 ppb	18:35:14
3	Sn 189.927†	-125.0	-128.1	-14.843 ug/L	-14.843 ppb	18:35:39
3	Ti 334.940†	3580933.8	3553963.4	5568.8 ug/L	5568.8 ppb	18:35:14
3	Tl 190.801†	-273.9	-225.7	-2.0261 ug/L	-2.0261 ppb	18:35:39
3	U 409.014†	-9178.4	-6478.5	-209.55 ug/L	-209.55 ppb	18:35:19
3	V 292.402†	44383.5	45827.2	260.56 ug/L	260.56 ppb	18:35:19
3	Zn 213.857†	30276.3	29174.9	231.28 ug/L	231.28 ppb	18:35:19
3	SiO2†	1262146.8	1251324.8	77463 ug/L	77463 ppb	18:35:57

Mean Data: 243270010|935381|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	913679.0	99.858	%	1.1997				1.20%
Sc Radial	4861.7	95.6	%	0.66				0.69%
Y 371.029	877455.6	112.26	%	1.240				1.10%
Y RADIAL	5726.4	106.8	%	0.66				0.62%
Ag 328.068†	-9349.9	6.7122	ug/L	0.82377	6.7122	ppb	0.82377	12.27%
Al 396.153Radial†	155933.1	126650	ug/L	2430.2	126650	ppb	2430.2	1.92%
As 188.979†	-61.3	46.221	ug/L	1.2570	46.221	ppb	1.2570	2.72%
B 249.677†	1491.2	12.174	ug/L	0.4803	12.174	ppb	0.4803	3.95%
Ba 233.527†	200330.4	1464.1	ug/L	23.78	1464.1	ppb	23.78	1.62%
Be 313.107†	-8083.1	8.1829	ug/L	0.08288	8.1829	ppb	0.08288	1.01%
Ca 317.933Radial†	13428.5	21312	ug/L	475.3	21312	ppb	475.3	2.23%
Cd 226.502†	1341.6	-1.0632	ug/L	0.25543	-1.0632	ppb	0.25543	24.03%
Co 228.616†	3136.3	45.464	ug/L	0.4819	45.464	ppb	0.4819	1.06%
Cr 267.716†	10362.7	106.81	ug/L	1.170	106.81	ppb	1.170	1.09%
Cu 324.752†	22157.3	72.571	ug/L	1.3955	72.571	ppb	1.3955	1.92%
Fe 238.204 Radial†	15858.7	137340	ug/L	3004.8	137340	ppb	3004.8	2.19%
K 766.490 Radial†	94523.0	18199	ug/L	355.9	18199	ppb	355.9	1.96%

Mg 279.077 IEC†	654.1	20112	ug/L	217.9	20112	ppb	217.9	1.08%
Mn 257.610†	2354511.7	2484.2	ug/L	20.80	2484.2	ppb	20.80	0.84%
Mo 202.031†	-113.8	6.0231	ug/L	0.53095	6.0231	ppb	0.53095	8.82%
Na 589.592 Radial†	4945.5	1407.6	ug/L	36.25	1407.6	ppb	36.25	2.58%
Ni 231.604†	3424.0	74.891	ug/L	0.6729	74.891	ppb	0.6729	0.90%
P 214.914†	2322.1	1059.7	ug/L	9.51	1059.7	ppb	9.51	0.90%
Pb 220.353†	974.6	117.98	ug/L	1.049	117.98	ppb	1.049	0.89%
S 181.975 Axial†	564.2	619.59	ug/L	15.378	619.59	ppb	15.378	2.48%
Sb 206.836†	65.5	0.6639	ug/L	1.56095	0.6639	ppb	1.56095	235.10%
Se 196.026†	-736.4	36.198	ug/L	9.6561	36.198	ppb	9.6561	26.68%
Si 251.611†	1247160.2	35804	ug/L	268.3	35804	ppb	268.3	0.75%
Sn 189.927†	-126.4	-14.624	ug/L	0.7815	-14.624	ppb	0.7815	5.34%
Sr 421.552†	36417.8	241.32	ug/L	4.965	241.32	ppb	4.965	2.06%
Ti 334.940†	3543264.8	5552.0	ug/L	43.72	5552.0	ppb	43.72	0.79%
Tl 190.801†	-221.2	-0.9895	ug/L	2.68891	-0.9895	ppb	2.68891	271.74%
U 409.014†	-6494.0	-209.91	ug/L	0.649	-209.91	ppb	0.649	0.31%
V 292.402†	46192.9	263.00	ug/L	3.977	263.00	ppb	3.977	1.51%
Zn 213.857†	29488.8	233.89	ug/L	3.825	233.89	ppb	3.825	1.64%
SiO2†	1258587.1	77913	ug/L	640.9	77913	ppb	640.9	0.82%

Sequence No.: 34
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 1/5/2010 18:45:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4192.3	4192.3	82.4	%			18:46:53
1	Y RADIAL	4388.0	4388.0	81.85	%			18:46:53
1	Al 396.153Radial†	5760.5	7006.8	5669.2	ug/L	5669.2	ppb	18:46:53
1	Ca 317.933Radial†	3010.6	3633.5	5766.5	ug/L	5766.5	ppb	18:47:13
1	Fe 238.204 Radial†	583.6	693.2	6019.1	ug/L	6019.1	ppb	18:47:13
1	K 766.490 Radial†	29164.5	32043.9	6164.2	ug/L	6164.2	ppb	18:46:53
1	Mg 279.077 IEC†	160.5	190.8	5905.2	ug/L	5905.2	ppb	18:47:13
1	Na 589.592 Radial†	32752.7	41465.3	11802	ug/L	11802	ppb	18:46:53
1	Sr 421.552†	70130.9	85058.1	564.03	ug/L	564.03	ppb	18:46:53
1	Sc 361.383	903741.2	903741.2	98.772	%			18:48:12
1	Y 371.029	763398.0	763398.0	97.671	%			18:48:12
1	Ag 328.068†	116387.7	117322.1	507.67	ug/L	507.67	ppb	18:48:12
1	As 188.979†	1395.2	1443.8	513.11	ug/L	513.11	ppb	18:48:32
1	B 249.677†	23153.1	24154.4	492.65	ug/L	492.65	ppb	18:48:12
1	Ba 233.527†	68650.3	69495.4	507.74	ug/L	507.74	ppb	18:48:12
1	Be 313.107†	1481785.9	1504586.3	508.69	ug/L	508.69	ppb	18:48:12
1	Cd 226.502†	53079.4	53990.0	507.54	ug/L	507.54	ppb	18:48:12
1	Co 228.616†	26431.0	26848.6	502.09	ug/L	502.09	ppb	18:48:32
1	Cr 267.716†	49857.8	50361.5	505.21	ug/L	505.21	ppb	18:48:12
1	Cu 324.752†	176556.1	170653.2	505.28	ug/L	505.28	ppb	18:48:12
1	Mn 257.610†	479832.1	485130.4	509.61	ug/L	509.61	ppb	18:48:12
1	Mo 202.031†	8023.7	8100.2	508.78	ug/L	508.78	ppb	18:48:32
1	Ni 231.604†	22754.3	22919.9	501.24	ug/L	501.24	ppb	18:48:32
1	P 214.914†	5393.5	5208.0	2476.1	ug/L	2476.1	ppb	18:48:32
1	Pb 220.353†	4777.1	4937.2	512.80	ug/L	512.80	ppb	18:48:32
1	S 181.975 Axial†	944.9	894.3	1020.5	ug/L	1020.5	ppb	18:48:32
1	Sb 206.836†	1702.5	1683.0	506.11	ug/L	506.11	ppb	18:48:32
1	Se 196.026†	956.1	1003.3	533.03	ug/L	533.03	ppb	18:48:32
1	Si 251.611†	87832.7	88263.1	2521.9	ug/L	2521.9	ppb	18:48:12
1	Sn 189.927†	3368.9	3406.7	505.69	ug/L	505.69	ppb	18:48:32
1	Ti 334.940†	318047.2	323794.9	507.16	ug/L	507.16	ppb	18:48:12
1	Tl 190.801†	1759.6	1827.4	503.85	ug/L	503.85	ppb	18:48:32
1	U 409.014†	13608.6	16404.1	484.35	ug/L	484.35	ppb	18:48:12
1	V 292.402†	77249.0	80009.8	509.08	ug/L	509.08	ppb	18:48:12
1	Zn 213.857†	61875.0	61786.2	503.26	ug/L	503.26	ppb	18:48:12
1	SiO2†	88192.1	88604.7	5458.8	ug/L	5458.8	ppb	18:49:32
2	Sc Radial	4733.5	4733.5	93.1	%			18:47:18
2	Y RADIAL	4949.4	4949.4	92.32	%			18:47:18
2	Al 396.153Radial†	5628.7	6066.3	4905.1	ug/L	4905.1	ppb	18:47:18
2	Ca 317.933Radial†	3048.2	3256.4	5168.1	ug/L	5168.1	ppb	18:47:38
2	Fe 238.204 Radial†	586.1	615.0	5341.9	ug/L	5341.9	ppb	18:47:38
2	K 766.490 Radial†	28806.0	27614.3	5311.4	ug/L	5311.4	ppb	18:47:18
2	Mg 279.077 IEC†	163.9	172.2	5332.0	ug/L	5332.0	ppb	18:47:38
2	Na 589.592 Radial†	31781.7	35880.1	10212	ug/L	10212	ppb	18:47:18
2	Sr 421.552†	68282.3	73346.5	486.37	ug/L	486.37	ppb	18:47:18
2	Sc 361.383	890245.3	890245.3	97.297	%			18:48:39
2	Y 371.029	752928.9	752928.9	96.331	%			18:48:39
2	Ag 328.068†	115265.1	117954.7	510.19	ug/L	510.19	ppb	18:48:39
2	As 188.979†	1383.2	1452.9	516.22	ug/L	516.22	ppb	18:48:59
2	B 249.677†	23039.1	24392.6	497.61	ug/L	497.61	ppb	18:48:39
2	Ba 233.527†	68126.5	70010.7	511.49	ug/L	511.49	ppb	18:48:39
2	Be 313.107†	1468730.4	1513910.9	511.84	ug/L	511.84	ppb	18:48:39
2	Cd 226.502†	52475.0	54183.5	509.43	ug/L	509.43	ppb	18:48:39
2	Co 228.616†	26162.8	26978.7	504.53	ug/L	504.53	ppb	18:48:59
2	Cr 267.716†	49333.9	50588.3	507.48	ug/L	507.48	ppb	18:48:39
2	Cu 324.752†	174688.6	171443.7	507.59	ug/L	507.59	ppb	18:48:39
2	Mn 257.610†	475415.1	487955.3	512.51	ug/L	512.51	ppb	18:48:39
2	Mo 202.031†	7959.2	8157.1	512.28	ug/L	512.28	ppb	18:48:59
2	Ni 231.604†	22591.6	23102.0	505.22	ug/L	505.22	ppb	18:48:59

2	P 214.914†	5318.3	5213.5	2478.7 ug/L	2478.7 ppb	18:48:59
2	Pb 220.353†	4719.3	4951.1	514.13 ug/L	514.13 ppb	18:48:59
2	S 181.975 Axial†	917.7	880.9	1005.3 ug/L	1005.3 ppb	18:48:59
2	Sb 206.836†	1687.9	1694.1	509.43 ug/L	509.43 ppb	18:48:59
2	Se 196.026†	957.9	1019.8	539.42 ug/L	539.42 ppb	18:48:59
2	Si 251.611†	86960.7	88714.9	2535.1 ug/L	2535.1 ppb	18:48:39
2	Sn 189.927†	3318.4	3406.4	505.58 ug/L	505.58 ppb	18:48:59
2	Ti 334.940†	315021.7	325566.8	509.91 ug/L	509.91 ppb	18:48:39
2	Tl 190.801†	1757.0	1851.8	510.52 ug/L	510.52 ppb	18:48:59
2	U 409.014†	13236.2	16230.2	479.28 ug/L	479.28 ppb	18:48:39
2	V 292.402†	76592.3	80520.5	512.42 ug/L	512.42 ppb	18:48:39
2	Zn 213.857†	61321.3	62166.7	506.41 ug/L	506.41 ppb	18:48:39
2	SiO2†	87919.9	89678.5	5525.8 ug/L	5525.8 ppb	18:49:37
3	Sc Radial	4766.1	4766.1	93.7 %		18:47:43
3	Y RADIAL	4945.0	4945.0	92.24 %		18:47:43
3	Al 396.153Radial†	5655.2	6053.3	4895.0 ug/L	4895.0 ppb	18:47:43
3	Ca 317.933Radial†	3055.0	3241.2	5144.1 ug/L	5144.1 ppb	18:48:03
3	Fe 238.204 Radial†	590.6	615.5	5345.8 ug/L	5345.8 ppb	18:48:03
3	K 766.490 Radial†	28861.9	27462.5	5282.1 ug/L	5282.1 ppb	18:47:43
3	Mg 279.077 IEC†	161.9	168.9	5227.7 ug/L	5227.7 ppb	18:48:03
3	Na 589.592 Radial†	32019.3	35900.4	10218 ug/L	10218 ppb	18:47:43
3	Sr 421.552†	68575.6	73158.4	485.12 ug/L	485.12 ppb	18:47:43
3	Sc 361.383	901999.0	901999.0	98.581 %		18:49:07
3	Y 371.029	762180.6	762180.6	97.515 %		18:49:07
3	Ag 328.068†	116883.1	118052.2	510.61 ug/L	510.61 ppb	18:49:07
3	As 188.979†	1377.4	1428.5	507.65 ug/L	507.65 ppb	18:49:27
3	B 249.677†	23383.8	24433.6	498.47 ug/L	498.47 ppb	18:49:07
3	Ba 233.527†	69059.3	70044.5	511.74 ug/L	511.74 ppb	18:49:07
3	Be 313.107†	1490190.9	1516009.8	512.55 ug/L	512.55 ppb	18:49:07
3	Cd 226.502†	53291.2	54308.6	510.60 ug/L	510.60 ppb	18:49:07
3	Co 228.616†	26071.4	26535.5	496.22 ug/L	496.22 ppb	18:49:27
3	Cr 267.716†	49975.2	50578.2	507.38 ug/L	507.38 ppb	18:49:07
3	Cu 324.752†	177183.7	171635.1	508.16 ug/L	508.16 ppb	18:49:07
3	Mn 257.610†	482485.6	488760.4	513.36 ug/L	513.36 ppb	18:49:07
3	Mo 202.031†	7918.4	8009.1	502.99 ug/L	502.99 ppb	18:49:27
3	Ni 231.604†	22496.1	22702.4	496.48 ug/L	496.48 ppb	18:49:27
3	P 214.914†	5307.2	5131.0	2438.1 ug/L	2438.1 ppb	18:49:27
3	Pb 220.353†	4683.7	4851.8	503.82 ug/L	503.82 ppb	18:49:27
3	S 181.975 Axial†	931.0	882.0	1006.6 ug/L	1006.6 ppb	18:49:27
3	Sb 206.836†	1687.1	1670.6	502.18 ug/L	502.18 ppb	18:49:27
3	Se 196.026†	946.2	995.1	526.78 ug/L	526.78 ppb	18:49:27
3	Si 251.611†	88249.4	88857.6	2539.3 ug/L	2539.3 ppb	18:49:07
3	Sn 189.927†	3324.9	3368.6	499.98 ug/L	499.98 ppb	18:49:27
3	Ti 334.940†	319735.8	326129.7	510.79 ug/L	510.79 ppb	18:49:07
3	Tl 190.801†	1754.0	1825.2	503.29 ug/L	503.29 ppb	18:49:27
3	U 409.014†	13619.3	16441.5	485.54 ug/L	485.54 ppb	18:49:07
3	V 292.402†	77730.6	80649.4	513.10 ug/L	513.10 ppb	18:49:07
3	Zn 213.857†	62184.5	62221.1	506.92 ug/L	506.92 ppb	18:49:07
3	SiO2†	86313.5	86871.6	5352.4 ug/L	5352.4 ppb	18:49:42

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	898661.8	98.217	%	0.8023				0.82%
Sc Radial	4564.0	89.8	%	6.34				7.06%
Y 371.029	759502.5	97.172	%	0.7325				0.75%
Y RADIAL	4760.8	88.80	%	6.022				6.78%
Ag 328.068†	117776.3	509.49	ug/L	1.589	509.49	ppb	1.589	0.31%
QC value within limits for Ag 328.068 Recovery = 101.90%								
Al 396.153Radial†	6375.4	5156.4	ug/L	444.09	5156.4	ppb	444.09	8.61%
QC value within limits for Al 396.153Radial Recovery = 103.13%								
As 188.979†	1441.7	512.33	ug/L	4.337	512.33	ppb	4.337	0.85%
QC value within limits for As 188.979 Recovery = 102.47%								
B 249.677†	24326.9	496.25	ug/L	3.143	496.25	ppb	3.143	0.63%
QC value within limits for B 249.677 Recovery = 99.25%								
Ba 233.527†	69850.2	510.32	ug/L	2.237	510.32	ppb	2.237	0.44%
QC value within limits for Ba 233.527 Recovery = 102.06%								
Be 313.107†	1511502.3	511.03	ug/L	2.056	511.03	ppb	2.056	0.40%
QC value within limits for Be 313.107 Recovery = 102.21%								
Ca 317.933Radial†	3377.0	5359.6	ug/L	352.65	5359.6	ppb	352.65	6.58%

QC value within limits for Ca 317.933Radial Recovery = 107.19%

Cd 226.502†	54160.7	509.19 ug/L	1.544	509.19 ppb	1.544	0.30%
QC value within limits for Cd 226.502 Recovery = 101.84%						
Co 228.616†	26787.6	500.95 ug/L	4.271	500.95 ppb	4.271	0.85%
QC value within limits for Co 228.616 Recovery = 100.19%						
Cr 267.716†	50509.3	506.69 ug/L	1.280	506.69 ppb	1.280	0.25%
QC value within limits for Cr 267.716 Recovery = 101.34%						
Cu 324.752†	171244.0	507.01 ug/L	1.521	507.01 ppb	1.521	0.30%
QC value within limits for Cu 324.752 Recovery = 101.40%						
Fe 238.204 Radial†	641.2	5568.9 ug/L	389.86	5568.9 ppb	389.86	7.00%
QC value greater than the upper limit for Fe 238.204 Radial Recovery = 111.38%						
K 766.490 Radial†	29040.2	5585.9 ug/L	501.03	5585.9 ppb	501.03	8.97%
QC value greater than the upper limit for K 766.490 Radial Recovery = 111.72%						
Mg 279.077 IEC†	177.3	5488.3 ug/L	364.79	5488.3 ppb	364.79	6.65%
QC value within limits for Mg 279.077 IEC Recovery = 109.77%						
Mn 257.610†	487282.0	511.83 ug/L	1.969	511.83 ppb	1.969	0.38%
QC value within limits for Mn 257.610 Recovery = 102.37%						
Mo 202.031†	8088.8	508.02 ug/L	4.690	508.02 ppb	4.690	0.92%
QC value within limits for Mo 202.031 Recovery = 101.60%						
Na 589.592 Radial†	37748.6	10744 ug/L	916.1	10744 ppb	916.1	8.53%
QC value within limits for Na 589.592 Radial Recovery = 107.44%						
Ni 231.604†	22908.1	500.98 ug/L	4.375	500.98 ppb	4.375	0.87%
QC value within limits for Ni 231.604 Recovery = 100.20%						
P 214.914†	5184.2	2464.3 ug/L	22.75	2464.3 ppb	22.75	0.92%
QC value within limits for P 214.914 Recovery = 98.57%						
Pb 220.353†	4913.4	510.25 ug/L	5.608	510.25 ppb	5.608	1.10%
QC value within limits for Pb 220.353 Recovery = 102.05%						
S 181.975 Axial†	885.7	1010.8 ug/L	8.43	1010.8 ppb	8.43	0.83%
QC value within limits for S 181.975 Axial Recovery = 101.08%						
Sb 206.836†	1682.6	505.91 ug/L	3.629	505.91 ppb	3.629	0.72%
QC value within limits for Sb 206.836 Recovery = 101.18%						
Se 196.026†	1006.1	533.08 ug/L	6.320	533.08 ppb	6.320	1.19%
QC value within limits for Se 196.026 Recovery = 106.62%						
Si 251.611†	88611.9	2532.1 ug/L	9.11	2532.1 ppb	9.11	0.36%
QC value within limits for Si 251.611 Recovery = 101.28%						
Sn 189.927†	3393.9	503.75 ug/L	3.267	503.75 ppb	3.267	0.65%
QC value within limits for Sn 189.927 Recovery = 100.75%						
Sr 421.552†	77187.7	511.84 ug/L	45.203	511.84 ppb	45.203	8.83%
QC value within limits for Sr 421.552 Recovery = 102.37%						
Ti 334.940†	325163.8	509.29 ug/L	1.891	509.29 ppb	1.891	0.37%
QC value within limits for Ti 334.940 Recovery = 101.86%						
Tl 190.801†	1834.8	505.88 ug/L	4.022	505.88 ppb	4.022	0.80%
QC value within limits for Tl 190.801 Recovery = 101.18%						
U 409.014†	16358.6	483.06 ug/L	3.325	483.06 ppb	3.325	0.69%
QC value within limits for U 409.014 Recovery = 96.61%						
V 292.402†	80393.2	511.53 ug/L	2.150	511.53 ppb	2.150	0.42%
QC value within limits for V 292.402 Recovery = 102.31%						
Zn 213.857†	62058.0	505.53 ug/L	1.982	505.53 ppb	1.982	0.39%
QC value within limits for Zn 213.857 Recovery = 101.11%						
SiO2†	88384.9	5445.7 ug/L	87.44	5445.7 ppb	87.44	1.61%
QC value within limits for SiO2 Recovery = 101.84%						

QC Failed. Continue with analysis.

Sequence No.: 35
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 1/5/2010 18:51:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4773.9	4773.9	93.9	%			18:53:44
1	Y RADIAL	5013.0	5013.0	93.51	%			18:53:44
1	Al 396.153Radial†	-9.1	9.8	7.9719	ug/L	7.9719	ppb	18:53:44
1	Ca 317.933Radial†	16.8	-0.3	-0.5231	ug/L	-0.5231	ppb	18:54:04
1	Fe 238.204 Radial†	11.5	-2.4	-20.605	ug/L	-20.605	ppb	18:54:04
1	K 766.490 Radial†	3416.2	307.6	59.254	ug/L	59.254	ppb	18:53:44
1	Mg 279.077 IEC†	3.3	-0.3	-9.9047	ug/L	-9.9047	ppb	18:54:04
1	Na 589.592 Radial†	-1610.7	22.1	6.2952	ug/L	6.2952	ppb	18:53:44
1	Sr 421.552†	31.5	26.1	0.1732	ug/L	0.1732	ppb	18:53:44
1	Sc 361.383	913463.3	913463.3	99.834	%			18:55:01
1	Y 371.029	779972.2	779972.2	99.791	%			18:55:01
1	Ag 328.068†	568.6	56.8	0.2371	ug/L	0.2371	ppb	18:55:06
1	As 188.979†	-29.2	2.0	0.6874	ug/L	0.6874	ppb	18:55:26
1	B 249.677†	-656.8	55.5	1.1393	ug/L	1.1393	ppb	18:55:06
1	Ba 233.527†	16.7	8.2	0.0599	ug/L	0.0599	ppb	18:55:26
1	Be 313.107†	-4258.1	110.2	0.0371	ug/L	0.0371	ppb	18:55:06
1	Cd 226.502†	-237.8	12.4	0.1189	ug/L	0.1189	ppb	18:55:26
1	Co 228.616†	-87.3	1.5	0.0280	ug/L	0.0280	ppb	18:55:26
1	Cr 267.716†	108.7	-7.3	-0.0738	ug/L	-0.0738	ppb	18:55:06
1	Cu 324.752†	7962.4	-122.6	-0.3639	ug/L	-0.3639	ppb	18:55:06
1	Mn 257.610†	609.9	-57.1	-0.0618	ug/L	-0.0618	ppb	18:55:06
1	Mo 202.031†	17.2	-6.0	-0.3804	ug/L	-0.3804	ppb	18:55:26
1	Ni 231.604†	132.4	15.3	0.3343	ug/L	0.3343	ppb	18:55:26
1	P 214.914†	254.6	2.4	1.2474	ug/L	1.2474	ppb	18:55:26
1	Pb 220.353†	-94.1	6.5	0.6731	ug/L	0.6731	ppb	18:55:26
1	S 181.975 Axial†	59.0	-3.3	-3.7726	ug/L	-3.7726	ppb	18:55:26
1	Sb 206.836†	53.5	12.9	3.8107	ug/L	3.8107	ppb	18:55:26
1	Se 196.026†	-43.8	-8.6	-4.4725	ug/L	-4.4725	ppb	18:55:26
1	Si 251.611†	676.4	15.8	0.4402	ug/L	0.4402	ppb	18:55:26
1	Sn 189.927†	2.2	-2.0	-0.2943	ug/L	-0.2943	ppb	18:55:26
1	Ti 334.940†	-1822.0	-32.0	-0.0509	ug/L	-0.0509	ppb	18:55:06
1	Tl 190.801†	-53.3	-7.5	-2.0488	ug/L	-2.0488	ppb	18:55:26
1	U 409.014†	-2567.7	54.3	1.6120	ug/L	1.6120	ppb	18:55:01
1	V 292.402†	-1745.9	51.5	0.3240	ug/L	0.3240	ppb	18:55:06
1	Zn 213.857†	883.4	26.6	0.2184	ug/L	0.2184	ppb	18:55:26
1	SiO2†	712.8	30.0	1.8318	ug/L	1.8318	ppb	18:56:32
2	Sc Radial	4724.5	4724.5	92.9	%			18:54:09
2	Y RADIAL	4960.8	4960.8	92.53	%			18:54:09
2	Al 396.153Radial†	-19.6	-1.5	-1.2186	ug/L	-1.2186	ppb	18:54:09
2	Ca 317.933Radial†	12.3	-5.0	-7.9790	ug/L	-7.9790	ppb	18:54:29
2	Fe 238.204 Radial†	13.1	-0.5	-4.6141	ug/L	-4.6141	ppb	18:54:29
2	K 766.490 Radial†	3325.8	248.4	47.846	ug/L	47.846	ppb	18:54:09
2	Mg 279.077 IEC†	6.3	2.8	87.851	ug/L	87.851	ppb	18:54:29
2	Na 589.592 Radial†	-1575.9	41.6	11.848	ug/L	11.848	ppb	18:54:09
2	Sr 421.552†	45.1	41.1	0.2728	ug/L	0.2728	ppb	18:54:09
2	Sc 361.383	905008.8	905008.8	98.910	%			18:55:31
2	Y 371.029	773193.9	773193.9	98.924	%			18:55:31
2	Ag 328.068†	416.4	-91.8	-0.3941	ug/L	-0.3941	ppb	18:55:36
2	As 188.979†	-40.3	-9.5	-3.3396	ug/L	-3.3396	ppb	18:55:56
2	B 249.677†	-664.6	41.5	0.8506	ug/L	0.8506	ppb	18:55:36
2	Ba 233.527†	29.4	21.2	0.1539	ug/L	0.1539	ppb	18:55:56
2	Be 313.107†	-4342.3	-14.7	-0.0046	ug/L	-0.0046	ppb	18:55:36
2	Cd 226.502†	-227.5	20.6	0.1941	ug/L	0.1941	ppb	18:55:56
2	Co 228.616†	-90.2	-2.2	-0.0422	ug/L	-0.0422	ppb	18:55:56
2	Cr 267.716†	109.6	-5.4	-0.0539	ug/L	-0.0539	ppb	18:55:36
2	Cu 324.752†	8028.5	18.7	0.0551	ug/L	0.0551	ppb	18:55:36
2	Mn 257.610†	602.9	-58.5	-0.0635	ug/L	-0.0635	ppb	18:55:36
2	Mo 202.031†	13.9	-9.2	-0.5763	ug/L	-0.5763	ppb	18:55:56
2	Ni 231.604†	132.0	16.1	0.3524	ug/L	0.3524	ppb	18:55:56

2	P 214.914†	241.4	-8.5	-4.1753 ug/L	-4.1753 ppb	18:55:56
2	Pb 220.353†	-91.7	8.0	0.8240 ug/L	0.8240 ppb	18:55:56
2	S 181.975 Axial†	62.2	0.5	0.6137 ug/L	0.6137 ppb	18:55:56
2	Sb 206.836†	49.9	9.8	2.9029 ug/L	2.9029 ppb	18:55:56
2	Se 196.026†	-38.8	-4.0	-2.0519 ug/L	-2.0519 ppb	18:55:56
2	Si 251.611†	673.2	18.9	0.5343 ug/L	0.5343 ppb	18:55:56
2	Sn 189.927†	10.4	6.4	0.9498 ug/L	0.9498 ppb	18:55:56
2	Ti 334.940†	-1665.1	109.5	0.1722 ug/L	0.1722 ppb	18:55:36
2	Tl 190.801†	-47.5	-2.0	-0.5587 ug/L	-0.5587 ppb	18:55:56
2	U 409.014†	-2676.1	-79.3	-2.3498 ug/L	-2.3498 ppb	18:55:31
2	V 292.402†	-1794.1	-13.7	-0.0961 ug/L	-0.0961 ppb	18:55:36
2	Zn 213.857†	876.2	27.7	0.2224 ug/L	0.2224 ppb	18:55:56
2	SiO2†	693.9	17.6	1.0698 ug/L	1.0698 ppb	18:56:37
3	Sc Radial	4756.6	4756.6	93.5 %		18:54:34
3	Y RADIAL	4976.8	4976.8	92.83 %		18:54:34
3	Al 396.153Radial†	-10.0	8.9	7.2285 ug/L	7.2285 ppb	18:54:34
3	Ca 317.933Radial†	15.2	-2.0	-3.1040 ug/L	-3.1040 ppb	18:54:54
3	Fe 238.204 Radial†	12.6	-1.2	-10.476 ug/L	-10.476 ppb	18:54:54
3	K 766.490 Radial†	3458.0	365.5	70.411 ug/L	70.411 ppb	18:54:34
3	Mg 279.077 IEC†	2.4	-1.3	-40.141 ug/L	-40.141 ppb	18:54:54
3	Na 589.592 Radial†	-1596.7	30.8	8.7690 ug/L	8.7690 ppb	18:54:34
3	Sr 421.552†	21.2	15.2	0.1008 ug/L	0.1008 ppb	18:54:34
3	Sc 361.383	906444.9	906444.9	99.067 %		18:56:01
3	Y 371.029	773884.4	773884.4	99.012 %		18:56:01
3	Ag 328.068†	365.6	-143.7	-0.6225 ug/L	-0.6225 ppb	18:56:06
3	As 188.979†	-35.1	-4.1	-1.4612 ug/L	-1.4612 ppb	18:56:27
3	B 249.677†	-635.8	71.6	1.4665 ug/L	1.4665 ppb	18:56:06
3	Ba 233.527†	12.8	4.4	0.0315 ug/L	0.0315 ppb	18:56:27
3	Be 313.107†	-4272.6	62.6	0.0214 ug/L	0.0214 ppb	18:56:06
3	Cd 226.502†	-246.4	1.9	0.0189 ug/L	0.0189 ppb	18:56:27
3	Co 228.616†	-72.7	15.6	0.2910 ug/L	0.2910 ppb	18:56:27
3	Cr 267.716†	101.0	-14.3	-0.1436 ug/L	-0.1436 ppb	18:56:06
3	Cu 324.752†	8159.1	137.7	0.4069 ug/L	0.4069 ppb	18:56:06
3	Mn 257.610†	618.3	-44.0	-0.0464 ug/L	-0.0464 ppb	18:56:06
3	Mo 202.031†	22.1	-1.0	-0.0637 ug/L	-0.0637 ppb	18:56:27
3	Ni 231.604†	116.8	0.6	0.0131 ug/L	0.0131 ppb	18:56:27
3	P 214.914†	270.2	20.2	9.8340 ug/L	9.8340 ppb	18:56:27
3	Pb 220.353†	-91.4	8.5	0.8811 ug/L	0.8811 ppb	18:56:27
3	S 181.975 Axial†	61.9	0.2	0.1786 ug/L	0.1786 ppb	18:56:27
3	Sb 206.836†	55.6	15.4	4.5858 ug/L	4.5858 ppb	18:56:27
3	Se 196.026†	-35.9	-0.9	-0.5029 ug/L	-0.5029 ppb	18:56:27
3	Si 251.611†	670.2	14.8	0.4002 ug/L	0.4002 ppb	18:56:27
3	Sn 189.927†	7.6	3.6	0.5286 ug/L	0.5286 ppb	18:56:27
3	Ti 334.940†	-1696.1	80.9	0.1259 ug/L	0.1259 ppb	18:56:06
3	Tl 190.801†	-50.3	-4.8	-1.3205 ug/L	-1.3205 ppb	18:56:27
3	U 409.014†	-2543.8	58.4	1.7333 ug/L	1.7333 ppb	18:56:01
3	V 292.402†	-1787.8	-4.4	-0.0247 ug/L	-0.0247 ppb	18:56:06
3	Zn 213.857†	871.3	21.3	0.1763 ug/L	0.1763 ppb	18:56:27
3	SiO2†	696.3	18.9	1.1153 ug/L	1.1153 ppb	18:56:42

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	908305.7	99.271	%	0.4944				0.50%
Sc Radial	4751.7	93.4	%	0.49				0.53%
Y 371.029	775683.5	99.242	%	0.4772				0.48%
Y RADIAL	4983.5	92.96	%	0.500				0.54%
Ag 328.068†	-59.5	-0.2598	ug/L	0.44529	-0.2598	ppb	0.44529	171.38%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	5.7	4.6606	ug/L	5.10505	4.6606	ppb	5.10505	109.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.9	-1.3711	ug/L	2.01503	-1.3711	ppb	2.01503	146.96%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	56.2	1.1522	ug/L	0.30816	1.1522	ppb	0.30816	26.75%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	11.2	0.0818	ug/L	0.06404	0.0818	ppb	0.06404	78.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	52.7	0.0179	ug/L	0.02107	0.0179	ppb	0.02107	117.47%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-2.4	-3.8687	ug/L	3.78633	-3.8687	ppb	3.78633	97.87%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              11.6      0.1106 ug/L       0.08793      0.1106 ppb       0.08793  79.48%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               5.0      0.0922 ug/L       0.17563      0.0922 ppb       0.17563 190.42%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -9.0     -0.0904 ug/L       0.04713     -0.0904 ppb       0.04713  52.12%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              11.3      0.0327 ug/L       0.38591      0.0327 ppb       0.38591 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -1.4    -11.898 ug/L        8.0897     -11.898 ppb        8.0897  67.99%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       307.1      59.170 ug/L       11.2829      59.170 ppb       11.2829  19.07%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.4      12.602 ug/L       66.8982      12.602 ppb       66.8982 530.87%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             -53.2      -0.0573 ug/L       0.00940     -0.0573 ppb       0.00940  16.42%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -5.4      -0.3401 ug/L       0.25866     -0.3401 ppb       0.25866  76.05%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       31.5      8.9706 ug/L       2.78166      8.9706 ppb       2.78166  31.01%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              10.7      0.2333 ug/L       0.19092      0.2333 ppb       0.19092  81.85%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                4.7      2.3020 ug/L       7.06392      2.3020 ppb       7.06392 306.86%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               7.6      0.7927 ug/L       0.10745      0.7927 ppb       0.10745  13.55%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -0.9      -0.9934 ug/L       2.41667     -0.9934 ppb       2.41667 243.26%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              12.7      3.7665 ug/L       0.84230      3.7665 ppb       0.84230  22.36%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -4.5      -2.3424 ug/L       2.00068     -2.3424 ppb       2.00068  85.41%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              16.5      0.4582 ug/L       0.06881      0.4582 ppb       0.06881  15.02%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               2.7      0.3947 ug/L       0.63273      0.3947 ppb       0.63273 160.31%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              27.5      0.1823 ug/L       0.08632      0.1823 ppb       0.08632  47.36%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              52.8      0.0824 ug/L       0.11775      0.0824 ppb       0.11775 142.88%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -4.8     -1.3093 ug/L       0.74513     -1.3093 ppb       0.74513  56.91%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               11.1      0.3318 ug/L       2.32318      0.3318 ppb       2.32318 700.13%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               11.1      0.0677 ug/L       0.22479      0.0677 ppb       0.22479 331.87%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              25.2      0.2057 ug/L       0.02555      0.2057 ppb       0.02555  12.42%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    22.2      1.3390 ug/L       0.42744      1.3390 ppb       0.42744  31.92%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Reprocessing Begun
Logged In Analyst: Optima3 Technique: ICP Continuous

Results Data Set (original): 010610
Results Library (original): C:\pe\Optima3\Results\Results.mdb
Results Data Set (reprocessed): 010610A
Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

Method Loaded
Method Name: General Eng.2AX Method Last Saved: 1/6/2010 11:54:05
IEC File: 101209.iec MSF File:
Method Description:

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

Sequence No.: 1 Autosampler Location: 8
Sample ID: S0 Date Collected: 1/6/2010 10:05:16
Analyst: Data Type: Reprocessed on 1/6/2010 11:55:25
Logged In Analyst (Original) : Optima3
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	884204.5	884204.5	99.729	%	10:08:26
1	Sc Radial	4647.0	4647.0	99.6	%	10:07:09
1	Y 371.029	760145.0	760145.0	99.788	%	10:08:26
1	Y RADIAL	4888.3	4888.3	99.10	%	10:07:09
1	Ag 328.068†	383.7	384.7	[0.00]	ug/L	10:08:31

1	Al 396.153Radial†	-35.8	-36.0	[0.00] ug/L	10:07:09
1	As 188.979†	-40.4	-40.5	[0.00] ug/L	10:08:51
1	B 249.677†	-622.0	-623.7	[0.00] ug/L	10:08:31
1	Ba 233.527†	18.5	18.5	[0.00] ug/L	10:08:51
1	Be 313.107†	-4379.0	-4390.9	[0.00] ug/L	10:08:31
1	Ca 317.933Radial†	10.1	10.2	[0.00] ug/L	10:07:29
1	Cd 226.502†	-233.2	-233.9	[0.00] ug/L	10:08:51
1	Co 228.616†	-82.3	-82.5	[0.00] ug/L	10:08:51
1	Cr 267.716†	129.2	129.6	[0.00] ug/L	10:08:31
1	Cu 324.752†	8059.5	8081.4	[0.00] ug/L	10:08:31
1	Fe 238.204 Radial†	13.7	13.7	[0.00] ug/L	10:07:29
1	K 766.490 Radial†	3438.5	3453.7	[0.00] ug/L	10:07:09
1	Mg 279.077 IEC†	2.0	2.0	[0.00] ug/L	10:07:29
1	Mn 257.610†	555.5	557.0	[0.00] ug/L	10:08:31
1	Mo 202.031†	22.3	22.3	[0.00] ug/L	10:08:51
1	Na 589.592 Radial†	-1748.6	-1756.4	[0.00] ug/L	10:07:09
1	Ni 231.604†	114.8	115.1	[0.00] ug/L	10:08:51
1	P 214.914†	248.4	249.1	[0.00] ug/L	10:08:51
1	Pb 220.353†	-93.7	-94.0	[0.00] ug/L	10:08:51
1	S 181.975 Axial†	53.6	53.8	[0.00] ug/L	10:08:51
1	Sb 206.836†	40.2	40.3	[0.00] ug/L	10:08:51
1	Se 196.026†	-36.2	-36.3	[0.00] ug/L	10:08:51
1	Si 251.611†	623.9	625.6	[0.00] ug/L	10:08:51
1	Sn 189.927†	3.5	3.5	[0.00] ug/L	10:08:51
1	Sr 421.552†	33.7	33.8	[0.00] ug/L	10:07:09
1	Ti 334.940†	-1810.6	-1815.5	[0.00] ug/L	10:08:31
1	Tl 190.801†	-47.9	-48.0	[0.00] ug/L	10:08:51
1	U 409.014†	-2556.5	-2563.4	[0.00] ug/L	10:08:26
1	V 292.402†	-1786.0	-1790.8	[0.00] ug/L	10:08:31
1	Zn 213.857†	844.0	846.3	[0.00] ug/L	10:08:51
1	SiO2†	616.3	618.0	[0.00] ug/L	10:09:57
2	Sc 361.383	888077.5	888077.5	100.17 %	10:08:56
2	Sc Radial	4701.9	4701.9	101 %	10:07:34
2	Y 371.029	762915.3	762915.3	100.15 %	10:08:56
2	Y RADIAL	4987.9	4987.9	101.1 %	10:07:34
2	Ag 328.068†	601.4	600.4	[0.00] ug/L	10:09:01
2	Al 396.153Radial†	-6.8	-6.8	[0.00] ug/L	10:07:34
2	As 188.979†	-32.7	-32.6	[0.00] ug/L	10:09:21
2	B 249.677†	-682.2	-681.0	[0.00] ug/L	10:09:01
2	Ba 233.527†	-2.0	-1.9	[0.00] ug/L	10:09:21
2	Be 313.107†	-4308.2	-4301.1	[0.00] ug/L	10:09:01
2	Ca 317.933Radial†	14.5	14.4	[0.00] ug/L	10:07:54
2	Cd 226.502†	-234.7	-234.3	[0.00] ug/L	10:09:21
2	Co 228.616†	-75.6	-75.4	[0.00] ug/L	10:09:21
2	Cr 267.716†	138.6	138.4	[0.00] ug/L	10:09:01
2	Cu 324.752†	7960.6	7947.4	[0.00] ug/L	10:09:01
2	Fe 238.204 Radial†	12.8	12.7	[0.00] ug/L	10:07:54
2	K 766.490 Radial†	3279.2	3255.3	[0.00] ug/L	10:07:34
2	Mg 279.077 IEC†	2.5	2.5	[0.00] ug/L	10:07:54
2	Mn 257.610†	504.7	503.9	[0.00] ug/L	10:09:01
2	Mo 202.031†	7.4	7.4	[0.00] ug/L	10:09:21
2	Na 589.592 Radial†	-1789.0	-1775.9	[0.00] ug/L	10:07:34
2	Ni 231.604†	139.5	139.3	[0.00] ug/L	10:09:21
2	P 214.914†	244.1	243.7	[0.00] ug/L	10:09:21
2	Pb 220.353†	-73.5	-73.4	[0.00] ug/L	10:09:21
2	S 181.975 Axial†	64.8	64.7	[0.00] ug/L	10:09:21
2	Sb 206.836†	33.6	33.5	[0.00] ug/L	10:09:21
2	Se 196.026†	-33.5	-33.5	[0.00] ug/L	10:09:21
2	Si 251.611†	597.2	596.2	[0.00] ug/L	10:09:21
2	Sn 189.927†	6.0	6.0	[0.00] ug/L	10:09:21
2	Sr 421.552†	25.1	24.9	[0.00] ug/L	10:07:34
2	Ti 334.940†	-1812.8	-1809.8	[0.00] ug/L	10:09:01
2	Tl 190.801†	-65.1	-65.0	[0.00] ug/L	10:09:21
2	U 409.014†	-2701.8	-2697.3	[0.00] ug/L	10:08:56
2	V 292.402†	-1773.9	-1771.0	[0.00] ug/L	10:09:01
2	Zn 213.857†	830.2	828.8	[0.00] ug/L	10:09:21
2	SiO2†	650.9	649.9	[0.00] ug/L	10:10:02
3	Sc 361.383	887546.5	887546.5	100.11 %	10:09:27
3	Sc Radial	4653.8	4653.8	99.7 %	10:07:59
3	Y 371.029	762209.6	762209.6	100.06 %	10:09:27
3	Y RADIAL	4922.5	4922.5	99.79 %	10:07:59

3	Ag 328.068†	552.4	551.9	[0.00] ug/L	10:09:32
3	Al 396.153Radial†	-37.3	-37.4	[0.00] ug/L	10:07:59
3	As 188.979†	-27.2	-27.2	[0.00] ug/L	10:09:52
3	B 249.677†	-693.6	-692.8	[0.00] ug/L	10:09:32
3	Ba 233.527†	6.0	6.0	[0.00] ug/L	10:09:52
3	Be 313.107†	-4367.1	-4362.5	[0.00] ug/L	10:09:32
3	Ca 317.933Radial†	13.0	13.1	[0.00] ug/L	10:08:19
3	Cd 226.502†	-247.2	-247.0	[0.00] ug/L	10:09:52
3	Co 228.616†	-94.0	-93.9	[0.00] ug/L	10:09:52
3	Cr 267.716†	44.2	44.1	[0.00] ug/L	10:09:32
3	Cu 324.752†	7976.6	7968.2	[0.00] ug/L	10:09:32
3	Fe 238.204 Radial†	15.1	15.2	[0.00] ug/L	10:08:19
3	K 766.490 Radial†	3291.4	3301.2	[0.00] ug/L	10:07:59
3	Mg 279.077 IEC†	0.4	0.4	[0.00] ug/L	10:08:19
3	Mn 257.610†	488.9	488.4	[0.00] ug/L	10:09:32
3	Mo 202.031†	30.1	30.1	[0.00] ug/L	10:09:52
3	Na 589.592 Radial†	-1712.9	-1718.0	[0.00] ug/L	10:07:59
3	Ni 231.604†	121.0	120.8	[0.00] ug/L	10:09:52
3	P 214.914†	253.1	252.8	[0.00] ug/L	10:09:52
3	Pb 220.353†	-66.0	-65.9	[0.00] ug/L	10:09:52
3	S 181.975 Axial†	61.3	61.2	[0.00] ug/L	10:09:52
3	Sb 206.836†	37.5	37.5	[0.00] ug/L	10:09:52
3	Se 196.026†	-30.1	-30.0	[0.00] ug/L	10:09:52
3	Si 251.611†	628.5	627.8	[0.00] ug/L	10:09:52
3	Sn 189.927†	0.7	0.7	[0.00] ug/L	10:09:52
3	Sr 421.552†	-10.8	-10.8	[0.00] ug/L	10:07:59
3	Ti 334.940†	-1828.6	-1826.7	[0.00] ug/L	10:09:32
3	Tl 190.801†	-47.3	-47.2	[0.00] ug/L	10:09:52
3	U 409.014†	-2748.3	-2745.4	[0.00] ug/L	10:09:27
3	V 292.402†	-1845.7	-1843.7	[0.00] ug/L	10:09:32
3	Zn 213.857†	820.8	820.0	[0.00] ug/L	10:09:52
3	SiO2†	640.9	640.3	[0.00] ug/L	10:10:07

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	886609.5	2099.64	0.24%	100.00	%
Sc Radial	4667.6	29.96	0.64%	100	%
Y 371.029	761756.6	1439.64	0.19%	100.00	%
Y RADIAL	4932.9	50.59	1.03%	100.0	%
Ag 328.068†	512.3	113.13	22.08%	[0.00]	ug/L
Al 396.153Radial†	-26.7	17.27	64.64%	[0.00]	ug/L
As 188.979†	-33.4	6.69	20.02%	[0.00]	ug/L
B 249.677†	-665.8	37.00	5.56%	[0.00]	ug/L
Ba 233.527†	7.5	10.31	137.44%	[0.00]	ug/L
Be 313.107†	-4351.5	45.91	1.06%	[0.00]	ug/L
Ca 317.933Radial†	12.6	2.15	17.15%	[0.00]	ug/L
Cd 226.502†	-238.4	7.44	3.12%	[0.00]	ug/L
Co 228.616†	-84.0	9.33	11.12%	[0.00]	ug/L
Cr 267.716†	104.0	52.08	50.06%	[0.00]	ug/L
Cu 324.752†	7999.0	72.12	0.90%	[0.00]	ug/L
Fe 238.204 Radial†	13.9	1.22	8.80%	[0.00]	ug/L
K 766.490 Radial†	3336.7	103.88	3.11%	[0.00]	ug/L
Mg 279.077 IEC†	1.6	1.09	66.14%	[0.00]	ug/L
Mn 257.610†	516.4	35.95	6.96%	[0.00]	ug/L
Mo 202.031†	19.9	11.55	57.98%	[0.00]	ug/L
Na 589.592 Radial†	-1750.1	29.46	1.68%	[0.00]	ug/L
Ni 231.604†	125.1	12.63	10.10%	[0.00]	ug/L
P 214.914†	248.6	4.57	1.84%	[0.00]	ug/L
Pb 220.353†	-77.8	14.53	18.68%	[0.00]	ug/L
S 181.975 Axial†	59.9	5.58	9.32%	[0.00]	ug/L
Sb 206.836†	37.1	3.40	9.17%	[0.00]	ug/L
Se 196.026†	-33.3	3.12	9.39%	[0.00]	ug/L
Si 251.611†	616.6	17.63	2.86%	[0.00]	ug/L
Sn 189.927†	3.4	2.63	77.27%	[0.00]	ug/L
Sr 421.552†	16.0	23.64	147.88%	[0.00]	ug/L
Ti 334.940†	-1817.4	8.59	0.47%	[0.00]	ug/L
Tl 190.801†	-53.4	10.02	18.78%	[0.00]	ug/L
U 409.014†	-2668.7	94.31	3.53%	[0.00]	ug/L
V 292.402†	-1801.8	37.61	2.09%	[0.00]	ug/L

Zn 213.857†	831.7	13.39	1.61%	[0.00] ug/L
SiO2†	636.0	16.37	2.57%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 1/6/2010 10:12:18
Data Type: Reprocessed on 1/6/2010 11:55:26

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	858980.9	858980.9	96.884	%	10:14:42
1	Sc Radial	4680.0	4680.0	100	%	10:14:15
1	Y 371.029	737496.5	737496.5	96.815	%	10:14:42
1	Y RADIAL	4959.7	4959.7	100.5	%	10:14:15
1	Ag 328.068†	23297.9	23534.9	[100]	ug/L	10:14:42
1	As 188.979†	245.5	286.8	[100]	ug/L	10:15:02
1	B 249.677†	3857.1	4647.0	[100]	ug/L	10:14:42
1	Ba 233.527†	13535.2	13963.1	[100]	ug/L	10:14:42
1	Be 313.107†	285272.4	298799.6	[100]	ug/L	10:14:42
1	Cd 226.502†	9981.9	10541.4	[100]	ug/L	10:15:02
1	Co 228.616†	5125.3	5374.1	[100]	ug/L	10:15:02
1	Cr 267.716†	9927.5	10142.7	[100]	ug/L	10:14:42
1	Cu 324.752†	40691.6	34001.4	[100]	ug/L	10:14:42
1	K 766.490 Radial†	8407.9	5048.9	[1000]	ug/L	10:14:10
1	Mn 257.610†	95334.8	97884.8	[100]	ug/L	10:14:42
1	Mo 202.031†	1605.3	1637.0	[100]	ug/L	10:15:02
1	Ni 231.604†	4633.5	4657.5	[100]	ug/L	10:15:02
1	P 214.914†	1254.4	1046.2	[500]	ug/L	10:15:02
1	Pb 220.353†	853.5	958.8	[100]	ug/L	10:15:02
1	S 181.975 Axial†	233.2	180.8	[200]	ug/L	10:15:02
1	Sb 206.836†	367.3	342.0	[100]	ug/L	10:15:02
1	Se 196.026†	151.8	190.0	[100]	ug/L	10:15:02
1	Si 251.611†	17526.4	17473.5	[500]	ug/L	10:14:42
1	Sn 189.927†	662.1	680.0	[100]	ug/L	10:15:02
1	Sr 421.552†	13727.0	13674.7	[100]	ug/L	10:14:15
1	Ti 334.940†	60372.6	64131.8	[100]	ug/L	10:14:42
1	Tl 190.801†	306.6	369.9	[100]	ug/L	10:15:02
1	U 409.014†	488.3	3172.7	[100]	ug/L	10:14:42
1	V 292.402†	13700.9	15943.5	[100]	ug/L	10:14:42
1	Zn 213.857†	12421.0	11988.8	[100]	ug/L	10:15:02
1	SiO2†	17631.3	17562.4	[1069.5]	ug/L	10:15:58
2	Sc 361.383	855417.8	855417.8	96.482	%	10:15:07
2	Sc Radial	4654.0	4654.0	99.7	%	10:14:25
2	Y 371.029	735371.7	735371.7	96.536	%	10:15:07
2	Y RADIAL	4912.1	4912.1	99.58	%	10:14:25
2	Ag 328.068†	22993.6	23319.8	[100]	ug/L	10:15:07
2	As 188.979†	244.4	286.7	[100]	ug/L	10:15:27
2	B 249.677†	3820.7	4625.8	[100]	ug/L	10:15:07
2	Ba 233.527†	13432.1	13914.4	[100]	ug/L	10:15:07
2	Be 313.107†	283600.2	298292.9	[100]	ug/L	10:15:07
2	Cd 226.502†	9983.4	10585.8	[100]	ug/L	10:15:27
2	Co 228.616†	5125.5	5396.4	[100]	ug/L	10:15:27
2	Cr 267.716†	9891.3	10148.0	[100]	ug/L	10:15:07
2	Cu 324.752†	40378.4	33851.7	[100]	ug/L	10:15:07
2	K 766.490 Radial†	8231.9	4919.2	[1000]	ug/L	10:14:20
2	Mn 257.610†	94787.7	97727.6	[100]	ug/L	10:15:07
2	Mo 202.031†	1588.4	1626.4	[100]	ug/L	10:15:27
2	Ni 231.604†	4613.6	4656.7	[100]	ug/L	10:15:27
2	P 214.914†	1234.6	1031.1	[500]	ug/L	10:15:27
2	Pb 220.353†	854.4	963.3	[100]	ug/L	10:15:27
2	S 181.975 Axial†	222.7	170.9	[200]	ug/L	10:15:27
2	Sb 206.836†	368.9	345.2	[100]	ug/L	10:15:27
2	Se 196.026†	149.3	188.0	[100]	ug/L	10:15:27
2	Si 251.611†	17335.2	17350.7	[500]	ug/L	10:15:07
2	Sn 189.927†	671.0	692.0	[100]	ug/L	10:15:27
2	Sr 421.552†	13682.9	13706.8	[100]	ug/L	10:14:25
2	Ti 334.940†	60014.8	64020.5	[100]	ug/L	10:15:07
2	Tl 190.801†	307.2	371.8	[100]	ug/L	10:15:27

2	U 409.014†	295.8	2975.3	[100] ug/L	10:15:07
2	V 292.402†	13528.2	15823.3	[100] ug/L	10:15:07
2	Zn 213.857†	12466.1	12089.0	[100] ug/L	10:15:27
2	SiO2†	17384.6	17382.5	[1069.5] ug/L	10:16:03
3	Sc 361.383	859958.1	859958.1	96.994 %	10:15:33
3	Sc Radial	4766.0	4766.0	102 %	10:14:35
3	Y 371.029	739304.7	739304.7	97.053 %	10:15:33
3	Y RADIAL	5003.2	5003.2	101.4 %	10:14:35
3	Ag 328.068†	23212.3	23419.4	[100] ug/L	10:15:33
3	As 188.979†	253.6	294.9	[100] ug/L	10:15:53
3	B 249.677†	3961.8	4750.4	[100] ug/L	10:15:33
3	Ba 233.527†	13535.7	13947.7	[100] ug/L	10:15:33
3	Be 313.107†	285383.3	298579.3	[100] ug/L	10:15:33
3	Cd 226.502†	9988.9	10536.8	[100] ug/L	10:15:53
3	Co 228.616†	5127.3	5370.2	[100] ug/L	10:15:53
3	Cr 267.716†	9938.8	10142.8	[100] ug/L	10:15:33
3	Cu 324.752†	40815.8	34081.7	[100] ug/L	10:15:33
3	K 766.490 Radial†	8372.8	4863.1	[1000] ug/L	10:14:30
3	Mn 257.610†	95438.6	97880.0	[100] ug/L	10:15:33
3	Mo 202.031†	1597.4	1627.0	[100] ug/L	10:15:53
3	Ni 231.604†	4590.6	4607.8	[100] ug/L	10:15:53
3	P 214.914†	1236.1	1025.8	[500] ug/L	10:15:53
3	Pb 220.353†	853.0	957.2	[100] ug/L	10:15:53
3	S 181.975 Axial†	215.4	162.1	[200] ug/L	10:15:53
3	Sb 206.836†	363.9	338.1	[100] ug/L	10:15:53
3	Se 196.026†	147.6	185.4	[100] ug/L	10:15:53
3	Si 251.611†	17460.2	17384.8	[500] ug/L	10:15:33
3	Sn 189.927†	668.8	686.1	[100] ug/L	10:15:53
3	Sr 421.552†	13921.0	13617.4	[100] ug/L	10:14:35
3	Ti 334.940†	60486.7	64178.6	[100] ug/L	10:15:33
3	Tl 190.801†	311.4	374.4	[100] ug/L	10:15:53
3	U 409.014†	310.2	2988.5	[100] ug/L	10:15:33
3	V 292.402†	13652.1	15877.1	[100] ug/L	10:15:33
3	Zn 213.857†	12472.9	12027.8	[100] ug/L	10:15:53
3	SiO2†	17487.2	17393.2	[1069.5] ug/L	10:16:08

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	858118.9	2389.74	0.28%	96.787	%
Sc Radial	4700.0	58.64	1.25%	101	%
Y 371.029	737391.0	1968.61	0.27%	96.801	%
Y RADIAL	4958.3	45.59	0.92%	100.5	%
Ag 328.068†	23424.7	107.68	0.46%	[100]	ug/L
As 188.979†	289.5	4.67	1.61%	[100]	ug/L
B 249.677†	4674.4	66.66	1.43%	[100]	ug/L
Ba 233.527†	13941.7	24.90	0.18%	[100]	ug/L
Be 313.107†	298557.2	254.08	0.09%	[100]	ug/L
Cd 226.502†	10554.7	27.08	0.26%	[100]	ug/L
Co 228.616†	5380.2	14.13	0.26%	[100]	ug/L
Cr 267.716†	10144.5	2.99	0.03%	[100]	ug/L
Cu 324.752†	33978.3	116.72	0.34%	[100]	ug/L
K 766.490 Radial†	4943.7	95.30	1.93%	[1000]	ug/L
Mn 257.610†	97830.8	89.39	0.09%	[100]	ug/L
Mo 202.031†	1630.1	5.97	0.37%	[100]	ug/L
Ni 231.604†	4640.7	28.47	0.61%	[100]	ug/L
P 214.914†	1034.4	10.58	1.02%	[500]	ug/L
Pb 220.353†	959.8	3.20	0.33%	[100]	ug/L
S 181.975 Axial†	171.3	9.35	5.46%	[200]	ug/L
Sb 206.836†	341.8	3.59	1.05%	[100]	ug/L
Se 196.026†	187.8	2.27	1.21%	[100]	ug/L
Si 251.611†	17403.0	63.40	0.36%	[500]	ug/L
Sn 189.927†	686.0	6.02	0.88%	[100]	ug/L
Sr 421.552†	13666.3	45.28	0.33%	[100]	ug/L
Ti 334.940†	64110.3	81.19	0.13%	[100]	ug/L
Tl 190.801†	372.0	2.28	0.61%	[100]	ug/L
U 409.014†	3045.5	110.39	3.62%	[100]	ug/L
V 292.402†	15881.3	60.18	0.38%	[100]	ug/L
Zn 213.857†	12035.2	50.50	0.42%	[100]	ug/L
SiO2†	17446.0	100.94	0.58%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 1/6/2010 10:18:19
Data Type: Reprocessed on 1/6/2010 11:55:28
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	883512.7	883512.7	99.651	%	10:21:31
1	Sc Radial	4601.8	4601.8	98.6	%	10:20:12
1	Y 371.029	752079.9	752079.9	98.730	%	10:21:31
1	Y RADIAL	4817.5	4817.5	97.66	%	10:20:12
1	Ag 328.068†	114385.8	114274.4	[500]	ug/L	10:21:31
1	Al 396.153Radial†	5563.1	5669.3	[5000]	ug/L	10:20:12
1	As 188.979†	1380.3	1418.6	[500]	ug/L	10:21:51
1	B 249.677†	22915.8	23661.9	[500]	ug/L	10:21:31
1	Ba 233.527†	67394.6	67623.3	[500]	ug/L	10:21:31
1	Be 313.107†	1463962.1	1473445.0	[500]	ug/L	10:21:31
1	Ca 317.933Radial†	3026.4	3057.1	[5000]	ug/L	10:20:32
1	Cd 226.502†	52091.1	52512.1	[500]	ug/L	10:21:31
1	Co 228.616†	25883.0	26057.7	[500]	ug/L	10:21:51
1	Cr 267.716†	49100.1	49168.1	[500]	ug/L	10:21:31
1	Cu 324.752†	173485.5	166094.6	[500]	ug/L	10:21:31
1	K 766.490 Radial†	28039.4	25103.4	[5000]	ug/L	10:20:12
1	Mg 279.077 IEC†	160.2	160.9	[5000]	ug/L	10:20:32
1	Mn 257.610†	471058.4	472193.1	[500]	ug/L	10:21:31
1	Mo 202.031†	7928.7	7936.5	[500]	ug/L	10:21:51
1	Ni 231.604†	22462.4	22416.0	[500]	ug/L	10:21:51
1	P 214.914†	5312.3	5082.3	[2500]	ug/L	10:21:51
1	Pb 220.353†	4719.2	4813.5	[500]	ug/L	10:21:51
1	S 181.975 Axial†	934.0	877.4	[1000]	ug/L	10:21:51
1	Sb 206.836†	1674.2	1643.0	[500]	ug/L	10:21:51
1	Se 196.026†	933.0	969.5	[500]	ug/L	10:21:51
1	Si 251.611†	86137.1	85822.4	[2500]	ug/L	10:21:31
1	Sn 189.927†	3339.3	3347.7	[500]	ug/L	10:21:51
1	Sr 421.552†	68394.0	69355.4	[500]	ug/L	10:20:12
1	Ti 334.940†	312108.2	315019.5	[500]	ug/L	10:21:31
1	Tl 190.801†	1747.5	1807.0	[500]	ug/L	10:21:51
1	U 409.014†	13304.8	16020.2	[500]	ug/L	10:21:31
1	V 292.402†	76303.3	78372.6	[500]	ug/L	10:21:31
1	Zn 213.857†	60967.6	60349.6	[500]	ug/L	10:21:31
1	SiO2†	86414.0	86080.9	[5347.5]	ug/L	10:22:51
2	Sc 361.383	887225.8	887225.8	100.07	%	10:21:58
2	Sc Radial	4740.4	4740.4	102	%	10:20:37
2	Y 371.029	754809.6	754809.6	99.088	%	10:21:58
2	Y RADIAL	4960.4	4960.4	100.6	%	10:20:37
2	Ag 328.068†	115157.8	114565.5	[500]	ug/L	10:21:58
2	Al 396.153Radial†	5682.9	5622.3	[5000]	ug/L	10:20:37
2	As 188.979†	1369.6	1402.0	[500]	ug/L	10:22:18
2	B 249.677†	23171.9	23821.6	[500]	ug/L	10:21:58
2	Ba 233.527†	67955.3	67900.6	[500]	ug/L	10:21:58
2	Be 313.107†	1474743.7	1478070.7	[500]	ug/L	10:21:58
2	Ca 317.933Radial†	3029.9	2970.9	[5000]	ug/L	10:20:57
2	Cd 226.502†	52500.4	52702.3	[500]	ug/L	10:21:58
2	Co 228.616†	25759.0	25825.1	[500]	ug/L	10:22:18
2	Cr 267.716†	49400.6	49262.3	[500]	ug/L	10:21:58
2	Cu 324.752†	174589.1	166468.8	[500]	ug/L	10:21:58
2	K 766.490 Radial†	28831.9	25052.4	[5000]	ug/L	10:20:37
2	Mg 279.077 IEC†	165.0	160.9	[5000]	ug/L	10:20:57
2	Mn 257.610†	474451.9	473605.9	[500]	ug/L	10:21:58
2	Mo 202.031†	7868.6	7843.2	[500]	ug/L	10:22:18
2	Ni 231.604†	22362.2	22221.6	[500]	ug/L	10:22:18
2	P 214.914†	5271.4	5019.2	[2500]	ug/L	10:22:18
2	Pb 220.353†	4679.9	4754.4	[500]	ug/L	10:22:18
2	S 181.975 Axial†	927.7	867.1	[1000]	ug/L	10:22:18
2	Sb 206.836†	1664.7	1626.5	[500]	ug/L	10:22:18

2	Se 196.026†	938.7	971.3	[500]	ug/L	10:22:18
2	Si 251.611†	86879.3	86202.4	[2500]	ug/L	10:21:58
2	Sn 189.927†	3327.1	3321.4	[500]	ug/L	10:22:18
2	Sr 421.552†	70252.9	69158.0	[500]	ug/L	10:20:37
2	Ti 334.940†	313954.4	315553.7	[500]	ug/L	10:21:58
2	Tl 190.801†	1748.5	1800.6	[500]	ug/L	10:22:18
2	U 409.014†	13260.1	15919.6	[500]	ug/L	10:21:58
2	V 292.402†	76752.0	78500.6	[500]	ug/L	10:21:58
2	Zn 213.857†	61417.5	60543.2	[500]	ug/L	10:21:58
2	SiO2†	85934.5	85238.8	[5347.5]	ug/L	10:22:56
3	Sc 361.383	884330.4	884330.4	99.743	%	10:22:26
3	Sc Radial	4562.7	4562.7	97.8	%	10:21:02
3	Y 371.029	752217.8	752217.8	98.748	%	10:22:26
3	Y RADIAL	4788.6	4788.6	97.07	%	10:21:02
3	Ag 328.068†	114779.6	114563.1	[500]	ug/L	10:22:26
3	Al 396.153Radial†	5525.6	5679.3	[5000]	ug/L	10:21:02
3	As 188.979†	1366.0	1403.0	[500]	ug/L	10:22:46
3	B 249.677†	22910.0	23634.9	[500]	ug/L	10:22:26
3	Ba 233.527†	67647.5	67814.4	[500]	ug/L	10:22:26
3	Be 313.107†	1467958.9	1476093.6	[500]	ug/L	10:22:26
3	Ca 317.933Radial†	3015.8	3072.5	[5000]	ug/L	10:21:22
3	Cd 226.502†	52364.8	52738.1	[500]	ug/L	10:22:26
3	Co 228.616†	25760.2	25910.5	[500]	ug/L	10:22:46
3	Cr 267.716†	49276.5	49299.5	[500]	ug/L	10:22:26
3	Cu 324.752†	173800.1	166249.0	[500]	ug/L	10:22:26
3	K 766.490 Radial†	28001.8	25308.7	[5000]	ug/L	10:21:02
3	Mg 279.077 IEC†	162.2	164.3	[5000]	ug/L	10:21:22
3	Mn 257.610†	472600.3	473301.9	[500]	ug/L	10:22:26
3	Mo 202.031†	7885.0	7885.4	[500]	ug/L	10:22:46
3	Ni 231.604†	22342.5	22275.0	[500]	ug/L	10:22:46
3	P 214.914†	5269.3	5034.3	[2500]	ug/L	10:22:46
3	Pb 220.353†	4660.7	4750.4	[500]	ug/L	10:22:46
3	S 181.975 Axial†	923.8	866.3	[1000]	ug/L	10:22:46
3	Sb 206.836†	1679.2	1646.4	[500]	ug/L	10:22:46
3	Se 196.026†	930.9	966.5	[500]	ug/L	10:22:46
3	Si 251.611†	86364.9	85970.9	[2500]	ug/L	10:22:26
3	Sn 189.927†	3331.4	3336.5	[500]	ug/L	10:22:46
3	Sr 421.552†	68237.4	69789.8	[500]	ug/L	10:21:02
3	Ti 334.940†	312680.8	315304.0	[500]	ug/L	10:22:26
3	Tl 190.801†	1748.9	1806.8	[500]	ug/L	10:22:46
3	U 409.014†	13013.2	15715.4	[500]	ug/L	10:22:26
3	V 292.402†	76468.7	78467.6	[500]	ug/L	10:22:26
3	Zn 213.857†	61087.2	60413.0	[500]	ug/L	10:22:26
3	SiO2†	86458.6	86045.4	[5347.5]	ug/L	10:23:02

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	885023.0	1951.07	0.22%	99.821	%
Sc Radial	4635.0	93.36	2.01%	99.3	%
Y 371.029	753035.8	1537.71	0.20%	98.855	%
Y RADIAL	4855.5	92.01	1.89%	98.43	%
Ag 328.068†	114467.6	167.37	0.15%	[500]	ug/L
Al 396.153Radial†	5657.0	30.41	0.54%	[5000]	ug/L
As 188.979†	1407.9	9.28	0.66%	[500]	ug/L
B 249.677†	23706.2	100.93	0.43%	[500]	ug/L
Ba 233.527†	67779.4	141.90	0.21%	[500]	ug/L
Be 313.107†	1475869.8	2320.96	0.16%	[500]	ug/L
Ca 317.933Radial†	3033.5	54.79	1.81%	[5000]	ug/L
Cd 226.502†	52650.8	121.47	0.23%	[500]	ug/L
Co 228.616†	25931.1	117.66	0.45%	[500]	ug/L
Cr 267.716†	49243.3	67.70	0.14%	[500]	ug/L
Cu 324.752†	166270.8	188.05	0.11%	[500]	ug/L
K 766.490 Radial†	25154.8	135.66	0.54%	[5000]	ug/L
Mg 279.077 IEC†	162.0	1.99	1.23%	[5000]	ug/L
Mn 257.610†	473033.6	743.59	0.16%	[500]	ug/L
Mo 202.031†	7888.4	46.74	0.59%	[500]	ug/L
Ni 231.604†	22304.2	100.46	0.45%	[500]	ug/L
P 214.914†	5045.3	32.96	0.65%	[2500]	ug/L
Pb 220.353†	4772.8	35.35	0.74%	[500]	ug/L

S 181.975 Axial†	870.3	6.18	0.71%	[1000] ug/L
Sb 206.836†	1638.6	10.67	0.65%	[500] ug/L
Se 196.026†	969.1	2.40	0.25%	[500] ug/L
Si 251.611†	85998.6	191.49	0.22%	[2500] ug/L
Sn 189.927†	3335.2	13.17	0.39%	[500] ug/L
Sr 421.552†	69434.4	323.18	0.47%	[500] ug/L
Ti 334.940†	315292.4	267.26	0.08%	[500] ug/L
Tl 190.801†	1804.8	3.61	0.20%	[500] ug/L
U 409.014†	15885.1	155.29	0.98%	[500] ug/L
V 292.402†	78446.9	66.45	0.08%	[500] ug/L
Zn 213.857†	60435.3	98.69	0.16%	[500] ug/L
SiO2†	85788.4	476.26	0.56%	[5347.5] ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 1/6/2010 10:25:12
Data Type: Reprocessed on 1/6/2010 11:55:29
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	854575.1	854575.1	96.387	%	10:28:28
1	Sc Radial	4579.0	4579.0	98.1	%	10:27:25
1	Y 371.029	728537.8	728537.8	95.639	%	10:28:28
1	Y RADIAL	4758.3	4758.3	96.46	%	10:27:25
1	Ag 328.068†	225908.9	233865.0	[1000]	ug/L	10:28:28
1	Al 396.153Radial†	10920.1	11158.0	[10000]	ug/L	10:27:05
1	As 188.979†	2738.1	2874.1	[1000]	ug/L	10:28:49
1	B 249.677†	46350.1	48753.4	[1000]	ug/L	10:28:28
1	Ba 233.527†	132639.6	137604.2	[1000]	ug/L	10:28:28
1	Be 313.107†	2851071.1	2962297.1	[1000]	ug/L	10:28:23
1	Ca 317.933Radial†	5910.2	6011.9	[10000]	ug/L	10:27:25
1	Cd 226.502†	102524.3	106605.9	[1000]	ug/L	10:28:28
1	Co 228.616†	51547.3	53563.6	[1000]	ug/L	10:28:28
1	Cr 267.716†	96715.8	100237.2	[1000]	ug/L	10:28:28
1	Cu 324.752†	334819.6	339371.6	[1000]	ug/L	10:28:28
1	Fe 238.204 Radial†	1132.1	1140.1	[10000]	ug/L	10:27:25
1	K 766.490 Radial†	52192.2	49864.5	[10000]	ug/L	10:27:05
1	Mg 279.077 IEC†	320.5	325.0	[10000]	ug/L	10:27:25
1	Mn 257.610†	916466.8	950304.8	[1000]	ug/L	10:28:23
1	Mo 202.031†	15444.9	16003.9	[1000]	ug/L	10:28:49
1	Na 589.592 Radial†	30756.6	33101.3	[10000]	ug/L	10:27:05
1	Ni 231.604†	44283.7	45818.7	[1000]	ug/L	10:28:28
1	P 214.914†	10191.8	10325.2	[5000]	ug/L	10:28:49
1	Pb 220.353†	9273.6	9699.0	[1000]	ug/L	10:28:49
1	S 181.975 Axial†	1777.1	1783.8	[2000]	ug/L	10:28:49
1	Sb 206.836†	3289.2	3375.4	[1000]	ug/L	10:28:49
1	Se 196.026†	1867.2	1970.5	[1000]	ug/L	10:28:49
1	Si 251.611†	169164.9	174889.6	[5000]	ug/L	10:28:28
1	Sn 189.927†	6538.0	6779.7	[1000]	ug/L	10:28:49
1	Sr 421.552†	132173.6	134713.1	[1000]	ug/L	10:27:05
1	Ti 334.940†	605418.2	629930.1	[1000]	ug/L	10:28:28
1	Tl 190.801†	3494.5	3678.9	[1000]	ug/L	10:28:49
1	U 409.014†	30337.2	34143.1	[1000]	ug/L	10:28:28
1	V 292.402†	152445.1	159961.5	[1000]	ug/L	10:28:28
1	Zn 213.857†	118494.0	122104.1	[1000]	ug/L	10:28:28
1	SiO2†	169704.7	175430.1	[10695]	ug/L	10:29:57
2	Sc 361.383	858196.3	858196.3	96.795	%	10:29:00
2	Sc Radial	4524.0	4524.0	96.9	%	10:27:50
2	Y 371.029	732256.6	732256.6	96.127	%	10:29:00
2	Y RADIAL	4715.6	4715.6	95.59	%	10:27:50
2	Ag 328.068†	226859.1	233857.6	[1000]	ug/L	10:29:00
2	Al 396.153Radial†	10942.0	11316.0	[10000]	ug/L	10:27:30
2	As 188.979†	2707.6	2830.6	[1000]	ug/L	10:29:20
2	B 249.677†	46591.3	48799.7	[1000]	ug/L	10:29:00
2	Ba 233.527†	133100.4	137499.6	[1000]	ug/L	10:29:00
2	Be 313.107†	2844083.0	2942596.8	[1000]	ug/L	10:28:54
2	Ca 317.933Radial†	5868.1	6041.8	[10000]	ug/L	10:27:50
2	Cd 226.502†	102682.4	106320.4	[1000]	ug/L	10:29:00
2	Co 228.616†	51719.3	53515.6	[1000]	ug/L	10:29:00
2	Cr 267.716†	96914.5	100019.1	[1000]	ug/L	10:29:00
2	Cu 324.752†	336569.7	339713.9	[1000]	ug/L	10:29:00
2	Fe 238.204 Radial†	1122.1	1143.9	[10000]	ug/L	10:27:50
2	K 766.490 Radial†	52429.8	50757.1	[10000]	ug/L	10:27:30
2	Mg 279.077 IEC†	314.1	322.4	[10000]	ug/L	10:27:50
2	Mn 257.610†	914632.9	944398.2	[1000]	ug/L	10:28:54
2	Mo 202.031†	15333.9	15821.6	[1000]	ug/L	10:29:20
2	Na 589.592 Radial†	30925.2	33656.9	[10000]	ug/L	10:27:30
2	Ni 231.604†	44461.0	45808.0	[1000]	ug/L	10:29:00

2	P 214.914†	10085.9	10171.2	[5000] ug/L	10:29:20
2	Pb 220.353†	9186.3	9568.2	[1000] ug/L	10:29:20
2	S 181.975 Axial†	1757.9	1756.2	[2000] ug/L	10:29:20
2	Sb 206.836†	3244.2	3314.5	[1000] ug/L	10:29:20
2	Se 196.026†	1837.0	1931.0	[1000] ug/L	10:29:20
2	Si 251.611†	170090.1	175104.9	[5000] ug/L	10:29:00
2	Sn 189.927†	6497.8	6709.5	[1000] ug/L	10:29:20
2	Sr 421.552†	132770.8	136968.8	[1000] ug/L	10:27:30
2	Ti 334.940†	608846.1	630821.2	[1000] ug/L	10:29:00
2	Tl 190.801†	3461.5	3629.5	[1000] ug/L	10:29:20
2	U 409.014†	30543.7	34223.7	[1000] ug/L	10:29:00
2	V 292.402†	152968.7	159835.0	[1000] ug/L	10:29:00
2	Zn 213.857†	118722.7	121821.7	[1000] ug/L	10:29:00
2	SiO2†	170248.2	175248.8	[10695] ug/L	10:30:02
3	Sc 361.383	848819.7	848819.7	95.738 %	10:29:32
3	Sc Radial	4499.1	4499.1	96.4 %	10:28:16
3	Y 371.029	724197.9	724197.9	95.069 %	10:29:32
3	Y RADIAL	4687.7	4687.7	95.03 %	10:28:16
3	Ag 328.068†	224046.8	233509.2	[1000] ug/L	10:29:32
3	Al 396.153Radial†	10912.2	11347.6	[10000] ug/L	10:27:56
3	As 188.979†	2741.3	2896.8	[1000] ug/L	10:29:52
3	B 249.677†	46090.8	48808.7	[1000] ug/L	10:29:32
3	Ba 233.527†	131592.1	137443.1	[1000] ug/L	10:29:32
3	Be 313.107†	2844415.3	2975401.5	[1000] ug/L	10:29:26
3	Ca 317.933Radial†	5826.7	6032.3	[10000] ug/L	10:28:16
3	Cd 226.502†	101521.4	106279.5	[1000] ug/L	10:29:32
3	Co 228.616†	51116.9	53476.7	[1000] ug/L	10:29:32
3	Cr 267.716†	95939.3	100106.5	[1000] ug/L	10:29:32
3	Cu 324.752†	331317.2	338068.6	[1000] ug/L	10:29:32
3	Fe 238.204 Radial†	1112.8	1140.6	[10000] ug/L	10:28:16
3	K 766.490 Radial†	51979.0	50588.9	[10000] ug/L	10:27:56
3	Mg 279.077 IEC†	309.4	319.3	[10000] ug/L	10:28:16
3	Mn 257.610†	913765.8	953930.6	[1000] ug/L	10:29:26
3	Mo 202.031†	15519.8	16190.8	[1000] ug/L	10:29:52
3	Na 589.592 Radial†	30476.4	33367.8	[10000] ug/L	10:27:56
3	Ni 231.604†	43886.2	45715.0	[1000] ug/L	10:29:32
3	P 214.914†	10188.8	10393.9	[5000] ug/L	10:29:52
3	Pb 220.353†	9282.8	9773.9	[1000] ug/L	10:29:52
3	S 181.975 Axial†	1773.5	1792.6	[2000] ug/L	10:29:52
3	Sb 206.836†	3297.2	3406.9	[1000] ug/L	10:29:52
3	Se 196.026†	1859.1	1975.1	[1000] ug/L	10:29:52
3	Si 251.611†	167775.3	174628.2	[5000] ug/L	10:29:32
3	Sn 189.927†	6568.9	6858.0	[1000] ug/L	10:29:52
3	Sr 421.552†	131436.1	136342.3	[1000] ug/L	10:27:56
3	Ti 334.940†	600971.6	629544.5	[1000] ug/L	10:29:32
3	Tl 190.801†	3500.4	3709.6	[1000] ug/L	10:29:52
3	U 409.014†	30036.8	34042.8	[1000] ug/L	10:29:32
3	V 292.402†	151366.7	159907.4	[1000] ug/L	10:29:32
3	Zn 213.857†	117155.4	121539.5	[1000] ug/L	10:29:32
3	SiO2†	167148.2	173953.7	[10695] ug/L	10:30:08

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	853863.7	4728.60	0.55%	96.307	%
Sc Radial	4534.0	40.91	0.90%	97.1	%
Y 371.029	728330.8	4033.35	0.55%	95.612	%
Y RADIAL	4720.6	35.55	0.75%	95.70	%
Ag 328.068†	233743.9	203.34	0.09%	[1000]	ug/L
Al 396.153Radial†	11273.9	101.59	0.90%	[10000]	ug/L
As 188.979†	2867.2	33.62	1.17%	[1000]	ug/L
B 249.677†	48787.3	29.65	0.06%	[1000]	ug/L
Ba 233.527†	137515.6	81.75	0.06%	[1000]	ug/L
Be 313.107†	2960098.5	16512.52	0.56%	[1000]	ug/L
Ca 317.933Radial†	6028.6	15.28	0.25%	[10000]	ug/L
Cd 226.502†	106401.9	177.79	0.17%	[1000]	ug/L
Co 228.616†	53518.6	43.54	0.08%	[1000]	ug/L
Cr 267.716†	100120.9	109.77	0.11%	[1000]	ug/L
Cu 324.752†	339051.3	868.12	0.26%	[1000]	ug/L
Fe 238.204 Radial†	1141.5	2.02	0.18%	[10000]	ug/L

K 766.490 Radial†	50403.5	474.29	0.94%	[10000] ug/L
Mg 279.077 IEC†	322.3	2.85	0.88%	[10000] ug/L
Mn 257.610†	949544.6	4811.46	0.51%	[1000] ug/L
Mo 202.031†	16005.4	184.60	1.15%	[1000] ug/L
Na 589.592 Radial†	33375.3	277.85	0.83%	[10000] ug/L
Ni 231.604†	45780.5	57.00	0.12%	[1000] ug/L
P 214.914†	10296.8	114.02	1.11%	[5000] ug/L
Pb 220.353†	9680.4	104.09	1.08%	[1000] ug/L
S 181.975 Axial†	1777.5	19.00	1.07%	[2000] ug/L
Sb 206.836†	3365.6	46.99	1.40%	[1000] ug/L
Se 196.026†	1958.9	24.22	1.24%	[1000] ug/L
Si 251.611†	174874.3	238.73	0.14%	[5000] ug/L
Sn 189.927†	6782.4	74.28	1.10%	[1000] ug/L
Sr 421.552†	136008.0	1164.39	0.86%	[1000] ug/L
Ti 334.940†	630098.6	654.84	0.10%	[1000] ug/L
Tl 190.801†	3672.7	40.46	1.10%	[1000] ug/L
U 409.014†	34136.5	90.64	0.27%	[1000] ug/L
V 292.402†	159901.3	63.47	0.04%	[1000] ug/L
Zn 213.857†	121821.8	282.30	0.23%	[1000] ug/L
SiO2†	174877.5	805.17	0.46%	[10695] ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 1/6/2010 10:32:18
Data Type: Reprocessed on 1/6/2010 11:55:30
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	861751.7	861751.7	97.196	%	10:35:29
1	Sc Radial	4571.4	4571.4	97.9	%	10:34:32
1	Y 371.029	729816.8	729816.8	95.807	%	10:35:29
1	Y RADIAL	4793.7	4793.7	97.18	%	10:34:32
1	Al 396.153Radial†	54896.5	56078.0	[50000]	ug/L	10:34:12
1	Ca 317.933Radial†	29031.6	29629.7	[50000]	ug/L	10:34:12
1	Fe 238.204 Radial†	2245.0	2278.4	[20000]	ug/L	10:34:32
1	Mg 279.077 IEC†	1543.0	1573.8	[50000]	ug/L	10:34:32
1	Na 589.592 Radial†	62736.0	65805.8	[20000]	ug/L	10:34:12
2	Sc 361.383	845745.1	845745.1	95.391	%	10:35:34
2	Sc Radial	4549.2	4549.2	97.5	%	10:34:57
2	Y 371.029	716040.3	716040.3	93.999	%	10:35:34
2	Y RADIAL	4774.2	4774.2	96.78	%	10:34:57
2	Al 396.153Radial†	54557.8	56003.9	[50000]	ug/L	10:34:37
2	Ca 317.933Radial†	28909.0	29648.5	[50000]	ug/L	10:34:37
2	Fe 238.204 Radial†	2233.3	2277.5	[20000]	ug/L	10:34:57
2	Mg 279.077 IEC†	1522.9	1560.9	[50000]	ug/L	10:34:57
2	Na 589.592 Radial†	62157.3	65524.6	[20000]	ug/L	10:34:37
3	Sc 361.383	859471.0	859471.0	96.939	%	10:35:40
3	Sc Radial	4549.1	4549.1	97.5	%	10:35:22
3	Y 371.029	728245.3	728245.3	95.601	%	10:35:40
3	Y RADIAL	4768.4	4768.4	96.66	%	10:35:22
3	Al 396.153Radial†	55563.5	57036.8	[50000]	ug/L	10:35:02
3	Ca 317.933Radial†	29433.3	30187.0	[50000]	ug/L	10:35:02
3	Fe 238.204 Radial†	2223.3	2267.3	[20000]	ug/L	10:35:22
3	Mg 279.077 IEC†	1511.5	1549.2	[50000]	ug/L	10:35:22
3	Na 589.592 Radial†	63482.8	66885.7	[20000]	ug/L	10:35:02

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	855655.9	8658.47	1.01%	96.509	%
Sc Radial	4556.6	12.84	0.28%	97.6	%
Y 371.029	724700.8	7541.27	1.04%	95.135	%
Y RADIAL	4778.7	13.24	0.28%	96.87	%
Al 396.153Radial†	56372.9	576.17	1.02%	[50000]	ug/L
Ca 317.933Radial†	29821.8	316.47	1.06%	[50000]	ug/L
Fe 238.204 Radial†	2274.4	6.14	0.27%	[20000]	ug/L
Mg 279.077 IEC†	1561.3	12.27	0.79%	[50000]	ug/L
Na 589.592 Radial†	66072.1	718.58	1.09%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	232.8	0.00000	0.999966	
Al 396.153Radial	3	Lin Thru 0	0.0	1.127	0.00000	1.000000	
As 188.979	3	Lin Thru 0	0.0	2.857	0.00000	0.999974	
B 249.677	3	Lin Thru 0	0.0	48.50	0.00000	0.999931	
Ba 233.527	3	Lin Thru 0	0.0	137.1	0.00000	0.999983	
Be 313.107	3	Lin Thru 0	0.0	2959	0.00000	0.999999	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5968	0.00000	0.999997	
Cd 226.502	3	Lin Thru 0	0.0	106.2	0.00000	0.999991	
Co 228.616	3	Lin Thru 0	0.0	53.19	0.00000	0.999923	
Cr 267.716	3	Lin Thru 0	0.0	99.81	0.00000	0.999978	
Cu 324.752	3	Lin Thru 0	0.0	337.8	0.00000	0.999970	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1138	0.00000	0.999999	

K 766.490 Radial	3	Lin Thru 0	0.0	5.038	0.00000	0.999998
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0313	0.00000	0.999975
Mn 257.610	3	Lin Thru 0	0.0	949.1	0.00000	0.999995
Mo 202.031	3	Lin Thru 0	0.0	15.96	0.00000	0.999982
Na 589.592 Radia	2	Lin Thru 0	0.0	3.310	0.00000	0.999992
Ni 231.604	3	Lin Thru 0	0.0	45.55	0.00000	0.999946
P 214.914	3	Lin Thru 0	0.0	2.051	0.00000	0.999968
Pb 220.353	3	Lin Thru 0	0.0	9.653	0.00000	0.999984
S 181.975 Axial	3	Lin Thru 0	0.0	0.8848	0.00000	0.999961
Sb 206.836	3	Lin Thru 0	0.0	3.348	0.00000	0.999943
Se 196.026	3	Lin Thru 0	0.0	1.954	0.00000	0.999985
Si 251.611	3	Lin Thru 0	0.0	34.86	0.00000	0.999978
Sn 189.927	3	Lin Thru 0	0.0	6.761	0.00000	0.999977
Sr 421.552	3	Lin Thru 0	0.0	136.6	0.00000	0.999965
Ti 334.940	3	Lin Thru 0	0.0	630.3	0.00000	0.999999
Tl 190.801	3	Lin Thru 0	0.0	3.661	0.00000	0.999975
U 409.014	3	Lin Thru 0	0.0	33.64	0.00000	0.999572
V 292.402	3	Lin Thru 0	0.0	159.3	0.00000	0.999972
Zn 213.857	3	Lin Thru 0	0.0	121.6	0.00000	0.999995
SiO2	3	Lin Thru 0	0.0	16.29	0.00000	0.999972

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 1/6/2010 10:37:51
Data Type: Reprocessed on 1/6/2010 11:55:31
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	875249.9	875249.9	98.719	%			10:41:01
1	Sc Radial	4611.4	4611.4	98.8	%			10:39:44
1	Y 371.029	746029.3	746029.3	97.935	%			10:41:01
1	Y RADIAL	4861.5	4861.5	98.55	%			10:39:44
1	Ag 328.068†	58592.2	58840.3	255.97	ug/L	255.97	ppb	10:41:01
1	Al 396.153Radial†	5658.3	5754.0	5080.5	ug/L	5080.5	ppb	10:39:44
1	As 188.979†	1300.3	1350.6	477.00	ug/L	477.00	ppb	10:41:21
1	B 249.677†	23792.7	24767.3	508.73	ug/L	508.73	ppb	10:41:01
1	Ba 233.527†	68181.7	69059.1	504.81	ug/L	504.81	ppb	10:41:01
1	Be 313.107†	750258.5	764347.5	259.32	ug/L	259.32	ppb	10:41:01
1	Ca 317.933Radial†	2964.6	2988.2	5007.2	ug/L	5007.2	ppb	10:40:04
1	Cd 226.502†	51645.3	52554.0	494.77	ug/L	494.77	ppb	10:41:01
1	Co 228.616†	26107.0	26529.8	499.07	ug/L	499.07	ppb	10:41:21
1	Cr 267.716†	47678.5	48193.3	483.68	ug/L	483.68	ppb	10:41:01
1	Cu 324.752†	174605.9	168873.0	500.23	ug/L	500.23	ppb	10:41:01
1	Fe 238.204 Radial†	594.9	588.3	5184.9	ug/L	5184.9	ppb	10:40:04
1	K 766.490 Radial†	15727.6	12582.4	2492.3	ug/L	2492.3	ppb	10:39:44
1	Mg 279.077 IEC†	164.0	164.4	5262.6	ug/L	5262.6	ppb	10:40:04
1	Mn 257.610†	479368.3	485073.5	511.51	ug/L	511.51	ppb	10:41:01
1	Mo 202.031†	8416.8	8506.1	533.38	ug/L	533.38	ppb	10:41:21
1	Na 589.592 Radial†	6799.8	8632.7	2607.8	ug/L	2607.8	ppb	10:39:44
1	Ni 231.604†	22404.2	22569.9	495.15	ug/L	495.15	ppb	10:41:21
1	P 214.914†	5293.0	5113.1	2417.4	ug/L	2417.4	ppb	10:41:21
1	Pb 220.353†	4662.5	4800.8	498.97	ug/L	498.97	ppb	10:41:21
1	S 181.975 Axial†	2212.8	2181.6	2464.5	ug/L	2464.5	ppb	10:41:21
1	Sb 206.836†	1689.6	1674.4	509.06	ug/L	509.06	ppb	10:41:21
1	Se 196.026†	4904.6	5001.5	2577.8	ug/L	2577.8	ppb	10:41:21
1	Si 251.611†	164206.4	165721.0	4742.2	ug/L	4742.2	ppb	10:41:01
1	Sn 189.927†	3563.3	3606.1	533.98	ug/L	533.98	ppb	10:41:21
1	Sr 421.552†	72600.4	73468.6	537.87	ug/L	537.87	ppb	10:39:44
1	Ti 334.940†	306956.3	312757.6	496.10	ug/L	496.10	ppb	10:41:01
1	Tl 190.801†	1835.3	1912.5	525.70	ug/L	525.70	ppb	10:41:21
1	U 409.014†	13384.3	16226.8	480.81	ug/L	480.81	ppb	10:41:01
1	V 292.402†	76997.8	79799.0	508.10	ug/L	508.10	ppb	10:41:01
1	Zn 213.857†	61557.9	61525.2	501.66	ug/L	501.66	ppb	10:41:01
1	SiO2†	163209.8	164692.0	10085	ug/L	10085	ppb	10:42:19
2	Sc 361.383	875752.3	875752.3	98.775	%			10:41:27
2	Sc Radial	4643.7	4643.7	99.5	%			10:40:09
2	Y 371.029	745923.5	745923.5	97.922	%			10:41:27
2	Y RADIAL	4862.5	4862.5	98.57	%			10:40:09
2	Ag 328.068†	58994.0	59213.1	257.54	ug/L	257.54	ppb	10:41:27
2	Al 396.153Radial†	5570.1	5625.5	4966.6	ug/L	4966.6	ppb	10:40:09
2	As 188.979†	1303.5	1353.1	477.90	ug/L	477.90	ppb	10:41:47
2	B 249.677†	24003.0	24966.4	512.85	ug/L	512.85	ppb	10:41:27
2	Ba 233.527†	68768.7	69613.7	508.87	ug/L	508.87	ppb	10:41:27
2	Be 313.107†	757527.9	771271.0	261.67	ug/L	261.67	ppb	10:41:27
2	Ca 317.933Radial†	2967.9	2970.6	4977.8	ug/L	4977.8	ppb	10:40:29
2	Cd 226.502†	51932.9	52815.1	497.24	ug/L	497.24	ppb	10:41:27
2	Co 228.616†	26075.2	26482.4	498.17	ug/L	498.17	ppb	10:41:47
2	Cr 267.716†	48078.8	48570.9	487.47	ug/L	487.47	ppb	10:41:27
2	Cu 324.752†	176133.4	170318.0	504.51	ug/L	504.51	ppb	10:41:27
2	Fe 238.204 Radial†	587.9	577.0	5086.0	ug/L	5086.0	ppb	10:40:29
2	K 766.490 Radial†	15626.5	12370.1	2450.1	ug/L	2450.1	ppb	10:40:09
2	Mg 279.077 IEC†	163.2	162.4	5197.8	ug/L	5197.8	ppb	10:40:29
2	Mn 257.610†	483197.1	488671.2	515.30	ug/L	515.30	ppb	10:41:27
2	Mo 202.031†	8421.6	8506.1	533.37	ug/L	533.37	ppb	10:41:47
2	Na 589.592 Radial†	6730.1	8514.8	2572.2	ug/L	2572.2	ppb	10:40:09
2	Ni 231.604†	22358.8	22511.0	493.85	ug/L	493.85	ppb	10:41:47

2	P 214.914†	5291.5	5108.5	2414.5 ug/L	2414.5 ppb	10:41:47
2	Pb 220.353†	4645.7	4781.1	496.91 ug/L	496.91 ppb	10:41:47
2	S 181.975 Axial†	2208.4	2175.9	2458.1 ug/L	2458.1 ppb	10:41:47
2	Sb 206.836†	1662.2	1645.7	500.33 ug/L	500.33 ppb	10:41:47
2	Se 196.026†	4899.9	4993.9	2573.6 ug/L	2573.6 ppb	10:41:47
2	Si 251.611†	165602.3	167038.8	4780.0 ug/L	4780.0 ppb	10:41:27
2	Sn 189.927†	3536.1	3576.5	529.60 ug/L	529.60 ppb	10:41:47
2	Sr 421.552†	71798.5	72151.8	528.23 ug/L	528.23 ppb	10:40:09
2	Ti 334.940†	309702.6	315359.5	500.22 ug/L	500.22 ppb	10:41:27
2	Tl 190.801†	1842.0	1918.3	527.32 ug/L	527.32 ppb	10:41:47
2	U 409.014†	13830.5	16670.7	494.02 ug/L	494.02 ppb	10:41:27
2	V 292.402†	77815.0	80581.6	513.04 ug/L	513.04 ppb	10:41:27
2	Zn 213.857†	62091.2	62029.3	505.82 ug/L	505.82 ppb	10:41:27
2	SiO2†	164649.5	166054.7	10168 ug/L	10168 ppb	10:42:24
3	Sc 361.383	876292.2	876292.2	98.836 %		10:41:53
3	Sc Radial	4648.7	4648.7	99.6 %		10:40:34
3	Y 371.029	748097.3	748097.3	98.207 %		10:41:53
3	Y RADIAL	4889.0	4889.0	99.11 %		10:40:34
3	Ag 328.068†	58712.7	58891.7	256.18 ug/L	256.18 ppb	10:41:53
3	Al 396.153Radial†	5662.3	5712.0	5043.4 ug/L	5043.4 ppb	10:40:34
3	As 188.979†	1287.3	1335.9	471.85 ug/L	471.85 ppb	10:42:13
3	B 249.677†	23901.6	24848.9	510.43 ug/L	510.43 ppb	10:41:53
3	Ba 233.527†	68267.4	69063.7	504.85 ug/L	504.85 ppb	10:41:53
3	Be 313.107†	752113.5	765320.3	259.65 ug/L	259.65 ppb	10:41:53
3	Ca 317.933Radial†	2982.5	2982.1	4997.0 ug/L	4997.0 ppb	10:40:54
3	Cd 226.502†	51696.0	52543.0	494.66 ug/L	494.66 ppb	10:41:53
3	Co 228.616†	25907.2	26296.2	494.67 ug/L	494.67 ppb	10:42:13
3	Cr 267.716†	47758.4	48216.6	483.92 ug/L	483.92 ppb	10:41:53
3	Cu 324.752†	174915.4	168975.9	500.54 ug/L	500.54 ppb	10:41:53
3	Fe 238.204 Radial†	596.9	585.4	5159.8 ug/L	5159.8 ppb	10:40:54
3	K 766.490 Radial†	15874.5	12602.1	2496.2 ug/L	2496.2 ppb	10:40:34
3	Mg 279.077 IEC†	169.1	168.1	5381.8 ug/L	5381.8 ppb	10:40:54
3	Mn 257.610†	479775.8	484908.2	511.34 ug/L	511.34 ppb	10:41:53
3	Mo 202.031†	8365.9	8444.5	529.52 ug/L	529.52 ppb	10:42:13
3	Na 589.592 Radial†	6779.6	8557.2	2585.0 ug/L	2585.0 ppb	10:40:34
3	Ni 231.604†	22192.2	22328.4	489.85 ug/L	489.85 ppb	10:42:13
3	P 214.914†	5264.0	5077.4	2399.9 ug/L	2399.9 ppb	10:42:13
3	Pb 220.353†	4633.2	4765.5	495.30 ug/L	495.30 ppb	10:42:13
3	S 181.975 Axial†	2187.9	2153.8	2433.1 ug/L	2433.1 ppb	10:42:13
3	Sb 206.836†	1651.0	1633.3	496.56 ug/L	496.56 ppb	10:42:13
3	Se 196.026†	4863.7	4954.2	2553.5 ug/L	2553.5 ppb	10:42:13
3	Si 251.611†	164437.9	165757.4	4743.3 ug/L	4743.3 ppb	10:41:53
3	Sn 189.927†	3512.5	3550.4	525.74 ug/L	525.74 ppb	10:42:13
3	Sr 421.552†	72663.7	72942.4	534.01 ug/L	534.01 ppb	10:40:34
3	Ti 334.940†	307375.9	312812.2	496.18 ug/L	496.18 ppb	10:41:53
3	Tl 190.801†	1835.3	1910.3	525.13 ug/L	525.13 ppb	10:42:13
3	U 409.014†	13660.4	16490.0	488.64 ug/L	488.64 ppb	10:41:53
3	V 292.402†	77277.5	79989.2	509.26 ug/L	509.26 ppb	10:41:53
3	Zn 213.857†	61683.6	61578.2	502.13 ug/L	502.13 ppb	10:41:53
3	SiO2†	163090.9	164375.0	10065 ug/L	10065 ppb	10:42:30

Mean Data: ICV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	875764.8	98.777	%	0.0588				0.06%
Sc Radial	4634.6	99.3	%	0.43				0.44%
Y 371.029	746683.4	98.021	%	0.1609				0.16%
Y RADIAL	4871.0	98.75	%	0.316				0.32%
Ag 328.068†	58981.7	256.56	ug/L	0.856	256.56	ppb	0.856	0.33%
QC value within limits for Ag 328.068 Recovery = 102.63%								
Al 396.153Radial†	5697.1	5030.2	ug/L	58.13	5030.2	ppb	58.13	1.16%
QC value within limits for Al 396.153Radial Recovery = 100.60%								
As 188.979†	1346.5	475.58	ug/L	3.265	475.58	ppb	3.265	0.69%
QC value within limits for As 188.979 Recovery = 95.12%								
B 249.677†	24860.9	510.67	ug/L	2.071	510.67	ppb	2.071	0.41%
QC value within limits for B 249.677 Recovery = 102.13%								
Ba 233.527†	69245.5	506.18	ug/L	2.330	506.18	ppb	2.330	0.46%
QC value within limits for Ba 233.527 Recovery = 101.24%								
Be 313.107†	766979.6	260.21	ug/L	1.271	260.21	ppb	1.271	0.49%
QC value within limits for Be 313.107 Recovery = 104.08%								

Ca 317.933Radial†	2980.3	4994.0 ug/L	14.95	4994.0 ppb	14.95	0.30%
QC value within limits for Ca 317.933Radial Recovery = 99.88%						
Cd 226.502†	52637.4	495.56 ug/L	1.456	495.56 ppb	1.456	0.29%
QC value within limits for Cd 226.502 Recovery = 99.11%						
Co 228.616†	26436.1	497.30 ug/L	2.326	497.30 ppb	2.326	0.47%
QC value within limits for Co 228.616 Recovery = 99.46%						
Cr 267.716†	48326.9	485.02 ug/L	2.122	485.02 ppb	2.122	0.44%
QC value within limits for Cr 267.716 Recovery = 97.00%						
Cu 324.752†	169389.0	501.76 ug/L	2.384	501.76 ppb	2.384	0.48%
QC value within limits for Cu 324.752 Recovery = 100.35%						
Fe 238.204 Radial†	583.6	5143.6 ug/L	51.43	5143.6 ppb	51.43	1.00%
QC value within limits for Fe 238.204 Radial Recovery = 102.87%						
K 766.490 Radial†	12518.2	2479.5 ug/L	25.56	2479.5 ppb	25.56	1.03%
QC value within limits for K 766.490 Radial Recovery = 99.18%						
Mg 279.077 IEC†	165.0	5280.7 ug/L	93.33	5280.7 ppb	93.33	1.77%
QC value within limits for Mg 279.077 IEC Recovery = 105.61%						
Mn 257.610†	486217.6	512.72 ug/L	2.237	512.72 ppb	2.237	0.44%
QC value within limits for Mn 257.610 Recovery = 102.54%						
Mo 202.031†	8485.6	532.09 ug/L	2.226	532.09 ppb	2.226	0.42%
QC value within limits for Mo 202.031 Recovery = 106.42%						
Na 589.592 Radial†	8568.3	2588.3 ug/L	18.04	2588.3 ppb	18.04	0.70%
QC value within limits for Na 589.592 Radial Recovery = 103.53%						
Ni 231.604†	22469.8	492.95 ug/L	2.762	492.95 ppb	2.762	0.56%
QC value within limits for Ni 231.604 Recovery = 98.59%						
P 214.914†	5099.7	2410.6 ug/L	9.41	2410.6 ppb	9.41	0.39%
QC value within limits for P 214.914 Recovery = 96.42%						
Pb 220.353†	4782.5	497.06 ug/L	1.840	497.06 ppb	1.840	0.37%
QC value within limits for Pb 220.353 Recovery = 99.41%						
S 181.975 Axial†	2170.4	2451.9 ug/L	16.61	2451.9 ppb	16.61	0.68%
QC value within limits for S 181.975 Axial Recovery = 98.08%						
Sb 206.836†	1651.1	501.98 ug/L	6.414	501.98 ppb	6.414	1.28%
QC value within limits for Sb 206.836 Recovery = 100.40%						
Se 196.026†	4983.2	2568.3 ug/L	12.98	2568.3 ppb	12.98	0.51%
QC value within limits for Se 196.026 Recovery = 102.73%						
Si 251.611†	166172.4	4755.2 ug/L	21.52	4755.2 ppb	21.52	0.45%
QC value within limits for Si 251.611 Recovery = 95.10%						
Sn 189.927†	3577.7	529.77 ug/L	4.123	529.77 ppb	4.123	0.78%
QC value within limits for Sn 189.927 Recovery = 105.95%						
Sr 421.552†	72854.3	533.37 ug/L	4.852	533.37 ppb	4.852	0.91%
QC value within limits for Sr 421.552 Recovery = 106.67%						
Ti 334.940†	313643.1	497.50 ug/L	2.355	497.50 ppb	2.355	0.47%
QC value within limits for Ti 334.940 Recovery = 99.50%						
Tl 190.801†	1913.7	526.05 ug/L	1.138	526.05 ppb	1.138	0.22%
QC value within limits for Tl 190.801 Recovery = 105.21%						
U 409.014†	16462.5	487.82 ug/L	6.639	487.82 ppb	6.639	1.36%
QC value within limits for U 409.014 Recovery = 97.56%						
V 292.402†	80123.3	510.13 ug/L	2.587	510.13 ppb	2.587	0.51%
QC value within limits for V 292.402 Recovery = 102.03%						
Zn 213.857†	61710.9	503.21 ug/L	2.277	503.21 ppb	2.277	0.45%
QC value within limits for Zn 213.857 Recovery = 100.64%						
SiO2†	165040.6	10106 ug/L	54.7	10106 ppb	54.7	0.54%
QC value within limits for SiO2 Recovery = 94.49%						

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 1/6/2010 10:44:40
Data Type: Reprocessed on 1/6/2010 11:55:32
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	887280.4	887280.4	100.08	%			10:47:50
1	Sc Radial	4700.6	4700.6	101	%			10:46:33
1	Y 371.029	762353.6	762353.6	100.08	%			10:47:50
1	Y RADIAL	4975.1	4975.1	100.9	%			10:46:33
1	Ag 328.068†	578.7	66.0	0.2835	ug/L	0.2835	ppb	10:47:55
1	Al 396.153Radial†	6.3	33.0	29.215	ug/L	29.215	ppb	10:46:33
1	As 188.979†	-34.7	-1.2	-0.4330	ug/L	-0.4330	ppb	10:48:15
1	B 249.677†	-414.0	252.1	5.2003	ug/L	5.2003	ppb	10:47:55
1	Ba 233.527†	32.2	24.6	0.1800	ug/L	0.1800	ppb	10:48:15
1	Be 313.107†	-4259.0	95.7	0.0324	ug/L	0.0324	ppb	10:47:55
1	Ca 317.933Radial†	23.7	11.0	18.355	ug/L	18.355	ppb	10:46:53
1	Cd 226.502†	-236.8	1.8	0.0179	ug/L	0.0179	ppb	10:48:15
1	Co 228.616†	-93.5	-9.5	-0.1754	ug/L	-0.1754	ppb	10:48:15
1	Cr 267.716†	169.9	65.7	0.6597	ug/L	0.6597	ppb	10:47:55
1	Cu 324.752†	7947.1	-57.9	-0.1719	ug/L	-0.1719	ppb	10:47:55
1	Fe 238.204 Radial†	12.8	-1.1	-9.8464	ug/L	-9.8464	ppb	10:46:53
1	K 766.490 Radial†	3328.9	-31.3	-6.2120	ug/L	-6.2120	ppb	10:46:33
1	Mg 279.077 IEC†	5.2	3.5	111.29	ug/L	111.29	ppb	10:46:53
1	Mn 257.610†	576.1	59.3	0.0594	ug/L	0.0594	ppb	10:47:55
1	Mo 202.031†	34.6	14.6	0.9162	ug/L	0.9162	ppb	10:48:15
1	Na 589.592 Radial†	-1693.2	68.9	20.802	ug/L	20.802	ppb	10:46:33
1	Ni 231.604†	154.8	29.6	0.6495	ug/L	0.6495	ppb	10:48:15
1	P 214.914†	270.5	21.7	10.641	ug/L	10.641	ppb	10:48:15
1	Pb 220.353†	-87.1	-9.2	-0.9477	ug/L	-0.9477	ppb	10:48:15
1	S 181.975 Axial†	57.7	-2.3	-2.5814	ug/L	-2.5814	ppb	10:48:15
1	Sb 206.836†	46.0	8.9	2.6823	ug/L	2.6823	ppb	10:48:15
1	Se 196.026†	-28.9	4.4	2.2057	ug/L	2.2057	ppb	10:48:15
1	Si 251.611†	668.3	51.3	1.4538	ug/L	1.4538	ppb	10:48:15
1	Sn 189.927†	9.4	6.0	0.8890	ug/L	0.8890	ppb	10:48:15
1	Sr 421.552†	31.7	15.5	0.1132	ug/L	0.1132	ppb	10:46:33
1	Ti 334.940†	-1819.0	-0.3	0.0015	ug/L	0.0015	ppb	10:47:55
1	Tl 190.801†	-44.2	9.2	2.5136	ug/L	2.5136	ppb	10:48:15
1	U 409.014†	-2765.4	-94.6	-2.8110	ug/L	-2.8110	ppb	10:47:50
1	V 292.402†	-1751.4	51.8	0.3365	ug/L	0.3365	ppb	10:47:55
1	Zn 213.857†	904.4	72.0	0.5850	ug/L	0.5850	ppb	10:48:15
1	SiO2†	710.9	74.3	4.5260	ug/L	4.5260	ppb	10:49:21
2	Sc 361.383	883890.9	883890.9	99.693	%			10:48:20
2	Sc Radial	4679.7	4679.7	100	%			10:46:58
2	Y 371.029	758461.0	758461.0	99.567	%			10:48:20
2	Y RADIAL	4921.0	4921.0	99.76	%			10:46:58
2	Ag 328.068†	470.6	-40.3	-0.1638	ug/L	-0.1638	ppb	10:48:25
2	Al 396.153Radial†	-17.6	9.1	8.0671	ug/L	8.0671	ppb	10:46:58
2	As 188.979†	-29.7	3.6	1.2519	ug/L	1.2519	ppb	10:48:45
2	B 249.677†	-379.8	284.8	5.8698	ug/L	5.8698	ppb	10:48:25
2	Ba 233.527†	-1.7	-9.3	-0.0668	ug/L	-0.0668	ppb	10:48:45
2	Be 313.107†	-4371.6	-33.6	-0.0115	ug/L	-0.0115	ppb	10:48:25
2	Ca 317.933Radial†	27.7	15.1	25.290	ug/L	25.290	ppb	10:47:18
2	Cd 226.502†	-245.6	-8.0	-0.0772	ug/L	-0.0772	ppb	10:48:45
2	Co 228.616†	-81.3	2.5	0.0475	ug/L	0.0475	ppb	10:48:45
2	Cr 267.716†	72.3	-31.5	-0.3142	ug/L	-0.3142	ppb	10:48:25
2	Cu 324.752†	8005.0	30.6	0.0918	ug/L	0.0918	ppb	10:48:25
2	Fe 238.204 Radial†	16.5	2.5	22.405	ug/L	22.405	ppb	10:47:18
2	K 766.490 Radial†	3266.9	-78.2	-15.531	ug/L	-15.531	ppb	10:46:58
2	Mg 279.077 IEC†	6.2	4.6	146.57	ug/L	146.57	ppb	10:47:18
2	Mn 257.610†	547.8	33.1	0.0344	ug/L	0.0344	ppb	10:48:25
2	Mo 202.031†	28.2	8.4	0.5288	ug/L	0.5288	ppb	10:48:45
2	Na 589.592 Radial†	-1736.9	17.6	5.3292	ug/L	5.3292	ppb	10:46:58
2	Ni 231.604†	122.0	-2.7	-0.0600	ug/L	-0.0600	ppb	10:48:45

2	P 214.914†	252.5	4.7	2.2638 ug/L	2.2638 ppb	10:48:45
2	Pb 220.353†	-87.6	-10.1	-1.0474 ug/L	-1.0474 ppb	10:48:45
2	S 181.975 Axial†	60.1	0.4	0.4845 ug/L	0.4845 ppb	10:48:45
2	Sb 206.836†	44.0	7.0	2.1190 ug/L	2.1190 ppb	10:48:45
2	Se 196.026†	-31.9	1.3	0.7134 ug/L	0.7134 ppb	10:48:45
2	Si 251.611†	664.7	50.2	1.4339 ug/L	1.4339 ppb	10:48:45
2	Sn 189.927†	6.7	3.3	0.4945 ug/L	0.4945 ppb	10:48:45
2	Sr 421.552†	19.9	3.9	0.0283 ug/L	0.0283 ppb	10:46:58
2	Ti 334.940†	-1853.3	-41.7	-0.0638 ug/L	-0.0638 ppb	10:48:25
2	Tl 190.801†	-47.7	5.6	1.5221 ug/L	1.5221 ppb	10:48:45
2	U 409.014†	-2732.6	-72.2	-2.1498 ug/L	-2.1498 ppb	10:48:20
2	V 292.402†	-1788.5	7.8	0.0523 ug/L	0.0523 ppb	10:48:25
2	Zn 213.857†	890.3	61.4	0.4990 ug/L	0.4990 ppb	10:48:45
2	SiO2†	656.1	22.1	1.3473 ug/L	1.3473 ppb	10:49:26
3	Sc 361.383	881844.3	881844.3	99.463 %		10:48:51
3	Sc Radial	4730.7	4730.7	101 %		10:47:23
3	Y 371.029	757223.1	757223.1	99.405 %		10:48:51
3	Y RADIAL	4981.0	4981.0	101.0 %		10:47:23
3	Ag 328.068†	598.1	89.0	0.3682 ug/L	0.3682 ppb	10:48:56
3	Al 396.153Radial†	-39.0	-11.7	-10.402 ug/L	-10.402 ppb	10:47:23
3	As 188.979†	-23.7	9.6	3.3395 ug/L	3.3395 ppb	10:49:16
3	B 249.677†	-385.7	278.1	5.7395 ug/L	5.7395 ppb	10:48:56
3	Ba 233.527†	2.2	-5.2	-0.0390 ug/L	-0.0390 ppb	10:49:16
3	Be 313.107†	-4297.4	30.9	0.0105 ug/L	0.0105 ppb	10:48:56
3	Ca 317.933Radial†	17.4	4.6	7.6932 ug/L	7.6932 ppb	10:47:43
3	Cd 226.502†	-225.4	11.7	0.1141 ug/L	0.1141 ppb	10:49:16
3	Co 228.616†	-92.2	-8.7	-0.1625 ug/L	-0.1625 ppb	10:49:16
3	Cr 267.716†	121.8	18.4	0.1828 ug/L	0.1828 ppb	10:48:56
3	Cu 324.752†	8074.5	119.1	0.3507 ug/L	0.3507 ppb	10:48:56
3	Fe 238.204 Radial†	9.9	-4.1	-36.031 ug/L	-36.031 ppb	10:47:43
3	K 766.490 Radial†	3300.1	-80.7	-16.033 ug/L	-16.033 ppb	10:47:23
3	Mg 279.077 IEC†	5.0	3.3	106.65 ug/L	106.65 ppb	10:47:43
3	Mn 257.610†	527.8	14.3	0.0095 ug/L	0.0095 ppb	10:48:56
3	Mo 202.031†	25.2	5.4	0.3373 ug/L	0.3373 ppb	10:49:16
3	Na 589.592 Radial†	-1666.8	105.5	31.869 ug/L	31.869 ppb	10:47:23
3	Ni 231.604†	115.1	-9.3	-0.2042 ug/L	-0.2042 ppb	10:49:16
3	P 214.914†	245.4	-1.8	-0.9247 ug/L	-0.9247 ppb	10:49:16
3	Pb 220.353†	-100.2	-23.0	-2.3814 ug/L	-2.3814 ppb	10:49:16
3	S 181.975 Axial†	55.0	-4.6	-5.1525 ug/L	-5.1525 ppb	10:49:16
3	Sb 206.836†	58.9	22.1	6.6083 ug/L	6.6083 ppb	10:49:16
3	Se 196.026†	-24.7	8.4	4.1781 ug/L	4.1781 ppb	10:49:16
3	Si 251.611†	670.0	57.0	1.6361 ug/L	1.6361 ppb	10:49:16
3	Sn 189.927†	1.5	-1.9	-0.2812 ug/L	-0.2812 ppb	10:49:16
3	Sr 421.552†	-14.3	-30.1	-0.2203 ug/L	-0.2203 ppb	10:47:23
3	Ti 334.940†	-1775.1	32.6	0.0509 ug/L	0.0509 ppb	10:48:56
3	Tl 190.801†	-51.0	2.1	0.5852 ug/L	0.5852 ppb	10:49:16
3	U 409.014†	-2560.8	94.1	2.8018 ug/L	2.8018 ppb	10:48:51
3	V 292.402†	-1781.6	10.6	0.0843 ug/L	0.0843 ppb	10:48:56
3	Zn 213.857†	874.0	47.1	0.3862 ug/L	0.3862 ppb	10:49:16
3	SiO2†	736.2	104.1	6.3943 ug/L	6.3943 ppb	10:49:31

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	884338.5	99.744	%	0.3097				0.31%
Sc Radial	4703.7	101	%	0.5				0.55%
Y 371.029	759345.9	99.684	%	0.3515				0.35%
Y RADIAL	4959.1	100.5	%	0.67				0.67%
Ag 328.068†	38.2	0.1626	ug/L	0.28587	0.1626	ppb	0.28587	175.79%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	10.1	8.9600	ug/L	19.82374	8.9600	ppb	19.82374	221.25%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.0	1.3861	ug/L	1.88986	1.3861	ppb	1.88986	136.34%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	271.7	5.6032	ug/L	0.35498	5.6032	ppb	0.35498	6.34%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	3.4	0.0247	ug/L	0.13521	0.0247	ppb	0.13521	546.69%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	31.0	0.0105	ug/L	0.02191	0.0105	ppb	0.02191	209.31%
QC value within limits for Be 313.107 Recovery = Not calculated								

Ca 317.933Radial†	10.2	17.113 ug/L	8.8641	17.113 ppb	8.8641	51.80%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	1.8	0.0183 ug/L	0.09567	0.0183 ppb	0.09567	523.59%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-5.2	-0.0968 ug/L	0.12513	-0.0968 ppb	0.12513	129.26%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	17.5	0.1761 ug/L	0.48700	0.1761 ppb	0.48700	276.53%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	30.6	0.0902 ug/L	0.26132	0.0902 ppb	0.26132	289.73%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.9	-7.8241 ug/L	29.27009	-7.8241 ppb	29.27009	374.10%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-63.4	-12.592 ug/L	5.5311	-12.592 ppb	5.5311	43.92%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	3.8	121.50 ug/L	21.831	121.50 ppb	21.831	17.97%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	35.5	0.0344 ug/L	0.02496	0.0344 ppb	0.02496	72.55%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	9.5	0.5941 ug/L	0.29489	0.5941 ppb	0.29489	49.64%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	64.0	19.333 ug/L	13.3307	19.333 ppb	13.3307	68.95%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	5.8	0.1284 ug/L	0.45698	0.1284 ppb	0.45698	355.80%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	8.2	3.9933 ug/L	5.97360	3.9933 ppb	5.97360	149.59%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-14.1	-1.4589 ug/L	0.80054	-1.4589 ppb	0.80054	54.87%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-2.1	-2.4165 ug/L	2.82211	-2.4165 ppb	2.82211	116.79%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	12.7	3.8032 ug/L	2.44553	3.8032 ppb	2.44553	64.30%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	4.7	2.3657 ug/L	1.73788	2.3657 ppb	1.73788	73.46%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	52.8	1.5080 ug/L	0.11146	1.5080 ppb	0.11146	7.39%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	2.5	0.3674 ug/L	0.59538	0.3674 ppb	0.59538	162.04%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-3.6	-0.0263 ug/L	0.17334	-0.0263 ppb	0.17334	659.55%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-3.1	-0.0038 ug/L	0.05750	-0.0038 ppb	0.05750	>999.9%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	5.6	1.5403 ug/L	0.96431	1.5403 ppb	0.96431	62.60%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-24.2	-0.7197 ug/L	3.06754	-0.7197 ppb	3.06754	426.23%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	23.4	0.1577 ug/L	0.15568	0.1577 ppb	0.15568	98.71%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	60.2	0.4901 ug/L	0.09967	0.4901 ppb	0.09967	20.34%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	66.9	4.0892 ug/L	2.55169	4.0892 ppb	2.55169	62.40%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 1/6/2010 10:51:42
Data Type: Reprocessed on 1/6/2010 11:55:33

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	864890.2	864890.2	97.550	%			10:54:52
1	Sc Radial	4615.5	4615.5	98.9	%			10:53:35
1	Y 371.029	744403.8	744403.8	97.722	%			10:54:52
1	Y RADIAL	4870.5	4870.5	98.73	%			10:53:35
1	Ag 328.068†	1666.1	1195.6	5.1487	ug/L	5.1487	ppb	10:54:52
1	Al 396.153Radial†	219.5	248.7	220.16	ug/L	220.16	ppb	10:53:35
1	As 188.979†	48.9	83.6	29.265	ug/L	29.265	ppb	10:55:12
1	B 249.677†	1786.7	2497.4	51.469	ug/L	51.469	ppb	10:55:12
1	Ba 233.527†	713.3	723.7	5.2911	ug/L	5.2911	ppb	10:55:12
1	Be 313.107†	10181.7	14788.9	5.0087	ug/L	5.0087	ppb	10:54:52
1	Ca 317.933Radial†	139.5	128.5	215.32	ug/L	215.32	ppb	10:53:55
1	Cd 226.502†	270.6	515.8	4.8513	ug/L	4.8513	ppb	10:55:12
1	Co 228.616†	165.6	253.7	4.7842	ug/L	4.7842	ppb	10:55:12
1	Cr 267.716†	602.9	514.0	5.1464	ug/L	5.1464	ppb	10:55:12
1	Cu 324.752†	11320.6	3605.9	10.681	ug/L	10.681	ppb	10:54:52
1	Fe 238.204 Radial†	24.7	11.1	97.487	ug/L	97.487	ppb	10:53:55
1	K 766.490 Radial†	4010.4	718.9	142.49	ug/L	142.49	ppb	10:53:35
1	Mg 279.077 IEC†	12.5	11.0	351.81	ug/L	351.81	ppb	10:53:55
1	Mn 257.610†	10207.6	9947.6	10.484	ug/L	10.484	ppb	10:54:52
1	Mo 202.031†	173.7	158.1	9.9167	ug/L	9.9167	ppb	10:55:12
1	Na 589.592 Radial†	-812.7	928.3	280.42	ug/L	280.42	ppb	10:53:35
1	Ni 231.604†	359.3	243.3	5.3375	ug/L	5.3375	ppb	10:55:12
1	P 214.914†	560.6	326.1	157.39	ug/L	157.39	ppb	10:55:12
1	Pb 220.353†	11.0	89.0	9.2802	ug/L	9.2802	ppb	10:55:12
1	S 181.975 Axial†	145.2	88.9	100.43	ug/L	100.43	ppb	10:55:12
1	Sb 206.836†	76.5	41.3	12.599	ug/L	12.599	ppb	10:55:12
1	Se 196.026†	34.9	69.1	35.713	ug/L	35.713	ppb	10:55:12
1	Si 251.611†	4048.3	3533.4	101.11	ug/L	101.11	ppb	10:55:12
1	Sn 189.927†	66.4	64.7	9.5959	ug/L	9.5959	ppb	10:55:12
1	Sr 421.552†	681.4	673.1	4.9260	ug/L	4.9260	ppb	10:53:35
1	Ti 334.940†	1405.7	3258.4	5.1599	ug/L	5.1599	ppb	10:54:52
1	Tl 190.801†	23.8	77.8	21.321	ug/L	21.321	ppb	10:55:12
1	U 409.014†	-1169.6	1469.8	43.672	ug/L	43.672	ppb	10:54:52
1	V 292.402†	-943.7	834.4	5.4501	ug/L	5.4501	ppb	10:55:12
1	Zn 213.857†	2094.7	1315.6	10.754	ug/L	10.754	ppb	10:55:12
1	SiO2†	4055.3	3521.1	215.61	ug/L	215.61	ppb	10:56:08
2	Sc 361.383	862681.9	862681.9	97.301	%			10:55:18
2	Sc Radial	4754.1	4754.1	102	%			10:54:00
2	Y 371.029	742521.1	742521.1	97.475	%			10:55:18
2	Y RADIAL	5002.0	5002.0	101.4	%			10:54:00
2	Ag 328.068†	1578.1	1109.5	4.7828	ug/L	4.7828	ppb	10:55:18
2	Al 396.153Radial†	210.6	233.5	206.60	ug/L	206.60	ppb	10:54:00
2	As 188.979†	48.6	83.4	29.197	ug/L	29.197	ppb	10:55:38
2	B 249.677†	1770.5	2485.5	51.222	ug/L	51.222	ppb	10:55:38
2	Ba 233.527†	700.4	712.3	5.2089	ug/L	5.2089	ppb	10:55:38
2	Be 313.107†	10220.4	14855.4	5.0311	ug/L	5.0311	ppb	10:55:18
2	Ca 317.933Radial†	134.8	119.8	200.76	ug/L	200.76	ppb	10:54:20
2	Cd 226.502†	289.3	535.7	5.0374	ug/L	5.0374	ppb	10:55:38
2	Co 228.616†	167.8	256.4	4.8384	ug/L	4.8384	ppb	10:55:38
2	Cr 267.716†	566.5	478.2	4.7880	ug/L	4.7880	ppb	10:55:38
2	Cu 324.752†	11291.1	3605.3	10.680	ug/L	10.680	ppb	10:55:18
2	Fe 238.204 Radial†	26.8	12.5	109.61	ug/L	109.61	ppb	10:54:20
2	K 766.490 Radial†	4121.7	710.0	140.70	ug/L	140.70	ppb	10:54:00
2	Mg 279.077 IEC†	14.7	12.8	410.58	ug/L	410.58	ppb	10:54:20
2	Mn 257.610†	10171.1	9936.8	10.473	ug/L	10.473	ppb	10:55:18
2	Mo 202.031†	193.2	178.6	11.199	ug/L	11.199	ppb	10:55:38
2	Na 589.592 Radial†	-664.3	1097.9	331.66	ug/L	331.66	ppb	10:54:00
2	Ni 231.604†	359.6	244.5	5.3646	ug/L	5.3646	ppb	10:55:38

2	P 214.914†	540.0	306.4	147.80 ug/L	147.80 ppb	10:55:38
2	Pb 220.353†	-4.4	73.3	7.6473 ug/L	7.6473 ppb	10:55:38
2	S 181.975 Axial†	153.9	98.2	110.96 ug/L	110.96 ppb	10:55:38
2	Sb 206.836†	82.6	47.8	14.571 ug/L	14.571 ppb	10:55:38
2	Se 196.026†	23.0	56.9	29.508 ug/L	29.508 ppb	10:55:38
2	Si 251.611†	4055.7	3551.6	101.61 ug/L	101.61 ppb	10:55:38
2	Sn 189.927†	69.5	68.0	10.077 ug/L	10.077 ppb	10:55:38
2	Sr 421.552†	680.6	652.3	4.7737 ug/L	4.7737 ppb	10:54:00
2	Ti 334.940†	1359.5	3214.5	5.0894 ug/L	5.0894 ppb	10:55:18
2	Tl 190.801†	32.2	86.5	23.700 ug/L	23.700 ppb	10:55:38
2	U 409.014†	-1144.5	1492.5	44.347 ug/L	44.347 ppb	10:55:18
2	V 292.402†	-926.4	849.7	5.5654 ug/L	5.5654 ppb	10:55:38
2	Zn 213.857†	2085.8	1312.0	10.721 ug/L	10.721 ppb	10:55:38
2	SiO2†	4086.4	3563.7	218.18 ug/L	218.18 ppb	10:56:13
3	Sc 361.383	872526.3	872526.3	98.412 %		10:55:43
3	Sc Radial	4661.1	4661.1	99.9 %		10:54:26
3	Y 371.029	750241.4	750241.4	98.488 %		10:55:43
3	Y RADIAL	4937.4	4937.4	100.1 %		10:54:26
3	Ag 328.068†	1623.4	1137.3	4.9014 ug/L	4.9014 ppb	10:55:43
3	Al 396.153Radial†	216.7	243.8	215.75 ug/L	215.75 ppb	10:54:26
3	As 188.979†	47.1	81.3	28.469 ug/L	28.469 ppb	10:56:03
3	B 249.677†	1751.4	2445.5	50.399 ug/L	50.399 ppb	10:56:03
3	Ba 233.527†	706.2	710.1	5.1916 ug/L	5.1916 ppb	10:56:03
3	Be 313.107†	10363.1	14881.9	5.0399 ug/L	5.0399 ppb	10:55:43
3	Ca 317.933Radial†	139.2	126.9	212.59 ug/L	212.59 ppb	10:54:46
3	Cd 226.502†	272.7	515.5	4.8480 ug/L	4.8480 ppb	10:56:03
3	Co 228.616†	158.4	245.0	4.6209 ug/L	4.6209 ppb	10:56:03
3	Cr 267.716†	576.9	482.2	4.8283 ug/L	4.8283 ppb	10:56:03
3	Cu 324.752†	11366.5	3551.0	10.518 ug/L	10.518 ppb	10:55:43
3	Fe 238.204 Radial†	25.7	11.8	104.23 ug/L	104.23 ppb	10:54:46
3	K 766.490 Radial†	4132.4	801.4	158.86 ug/L	158.86 ppb	10:54:26
3	Mg 279.077 IEC†	14.8	13.2	421.14 ug/L	421.14 ppb	10:54:46
3	Mn 257.610†	10368.6	10019.5	10.560 ug/L	10.560 ppb	10:55:43
3	Mo 202.031†	183.5	166.6	10.445 ug/L	10.445 ppb	10:56:03
3	Na 589.592 Radial†	-719.9	1029.2	310.91 ug/L	310.91 ppb	10:54:26
3	Ni 231.604†	357.1	237.8	5.2178 ug/L	5.2178 ppb	10:56:03
3	P 214.914†	529.6	289.5	139.61 ug/L	139.61 ppb	10:56:03
3	Pb 220.353†	1.8	79.6	8.3021 ug/L	8.3021 ppb	10:56:03
3	S 181.975 Axial†	142.6	85.0	96.017 ug/L	96.017 ppb	10:56:03
3	Sb 206.836†	69.5	33.5	10.312 ug/L	10.312 ppb	10:56:03
3	Se 196.026†	31.2	64.9	33.613 ug/L	33.613 ppb	10:56:03
3	Si 251.611†	4006.5	3454.6	98.832 ug/L	98.832 ppb	10:56:03
3	Sn 189.927†	76.4	74.3	11.010 ug/L	11.010 ppb	10:56:03
3	Sr 421.552†	673.2	658.2	4.8171 ug/L	4.8171 ppb	10:54:26
3	Ti 334.940†	1360.9	3200.2	5.0685 ug/L	5.0685 ppb	10:55:43
3	Tl 190.801†	31.5	85.3	23.387 ug/L	23.387 ppb	10:56:03
3	U 409.014†	-1259.2	1389.2	41.277 ug/L	41.277 ppb	10:55:43
3	V 292.402†	-985.6	800.3	5.2394 ug/L	5.2394 ppb	10:56:03
3	Zn 213.857†	2075.9	1277.8	10.440 ug/L	10.440 ppb	10:56:03
3	SiO2†	4122.9	3553.4	217.55 ug/L	217.55 ppb	10:56:18

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	866699.4	97.754	%	0.5826				0.60%
Sc Radial	4676.9	100	%	1.5				1.51%
Y 371.029	745722.1	97.895	%	0.5284				0.54%
Y RADIAL	4936.6	100.1	%	1.33				1.33%
Ag 328.068†	1147.5	4.9443	ug/L	0.18669	4.9443	ppb	0.18669	3.78%
QC value within limits for Ag 328.068 Recovery = 98.89%								
Al 396.153Radial†	242.0	214.17	ug/L	6.917	214.17	ppb	6.917	3.23%
QC value within limits for Al 396.153Radial Recovery = 107.09%								
As 188.979†	82.7	28.977	ug/L	0.4416	28.977	ppb	0.4416	1.52%
QC value within limits for As 188.979 Recovery = 96.59%								
B 249.677†	2476.1	51.030	ug/L	0.5600	51.030	ppb	0.5600	1.10%
QC value within limits for B 249.677 Recovery = 102.06%								
Ba 233.527†	715.4	5.2305	ug/L	0.05318	5.2305	ppb	0.05318	1.02%
QC value within limits for Ba 233.527 Recovery = 104.61%								
Be 313.107†	14842.1	5.0266	ug/L	0.01610	5.0266	ppb	0.01610	0.32%
QC value within limits for Be 313.107 Recovery = 100.53%								

Ca 317.933Radial†	125.1	209.56 ug/L	7.740	209.56 ppb	7.740	3.69%
QC value within limits for Ca 317.933Radial Recovery = 104.78%						
Cd 226.502†	522.3	4.9122 ug/L	0.10842	4.9122 ppb	0.10842	2.21%
QC value within limits for Cd 226.502 Recovery = 98.24%						
Co 228.616†	251.7	4.7478 ug/L	0.11318	4.7478 ppb	0.11318	2.38%
QC value within limits for Co 228.616 Recovery = 94.96%						
Cr 267.716†	491.4	4.9209 ug/L	0.19632	4.9209 ppb	0.19632	3.99%
QC value within limits for Cr 267.716 Recovery = 98.42%						
Cu 324.752†	3587.4	10.626 ug/L	0.0933	10.626 ppb	0.0933	0.88%
QC value within limits for Cu 324.752 Recovery = 106.26%						
Fe 238.204 Radial†	11.8	103.78 ug/L	6.074	103.78 ppb	6.074	5.85%
QC value within limits for Fe 238.204 Radial Recovery = 103.78%						
K 766.490 Radial†	743.5	147.35 ug/L	10.005	147.35 ppb	10.005	6.79%
QC value within limits for K 766.490 Radial Recovery = 98.23%						
Mg 279.077 IEC†	12.3	394.51 ug/L	37.353	394.51 ppb	37.353	9.47%
QC value greater than the upper limit for Mg 279.077 IEC Recovery = 131.50%						
Mn 257.610†	9968.0	10.506 ug/L	0.0470	10.506 ppb	0.0470	0.45%
QC value within limits for Mn 257.610 Recovery = 105.06%						
Mo 202.031†	167.8	10.520 ug/L	0.6446	10.520 ppb	0.6446	6.13%
QC value within limits for Mo 202.031 Recovery = 105.20%						
Na 589.592 Radial†	1018.5	307.66 ug/L	25.776	307.66 ppb	25.776	8.38%
QC value within limits for Na 589.592 Radial Recovery = 102.55%						
Ni 231.604†	241.9	5.3066 ug/L	0.07809	5.3066 ppb	0.07809	1.47%
QC value within limits for Ni 231.604 Recovery = 106.13%						
P 214.914†	307.4	148.27 ug/L	8.897	148.27 ppb	8.897	6.00%
QC value within limits for P 214.914 Recovery = 98.84%						
Pb 220.353†	80.6	8.4099 ug/L	0.82175	8.4099 ppb	0.82175	9.77%
QC value within limits for Pb 220.353 Recovery = 84.10%						
S 181.975 Axial†	90.7	102.47 ug/L	7.681	102.47 ppb	7.681	7.50%
QC value within limits for S 181.975 Axial Recovery = 102.47%						
Sb 206.836†	40.9	12.494 ug/L	2.1317	12.494 ppb	2.1317	17.06%
QC value within limits for Sb 206.836 Recovery = 124.94%						
Se 196.026†	63.6	32.945 ug/L	3.1563	32.945 ppb	3.1563	9.58%
QC value within limits for Se 196.026 Recovery = 109.82%						
Si 251.611†	3513.2	100.52 ug/L	1.482	100.52 ppb	1.482	1.47%
QC value within limits for Si 251.611 Recovery = 100.52%						
Sn 189.927†	69.0	10.228 ug/L	0.7190	10.228 ppb	0.7190	7.03%
QC value within limits for Sn 189.927 Recovery = 102.28%						
Sr 421.552†	661.2	4.8389 ug/L	0.07843	4.8389 ppb	0.07843	1.62%
QC value within limits for Sr 421.552 Recovery = 96.78%						
Ti 334.940†	3224.4	5.1059 ug/L	0.04787	5.1059 ppb	0.04787	0.94%
QC value within limits for Ti 334.940 Recovery = 102.12%						
Tl 190.801†	83.2	22.803 ug/L	1.2930	22.803 ppb	1.2930	5.67%
QC value within limits for Tl 190.801 Recovery = 114.01%						
U 409.014†	1450.5	43.099 ug/L	1.6133	43.099 ppb	1.6133	3.74%
QC value within limits for U 409.014 Recovery = 86.20%						
V 292.402†	828.1	5.4183 ug/L	0.16533	5.4183 ppb	0.16533	3.05%
QC value within limits for V 292.402 Recovery = 108.37%						
Zn 213.857†	1301.8	10.638 ug/L	0.1721	10.638 ppb	0.1721	1.62%
QC value within limits for Zn 213.857 Recovery = 106.38%						
SiO2†	3546.1	217.11 ug/L	1.338	217.11 ppb	1.338	0.62%
QC value within limits for SiO2 Recovery = 101.93%						

QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 1/6/2010 10:58:30
Data Type: Reprocessed on 1/6/2010 11:55:34

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	753202.5	753202.5	84.953	%			11:00:55
1	Sc Radial	4258.7	4258.7	91.2	%			11:00:28
1	Y 371.029	636756.7	636756.7	83.591	%			11:00:55
1	Y RADIAL	4458.6	4458.6	90.39	%			11:00:28
1	Ag 328.068†	-10379.9	-12730.8	1.7815	ug/L	1.7815	ppb	11:00:55
1	Al 396.153Radial†	543336.5	595526.4	528190	ug/L	528190	ppb	11:00:23
1	As 188.979†	-110.8	-97.0	-4.7044	ug/L	-4.7044	ppb	11:01:15
1	B 249.677†	4.9	671.6	-11.419	ug/L	-11.419	ppb	11:00:55
1	Ba 233.527†	-722.9	-858.4	-1.4244	ug/L	-1.4244	ppb	11:01:15
1	Be 313.107†	-4139.1	-520.6	-0.2187	ug/L	-0.2187	ppb	11:00:55
1	Ca 317.933Radial†	268839.9	294637.4	493710	ug/L	493710	ppb	11:00:23
1	Cd 226.502†	1292.9	1760.3	-2.4583	ug/L	-2.4583	ppb	11:01:15
1	Co 228.616†	-10.0	72.2	-1.3635	ug/L	-1.3635	ppb	11:01:15
1	Cr 267.716†	-61.3	-176.2	1.6644	ug/L	1.6644	ppb	11:01:15
1	Cu 324.752†	4196.3	-3059.4	0.6567	ug/L	0.6567	ppb	11:00:55
1	Fe 238.204 Radial†	19787.2	21673.0	190440	ug/L	190440	ppb	11:00:28
1	K 766.490 Radial†	2915.0	-141.9	-12.209	ug/L	-12.209	ppb	11:00:23
1	Mg 279.077 IEC†	14063.0	15411.5	492600	ug/L	492600	ppb	11:00:28
1	Mn 257.610†	-569.1	-1186.3	8.5667	ug/L	8.5667	ppb	11:00:55
1	Mo 202.031†	-238.4	-300.6	-0.5758	ug/L	-0.5758	ppb	11:01:15
1	Na 589.592 Radial†	-1538.9	63.5	19.169	ug/L	19.169	ppb	11:00:28
1	Ni 231.604†	227.1	142.3	3.1234	ug/L	3.1234	ppb	11:01:15
1	P 214.914†	231.9	24.4	37.831	ug/L	37.831	ppb	11:01:15
1	Pb 220.353†	-995.9	-1094.5	-10.525	ug/L	-10.525	ppb	11:01:15
1	S 181.975 Axial†	83.4	38.2	-60.693	ug/L	-60.693	ppb	11:01:15
1	Sb 206.836†	61.5	35.3	-2.2838	ug/L	-2.2838	ppb	11:01:15
1	Se 196.026†	-1144.8	-1314.3	-4.4475	ug/L	-4.4475	ppb	11:01:15
1	Si 251.611†	537.0	15.6	0.9976	ug/L	0.9976	ppb	11:01:15
1	Sn 189.927†	-390.5	-463.1	-14.397	ug/L	-14.397	ppb	11:01:15
1	Sr 421.552†	470.2	499.4	-0.9197	ug/L	-0.9197	ppb	11:00:28
1	Ti 334.940†	-13182.1	-13699.6	4.0139	ug/L	4.0139	ppb	11:00:55
1	Tl 190.801†	-107.0	-72.6	-5.5819	ug/L	-5.5819	ppb	11:01:15
1	U 409.014†	-1998.0	316.8	-14.537	ug/L	-14.537	ppb	11:00:55
1	V 292.402†	565.4	2467.3	-2.5903	ug/L	-2.5903	ppb	11:01:15
1	Zn 213.857†	3443.4	3221.6	-0.2562	ug/L	-0.2562	ppb	11:01:15
1	SiO2†	550.4	11.8	1.9222	ug/L	1.9222	ppb	11:02:12
2	Sc 361.383	759275.0	759275.0	85.638	%			11:01:21
2	Sc Radial	4214.5	4214.5	90.3	%			11:00:38
2	Y 371.029	641859.3	641859.3	84.260	%			11:01:21
2	Y RADIAL	4476.8	4476.8	90.75	%			11:00:38
2	Ag 328.068†	-10380.1	-12633.2	2.5928	ug/L	2.5928	ppb	11:01:21
2	Al 396.153Radial†	526541.1	583169.3	517230	ug/L	517230	ppb	11:00:33
2	As 188.979†	-100.8	-84.3	-0.1464	ug/L	-0.1464	ppb	11:01:41
2	B 249.677†	87.7	768.3	-9.5295	ug/L	-9.5295	ppb	11:01:21
2	Ba 233.527†	-705.8	-831.7	-1.2098	ug/L	-1.2098	ppb	11:01:41
2	Be 313.107†	-4067.1	-397.7	-0.1780	ug/L	-0.1780	ppb	11:01:21
2	Ca 317.933Radial†	261146.2	289206.0	484610	ug/L	484610	ppb	11:00:33
2	Cd 226.502†	1288.6	1743.1	-2.7001	ug/L	-2.7001	ppb	11:01:41
2	Co 228.616†	-36.7	41.2	-1.9559	ug/L	-1.9559	ppb	11:01:41
2	Cr 267.716†	-60.1	-174.2	1.6951	ug/L	1.6951	ppb	11:01:41
2	Cu 324.752†	4267.8	-3015.4	0.8279	ug/L	0.8279	ppb	11:01:21
2	Fe 238.204 Radial†	19664.5	21764.5	191240	ug/L	191240	ppb	11:00:38
2	K 766.490 Radial†	2915.7	-107.6	-5.9274	ug/L	-5.9274	ppb	11:00:33
2	Mg 279.077 IEC†	13981.2	15482.5	494870	ug/L	494870	ppb	11:00:38
2	Mn 257.610†	-551.4	-1160.3	8.6320	ug/L	8.6320	ppb	11:01:21
2	Mo 202.031†	-236.8	-296.4	-0.2373	ug/L	-0.2373	ppb	11:01:41
2	Na 589.592 Radial†	-1549.5	34.1	10.299	ug/L	10.299	ppb	11:00:38
2	Ni 231.604†	257.1	175.1	3.8435	ug/L	3.8435	ppb	11:01:41

2	P 214.914†	255.3	49.5	45.646 ug/L	45.646 ppb	11:01:41
2	Pb 220.353†	-991.5	-1080.0	-11.551 ug/L	-11.551 ppb	11:01:41
2	S 181.975 Axial†	88.3	43.2	-52.950 ug/L	-52.950 ppb	11:01:41
2	Sb 206.836†	77.5	53.4	3.4112 ug/L	3.4112 ppb	11:01:41
2	Se 196.026†	-1139.5	-1297.3	5.0374 ug/L	5.0374 ppb	11:01:41
2	Si 251.611†	573.3	52.9	2.0679 ug/L	2.0679 ppb	11:01:41
2	Sn 189.927†	-407.9	-479.7	-17.799 ug/L	-17.799 ppb	11:01:41
2	Sr 421.552†	452.7	485.4	-0.9382 ug/L	-0.9382 ppb	11:00:38
2	Ti 334.940†	-13537.0	-13989.8	3.0739 ug/L	3.0739 ppb	11:01:21
2	Tl 190.801†	-114.3	-80.1	-7.9393 ug/L	-7.9393 ppb	11:01:41
2	U 409.014†	-1707.5	674.9	-3.9930 ug/L	-3.9930 ppb	11:01:21
2	V 292.402†	546.7	2440.3	-2.8065 ug/L	-2.8065 ppb	11:01:41
2	Zn 213.857†	3441.4	3186.9	-0.6655 ug/L	-0.6655 ppb	11:01:41
2	SiO2†	505.9	-45.3	-1.5806 ug/L	-1.5806 ppb	11:02:17
3	Sc 361.383	751186.8	751186.8	84.726 %		11:01:46
3	Sc Radial	4186.9	4186.9	89.7 %		11:00:49
3	Y 371.029	635002.1	635002.1	83.360 %		11:01:46
3	Y RADIAL	4447.4	4447.4	90.16 %		11:00:49
3	Ag 328.068†	-10460.2	-12858.3	1.7968 ug/L	1.7968 ppb	11:01:46
3	Al 396.153Radial†	532654.5	593833.3	526690 ug/L	526690 ppb	11:00:44
3	As 188.979†	-114.1	-101.3	-5.9524 ug/L	-5.9524 ppb	11:02:06
3	B 249.677†	113.1	799.4	-9.0024 ug/L	-9.0024 ppb	11:01:46
3	Ba 233.527†	-713.1	-849.2	-1.3160 ug/L	-1.3160 ppb	11:02:06
3	Be 313.107†	-4125.4	-517.6	-0.2177 ug/L	-0.2177 ppb	11:01:46
3	Ca 317.933Radial†	263738.1	294004.4	492650 ug/L	492650 ppb	11:00:44
3	Cd 226.502†	1283.9	1753.7	-2.6857 ug/L	-2.6857 ppb	11:02:06
3	Co 228.616†	-34.4	43.3	-1.9279 ug/L	-1.9279 ppb	11:02:06
3	Cr 267.716†	-93.5	-214.4	1.3088 ug/L	1.3088 ppb	11:02:06
3	Cu 324.752†	4225.0	-3012.4	0.8806 ug/L	0.8806 ppb	11:01:46
3	Fe 238.204 Radial†	19622.8	21861.8	192100 ug/L	192100 ppb	11:00:49
3	K 766.490 Radial†	2882.8	-123.0	-8.5384 ug/L	-8.5384 ppb	11:00:44
3	Mg 279.077 IEC†	13916.3	15512.4	495830 ug/L	495830 ppb	11:00:49
3	Mn 257.610†	-533.9	-1146.5	8.7140 ug/L	8.7140 ppb	11:01:46
3	Mo 202.031†	-233.8	-295.9	-0.1250 ug/L	-0.1250 ppb	11:02:06
3	Na 589.592 Radial†	-1593.1	-25.9	-7.8365 ug/L	-7.8365 ppb	11:00:49
3	Ni 231.604†	234.5	151.7	3.3293 ug/L	3.3293 ppb	11:02:06
3	P 214.914†	250.9	47.5	47.212 ug/L	47.212 ppb	11:02:06
3	Pb 220.353†	-1005.0	-1108.4	-12.435 ug/L	-12.435 ppb	11:02:06
3	S 181.975 Axial†	96.9	54.5	-42.024 ug/L	-42.024 ppb	11:02:06
3	Sb 206.836†	74.2	50.4	2.3042 ug/L	2.3042 ppb	11:02:06
3	Se 196.026†	-1143.4	-1316.3	-0.5904 ug/L	-0.5904 ppb	11:02:06
3	Si 251.611†	593.1	83.5	2.9418 ug/L	2.9418 ppb	11:02:06
3	Sn 189.927†	-395.6	-470.4	-15.565 ug/L	-15.565 ppb	11:02:06
3	Sr 421.552†	518.1	561.7	-0.4542 ug/L	-0.4542 ppb	11:00:49
3	Ti 334.940†	-13154.2	-13708.3	3.9422 ug/L	3.9422 ppb	11:01:46
3	Tl 190.801†	-98.0	-62.3	-2.8132 ug/L	-2.8132 ppb	11:02:06
3	U 409.014†	-1817.7	523.3	-8.6066 ug/L	-8.6066 ppb	11:01:46
3	V 292.402†	510.1	2403.8	-3.1522 ug/L	-3.1522 ppb	11:02:06
3	Zn 213.857†	3432.7	3219.8	-0.4685 ug/L	-0.4685 ppb	11:02:06
3	SiO2†	498.3	-47.9	-1.7492 ug/L	-1.7492 ppb	11:02:22

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	754554.8	85.106	%	0.4749				0.56%
Sc Radial	4220.0	90.4	%	0.78				0.86%
Y 371.029	637872.7	83.737	%	0.4676				0.56%
Y RADIAL	4461.0	90.43	%	0.300				0.33%
Ag 328.068†	-12740.8	2.0571	ug/L	0.46404	2.0571	ppb	0.46404	22.56%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	590843.0	524030	ug/L	5941.8	524030	ppb	5941.8	1.13%
QC value within limits for Al 396.153Radial Recovery = 104.81%								
As 188.979†	-94.2	-3.6010	ug/L	3.05620	-3.6010	ppb	3.05620	84.87%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	746.4	-9.9835	ug/L	1.27043	-9.9835	ppb	1.27043	12.73%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-846.4	-1.3167	ug/L	0.10732	-1.3167	ppb	0.10732	8.15%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-478.7	-0.2048	ug/L	0.02319	-0.2048	ppb	0.02319	11.32%
QC value within limits for Be 313.107 Recovery = Not calculated								

Ca 317.933Radial†	292615.9	490330 ug/L	4976.7	490330 ppb	4976.7	1.01%
QC value within limits for Ca 317.933Radial Recovery = 98.07%						
Cd 226.502†	1752.4	-2.6147 ug/L	0.13567	-2.6147 ppb	0.13567	5.19%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	52.2	-1.7491 ug/L	0.33421	-1.7491 ppb	0.33421	19.11%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-188.3	1.5561 ug/L	0.21472	1.5561 ppb	0.21472	13.80%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-3029.1	0.7884 ug/L	0.11705	0.7884 ppb	0.11705	14.85%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	21766.4	191260 ug/L	829.5	191260 ppb	829.5	0.43%
QC value within limits for Fe 238.204 Radial Recovery = 95.63%						
K 766.490 Radial†	-124.2	-8.8918 ug/L	3.15589	-8.8918 ppb	3.15589	35.49%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	15468.8	494430 ug/L	1657.1	494430 ppb	1657.1	0.34%
QC value within limits for Mg 279.077 IEC Recovery = 98.89%						
Mn 257.610†	-1164.4	8.6375 ug/L	0.07379	8.6375 ppb	0.07379	0.85%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-297.6	-0.3127 ug/L	0.23467	-0.3127 ppb	0.23467	75.05%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	23.9	7.2102 ug/L	13.76491	7.2102 ppb	13.76491	190.91%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	156.4	3.4321 ug/L	0.37090	3.4321 ppb	0.37090	10.81%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	40.5	43.563 ug/L	5.0252	43.563 ppb	5.0252	11.54%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-1094.3	-11.504 ug/L	0.9561	-11.504 ppb	0.9561	8.31%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	45.3	-51.889 ug/L	9.3800	-51.889 ppb	9.3800	18.08%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	46.4	1.1439 ug/L	3.01962	1.1439 ppb	3.01962	263.98%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-1309.3	-0.0001 ug/L	4.76989	-0.0001 ppb	4.76989	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	50.6	2.0024 ug/L	0.97379	2.0024 ppb	0.97379	48.63%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-471.0	-15.920 ug/L	1.7286	-15.920 ppb	1.7286	10.86%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	515.5	-0.7707 ug/L	0.27428	-0.7707 ppb	0.27428	35.59%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-13799.2	3.6767 ug/L	0.52321	3.6767 ppb	0.52321	14.23%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-71.7	-5.4448 ug/L	2.56579	-5.4448 ppb	2.56579	47.12%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	505.0	-9.0456 ug/L	5.28573	-9.0456 ppb	5.28573	58.43%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	2437.2	-2.8497 ug/L	0.28341	-2.8497 ppb	0.28341	9.95%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	3209.4	-0.4634 ug/L	0.20471	-0.4634 ppb	0.20471	44.18%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	-27.1	-0.4692 ug/L	2.07277	-0.4692 ppb	2.07277	441.76%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 1/6/2010 11:04:33
Data Type: Reprocessed on 1/6/2010 11:55:35
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	779127.1	779127.1	87.877	%			11:06:59
1	Sc Radial	4454.4	4454.4	95.4	%			11:06:31
1	Y 371.029	656369.1	656369.1	86.165	%			11:06:59
1	Y RADIAL	4717.2	4717.2	95.63	%			11:06:31
1	Ag 328.068†	44700.6	50354.8	271.57	ug/L	271.57	ppb	11:06:59
1	Al 396.153Radial†	542854.2	568858.2	504510	ug/L	504510	ppb	11:06:26
1	As 188.979†	1186.0	1383.0	515.64	ug/L	515.64	ppb	11:07:04
1	B 249.677†	22144.7	25865.5	508.09	ug/L	508.09	ppb	11:06:59
1	Ba 233.527†	59785.3	68025.3	501.76	ug/L	501.76	ppb	11:06:59
1	Be 313.107†	638883.9	731370.9	248.18	ug/L	248.18	ppb	11:06:59
1	Ca 317.933Radial†	269440.5	282321.5	473080	ug/L	473080	ppb	11:06:26
1	Cd 226.502†	44934.9	51372.1	466.00	ug/L	466.00	ppb	11:07:04
1	Co 228.616†	21546.0	24602.3	460.14	ug/L	460.14	ppb	11:07:04
1	Cr 267.716†	41176.3	46752.7	472.42	ug/L	472.42	ppb	11:07:04
1	Cu 324.752†	172238.2	187999.8	565.85	ug/L	565.85	ppb	11:06:59
1	Fe 238.204 Radial†	19710.1	20639.4	181370	ug/L	181370	ppb	11:06:31
1	K 766.490 Radial†	28330.7	26349.7	5238.8	ug/L	5238.8	ppb	11:06:26
1	Mg 279.077 IEC†	14049.6	14720.3	470520	ug/L	470520	ppb	11:06:31
1	Mn 257.610†	413808.4	470377.9	504.94	ug/L	504.94	ppb	11:06:59
1	Mo 202.031†	6539.3	7421.5	482.32	ug/L	482.32	ppb	11:07:04
1	Na 589.592 Radial†	15160.6	17636.2	5327.5	ug/L	5327.5	ppb	11:06:31
1	Ni 231.604†	18561.1	20996.6	460.63	ug/L	460.63	ppb	11:07:04
1	P 214.914†	4828.3	5245.8	2498.8	ug/L	2498.8	ppb	11:07:04
1	Pb 220.353†	3022.4	3517.1	463.40	ug/L	463.40	ppb	11:07:04
1	S 181.975 Axial†	2097.2	2326.6	2530.2	ug/L	2530.2	ppb	11:07:04
1	Sb 206.836†	1597.3	1780.5	526.98	ug/L	526.98	ppb	11:07:04
1	Se 196.026†	3327.7	3820.0	2592.9	ug/L	2592.9	ppb	11:07:04
1	Si 251.611†	162299.0	184072.0	5269.3	ug/L	5269.3	ppb	11:06:59
1	Sn 189.927†	2534.0	2880.2	477.84	ug/L	477.84	ppb	11:07:04
1	Sr 421.552†	64399.4	67465.1	489.57	ug/L	489.57	ppb	11:06:26
1	Ti 334.940†	273893.2	313494.8	521.66	ug/L	521.66	ppb	11:06:59
1	Tl 190.801†	1424.0	1673.8	474.24	ug/L	474.24	ppb	11:07:04
1	U 409.014†	13388.8	17904.5	508.55	ug/L	508.55	ppb	11:06:59
1	V 292.402†	71020.6	82619.9	508.63	ug/L	508.63	ppb	11:06:59
1	Zn 213.857†	55652.9	62498.7	484.76	ug/L	484.76	ppb	11:07:04
1	SiO2†	160345.8	181829.9	11138	ug/L	11138	ppb	11:07:31
2	Sc 361.383	782551.7	782551.7	88.263	%			11:07:10
2	Sc Radial	4310.7	4310.7	92.4	%			11:06:41
2	Y 371.029	659175.2	659175.2	86.534	%			11:07:10
2	Y RADIAL	4569.4	4569.4	92.63	%			11:06:41
2	Ag 328.068†	44733.5	50169.5	271.97	ug/L	271.97	ppb	11:07:10
2	Al 396.153Radial†	524292.2	567719.1	503500	ug/L	503500	ppb	11:06:36
2	As 188.979†	1190.8	1382.6	516.02	ug/L	516.02	ppb	11:07:15
2	B 249.677†	22208.8	25827.8	506.84	ug/L	506.84	ppb	11:07:10
2	Ba 233.527†	59710.0	67642.3	499.05	ug/L	499.05	ppb	11:07:10
2	Be 313.107†	638538.1	727797.6	246.96	ug/L	246.96	ppb	11:07:10
2	Ca 317.933Radial†	260192.9	281718.8	472070	ug/L	472070	ppb	11:06:36
2	Cd 226.502†	45076.0	51308.3	465.04	ug/L	465.04	ppb	11:07:15
2	Co 228.616†	21732.6	24706.4	462.06	ug/L	462.06	ppb	11:07:15
2	Cr 267.716†	41362.7	46758.8	472.54	ug/L	472.54	ppb	11:07:15
2	Cu 324.752†	172268.0	187175.8	563.59	ug/L	563.59	ppb	11:07:10
2	Fe 238.204 Radial†	19447.4	21043.4	184920	ug/L	184920	ppb	11:06:41
2	K 766.490 Radial†	27448.6	26384.1	5245.5	ug/L	5245.5	ppb	11:06:36
2	Mg 279.077 IEC†	13853.6	14998.7	479420	ug/L	479420	ppb	11:06:41
2	Mn 257.610†	413221.7	467652.3	502.25	ug/L	502.25	ppb	11:07:10
2	Mo 202.031†	6615.2	7474.9	486.01	ug/L	486.01	ppb	11:07:15
2	Na 589.592 Radial†	14817.5	17794.2	5375.3	ug/L	5375.3	ppb	11:06:41
2	Ni 231.604†	18668.1	21025.4	461.26	ug/L	461.26	ppb	11:07:15

2	P 214.914†	4811.7	5202.9	2474.9 ug/L	2474.9 ppb	11:07:15
2	Pb 220.353†	3019.9	3499.2	461.03 ug/L	461.03 ppb	11:07:15
2	S 181.975 Axial†	2128.5	2351.6	2558.6 ug/L	2558.6 ppb	11:07:15
2	Sb 206.836†	1622.3	1800.9	533.15 ug/L	533.15 ppb	11:07:15
2	Se 196.026†	3297.2	3768.9	2577.5 ug/L	2577.5 ppb	11:07:15
2	Si 251.611†	162156.2	183101.9	5241.4 ug/L	5241.4 ppb	11:07:10
2	Sn 189.927†	2516.2	2847.4	472.92 ug/L	472.92 ppb	11:07:15
2	Sr 421.552†	62261.9	67399.9	489.10 ug/L	489.10 ppb	11:06:36
2	Ti 334.940†	273884.8	312121.3	519.44 ug/L	519.44 ppb	11:07:10
2	Tl 190.801†	1448.5	1694.4	479.82 ug/L	479.82 ppb	11:07:15
2	U 409.014†	13235.3	17663.9	500.95 ug/L	500.95 ppb	11:07:10
2	V 292.402†	70906.1	82136.5	505.30 ug/L	505.30 ppb	11:07:10
2	Zn 213.857†	56331.5	62990.4	488.31 ug/L	488.31 ppb	11:07:15
2	SiO2†	158587.0	179038.7	10966 ug/L	10966 ppb	11:07:36
3	Sc 361.383	775657.2	775657.2	87.486 %		11:07:21
3	Sc Radial	4197.2	4197.2	89.9 %		11:06:52
3	Y 371.029	654106.3	654106.3	85.868 %		11:07:21
3	Y RADIAL	4453.0	4453.0	90.27 %		11:06:52
3	Ag 328.068†	44493.8	50346.0	274.39 ug/L	274.39 ppb	11:07:21
3	Al 396.153Radial†	539688.6	600202.2	532310 ug/L	532310 ppb	11:06:47
3	As 188.979†	1204.7	1410.4	526.71 ug/L	526.71 ppb	11:07:26
3	B 249.677†	22061.1	25882.7	507.15 ug/L	507.15 ppb	11:07:21
3	Ba 233.527†	59567.4	68080.6	502.41 ug/L	502.41 ppb	11:07:21
3	Be 313.107†	635782.5	731078.2	248.08 ug/L	248.08 ppb	11:07:21
3	Ca 317.933Radial†	267429.2	297389.5	498320 ug/L	498320 ppb	11:06:47
3	Cd 226.502†	45046.1	51728.0	468.39 ug/L	468.39 ppb	11:07:26
3	Co 228.616†	21698.9	24886.7	465.37 ug/L	465.37 ppb	11:07:26
3	Cr 267.716†	41445.2	47269.6	477.77 ug/L	477.77 ppb	11:07:26
3	Cu 324.752†	171054.1	187523.2	564.93 ug/L	564.93 ppb	11:07:21
3	Fe 238.204 Radial†	19560.0	21738.4	191030 ug/L	191030 ppb	11:06:52
3	K 766.490 Radial†	28206.6	28031.2	5573.4 ug/L	5573.4 ppb	11:06:47
3	Mg 279.077 IEC†	13930.5	15490.2	495130 ug/L	495130 ppb	11:06:52
3	Mn 257.610†	411428.3	469763.8	504.79 ug/L	504.79 ppb	11:07:21
3	Mo 202.031†	6618.5	7545.3	491.00 ug/L	491.00 ppb	11:07:26
3	Na 589.592 Radial†	15048.5	18485.2	5584.0 ug/L	5584.0 ppb	11:06:52
3	Ni 231.604†	18707.8	21258.7	466.38 ug/L	466.38 ppb	11:07:26
3	P 214.914†	4808.0	5247.2	2501.4 ug/L	2501.4 ppb	11:07:26
3	Pb 220.353†	2979.3	3483.2	465.35 ug/L	465.35 ppb	11:07:26
3	S 181.975 Axial†	2148.9	2396.4	2603.6 ug/L	2603.6 ppb	11:07:26
3	Sb 206.836†	1590.7	1781.1	526.70 ug/L	526.70 ppb	11:07:26
3	Se 196.026†	3309.9	3816.6	2625.3 ug/L	2625.3 ppb	11:07:26
3	Si 251.611†	161445.6	183922.7	5264.7 ug/L	5264.7 ppb	11:07:21
3	Sn 189.927†	2557.6	2920.1	486.49 ug/L	486.49 ppb	11:07:26
3	Sr 421.552†	64130.0	71301.5	517.43 ug/L	517.43 ppb	11:06:47
3	Ti 334.940†	272561.7	313367.1	522.78 ug/L	522.78 ppb	11:07:21
3	Tl 190.801†	1491.8	1758.5	498.12 ug/L	498.12 ppb	11:07:26
3	U 409.014†	13359.2	17938.9	508.35 ug/L	508.35 ppb	11:07:21
3	V 292.402†	70827.0	82760.2	508.71 ug/L	508.71 ppb	11:07:21
3	Zn 213.857†	56121.4	63317.5	490.12 ug/L	490.12 ppb	11:07:26
3	SiO2†	161991.9	184527.6	11303 ug/L	11303 ppb	11:07:42

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	779112.0	87.875	%	0.3888				0.44%
Sc Radial	4320.8	92.6	%	2.76				2.98%
Y 371.029	656550.2	86.189	%	0.3333				0.39%
Y RADIAL	4579.9	92.84	%	2.683				2.89%
Ag 328.068†	50290.1	272.65	ug/L	1.527	272.65	ppb	1.527	0.56%
QC value within limits for Ag 328.068 Recovery = 109.06%								
Al 396.153Radial†	578926.5	513440	ug/L	16349.5	513440	ppb	16349.5	3.18%
QC value within limits for Al 396.153Radial Recovery = 102.69%								
As 188.979†	1392.0	519.46	ug/L	6.281	519.46	ppb	6.281	1.21%
QC value within limits for As 188.979 Recovery = 103.89%								
B 249.677†	25858.6	507.36	ug/L	0.652	507.36	ppb	0.652	0.13%
QC value within limits for B 249.677 Recovery = 101.47%								
Ba 233.527†	67916.1	501.07	ug/L	1.782	501.07	ppb	1.782	0.36%
QC value within limits for Ba 233.527 Recovery = 100.21%								
Be 313.107†	730082.2	247.74	ug/L	0.673	247.74	ppb	0.673	0.27%
QC value within limits for Be 313.107 Recovery = 99.10%								

Ca 317.933Radial†	287143.3	481160 ug/L	14877.5	481160 ppb	14877.5	3.09%
QC value within limits for Ca 317.933Radial Recovery = 96.23%						
Cd 226.502†	51469.4	466.48 ug/L	1.723	466.48 ppb	1.723	0.37%
QC value within limits for Cd 226.502 Recovery = 93.30%						
Co 228.616†	24731.8	462.53 ug/L	2.645	462.53 ppb	2.645	0.57%
QC value within limits for Co 228.616 Recovery = 92.51%						
Cr 267.716†	46927.0	474.24 ug/L	3.056	474.24 ppb	3.056	0.64%
QC value within limits for Cr 267.716 Recovery = 94.85%						
Cu 324.752†	187566.3	564.79 ug/L	1.136	564.79 ppb	1.136	0.20%
QC value within limits for Cu 324.752 Recovery = 112.96%						
Fe 238.204 Radial†	21140.4	185770 ug/L	4884.4	185770 ppb	4884.4	2.63%
QC value within limits for Fe 238.204 Radial Recovery = 92.89%						
K 766.490 Radial†	26921.7	5352.6 ug/L	191.29	5352.6 ppb	191.29	3.57%
QC value within limits for K 766.490 Radial Recovery = 107.05%						
Mg 279.077 IEC†	15069.7	481690 ug/L	12459.7	481690 ppb	12459.7	2.59%
QC value within limits for Mg 279.077 IEC Recovery = 96.34%						
Mn 257.610†	469264.6	503.99 ug/L	1.510	503.99 ppb	1.510	0.30%
QC value within limits for Mn 257.610 Recovery = 100.80%						
Mo 202.031†	7480.6	486.44 ug/L	4.356	486.44 ppb	4.356	0.90%
QC value within limits for Mo 202.031 Recovery = 97.29%						
Na 589.592 Radial†	17971.9	5428.9 ug/L	136.40	5428.9 ppb	136.40	2.51%
QC value within limits for Na 589.592 Radial Recovery = 108.58%						
Ni 231.604†	21093.6	462.76 ug/L	3.154	462.76 ppb	3.154	0.68%
QC value within limits for Ni 231.604 Recovery = 92.55%						
P 214.914†	5232.0	2491.7 ug/L	14.56	2491.7 ppb	14.56	0.58%
QC value within limits for P 214.914 Recovery = 99.67%						
Pb 220.353†	3499.9	463.26 ug/L	2.165	463.26 ppb	2.165	0.47%
QC value within limits for Pb 220.353 Recovery = 92.65%						
S 181.975 Axial†	2358.2	2564.1 ug/L	37.04	2564.1 ppb	37.04	1.44%
QC value within limits for S 181.975 Axial Recovery = 102.57%						
Sb 206.836†	1787.5	528.94 ug/L	3.648	528.94 ppb	3.648	0.69%
QC value within limits for Sb 206.836 Recovery = 105.79%						
Se 196.026†	3801.8	2598.5 ug/L	24.38	2598.5 ppb	24.38	0.94%
QC value within limits for Se 196.026 Recovery = 103.94%						
Si 251.611†	183698.9	5258.4 ug/L	14.95	5258.4 ppb	14.95	0.28%
QC value within limits for Si 251.611 Recovery = 105.17%						
Sn 189.927†	2882.5	479.08 ug/L	6.874	479.08 ppb	6.874	1.43%
QC value within limits for Sn 189.927 Recovery = 95.82%						
Sr 421.552†	68722.2	498.70 ug/L	16.219	498.70 ppb	16.219	3.25%
QC value within limits for Sr 421.552 Recovery = 99.74%						
Ti 334.940†	312994.4	521.29 ug/L	1.701	521.29 ppb	1.701	0.33%
QC value within limits for Ti 334.940 Recovery = 104.26%						
Tl 190.801†	1708.9	484.06 ug/L	12.491	484.06 ppb	12.491	2.58%
QC value within limits for Tl 190.801 Recovery = 96.81%						
U 409.014†	17835.8	505.95 ug/L	4.330	505.95 ppb	4.330	0.86%
QC value within limits for U 409.014 Recovery = 101.19%						
V 292.402†	82505.5	507.55 ug/L	1.950	507.55 ppb	1.950	0.38%
QC value within limits for V 292.402 Recovery = 101.51%						
Zn 213.857†	62935.5	487.73 ug/L	2.725	487.73 ppb	2.725	0.56%
QC value within limits for Zn 213.857 Recovery = 97.55%						
SiO2†	181798.7	11136 ug/L	168.2	11136 ppb	168.2	1.51%
QC value within limits for SiO2 Recovery = 104.12%						

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 1/6/2010 11:09:52
Data Type: Reprocessed on 1/6/2010 11:55:36

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	757190.3	757190.3	85.403	%			11:12:18
1	Sc Radial	4069.5	4069.5	87.2	%			11:11:50
1	Y 371.029	639627.2	639627.2	83.967	%			11:12:18
1	Y RADIAL	4307.8	4307.8	87.33	%			11:11:50
1	Ag 328.068†	-25114.7	-29919.6	3.2743	ug/L	3.2743	ppb	11:12:18
1	Al 396.153Radial†	510246.3	585257.6	519080	ug/L	519080	ppb	11:11:45
1	As 188.979†	-226.9	-232.3	-11.379	ug/L	-11.379	ppb	11:12:38
1	B 249.677†	930.6	1755.6	-23.986	ug/L	-23.986	ppb	11:12:18
1	Ba 233.527†	-1963.0	-2306.0	-5.3258	ug/L	-5.3258	ppb	11:12:38
1	Be 313.107†	-10999.8	-8528.4	-2.9251	ug/L	-2.9251	ppb	11:12:18
1	Ca 317.933Radial†	255686.9	293249.5	491390	ug/L	491390	ppb	11:11:45
1	Cd 226.502†	3401.1	4220.8	-5.5906	ug/L	-5.5906	ppb	11:12:38
1	Co 228.616†	183.2	298.5	-0.9238	ug/L	-0.9238	ppb	11:12:38
1	Cr 267.716†	44.1	-52.4	2.8440	ug/L	2.8440	ppb	11:12:38
1	Cu 324.752†	557.6	-7346.1	1.3885	ug/L	1.3885	ppb	11:12:18
1	Fe 238.204 Radial†	45017.9	51619.7	453570	ug/L	453570	ppb	11:11:50
1	K 766.490 Radial†	3444.5	613.9	-90.690	ug/L	-90.690	ppb	11:11:45
1	Mg 279.077 IEC†	13372.4	15335.9	489960	ug/L	489960	ppb	11:11:50
1	Mn 257.610†	-26979.7	-32107.5	2.2724	ug/L	2.2724	ppb	11:12:18
1	Mo 202.031†	-544.9	-658.0	2.2543	ug/L	2.2543	ppb	11:12:18
1	Na 589.592 Radial†	1546860.8	1775933.7	536470	ug/L	536470	ppb	11:11:45
1	Ni 231.604†	305.8	233.0	5.1111	ug/L	5.1111	ppb	11:12:38
1	P 214.914†	643.8	505.2	58.913	ug/L	58.913	ppb	11:12:38
1	Pb 220.353†	-720.0	-765.3	-0.1074	ug/L	-0.1074	ppb	11:12:38
1	S 181.975 Axial†	91.6	47.4	-48.518	ug/L	-48.518	ppb	11:12:38
1	Sb 206.836†	64.7	38.7	2.6602	ug/L	2.6602	ppb	11:12:38
1	Se 196.026†	-2673.6	-3097.3	-109.20	ug/L	-109.20	ppb	11:12:38
1	Si 251.611†	-394.3	-1078.3	-30.022	ug/L	-30.022	ppb	11:12:38
1	Sn 189.927†	-428.8	-505.5	-17.410	ug/L	-17.410	ppb	11:12:38
1	Sr 421.552†	654.3	734.5	0.8228	ug/L	0.8228	ppb	11:11:50
1	Ti 334.940†	-13218.6	-13660.6	-2.6075	ug/L	-2.6075	ppb	11:12:18
1	Tl 190.801†	-112.2	-78.0	-7.5455	ug/L	-7.5455	ppb	11:12:38
1	U 409.014†	424989.0	500297.0	14816	ug/L	14816	ppb	11:12:18
1	V 292.402†	1846.6	3964.0	-4.7330	ug/L	-4.7330	ppb	11:12:18
1	Zn 213.857†	6309.6	6556.3	13.614	ug/L	13.614	ppb	11:12:38
1	SiO2†	-467.6	-1183.5	-70.679	ug/L	-70.679	ppb	11:13:35
2	Sc 361.383	747932.4	747932.4	84.359	%			11:12:44
2	Sc Radial	4162.5	4162.5	89.2	%			11:12:00
2	Y 371.029	631266.1	631266.1	82.870	%			11:12:44
2	Y RADIAL	4406.2	4406.2	89.32	%			11:12:00
2	Ag 328.068†	-24896.5	-30025.0	2.7957	ug/L	2.7957	ppb	11:12:44
2	Al 396.153Radial†	513742.4	576099.8	510960	ug/L	510960	ppb	11:11:55
2	As 188.979†	-230.4	-239.8	-14.056	ug/L	-14.056	ppb	11:13:04
2	B 249.677†	877.2	1705.6	-24.970	ug/L	-24.970	ppb	11:12:44
2	Ba 233.527†	-1965.8	-2337.8	-5.5667	ug/L	-5.5667	ppb	11:13:04
2	Be 313.107†	-10971.6	-8654.3	-2.9684	ug/L	-2.9684	ppb	11:12:44
2	Ca 317.933Radial†	256858.8	288010.2	482610	ug/L	482610	ppb	11:11:55
2	Cd 226.502†	3363.5	4225.5	-5.5103	ug/L	-5.5103	ppb	11:13:04
2	Co 228.616†	225.5	351.3	0.0756	ug/L	0.0756	ppb	11:13:04
2	Cr 267.716†	11.6	-90.3	2.4440	ug/L	2.4440	ppb	11:13:04
2	Cu 324.752†	691.5	-7179.3	1.8641	ug/L	1.8641	ppb	11:12:44
2	Fe 238.204 Radial†	46010.4	51578.8	453210	ug/L	453210	ppb	11:12:00
2	K 766.490 Radial†	3371.7	444.0	-120.26	ug/L	-120.26	ppb	11:11:55
2	Mg 279.077 IEC†	13639.9	15293.2	488600	ug/L	488600	ppb	11:12:00
2	Mn 257.610†	-26627.6	-32081.1	2.2899	ug/L	2.2899	ppb	11:12:44
2	Mo 202.031†	-533.2	-652.0	2.5949	ug/L	2.5949	ppb	11:12:44
2	Na 589.592 Radial†	1553333.5	1743544.6	526690	ug/L	526690	ppb	11:11:55
2	Ni 231.604†	303.3	234.4	5.1418	ug/L	5.1418	ppb	11:13:04

2	P 214.914†	620.8	487.3	47.656 ug/L	47.656 ppb	11:13:04
2	Pb 220.353†	-807.2	-879.1	-13.693 ug/L	-13.693 ppb	11:13:04
2	S 181.975 Axial†	115.8	77.4	-13.020 ug/L	-13.020 ppb	11:13:04
2	Sb 206.836†	71.1	47.2	5.4744 ug/L	5.4744 ppb	11:13:04
2	Se 196.026†	-2683.9	-3148.3	-137.67 ug/L	-137.67 ppb	11:13:04
2	Si 251.611†	-403.6	-1095.0	-30.500 ug/L	-30.500 ppb	11:13:04
2	Sn 189.927†	-418.3	-499.2	-17.395 ug/L	-17.395 ppb	11:13:04
2	Sr 421.552†	692.7	760.8	1.0971 ug/L	1.0971 ppb	11:12:00
2	Ti 334.940†	-13250.4	-13889.9	-3.4473 ug/L	-3.4473 ppb	11:12:44
2	Tl 190.801†	-129.1	-99.7	-13.698 ug/L	-13.698 ppb	11:13:04
2	U 409.014†	420957.2	501677.2	14857 ug/L	14857 ppb	11:12:44
2	V 292.402†	1835.9	3978.1	-4.5353 ug/L	-4.5353 ppb	11:12:44
2	Zn 213.857†	6334.6	6677.4	14.674 ug/L	14.674 ppb	11:13:04
2	SiO2†	-393.1	-1102.1	-65.675 ug/L	-65.675 ppb	11:13:40
3	Sc 361.383	755624.4	755624.4	85.226 %		11:13:10
3	Sc Radial	4203.6	4203.6	90.1 %		11:12:11
3	Y 371.029	637710.9	637710.9	83.716 %		11:13:10
3	Y RADIAL	4489.0	4489.0	91.00 %		11:12:11
3	Ag 328.068†	-24986.3	-29829.9	2.9540 ug/L	2.9540 ppb	11:13:10
3	Al 396.153Radial†	523842.6	581687.2	515910 ug/L	515910 ppb	11:12:06
3	As 188.979†	-238.1	-245.9	-16.509 ug/L	-16.509 ppb	11:13:30
3	B 249.677†	950.0	1780.5	-23.167 ug/L	-23.167 ppb	11:13:10
3	Ba 233.527†	-1897.4	-2233.8	-4.8555 ug/L	-4.8555 ppb	11:13:30
3	Be 313.107†	-10926.8	-8469.5	-2.9039 ug/L	-2.9039 ppb	11:13:10
3	Ca 317.933Radial†	261514.2	290365.6	486560 ug/L	486560 ppb	11:12:06
3	Cd 226.502†	3385.8	4211.0	-5.4515 ug/L	-5.4515 ppb	11:13:30
3	Co 228.616†	222.9	345.5	-0.0118 ug/L	-0.0118 ppb	11:13:30
3	Cr 267.716†	23.1	-76.9	2.5547 ug/L	2.5547 ppb	11:13:30
3	Cu 324.752†	722.6	-7151.2	1.8478 ug/L	1.8478 ppb	11:13:10
3	Fe 238.204 Radial†	46264.7	51357.2	451270 ug/L	451270 ppb	11:12:11
3	K 766.490 Radial†	3543.4	597.7	-92.508 ug/L	-92.508 ppb	11:12:06
3	Mg 279.077 IEC†	13726.0	15239.3	486870 ug/L	486870 ppb	11:12:11
3	Mn 257.610†	-26793.1	-31954.0	2.2617 ug/L	2.2617 ppb	11:13:10
3	Mo 202.031†	-566.7	-684.9	0.3482 ug/L	0.3482 ppb	11:13:10
3	Na 589.592 Radial†	1588770.3	1765877.1	533430 ug/L	533430 ppb	11:12:06
3	Ni 231.604†	321.7	252.4	5.5371 ug/L	5.5371 ppb	11:13:30
3	P 214.914†	641.1	503.6	58.829 ug/L	58.829 ppb	11:13:30
3	Pb 220.353†	-758.3	-811.9	-5.4667 ug/L	-5.4667 ppb	11:13:30
3	S 181.975 Axial†	105.2	63.5	-29.686 ug/L	-29.686 ppb	11:13:30
3	Sb 206.836†	58.4	31.4	0.5209 ug/L	0.5209 ppb	11:13:30
3	Se 196.026†	-2673.4	-3103.6	-119.97 ug/L	-119.97 ppb	11:13:30
3	Si 251.611†	-378.8	-1061.0	-29.495 ug/L	-29.495 ppb	11:13:30
3	Sn 189.927†	-428.5	-506.2	-18.044 ug/L	-18.044 ppb	11:13:30
3	Sr 421.552†	720.4	783.9	1.2299 ug/L	1.2299 ppb	11:12:11
3	Ti 334.940†	-12836.6	-13244.5	-2.2045 ug/L	-2.2045 ppb	11:13:10
3	Tl 190.801†	-138.0	-108.6	-15.974 ug/L	-15.974 ppb	11:13:30
3	U 409.014†	424448.1	500693.5	14828 ug/L	14828 ppb	11:13:10
3	V 292.402†	1986.5	4132.7	-3.3948 ug/L	-3.3948 ppb	11:13:10
3	Zn 213.857†	6330.3	6595.9	14.161 ug/L	14.161 ppb	11:13:30
3	SiO2†	-463.9	-1180.3	-70.415 ug/L	-70.415 ppb	11:13:45

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	753582.4	84.996	%	0.5589				0.66%
Sc Radial	4145.2	88.8	%	1.47				1.66%
Y 371.029	636201.4	83.518	%	0.5750				0.69%
Y RADIAL	4401.0	89.22	%	1.839				2.06%
Ag 328.068†	-29924.8	3.0080	ug/L	0.24381	3.0080	ppb	0.24381	8.11%
Al 396.153Radial†	581014.9	515320	ug/L	4093.8	515320	ppb	4093.8	0.79%
QC value within limits for Al 396.153Radial Recovery = 103.06%								
As 188.979†	-239.3	-13.981	ug/L	2.5661	-13.981	ppb	2.5661	18.35%
B 249.677†	1747.2	-24.041	ug/L	0.9025	-24.041	ppb	0.9025	3.75%
Ba 233.527†	-2292.5	-5.2493	ug/L	0.36169	-5.2493	ppb	0.36169	6.89%
Be 313.107†	-8550.7	-2.9325	ug/L	0.03287	-2.9325	ppb	0.03287	1.12%
Ca 317.933Radial†	290541.7	486850	ug/L	4397.1	486850	ppb	4397.1	0.90%
QC value within limits for Ca 317.933Radial Recovery = 97.37%								
Cd 226.502†	4219.1	-5.5175	ug/L	0.06982	-5.5175	ppb	0.06982	1.27%
Co 228.616†	331.8	-0.2866	ug/L	0.55349	-0.2866	ppb	0.55349	193.09%
Cr 267.716†	-73.2	2.6142	ug/L	0.20654	2.6142	ppb	0.20654	7.90%

Cu 324.752†	-7225.5	1.7001 ug/L	0.26998	1.7001 ppb	0.26998	15.88%
Fe 238.204 Radial†	51518.6	452680 ug/L	1240.8	452680 ppb	1240.8	0.27%
QC value within limits for Fe 238.204 Radial Recovery = 90.54%						
K 766.490 Radial†	551.9	-101.15 ug/L	16.572	-101.15 ppb	16.572	16.38%
Mg 279.077 IEC†	15289.5	488480 ug/L	1547.1	488480 ppb	1547.1	0.32%
QC value within limits for Mg 279.077 IEC Recovery = 97.70%						
Mn 257.610†	-32047.5	2.2747 ug/L	0.01421	2.2747 ppb	0.01421	0.62%
Mo 202.031†	-665.0	1.7325 ug/L	1.21083	1.7325 ppb	1.21083	69.89%
Na 589.592 Radial†	1761785.1	532200 ug/L	5007.8	532200 ppb	5007.8	0.94%
QC value within limits for Na 589.592 Radial Recovery = 106.44%						
Ni 231.604†	239.9	5.2633 ug/L	0.23757	5.2633 ppb	0.23757	4.51%
P 214.914†	498.7	55.133 ug/L	6.4747	55.133 ppb	6.4747	11.74%
Pb 220.353†	-818.8	-6.4224 ug/L	6.84309	-6.4224 ppb	6.84309	106.55%
S 181.975 Axial†	62.8	-30.408 ug/L	17.7598	-30.408 ppb	17.7598	58.40%
Sb 206.836†	39.1	2.8852 ug/L	2.48438	2.8852 ppb	2.48438	86.11%
Se 196.026†	-3116.4	-122.28 ug/L	14.375	-122.28 ppb	14.375	11.76%
Si 251.611†	-1078.1	-30.006 ug/L	0.5029	-30.006 ppb	0.5029	1.68%
Sn 189.927†	-503.7	-17.617 ug/L	0.3704	-17.617 ppb	0.3704	2.10%
Sr 421.552†	759.7	1.0499 ug/L	0.20764	1.0499 ppb	0.20764	19.78%
Ti 334.940†	-13598.3	-2.7531 ug/L	0.63406	-2.7531 ppb	0.63406	23.03%
Tl 190.801†	-95.4	-12.406 ug/L	4.3601	-12.406 ppb	4.3601	35.15%
U 409.014†	500889.3	14834 ug/L	21.1	14834 ppb	21.1	0.14%
QC value within limits for U 409.014 Recovery = 98.89%						
V 292.402†	4024.9	-4.2210 ug/L	0.72230	-4.2210 ppb	0.72230	17.11%
Zn 213.857†	6609.9	14.150 ug/L	0.5302	14.150 ppb	0.5302	3.75%
SiO2†	-1155.3	-68.923 ug/L	2.8164	-68.923 ppb	2.8164	4.09%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 1/6/2010 11:15:55
Data Type: Reprocessed on 1/6/2010 11:55:37
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	855143.5	855143.5	96.451	%			11:19:29
1	Sc Radial	4532.6	4532.6	97.1	%			11:17:52
1	Y 371.029	719027.8	719027.8	94.391	%			11:19:29
1	Y RADIAL	4745.9	4745.9	96.21	%			11:17:52
1	Ag 328.068†	-7632.1	-8425.2	3.0535	ug/L	3.0535	ppb	11:19:35
1	Al 396.153Radial†	509.7	551.6	74.517	ug/L	74.517	ppb	11:17:52
1	As 188.979†	27888.2	28947.8	10215	ug/L	10215	ppb	11:19:35
1	B 249.677†	235236.7	244558.4	5018.7	ug/L	5018.7	ppb	11:19:29
1	Ba 233.527†	1893929.7	1963611.5	14341	ug/L	14341	ppb	11:19:29
1	Be 313.107†	8254992.6	8563096.1	2913.7	ug/L	2913.7	ppb	11:19:23
1	Ca 317.933Radial†	29.4	17.7	29.623	ug/L	29.623	ppb	11:18:12
1	Cd 226.502†	994256.1	1031079.3	9717.3	ug/L	9717.3	ppb	11:19:29
1	Co 228.616†	483605.0	501483.8	9429.4	ug/L	9429.4	ppb	11:19:35
1	Cr 267.716†	2313418.7	2398439.6	24048	ug/L	24048	ppb	11:19:29
1	Cu 324.752†	6593986.3	6828620.7	20217	ug/L	20217	ppb	11:19:23
1	Fe 238.204 Radial†	-18.7	-33.1	6.3256	ug/L	6.3256	ppb	11:18:12
1	K 766.490 Radial†	1422221.0	1461231.3	289970	ug/L	289970	ppb	11:17:47
1	Mg 279.077 IEC†	0.5	-1.2	158.74	ug/L	158.74	ppb	11:18:12
1	Mn 257.610†	8734405.4	9055281.5	9541.1	ug/L	9541.1	ppb	11:19:23
1	Mo 202.031†	149158.2	154626.7	9686.9	ug/L	9686.9	ppb	11:19:35
1	Na 589.592 Radial†	-946.1	775.9	234.37	ug/L	234.37	ppb	11:17:52
1	Ni 231.604†	433885.0	449725.2	9866.6	ug/L	9866.6	ppb	11:19:29
1	P 214.914†	35103.9	36147.0	14522	ug/L	14522	ppb	11:19:35
1	Pb 220.353†	225385.4	233756.5	24224	ug/L	24224	ppb	11:19:35
1	S 181.975 Axial†	43781.0	45332.1	51232	ug/L	51232	ppb	11:19:35
1	Sb 206.836†	33207.8	34392.6	10072	ug/L	10072	ppb	11:19:35
1	Se 196.026†	19445.2	20194.0	10364	ug/L	10364	ppb	11:19:35
1	Si 251.611†	1634255.5	1693773.3	48292	ug/L	48292	ppb	11:19:29
1	Sn 189.927†	67140.8	69607.9	10296	ug/L	10296	ppb	11:19:35
1	Sr 421.552†	1283469.1	1321668.7	9676.8	ug/L	9676.8	ppb	11:17:47
1	Ti 334.940†	6020668.2	6244023.1	9898.3	ug/L	9898.3	ppb	11:19:23
1	Tl 190.801†	34515.2	35838.6	9851.2	ug/L	9851.2	ppb	11:19:35
1	U 409.014†	-1575.9	1034.8	-15.619	ug/L	-15.619	ppb	11:19:35
1	V 292.402†	1537981.1	1596374.8	10140	ug/L	10140	ppb	11:19:29
1	Zn 213.857†	1663348.7	1723721.9	14086	ug/L	14086	ppb	11:19:29
1	SiO2†	1661507.8	1722008.9	105060	ug/L	105060	ppb	11:20:22
2	Sc 361.383	852719.5	852719.5	96.178	%			11:19:49
2	Sc Radial	4559.9	4559.9	97.7	%			11:18:22
2	Y 371.029	717455.3	717455.3	94.184	%			11:19:49
2	Y RADIAL	4799.5	4799.5	97.30	%			11:18:22
2	Ag 328.068†	-7539.2	-8351.2	3.3458	ug/L	3.3458	ppb	11:19:54
2	Al 396.153Radial†	529.3	568.5	92.510	ug/L	92.510	ppb	11:18:22
2	As 188.979†	27510.7	28637.5	10106	ug/L	10106	ppb	11:19:54
2	B 249.677†	234879.8	244880.5	5025.5	ug/L	5025.5	ppb	11:19:49
2	Ba 233.527†	1886474.8	1961442.2	14325	ug/L	14325	ppb	11:19:49
2	Be 313.107†	8221762.2	8552874.5	2910.2	ug/L	2910.2	ppb	11:19:43
2	Ca 317.933Radial†	27.6	15.7	26.326	ug/L	26.326	ppb	11:18:43
2	Cd 226.502†	990836.2	1030453.7	9711.4	ug/L	9711.4	ppb	11:19:49
2	Co 228.616†	479786.7	498939.0	9381.4	ug/L	9381.4	ppb	11:19:54
2	Cr 267.716†	2306239.8	2397793.6	24042	ug/L	24042	ppb	11:19:49
2	Cu 324.752†	6556528.0	6809107.7	20159	ug/L	20159	ppb	11:19:43
2	Fe 238.204 Radial†	-21.7	-36.1	-20.921	ug/L	-20.921	ppb	11:18:43
2	K 766.490 Radial†	1435740.8	1466307.3	290980	ug/L	290980	ppb	11:18:17
2	Mg 279.077 IEC†	-6.1	-7.8	-55.841	ug/L	-55.841	ppb	11:18:43
2	Mn 257.610†	8690389.9	9035259.1	9520.0	ug/L	9520.0	ppb	11:19:43
2	Mo 202.031†	147648.8	153497.0	9616.1	ug/L	9616.1	ppb	11:19:54
2	Na 589.592 Radial†	-1022.3	703.7	212.57	ug/L	212.57	ppb	11:18:22
2	Ni 231.604†	432587.9	449655.4	9865.1	ug/L	9865.1	ppb	11:19:49

2	P 214.914†	34621.3	35748.7	14337 ug/L	14337 ppb	11:19:54
2	Pb 220.353†	223665.0	232632.0	24107 ug/L	24107 ppb	11:19:54
2	S 181.975 Axial†	43159.2	44814.6	50647 ug/L	50647 ppb	11:19:54
2	Sb 206.836†	32939.0	34211.0	10015 ug/L	10015 ppb	11:19:54
2	Se 196.026†	19215.5	20012.5	10271 ug/L	10271 ppb	11:19:54
2	Si 251.611†	1630656.6	1694847.8	48323 ug/L	48323 ppb	11:19:49
2	Sn 189.927†	66660.2	69306.1	10251 ug/L	10251 ppb	11:19:54
2	Sr 421.552†	1293913.8	1324452.0	9697.2 ug/L	9697.2 ppb	11:18:17
2	Ti 334.940†	5988704.5	6228533.4	9873.7 ug/L	9873.7 ppb	11:19:43
2	Tl 190.801†	34232.4	35646.3	9798.7 ug/L	9798.7 ppb	11:19:54
2	U 409.014†	-1574.4	1031.7	-15.694 ug/L	-15.694 ppb	11:19:54
2	V 292.402†	1532941.9	1595668.1	10134 ug/L	10134 ppb	11:19:49
2	Zn 213.857†	1658548.0	1723632.6	14085 ug/L	14085 ppb	11:19:49
2	SiO2†	1655031.2	1720171.7	104950 ug/L	104950 ppb	11:20:29
3	Sc 361.383	857798.8	857798.8	96.750 %		11:20:09
3	Sc Radial	4449.0	4449.0	95.3 %		11:18:53
3	Y 371.029	721549.0	721549.0	94.722 %		11:20:09
3	Y RADIAL	4659.1	4659.1	94.45 %		11:18:53
3	Ag 328.068†	-7591.1	-8358.3	3.2878 ug/L	3.2878 ppb	11:20:14
3	Al 396.153Radial†	549.6	603.3	121.01 ug/L	121.01 ppb	11:18:53
3	As 188.979†	27884.6	28854.6	10183 ug/L	10183 ppb	11:20:14
3	B 249.677†	236512.7	245122.2	5030.4 ug/L	5030.4 ppb	11:20:09
3	Ba 233.527†	1897433.0	1961154.3	14323 ug/L	14323 ppb	11:20:09
3	Be 313.107†	8335052.1	8619351.9	2932.9 ug/L	2932.9 ppb	11:20:02
3	Ca 317.933Radial†	32.4	21.4	35.884 ug/L	35.884 ppb	11:19:13
3	Cd 226.502†	994033.2	1027658.0	9685.1 ug/L	9685.1 ppb	11:20:09
3	Co 228.616†	484126.0	500470.3	9410.2 ug/L	9410.2 ppb	11:20:14
3	Cr 267.716†	2315895.2	2393574.8	24000 ug/L	24000 ppb	11:20:09
3	Cu 324.752†	6658558.7	6874199.8	20352 ug/L	20352 ppb	11:20:02
3	Fe 238.204 Radial†	-19.0	-33.8	0.0691 ug/L	0.0691 ppb	11:19:13
3	K 766.490 Radial†	1453148.7	1521214.6	301880 ug/L	301880 ppb	11:18:48
3	Mg 279.077 IEC†	-5.4	-7.3	-36.118 ug/L	-36.118 ppb	11:19:13
3	Mn 257.610†	8805381.2	9100610.0	9588.8 ug/L	9588.8 ppb	11:20:02
3	Mo 202.031†	149382.4	154379.7	9671.4 ug/L	9671.4 ppb	11:20:14
3	Na 589.592 Radial†	-1048.5	650.1	196.38 ug/L	196.38 ppb	11:18:53
3	Ni 231.604†	434754.6	449231.6	9855.7 ug/L	9855.7 ppb	11:20:09
3	P 214.914†	35004.0	35931.1	14395 ug/L	14395 ppb	11:20:14
3	Pb 220.353†	225554.5	233207.9	24167 ug/L	24167 ppb	11:20:14
3	S 181.975 Axial†	43866.1	45279.5	51173 ug/L	51173 ppb	11:20:14
3	Sb 206.836†	33327.1	34409.3	10077 ug/L	10077 ppb	11:20:14
3	Se 196.026†	19458.9	20145.7	10339 ug/L	10339 ppb	11:20:14
3	Si 251.611†	1642305.9	1696849.3	48376 ug/L	48376 ppb	11:20:09
3	Sn 189.927†	67120.8	69371.7	10261 ug/L	10261 ppb	11:20:14
3	Sr 421.552†	1310935.2	1375334.0	10070 ug/L	10070 ppb	11:18:48
3	Ti 334.940†	6074754.7	6280604.0	9956.3 ug/L	9956.3 ppb	11:20:02
3	Tl 190.801†	34481.6	35693.1	9812.4 ug/L	9812.4 ppb	11:20:14
3	U 409.014†	-1695.1	916.7	-19.035 ug/L	-19.035 ppb	11:20:14
3	V 292.402†	1540635.9	1594182.9	10126 ug/L	10126 ppb	11:20:09
3	Zn 213.857†	1666183.8	1721314.0	14066 ug/L	14066 ppb	11:20:09
3	SiO2†	1649310.9	1704070.0	103950 ug/L	103950 ppb	11:20:36

Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	855220.6	96.460	%	0.2865				0.30%
Sc Radial	4513.8	96.7	%	1.24				1.28%
Y 371.029	719344.0	94.432	%	0.2711				0.29%
Y RADIAL	4734.8	95.98	%	1.437				1.50%
Ag 328.068†	-8378.2	3.2290	ug/L	0.15473	3.2290	ppb	0.15473	4.79%
Al 396.153Radial†	574.5	96.012	ug/L	23.4424	96.012	ppb	23.4424	24.42%
As 188.979†	28813.3	10168	ug/L	55.9	10168	ppb	55.9	0.55%
QC value within limits for As 188.979 Recovery = 101.68%								
B 249.677†	244853.7	5024.9	ug/L	5.86	5024.9	ppb	5.86	0.12%
QC value within limits for B 249.677 Recovery = 100.50%								
Ba 233.527†	1962069.3	14329	ug/L	9.8	14329	ppb	9.8	0.07%
QC value within limits for Ba 233.527 Recovery = 95.53%								
Be 313.107†	8578440.8	2918.9	ug/L	12.18	2918.9	ppb	12.18	0.42%
QC value within limits for Be 313.107 Recovery = 97.30%								
Ca 317.933Radial†	18.3	30.611	ug/L	4.8545	30.611	ppb	4.8545	15.86%
Cd 226.502†	1029730.3	9704.6	ug/L	17.16	9704.6	ppb	17.16	0.18%

QC value within limits for Cd 226.502 Recovery = 97.05%

Co 228.616†	500297.7	9407.0 ug/L	24.15	9407.0 ppb	24.15	0.26%
QC value within limits for Co 228.616 Recovery = 94.07%						
Cr 267.716†	2396602.7	24030 ug/L	26.5	24030 ppb	26.5	0.11%
QC value within limits for Cr 267.716 Recovery = 96.12%						
Cu 324.752†	6837309.4	20243 ug/L	98.9	20243 ppb	98.9	0.49%
QC value within limits for Cu 324.752 Recovery = 101.21%						
Fe 238.204 Radial†	-34.3	-4.8420 ug/L	14.27150	-4.8420 ppb	14.27150	294.75%
K 766.490 Radial†	1482917.8	294280 ug/L	6602.4	294280 ppb	6602.4	2.24%
QC value within limits for K 766.490 Radial Recovery = 98.09%						
Mg 279.077 IEC†	-5.4	22.261 ug/L	118.6075	22.261 ppb	118.6075	532.79%
Mn 257.610†	9063716.9	9549.9 ug/L	35.28	9549.9 ppb	35.28	0.37%
QC value within limits for Mn 257.610 Recovery = 95.50%						
Mo 202.031†	154167.8	9658.1 ug/L	37.21	9658.1 ppb	37.21	0.39%
QC value within limits for Mo 202.031 Recovery = 96.58%						
Na 589.592 Radial†	709.9	214.44 ug/L	19.065	214.44 ppb	19.065	8.89%
Ni 231.604†	449537.4	9862.5 ug/L	5.86	9862.5 ppb	5.86	0.06%
QC value within limits for Ni 231.604 Recovery = 98.62%						
P 214.914†	35942.3	14418 ug/L	94.9	14418 ppb	94.9	0.66%
QC value within limits for P 214.914 Recovery = 96.12%						
Pb 220.353†	233198.8	24166 ug/L	58.3	24166 ppb	58.3	0.24%
QC value within limits for Pb 220.353 Recovery = 96.66%						
S 181.975 Axial†	45142.1	51017 ug/L	321.9	51017 ppb	321.9	0.63%
QC value within limits for S 181.975 Axial Recovery = 102.03%						
Sb 206.836†	34337.6	10055 ug/L	34.1	10055 ppb	34.1	0.34%
QC value within limits for Sb 206.836 Recovery = 100.55%						
Se 196.026†	20117.4	10325 ug/L	48.3	10325 ppb	48.3	0.47%
QC value within limits for Se 196.026 Recovery = 103.25%						
Si 251.611†	1695156.8	48330 ug/L	42.8	48330 ppb	42.8	0.09%
QC value within limits for Si 251.611 Recovery = 96.66%						
Sn 189.927†	69428.6	10269 ug/L	23.5	10269 ppb	23.5	0.23%
QC value within limits for Sn 189.927 Recovery = 102.69%						
Sr 421.552†	1340484.9	9814.6 ug/L	221.20	9814.6 ppb	221.20	2.25%
QC value within limits for Sr 421.552 Recovery = 98.15%						
Ti 334.940†	6251053.5	9909.4 ug/L	42.43	9909.4 ppb	42.43	0.43%
QC value within limits for Ti 334.940 Recovery = 99.09%						
Tl 190.801†	35726.0	9820.7 ug/L	27.28	9820.7 ppb	27.28	0.28%
QC value within limits for Tl 190.801 Recovery = 98.21%						
U 409.014†	994.4	-16.782 ug/L	1.9508	-16.782 ppb	1.9508	11.62%
V 292.402†	1595408.6	10133 ug/L	7.1	10133 ppb	7.1	0.07%
QC value within limits for V 292.402 Recovery = 101.33%						
Zn 213.857†	1722889.5	14079 ug/L	11.3	14079 ppb	11.3	0.08%
QC value within limits for Zn 213.857 Recovery = 93.86%						
SiO2†	1715416.9	104650 ug/L	611.0	104650 ppb	611.0	0.58%
QC value within limits for SiO2 Recovery = 97.81%						

All analyte(s) passed QC.

Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/6/2010 11:40:15
Data Type: Reprocessed on 1/6/2010 11:55:41
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	880607.9	880607.9	99.323	%			11:43:26
1	Sc Radial	4577.3	4577.3	98.1	%			11:42:07
1	Y 371.029	748816.6	748816.6	98.301	%			11:43:26
1	Y RADIAL	4817.1	4817.1	97.65	%			11:42:07
1	Ag 328.068†	113728.4	113991.1	492.76	ug/L	492.76	ppb	11:43:26
1	Al 396.153Radial†	5558.8	5695.1	5030.1	ug/L	5030.1	ppb	11:42:07
1	As 188.979†	1375.6	1418.4	500.79	ug/L	500.79	ppb	11:43:46
1	B 249.677†	23608.4	24435.1	501.95	ug/L	501.95	ppb	11:43:26
1	Ba 233.527†	66877.5	67325.8	492.14	ug/L	492.14	ppb	11:43:26
1	Be 313.107†	1452961.5	1467215.3	496.89	ug/L	496.89	ppb	11:43:26
1	Ca 317.933Radial†	2960.6	3006.4	5037.8	ug/L	5037.8	ppb	11:42:27
1	Cd 226.502†	51692.2	52282.8	492.23	ug/L	492.23	ppb	11:43:26
1	Co 228.616†	25597.3	25855.7	486.28	ug/L	486.28	ppb	11:43:46
1	Cr 267.716†	48593.4	48820.6	489.95	ug/L	489.95	ppb	11:43:26
1	Cu 324.752†	172560.6	165737.6	490.94	ug/L	490.94	ppb	11:43:26
1	Fe 238.204 Radial†	564.9	562.2	4955.2	ug/L	4955.2	ppb	11:42:27
1	K 766.490 Radial†	28441.4	25665.3	5086.2	ug/L	5086.2	ppb	11:42:07
1	Mg 279.077 IEC†	156.3	157.8	5049.8	ug/L	5049.8	ppb	11:42:27
1	Mn 257.610†	467681.0	470352.0	495.98	ug/L	495.98	ppb	11:43:26
1	Mo 202.031†	7795.0	7828.2	490.89	ug/L	490.89	ppb	11:43:46
1	Na 589.592 Radial†	29691.6	32027.0	9674.7	ug/L	9674.7	ppb	11:42:07
1	Ni 231.604†	22169.3	22195.3	486.93	ug/L	486.93	ppb	11:43:46
1	P 214.914†	5231.3	5018.4	2372.3	ug/L	2372.3	ppb	11:43:46
1	Pb 220.353†	4637.7	4747.1	493.32	ug/L	493.32	ppb	11:43:46
1	S 181.975 Axial†	914.5	860.8	971.85	ug/L	971.85	ppb	11:43:46
1	Sb 206.836†	1672.4	1646.7	498.92	ug/L	498.92	ppb	11:43:46
1	Se 196.026†	933.3	972.9	515.40	ug/L	515.40	ppb	11:43:46
1	Si 251.611†	85554.9	85521.4	2441.6	ug/L	2441.6	ppb	11:43:26
1	Sn 189.927†	3296.8	3315.9	491.05	ug/L	491.05	ppb	11:43:46
1	Sr 421.552†	65973.1	67257.6	492.39	ug/L	492.39	ppb	11:42:07
1	Ti 334.940†	309958.2	313888.0	497.89	ug/L	497.89	ppb	11:43:26
1	Tl 190.801†	1738.9	1804.1	496.11	ug/L	496.11	ppb	11:43:46
1	U 409.014†	13104.2	15862.3	469.99	ug/L	469.99	ppb	11:43:26
1	V 292.402†	75644.0	77961.4	495.96	ug/L	495.96	ppb	11:43:26
1	Zn 213.857†	60403.7	59983.7	489.07	ug/L	489.07	ppb	11:43:26
1	SiO2†	84375.4	84314.4	5150.3	ug/L	5150.3	ppb	11:44:46
2	Sc 361.383	881660.6	881660.6	99.442	%			11:43:54
2	Sc Radial	4591.0	4591.0	98.4	%			11:42:32
2	Y 371.029	749459.3	749459.3	98.386	%			11:43:54
2	Y RADIAL	4873.5	4873.5	98.80	%			11:42:32
2	Ag 328.068†	113707.1	113833.1	492.09	ug/L	492.09	ppb	11:43:54
2	Al 396.153Radial†	5586.7	5706.6	5040.2	ug/L	5040.2	ppb	11:42:32
2	As 188.979†	1370.8	1411.9	498.49	ug/L	498.49	ppb	11:44:14
2	B 249.677†	23565.3	24363.4	500.46	ug/L	500.46	ppb	11:43:54
2	Ba 233.527†	67254.5	67624.5	494.32	ug/L	494.32	ppb	11:43:54
2	Be 313.107†	1456068.8	1468593.5	497.35	ug/L	497.35	ppb	11:43:54
2	Ca 317.933Radial†	2992.2	3029.6	5076.6	ug/L	5076.6	ppb	11:42:52
2	Cd 226.502†	52002.1	52532.3	494.58	ug/L	494.58	ppb	11:43:54
2	Co 228.616†	25716.5	25944.8	487.96	ug/L	487.96	ppb	11:44:14
2	Cr 267.716†	48785.1	48954.9	491.30	ug/L	491.30	ppb	11:43:54
2	Cu 324.752†	172808.2	165779.2	491.06	ug/L	491.06	ppb	11:43:54
2	Fe 238.204 Radial†	569.0	564.6	4976.5	ug/L	4976.5	ppb	11:42:52
2	K 766.490 Radial†	28423.4	25560.6	5065.4	ug/L	5065.4	ppb	11:42:32
2	Mg 279.077 IEC†	156.7	157.7	5047.7	ug/L	5047.7	ppb	11:42:52
2	Mn 257.610†	469471.6	471590.5	497.29	ug/L	497.29	ppb	11:43:54
2	Mo 202.031†	7836.0	7860.0	492.88	ug/L	492.88	ppb	11:44:14
2	Na 589.592 Radial†	29774.4	32020.9	9672.9	ug/L	9672.9	ppb	11:42:32
2	Ni 231.604†	22217.9	22217.6	487.42	ug/L	487.42	ppb	11:44:14

2	P 214.914†	5265.1	5046.1	2385.8 ug/L	2385.8 ppb	11:44:14
2	Pb 220.353†	4670.1	4774.1	496.12 ug/L	496.12 ppb	11:44:14
2	S 181.975 Axial†	924.2	869.5	981.68 ug/L	981.68 ppb	11:44:14
2	Sb 206.836†	1678.1	1650.4	500.03 ug/L	500.03 ppb	11:44:14
2	Se 196.026†	922.1	960.5	509.14 ug/L	509.14 ppb	11:44:14
2	Si 251.611†	85834.1	85699.4	2446.6 ug/L	2446.6 ppb	11:43:54
2	Sn 189.927†	3300.3	3315.5	490.99 ug/L	490.99 ppb	11:44:14
2	Sr 421.552†	66332.7	67422.8	493.60 ug/L	493.60 ppb	11:42:32
2	Ti 334.940†	310595.5	314156.3	498.32 ug/L	498.32 ppb	11:43:54
2	Tl 190.801†	1745.4	1808.6	497.34 ug/L	497.34 ppb	11:44:14
2	U 409.014†	12971.1	15712.6	465.54 ug/L	465.54 ppb	11:43:54
2	V 292.402†	75758.6	77985.7	496.13 ug/L	496.13 ppb	11:43:54
2	Zn 213.857†	60678.4	60187.3	490.74 ug/L	490.74 ppb	11:43:54
2	SiO2†	85279.4	85122.1	5199.8 ug/L	5199.8 ppb	11:44:52
3	Sc 361.383	875525.0	875525.0	98.750 %		11:44:21
3	Sc Radial	4595.9	4595.9	98.5 %		11:42:57
3	Y 371.029	743592.4	743592.4	97.615 %		11:44:21
3	Y RADIAL	4837.2	4837.2	98.06 %		11:42:57
3	Ag 328.068†	113388.1	114311.3	494.11 ug/L	494.11 ppb	11:44:21
3	Al 396.153Radial†	5602.4	5716.4	5048.8 ug/L	5048.8 ppb	11:42:57
3	As 188.979†	1373.1	1423.9	502.68 ug/L	502.68 ppb	11:44:41
3	B 249.677†	23651.1	24616.4	505.68 ug/L	505.68 ppb	11:44:21
3	Ba 233.527†	66854.7	67693.6	494.82 ug/L	494.82 ppb	11:44:21
3	Be 313.107†	1447710.5	1470390.7	497.96 ug/L	497.96 ppb	11:44:21
3	Ca 317.933Radial†	2982.6	3016.6	5054.7 ug/L	5054.7 ppb	11:43:17
3	Cd 226.502†	51693.2	52586.0	495.10 ug/L	495.10 ppb	11:44:21
3	Co 228.616†	25676.6	26085.7	490.61 ug/L	490.61 ppb	11:44:41
3	Cr 267.716†	48536.4	49046.9	492.21 ug/L	492.21 ppb	11:44:21
3	Cu 324.752†	171989.4	166167.9	492.21 ug/L	492.21 ppb	11:44:21
3	Fe 238.204 Radial†	558.0	552.8	4873.3 ug/L	4873.3 ppb	11:43:17
3	K 766.490 Radial†	28341.4	25446.5	5042.8 ug/L	5042.8 ppb	11:42:57
3	Mg 279.077 IEC†	160.4	161.3	5161.7 ug/L	5161.7 ppb	11:43:17
3	Mn 257.610†	467425.0	472826.5	498.58 ug/L	498.58 ppb	11:44:21
3	Mo 202.031†	7819.0	7898.1	495.26 ug/L	495.26 ppb	11:44:41
3	Na 589.592 Radial†	29641.6	31853.8	9622.4 ug/L	9622.4 ppb	11:42:57
3	Ni 231.604†	22160.8	22316.3	489.58 ug/L	489.58 ppb	11:44:41
3	P 214.914†	5238.5	5056.3	2390.7 ug/L	2390.7 ppb	11:44:41
3	Pb 220.353†	4658.3	4795.0	498.31 ug/L	498.31 ppb	11:44:41
3	S 181.975 Axial†	919.0	870.7	983.04 ug/L	983.04 ppb	11:44:41
3	Sb 206.836†	1680.5	1664.7	504.38 ug/L	504.38 ppb	11:44:41
3	Se 196.026†	919.7	964.6	510.91 ug/L	510.91 ppb	11:44:41
3	Si 251.611†	85447.2	85912.4	2452.7 ug/L	2452.7 ppb	11:44:21
3	Sn 189.927†	3298.3	3336.7	494.12 ug/L	494.12 ppb	11:44:41
3	Sr 421.552†	66374.7	67393.4	493.39 ug/L	493.39 ppb	11:42:57
3	Ti 334.940†	309182.0	314913.7	499.52 ug/L	499.52 ppb	11:44:21
3	Tl 190.801†	1756.6	1832.2	503.78 ug/L	503.78 ppb	11:44:41
3	U 409.014†	13124.0	15958.8	472.87 ug/L	472.87 ppb	11:44:21
3	V 292.402†	75255.1	78009.7	496.34 ug/L	496.34 ppb	11:44:21
3	Zn 213.857†	60325.0	60257.1	491.30 ug/L	491.30 ppb	11:44:21
3	SiO2†	84657.8	85093.6	5198.0 ug/L	5198.0 ppb	11:44:57

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	879264.5	99.172	%	0.3701				0.37%
Sc Radial	4588.1	98.3	%	0.21				0.21%
Y 371.029	747289.4	98.101	%	0.4224				0.43%
Y RADIAL	4842.6	98.17	%	0.580				0.59%
Ag 328.068†	114045.2	492.99	ug/L	1.026	492.99	ppb	1.026	0.21%
QC value within limits for Ag 328.068 Recovery = 98.60%								
Al 396.153Radial†	5706.0	5039.7	ug/L	9.37	5039.7	ppb	9.37	0.19%
QC value within limits for Al 396.153Radial Recovery = 100.79%								
As 188.979†	1418.1	500.65	ug/L	2.096	500.65	ppb	2.096	0.42%
QC value within limits for As 188.979 Recovery = 100.13%								
B 249.677†	24471.6	502.70	ug/L	2.691	502.70	ppb	2.691	0.54%
QC value within limits for B 249.677 Recovery = 100.54%								
Ba 233.527†	67548.0	493.76	ug/L	1.425	493.76	ppb	1.425	0.29%
QC value within limits for Ba 233.527 Recovery = 98.75%								
Be 313.107†	1468733.2	497.40	ug/L	0.540	497.40	ppb	0.540	0.11%
QC value within limits for Be 313.107 Recovery = 99.48%								

Ca 317.933Radial†	3017.5	5056.4 ug/L	19.44	5056.4 ppb	19.44	0.38%
QC value within limits for Ca 317.933Radial Recovery = 101.13%						
Cd 226.502†	52467.1	493.97 ug/L	1.527	493.97 ppb	1.527	0.31%
QC value within limits for Cd 226.502 Recovery = 98.79%						
Co 228.616†	25962.1	488.28 ug/L	2.184	488.28 ppb	2.184	0.45%
QC value within limits for Co 228.616 Recovery = 97.66%						
Cr 267.716†	48940.8	491.15 ug/L	1.140	491.15 ppb	1.140	0.23%
QC value within limits for Cr 267.716 Recovery = 98.23%						
Cu 324.752†	165894.9	491.40 ug/L	0.700	491.40 ppb	0.700	0.14%
QC value within limits for Cu 324.752 Recovery = 98.28%						
Fe 238.204 Radial†	559.9	4935.0 ug/L	54.52	4935.0 ppb	54.52	1.10%
QC value within limits for Fe 238.204 Radial Recovery = 98.70%						
K 766.490 Radial†	25557.5	5064.8 ug/L	21.73	5064.8 ppb	21.73	0.43%
QC value within limits for K 766.490 Radial Recovery = 101.30%						
Mg 279.077 IEC†	158.9	5086.4 ug/L	65.22	5086.4 ppb	65.22	1.28%
QC value within limits for Mg 279.077 IEC Recovery = 101.73%						
Mn 257.610†	471589.6	497.29 ug/L	1.298	497.29 ppb	1.298	0.26%
QC value within limits for Mn 257.610 Recovery = 99.46%						
Mo 202.031†	7862.1	493.01 ug/L	2.187	493.01 ppb	2.187	0.44%
QC value within limits for Mo 202.031 Recovery = 98.60%						
Na 589.592 Radial†	31967.3	9656.6 ug/L	29.69	9656.6 ppb	29.69	0.31%
QC value within limits for Na 589.592 Radial Recovery = 96.57%						
Ni 231.604†	22243.0	487.98 ug/L	1.412	487.98 ppb	1.412	0.29%
QC value within limits for Ni 231.604 Recovery = 97.60%						
P 214.914†	5040.3	2383.0 ug/L	9.52	2383.0 ppb	9.52	0.40%
QC value within limits for P 214.914 Recovery = 95.32%						
Pb 220.353†	4772.1	495.91 ug/L	2.500	495.91 ppb	2.500	0.50%
QC value within limits for Pb 220.353 Recovery = 99.18%						
S 181.975 Axial†	867.0	978.86 ug/L	6.106	978.86 ppb	6.106	0.62%
QC value within limits for S 181.975 Axial Recovery = 97.89%						
Sb 206.836†	1653.9	501.11 ug/L	2.885	501.11 ppb	2.885	0.58%
QC value within limits for Sb 206.836 Recovery = 100.22%						
Se 196.026†	966.0	511.82 ug/L	3.226	511.82 ppb	3.226	0.63%
QC value within limits for Se 196.026 Recovery = 102.36%						
Si 251.611†	85711.1	2447.0 ug/L	5.58	2447.0 ppb	5.58	0.23%
QC value within limits for Si 251.611 Recovery = 97.88%						
Sn 189.927†	3322.7	492.06 ug/L	1.792	492.06 ppb	1.792	0.36%
QC value within limits for Sn 189.927 Recovery = 98.41%						
Sr 421.552†	67357.9	493.13 ug/L	0.645	493.13 ppb	0.645	0.13%
QC value within limits for Sr 421.552 Recovery = 98.63%						
Ti 334.940†	314319.4	498.58 ug/L	0.843	498.58 ppb	0.843	0.17%
QC value within limits for Ti 334.940 Recovery = 99.72%						
Tl 190.801†	1815.0	499.07 ug/L	4.120	499.07 ppb	4.120	0.83%
QC value within limits for Tl 190.801 Recovery = 99.81%						
U 409.014†	15844.6	469.47 ug/L	3.694	469.47 ppb	3.694	0.79%
QC value within limits for U 409.014 Recovery = 93.89%						
V 292.402†	77985.6	496.14 ug/L	0.192	496.14 ppb	0.192	0.04%
QC value within limits for V 292.402 Recovery = 99.23%						
Zn 213.857†	60142.7	490.37 ug/L	1.160	490.37 ppb	1.160	0.24%
QC value within limits for Zn 213.857 Recovery = 98.07%						
SiO2†	84843.4	5182.7 ug/L	28.07	5182.7 ppb	28.07	0.54%
QC value within limits for SiO2 Recovery = 96.92%						

All analyte(s) passed QC.

Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/6/2010 11:47:06
Data Type: Reprocessed on 1/6/2010 11:55:42
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	853425.9	853425.9	96.257	%			11:50:16
1	Sc Radial	4639.9	4639.9	99.4	%			11:48:59
1	Y 371.029	734376.1	734376.1	96.406	%			11:50:16
1	Y RADIAL	4904.2	4904.2	99.42	%			11:48:59
1	Ag 328.068†	487.6	-5.7	-0.0153	ug/L	-0.0153	ppb	11:50:16
1	Al 396.153Radial†	0.7	27.4	24.328	ug/L	24.328	ppb	11:48:59
1	As 188.979†	-20.0	12.6	4.4098	ug/L	4.4098	ppb	11:50:36
1	B 249.677†	138.9	810.2	16.706	ug/L	16.706	ppb	11:50:16
1	Ba 233.527†	2.4	-5.0	-0.0370	ug/L	-0.0370	ppb	11:50:36
1	Be 313.107†	-4320.5	-137.0	-0.0464	ug/L	-0.0464	ppb	11:50:16
1	Ca 317.933Radial†	11.6	-0.9	-1.5441	ug/L	-1.5441	ppb	11:49:19
1	Cd 226.502†	-209.8	20.4	0.1926	ug/L	0.1926	ppb	11:50:36
1	Co 228.616†	-98.8	-18.6	-0.3493	ug/L	-0.3493	ppb	11:50:36
1	Cr 267.716†	104.7	4.7	0.0501	ug/L	0.0501	ppb	11:50:16
1	Cu 324.752†	8033.0	346.3	1.0255	ug/L	1.0255	ppb	11:50:16
1	Fe 238.204 Radial†	14.2	0.4	3.1714	ug/L	3.1714	ppb	11:49:19
1	K 766.490 Radial†	3805.5	491.5	97.544	ug/L	97.544	ppb	11:48:59
1	Mg 279.077 IEC†	0.6	-1.0	-33.016	ug/L	-33.016	ppb	11:49:19
1	Mn 257.610†	560.9	66.3	0.0707	ug/L	0.0707	ppb	11:50:16
1	Mo 202.031†	24.3	5.3	0.3311	ug/L	0.3311	ppb	11:50:36
1	Na 589.592 Radial†	-1577.7	163.0	49.249	ug/L	49.249	ppb	11:48:59
1	Ni 231.604†	151.8	32.7	0.7176	ug/L	0.7176	ppb	11:50:36
1	P 214.914†	245.6	6.6	3.0816	ug/L	3.0816	ppb	11:50:36
1	Pb 220.353†	-75.7	-0.9	-0.0843	ug/L	-0.0843	ppb	11:50:36
1	S 181.975 Axial†	57.4	-0.3	-0.3460	ug/L	-0.3460	ppb	11:50:36
1	Sb 206.836†	59.7	24.9	7.4621	ug/L	7.4621	ppb	11:50:36
1	Se 196.026†	-38.5	-6.7	-3.4348	ug/L	-3.4348	ppb	11:50:36
1	Si 251.611†	660.5	69.6	1.9575	ug/L	1.9575	ppb	11:50:36
1	Sn 189.927†	6.2	3.0	0.4452	ug/L	0.4452	ppb	11:50:36
1	Sr 421.552†	31.8	16.0	0.1172	ug/L	0.1172	ppb	11:48:59
1	Ti 334.940†	-1772.5	-24.1	-0.0337	ug/L	-0.0337	ppb	11:50:16
1	Tl 190.801†	-44.0	7.7	2.1129	ug/L	2.1129	ppb	11:50:36
1	U 409.014†	-2905.4	-349.7	-10.395	ug/L	-10.395	ppb	11:50:16
1	V 292.402†	-1761.0	-27.7	-0.1902	ug/L	-0.1902	ppb	11:50:16
1	Zn 213.857†	885.4	88.2	0.7201	ug/L	0.7201	ppb	11:50:36
1	SiO2†	691.8	82.7	4.9899	ug/L	4.9899	ppb	11:51:32
2	Sc 361.383	869080.1	869080.1	98.023	%			11:50:41
2	Sc Radial	4769.4	4769.4	102	%			11:49:24
2	Y 371.029	747962.0	747962.0	98.189	%			11:50:41
2	Y RADIAL	5060.7	5060.7	102.6	%			11:49:24
2	Ag 328.068†	532.8	31.3	0.1537	ug/L	0.1537	ppb	11:50:41
2	Al 396.153Radial†	-14.9	12.1	10.712	ug/L	10.712	ppb	11:49:24
2	As 188.979†	-17.2	15.8	5.5311	ug/L	5.5311	ppb	11:51:01
2	B 249.677†	127.0	795.4	16.399	ug/L	16.399	ppb	11:50:41
2	Ba 233.527†	23.8	16.8	0.1239	ug/L	0.1239	ppb	11:51:01
2	Be 313.107†	-4341.0	-77.1	-0.0263	ug/L	-0.0263	ppb	11:50:41
2	Ca 317.933Radial†	15.1	2.2	3.7179	ug/L	3.7179	ppb	11:49:44
2	Cd 226.502†	-221.8	12.1	0.1116	ug/L	0.1116	ppb	11:51:01
2	Co 228.616†	-104.7	-22.9	-0.4282	ug/L	-0.4282	ppb	11:51:01
2	Cr 267.716†	85.2	-17.2	-0.1670	ug/L	-0.1670	ppb	11:50:41
2	Cu 324.752†	8191.6	357.8	1.0606	ug/L	1.0606	ppb	11:50:41
2	Fe 238.204 Radial†	17.0	2.8	24.255	ug/L	24.255	ppb	11:49:44
2	K 766.490 Radial†	3825.8	407.3	80.820	ug/L	80.820	ppb	11:49:24
2	Mg 279.077 IEC†	4.7	3.0	94.742	ug/L	94.742	ppb	11:49:44
2	Mn 257.610†	530.5	24.7	0.0267	ug/L	0.0267	ppb	11:50:41
2	Mo 202.031†	29.1	9.8	0.6168	ug/L	0.6168	ppb	11:51:01
2	Na 589.592 Radial†	-1515.3	267.2	80.710	ug/L	80.710	ppb	11:49:24
2	Ni 231.604†	126.0	3.5	0.0763	ug/L	0.0763	ppb	11:51:01

2	P 214.914†	258.5	15.2	7.2242 ug/L	7.2242 ppb	11:51:01
2	Pb 220.353†	-78.5	-2.3	-0.2359 ug/L	-0.2359 ppb	11:51:01
2	S 181.975 Axial†	57.2	-1.5	-1.6884 ug/L	-1.6884 ppb	11:51:01
2	Sb 206.836†	66.5	30.8	9.2191 ug/L	9.2191 ppb	11:51:01
2	Se 196.026†	-40.1	-7.6	-3.8284 ug/L	-3.8284 ppb	11:51:01
2	Si 251.611†	656.8	53.5	1.4953 ug/L	1.4953 ppb	11:51:01
2	Sn 189.927†	6.6	3.3	0.4884 ug/L	0.4884 ppb	11:51:01
2	Sr 421.552†	30.0	13.3	0.0976 ug/L	0.0976 ppb	11:49:24
2	Ti 334.940†	-1843.9	-63.8	-0.0958 ug/L	-0.0958 ppb	11:50:41
2	Tl 190.801†	-38.8	13.8	3.7753 ug/L	3.7753 ppb	11:51:01
2	U 409.014†	-2996.6	-388.3	-11.548 ug/L	-11.548 ppb	11:50:41
2	V 292.402†	-1708.0	59.3	0.3575 ug/L	0.3575 ppb	11:50:41
2	Zn 213.857†	895.7	82.1	0.6691 ug/L	0.6691 ppb	11:51:01
2	SiO2†	718.4	96.9	5.8610 ug/L	5.8610 ppb	11:51:37
3	Sc 361.383	855687.9	855687.9	96.512 %		11:51:07
3	Sc Radial	4706.5	4706.5	101 %		11:49:49
3	Y 371.029	736491.2	736491.2	96.683 %		11:51:07
3	Y RADIAL	4963.4	4963.4	100.6 %		11:49:49
3	Ag 328.068†	448.2	-47.9	-0.2025 ug/L	-0.2025 ppb	11:51:07
3	Al 396.153Radial†	-29.2	-2.2	-2.0198 ug/L	-2.0198 ppb	11:49:49
3	As 188.979†	-17.7	15.1	5.2772 ug/L	5.2772 ppb	11:51:27
3	B 249.677†	117.7	787.8	16.244 ug/L	16.244 ppb	11:51:07
3	Ba 233.527†	7.8	0.5	0.0028 ug/L	0.0028 ppb	11:51:27
3	Be 313.107†	-4264.9	-67.5	-0.0227 ug/L	-0.0227 ppb	11:51:07
3	Ca 317.933Radial†	14.7	2.0	3.3743 ug/L	3.3743 ppb	11:50:09
3	Cd 226.502†	-208.0	22.8	0.2144 ug/L	0.2144 ppb	11:51:27
3	Co 228.616†	-108.7	-28.6	-0.5356 ug/L	-0.5356 ppb	11:51:27
3	Cr 267.716†	93.3	-7.4	-0.0731 ug/L	-0.0731 ppb	11:51:07
3	Cu 324.752†	8026.2	317.2	0.9391 ug/L	0.9391 ppb	11:51:07
3	Fe 238.204 Radial†	14.2	0.2	1.8112 ug/L	1.8112 ppb	11:50:09
3	K 766.490 Radial†	3800.7	432.5	85.837 ug/L	85.837 ppb	11:49:49
3	Mg 279.077 IEC†	3.1	1.4	45.216 ug/L	45.216 ppb	11:50:09
3	Mn 257.610†	551.8	55.3	0.0576 ug/L	0.0576 ppb	11:51:07
3	Mo 202.031†	35.1	16.4	1.0303 ug/L	1.0303 ppb	11:51:27
3	Na 589.592 Radial†	-1580.0	183.2	55.348 ug/L	55.348 ppb	11:49:49
3	Ni 231.604†	110.5	-10.5	-0.2312 ug/L	-0.2312 ppb	11:51:27
3	P 214.914†	242.8	3.0	1.3094 ug/L	1.3094 ppb	11:51:27
3	Pb 220.353†	-101.4	-27.3	-2.8273 ug/L	-2.8273 ppb	11:51:27
3	S 181.975 Axial†	56.1	-1.7	-1.9684 ug/L	-1.9684 ppb	11:51:27
3	Sb 206.836†	52.3	17.1	5.1370 ug/L	5.1370 ppb	11:51:27
3	Se 196.026†	-37.0	-5.1	-2.5822 ug/L	-2.5822 ppb	11:51:27
3	Si 251.611†	671.7	79.4	2.2299 ug/L	2.2299 ppb	11:51:27
3	Sn 189.927†	4.4	1.2	0.1772 ug/L	0.1772 ppb	11:51:27
3	Sr 421.552†	3.4	-12.6	-0.0920 ug/L	-0.0920 ppb	11:49:49
3	Ti 334.940†	-1711.2	44.3	0.0730 ug/L	0.0730 ppb	11:51:07
3	Tl 190.801†	-46.9	4.8	1.3094 ug/L	1.3094 ppb	11:51:27
3	U 409.014†	-2756.2	-187.0	-5.5607 ug/L	-5.5607 ppb	11:51:07
3	V 292.402†	-1813.5	-77.2	-0.4800 ug/L	-0.4800 ppb	11:51:07
3	Zn 213.857†	870.5	70.2	0.5763 ug/L	0.5763 ppb	11:51:27
3	SiO2†	683.0	71.6	4.2941 ug/L	4.2941 ppb	11:51:42

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	859398.0	96.931	%	0.9543				0.98%
Sc Radial	4705.3	101	%	1.4				1.38%
Y 371.029	739609.8	97.093	%	0.9596				0.99%
Y RADIAL	4976.1	100.9	%	1.60				1.59%
Ag 328.068†	-7.5	-0.0214	ug/L	0.17817	-0.0214	ppb	0.17817	833.12%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	12.4	11.007	ug/L	13.1764	11.007	ppb	13.1764	119.71%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	14.5	5.0727	ug/L	0.58799	5.0727	ppb	0.58799	11.59%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	797.8	16.450	ug/L	0.2350	16.450	ppb	0.2350	1.43%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.1	0.0299	ug/L	0.08381	0.0299	ppb	0.08381	280.45%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-93.9	-0.0318	ug/L	0.01279	-0.0318	ppb	0.01279	40.26%
QC value within limits for Be 313.107 Recovery = Not calculated								

Ca 317.933Radial†	1.1	1.8494 ug/L	2.94383	1.8494 ppb	2.94383	159.18%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	18.4	0.1729 ug/L	0.05420	0.1729 ppb	0.05420	31.35%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-23.4	-0.4377 ug/L	0.09355	-0.4377 ppb	0.09355	21.37%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-6.6	-0.0634 ug/L	0.10892	-0.0634 ppb	0.10892	171.93%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	340.4	1.0084 ug/L	0.06251	1.0084 ppb	0.06251	6.20%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.1	9.7460 ug/L	12.58394	9.7460 ppb	12.58394	129.12%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	443.8	88.067 ug/L	8.5823	88.067 ppb	8.5823	9.75%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.1	35.647 ug/L	64.4140	35.647 ppb	64.4140	180.70%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	48.8	0.0517 ug/L	0.02260	0.0517 ppb	0.02260	43.71%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	10.5	0.6594 ug/L	0.35156	0.6594 ppb	0.35156	53.31%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	204.5	61.769 ug/L	16.6847	61.769 ppb	16.6847	27.01%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	8.5	0.1876 ug/L	0.48411	0.1876 ppb	0.48411	258.07%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	8.3	3.8717 ug/L	3.03553	3.8717 ppb	3.03553	78.40%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-10.2	-1.0492 ug/L	1.54178	-1.0492 ppb	1.54178	146.95%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-1.2	-1.3343 ug/L	0.86725	-1.3343 ppb	0.86725	65.00%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	24.3	7.2727 ug/L	2.04763	7.2727 ppb	2.04763	28.16%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-6.5	-3.2818 ug/L	0.63701	-3.2818 ppb	0.63701	19.41%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	67.5	1.8942 ug/L	0.37137	1.8942 ppb	0.37137	19.60%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	2.5	0.3703 ug/L	0.16858	0.3703 ppb	0.16858	45.53%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	5.6	0.0409 ug/L	0.11554	0.0409 ppb	0.11554	282.26%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-14.5	-0.0189 ug/L	0.08539	-0.0189 ppb	0.08539	452.74%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	8.8	2.3992 ug/L	1.25764	2.3992 ppb	1.25764	52.42%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-308.3	-9.1679 ug/L	3.17654	-9.1679 ppb	3.17654	34.65%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-15.2	-0.1042 ug/L	0.42535	-0.1042 ppb	0.42535	408.06%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	80.2	0.6552 ug/L	0.07293	0.6552 ppb	0.07293	11.13%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	83.7	5.0483 ug/L	0.78506	5.0483 ppb	0.78506	15.55%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Analysis Begun

Start Time: 1/6/2010 11:56:45 Plasma On Time: 1/4/2010 06:33:21
Logged In Analyst: Optima3 Technique: ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\010610.sif
Batch ID:
Results Data Set: 010610A
Results Library: C:\pe\Optima3\Results\Results.mdb

Sequence No.: 1 Autosampler Location: 38
Sample ID: 243270003|935381|1 Date Collected: 1/6/2010 11:56:46
Analyst: HSC Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 243270003|935381|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4872.3	4872.3	104	%			11:58:59
1	Y RADIAL	5690.1	5690.1	115.4	%			11:58:59
1	Al 396.153Radial†	196704.2	188464.5	167150	ug/L	167150	ppb	11:58:39
1	Ca 317.933Radial†	11459.6	10965.4	18374	ug/L	18374	ppb	11:58:59
1	Fe 238.204 Radial†	16419.2	15715.3	138090	ug/L	138090	ppb	11:58:39
1	K 766.490 Radial†	115750.5	107549.3	21345	ug/L	21345	ppb	11:58:39
1	Mg 279.077 IEC†	735.9	703.3	22370	ug/L	22370	ppb	11:58:59
1	Na 589.592 Radial†	7432.6	8870.3	2679.5	ug/L	2679.5	ppb	11:58:39
1	Sr 421.552†	37070.3	35496.5	259.72	ug/L	259.72	ppb	11:58:39
1	Sc 361.383	901901.3	901901.3	101.72	%			11:59:57
1	Y 371.029	815863.6	815863.6	107.10	%			12:00:02
1	Ag 328.068†	-9632.2	-9981.2	4.2892	ug/L	4.2892	ppb	12:00:02
1	As 188.979†	-12.4	21.3	75.779	ug/L	75.779	ppb	12:00:22
1	B 249.677†	1771.0	2406.8	31.154	ug/L	31.154	ppb	12:00:02
1	Ba 233.527†	208159.2	204622.3	1496.2	ug/L	1496.2	ppb	12:00:02
1	Be 313.107†	-8495.6	-4000.0	9.6553	ug/L	9.6553	ppb	12:00:02
1	Cd 226.502†	1198.3	1416.4	-0.4145	ug/L	-0.4145	ppb	12:00:22
1	Co 228.616†	3213.6	3243.1	47.708	ug/L	47.708	ppb	12:00:22
1	Cr 267.716†	11187.5	10893.8	112.18	ug/L	112.18	ppb	12:00:22
1	Cu 324.752†	31354.0	22823.3	74.616	ug/L	74.616	ppb	12:00:02
1	Mn 257.610†	2160280.8	2123136.6	2250.4	ug/L	2250.4	ppb	11:59:57
1	Mo 202.031†	-63.4	-82.3	8.0813	ug/L	8.0813	ppb	12:00:22
1	Ni 231.604†	3819.5	3629.7	79.641	ug/L	79.641	ppb	12:00:22
1	P 214.914†	1729.8	1451.9	642.07	ug/L	642.07	ppb	12:00:22
1	Pb 220.353†	2239.3	2279.1	262.22	ug/L	262.22	ppb	12:00:22
1	S 181.975 Axial†	728.3	656.1	708.59	ug/L	708.59	ppb	12:00:22
1	Sb 206.836†	122.9	83.8	5.0036	ug/L	5.0036	ppb	12:00:22
1	Se 196.026†	-850.5	-802.8	39.939	ug/L	39.939	ppb	12:00:22
1	Si 251.611†	1346577.7	1323129.8	37949	ug/L	37949	ppb	11:59:57
1	Sn 189.927†	-96.3	-98.1	-10.661	ug/L	-10.661	ppb	12:00:22
1	Ti 334.940†	3588669.1	3529640.3	5601.1	ug/L	5601.1	ppb	11:59:57
1	Tl 190.801†	-239.1	-181.7	10.090	ug/L	10.090	ppb	12:00:22
1	U 409.014†	-9782.6	-6948.1	-224.14	ug/L	-224.14	ppb	12:00:02
1	V 292.402†	43773.9	44833.6	254.27	ug/L	254.27	ppb	12:00:02
1	Zn 213.857†	43113.6	41550.9	333.13	ug/L	333.13	ppb	12:00:02
1	SiO2†	1355936.0	1332310.0	81772	ug/L	81772	ppb	12:01:32
2	Sc Radial	4815.4	4815.4	103	%			11:59:24
2	Y RADIAL	5640.1	5640.1	114.3	%			11:59:24
2	Al 396.153Radial†	192540.9	186657.3	165550	ug/L	165550	ppb	11:59:04
2	Ca 317.933Radial†	11348.8	10987.8	18412	ug/L	18412	ppb	11:59:24
2	Fe 238.204 Radial†	16119.1	15610.4	137170	ug/L	137170	ppb	11:59:04
2	K 766.490 Radial†	113061.5	106254.2	21087	ug/L	21087	ppb	11:59:04
2	Mg 279.077 IEC†	724.5	700.6	22283	ug/L	22283	ppb	11:59:24
2	Na 589.592 Radial†	7049.1	8582.8	2592.7	ug/L	2592.7	ppb	11:59:04
2	Sr 421.552†	36174.8	35048.4	256.44	ug/L	256.44	ppb	11:59:04
2	Sc 361.383	898647.1	898647.1	101.36	%			12:00:29
2	Y 371.029	813921.4	813921.4	106.85	%			12:00:34

2	Ag 328.068†	-9614.9	-9998.5	3.9101 ug/L	3.9101 ppb	12:00:34
2	As 188.979†	-19.2	14.5	73.295 ug/L	73.295 ppb	12:00:54
2	B 249.677†	1766.0	2408.2	31.303 ug/L	31.303 ppb	12:00:34
2	Ba 233.527†	207843.4	205051.8	1499.3 ug/L	1499.3 ppb	12:00:34
2	Be 313.107†	-8369.4	-3905.8	9.6947 ug/L	9.6947 ppb	12:00:34
2	Cd 226.502†	1190.3	1412.7	-0.3568 ug/L	-0.3568 ppb	12:00:54
2	Co 228.616†	3219.8	3260.7	48.044 ug/L	48.044 ppb	12:00:54
2	Cr 267.716†	11210.2	10956.0	112.79 ug/L	112.79 ppb	12:00:54
2	Cu 324.752†	31432.3	23012.3	75.128 ug/L	75.128 ppb	12:00:34
2	Mn 257.610†	2151346.5	2122012.4	2249.1 ug/L	2249.1 ppb	12:00:29
2	Mo 202.031†	-68.8	-87.8	7.6452 ug/L	7.6452 ppb	12:00:54
2	Ni 231.604†	3813.6	3637.5	79.812 ug/L	79.812 ppb	12:00:54
2	P 214.914†	1763.9	1491.7	661.59 ug/L	661.59 ppb	12:00:54
2	Pb 220.353†	2241.2	2288.9	262.95 ug/L	262.95 ppb	12:00:54
2	S 181.975 Axial†	734.4	664.7	718.61 ug/L	718.61 ppb	12:00:54
2	Sb 206.836†	120.3	81.6	4.3752 ug/L	4.3752 ppb	12:00:54
2	Se 196.026†	-839.3	-794.8	40.924 ug/L	40.924 ppb	12:00:54
2	Si 251.611†	1342190.4	1323594.9	37963 ug/L	37963 ppb	12:00:29
2	Sn 189.927†	-87.6	-89.8	-9.4431 ug/L	-9.4431 ppb	12:00:54
2	Ti 334.940†	3578178.3	3532065.4	5605.0 ug/L	5605.0 ppb	12:00:29
2	Tl 190.801†	-271.5	-214.5	1.1112 ug/L	1.1112 ppb	12:00:54
2	U 409.014†	-9828.8	-7028.4	-226.41 ug/L	-226.41 ppb	12:00:34
2	V 292.402†	43676.2	44893.0	254.76 ug/L	254.76 ppb	12:00:34
2	Zn 213.857†	42951.1	41544.1	333.12 ug/L	333.12 ppb	12:00:34
2	SiO2†	1348250.7	1329554.6	81604 ug/L	81604 ppb	12:01:38
3	Sc Radial	4856.9	4856.9	104 %		11:59:49
3	Y RADIAL	5668.7	5668.7	114.9 %		11:59:49
3	Al 396.153Radial†	196194.7	188574.1	167250 ug/L	167250 ppb	11:59:29
3	Ca 317.933Radial†	11439.1	10980.7	18400 ug/L	18400 ppb	11:59:49
3	Fe 238.204 Radial†	16319.2	15669.2	137680 ug/L	137680 ppb	11:59:29
3	K 766.490 Radial†	115253.4	107424.4	21320 ug/L	21320 ppb	11:59:29
3	Mg 279.077 IEC†	733.8	703.5	22377 ug/L	22377 ppb	11:59:49
3	Na 589.592 Radial†	7403.6	8865.1	2678.0 ug/L	2678.0 ppb	11:59:29
3	Sr 421.552†	37019.9	35560.9	260.19 ug/L	260.19 ppb	11:59:29
3	Sc 361.383	886669.4	886669.4	100.01 %		12:01:01
3	Y 371.029	806065.3	806065.3	105.82 %		12:01:06
3	Ag 328.068†	-9576.0	-10087.7	3.7010 ug/L	3.7010 ppb	12:01:06
3	As 188.979†	-30.1	3.3	69.404 ug/L	69.404 ppb	12:01:26
3	B 249.677†	1849.1	2514.8	33.429 ug/L	33.429 ppb	12:01:06
3	Ba 233.527†	204702.6	204681.2	1496.6 ug/L	1496.6 ppb	12:01:06
3	Be 313.107†	-8366.5	-4014.4	9.6448 ug/L	9.6448 ppb	12:01:06
3	Cd 226.502†	1187.4	1425.7	-0.2854 ug/L	-0.2854 ppb	12:01:26
3	Co 228.616†	3258.3	3342.1	49.580 ug/L	49.580 ppb	12:01:26
3	Cr 267.716†	11322.0	11217.2	115.42 ug/L	115.42 ppb	12:01:26
3	Cu 324.752†	30694.3	22693.2	74.210 ug/L	74.210 ppb	12:01:06
3	Mn 257.610†	2119981.3	2119321.7	2246.3 ug/L	2246.3 ppb	12:01:01
3	Mo 202.031†	-63.3	-83.3	7.9819 ug/L	7.9819 ppb	12:01:26
3	Ni 231.604†	3804.8	3679.5	80.735 ug/L	80.735 ppb	12:01:26
3	P 214.914†	1787.7	1539.0	684.96 ug/L	684.96 ppb	12:01:26
3	Pb 220.353†	2239.4	2317.0	266.20 ug/L	266.20 ppb	12:01:26
3	S 181.975 Axial†	737.2	677.2	732.49 ug/L	732.49 ppb	12:01:26
3	Sb 206.836†	128.7	91.6	7.2644 ug/L	7.2644 ppb	12:01:26
3	Se 196.026†	-854.1	-820.8	29.483 ug/L	29.483 ppb	12:01:26
3	Si 251.611†	1321298.6	1320592.8	37877 ug/L	37877 ppb	12:01:01
3	Sn 189.927†	-99.9	-103.3	-11.432 ug/L	-11.432 ppb	12:01:26
3	Ti 334.940†	3526259.8	3527839.0	5598.2 ug/L	5598.2 ppb	12:01:01
3	Tl 190.801†	-258.6	-205.2	3.6252 ug/L	3.6252 ppb	12:01:26
3	U 409.014†	-9641.0	-6971.6	-224.79 ug/L	-224.79 ppb	12:01:06
3	V 292.402†	43205.3	45004.3	255.40 ug/L	255.40 ppb	12:01:06
3	Zn 213.857†	42256.9	41422.3	332.08 ug/L	332.08 ppb	12:01:06
3	SiO2†	1342517.1	1341790.4	82354 ug/L	82354 ppb	12:01:44

Mean Data: 243270003|935381|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	895739.3	101.03	%	0.905				0.90%
Sc Radial	4848.2	104	%	0.6				0.61%
Y 371.029	811950.1	106.59	%	0.681				0.64%
Y RADIAL	5666.3	114.9	%	0.51				0.44%
Ag 328.068†	-10022.5	3.9668	ug/L	0.29820	3.9668	ppb	0.29820	7.52%

Al 396.153Radial†	187898.6	166650 ug/L	954.7	166650 ppb	954.7	0.57%
As 188.979†	13.0	72.826 ug/L	3.2136	72.826 ppb	3.2136	4.41%
B 249.677†	2443.3	31.962 ug/L	1.2726	31.962 ppb	1.2726	3.98%
Ba 233.527†	204785.1	1497.3 ug/L	1.69	1497.3 ppb	1.69	0.11%
Be 313.107†	-3973.4	9.6649 ug/L	0.02630	9.6649 ppb	0.02630	0.27%
Ca 317.933Radial†	10978.0	18395 ug/L	19.2	18395 ppb	19.2	0.10%
Cd 226.502†	1418.2	-0.3523 ug/L	0.06468	-0.3523 ppb	0.06468	18.36%
Co 228.616†	3281.9	48.444 ug/L	0.9978	48.444 ppb	0.9978	2.06%
Cr 267.716†	11022.3	113.46 ug/L	1.720	113.46 ppb	1.720	1.52%
Cu 324.752†	22842.9	74.651 ug/L	0.4602	74.651 ppb	0.4602	0.62%
Fe 238.204 Radial†	15665.0	137650 ug/L	461.7	137650 ppb	461.7	0.34%
K 766.490 Radial†	107076.0	21251 ug/L	141.9	21251 ppb	141.9	0.67%
Mg 279.077 IEC†	702.5	22343 ug/L	52.3	22343 ppb	52.3	0.23%
Mn 257.610†	2121490.3	2248.6 ug/L	2.08	2248.6 ppb	2.08	0.09%
Mo 202.031†	-84.5	7.9028 ug/L	0.22854	7.9028 ppb	0.22854	2.89%
Na 589.592 Radial†	8772.8	2650.1 ug/L	49.69	2650.1 ppb	49.69	1.88%
Ni 231.604†	3648.9	80.063 ug/L	0.5883	80.063 ppb	0.5883	0.73%
P 214.914†	1494.2	662.87 ug/L	21.472	662.87 ppb	21.472	3.24%
Pb 220.353†	2295.0	263.79 ug/L	2.119	263.79 ppb	2.119	0.80%
S 181.975 Axial†	666.0	719.90 ug/L	12.004	719.90 ppb	12.004	1.67%
Sb 206.836†	85.7	5.5477 ug/L	1.51953	5.5477 ppb	1.51953	27.39%
Se 196.026†	-806.1	36.782 ug/L	6.3406	36.782 ppb	6.3406	17.24%
Si 251.611†	1322439.2	37930 ug/L	46.4	37930 ppb	46.4	0.12%
Sn 189.927†	-97.1	-10.512 ug/L	1.0028	-10.512 ppb	1.0028	9.54%
Sr 421.552†	35368.6	258.79 ug/L	2.044	258.79 ppb	2.044	0.79%
Ti 334.940†	3529848.3	5601.4 ug/L	3.37	5601.4 ppb	3.37	0.06%
Tl 190.801†	-200.4	4.9422 ug/L	4.63197	4.9422 ppb	4.63197	93.72%
U 409.014†	-6982.7	-225.12 ug/L	1.170	-225.12 ppb	1.170	0.52%
V 292.402†	44910.3	254.81 ug/L	0.568	254.81 ppb	0.568	0.22%
Zn 213.857†	41505.8	332.78 ug/L	0.600	332.78 ppb	0.600	0.18%
SiO2†	1334551.7	81910 ug/L	394.0	81910 ppb	394.0	0.48%

Sequence No.: 2
Sample ID: 243270004|935381|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 1/6/2010 12:03:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243270004|935381|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4781.8	4781.8	102	%			12:06:06
1	Y RADIAL	5543.2	5543.2	112.4	%			12:06:06
1	Al 396.153Radial†	126992.9	123987.2	109970	ug/L	109970	ppb	12:05:46
1	Ca 317.933Radial†	12325.7	12018.8	20140	ug/L	20140	ppb	12:05:46
1	Fe 238.204 Radial†	15058.1	14684.7	129030	ug/L	129030	ppb	12:05:46
1	K 766.490 Radial†	101652.0	95887.9	19011	ug/L	19011	ppb	12:05:46
1	Mg 279.077 IEC†	614.2	597.9	19008	ug/L	19008	ppb	12:06:06
1	Na 589.592 Radial†	2099.9	3799.9	1147.9	ug/L	1147.9	ppb	12:05:46
1	Sr 421.552†	34892.1	34042.9	249.06	ug/L	249.06	ppb	12:05:46
1	Sc 361.383	903145.8	903145.8	101.87	%			12:07:05
1	Y 371.029	848293.7	848293.7	111.36	%			12:07:05
1	Ag 328.068†	-9135.1	-9480.2	3.4789	ug/L	3.4789	ppb	12:07:10
1	As 188.979†	-71.4	-36.7	59.062	ug/L	59.062	ppb	12:07:30
1	B 249.677†	1706.6	2341.2	30.953	ug/L	30.953	ppb	12:07:10
1	Ba 233.527†	199030.2	195378.6	1428.6	ug/L	1428.6	ppb	12:07:10
1	Be 313.107†	-22285.0	-17525.5	6.2495	ug/L	6.2495	ppb	12:07:10
1	Cd 226.502†	1239.9	1455.6	0.8576	ug/L	0.8576	ppb	12:07:30
1	Co 228.616†	4258.8	4264.8	65.751	ug/L	65.751	ppb	12:07:30
1	Cr 267.716†	11676.7	11358.9	116.72	ug/L	116.72	ppb	12:07:30
1	Cu 324.752†	32860.5	24259.8	78.407	ug/L	78.407	ppb	12:07:10
1	Mn 257.610†	3031266.7	2975248.8	3147.4	ug/L	3147.4	ppb	12:07:05
1	Mo 202.031†	-73.8	-92.4	6.5792	ug/L	6.5792	ppb	12:07:30
1	Ni 231.604†	3623.9	3432.5	75.300	ug/L	75.300	ppb	12:07:30
1	P 214.914†	2318.0	2027.0	909.63	ug/L	909.63	ppb	12:07:30
1	Pb 220.353†	5051.9	5037.2	535.84	ug/L	535.84	ppb	12:07:30
1	S 181.975 Axial†	741.1	667.6	732.90	ug/L	732.90	ppb	12:07:30
1	Sb 206.836†	118.5	79.2	3.3064	ug/L	3.3064	ppb	12:07:30
1	Se 196.026†	-790.4	-742.6	33.924	ug/L	33.924	ppb	12:07:30
1	Si 251.611†	1220112.3	1197155.9	34336	ug/L	34336	ppb	12:07:05
1	Sn 189.927†	-119.8	-121.0	-14.015	ug/L	-14.015	ppb	12:07:30
1	Ti 334.940†	3974407.8	3903455.1	6194.3	ug/L	6194.3	ppb	12:07:05
1	Tl 190.801†	-279.8	-221.3	7.3680	ug/L	7.3680	ppb	12:07:30
1	U 409.014†	-9582.3	-6738.1	-216.77	ug/L	-216.77	ppb	12:07:10
1	V 292.402†	47768.9	48696.0	279.16	ug/L	279.16	ppb	12:07:10
1	Zn 213.857†	63125.6	61138.1	494.79	ug/L	494.79	ppb	12:07:10
1	SiO2†	1208596.5	1185831.5	72782	ug/L	72782	ppb	12:08:41
2	Sc Radial	4747.2	4747.2	102	%			12:06:32
2	Y RADIAL	5501.3	5501.3	111.5	%			12:06:32
2	Al 396.153Radial†	126212.9	124121.8	110090	ug/L	110090	ppb	12:06:12
2	Ca 317.933Radial†	12243.4	12025.4	20151	ug/L	20151	ppb	12:06:12
2	Fe 238.204 Radial†	14951.4	14686.6	129050	ug/L	129050	ppb	12:06:12
2	K 766.490 Radial†	100981.2	95950.0	19023	ug/L	19023	ppb	12:06:12
2	Mg 279.077 IEC†	613.4	601.4	19120	ug/L	19120	ppb	12:06:32
2	Na 589.592 Radial†	2167.3	3881.0	1172.4	ug/L	1172.4	ppb	12:06:12
2	Sr 421.552†	34648.4	34051.0	249.12	ug/L	249.12	ppb	12:06:12
2	Sc 361.383	901294.3	901294.3	101.66	%			12:07:37
2	Y 371.029	846350.2	846350.2	111.11	%			12:07:37
2	Ag 328.068†	-9092.3	-9456.4	3.5713	ug/L	3.5713	ppb	12:07:42
2	As 188.979†	-67.3	-32.8	60.563	ug/L	60.563	ppb	12:08:02
2	B 249.677†	1748.1	2385.5	31.863	ug/L	31.863	ppb	12:07:42
2	Ba 233.527†	196286.1	193080.5	1411.8	ug/L	1411.8	ppb	12:07:42
2	Be 313.107†	-22144.4	-17432.0	6.3085	ug/L	6.3085	ppb	12:07:42
2	Cd 226.502†	1231.4	1449.7	0.8007	ug/L	0.8007	ppb	12:08:02
2	Co 228.616†	4266.2	4280.6	66.016	ug/L	66.016	ppb	12:08:02
2	Cr 267.716†	11651.8	11357.9	116.70	ug/L	116.70	ppb	12:08:02
2	Cu 324.752†	32187.3	23663.9	76.643	ug/L	76.643	ppb	12:07:42
2	Mn 257.610†	3032547.4	2982621.7	3155.1	ug/L	3155.1	ppb	12:07:37
2	Mo 202.031†	-40.0	-59.3	8.6562	ug/L	8.6562	ppb	12:08:02
2	Ni 231.604†	3629.7	3445.5	75.586	ug/L	75.586	ppb	12:08:02

2	P 214.914†	2297.3	2011.3	902.29 ug/L	902.29 ppb	12:08:02
2	Pb 220.353†	5006.0	5002.2	532.25 ug/L	532.25 ppb	12:08:02
2	S 181.975 Axial†	742.0	670.0	735.59 ug/L	735.59 ppb	12:08:02
2	Sb 206.836†	123.9	84.8	4.9894 ug/L	4.9894 ppb	12:08:02
2	Se 196.026†	-796.6	-750.3	30.063 ug/L	30.063 ppb	12:08:02
2	Si 251.611†	1219780.5	1199290.0	34397 ug/L	34397 ppb	12:07:37
2	Sn 189.927†	-115.5	-117.1	-13.434 ug/L	-13.434 ppb	12:08:02
2	Ti 334.940†	3975180.6	3912230.2	6208.2 ug/L	6208.2 ppb	12:07:37
2	Tl 190.801†	-279.2	-221.2	7.5446 ug/L	7.5446 ppb	12:08:02
2	U 409.014†	-9521.0	-6697.1	-215.55 ug/L	-215.55 ppb	12:07:42
2	V 292.402†	47086.6	48121.2	275.57 ug/L	275.57 ppb	12:07:42
2	Zn 213.857†	62348.8	60501.2	489.54 ug/L	489.54 ppb	12:07:42
2	SiO2†	1198612.0	1178446.9	72329 ug/L	72329 ppb	12:08:47
3	Sc Radial	4754.7	4754.7	102 %		12:06:57
3	Y RADIAL	5509.6	5509.6	111.7 %		12:06:57
3	Al 396.153Radial†	125938.0	123657.3	109670 ug/L	109670 ppb	12:06:37
3	Ca 317.933Radial†	12269.1	12031.7	20161 ug/L	20161 ppb	12:06:37
3	Fe 238.204 Radial†	14912.1	14625.0	128510 ug/L	128510 ppb	12:06:37
3	K 766.490 Radial†	100978.7	95791.9	18992 ug/L	18992 ppb	12:06:37
3	Mg 279.077 IEC†	611.9	599.0	19042 ug/L	19042 ppb	12:06:57
3	Na 589.592 Radial†	2154.1	3864.8	1167.5 ug/L	1167.5 ppb	12:06:37
3	Sr 421.552†	34498.4	33850.4	247.65 ug/L	247.65 ppb	12:06:37
3	Sc 361.383	883521.2	883521.2	99.652 %		12:08:09
3	Y 371.029	830566.2	830566.2	109.03 %		12:08:09
3	Ag 328.068†	-8965.1	-9508.8	3.1953 ug/L	3.1953 ppb	12:08:15
3	As 188.979†	-70.0	-36.8	58.948 ug/L	58.948 ppb	12:08:35
3	B 249.677†	1776.6	2448.6	33.231 ug/L	33.231 ppb	12:08:15
3	Ba 233.527†	197502.3	198185.2	1449.0 ug/L	1449.0 ppb	12:08:15
3	Be 313.107†	-22011.1	-17736.6	6.1800 ug/L	6.1800 ppb	12:08:15
3	Cd 226.502†	1248.2	1490.9	1.2442 ug/L	1.2442 ppb	12:08:35
3	Co 228.616†	4300.3	4399.3	68.293 ug/L	68.293 ppb	12:08:35
3	Cr 267.716†	11718.1	11655.0	119.68 ug/L	119.68 ppb	12:08:35
3	Cu 324.752†	32460.3	24574.8	79.312 ug/L	79.312 ppb	12:08:15
3	Mn 257.610†	2964589.2	2974435.5	3146.5 ug/L	3146.5 ppb	12:08:09
3	Mo 202.031†	-75.0	-95.2	6.3562 ug/L	6.3562 ppb	12:08:35
3	Ni 231.604†	3633.7	3521.4	77.250 ug/L	77.250 ppb	12:08:35
3	P 214.914†	2293.7	2053.1	922.53 ug/L	922.53 ppb	12:08:35
3	Pb 220.353†	5024.3	5119.6	544.36 ug/L	544.36 ppb	12:08:35
3	S 181.975 Axial†	756.4	699.2	768.60 ug/L	768.60 ppb	12:08:35
3	Sb 206.836†	134.3	97.6	8.7383 ug/L	8.7383 ppb	12:08:35
3	Se 196.026†	-797.8	-767.3	19.655 ug/L	19.655 ppb	12:08:35
3	Si 251.611†	1191161.2	1194708.3	34266 ug/L	34266 ppb	12:08:09
3	Sn 189.927†	-118.2	-122.0	-14.176 ug/L	-14.176 ppb	12:08:35
3	Ti 334.940†	3888628.4	3904038.5	6195.2 ug/L	6195.2 ppb	12:08:09
3	Tl 190.801†	-292.9	-240.5	2.0952 ug/L	2.0952 ppb	12:08:35
3	U 409.014†	-9475.3	-6839.7	-219.73 ug/L	-219.73 ppb	12:08:15
3	V 292.402†	47221.3	49188.2	282.32 ug/L	282.32 ppb	12:08:15
3	Zn 213.857†	62617.9	62005.1	501.93 ug/L	501.93 ppb	12:08:15
3	SiO2†	1220836.7	1224468.1	75154 ug/L	75154 ppb	12:08:53

Mean Data: 243270004|935381|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	895987.1	101.06	%	1.222				1.21%
Sc Radial	4761.2	102	%	0.4				0.38%
Y 371.029	841736.7	110.50	%	1.276				1.16%
Y RADIAL	5518.0	111.9	%	0.45				0.40%
Ag 328.068†	-9481.8	3.4152	ug/L	0.19593	3.4152	ppb	0.19593	5.74%
Al 396.153Radial†	123922.1	109910	ug/L	211.9	109910	ppb	211.9	0.19%
As 188.979†	-35.4	59.525	ug/L	0.9014	59.525	ppb	0.9014	1.51%
B 249.677†	2391.8	32.016	ug/L	1.1467	32.016	ppb	1.1467	3.58%
Ba 233.527†	195548.1	1429.8	ug/L	18.64	1429.8	ppb	18.64	1.30%
Be 313.107†	-17564.7	6.2460	ug/L	0.06431	6.2460	ppb	0.06431	1.03%
Ca 317.933Radial†	12025.3	20150	ug/L	10.8	20150	ppb	10.8	0.05%
Cd 226.502†	1465.4	0.9675	ug/L	0.24128	0.9675	ppb	0.24128	24.94%
Co 228.616†	4314.9	66.687	ug/L	1.3974	66.687	ppb	1.3974	2.10%
Cr 267.716†	11457.3	117.70	ug/L	1.716	117.70	ppb	1.716	1.46%
Cu 324.752†	24166.2	78.121	ug/L	1.3574	78.121	ppb	1.3574	1.74%
Fe 238.204 Radial†	14665.4	128870	ug/L	307.7	128870	ppb	307.7	0.24%
K 766.490 Radial†	95876.6	19009	ug/L	15.8	19009	ppb	15.8	0.08%

Mg 279.077 IEC†	599.5	19057 ug/L	57.5	19057 ppb	57.5	0.30%
Mn 257.610†	2977435.3	3149.7 ug/L	4.77	3149.7 ppb	4.77	0.15%
Mo 202.031†	-82.3	7.1972 ug/L	1.26841	7.1972 ppb	1.26841	17.62%
Na 589.592 Radial†	3848.6	1162.6 ug/L	12.97	1162.6 ppb	12.97	1.12%
Ni 231.604†	3466.5	76.045 ug/L	1.0531	76.045 ppb	1.0531	1.38%
P 214.914†	2030.5	911.48 ug/L	10.251	911.48 ppb	10.251	1.12%
Pb 220.353†	5053.0	537.49 ug/L	6.219	537.49 ppb	6.219	1.16%
S 181.975 Axial†	678.9	745.70 ug/L	19.882	745.70 ppb	19.882	2.67%
Sb 206.836†	87.2	5.6780 ug/L	2.78066	5.6780 ppb	2.78066	48.97%
Se 196.026†	-753.4	27.880 ug/L	7.3804	27.880 ppb	7.3804	26.47%
Si 251.611†	1197051.4	34333 ug/L	65.7	34333 ppb	65.7	0.19%
Sn 189.927†	-120.0	-13.875 ug/L	0.3904	-13.875 ppb	0.3904	2.81%
Sr 421.552†	33981.4	248.61 ug/L	0.832	248.61 ppb	0.832	0.33%
Ti 334.940†	3906574.6	6199.2 ug/L	7.78	6199.2 ppb	7.78	0.13%
Tl 190.801†	-227.7	5.6692 ug/L	3.09650	5.6692 ppb	3.09650	54.62%
U 409.014†	-6758.3	-217.35 ug/L	2.148	-217.35 ppb	2.148	0.99%
V 292.402†	48668.5	279.02 ug/L	3.378	279.02 ppb	3.378	1.21%
Zn 213.857†	61214.8	495.42 ug/L	6.215	495.42 ppb	6.215	1.25%
SiO2†	1196248.9	73422 ug/L	1517.3	73422 ppb	1517.3	2.07%

Sequence No.: 3
Sample ID: 243270005|935381|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 1/6/2010 12:11:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243270005|935381|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4718.5	4718.5	101	%			12:13:15
1	Y RADIAL	5505.3	5505.3	111.6	%			12:13:15
1	Al 396.153Radial†	120293.6	119023.1	105560	ug/L	105560	ppb	12:12:55
1	Ca 317.933Radial†	16219.4	16032.0	26864	ug/L	26864	ppb	12:12:55
1	Fe 238.204 Radial†	14245.3	14077.8	123700	ug/L	123700	ppb	12:12:55
1	K 766.490 Radial†	72881.5	68758.9	13617	ug/L	13617	ppb	12:12:55
1	Mg 279.077 IEC†	624.4	616.0	19589	ug/L	19589	ppb	12:13:15
1	Na 589.592 Radial†	2594.0	4316.1	1303.8	ug/L	1303.8	ppb	12:12:55
1	Sr 421.552†	36897.2	36483.3	266.87	ug/L	266.87	ppb	12:12:55
1	Sc 361.383	895784.7	895784.7	101.03	%			12:14:14
1	Y 371.029	845843.7	845843.7	111.04	%			12:14:14
1	Ag 328.068†	-8288.8	-8716.2	4.8421	ug/L	4.8421	ppb	12:14:19
1	As 188.979†	-108.2	-73.7	39.532	ug/L	39.532	ppb	12:14:39
1	B 249.677†	1260.8	1913.7	22.900	ug/L	22.900	ppb	12:14:19
1	Ba 233.527†	377955.8	374077.1	2731.4	ug/L	2731.4	ppb	12:14:19
1	Be 313.107†	-22196.9	-17618.0	4.8681	ug/L	4.8681	ppb	12:14:19
1	Cd 226.502†	1057.0	1284.5	-0.2195	ug/L	-0.2195	ppb	12:14:39
1	Co 228.616†	3070.5	3123.1	46.416	ug/L	46.416	ppb	12:14:39
1	Cr 267.716†	9060.9	8864.0	91.611	ug/L	91.611	ppb	12:14:39
1	Cu 324.752†	34092.9	25744.7	82.531	ug/L	82.531	ppb	12:14:19
1	Mn 257.610†	3556731.5	3519784.8	3720.6	ug/L	3720.6	ppb	12:14:14
1	Mo 202.031†	-84.4	-103.5	5.3760	ug/L	5.3760	ppb	12:14:39
1	Ni 231.604†	3669.3	3506.7	76.942	ug/L	76.942	ppb	12:14:39
1	P 214.914†	4912.5	4613.6	2172.7	ug/L	2172.7	ppb	12:14:39
1	Pb 220.353†	761.1	831.1	99.555	ug/L	99.555	ppb	12:14:39
1	S 181.975 Axial†	592.3	526.3	574.07	ug/L	574.07	ppb	12:14:39
1	Sb 206.836†	105.0	66.9	2.0365	ug/L	2.0365	ppb	12:14:39
1	Se 196.026†	-744.9	-704.0	36.619	ug/L	36.619	ppb	12:14:39
1	Si 251.611†	1232021.7	1218786.0	34959	ug/L	34959	ppb	12:14:14
1	Sn 189.927†	-149.7	-151.6	-17.921	ug/L	-17.921	ppb	12:14:39
1	Ti 334.940†	3504602.9	3470523.9	5507.8	ug/L	5507.8	ppb	12:14:14
1	Tl 190.801†	-271.8	-215.6	7.0114	ug/L	7.0114	ppb	12:14:39
1	U 409.014†	-9081.7	-6319.9	-203.62	ug/L	-203.62	ppb	12:14:19
1	V 292.402†	46269.2	47597.1	273.87	ug/L	273.87	ppb	12:14:19
1	Zn 213.857†	30005.4	28866.4	229.68	ug/L	229.68	ppb	12:14:39
1	SiO2†	1219727.6	1206598.4	74061	ug/L	74061	ppb	12:15:50
2	Sc Radial	4750.2	4750.2	102	%			12:13:41
2	Y RADIAL	5549.1	5549.1	112.5	%			12:13:41
2	Al 396.153Radial†	119308.6	117259.0	104000	ug/L	104000	ppb	12:13:21
2	Ca 317.933Radial†	16113.9	15820.9	26511	ug/L	26511	ppb	12:13:21
2	Fe 238.204 Radial†	14094.0	13834.9	121570	ug/L	121570	ppb	12:13:21
2	K 766.490 Radial†	72440.3	67842.9	13435	ug/L	13435	ppb	12:13:21
2	Mg 279.077 IEC†	627.1	614.6	19546	ug/L	19546	ppb	12:13:41
2	Na 589.592 Radial†	2517.3	4223.6	1275.9	ug/L	1275.9	ppb	12:13:21
2	Sr 421.552†	36602.8	35949.9	262.97	ug/L	262.97	ppb	12:13:21
2	Sc 361.383	890536.8	890536.8	100.44	%			12:14:46
2	Y 371.029	840711.9	840711.9	110.36	%			12:14:46
2	Ag 328.068†	-8353.1	-8828.6	3.6587	ug/L	3.6587	ppb	12:14:51
2	As 188.979†	-105.8	-71.9	39.814	ug/L	39.814	ppb	12:15:11
2	B 249.677†	1218.2	1878.7	22.461	ug/L	22.461	ppb	12:14:51
2	Ba 233.527†	379268.6	377588.5	2757.0	ug/L	2757.0	ppb	12:14:51
2	Be 313.107†	-22267.5	-17817.7	4.7970	ug/L	4.7970	ppb	12:14:51
2	Cd 226.502†	1087.4	1321.0	0.3377	ug/L	0.3377	ppb	12:15:11
2	Co 228.616†	3077.9	3148.3	46.935	ug/L	46.935	ppb	12:15:11
2	Cr 267.716†	9037.0	8893.1	91.867	ug/L	91.867	ppb	12:15:11
2	Cu 324.752†	34253.1	26103.0	83.483	ug/L	83.483	ppb	12:14:51
2	Mn 257.610†	3537875.3	3521757.0	3722.5	ug/L	3722.5	ppb	12:14:46
2	Mo 202.031†	-85.2	-104.8	5.0888	ug/L	5.0888	ppb	12:15:11
2	Ni 231.604†	3670.0	3528.8	77.428	ug/L	77.428	ppb	12:15:11

2	P 214.914†	4912.8	4642.6	2187.8 ug/L	2187.8 ppb	12:15:11
2	Pb 220.353†	775.5	849.8	101.32 ug/L	101.32 ppb	12:15:11
2	S 181.975 Axial†	588.3	525.8	573.76 ug/L	573.76 ppb	12:15:11
2	Sb 206.836†	95.9	58.4	-0.5124 ug/L	-0.5124 ppb	12:15:11
2	Se 196.026†	-745.4	-708.9	27.299 ug/L	27.299 ppb	12:15:11
2	Si 251.611†	1224950.2	1218931.7	34963 ug/L	34963 ppb	12:14:46
2	Sn 189.927†	-156.5	-159.2	-19.118 ug/L	-19.118 ppb	12:15:11
2	Ti 334.940†	3482898.2	3469356.1	5505.9 ug/L	5505.9 ppb	12:14:46
2	Tl 190.801†	-282.9	-228.3	3.5067 ug/L	3.5067 ppb	12:15:11
2	U 409.014†	-8908.5	-6200.5	-199.80 ug/L	-199.80 ppb	12:14:51
2	V 292.402†	46421.2	48018.3	276.84 ug/L	276.84 ppb	12:14:51
2	Zn 213.857†	30014.3	29050.3	231.30 ug/L	231.30 ppb	12:15:11
2	SiO2†	1219515.9	1213501.9	74485 ug/L	74485 ppb	12:15:56
3	Sc Radial	4752.2	4752.2	102 %		12:14:06
3	Y RADIAL	5547.1	5547.1	112.5 %		12:14:06
3	Al 396.153Radial†	120056.6	117945.0	104610 ug/L	104610 ppb	12:13:46
3	Ca 317.933Radial†	16080.3	15781.3	26444 ug/L	26444 ppb	12:13:46
3	Fe 238.204 Radial†	14113.0	13847.8	121680 ug/L	121680 ppb	12:13:46
3	K 766.490 Radial†	72566.6	67937.4	13454 ug/L	13454 ppb	12:13:46
3	Mg 279.077 IEC†	625.7	613.0	19494 ug/L	19494 ppb	12:14:06
3	Na 589.592 Radial†	2482.4	4188.3	1265.2 ug/L	1265.2 ppb	12:13:46
3	Sr 421.552†	36800.5	36129.1	264.28 ug/L	264.28 ppb	12:13:46
3	Sc 361.383	890567.9	890567.9	100.45 %		12:15:18
3	Y 371.029	841240.2	841240.2	110.43 %		12:15:18
3	Ag 328.068†	-8349.1	-8824.3	3.7076 ug/L	3.7076 ppb	12:15:24
3	As 188.979†	-102.5	-68.6	41.012 ug/L	41.012 ppb	12:15:44
3	B 249.677†	1273.6	1933.8	23.582 ug/L	23.582 ppb	12:15:24
3	Ba 233.527†	378127.9	376439.7	2748.6 ug/L	2748.6 ppb	12:15:24
3	Be 313.107†	-22357.6	-17906.7	4.7752 ug/L	4.7752 ppb	12:15:24
3	Cd 226.502†	1096.9	1330.4	0.4144 ug/L	0.4144 ppb	12:15:44
3	Co 228.616†	3063.4	3133.7	46.645 ug/L	46.645 ppb	12:15:44
3	Cr 267.716†	9006.8	8862.7	91.561 ug/L	91.561 ppb	12:15:44
3	Cu 324.752†	33979.4	25829.4	82.678 ug/L	82.678 ppb	12:15:24
3	Mn 257.610†	3541185.7	3524929.7	3725.8 ug/L	3725.8 ppb	12:15:18
3	Mo 202.031†	-101.8	-121.3	4.0656 ug/L	4.0656 ppb	12:15:44
3	Ni 231.604†	3644.3	3503.1	76.864 ug/L	76.864 ppb	12:15:44
3	P 214.914†	4918.3	4647.9	2190.7 ug/L	2190.7 ppb	12:15:44
3	Pb 220.353†	770.5	844.9	100.94 ug/L	100.94 ppb	12:15:44
3	S 181.975 Axial†	593.7	531.2	579.73 ug/L	579.73 ppb	12:15:44
3	Sb 206.836†	94.5	56.9	-0.9509 ug/L	-0.9509 ppb	12:15:44
3	Se 196.026†	-747.9	-711.4	26.477 ug/L	26.477 ppb	12:15:44
3	Si 251.611†	1225414.9	1219351.7	34975 ug/L	34975 ppb	12:15:18
3	Sn 189.927†	-146.7	-149.4	-17.672 ug/L	-17.672 ppb	12:15:44
3	Ti 334.940†	3485692.7	3472017.1	5510.1 ug/L	5510.1 ppb	12:15:18
3	Tl 190.801†	-293.2	-238.5	0.7788 ug/L	0.7788 ppb	12:15:44
3	U 409.014†	-8704.5	-5997.1	-193.76 ug/L	-193.76 ppb	12:15:24
3	V 292.402†	46293.9	47890.0	276.01 ug/L	276.01 ppb	12:15:24
3	Zn 213.857†	29944.8	28980.0	230.72 ug/L	230.72 ppb	12:15:44
3	SiO2†	1228653.7	1222556.7	75041 ug/L	75041 ppb	12:16:02

Mean Data: 243270005|935381|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	892296.4	100.64	%	0.341				0.34%
Sc Radial	4740.3	102	%	0.4				0.40%
Y 371.029	842598.6	110.61	%	0.371				0.33%
Y RADIAL	5533.8	112.2	%	0.50				0.45%
Ag 328.068†	-8789.7	4.0695	ug/L	0.66958	4.0695	ppb	0.66958	16.45%
Al 396.153Radial†	118075.7	104720	ug/L	788.8	104720	ppb	788.8	0.75%
As 188.979†	-71.4	40.119	ug/L	0.7861	40.119	ppb	0.7861	1.96%
B 249.677†	1908.7	22.981	ug/L	0.5650	22.981	ppb	0.5650	2.46%
Ba 233.527†	376035.1	2745.7	ug/L	13.03	2745.7	ppb	13.03	0.47%
Be 313.107†	-17780.8	4.8134	ug/L	0.04859	4.8134	ppb	0.04859	1.01%
Ca 317.933Radial†	15878.1	26606	ug/L	225.8	26606	ppb	225.8	0.85%
Cd 226.502†	1312.0	0.1775	ug/L	0.34598	0.1775	ppb	0.34598	194.87%
Co 228.616†	3135.0	46.665	ug/L	0.2602	46.665	ppb	0.2602	0.56%
Cr 267.716†	8873.3	91.680	ug/L	0.1641	91.680	ppb	0.1641	0.18%
Cu 324.752†	25892.4	82.897	ug/L	0.5124	82.897	ppb	0.5124	0.62%
Fe 238.204 Radial†	13920.2	122320	ug/L	1201.0	122320	ppb	1201.0	0.98%
K 766.490 Radial†	68179.7	13502	ug/L	100.1	13502	ppb	100.1	0.74%

Mg 279.077 IEC†	614.5	19543	ug/L	47.6	19543	ppb	47.6	0.24%
Mn 257.610†	3522157.2	3722.9	ug/L	2.65	3722.9	ppb	2.65	0.07%
Mo 202.031†	-109.8	4.8434	ug/L	0.68877	4.8434	ppb	0.68877	14.22%
Na 589.592 Radial†	4242.7	1281.6	ug/L	19.93	1281.6	ppb	19.93	1.56%
Ni 231.604†	3512.8	77.078	ug/L	0.3055	77.078	ppb	0.3055	0.40%
P 214.914†	4634.7	2183.7	ug/L	9.67	2183.7	ppb	9.67	0.44%
Pb 220.353†	841.9	100.60	ug/L	0.927	100.60	ppb	0.927	0.92%
S 181.975 Axial†	527.8	575.85	ug/L	3.362	575.85	ppb	3.362	0.58%
Sb 206.836†	60.7	0.1911	ug/L	1.61318	0.1911	ppb	1.61318	844.37%
Se 196.026†	-708.1	30.131	ug/L	5.6333	30.131	ppb	5.6333	18.70%
Si 251.611†	1219023.1	34965	ug/L	8.5	34965	ppb	8.5	0.02%
Sn 189.927†	-153.4	-18.237	ug/L	0.7730	-18.237	ppb	0.7730	4.24%
Sr 421.552†	36187.4	264.71	ug/L	1.986	264.71	ppb	1.986	0.75%
Ti 334.940†	3470632.3	5507.9	ug/L	2.11	5507.9	ppb	2.11	0.04%
Tl 190.801†	-227.5	3.7656	ug/L	3.12438	3.7656	ppb	3.12438	82.97%
U 409.014†	-6172.5	-199.06	ug/L	4.967	-199.06	ppb	4.967	2.50%
V 292.402†	47835.1	275.57	ug/L	1.535	275.57	ppb	1.535	0.56%
Zn 213.857†	28965.6	230.57	ug/L	0.821	230.57	ppb	0.821	0.36%
SiO2†	1214219.0	74529	ug/L	491.4	74529	ppb	491.4	0.66%

Sequence No.: 4
Sample ID: 243270006|935381|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 1/6/2010 12:18:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243270006|935381|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4791.2	4791.2	103	%			12:20:25
1	Y RADIAL	5420.7	5420.7	109.9	%			12:20:25
1	Al 396.153Radial†	162904.9	158729.0	140780	ug/L	140780	ppb	12:20:05
1	Ca 317.933Radial†	24630.4	23982.4	40187	ug/L	40187	ppb	12:20:05
1	Fe 238.204 Radial†	17577.5	17110.1	150350	ug/L	150350	ppb	12:20:05
1	K 766.490 Radial†	112290.7	106057.2	21042	ug/L	21042	ppb	12:20:05
1	Mg 279.077 IEC†	817.6	794.9	25287	ug/L	25287	ppb	12:20:25
1	Na 589.592 Radial†	10265.6	11750.8	3549.7	ug/L	3549.7	ppb	12:20:05
1	Sr 421.552†	46331.8	45120.6	329.99	ug/L	329.99	ppb	12:20:05
1	Sc 361.383	901413.7	901413.7	101.67	%			12:21:23
1	Y 371.029	817681.1	817681.1	107.34	%			12:21:23
1	Ag 328.068†	-10334.8	-10677.3	4.9116	ug/L	4.9116	ppb	12:21:23
1	As 188.979†	-36.7	-2.7	49.555	ug/L	49.555	ppb	12:21:44
1	B 249.677†	1366.7	2010.1	21.365	ug/L	21.365	ppb	12:21:23
1	Ba 233.527†	241897.6	237917.4	1739.1	ug/L	1739.1	ppb	12:21:23
1	Be 313.107†	5067.5	9335.8	9.5355	ug/L	9.5355	ppb	12:21:23
1	Cd 226.502†	1221.1	1439.4	-1.4162	ug/L	-1.4162	ppb	12:21:44
1	Co 228.616†	2834.7	2872.1	45.662	ug/L	45.662	ppb	12:21:44
1	Cr 267.716†	13145.6	12825.7	131.68	ug/L	131.68	ppb	12:21:44
1	Cu 324.752†	25780.3	17357.9	59.060	ug/L	59.060	ppb	12:21:23
1	Mn 257.610†	2173025.5	2136820.9	2266.0	ug/L	2266.0	ppb	12:21:23
1	Mo 202.031†	-85.2	-103.7	7.9149	ug/L	7.9149	ppb	12:21:44
1	Ni 231.604†	4302.5	4106.8	90.120	ug/L	90.120	ppb	12:21:44
1	P 214.914†	1498.0	1224.9	515.06	ug/L	515.06	ppb	12:21:44
1	Pb 220.353†	514.0	583.4	79.628	ug/L	79.628	ppb	12:21:44
1	S 181.975 Axial†	681.7	610.6	662.37	ug/L	662.37	ppb	12:21:44
1	Sb 206.836†	86.4	47.9	0.8805	ug/L	0.8805	ppb	12:21:44
1	Se 196.026†	-917.9	-869.6	39.332	ug/L	39.332	ppb	12:21:44
1	Si 251.611†	1319982.7	1297687.6	37220	ug/L	37220	ppb	12:21:23
1	Sn 189.927†	-145.4	-146.4	-15.400	ug/L	-15.400	ppb	12:21:44
1	Ti 334.940†	2078164.0	2045851.0	3248.1	ug/L	3248.1	ppb	12:21:23
1	Tl 190.801†	-210.2	-153.4	-0.7084	ug/L	-0.7084	ppb	12:21:44
1	U 409.014†	-12536.5	-9661.9	-306.40	ug/L	-306.40	ppb	12:21:23
1	V 292.402†	34148.7	35389.7	195.59	ug/L	195.59	ppb	12:21:23
1	Zn 213.857†	44177.1	42619.9	341.13	ug/L	341.13	ppb	12:21:23
1	SiO2†	1295270.0	1273361.3	78154	ug/L	78154	ppb	12:22:44
2	Sc Radial	4789.6	4789.6	103	%			12:20:50
2	Y RADIAL	5437.2	5437.2	110.2	%			12:20:50
2	Al 396.153Radial†	164323.4	160163.1	142050	ug/L	142050	ppb	12:20:30
2	Ca 317.933Radial†	24868.1	24221.9	40588	ug/L	40588	ppb	12:20:30
2	Fe 238.204 Radial†	17725.7	17260.2	151660	ug/L	151660	ppb	12:20:30
2	K 766.490 Radial†	113434.0	107206.9	21271	ug/L	21271	ppb	12:20:30
2	Mg 279.077 IEC†	826.3	803.6	25565	ug/L	25565	ppb	12:20:50
2	Na 589.592 Radial†	10325.2	11812.2	3568.2	ug/L	3568.2	ppb	12:20:30
2	Sr 421.552†	46777.6	45569.7	333.27	ug/L	333.27	ppb	12:20:30
2	Sc 361.383	902815.0	902815.0	101.83	%			12:21:51
2	Y 371.029	818686.2	818686.2	107.47	%			12:21:51
2	Ag 328.068†	-10519.5	-10843.0	4.6323	ug/L	4.6323	ppb	12:21:51
2	As 188.979†	-29.5	4.4	52.256	ug/L	52.256	ppb	12:22:11
2	B 249.677†	1240.9	1884.5	18.600	ug/L	18.600	ppb	12:21:51
2	Ba 233.527†	242287.9	237931.3	1739.2	ug/L	1739.2	ppb	12:21:51
2	Be 313.107†	5112.1	9371.9	9.5458	ug/L	9.5458	ppb	12:21:51
2	Cd 226.502†	1203.9	1420.6	-1.7245	ug/L	-1.7245	ppb	12:22:11
2	Co 228.616†	2851.3	2884.1	45.870	ug/L	45.870	ppb	12:22:11
2	Cr 267.716†	13171.5	12831.1	131.75	ug/L	131.75	ppb	12:22:11
2	Cu 324.752†	25844.3	17381.4	59.197	ug/L	59.197	ppb	12:21:51
2	Mn 257.610†	2175946.1	2136371.5	2265.6	ug/L	2265.6	ppb	12:21:51
2	Mo 202.031†	-89.9	-108.2	7.7575	ug/L	7.7575	ppb	12:22:11
2	Ni 231.604†	4326.6	4123.9	90.495	ug/L	90.495	ppb	12:22:11

2	P 214.914†	1511.5	1235.8	519.73 ug/L	519.73 ppb	12:22:11
2	Pb 220.353†	532.6	600.8	81.616 ug/L	81.616 ppb	12:22:11
2	S 181.975 Axial†	674.0	602.0	652.46 ug/L	652.46 ppb	12:22:11
2	Sb 206.836†	92.9	54.1	2.6960 ug/L	2.6960 ppb	12:22:11
2	Se 196.026†	-913.2	-863.5	46.668 ug/L	46.668 ppb	12:22:11
2	Si 251.611†	1322645.5	1298287.5	37237 ug/L	37237 ppb	12:21:51
2	Sn 189.927†	-154.0	-154.6	-16.548 ug/L	-16.548 ppb	12:22:11
2	Ti 334.940†	2080805.8	2045272.8	3247.2 ug/L	3247.2 ppb	12:21:51
2	Tl 190.801†	-194.4	-137.5	3.6482 ug/L	3.6482 ppb	12:22:11
2	U 409.014†	-12375.7	-9484.9	-301.30 ug/L	-301.30 ppb	12:21:51
2	V 292.402†	34275.4	35462.0	195.86 ug/L	195.86 ppb	12:21:51
2	Zn 213.857†	44249.2	42623.3	341.08 ug/L	341.08 ppb	12:21:51
2	SiO2†	1307088.4	1282990.2	78745 ug/L	78745 ppb	12:22:50
3	Sc Radial	4867.3	4867.3	104 %		12:21:15
3	Y RADIAL	5496.6	5496.6	111.4 %		12:21:15
3	Al 396.153Radial†	161069.8	154487.9	137020 ug/L	137020 ppb	12:20:55
3	Ca 317.933Radial†	24342.6	23331.3	39095 ug/L	39095 ppb	12:20:55
3	Fe 238.204 Radial†	17319.8	16595.3	145820 ug/L	145820 ppb	12:20:55
3	K 766.490 Radial†	111166.8	103268.9	20488 ug/L	20488 ppb	12:20:55
3	Mg 279.077 IEC†	840.9	804.8	25607 ug/L	25607 ppb	12:21:15
3	Na 589.592 Radial†	10089.6	11425.7	3451.5 ug/L	3451.5 ppb	12:20:55
3	Sr 421.552†	45728.6	43836.4	320.59 ug/L	320.59 ppb	12:20:55
3	Sc 361.383	894988.1	894988.1	100.95 %		12:22:18
3	Y 371.029	811639.1	811639.1	106.55 %		12:22:18
3	Ag 328.068†	-10432.5	-10847.2	2.6890 ug/L	2.6890 ppb	12:22:18
3	As 188.979†	-34.5	-0.8	49.518 ug/L	49.518 ppb	12:22:38
3	B 249.677†	1241.3	1895.5	19.601 ug/L	19.601 ppb	12:22:18
3	Ba 233.527†	239747.7	237495.8	1735.9 ug/L	1735.9 ppb	12:22:18
3	Be 313.107†	4964.1	9269.1	9.5083 ug/L	9.5083 ppb	12:22:18
3	Cd 226.502†	1222.5	1449.5	-0.8685 ug/L	-0.8685 ppb	12:22:38
3	Co 228.616†	2861.1	2918.3	46.597 ug/L	46.597 ppb	12:22:38
3	Cr 267.716†	13136.0	12909.0	132.43 ug/L	132.43 ppb	12:22:38
3	Cu 324.752†	25547.1	17308.9	58.684 ug/L	58.684 ppb	12:22:18
3	Mn 257.610†	2154802.8	2134113.9	2262.7 ug/L	2262.7 ppb	12:22:18
3	Mo 202.031†	-90.2	-109.3	7.1295 ug/L	7.1295 ppb	12:22:38
3	Ni 231.604†	4321.0	4155.5	91.188 ug/L	91.188 ppb	12:22:38
3	P 214.914†	1508.6	1246.0	527.74 ug/L	527.74 ppb	12:22:38
3	Pb 220.353†	522.6	595.5	80.410 ug/L	80.410 ppb	12:22:38
3	S 181.975 Axial†	686.3	620.0	673.72 ug/L	673.72 ppb	12:22:38
3	Sb 206.836†	67.8	30.1	-4.4383 ug/L	-4.4383 ppb	12:22:38
3	Se 196.026†	-925.8	-883.9	17.514 ug/L	17.514 ppb	12:22:38
3	Si 251.611†	1308304.5	1295440.0	37155 ug/L	37155 ppb	12:22:18
3	Sn 189.927†	-144.5	-146.6	-15.592 ug/L	-15.592 ppb	12:22:38
3	Ti 334.940†	2061836.6	2044351.8	3245.7 ug/L	3245.7 ppb	12:22:18
3	Tl 190.801†	-197.6	-142.3	2.1649 ug/L	2.1649 ppb	12:22:38
3	U 409.014†	-12514.4	-9728.5	-307.81 ug/L	-307.81 ppb	12:22:18
3	V 292.402†	33949.1	35433.1	196.55 ug/L	196.55 ppb	12:22:18
3	Zn 213.857†	43690.1	42449.5	339.95 ug/L	339.95 ppb	12:22:18
3	SiO2†	1323842.2	1310812.8	80454 ug/L	80454 ppb	12:22:56

Mean Data: 243270006|935381|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	899738.9	101.48	%	0.471				0.46%
Sc Radial	4816.0	103	%	1.0				0.92%
Y 371.029	816002.1	107.12	%	0.500				0.47%
Y RADIAL	5451.5	110.5	%	0.81				0.73%
Ag 328.068†	-10789.2	4.0776	ug/L	1.21070	4.0776	ppb	1.21070	29.69%
Al 396.153Radial†	157793.3	139950	ug/L	2617.3	139950	ppb	2617.3	1.87%
As 188.979†	0.3	50.443	ug/L	1.5700	50.443	ppb	1.5700	3.11%
B 249.677†	1930.0	19.855	ug/L	1.4002	19.855	ppb	1.4002	7.05%
Ba 233.527†	237781.5	1738.1	ug/L	1.88	1738.1	ppb	1.88	0.11%
Be 313.107†	9325.6	9.5299	ug/L	0.01941	9.5299	ppb	0.01941	0.20%
Ca 317.933Radial†	23845.2	39957	ug/L	772.3	39957	ppb	772.3	1.93%
Cd 226.502†	1436.5	-1.3364	ug/L	0.43355	-1.3364	ppb	0.43355	32.44%
Co 228.616†	2891.5	46.043	ug/L	0.4910	46.043	ppb	0.4910	1.07%
Cr 267.716†	12855.2	131.95	ug/L	0.415	131.95	ppb	0.415	0.31%
Cu 324.752†	17349.4	58.980	ug/L	0.2655	58.980	ppb	0.2655	0.45%
Fe 238.204 Radial†	16988.5	149280	ug/L	3064.1	149280	ppb	3064.1	2.05%
K 766.490 Radial†	105511.0	20934	ug/L	402.3	20934	ppb	402.3	1.92%

Mg 279.077 IEC†	801.1	25486	ug/L	174.0	25486	ppb	174.0	0.68%
Mn 257.610†	2135768.7	2264.8	ug/L	1.82	2264.8	ppb	1.82	0.08%
Mo 202.031†	-107.1	7.6006	ug/L	0.41555	7.6006	ppb	0.41555	5.47%
Na 589.592 Radial†	11662.9	3523.1	ug/L	62.74	3523.1	ppb	62.74	1.78%
Ni 231.604†	4128.7	90.601	ug/L	0.5420	90.601	ppb	0.5420	0.60%
P 214.914†	1235.5	520.84	ug/L	6.416	520.84	ppb	6.416	1.23%
Pb 220.353†	593.2	80.551	ug/L	1.0014	80.551	ppb	1.0014	1.24%
S 181.975 Axial†	610.9	662.85	ug/L	10.636	662.85	ppb	10.636	1.60%
Sb 206.836†	44.0	-0.2873	ug/L	3.70776	-0.2873	ppb	3.70776	>999.9%
Se 196.026†	-872.3	34.504	ug/L	15.1645	34.504	ppb	15.1645	43.95%
Si 251.611†	1297138.4	37204	ug/L	42.9	37204	ppb	42.9	0.12%
Sn 189.927†	-149.2	-15.847	ug/L	0.6148	-15.847	ppb	0.6148	3.88%
Sr 421.552†	44842.2	327.95	ug/L	6.579	327.95	ppb	6.579	2.01%
Ti 334.940†	2045158.5	3247.0	ug/L	1.23	3247.0	ppb	1.23	0.04%
Tl 190.801†	-144.4	1.7016	ug/L	2.21493	1.7016	ppb	2.21493	130.17%
U 409.014†	-9625.1	-305.17	ug/L	3.424	-305.17	ppb	3.424	1.12%
V 292.402†	35428.3	196.00	ug/L	0.496	196.00	ppb	0.496	0.25%
Zn 213.857†	42564.2	340.72	ug/L	0.669	340.72	ppb	0.669	0.20%
SiO2†	1289054.8	79118	ug/L	1194.2	79118	ppb	1194.2	1.51%

Sequence No.: 5
Sample ID: 243270007|935381|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 1/6/2010 12:25:06
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243270007|935381|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4657.3	4657.3	99.8	%			12:27:18
1	Y RADIAL	5341.0	5341.0	108.3	%			12:27:18
1	Al 396.153Radial†	183612.0	184042.0	163230	ug/L	163230	ppb	12:26:58
1	Ca 317.933Radial†	12895.2	12910.9	21634	ug/L	21634	ppb	12:26:58
1	Fe 238.204 Radial†	13628.3	13644.4	119890	ug/L	119890	ppb	12:26:58
1	K 766.490 Radial†	90974.5	87837.6	17436	ug/L	17436	ppb	12:26:58
1	Mg 279.077 IEC†	620.6	620.4	19733	ug/L	19733	ppb	12:27:18
1	Na 589.592 Radial†	1447.1	3200.4	966.77	ug/L	966.77	ppb	12:26:58
1	Sr 421.552†	30907.7	30959.6	226.48	ug/L	226.48	ppb	12:26:58
1	Sc 361.383	888774.0	888774.0	100.24	%			12:28:17
1	Y 371.029	819004.1	819004.1	107.52	%			12:28:17
1	Ag 328.068†	-8542.2	-9033.7	2.1240	ug/L	2.1240	ppb	12:28:22
1	As 188.979†	-55.3	-21.7	53.739	ug/L	53.739	ppb	12:28:42
1	B 249.677†	1178.3	1841.2	21.923	ug/L	21.923	ppb	12:28:22
1	Ba 233.527†	230028.7	229461.0	1676.8	ug/L	1676.8	ppb	12:28:22
1	Be 313.107†	-7145.2	-2776.3	9.0598	ug/L	9.0598	ppb	12:28:22
1	Cd 226.502†	986.2	1222.1	-0.3783	ug/L	-0.3783	ppb	12:28:42
1	Co 228.616†	2806.2	2883.4	42.312	ug/L	42.312	ppb	12:28:42
1	Cr 267.716†	27793.2	27621.5	279.41	ug/L	279.41	ppb	12:28:22
1	Cu 324.752†	35446.0	27360.7	87.121	ug/L	87.121	ppb	12:28:22
1	Mn 257.610†	1776179.1	1771337.0	1878.0	ug/L	1878.0	ppb	12:28:17
1	Mo 202.031†	-68.0	-87.8	5.9919	ug/L	5.9919	ppb	12:28:42
1	Ni 231.604†	7048.9	6906.6	151.58	ug/L	151.58	ppb	12:28:42
1	P 214.914†	2220.5	1966.6	904.13	ug/L	904.13	ppb	12:28:42
1	Pb 220.353†	784.2	860.1	115.81	ug/L	115.81	ppb	12:28:42
1	S 181.975 Axial†	486.7	425.6	448.85	ug/L	448.85	ppb	12:28:42
1	Sb 206.836†	107.6	70.2	-2.0370	ug/L	-2.0370	ppb	12:28:42
1	Se 196.026†	-747.7	-712.6	29.521	ug/L	29.521	ppb	12:28:42
1	Si 251.611†	1195247.7	1191720.2	34181	ug/L	34181	ppb	12:28:17
1	Sn 189.927†	-110.1	-113.3	-12.811	ug/L	-12.811	ppb	12:28:42
1	Ti 334.940†	3212061.6	3206056.3	5087.8	ug/L	5087.8	ppb	12:28:17
1	Tl 190.801†	-239.2	-185.3	2.9825	ug/L	2.9825	ppb	12:28:42
1	U 409.014†	-8767.1	-6077.0	-196.28	ug/L	-196.28	ppb	12:28:22
1	V 292.402†	39726.7	41431.7	236.16	ug/L	236.16	ppb	12:28:22
1	Zn 213.857†	27598.3	26699.5	211.57	ug/L	211.57	ppb	12:28:42
1	SiO2†	1201961.9	1198398.6	73555	ug/L	73555	ppb	12:29:53
2	Sc Radial	4739.6	4739.6	102	%			12:27:44
2	Y RADIAL	5420.3	5420.3	109.9	%			12:27:44
2	Al 396.153Radial†	188010.1	185178.4	164240	ug/L	164240	ppb	12:27:24
2	Ca 317.933Radial†	13156.1	12943.6	21689	ug/L	21689	ppb	12:27:24
2	Fe 238.204 Radial†	13865.7	13641.0	119860	ug/L	119860	ppb	12:27:24
2	K 766.490 Radial†	92921.2	88171.7	17502	ug/L	17502	ppb	12:27:24
2	Mg 279.077 IEC†	616.9	605.9	19270	ug/L	19270	ppb	12:27:44
2	Na 589.592 Radial†	1422.3	3150.8	951.78	ug/L	951.78	ppb	12:27:24
2	Sr 421.552†	31625.5	31128.7	227.71	ug/L	227.71	ppb	12:27:24
2	Sc 361.383	886819.0	886819.0	100.02	%			12:28:49
2	Y 371.029	817310.8	817310.8	107.29	%			12:28:49
2	Ag 328.068†	-8391.5	-8901.9	2.6554	ug/L	2.6554	ppb	12:28:54
2	As 188.979†	-56.5	-23.1	53.160	ug/L	53.160	ppb	12:29:15
2	B 249.677†	1112.6	1778.2	20.628	ug/L	20.628	ppb	12:28:54
2	Ba 233.527†	225620.3	225559.6	1648.3	ug/L	1648.3	ppb	12:28:54
2	Be 313.107†	-6909.3	-2556.1	9.1130	ug/L	9.1130	ppb	12:28:54
2	Cd 226.502†	974.1	1212.2	-0.4688	ug/L	-0.4688	ppb	12:29:15
2	Co 228.616†	2789.6	2872.9	42.125	ug/L	42.125	ppb	12:29:15
2	Cr 267.716†	27360.9	27250.4	275.68	ug/L	275.68	ppb	12:28:54
2	Cu 324.752†	34526.7	26519.5	84.629	ug/L	84.629	ppb	12:28:54
2	Mn 257.610†	1768368.0	1767433.9	1873.8	ug/L	1873.8	ppb	12:28:49
2	Mo 202.031†	-76.3	-96.2	5.4646	ug/L	5.4646	ppb	12:29:15
2	Ni 231.604†	7048.6	6921.9	151.92	ug/L	151.92	ppb	12:29:15

2	P 214.914†	2196.2	1947.2	895.43 ug/L	895.43 ppb	12:29:15
2	Pb 220.353†	775.6	853.2	115.33 ug/L	115.33 ppb	12:29:15
2	S 181.975 Axial†	491.1	431.1	454.87 ug/L	454.87 ppb	12:29:15
2	Sb 206.836†	118.2	81.0	1.2479 ug/L	1.2479 ppb	12:29:15
2	Se 196.026†	-756.2	-722.8	24.366 ug/L	24.366 ppb	12:29:15
2	Si 251.611†	1189806.1	1188908.5	34100 ug/L	34100 ppb	12:28:49
2	Sn 189.927†	-114.1	-117.4	-13.421 ug/L	-13.421 ppb	12:29:15
2	Ti 334.940†	3198201.9	3199264.0	5077.0 ug/L	5077.0 ppb	12:28:49
2	Tl 190.801†	-239.3	-185.8	2.7590 ug/L	2.7590 ppb	12:29:15
2	U 409.014†	-8592.4	-5921.6	-191.65 ug/L	-191.65 ppb	12:28:54
2	V 292.402†	38819.1	40611.8	231.02 ug/L	231.02 ppb	12:28:54
2	Zn 213.857†	27586.8	26748.6	212.00 ug/L	212.00 ppb	12:29:15
2	SiO2†	1202566.4	1201646.3	73754 ug/L	73754 ppb	12:29:59
3	Sc Radial	4728.0	4728.0	101 %		12:28:09
3	Y RADIAL	5430.1	5430.1	110.1 %		12:28:09
3	Al 396.153Radial†	183378.5	181060.4	160590 ug/L	160590 ppb	12:27:49
3	Ca 317.933Radial†	12871.8	12694.6	21272 ug/L	21272 ppb	12:27:49
3	Fe 238.204 Radial†	13520.8	13334.1	117170 ug/L	117170 ppb	12:27:49
3	K 766.490 Radial†	90888.7	86389.9	17148 ug/L	17148 ppb	12:27:49
3	Mg 279.077 IEC†	618.8	609.2	19380 ug/L	19380 ppb	12:28:09
3	Na 589.592 Radial†	1400.8	3133.0	946.43 ug/L	946.43 ppb	12:27:49
3	Sr 421.552†	30832.9	30422.7	222.55 ug/L	222.55 ppb	12:27:49
3	Sc 361.383	886031.8	886031.8	99.935 %		12:29:21
3	Y 371.029	816807.9	816807.9	107.23 %		12:29:21
3	Ag 328.068†	-8456.2	-8974.1	1.4670 ug/L	1.4670 ppb	12:29:27
3	As 188.979†	-66.0	-32.6	49.356 ug/L	49.356 ppb	12:29:47
3	B 249.677†	1243.4	1910.0	23.703 ug/L	23.703 ppb	12:29:27
3	Ba 233.527†	229420.2	229562.3	1677.4 ug/L	1677.4 ppb	12:29:27
3	Be 313.107†	-7128.9	-2782.0	9.0225 ug/L	9.0225 ppb	12:29:27
3	Cd 226.502†	999.0	1238.0	0.0442 ug/L	0.0442 ppb	12:29:47
3	Co 228.616†	2793.2	2879.0	42.304 ug/L	42.304 ppb	12:29:47
3	Cr 267.716†	27828.4	27742.5	280.57 ug/L	280.57 ppb	12:29:27
3	Cu 324.752†	35247.0	27271.0	86.716 ug/L	86.716 ppb	12:29:27
3	Mn 257.610†	1762024.4	1762656.9	1868.5 ug/L	1868.5 ppb	12:29:21
3	Mo 202.031†	-78.9	-98.9	5.0345 ug/L	5.0345 ppb	12:29:47
3	Ni 231.604†	7031.2	6910.7	151.67 ug/L	151.67 ppb	12:29:47
3	P 214.914†	2230.4	1983.3	913.61 ug/L	913.61 ppb	12:29:47
3	Pb 220.353†	803.8	882.1	117.72 ug/L	117.72 ppb	12:29:47
3	S 181.975 Axial†	493.0	433.4	458.28 ug/L	458.28 ppb	12:29:47
3	Sb 206.836†	105.9	68.9	-2.4209 ug/L	-2.4209 ppb	12:29:47
3	Se 196.026†	-763.0	-730.2	11.690 ug/L	11.690 ppb	12:29:47
3	Si 251.611†	1185417.8	1185574.2	34005 ug/L	34005 ppb	12:29:21
3	Sn 189.927†	-119.2	-122.7	-14.284 ug/L	-14.284 ppb	12:29:47
3	Ti 334.940†	3190837.5	3194735.4	5069.8 ug/L	5069.8 ppb	12:29:21
3	Tl 190.801†	-235.1	-181.9	3.6452 ug/L	3.6452 ppb	12:29:47
3	U 409.014†	-8617.0	-5953.9	-192.28 ug/L	-192.28 ppb	12:29:27
3	V 292.402†	39449.4	41277.0	235.61 ug/L	235.61 ppb	12:29:27
3	Zn 213.857†	27650.8	26837.2	212.86 ug/L	212.86 ppb	12:29:47
3	SiO2†	1198220.5	1198365.8	73553 ug/L	73553 ppb	12:30:05

Mean Data: 243270007|935381|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	887208.3	100.07	%	0.159				0.16%
Sc Radial	4708.3	101	%	1.0				0.95%
Y 371.029	817707.6	107.34	%	0.151				0.14%
Y RADIAL	5397.1	109.4	%	0.99				0.91%
Ag 328.068†	-8969.9	2.0821	ug/L	0.59532	2.0821	ppb	0.59532	28.59%
Al 396.153Radial†	183426.9	162690	ug/L	1886.3	162690	ppb	1886.3	1.16%
As 188.979†	-25.8	52.085	ug/L	2.3807	52.085	ppb	2.3807	4.57%
B 249.677†	1843.2	22.085	ug/L	1.5440	22.085	ppb	1.5440	6.99%
Ba 233.527†	228194.3	1667.5	ug/L	16.63	1667.5	ppb	16.63	1.00%
Be 313.107†	-2704.8	9.0651	ug/L	0.04547	9.0651	ppb	0.04547	0.50%
Ca 317.933Radial†	12849.7	21532	ug/L	226.7	21532	ppb	226.7	1.05%
Cd 226.502†	1224.1	-0.2676	ug/L	0.27380	-0.2676	ppb	0.27380	102.30%
Co 228.616†	2878.4	42.247	ug/L	0.1056	42.247	ppb	0.1056	0.25%
Cr 267.716†	27538.1	278.55	ug/L	2.555	278.55	ppb	2.555	0.92%
Cu 324.752†	27050.4	86.155	ug/L	1.3373	86.155	ppb	1.3373	1.55%
Fe 238.204 Radial†	13539.8	118970	ug/L	1565.9	118970	ppb	1565.9	1.32%
K 766.490 Radial†	87466.4	17362	ug/L	188.2	17362	ppb	188.2	1.08%

Mg 279.077 IEC†	611.8	19461 ug/L	242.1	19461 ppb	242.1	1.24%
Mn 257.610†	1767142.6	1873.4 ug/L	4.72	1873.4 ppb	4.72	0.25%
Mo 202.031†	-94.3	5.4970 ug/L	0.47952	5.4970 ppb	0.47952	8.72%
Na 589.592 Radial†	3161.4	954.99 ug/L	10.545	954.99 ppb	10.545	1.10%
Ni 231.604†	6913.1	151.72 ug/L	0.174	151.72 ppb	0.174	0.11%
P 214.914†	1965.7	904.39 ug/L	9.092	904.39 ppb	9.092	1.01%
Pb 220.353†	865.1	116.29 ug/L	1.267	116.29 ppb	1.267	1.09%
S 181.975 Axial†	430.0	454.00 ug/L	4.771	454.00 ppb	4.771	1.05%
Sb 206.836†	73.4	-1.0700 ug/L	2.01653	-1.0700 ppb	2.01653	188.46%
Se 196.026†	-721.9	21.859 ug/L	9.1756	21.859 ppb	9.1756	41.98%
Si 251.611†	1188734.3	34095 ug/L	88.2	34095 ppb	88.2	0.26%
Sn 189.927†	-117.8	-13.505 ug/L	0.7402	-13.505 ppb	0.7402	5.48%
Sr 421.552†	30837.0	225.58 ug/L	2.697	225.58 ppb	2.697	1.20%
Ti 334.940†	3200018.6	5078.2 ug/L	9.05	5078.2 ppb	9.05	0.18%
Tl 190.801†	-184.3	3.1289 ug/L	0.46089	3.1289 ppb	0.46089	14.73%
U 409.014†	-5984.2	-193.40 ug/L	2.511	-193.40 ppb	2.511	1.30%
V 292.402†	41106.8	234.27 ug/L	2.822	234.27 ppb	2.822	1.20%
Zn 213.857†	26761.7	212.14 ug/L	0.655	212.14 ppb	0.655	0.31%
SiO2†	1199470.3	73621 ug/L	115.6	73621 ppb	115.6	0.16%

Sequence No.: 6
Sample ID: 243270008|935381|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 1/6/2010 12:32:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243270008|935381|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4809.4	4809.4	103	%			12:34:28
1	Y RADIAL	5559.2	5559.2	112.7	%			12:34:28
1	Al 396.153Radial†	118710.5	115236.7	102210	ug/L	102210	ppb	12:34:08
1	Ca 317.933Radial†	11217.8	10874.4	18222	ug/L	18222	ppb	12:34:08
1	Fe 238.204 Radial†	13390.8	12982.1	114070	ug/L	114070	ppb	12:34:08
1	K 766.490 Radial†	76283.0	70696.8	14012	ug/L	14012	ppb	12:34:08
1	Mg 279.077 IEC†	565.3	547.0	17392	ug/L	17392	ppb	12:34:28
1	Na 589.592 Radial†	2138.9	3825.9	1155.7	ug/L	1155.7	ppb	12:34:08
1	Sr 421.552†	29815.6	28920.4	211.58	ug/L	211.58	ppb	12:34:08
1	Sc 361.383	906262.8	906262.8	102.22	%			12:35:26
1	Y 371.029	844898.9	844898.9	110.91	%			12:35:26
1	Ag 328.068†	-8055.0	-8392.7	3.0204	ug/L	3.0204	ppb	12:35:26
1	As 188.979†	-88.2	-52.9	43.248	ug/L	43.248	ppb	12:35:46
1	B 249.677†	765.9	1415.1	13.887	ug/L	13.887	ppb	12:35:26
1	Ba 233.527†	212579.0	207961.5	1519.9	ug/L	1519.9	ppb	12:35:26
1	Be 313.107†	-17027.3	-12306.5	6.1758	ug/L	6.1758	ppb	12:35:26
1	Cd 226.502†	1013.6	1230.0	0.2244	ug/L	0.2244	ppb	12:35:46
1	Co 228.616†	3307.2	3319.4	50.230	ug/L	50.230	ppb	12:35:46
1	Cr 267.716†	9418.1	9109.9	93.848	ug/L	93.848	ppb	12:35:46
1	Cu 324.752†	27229.5	18640.0	61.005	ug/L	61.005	ppb	12:35:26
1	Mn 257.610†	2836341.7	2774316.1	2934.2	ug/L	2934.2	ppb	12:35:26
1	Mo 202.031†	-66.8	-85.3	5.5896	ug/L	5.5896	ppb	12:35:46
1	Ni 231.604†	3364.1	3166.0	69.463	ug/L	69.463	ppb	12:35:46
1	P 214.914†	3054.9	2740.1	1269.4	ug/L	1269.4	ppb	12:35:46
1	Pb 220.353†	910.6	968.6	113.86	ug/L	113.86	ppb	12:35:46
1	S 181.975 Axial†	510.1	439.2	476.20	ug/L	476.20	ppb	12:35:46
1	Sb 206.836†	115.8	76.2	5.4235	ug/L	5.4235	ppb	12:35:46
1	Se 196.026†	-734.0	-684.8	16.283	ug/L	16.283	ppb	12:35:46
1	Si 251.611†	1055866.4	1032352.2	29610	ug/L	29610	ppb	12:35:26
1	Sn 189.927†	-112.3	-113.3	-13.282	ug/L	-13.282	ppb	12:35:46
1	Ti 334.940†	3385784.0	3314177.0	5259.2	ug/L	5259.2	ppb	12:35:26
1	Tl 190.801†	-266.7	-207.5	2.6835	ug/L	2.6835	ppb	12:35:46
1	U 409.014†	-9033.2	-6168.6	-197.91	ug/L	-197.91	ppb	12:35:26
1	V 292.402†	41982.1	42873.5	245.93	ug/L	245.93	ppb	12:35:26
1	Zn 213.857†	28008.9	26569.8	211.44	ug/L	211.44	ppb	12:35:46
1	SiO2†	1065725.0	1041977.6	63955	ug/L	63955	ppb	12:36:46
2	Sc Radial	4784.6	4784.6	103	%			12:34:53
2	Y RADIAL	5538.7	5538.7	112.3	%			12:34:53
2	Al 396.153Radial†	121304.3	118363.5	104980	ug/L	104980	ppb	12:34:33
2	Ca 317.933Radial†	11416.3	11124.4	18641	ug/L	18641	ppb	12:34:33
2	Fe 238.204 Radial†	13681.2	13332.7	117150	ug/L	117150	ppb	12:34:33
2	K 766.490 Radial†	77745.9	72507.2	14371	ug/L	14371	ppb	12:34:33
2	Mg 279.077 IEC†	561.5	546.1	17361	ug/L	17361	ppb	12:34:53
2	Na 589.592 Radial†	2258.4	3953.3	1194.2	ug/L	1194.2	ppb	12:34:33
2	Sr 421.552†	30466.2	29704.9	217.32	ug/L	217.32	ppb	12:34:33
2	Sc 361.383	887834.1	887834.1	100.14	%			12:35:53
2	Y 371.029	829871.4	829871.4	108.94	%			12:35:53
2	Ag 328.068†	-8097.8	-8599.0	3.1844	ug/L	3.1844	ppb	12:35:53
2	As 188.979†	-82.6	-49.1	45.881	ug/L	45.881	ppb	12:36:13
2	B 249.677†	786.2	1450.9	14.215	ug/L	14.215	ppb	12:35:53
2	Ba 233.527†	211984.6	211684.7	1547.1	ug/L	1547.1	ppb	12:35:53
2	Be 313.107†	-17084.9	-12709.8	6.2310	ug/L	6.2310	ppb	12:35:53
2	Cd 226.502†	971.5	1208.6	-0.2842	ug/L	-0.2842	ppb	12:36:13
2	Co 228.616†	3295.8	3375.3	51.038	ug/L	51.038	ppb	12:36:13
2	Cr 267.716†	9395.8	9278.9	95.608	ug/L	95.608	ppb	12:36:13
2	Cu 324.752†	27192.7	19156.1	62.690	ug/L	62.690	ppb	12:35:53
2	Mn 257.610†	2825543.3	2821129.7	2983.8	ug/L	2983.8	ppb	12:35:53
2	Mo 202.031†	-78.1	-97.9	5.0948	ug/L	5.0948	ppb	12:36:13
2	Ni 231.604†	3361.2	3231.5	70.900	ug/L	70.900	ppb	12:36:13

2	P 214.914†	3007.4	2754.7	1274.7 ug/L	1274.7 ppb	12:36:13
2	Pb 220.353†	909.4	985.9	116.01 ug/L	116.01 ppb	12:36:13
2	S 181.975 Axial†	518.6	458.0	496.91 ug/L	496.91 ppb	12:36:13
2	Sb 206.836†	96.0	58.8	-0.1051 ug/L	-0.1051 ppb	12:36:13
2	Se 196.026†	-702.6	-668.4	34.619 ug/L	34.619 ppb	12:36:13
2	Si 251.611†	1053347.1	1051277.7	30153 ug/L	30153 ppb	12:35:53
2	Sn 189.927†	-111.8	-115.0	-13.454 ug/L	-13.454 ppb	12:36:13
2	Ti 334.940†	3378434.0	3375591.6	5356.7 ug/L	5356.7 ppb	12:35:53
2	Tl 190.801†	-261.8	-208.0	3.6385 ug/L	3.6385 ppb	12:36:13
2	U 409.014†	-9159.3	-6477.9	-207.50 ug/L	-207.50 ppb	12:35:53
2	V 292.402†	41892.5	43636.6	250.11 ug/L	250.11 ppb	12:35:53
2	Zn 213.857†	27884.6	27014.4	214.93 ug/L	214.93 ppb	12:36:13
2	SiO2†	1059337.6	1057240.5	64892 ug/L	64892 ppb	12:36:52
3	Sc Radial	4774.4	4774.4	102 %		12:35:18
3	Y RADIAL	5518.6	5518.6	111.9 %		12:35:18
3	Al 396.153Radial†	119602.1	116951.8	103730 ug/L	103730 ppb	12:34:58
3	Ca 317.933Radial†	11252.6	10988.2	18413 ug/L	18413 ppb	12:34:58
3	Fe 238.204 Radial†	13454.7	13139.6	115460 ug/L	115460 ppb	12:34:58
3	K 766.490 Radial†	76664.1	71611.4	14193 ug/L	14193 ppb	12:34:58
3	Mg 279.077 IEC†	555.2	541.1	17202 ug/L	17202 ppb	12:35:18
3	Na 589.592 Radial†	2139.5	3841.8	1160.5 ug/L	1160.5 ppb	12:34:58
3	Sr 421.552†	29955.6	29269.1	214.13 ug/L	214.13 ppb	12:34:58
3	Sc 361.383	894149.2	894149.2	100.85 %		12:36:20
3	Y 371.029	835703.3	835703.3	109.71 %		12:36:20
3	Ag 328.068†	-8201.2	-8644.4	2.4212 ug/L	2.4212 ppb	12:36:20
3	As 188.979†	-95.8	-61.5	41.525 ug/L	41.525 ppb	12:36:40
3	B 249.677†	807.0	1466.1	14.751 ug/L	14.751 ppb	12:36:20
3	Ba 233.527†	214524.4	212707.9	1554.5 ug/L	1554.5 ppb	12:36:20
3	Be 313.107†	-17263.3	-12766.2	6.2756 ug/L	6.2756 ppb	12:36:20
3	Cd 226.502†	982.5	1212.5	-0.0774 ug/L	-0.0774 ppb	12:36:40
3	Co 228.616†	3336.1	3391.9	51.308 ug/L	51.308 ppb	12:36:40
3	Cr 267.716†	9453.8	9270.0	95.487 ug/L	95.487 ppb	12:36:40
3	Cu 324.752†	27538.0	19306.8	63.050 ug/L	63.050 ppb	12:36:20
3	Mn 257.610†	2860601.2	2835963.4	2999.3 ug/L	2999.3 ppb	12:36:20
3	Mo 202.031†	-91.5	-110.7	4.1340 ug/L	4.1340 ppb	12:36:40
3	Ni 231.604†	3370.0	3216.5	70.570 ug/L	70.570 ppb	12:36:40
3	P 214.914†	3046.0	2771.7	1283.9 ug/L	1283.9 ppb	12:36:40
3	Pb 220.353†	916.4	986.4	115.93 ug/L	115.93 ppb	12:36:40
3	S 181.975 Axial†	504.4	440.2	477.14 ug/L	477.14 ppb	12:36:40
3	Sb 206.836†	111.9	73.8	4.2839 ug/L	4.2839 ppb	12:36:40
3	Se 196.026†	-716.5	-677.2	24.694 ug/L	24.694 ppb	12:36:40
3	Si 251.611†	1066270.5	1056662.9	30308 ug/L	30308 ppb	12:36:20
3	Sn 189.927†	-114.6	-117.0	-13.792 ug/L	-13.792 ppb	12:36:40
3	Ti 334.940†	3423058.5	3396011.7	5389.1 ug/L	5389.1 ppb	12:36:20
3	Tl 190.801†	-281.1	-225.3	-0.7906 ug/L	-0.7906 ppb	12:36:40
3	U 409.014†	-8985.7	-6241.2	-200.25 ug/L	-200.25 ppb	12:36:20
3	V 292.402†	42256.6	43702.1	250.74 ug/L	250.74 ppb	12:36:20
3	Zn 213.857†	28088.1	27019.5	215.07 ug/L	215.07 ppb	12:36:40
3	SiO2†	1062397.9	1052803.5	64619 ug/L	64619 ppb	12:36:58

Mean Data: 243270008|935381|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	896082.1	101.07	%	1.056				1.05%
Sc Radial	4789.5	103	%	0.4				0.38%
Y 371.029	836824.5	109.85	%	0.995				0.91%
Y RADIAL	5538.8	112.3	%	0.41				0.37%
Ag 328.068†	-8545.3	2.8754	ug/L	0.40174	2.8754	ppb	0.40174	13.97%
Al 396.153Radial†	116850.7	103640	ug/L	1388.8	103640	ppb	1388.8	1.34%
As 188.979†	-54.5	43.551	ug/L	2.1935	43.551	ppb	2.1935	5.04%
B 249.677†	1444.0	14.284	ug/L	0.4363	14.284	ppb	0.4363	3.05%
Ba 233.527†	210784.7	1540.5	ug/L	18.25	1540.5	ppb	18.25	1.18%
Be 313.107†	-12594.2	6.2275	ug/L	0.05000	6.2275	ppb	0.05000	0.80%
Ca 317.933Radial†	10995.7	18425	ug/L	209.7	18425	ppb	209.7	1.14%
Cd 226.502†	1217.0	-0.0457	ug/L	0.25577	-0.0457	ppb	0.25577	559.41%
Co 228.616†	3362.2	50.859	ug/L	0.5612	50.859	ppb	0.5612	1.10%
Cr 267.716†	9219.6	94.981	ug/L	0.9831	94.981	ppb	0.9831	1.04%
Cu 324.752†	19034.3	62.249	ug/L	1.0917	62.249	ppb	1.0917	1.75%
Fe 238.204 Radial†	13151.5	115560	ug/L	1542.9	115560	ppb	1542.9	1.34%
K 766.490 Radial†	71605.1	14192	ug/L	179.6	14192	ppb	179.6	1.27%

Mg 279.077 IEC†	544.7	17318 ug/L	101.9	17318 ppb	101.9	0.59%
Mn 257.610†	2810469.7	2972.4 ug/L	34.01	2972.4 ppb	34.01	1.14%
Mo 202.031†	-98.0	4.9395 ug/L	0.74011	4.9395 ppb	0.74011	14.98%
Na 589.592 Radial†	3873.7	1170.2 ug/L	20.97	1170.2 ppb	20.97	1.79%
Ni 231.604†	3204.7	70.311 ug/L	0.7527	70.311 ppb	0.7527	1.07%
P 214.914†	2755.5	1276.0 ug/L	7.33	1276.0 ppb	7.33	0.57%
Pb 220.353†	980.3	115.27 ug/L	1.220	115.27 ppb	1.220	1.06%
S 181.975 Axial†	445.8	483.42 ug/L	11.693	483.42 ppb	11.693	2.42%
Sb 206.836†	69.6	3.2008 ug/L	2.91915	3.2008 ppb	2.91915	91.20%
Se 196.026†	-676.8	25.198 ug/L	9.1783	25.198 ppb	9.1783	36.42%
Si 251.611†	1046764.2	30024 ug/L	366.3	30024 ppb	366.3	1.22%
Sn 189.927†	-115.1	-13.509 ug/L	0.2595	-13.509 ppb	0.2595	1.92%
Sr 421.552†	29298.1	214.34 ug/L	2.876	214.34 ppb	2.876	1.34%
Ti 334.940†	3361926.8	5335.0 ug/L	67.59	5335.0 ppb	67.59	1.27%
Tl 190.801†	-213.6	1.8438 ug/L	2.33090	1.8438 ppb	2.33090	126.42%
U 409.014†	-6295.9	-201.89 ug/L	4.999	-201.89 ppb	4.999	2.48%
V 292.402†	43404.1	248.93 ug/L	2.617	248.93 ppb	2.617	1.05%
Zn 213.857†	26867.9	213.81 ug/L	2.053	213.81 ppb	2.053	0.96%
SiO2†	1050673.8	64489 ug/L	481.9	64489 ppb	481.9	0.75%

Sequence No.: 7
Sample ID: 243270009|935381|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 1/6/2010 12:39:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243270009|935381|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4750.4	4750.4	102	%			12:41:22
1	Y RADIAL	5540.6	5540.6	112.3	%			12:41:22
1	Al 396.153Radial†	131102.3	128843.5	114270	ug/L	114270	ppb	12:41:02
1	Ca 317.933Radial†	11551.8	11337.9	18998	ug/L	18998	ppb	12:41:02
1	Fe 238.204 Radial†	13785.0	13530.8	118890	ug/L	118890	ppb	12:41:02
1	K 766.490 Radial†	81749.5	76987.6	15269	ug/L	15269	ppb	12:41:02
1	Mg 279.077 IEC†	573.0	561.4	17849	ug/L	17849	ppb	12:41:22
1	Na 589.592 Radial†	2591.0	4295.9	1297.7	ug/L	1297.7	ppb	12:41:02
1	Sr 421.552†	30901.2	30346.5	222.01	ug/L	222.01	ppb	12:41:02
1	Sc 361.383	889622.0	889622.0	100.34	%			12:42:21
1	Y 371.029	839605.2	839605.2	110.22	%			12:42:21
1	Ag 328.068†	-8263.5	-8747.9	3.1121	ug/L	3.1121	ppb	12:42:21
1	As 188.979†	-87.6	-53.9	44.816	ug/L	44.816	ppb	12:42:41
1	B 249.677†	773.7	1436.9	13.710	ug/L	13.710	ppb	12:42:21
1	Ba 233.527†	188237.8	187592.9	1371.5	ug/L	1371.5	ppb	12:42:21
1	Be 313.107†	-16025.8	-11620.1	6.6845	ug/L	6.6845	ppb	12:42:21
1	Cd 226.502†	976.2	1211.2	-0.4313	ug/L	-0.4313	ppb	12:42:41
1	Co 228.616†	2980.7	3054.6	44.809	ug/L	44.809	ppb	12:42:41
1	Cr 267.716†	10312.0	10173.0	104.59	ug/L	104.59	ppb	12:42:41
1	Cu 324.752†	28738.9	20642.6	67.180	ug/L	67.180	ppb	12:42:21
1	Mn 257.610†	2304298.6	2295979.3	2430.7	ug/L	2430.7	ppb	12:42:21
1	Mo 202.031†	-85.1	-104.7	4.8357	ug/L	4.8357	ppb	12:42:41
1	Ni 231.604†	3496.9	3360.0	73.724	ug/L	73.724	ppb	12:42:41
1	P 214.914†	2489.6	2232.6	1021.2	ug/L	1021.2	ppb	12:42:41
1	Pb 220.353†	795.9	870.9	106.05	ug/L	106.05	ppb	12:42:41
1	S 181.975 Axial†	554.2	492.5	534.08	ug/L	534.08	ppb	12:42:41
1	Sb 206.836†	114.9	77.4	4.8714	ug/L	4.8714	ppb	12:42:41
1	Se 196.026†	-727.3	-691.6	29.527	ug/L	29.527	ppb	12:42:41
1	Si 251.611†	1180368.8	1175755.3	33724	ug/L	33724	ppb	12:42:21
1	Sn 189.927†	-115.1	-118.1	-13.839	ug/L	-13.839	ppb	12:42:41
1	Ti 334.940†	3412651.0	3402912.5	5400.1	ug/L	5400.1	ppb	12:42:21
1	Tl 190.801†	-248.2	-194.0	4.8533	ug/L	4.8533	ppb	12:42:41
1	U 409.014†	-9291.9	-6591.7	-211.12	ug/L	-211.12	ppb	12:42:21
1	V 292.402†	41485.3	43146.6	246.72	ug/L	246.72	ppb	12:42:21
1	Zn 213.857†	28718.8	27789.8	221.18	ug/L	221.18	ppb	12:42:41
1	SiO2†	1192602.0	1187927.6	72914	ug/L	72914	ppb	12:43:41
2	Sc Radial	4815.5	4815.5	103	%			12:41:47
2	Y RADIAL	5631.1	5631.1	114.2	%			12:41:47
2	Al 396.153Radial†	131139.7	127138.4	112760	ug/L	112760	ppb	12:41:27
2	Ca 317.933Radial†	11520.7	11154.3	18691	ug/L	18691	ppb	12:41:27
2	Fe 238.204 Radial†	13730.4	13294.8	116820	ug/L	116820	ppb	12:41:27
2	K 766.490 Radial†	81652.0	75807.3	15034	ug/L	15034	ppb	12:41:27
2	Mg 279.077 IEC†	567.3	548.2	17429	ug/L	17429	ppb	12:41:47
2	Na 589.592 Radial†	2574.7	4245.7	1282.5	ug/L	1282.5	ppb	12:41:27
2	Sr 421.552†	30859.6	29895.8	218.71	ug/L	218.71	ppb	12:41:27
2	Sc 361.383	893421.0	893421.0	100.77	%			12:42:48
2	Y 371.029	843363.3	843363.3	110.71	%			12:42:48
2	Ag 328.068†	-8399.9	-8848.2	1.9946	ug/L	1.9946	ppb	12:42:48
2	As 188.979†	-78.5	-44.5	47.986	ug/L	47.986	ppb	12:43:08
2	B 249.677†	844.4	1503.8	15.365	ug/L	15.365	ppb	12:42:48
2	Ba 233.527†	189743.7	188289.6	1376.5	ug/L	1376.5	ppb	12:42:48
2	Be 313.107†	-16405.2	-11928.6	6.6223	ug/L	6.6223	ppb	12:42:48
2	Cd 226.502†	997.5	1228.3	-0.0638	ug/L	-0.0638	ppb	12:43:08
2	Co 228.616†	2977.1	3038.3	44.491	ug/L	44.491	ppb	12:43:08
2	Cr 267.716†	10344.7	10161.8	104.45	ug/L	104.45	ppb	12:43:08
2	Cu 324.752†	29027.6	20807.2	67.562	ug/L	67.562	ppb	12:42:48
2	Mn 257.610†	2320670.3	2302460.9	2437.3	ug/L	2437.3	ppb	12:42:48
2	Mo 202.031†	-77.8	-97.1	5.1145	ug/L	5.1145	ppb	12:43:08
2	Ni 231.604†	3467.3	3315.8	72.753	ug/L	72.753	ppb	12:43:08

2	P 214.914†	2493.6	2226.1	1019.1 ug/L	1019.1 ppb	12:43:08
2	Pb 220.353†	841.3	912.6	110.19 ug/L	110.19 ppb	12:43:08
2	S 181.975 Axial†	554.3	490.2	531.78 ug/L	531.78 ppb	12:43:08
2	Sb 206.836†	103.1	65.2	1.1848 ug/L	1.1848 ppb	12:43:08
2	Se 196.026†	-725.2	-686.5	25.557 ug/L	25.557 ppb	12:43:08
2	Si 251.611†	1189470.5	1179785.3	33839 ug/L	33839 ppb	12:42:48
2	Sn 189.927†	-112.3	-114.8	-13.415 ug/L	-13.415 ppb	12:43:08
2	Ti 334.940†	3440817.0	3416401.4	5421.5 ug/L	5421.5 ppb	12:42:48
2	Tl 190.801†	-259.5	-204.2	2.2305 ug/L	2.2305 ppb	12:43:08
2	U 409.014†	-9115.9	-6377.7	-204.49 ug/L	-204.49 ppb	12:42:48
2	V 292.402†	41965.7	43447.5	248.91 ug/L	248.91 ppb	12:42:48
2	Zn 213.857†	28756.6	27705.7	220.61 ug/L	220.61 ppb	12:43:08
2	SiO2†	1189110.5	1179408.6	72391 ug/L	72391 ppb	12:43:47
3	Sc Radial	4764.3	4764.3	102 %		12:42:12
3	Y RADIAL	5577.6	5577.6	113.1 %		12:42:12
3	Al 396.153Radial†	131292.9	128654.2	114110 ug/L	114110 ppb	12:41:52
3	Ca 317.933Radial†	11551.2	11304.2	18942 ug/L	18942 ppb	12:41:52
3	Fe 238.204 Radial†	13814.7	13520.3	118800 ug/L	118800 ppb	12:41:52
3	K 766.490 Radial†	81691.2	76696.0	15211 ug/L	15211 ppb	12:41:52
3	Mg 279.077 IEC†	575.5	562.1	17872 ug/L	17872 ppb	12:42:12
3	Na 589.592 Radial†	2616.6	4313.6	1303.0 ug/L	1303.0 ppb	12:41:52
3	Sr 421.552†	31076.0	30429.1	222.62 ug/L	222.62 ppb	12:41:52
3	Sc 361.383	900698.8	900698.8	101.59 %		12:43:15
3	Y 371.029	850280.4	850280.4	111.62 %		12:43:15
3	Ag 328.068†	-8340.1	-8722.0	3.1919 ug/L	3.1919 ppb	12:43:15
3	As 188.979†	-78.9	-44.3	48.182 ug/L	48.182 ppb	12:43:35
3	B 249.677†	754.2	1408.3	13.134 ug/L	13.134 ppb	12:43:15
3	Ba 233.527†	190474.3	187487.3	1370.7 ug/L	1370.7 ppb	12:43:15
3	Be 313.107†	-16279.3	-11673.2	6.6656 ug/L	6.6656 ppb	12:43:15
3	Cd 226.502†	964.6	1187.9	-0.6434 ug/L	-0.6434 ppb	12:43:35
3	Co 228.616†	2965.7	3003.2	43.848 ug/L	43.848 ppb	12:43:35
3	Cr 267.716†	10277.3	10012.5	102.98 ug/L	102.98 ppb	12:43:35
3	Cu 324.752†	29166.2	20710.9	67.378 ug/L	67.378 ppb	12:43:15
3	Mn 257.610†	2330473.5	2293502.4	2428.1 ug/L	2428.1 ppb	12:43:15
3	Mo 202.031†	-74.6	-93.4	5.5363 ug/L	5.5363 ppb	12:43:35
3	Ni 231.604†	3433.4	3254.7	71.412 ug/L	71.412 ppb	12:43:35
3	P 214.914†	2488.1	2200.6	1005.6 ug/L	1005.6 ppb	12:43:35
3	Pb 220.353†	820.6	885.6	107.53 ug/L	107.53 ppb	12:43:35
3	S 181.975 Axial†	549.9	481.4	521.61 ug/L	521.61 ppb	12:43:35
3	Sb 206.836†	112.4	73.6	3.7800 ug/L	3.7800 ppb	12:43:35
3	Se 196.026†	-717.2	-672.7	38.901 ug/L	38.901 ppb	12:43:35
3	Si 251.611†	1194688.7	1175384.1	33713 ug/L	33713 ppb	12:43:15
3	Sn 189.927†	-112.7	-114.3	-13.292 ug/L	-13.292 ppb	12:43:35
3	Ti 334.940†	3454811.6	3402586.8	5399.5 ug/L	5399.5 ppb	12:43:15
3	Tl 190.801†	-249.7	-192.4	5.2622 ug/L	5.2622 ppb	12:43:35
3	U 409.014†	-9312.9	-6498.5	-208.33 ug/L	-208.33 ppb	12:43:15
3	V 292.402†	42033.2	43177.6	246.94 ug/L	246.94 ppb	12:43:15
3	Zn 213.857†	28557.2	27278.8	216.99 ug/L	216.99 ppb	12:43:35
3	SiO2†	1181220.5	1162107.1	71329 ug/L	71329 ppb	12:43:53

Mean Data: 243270009|935381|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	894580.6	100.90	%	0.635				0.63%
Sc Radial	4776.7	102	%	0.7				0.72%
Y 371.029	844416.3	110.85	%	0.711				0.64%
Y RADIAL	5583.1	113.2	%	0.92				0.82%
Ag 328.068†	-8772.7	2.7662	ug/L	0.66943	2.7662	ppb	0.66943	24.20%
Al 396.153Radial†	128212.0	113710	ug/L	828.9	113710	ppb	828.9	0.73%
As 188.979†	-47.6	46.994	ug/L	1.8894	46.994	ppb	1.8894	4.02%
B 249.677†	1449.7	14.070	ug/L	1.1580	14.070	ppb	1.1580	8.23%
Ba 233.527†	187789.9	1372.9	ug/L	3.15	1372.9	ppb	3.15	0.23%
Be 313.107†	-11740.6	6.6575	ug/L	0.03189	6.6575	ppb	0.03189	0.48%
Ca 317.933Radial†	11265.4	18877	ug/L	163.8	18877	ppb	163.8	0.87%
Cd 226.502†	1209.1	-0.3795	ug/L	0.29325	-0.3795	ppb	0.29325	77.26%
Co 228.616†	3032.0	44.383	ug/L	0.4894	44.383	ppb	0.4894	1.10%
Cr 267.716†	10115.8	104.01	ug/L	0.890	104.01	ppb	0.890	0.86%
Cu 324.752†	20720.3	67.373	ug/L	0.1909	67.373	ppb	0.1909	0.28%
Fe 238.204 Radial†	13448.6	118170	ug/L	1171.4	118170	ppb	1171.4	0.99%
K 766.490 Radial†	76497.0	15171	ug/L	122.2	15171	ppb	122.2	0.81%

Mg 279.077 IEC†	557.3	17717	ug/L	249.2	17717	ppb	249.2	1.41%
Mn 257.610†	2297314.2	2432.0	ug/L	4.77	2432.0	ppb	4.77	0.20%
Mo 202.031†	-98.4	5.1622	ug/L	0.35273	5.1622	ppb	0.35273	6.83%
Na 589.592 Radial†	4285.1	1294.4	ug/L	10.63	1294.4	ppb	10.63	0.82%
Ni 231.604†	3310.2	72.630	ug/L	1.1610	72.630	ppb	1.1610	1.60%
P 214.914†	2219.8	1015.3	ug/L	8.47	1015.3	ppb	8.47	0.83%
Pb 220.353†	889.7	107.92	ug/L	2.102	107.92	ppb	2.102	1.95%
S 181.975 Axial†	488.0	529.16	ug/L	6.637	529.16	ppb	6.637	1.25%
Sb 206.836†	72.1	3.2787	ug/L	1.89373	3.2787	ppb	1.89373	57.76%
Se 196.026†	-683.6	31.328	ug/L	6.8516	31.328	ppb	6.8516	21.87%
Si 251.611†	1176974.9	33759	ug/L	70.1	33759	ppb	70.1	0.21%
Sn 189.927†	-115.7	-13.515	ug/L	0.2870	-13.515	ppb	0.2870	2.12%
Sr 421.552†	30223.8	221.11	ug/L	2.100	221.11	ppb	2.100	0.95%
Ti 334.940†	3407300.2	5407.0	ug/L	12.50	5407.0	ppb	12.50	0.23%
Tl 190.801†	-196.9	4.1153	ug/L	1.64509	4.1153	ppb	1.64509	39.97%
U 409.014†	-6489.3	-207.98	ug/L	3.325	-207.98	ppb	3.325	1.60%
V 292.402†	43257.2	247.52	ug/L	1.205	247.52	ppb	1.205	0.49%
Zn 213.857†	27591.4	219.59	ug/L	2.270	219.59	ppb	2.270	1.03%
SiO2†	1176481.1	72211	ug/L	807.7	72211	ppb	807.7	1.12%

Sequence No.: 8
Sample ID: 243270010|935381|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 45
Date Collected: 1/6/2010 12:46:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243270010|935381|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4806.9	4806.9	103	%			12:48:16
1	Y RADIAL	5759.5	5759.5	116.8	%			12:48:16
1	Al 396.153Radial†	154394.8	149947.5	132990	ug/L	132990	ppb	12:47:56
1	Ca 317.933Radial†	13128.6	12735.6	21341	ug/L	21341	ppb	12:47:56
1	Fe 238.204 Radial†	14726.7	14286.1	125530	ug/L	125530	ppb	12:47:56
1	K 766.490 Radial†	92719.9	86696.3	17197	ug/L	17197	ppb	12:47:56
1	Mg 279.077 IEC†	649.7	629.2	20012	ug/L	20012	ppb	12:48:16
1	Na 589.592 Radial†	2812.2	4480.9	1353.6	ug/L	1353.6	ppb	12:47:56
1	Sr 421.552†	34422.2	33408.7	244.41	ug/L	244.41	ppb	12:47:56
1	Sc 361.383	870415.4	870415.4	98.173	%			12:49:20
1	Y 371.029	815807.9	815807.9	107.10	%			12:49:20
1	Ag 328.068†	-8976.8	-9656.2	1.5072	ug/L	1.5072	ppb	12:49:20
1	As 188.979†	-97.7	-66.1	44.157	ug/L	44.157	ppb	12:49:40
1	B 249.677†	1022.7	1707.5	18.404	ug/L	18.404	ppb	12:49:20
1	Ba 233.527†	202449.3	206208.4	1507.4	ug/L	1507.4	ppb	12:49:20
1	Be 313.107†	-12897.2	-8785.6	8.2470	ug/L	8.2470	ppb	12:49:20
1	Cd 226.502†	1088.7	1347.3	0.1885	ug/L	0.1885	ppb	12:49:40
1	Co 228.616†	3039.1	3179.6	46.470	ug/L	46.470	ppb	12:49:40
1	Cr 267.716†	10467.0	10557.7	108.62	ug/L	108.62	ppb	12:49:40
1	Cu 324.752†	30558.6	23128.2	74.878	ug/L	74.878	ppb	12:49:20
1	Mn 257.610†	2347469.7	2390628.1	2531.0	ug/L	2531.0	ppb	12:49:14
1	Mo 202.031†	-87.4	-109.0	5.2047	ug/L	5.2047	ppb	12:49:40
1	Ni 231.604†	3537.6	3478.4	76.321	ug/L	76.321	ppb	12:49:40
1	P 214.914†	2566.9	2366.1	1086.0	ug/L	1086.0	ppb	12:49:40
1	Pb 220.353†	914.5	1009.2	124.02	ug/L	124.02	ppb	12:49:40
1	S 181.975 Axial†	629.6	581.5	630.98	ug/L	630.98	ppb	12:49:40
1	Sb 206.836†	107.4	72.3	1.9900	ug/L	1.9900	ppb	12:49:40
1	Se 196.026†	-781.2	-762.4	16.630	ug/L	16.630	ppb	12:49:40
1	Si 251.611†	1227707.2	1249932.2	35851	ug/L	35851	ppb	12:49:14
1	Sn 189.927†	-136.1	-142.0	-17.038	ug/L	-17.038	ppb	12:49:40
1	Ti 334.940†	3529243.6	3596722.7	5707.7	ug/L	5707.7	ppb	12:49:14
1	Tl 190.801†	-261.5	-213.0	3.0373	ug/L	3.0373	ppb	12:49:40
1	U 409.014†	-9210.5	-6713.1	-215.57	ug/L	-215.57	ppb	12:49:20
1	V 292.402†	44960.2	47598.5	273.35	ug/L	273.35	ppb	12:49:20
1	Zn 213.857†	30855.7	30598.1	243.82	ug/L	243.82	ppb	12:49:40
1	SiO2†	1249653.9	1272267.7	78090	ug/L	78090	ppb	12:50:49
2	Sc Radial	4786.0	4786.0	103	%			12:48:42
2	Y RADIAL	5720.1	5720.1	116.0	%			12:48:42
2	Al 396.153Radial†	153692.0	149916.3	132960	ug/L	132960	ppb	12:48:21
2	Ca 317.933Radial†	13036.1	12701.0	21283	ug/L	21283	ppb	12:48:21
2	Fe 238.204 Radial†	14683.6	14306.5	125710	ug/L	125710	ppb	12:48:21
2	K 766.490 Radial†	92220.5	86602.2	17178	ug/L	17178	ppb	12:48:21
2	Mg 279.077 IEC†	639.7	622.2	19787	ug/L	19787	ppb	12:48:42
2	Na 589.592 Radial†	2829.1	4509.2	1362.1	ug/L	1362.1	ppb	12:48:21
2	Sr 421.552†	34154.8	33293.8	243.57	ug/L	243.57	ppb	12:48:21
2	Sc 361.383	864358.6	864358.6	97.490	%			12:49:51
2	Y 371.029	811847.6	811847.6	106.58	%			12:49:51
2	Ag 328.068†	-8955.0	-9697.9	1.3958	ug/L	1.3958	ppb	12:49:51
2	As 188.979†	-87.1	-55.9	48.568	ug/L	48.568	ppb	12:50:11
2	B 249.677†	990.6	1681.9	17.851	ug/L	17.851	ppb	12:49:51
2	Ba 233.527†	201145.7	206316.3	1508.2	ug/L	1508.2	ppb	12:49:51
2	Be 313.107†	-12684.5	-8659.6	8.4781	ug/L	8.4781	ppb	12:49:51
2	Cd 226.502†	1106.7	1373.6	0.4186	ug/L	0.4186	ppb	12:50:11
2	Co 228.616†	3037.4	3199.6	46.640	ug/L	46.640	ppb	12:50:11
2	Cr 267.716†	10482.8	10648.7	109.53	ug/L	109.53	ppb	12:50:11
2	Cu 324.752†	30335.8	23117.8	74.856	ug/L	74.856	ppb	12:49:51
2	Mn 257.610†	2366825.2	2427237.1	2569.6	ug/L	2569.6	ppb	12:49:46
2	Mo 202.031†	-77.6	-99.5	5.8145	ug/L	5.8145	ppb	12:50:11
2	Ni 231.604†	3540.9	3506.9	76.948	ug/L	76.948	ppb	12:50:11

2	P 214.914†	2584.9	2402.9	1103.9 ug/L	1103.9 ppb	12:50:11
2	Pb 220.353†	865.5	965.6	119.48 ug/L	119.48 ppb	12:50:11
2	S 181.975 Axial†	628.9	585.2	635.21 ug/L	635.21 ppb	12:50:11
2	Sb 206.836†	98.1	63.5	-0.8424 ug/L	-0.8424 ppb	12:50:11
2	Se 196.026†	-778.7	-765.5	15.624 ug/L	15.624 ppb	12:50:11
2	Si 251.611†	1239339.7	1270627.0	36445 ug/L	36445 ppb	12:49:46
2	Sn 189.927†	-114.4	-120.7	-13.892 ug/L	-13.892 ppb	12:50:11
2	Ti 334.940†	3563620.8	3657175.2	5803.6 ug/L	5803.6 ppb	12:49:46
2	Tl 190.801†	-252.2	-205.3	6.0923 ug/L	6.0923 ppb	12:50:11
2	U 409.014†	-9349.2	-6921.2	-221.78 ug/L	-221.78 ppb	12:49:51
2	V 292.402†	44719.8	47672.9	273.68 ug/L	273.68 ppb	12:49:51
2	Zn 213.857†	30872.2	30835.3	245.77 ug/L	245.77 ppb	12:50:11
2	SiO2†	1251135.2	1282706.7	78731 ug/L	78731 ppb	12:50:55
3	Sc Radial	4740.2	4740.2	102 %		12:49:07
3	Y RADIAL	5683.4	5683.4	115.2 %		12:49:07
3	Al 396.153Radial†	156433.5	154062.1	136640 ug/L	136640 ppb	12:48:47
3	Ca 317.933Radial†	13254.6	13038.8	21849 ug/L	21849 ppb	12:48:47
3	Fe 238.204 Radial†	14879.9	14637.9	128620 ug/L	128620 ppb	12:48:47
3	K 766.490 Radial†	93450.1	88680.9	17590 ug/L	17590 ppb	12:48:47
3	Mg 279.077 IEC†	636.1	624.7	19864 ug/L	19864 ppb	12:49:07
3	Na 589.592 Radial†	2875.2	4581.2	1383.9 ug/L	1383.9 ppb	12:48:47
3	Sr 421.552†	34803.8	34254.2	250.60 ug/L	250.60 ppb	12:48:47
3	Sc 361.383	868907.9	868907.9	98.003 %		12:50:23
3	Y 371.029	815145.0	815145.0	107.01 %		12:50:23
3	Ag 328.068†	-9059.8	-9756.7	2.1039 ug/L	2.1039 ppb	12:50:23
3	As 188.979†	-91.5	-60.0	48.413 ug/L	48.413 ppb	12:50:43
3	B 249.677†	1021.6	1708.2	18.009 ug/L	18.009 ppb	12:50:23
3	Ba 233.527†	201848.7	205953.3	1505.7 ug/L	1505.7 ppb	12:50:23
3	Be 313.107†	-12824.1	-8733.9	8.6475 ug/L	8.6475 ppb	12:50:23
3	Cd 226.502†	1096.9	1357.6	-0.0239 ug/L	-0.0239 ppb	12:50:43
3	Co 228.616†	3009.9	3155.2	45.550 ug/L	45.550 ppb	12:50:43
3	Cr 267.716†	10391.3	10498.9	108.08 ug/L	108.08 ppb	12:50:43
3	Cu 324.752†	30520.0	23142.8	75.079 ug/L	75.079 ppb	12:50:23
3	Mn 257.610†	2418661.0	2467418.1	2612.2 ug/L	2612.2 ppb	12:50:18
3	Mo 202.031†	-103.5	-125.6	4.4622 ug/L	4.4622 ppb	12:50:43
3	Ni 231.604†	3523.2	3469.9	76.135 ug/L	76.135 ppb	12:50:43
3	P 214.914†	2579.9	2383.9	1093.5 ug/L	1093.5 ppb	12:50:43
3	Pb 220.353†	901.3	997.4	123.36 ug/L	123.36 ppb	12:50:43
3	S 181.975 Axial†	622.1	574.9	622.85 ug/L	622.85 ppb	12:50:43
3	Sb 206.836†	96.5	61.4	-1.8425 ug/L	-1.8425 ppb	12:50:43
3	Se 196.026†	-784.2	-766.9	24.413 ug/L	24.413 ppb	12:50:43
3	Si 251.611†	1268481.6	1293706.8	37107 ug/L	37107 ppb	12:50:18
3	Sn 189.927†	-127.0	-133.0	-15.611 ug/L	-15.611 ppb	12:50:43
3	Ti 334.940†	3643495.9	3719539.4	5902.6 ug/L	5902.6 ppb	12:50:18
3	Tl 190.801†	-265.1	-217.1	3.9841 ug/L	3.9841 ppb	12:50:43
3	U 409.014†	-9287.6	-6808.1	-218.78 ug/L	-218.78 ppb	12:50:23
3	V 292.402†	44901.6	47618.2	272.77 ug/L	272.77 ppb	12:50:23
3	Zn 213.857†	30623.6	30415.8	242.17 ug/L	242.17 ppb	12:50:43
3	SiO2†	1232185.8	1256652.1	77131 ug/L	77131 ppb	12:51:01

Mean Data: 243270010|935381|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	867894.0	97.889	%	0.3556				0.36%
Sc Radial	4777.7	102	%	0.7				0.71%
Y 371.029	814266.9	106.89	%	0.278				0.26%
Y RADIAL	5721.0	116.0	%	0.77				0.66%
Ag 328.068†	-9703.6	1.6690	ug/L	0.38080	1.6690	ppb	0.38080	22.82%
Al 396.153Radial†	151308.6	134200	ug/L	2115.0	134200	ppb	2115.0	1.58%
As 188.979†	-60.7	47.046	ug/L	2.5030	47.046	ppb	2.5030	5.32%
B 249.677†	1699.2	18.088	ug/L	0.2847	18.088	ppb	0.2847	1.57%
Ba 233.527†	206159.3	1507.1	ug/L	1.32	1507.1	ppb	1.32	0.09%
Be 313.107†	-8726.3	8.4575	ug/L	0.20104	8.4575	ppb	0.20104	2.38%
Ca 317.933Radial†	12825.1	21491	ug/L	311.4	21491	ppb	311.4	1.45%
Cd 226.502†	1359.5	0.1944	ug/L	0.22132	0.1944	ppb	0.22132	113.84%
Co 228.616†	3178.2	46.220	ug/L	0.5868	46.220	ppb	0.5868	1.27%
Cr 267.716†	10568.4	108.75	ug/L	0.733	108.75	ppb	0.733	0.67%
Cu 324.752†	23129.6	74.937	ug/L	0.1228	74.937	ppb	0.1228	0.16%
Fe 238.204 Radial†	14410.2	126620	ug/L	1735.4	126620	ppb	1735.4	1.37%
K 766.490 Radial†	87326.5	17322	ug/L	232.9	17322	ppb	232.9	1.34%

Mg 279.077 IEC†	625.4	19887 ug/L	114.6	19887 ppb	114.6	0.58%
Mn 257.610†	2428427.7	2571.0 ug/L	40.63	2571.0 ppb	40.63	1.58%
Mo 202.031†	-111.4	5.1605 ug/L	0.67721	5.1605 ppb	0.67721	13.12%
Na 589.592 Radial†	4523.8	1366.5 ug/L	15.63	1366.5 ppb	15.63	1.14%
Ni 231.604†	3485.1	76.468 ug/L	0.4256	76.468 ppb	0.4256	0.56%
P 214.914†	2384.3	1094.5 ug/L	8.96	1094.5 ppb	8.96	0.82%
Pb 220.353†	990.7	122.29 ug/L	2.453	122.29 ppb	2.453	2.01%
S 181.975 Axial†	580.5	629.68 ug/L	6.284	629.68 ppb	6.284	1.00%
Sb 206.836†	65.7	-0.2316 ug/L	1.98792	-0.2316 ppb	1.98792	858.24%
Se 196.026†	-764.9	18.889 ug/L	4.8104	18.889 ppb	4.8104	25.47%
Si 251.611†	1271422.0	36467 ug/L	628.1	36467 ppb	628.1	1.72%
Sn 189.927†	-131.9	-15.513 ug/L	1.5750	-15.513 ppb	1.5750	10.15%
Sr 421.552†	33652.3	246.19 ug/L	3.837	246.19 ppb	3.837	1.56%
Ti 334.940†	3657812.5	5804.6 ug/L	97.45	5804.6 ppb	97.45	1.68%
Tl 190.801†	-211.8	4.3712 ug/L	1.56388	4.3712 ppb	1.56388	35.78%
U 409.014†	-6814.1	-218.71 ug/L	3.106	-218.71 ppb	3.106	1.42%
V 292.402†	47629.9	273.27 ug/L	0.461	273.27 ppb	0.461	0.17%
Zn 213.857†	30616.4	243.92 ug/L	1.801	243.92 ppb	1.801	0.74%
SiO2†	1270542.2	77984 ug/L	805.1	77984 ppb	805.1	1.03%

Sequence No.: 10
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/6/2010 13:00:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4856.0	4856.0	104	%			13:01:59
1	Y RADIAL	5121.0	5121.0	103.8	%			13:01:59
1	Al 396.153Radial†	5697.4	5503.1	4858.6	ug/L	4858.6	ppb	13:01:59
1	Ca 317.933Radial†	3059.6	2928.3	4906.9	ug/L	4906.9	ppb	13:02:19
1	Fe 238.204 Radial†	578.8	542.4	4782.6	ug/L	4782.6	ppb	13:02:19
1	K 766.490 Radial†	28302.2	23867.6	4729.0	ug/L	4729.0	ppb	13:01:59
1	Mg 279.077 IEC†	164.4	156.4	5006.5	ug/L	5006.5	ppb	13:02:19
1	Na 589.592 Radial†	31958.0	32468.4	9808.0	ug/L	9808.0	ppb	13:01:59
1	Sr 421.552†	69958.6	67228.8	492.18	ug/L	492.18	ppb	13:01:59
1	Sc 361.383	842039.2	842039.2	94.973	%			13:03:18
1	Y 371.029	715710.2	715710.2	93.955	%			13:03:18
1	Ag 328.068†	114518.0	120067.2	518.88	ug/L	518.88	ppb	13:03:18
1	As 188.979†	1365.3	1471.0	519.37	ug/L	519.37	ppb	13:03:38
1	B 249.677†	22939.8	24819.9	509.82	ug/L	509.82	ppb	13:03:18
1	Ba 233.527†	67506.8	71072.5	519.52	ug/L	519.52	ppb	13:03:18
1	Be 313.107†	1460375.3	1542026.6	522.23	ug/L	522.23	ppb	13:03:18
1	Cd 226.502†	51942.2	54929.9	517.20	ug/L	517.20	ppb	13:03:18
1	Co 228.616†	25997.5	27457.5	516.41	ug/L	516.41	ppb	13:03:38
1	Cr 267.716†	48970.5	51458.5	516.41	ug/L	516.41	ppb	13:03:18
1	Cu 324.752†	173918.9	175125.7	518.73	ug/L	518.73	ppb	13:03:18
1	Mn 257.610†	471957.9	496422.9	523.44	ug/L	523.44	ppb	13:03:18
1	Mo 202.031†	7903.7	8302.2	520.56	ug/L	520.56	ppb	13:03:38
1	Ni 231.604†	22421.0	23482.7	515.17	ug/L	515.17	ppb	13:03:38
1	P 214.914†	5291.9	5323.4	2517.0	ug/L	2517.0	ppb	13:03:38
1	Pb 220.353†	4699.1	5025.6	522.20	ug/L	522.20	ppb	13:03:38
1	S 181.975 Axial†	932.7	922.2	1041.3	ug/L	1041.3	ppb	13:03:38
1	Sb 206.836†	1677.4	1729.1	523.96	ug/L	523.96	ppb	13:03:38
1	Se 196.026†	933.1	1015.8	536.88	ug/L	536.88	ppb	13:03:38
1	Si 251.611†	86436.0	90394.6	2580.9	ug/L	2580.9	ppb	13:03:18
1	Sn 189.927†	3316.2	3488.3	516.54	ug/L	516.54	ppb	13:03:38
1	Ti 334.940†	313158.3	331551.6	525.89	ug/L	525.89	ppb	13:03:18
1	Tl 190.801†	1738.2	1883.6	517.98	ug/L	517.98	ppb	13:03:38
1	U 409.014†	13404.7	16783.0	497.34	ug/L	497.34	ppb	13:03:18
1	V 292.402†	76181.2	82015.4	521.87	ug/L	521.87	ppb	13:03:18
1	Zn 213.857†	60758.2	63142.5	514.84	ug/L	514.84	ppb	13:03:18
1	SiO2†	86463.8	90404.4	5523.1	ug/L	5523.1	ppb	13:04:39
2	Sc Radial	4805.7	4805.7	103	%			13:02:24
2	Y RADIAL	5062.2	5062.2	102.6	%			13:02:24
2	Al 396.153Radial†	5749.5	5611.0	4955.1	ug/L	4955.1	ppb	13:02:24
2	Ca 317.933Radial†	3033.6	2933.9	4916.2	ug/L	4916.2	ppb	13:02:44
2	Fe 238.204 Radial†	577.5	547.0	4822.3	ug/L	4822.3	ppb	13:02:44
2	K 766.490 Radial†	28602.5	24443.8	4843.6	ug/L	4843.6	ppb	13:02:24
2	Mg 279.077 IEC†	163.4	157.0	5027.1	ug/L	5027.1	ppb	13:02:44
2	Na 589.592 Radial†	32358.7	33178.9	10023	ug/L	10023	ppb	13:02:24
2	Sr 421.552†	70895.8	68842.4	504.00	ug/L	504.00	ppb	13:02:24
2	Sc 361.383	874072.2	874072.2	98.586	%			13:03:46
2	Y 371.029	742675.6	742675.6	97.495	%			13:03:46
2	Ag 328.068†	112980.0	114088.2	493.13	ug/L	493.13	ppb	13:03:46
2	As 188.979†	1374.2	1427.3	503.90	ug/L	503.90	ppb	13:04:06
2	B 249.677†	22603.2	23593.2	484.58	ug/L	484.58	ppb	13:03:46
2	Ba 233.527†	66392.4	67337.2	492.22	ug/L	492.22	ppb	13:03:46
2	Be 313.107†	1437065.2	1462029.4	495.14	ug/L	495.14	ppb	13:03:46
2	Cd 226.502†	50968.4	51937.9	489.00	ug/L	489.00	ppb	13:03:46
2	Co 228.616†	25908.2	26363.8	495.85	ug/L	495.85	ppb	13:04:06
2	Cr 267.716†	48182.3	48769.4	489.43	ug/L	489.43	ppb	13:03:46
2	Cu 324.752†	171662.5	166125.8	492.08	ug/L	492.08	ppb	13:03:46
2	Mn 257.610†	464646.5	470794.8	496.44	ug/L	496.44	ppb	13:03:46
2	Mo 202.031†	7877.6	7970.6	499.80	ug/L	499.80	ppb	13:04:06
2	Ni 231.604†	22351.7	22547.2	494.65	ug/L	494.65	ppb	13:04:06

2	P 214.914†	5282.5	5109.7	2416.9 ug/L	2416.9 ppb	13:04:06
2	Pb 220.353†	4655.9	4800.4	498.86 ug/L	498.86 ppb	13:04:06
2	S 181.975 Axial†	925.7	879.1	992.57 ug/L	992.57 ppb	13:04:06
2	Sb 206.836†	1683.0	1670.0	506.21 ug/L	506.21 ppb	13:04:06
2	Se 196.026†	942.5	989.3	523.42 ug/L	523.42 ppb	13:04:06
2	Si 251.611†	85091.3	85695.2	2446.4 ug/L	2446.4 ppb	13:03:46
2	Sn 189.927†	3322.8	3367.1	498.60 ug/L	498.60 ppb	13:04:06
2	Ti 334.940†	308868.6	315116.3	499.84 ug/L	499.84 ppb	13:03:46
2	Tl 190.801†	1762.5	1841.2	506.21 ug/L	506.21 ppb	13:04:06
2	U 409.014†	13158.3	16015.7	474.57 ug/L	474.57 ppb	13:03:46
2	V 292.402†	75003.8	77881.4	495.61 ug/L	495.61 ppb	13:03:46
2	Zn 213.857†	59690.5	59715.0	486.82 ug/L	486.82 ppb	13:03:46
2	SiO2†	87595.3	88215.7	5389.6 ug/L	5389.6 ppb	13:04:44
3	Sc Radial	4717.8	4717.8	101 %		13:02:50
3	Y RADIAL	4979.5	4979.5	100.9 %		13:02:50
3	Al 396.153Radial†	5700.2	5666.2	5004.1 ug/L	5004.1 ppb	13:02:50
3	Ca 317.933Radial†	3031.7	2986.8	5005.0 ug/L	5005.0 ppb	13:03:10
3	Fe 238.204 Radial†	577.5	557.4	4913.7 ug/L	4913.7 ppb	13:03:10
3	K 766.490 Radial†	28171.1	24534.3	4861.4 ug/L	4861.4 ppb	13:02:50
3	Mg 279.077 IEC†	161.3	157.9	5056.0 ug/L	5056.0 ppb	13:03:10
3	Na 589.592 Radial†	31937.2	33347.1	10073 ug/L	10073 ppb	13:02:50
3	Sr 421.552†	69652.2	68894.3	504.37 ug/L	504.37 ppb	13:02:50
3	Sc 361.383	873987.6	873987.6	98.576 %		13:04:13
3	Y 371.029	742146.3	742146.3	97.426 %		13:04:13
3	Ag 328.068†	114711.1	115855.4	500.78 ug/L	500.78 ppb	13:04:13
3	As 188.979†	1371.9	1425.1	503.21 ug/L	503.21 ppb	13:04:33
3	B 249.677†	23028.3	24026.7	493.50 ug/L	493.50 ppb	13:04:13
3	Ba 233.527†	67698.4	68668.6	501.95 ug/L	501.95 ppb	13:04:13
3	Be 313.107†	1463549.1	1489036.8	504.28 ug/L	504.28 ppb	13:04:13
3	Cd 226.502†	52057.4	53047.6	499.44 ug/L	499.44 ppb	13:04:13
3	Co 228.616†	25979.4	26438.6	497.24 ug/L	497.24 ppb	13:04:33
3	Cr 267.716†	48922.0	49524.5	497.01 ug/L	497.01 ppb	13:04:13
3	Cu 324.752†	174448.1	168968.4	500.50 ug/L	500.50 ppb	13:04:13
3	Mn 257.610†	472896.4	479209.5	505.31 ug/L	505.31 ppb	13:04:13
3	Mo 202.031†	7888.3	7982.3	500.54 ug/L	500.54 ppb	13:04:33
3	Ni 231.604†	22358.9	22556.8	494.86 ug/L	494.86 ppb	13:04:33
3	P 214.914†	5279.2	5106.9	2414.0 ug/L	2414.0 ppb	13:04:33
3	Pb 220.353†	4680.4	4825.8	501.48 ug/L	501.48 ppb	13:04:33
3	S 181.975 Axial†	927.0	880.5	994.10 ug/L	994.10 ppb	13:04:33
3	Sb 206.836†	1676.1	1663.2	503.95 ug/L	503.95 ppb	13:04:33
3	Se 196.026†	926.0	972.6	515.15 ug/L	515.15 ppb	13:04:33
3	Si 251.611†	86441.6	87073.4	2486.0 ug/L	2486.0 ppb	13:04:13
3	Sn 189.927†	3297.2	3341.5	494.83 ug/L	494.83 ppb	13:04:33
3	Ti 334.940†	313960.0	320311.5	508.08 ug/L	508.08 ppb	13:04:13
3	Tl 190.801†	1765.9	1844.8	507.28 ug/L	507.28 ppb	13:04:33
3	U 409.014†	13331.1	16192.3	479.80 ug/L	479.80 ppb	13:04:13
3	V 292.402†	76340.9	79245.2	504.17 ug/L	504.17 ppb	13:04:13
3	Zn 213.857†	60884.5	60932.1	496.81 ug/L	496.81 ppb	13:04:13
3	SiO2†	86336.1	86946.9	5311.7 ug/L	5311.7 ppb	13:04:49

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	863366.3	97.378	%	2.0832				2.14%
Sc Radial	4793.2	103	%	1.5				1.46%
Y 371.029	733510.7	96.292	%	2.0240				2.10%
Y RADIAL	5054.2	102.5	%	1.44				1.41%
Ag 328.068†	116670.3	504.27	ug/L	13.225	504.27	ppb	13.225	2.62%
QC value within limits for Ag 328.068 Recovery = 100.85%								
Al 396.153Radial†	5593.4	4939.3	ug/L	74.04	4939.3	ppb	74.04	1.50%
QC value within limits for Al 396.153Radial Recovery = 98.79%								
As 188.979†	1441.2	508.83	ug/L	9.142	508.83	ppb	9.142	1.80%
QC value within limits for As 188.979 Recovery = 101.77%								
B 249.677†	24146.6	495.97	ug/L	12.802	495.97	ppb	12.802	2.58%
QC value within limits for B 249.677 Recovery = 99.19%								
Ba 233.527†	69026.1	504.56	ug/L	13.833	504.56	ppb	13.833	2.74%
QC value within limits for Ba 233.527 Recovery = 100.91%								
Be 313.107†	1497697.6	507.22	ug/L	13.781	507.22	ppb	13.781	2.72%
QC value within limits for Be 313.107 Recovery = 101.44%								
Ca 317.933Radial†	2949.7	4942.7	ug/L	54.14	4942.7	ppb	54.14	1.10%

QC value within limits for Ca 317.933Radial Recovery = 98.85%

Cd 226.502†	53305.1	501.88 ug/L	14.256	501.88 ppb	14.256	2.84%
QC value within limits for Cd 226.502 Recovery = 100.38%						
Co 228.616†	26753.3	503.17 ug/L	11.492	503.17 ppb	11.492	2.28%
QC value within limits for Co 228.616 Recovery = 100.63%						
Cr 267.716†	49917.5	500.95 ug/L	13.915	500.95 ppb	13.915	2.78%
QC value within limits for Cr 267.716 Recovery = 100.19%						
Cu 324.752†	170073.3	503.77 ug/L	13.619	503.77 ppb	13.619	2.70%
QC value within limits for Cu 324.752 Recovery = 100.75%						
Fe 238.204 Radial†	549.0	4839.5 ug/L	67.25	4839.5 ppb	67.25	1.39%
QC value within limits for Fe 238.204 Radial Recovery = 96.79%						
K 766.490 Radial†	24281.9	4811.3 ug/L	71.85	4811.3 ppb	71.85	1.49%
QC value within limits for K 766.490 Radial Recovery = 96.23%						
Mg 279.077 IEC†	157.1	5029.8 ug/L	24.85	5029.8 ppb	24.85	0.49%
QC value within limits for Mg 279.077 IEC Recovery = 100.60%						
Mn 257.610†	482142.4	508.40 ug/L	13.761	508.40 ppb	13.761	2.71%
QC value within limits for Mn 257.610 Recovery = 101.68%						
Mo 202.031†	8085.0	506.97 ug/L	11.782	506.97 ppb	11.782	2.32%
QC value within limits for Mo 202.031 Recovery = 101.39%						
Na 589.592 Radial†	32998.1	9968.1 ug/L	140.90	9968.1 ppb	140.90	1.41%
QC value within limits for Na 589.592 Radial Recovery = 99.68%						
Ni 231.604†	22862.2	501.56 ug/L	11.789	501.56 ppb	11.789	2.35%
QC value within limits for Ni 231.604 Recovery = 100.31%						
P 214.914†	5180.0	2449.3 ug/L	58.67	2449.3 ppb	58.67	2.40%
QC value within limits for P 214.914 Recovery = 97.97%						
Pb 220.353†	4883.9	507.51 ug/L	12.786	507.51 ppb	12.786	2.52%
QC value within limits for Pb 220.353 Recovery = 101.50%						
S 181.975 Axial†	893.9	1009.3 ug/L	27.69	1009.3 ppb	27.69	2.74%
QC value within limits for S 181.975 Axial Recovery = 100.93%						
Sb 206.836†	1687.5	511.38 ug/L	10.959	511.38 ppb	10.959	2.14%
QC value within limits for Sb 206.836 Recovery = 102.28%						
Se 196.026†	992.6	525.15 ug/L	10.969	525.15 ppb	10.969	2.09%
QC value within limits for Se 196.026 Recovery = 105.03%						
Si 251.611†	87721.1	2504.4 ug/L	69.09	2504.4 ppb	69.09	2.76%
QC value within limits for Si 251.611 Recovery = 100.18%						
Sn 189.927†	3399.0	503.33 ug/L	11.602	503.33 ppb	11.602	2.31%
QC value within limits for Sn 189.927 Recovery = 100.67%						
Sr 421.552†	68321.8	500.18 ug/L	6.933	500.18 ppb	6.933	1.39%
QC value within limits for Sr 421.552 Recovery = 100.04%						
Ti 334.940†	322326.5	511.27 ug/L	13.318	511.27 ppb	13.318	2.60%
QC value within limits for Ti 334.940 Recovery = 102.25%						
Tl 190.801†	1856.5	510.49 ug/L	6.510	510.49 ppb	6.510	1.28%
QC value within limits for Tl 190.801 Recovery = 102.10%						
U 409.014†	16330.3	483.90 ug/L	11.923	483.90 ppb	11.923	2.46%
QC value within limits for U 409.014 Recovery = 96.78%						
V 292.402†	79714.0	507.22 ug/L	13.392	507.22 ppb	13.392	2.64%
QC value within limits for V 292.402 Recovery = 101.44%						
Zn 213.857†	61263.2	499.49 ug/L	14.202	499.49 ppb	14.202	2.84%
QC value within limits for Zn 213.857 Recovery = 99.90%						
SiO2†	88522.3	5408.1 ug/L	106.94	5408.1 ppb	106.94	1.98%
QC value within limits for SiO2 Recovery = 101.13%						

All analyte(s) passed QC.

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

Autosampler Location: 8
Date Collected: 1/6/2010 13:06:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4723.3	4723.3	101	%			13:08:51
1	Y RADIAL	4994.7	4994.7	101.3	%			13:08:51
1	Al 396.153Radial†	-28.6	-1.5	-1.3680	ug/L	-1.3680	ppb	13:08:51
1	Ca 317.933Radial†	13.3	0.6	1.0280	ug/L	1.0280	ppb	13:09:11
1	Fe 238.204 Radial†	10.5	-3.5	-30.742	ug/L	-30.742	ppb	13:09:11
1	K 766.490 Radial†	3481.9	104.1	20.621	ug/L	20.621	ppb	13:08:51
1	Mg 279.077 IEC†	1.9	0.2	7.1369	ug/L	7.1369	ppb	13:09:11
1	Na 589.592 Radial†	-1480.5	287.1	86.728	ug/L	86.728	ppb	13:08:51
1	Sr 421.552†	-36.2	-51.8	-0.3789	ug/L	-0.3789	ppb	13:08:51
1	Sc 361.383	861858.8	861858.8	97.208	%			13:10:08
1	Y 371.029	740906.7	740906.7	97.263	%			13:10:08
1	Ag 328.068†	518.8	21.3	0.0925	ug/L	0.0925	ppb	13:10:08
1	As 188.979†	-30.5	2.0	0.6959	ug/L	0.6959	ppb	13:10:28
1	B 249.677†	-522.9	127.9	2.6417	ug/L	2.6417	ppb	13:10:08
1	Ba 233.527†	-0.1	-7.6	-0.0555	ug/L	-0.0555	ppb	13:10:28
1	Be 313.107†	-4357.5	-131.2	-0.0441	ug/L	-0.0441	ppb	13:10:08
1	Cd 226.502†	-245.3	-14.0	-0.1287	ug/L	-0.1287	ppb	13:10:28
1	Co 228.616†	-86.0	-4.5	-0.0828	ug/L	-0.0828	ppb	13:10:28
1	Cr 267.716†	103.7	2.7	0.0306	ug/L	0.0306	ppb	13:10:08
1	Cu 324.752†	8041.2	273.1	0.8070	ug/L	0.8070	ppb	13:10:08
1	Mn 257.610†	590.9	91.4	0.0931	ug/L	0.0931	ppb	13:10:08
1	Mo 202.031†	33.1	14.1	0.8822	ug/L	0.8822	ppb	13:10:28
1	Ni 231.604†	114.2	-7.6	-0.1660	ug/L	-0.1660	ppb	13:10:28
1	P 214.914†	245.4	3.8	1.7810	ug/L	1.7810	ppb	13:10:28
1	Pb 220.353†	-73.6	2.0	0.2157	ug/L	0.2157	ppb	13:10:28
1	S 181.975 Axial†	59.9	1.7	1.9633	ug/L	1.9633	ppb	13:10:28
1	Sb 206.836†	49.1	13.5	4.0644	ug/L	4.0644	ppb	13:10:28
1	Se 196.026†	-39.0	-6.8	-3.5885	ug/L	-3.5885	ppb	13:10:28
1	Si 251.611†	654.5	56.7	1.5997	ug/L	1.5997	ppb	13:10:28
1	Sn 189.927†	12.2	9.1	1.3525	ug/L	1.3525	ppb	13:10:28
1	Ti 334.940†	-1683.9	85.1	0.1401	ug/L	0.1401	ppb	13:10:08
1	Tl 190.801†	-40.6	11.7	3.1853	ug/L	3.1853	ppb	13:10:28
1	U 409.014†	-2971.5	-388.1	-11.533	ug/L	-11.533	ppb	13:10:08
1	V 292.402†	-1701.2	51.8	0.3202	ug/L	0.3202	ppb	13:10:08
1	Zn 213.857†	814.7	6.4	0.0545	ug/L	0.0545	ppb	13:10:28
1	SiO2†	659.4	42.3	2.5374	ug/L	2.5374	ppb	13:11:24
2	Sc Radial	4629.7	4629.7	99.2	%			13:09:16
2	Y RADIAL	4889.1	4889.1	99.11	%			13:09:16
2	Al 396.153Radial†	-12.2	14.4	12.777	ug/L	12.777	ppb	13:09:16
2	Ca 317.933Radial†	18.1	5.7	9.5745	ug/L	9.5745	ppb	13:09:36
2	Fe 238.204 Radial†	12.8	-1.0	-8.4932	ug/L	-8.4932	ppb	13:09:36
2	K 766.490 Radial†	3521.1	213.2	42.283	ug/L	42.283	ppb	13:09:16
2	Mg 279.077 IEC†	2.8	1.2	39.321	ug/L	39.321	ppb	13:09:36
2	Na 589.592 Radial†	-1484.5	253.5	76.571	ug/L	76.571	ppb	13:09:16
2	Sr 421.552†	13.6	-2.2	-0.0164	ug/L	-0.0164	ppb	13:09:16
2	Sc 361.383	857375.9	857375.9	96.703	%			13:10:33
2	Y 371.029	736432.9	736432.9	96.676	%			13:10:33
2	Ag 328.068†	421.8	-76.1	-0.3214	ug/L	-0.3214	ppb	13:10:33
2	As 188.979†	-38.3	-6.2	-2.1704	ug/L	-2.1704	ppb	13:10:53
2	B 249.677†	-592.2	53.5	1.1047	ug/L	1.1047	ppb	13:10:33
2	Ba 233.527†	13.0	6.0	0.0447	ug/L	0.0447	ppb	13:10:53
2	Be 313.107†	-4316.0	-111.6	-0.0375	ug/L	-0.0375	ppb	13:10:33
2	Cd 226.502†	-226.8	3.9	0.0377	ug/L	0.0377	ppb	13:10:53
2	Co 228.616†	-93.4	-12.6	-0.2350	ug/L	-0.2350	ppb	13:10:53
2	Cr 267.716†	115.9	15.8	0.1616	ug/L	0.1616	ppb	13:10:33
2	Cu 324.752†	7932.6	204.0	0.6036	ug/L	0.6036	ppb	13:10:33
2	Mn 257.610†	576.2	79.5	0.0822	ug/L	0.0822	ppb	13:10:33
2	Mo 202.031†	28.0	9.0	0.5658	ug/L	0.5658	ppb	13:10:53
2	Ni 231.604†	140.4	20.1	0.4414	ug/L	0.4414	ppb	13:10:53

2	P 214.914†	256.3	16.5	7.9317 ug/L	7.9317 ppb	13:10:53
2	Pb 220.353†	-74.4	0.8	0.0874 ug/L	0.0874 ppb	13:10:53
2	S 181.975 Axial†	63.5	5.8	6.5329 ug/L	6.5329 ppb	13:10:53
2	Sb 206.836†	36.8	1.0	0.2943 ug/L	0.2943 ppb	13:10:53
2	Se 196.026†	-31.0	1.2	0.5889 ug/L	0.5889 ppb	13:10:53
2	Si 251.611†	653.3	59.1	1.6711 ug/L	1.6711 ppb	13:10:53
2	Sn 189.927†	1.1	-2.3	-0.3399 ug/L	-0.3399 ppb	13:10:53
2	Ti 334.940†	-1676.8	83.4	0.1358 ug/L	0.1358 ppb	13:10:33
2	Tl 190.801†	-43.1	8.8	2.4144 ug/L	2.4144 ppb	13:10:53
2	U 409.014†	-2807.1	-234.1	-6.9582 ug/L	-6.9582 ppb	13:10:33
2	V 292.402†	-1642.6	103.3	0.6448 ug/L	0.6448 ppb	13:10:33
2	Zn 213.857†	830.1	26.7	0.2152 ug/L	0.2152 ppb	13:10:53
2	SiO2†	675.5	62.5	3.7868 ug/L	3.7868 ppb	13:11:29
3	Sc Radial	4641.1	4641.1	99.4 %		13:09:41
3	Y RADIAL	4899.8	4899.8	99.33 %		13:09:41
3	Al 396.153Radial†	-37.6	-11.0	-9.8208 ug/L	-9.8208 ppb	13:09:41
3	Ca 317.933Radial†	17.1	4.6	7.7157 ug/L	7.7157 ppb	13:10:01
3	Fe 238.204 Radial†	8.5	-5.3	-46.933 ug/L	-46.933 ppb	13:10:01
3	K 766.490 Radial†	3545.5	229.0	45.418 ug/L	45.418 ppb	13:09:41
3	Mg 279.077 IEC†	0.1	-1.5	-48.406 ug/L	-48.406 ppb	13:10:01
3	Na 589.592 Radial†	-1461.4	280.3	84.676 ug/L	84.676 ppb	13:09:41
3	Sr 421.552†	-10.5	-26.5	-0.1943 ug/L	-0.1943 ppb	13:09:41
3	Sc 361.383	852049.0	852049.0	96.102 %		13:10:59
3	Y 371.029	732328.1	732328.1	96.137 %		13:10:59
3	Ag 328.068†	417.5	-77.9	-0.3474 ug/L	-0.3474 ppb	13:10:59
3	As 188.979†	-30.8	1.4	0.4873 ug/L	0.4873 ppb	13:11:19
3	B 249.677†	-557.3	85.9	1.7791 ug/L	1.7791 ppb	13:10:59
3	Ba 233.527†	-8.4	-16.2	-0.1204 ug/L	-0.1204 ppb	13:11:19
3	Be 313.107†	-4302.7	-125.7	-0.0424 ug/L	-0.0424 ppb	13:10:59
3	Cd 226.502†	-241.3	-12.7	-0.1148 ug/L	-0.1148 ppb	13:11:19
3	Co 228.616†	-96.6	-16.5	-0.3092 ug/L	-0.3092 ppb	13:11:19
3	Cr 267.716†	96.2	-3.9	-0.0387 ug/L	-0.0387 ppb	13:10:59
3	Cu 324.752†	8069.9	398.2	1.1765 ug/L	1.1765 ppb	13:10:59
3	Mn 257.610†	541.9	47.5	0.0462 ug/L	0.0462 ppb	13:10:59
3	Mo 202.031†	26.7	7.9	0.4875 ug/L	0.4875 ppb	13:11:19
3	Ni 231.604†	125.1	5.1	0.1124 ug/L	0.1124 ppb	13:11:19
3	P 214.914†	242.2	3.5	1.5427 ug/L	1.5427 ppb	13:11:19
3	Pb 220.353†	-74.8	-0.0	-0.0013 ug/L	-0.0013 ppb	13:11:19
3	S 181.975 Axial†	57.9	0.3	0.3542 ug/L	0.3542 ppb	13:11:19
3	Sb 206.836†	37.5	1.9	0.5855 ug/L	0.5855 ppb	13:11:19
3	Se 196.026†	-45.3	-13.9	-7.2614 ug/L	-7.2614 ppb	13:11:19
3	Si 251.611†	670.6	81.2	2.3048 ug/L	2.3048 ppb	13:11:19
3	Sn 189.927†	5.0	1.8	0.2708 ug/L	0.2708 ppb	13:11:19
3	Ti 334.940†	-1707.3	40.8	0.0676 ug/L	0.0676 ppb	13:10:59
3	Tl 190.801†	-36.7	15.2	4.1554 ug/L	4.1554 ppb	13:11:19
3	U 409.014†	-2740.6	-183.0	-5.4354 ug/L	-5.4354 ppb	13:10:59
3	V 292.402†	-1786.4	-57.1	-0.3558 ug/L	-0.3558 ppb	13:10:59
3	Zn 213.857†	831.9	33.9	0.2811 ug/L	0.2811 ppb	13:11:19
3	SiO2†	702.8	95.3	5.7935 ug/L	5.7935 ppb	13:11:34

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	857094.6	96.671	%	0.5539				0.57%
Sc Radial	4664.7	99.9	%	1.09				1.09%
Y 371.029	736555.9	96.692	%	0.5633				0.58%
Y RADIAL	4927.9	99.90	%	1.178				1.18%
Ag 328.068†	-44.2	-0.1921	ug/L	0.24681	-0.1921	ppb	0.24681	128.49%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.6	0.5294	ug/L	11.41775	0.5294	ppb	11.41775	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.9	-0.3291	ug/L	1.59804	-0.3291	ppb	1.59804	485.61%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	89.1	1.8418	ug/L	0.77039	1.8418	ppb	0.77039	41.83%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-6.0	-0.0437	ug/L	0.08313	-0.0437	ppb	0.08313	190.09%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-122.8	-0.0413	ug/L	0.00343	-0.0413	ppb	0.00343	8.29%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.6	6.1061	ug/L	4.49484	6.1061	ppb	4.49484	73.61%

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

Cd 226.502†	-7.6	-0.0686 ug/L	0.09233	-0.0686 ppb	0.09233	134.52%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-11.2	-0.2090 ug/L	0.11545	-0.2090 ppb	0.11545	55.24%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	4.9	0.0511 ug/L	0.10175	0.0511 ppb	0.10175	198.97%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	291.8	0.8624 ug/L	0.29040	0.8624 ppb	0.29040	33.67%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-3.3	-28.723 ug/L	19.2994	-28.723 ppb	19.2994	67.19%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	182.1	36.107 ug/L	13.5031	36.107 ppb	13.5031	37.40%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.0	-0.6497 ug/L	44.37884	-0.6497 ppb	44.37884	>999.9%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	72.8	0.0738 ug/L	0.02453	0.0738 ppb	0.02453	33.22%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	10.3	0.6451 ug/L	0.20898	0.6451 ppb	0.20898	32.39%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	273.6	82.658 ug/L	5.3706	82.658 ppb	5.3706	6.50%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	5.9	0.1293 ug/L	0.30403	0.1293 ppb	0.30403	235.19%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	7.9	3.7518 ug/L	3.62188	3.7518 ppb	3.62188	96.54%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	0.9	0.1006 ug/L	0.10913	0.1006 ppb	0.10913	108.46%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	2.6	2.9501 ug/L	3.20539	2.9501 ppb	3.20539	108.65%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	5.5	1.6481 ug/L	2.09765	1.6481 ppb	2.09765	127.28%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-6.5	-3.4203 ug/L	3.92786	-3.4203 ppb	3.92786	114.84%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	65.6	1.8586 ug/L	0.38813	1.8586 ppb	0.38813	20.88%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	2.9	0.4278 ug/L	0.85708	0.4278 ppb	0.85708	200.34%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-26.8	-0.1965 ug/L	0.18125	-0.1965 ppb	0.18125	92.22%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	69.8	0.1145 ug/L	0.04068	0.1145 ppb	0.04068	35.53%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	11.9	3.2517 ug/L	0.87238	3.2517 ppb	0.87238	26.83%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-268.4	-7.9756 ug/L	3.17367	-7.9756 ppb	3.17367	39.79%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	32.7	0.2030 ug/L	0.51048	0.2030 ppb	0.51048	251.43%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	22.4	0.1836 ug/L	0.11656	0.1836 ppb	0.11656	63.50%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	66.7	4.0392 ug/L	1.64266	4.0392 ppb	1.64266	40.67%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Wednesday, January 06, 2010 11:10:30
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\090811\Sample.346
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	919.6	919.630	21.572	2.3
	Mg	24.0	20080.9	20080.906	307.562	1.5
	Co	58.9	49084.0	49083.984	419.634	0.9
	Rh	102.9	85969.7	85969.738	1140.741	1.3
	In	114.9	111872.1	111872.135	429.627	0.4
	Pb	208.0	37594.6	37594.607	394.480	1.0
⌈>	Ba	137.9	89335.1	89335.070	586.494	0.7
⌊	Ba++	69.0	2230.9	0.025	0.001	4.2
⌈>	Ce	139.9	105853.1	105853.128	429.147	0.4
⌊	CeO	155.9	2311.3	0.022	0.000	0.9
	Bkgd	220.0	7.2	7.200	1.151	16.0

Current Optimization File Data

Current Value	Description
0.84	Nebulizer Gas Flow
6.00	Lens Voltage
1000.00	ICP RF Power
-1875.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	17	7.3	978.0
Co	59	17	8.3	36100.6
In	115	17	9.8	82051.3

ICPMS #4 TUNING REPORT

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	602	2060	0.636
Be	9.0	9.0	2029	2055	0.641
Mg	24.0	24.0	5677	2075	0.627
Mg	25.0	25.1	5963	2080	0.655
Mg	26.0	26.0	6130	2085	0.620
Co	58.9	59.0	14168	2140	0.623
Rh	102.9	102.9	24866	2230	0.647
In	114.9	114.9	27785	2255	0.658
Ce	139.9	139.9	33852	2310	0.623
Pb	206.0	206.0	49940	2500	0.624
Pb	207.0	207.0	50113	2380	0.631
Pb	208.0	208.0	50448	2570	0.630
U	238.1	238.1	57687	2510	0.672

ICPMS#4 - Summary Report

Sample ID: Blank
Sample Date/Time: Wednesday, January 06, 2010 16:43:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\Blank.039

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7		ug/L		9	
|	Be	9		ug/L		3	
|	B	11		ug/L		29	
|	Na	23		ug/L		15676	
|	Mg	24		ug/L		667	
|	Al	27		ug/L		1667	
|	P	31		ug/L		2483	
|	K	39		ug/L		397471	
|	Ca	43		ug/L		469	
|>	Sc	45		ug/L		240093	
|	Ti	47		ug/L		164	
|	V	51		ug/L		4411	
|	Cr	52		ug/L		3369	
|	Cr	53		ug/L		171322	
|	Mn	55		ug/L		862	
|	Fe	57		ug/L		4820	
|	Co	59		ug/L		156	
|	Ni	60		ug/L		35	
|	Cu	63		ug/L		82	
⌊	Cu	65		ug/L		52	
⌈	Zn	66		ug/L		65	
|	Zn	67		ug/L		7154	
|	Zn	68		ug/L		629	
|>	Ge	74		ug/L		95347	
|	As	75		ug/L		398	
|	Se	77		ug/L		6899	
|	Se	82		ug/L		-4	
⌊	Kr	83		ug/L		49	
⌈	Sr	88		ug/L		67	
|	Y	89		ug/L		12	
|	Zr	90		ug/L		105	
|	Mo	98		ug/L		14	
|	Ag	107		ug/L		49	
|	Cd	111		ug/L		7	
|	Cd	114		ug/L		21	
|>	In	115		ug/L		56646	
|	Sn	120		ug/L		109	
|	Sb	121		ug/L		183	
⌊	Sb	123		ug/L		174	
⌈	Ba	135		ug/L		12	
|	Ba	137		ug/L		16	
|	Ho	165		ug/L		6	
|>	Lu	175		ug/L		44715	
|	Tl	205		ug/L		29	
|	Pb	208		ug/L		184	
|	Bi	209		ug/L		18	
|	Th	232		ug/L		101	
⌊	U	238		ug/L		52	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	
Be	9	Linear Thru Zero	
B	11	Linear Thru Zero	
Na	23	Linear Thru Zero	
Mg	24	Linear Thru Zero	
Al	27	Linear Thru Zero	
P	31	Linear Thru Zero	
K	39	Linear Thru Zero	
Ca	43	Linear Thru Zero	
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	
V	51	Linear Thru Zero	
Cr	52	Linear Thru Zero	
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	
Fe	57	Linear Thru Zero	
Co	59	Linear Thru Zero	
Ni	60	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	
Zn	66	Linear Thru Zero	
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	
Mo	98	Linear Thru Zero	
Ag	107	Linear Thru Zero	
Cd	111	Linear Thru Zero	
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	
Sb	121	Linear Thru Zero	
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	
Pb	208	Linear Thru Zero	
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	
U	238	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175					
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Wednesday, January 06, 2010 16:49:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\Standard 1.040

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	1.698	2109	0.009
	Be	9	10.000	ug/L	3.327	574	0.002
	B	11	20.000	ug/L	6.805	954	0.004
	Na	23	1000.000	ug/L	5.191	1220048	4.907
	Mg	24	1000.000	ug/L	2.576	794862	3.237
	Al	27	1000.000	ug/L	4.340	1127543	4.588
	P	31	1000.000	ug/L	0.753	64160	0.251
	K	39	1000.000	ug/L	9.054	2469573	8.415
	Ca	43	1000.000	ug/L	1.655	4634	0.017
>	Sc	45		ug/L		245356	245356.296
	Ti	47	10.000	ug/L	3.079	2051	0.008
	V	51	10.000	ug/L	19.605	21408	0.069
	Cr	52	10.000	ug/L	0.903	21441	0.073
	Cr	53		ug/L		146403	-0.117
	Mn	55	10.000	ug/L	1.415	31045	0.123
	Fe	57	1000.000	ug/L	1.104	65588	0.247
	Co	59	10.000	ug/L	1.375	22844	0.092
	Ni	60	10.000	ug/L	2.286	4816	0.019
	Cu	63		ug/L		11090	0.045
	Cu	65	10.000	ug/L	0.241	5268	0.021
	Zn	66	10.000	ug/L	1.819	2847	0.028
	Zn	67		ug/L		6568	-0.008
	Zn	68		ug/L		2559	0.020
>	Ge	74		ug/L		97686	97686.178
	As	75	10.000	ug/L	6.770	3297	0.030
	Se	77		ug/L		5817	-0.013
	Se	82	10.000	ug/L	13.781	318	0.003
	Kr	83		ug/L		48	-0.000
	Sr	88	10.000	ug/L	1.280	46591	0.807
	Y	89		ug/L		11	-0.000
	Zr	90	10.000	ug/L	0.446	24377	0.421
	Mo	98	10.000	ug/L	1.028	10840	0.188
	Ag	107	10.000	ug/L	1.478	17116	0.296
	Cd	111	10.000	ug/L	1.876	3983	0.069
	Cd	114		ug/L		9154	0.158
>	In	115		ug/L		57641	57641.414
	Sn	120	10.000	ug/L	2.163	17667	0.305
	Sb	121	10.000	ug/L	6.392	12607	0.215
	Sb	123		ug/L		9622	0.164
	Ba	135		ug/L		3982	0.085
	Ba	137	10.000	ug/L	4.204	6870	0.147
	Ho	165		ug/L		10	0.000
>	Lu	175		ug/L		46636	46636.150
	Tl	205	10.000	ug/L	1.046	6770	0.145
	Pb	208	10.000	ug/L	0.794	36636	0.782
	Bi	209		ug/L		22	0.000
	Th	232	10.000	ug/L	0.864	45331	0.970
	U	238	10.000	ug/L	2.723	47701	1.022

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175					
|	Tl	205					
|	Pb	208					
|	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#4 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Wednesday, January 06, 2010 16:55:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\Standard 2.041

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.917**	**ug/L**	4.472	20082	0.079
	Be	9	**99.930**	**ug/L**	1.444	5528	0.022
	B	11	**200.029**	**ug/L**	0.972	9759	0.038
	Na	23	**9999.807**	**ug/L**	2.587	12473965	48.978
	Mg	24	**9998.704**	**ug/L**	3.264	8128801	31.948
	Al	27	**10005.967**	**ug/L**	1.751	12421103	48.817
	P	31	**9998.926**	**ug/L**	1.190	634731	2.485
	K	39	**9993.032**	**ug/L**	7.049	20416652	78.611
	Ca	43	**9999.653**	**ug/L**	1.029	43439	0.169
>	Sc	45		**ug/L**		254412	254412.327
	Ti	47	**100.017**	**ug/L**	1.683	20040	0.078
	V	51	**100.094**	**ug/L**	2.247	198364	0.761
	Cr	52	**100.023**	**ug/L**	1.402	194696	0.751
	Cr	53		**ug/L**		160081	-0.084
	Mn	55	**99.988**	**ug/L**	0.284	309839	1.214
	Fe	57	**9998.182**	**ug/L**	0.114	622804	2.428
	Co	59	**99.981**	**ug/L**	0.858	231012	0.907
	Ni	60	**99.968**	**ug/L**	1.351	48043	0.189
	Cu	63		**ug/L**		110074	0.432
	Cu	65	**99.967**	**ug/L**	0.480	52362	0.206
	Zn	66	**99.991**	**ug/L**	2.013	28003	0.282
	Zn	67		**ug/L**		10418	0.030
	Zn	68		**ug/L**		20392	0.199
>	Ge	74		**ug/L**		99097	99097.259
	As	75	**100.083**	**ug/L**	2.620	32400	0.323
	Se	77		**ug/L**		7343	0.002
	Se	82	**99.947**	**ug/L**	2.992	3100	0.031
	Kr	83		**ug/L**		43	-0.000
	Sr	88	**100.012**	**ug/L**	0.700	476818	8.170
	Y	89		**ug/L**		55	0.001
	Zr	90	**100.037**	**ug/L**	0.643	255295	4.373
	Mo	98	**100.001**	**ug/L**	0.436	109665	1.879
	Ag	107	**99.979**	**ug/L**	1.743	169233	2.899
	Cd	111	**99.982**	**ug/L**	1.173	39544	0.677
	Cd	114		**ug/L**		93632	1.604
>	In	115		**ug/L**		58357	58356.882
	Sn	120	**100.011**	**ug/L**	0.657	179860	3.080
	Sb	121	**100.081**	**ug/L**	2.928	137146	2.346
	Sb	123		**ug/L**		105013	1.796
	Ba	135		**ug/L**		41098	0.874
	Ba	137	**100.017**	**ug/L**	1.884	70260	1.495
	Ho	165		**ug/L**		10	0.000
>	Lu	175		**ug/L**		46992	46992.322
	Tl	205	**100.017**	**ug/L**	0.824	69135	1.471
	Pb	208	**99.993**	**ug/L**	2.058	364944	7.764
	Bi	209		**ug/L**		51	0.001
	Th	232	**100.028**	**ug/L**	2.562	469192	9.986
	U	238	**99.998**	**ug/L**	3.212	478907	10.195

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175					
|	Tl	205					
|	Pb	208					
|	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#4 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Wednesday, January 06, 2010 17:01:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\QC Std 1.042

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.029**	**ug/L**	2.409	10341	0.040
	Be	9	**52.223**	**ug/L**	0.338	2913	0.011
	B	11	**102.435**	**ug/L**	0.964	5050	0.020
	Na	23	**4803.620**	**ug/L**	0.571	6047416	23.528
	Mg	24	**4989.471**	**ug/L**	4.556	4088052	15.942
	Al	27	**4983.578**	**ug/L**	7.387	6236310	24.314
	P	31	**4952.061**	**ug/L**	0.667	318071	1.231
	K	39	**5254.176**	**ug/L**	7.208	11022033	41.333
	Ca	43	**4929.073**	**ug/L**	0.281	21824	0.083
>	Sc	45		ug/L		256318	256318.420
	Ti	47	**49.976**	**ug/L**	1.910	10176	0.039
	V	51	**48.539**	**ug/L**	1.784	99347	0.369
	Cr	52	**50.627**	**ug/L**	0.317	101070	0.380
	Cr	53		ug/L		147348	-0.139
	Mn	55	**51.432**	**ug/L**	0.665	161015	0.625
	Fe	57	**4968.475**	**ug/L**	0.784	314398	1.207
	Co	59	**49.737**	**ug/L**	1.129	115864	0.451
	Ni	60	**51.736**	**ug/L**	1.186	25065	0.098
	Cu	63		ug/L		56364	0.220
	Cu	65	**51.279**	**ug/L**	1.187	27087	0.105
	Zn	66	**51.894**	**ug/L**	1.410	14698	0.146
	Zn	67		ug/L		8212	0.007
	Zn	68		ug/L		11077	0.104
>	Ge	74		ug/L		99966	99966.229
	As	75	**48.712**	**ug/L**	3.543	16126	0.157
	Se	77		ug/L		6000	-0.012
	Se	82	**51.829**	**ug/L**	5.440	1620	0.016
	Kr	83		ug/L		53	0.000
	Sr	88	**51.379**	**ug/L**	1.013	247168	4.197
	Y	89		ug/L		19	0.000
	Zr	90	**49.542**	**ug/L**	1.711	127604	2.166
	Mo	98	**49.909**	**ug/L**	1.195	55227	0.938
	Ag	107	**50.694**	**ug/L**	1.927	86595	1.470
	Cd	111	**51.216**	**ug/L**	2.844	20434	0.347
	Cd	114		ug/L		47589	0.808
>	In	115		ug/L		58884	58883.736
	Sn	120	**50.191**	**ug/L**	1.217	91127	1.546
	Sb	121	**49.631**	**ug/L**	5.298	68744	1.164
	Sb	123		ug/L		52794	0.893
	Ba	135		ug/L		20954	0.438
	Ba	137	**49.969**	**ug/L**	0.640	35710	0.747
	Ho	165		ug/L		12	0.000
>	Lu	175		ug/L		47781	47780.934
	Tl	205	**48.391**	**ug/L**	1.054	34027	0.712
	Pb	208	**50.640**	**ug/L**	2.234	188023	3.932
	Bi	209		ug/L		40	0.000
	Th	232	**50.472**	**ug/L**	1.536	240834	5.039
	U	238	**52.261**	**ug/L**	1.602	254593	5.328

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7	102.057				
|	Be	9	104.446				
|	B	11	102.435				
|	Na	23	96.072				
|	Mg	24	99.789				
|	Al	27	98.685				
|	P	31	99.041				
|	K	39	105.084				
|	Ca	43	98.581				
|>	Sc	45			106.8		
|	Ti	47	99.952				
|	V	51	97.078				
|	Cr	52	101.254				
|	Cr	53					
|	Mn	55	102.865				
|	Fe	57	99.369				
|	Co	59	99.474				
|	Ni	60	103.472				
|	Cu	63					
⌊	Cu	65	102.558				
⌈	Zn	66	103.789				
|	Zn	67					
|	Zn	68					
|>	Ge	74			104.8		
|	As	75	97.424				
|	Se	77					
|	Se	82	103.658				
⌊	Kr	83					
⌈	Sr	88	102.759				
|	Y	89					
|	Zr	90	99.085				
|	Mo	98	99.819				
|	Ag	107	101.388				
|	Cd	111	102.432				
|	Cd	114					
|>	In	115			104.0		
|	Sn	120	100.383				
|	Sb	121	99.261				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	99.938				
|	Ho	165					
|>	Lu	175			106.9		
|	Tl	205	96.783				
|	Pb	208	101.280				
|	Bi	209					
|	Th	232	100.943				
⌊	U	238	104.522				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Wednesday, January 06, 2010 17:08:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\QC Std 2.043

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**0.084**	**ug/L**	40.126	26	0.000
|	Be	9	**0.011**	**ug/L**	198.279	4	0.000
|	B	11	**5.316**	**ug/L**	5.737	280	0.001
|	Na	23	**6.861**	**ug/L**	20.031	24354	0.034
|	Mg	24	**-0.024**	**ug/L**	3021.941	667	-0.000
|	Al	27	**0.246**	**ug/L**	590.905	2000	0.001
|	P	31	**-0.638**	**ug/L**	46.820	2508	-0.000
|	K	39	**5.258**	**ug/L**	200.865	418040	0.041
|	Ca	43	**-7.207**	**ug/L**	191.666	451	-0.000
|>	Sc	45		**ug/L**		246323	246323.292
|	Ti	47	**-0.019**	**ug/L**	297.978	165	-0.000
|	V	51	**0.308**	**ug/L**	448.016	5108	0.002
|	Cr	52	**-0.511**	**ug/L**	31.570	2512	-0.004
|	Cr	53		**ug/L**		152899	-0.093
|	Mn	55	**-0.021**	**ug/L**	28.921	822	-0.000
|	Fe	57	**-3.014**	**ug/L**	29.584	4765	-0.001
|	Co	59	**0.003**	**ug/L**	385.369	166	0.000
|	Ni	60	**0.012**	**ug/L**	123.735	42	0.000
|	Cu	63		**ug/L**		104	0.000
⌊	Cu	65	**0.017**	**ug/L**	96.567	62	0.000
⌈	Zn	66	**0.027**	**ug/L**	124.303	73	0.000
|	Zn	67		**ug/L**		6301	-0.010
|	Zn	68		**ug/L**		581	-0.001
|>	Ge	74		**ug/L**		97058	97057.642
|	As	75	**-0.213**	**ug/L**	334.385	336	-0.001
|	Se	77		**ug/L**		5749	-0.013
|	Se	82	**0.173**	**ug/L**	314.605	2	0.000
⌊	Kr	83		**ug/L**		50	0.000
⌈	Sr	88	**0.004**	**ug/L**	48.245	87	0.000
|	Y	89		**ug/L**		12	-0.000
|	Zr	90	**0.259**	**ug/L**	4.481	758	0.011
|	Mo	98	**0.079**	**ug/L**	17.077	100	0.001
|	Ag	107	**0.015**	**ug/L**	57.593	76	0.000
|	Cd	111	**0.026**	**ug/L**	18.268	18	0.000
|	Cd	114		**ug/L**		31	0.000
|>	In	115		**ug/L**		57569	57568.890
|	Sn	120	**0.295**	**ug/L**	5.084	635	0.009
|	Sb	121	**1.328**	**ug/L**	9.615	1978	0.031
⌊	Sb	123		**ug/L**		1528	0.023
⌈	Ba	135		**ug/L**		14	0.000
|	Ba	137	**0.010**	**ug/L**	68.267	24	0.000
|	Ho	165		**ug/L**		8	0.000
|>	Lu	175		**ug/L**		45975	45974.665
|	Tl	205	**0.125**	**ug/L**	13.454	115	0.002
|	Pb	208	**0.011**	**ug/L**	44.569	227	0.001
|	Bi	209		**ug/L**		19	0.000
|	Th	232	**0.185**	**ug/L**	17.688	952	0.018
⌊	U	238	**0.013**	**ug/L**	8.824	114	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			102.6		
	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			101.8		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			101.6		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			102.8		
	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#4 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Wednesday, January 06, 2010 17:14:15
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\QC Std 3.044

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**11.643**	**ug/L**	0.819	2304	0.009
	Be	9	**0.546**	**ug/L**	12.659	33	0.000
	B	11	**18.065**	**ug/L**	7.296	891	0.003
	Na	23	**295.859**	**ug/L**	12.819	377637	1.449
	Mg	24	**17.540**	**ug/L**	3.776	14674	0.056
	Al	27	**27.890**	**ug/L**	11.908	35712	0.136
	P	31	**46.347**	**ug/L**	5.922	5452	0.012
	K	39	**327.018**	**ug/L**	2.805	1054917	2.573
	Ca	43	**191.309**	**ug/L**	8.136	1292	0.003
>	Sc	45		**ug/L**		249482	249482.495
	Ti	47	**9.459**	**ug/L**	1.947	2013	0.007
	V	51	**10.190**	**ug/L**	20.825	23939	0.078
	Cr	52	**10.092**	**ug/L**	2.183	22409	0.076
	Cr	53		**ug/L**		138747	-0.157
	Mn	55	**5.629**	**ug/L**	2.132	17945	0.068
	Fe	57	**105.256**	**ug/L**	2.321	11384	0.026
	Co	59	**1.082**	**ug/L**	1.860	2612	0.010
	Ni	60	**2.246**	**ug/L**	4.005	1094	0.004
	Cu	63		**ug/L**		1304	0.005
	Cu	65	**1.136**	**ug/L**	7.190	637	0.002
	Zn	66	**10.981**	**ug/L**	1.262	3087	0.031
	Zn	67		**ug/L**		6205	-0.011
	Zn	68		**ug/L**		2664	0.021
>	Ge	74		**ug/L**		97541	97540.860
	As	75	**4.358**	**ug/L**	20.572	1780	0.014
	Se	77		**ug/L**		5053	-0.021
	Se	82	**5.880**	**ug/L**	0.578	176	0.002
	Kr	83		**ug/L**		45	-0.000
	Sr	88	**10.809**	**ug/L**	0.785	51702	0.883
	Y	89		**ug/L**		11	-0.000
	Zr	90	**1.993**	**ug/L**	4.176	5206	0.087
	Mo	98	**0.583**	**ug/L**	6.487	656	0.011
	Ag	107	**1.033**	**ug/L**	4.586	1803	0.030
	Cd	111	**1.091**	**ug/L**	5.008	440	0.007
	Cd	114		**ug/L**		1018	0.017
>	In	115		**ug/L**		58478	58477.817
	Sn	120	**5.245**	**ug/L**	1.530	9557	0.162
	Sb	121	**3.147**	**ug/L**	6.365	4505	0.074
	Sb	123		**ug/L**		3552	0.058
	Ba	135		**ug/L**		842	0.018
	Ba	137	**2.078**	**ug/L**	1.660	1474	0.031
	Ho	165		**ug/L**		8	0.000
>	Lu	175		**ug/L**		46903	46903.006
	Tl	205	**1.066**	**ug/L**	2.923	766	0.016
	Pb	208	**2.168**	**ug/L**	1.237	8090	0.168
	Bi	209		**ug/L**		20	0.000
	Th	232	**1.059**	**ug/L**	4.972	5063	0.106
	U	238	**0.226**	**ug/L**	1.999	1133	0.023

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7	116.425				
|	Be	9	109.148				
|	B	11	120.434				
|	Na	23	118.344				
|	Mg	24	116.931				
|	Al	27	92.966				
|	P	31	92.694				
|	K	39	109.006				
|	Ca	43	95.655				
|>	Sc	45			103.9		
|	Ti	47	94.590				
|	V	51	101.897				
|	Cr	52	100.917				
|	Cr	53					
|	Mn	55	112.571				
|	Fe	57	105.256				
|	Co	59	108.217				
|	Ni	60	112.306				
|	Cu	63					
⌊	Cu	65	113.570				
⌈	Zn	66	109.809				
|	Zn	67					
|	Zn	68					
|>	Ge	74			102.3		
|	As	75	87.166				
|	Se	77					
|	Se	82	117.608				
⌊	Kr	83					
⌈	Sr	88	108.085				
|	Y	89					
|	Zr	90	99.671				
|	Mo	98	116.699				
|	Ag	107	103.328				
|	Cd	111	109.087				
|	Cd	114					
|>	In	115			103.2		
|	Sn	120	104.892				
|	Sb	121	104.893				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	103.919				
|	Ho	165					
|>	Lu	175			104.9		
|	Tl	205	106.602				
|	Pb	208	108.416				
|	Bi	209					
|	Th	232	105.867				
⌊	U	238	112.780				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Wednesday, January 06, 2010 17:20:26
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\QC Std 4.045

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**0.110**	**ug/L**	26.559	31	0.000
|	Be	9	**0.028**	**ug/L**	131.080	5	0.000
|	B	11	**2.350**	**ug/L**	10.024	142	0.000
|	Na	23	**96290.800**	**ug/L**	8.895	117428458	471.622
|	Mg	24	**99819.268**	**ug/L**	6.151	79351039	318.939
|	Al	27	**94884.550**	**ug/L**	1.516	115225322	462.917
|	P	31	**96729.795**	**ug/L**	1.724	5985180	24.036
|	K	39	**99767.072**	**ug/L**	1.229	195744934	784.830
|	Ca	43	**97119.854**	**ug/L**	0.782	408438	1.639
|>	Sc	45		**ug/L**		248854	248854.011
|	Ti	47	**1486.876**	**ug/L**	0.890	289119	1.161
|	V	51	**-1.493**	**ug/L**	127.139	1680	-0.011
|	Cr	52	**2.898**	**ug/L**	4.787	8908	0.022
|	Cr	53		**ug/L**		124508	-0.213
|	Mn	55	**5.609**	**ug/L**	1.686	17850	0.068
|	Fe	57	**96043.957**	**ug/L**	1.319	5810502	23.323
|	Co	59	**0.238**	**ug/L**	5.814	700	0.002
|	Ni	60	**2.914**	**ug/L**	2.645	1406	0.006
|	Cu	63		**ug/L**		2317	0.009
⌊	Cu	65	**2.359**	**ug/L**	1.329	1261	0.005
⌈	Zn	66	**3.550**	**ug/L**	6.085	1013	0.010
|	Zn	67		**ug/L**		5774	-0.014
|	Zn	68		**ug/L**		698	0.001
|>	Ge	74		**ug/L**		94804	94804.202
|	As	75	**-0.200**	**ug/L**	320.005	334	-0.001
|	Se	77		**ug/L**		4329	-0.027
|	Se	82	**0.030**	**ug/L**	1408.117	-3	0.000
⌊	Kr	83		**ug/L**		70	0.000
⌈	Sr	88	**1.118**	**ug/L**	3.344	5175	0.091
|	Y	89		**ug/L**		139	0.002
|	Zr	90	**0.657**	**ug/L**	48.420	1713	0.029
|	Mo	98	**2039.214**	**ug/L**	1.415	2143415	38.316
|	Ag	107	**0.053**	**ug/L**	23.108	134	0.002
|	Cd	111	**0.458**	**ug/L**	38.014	181	0.003
|	Cd	114		**ug/L**		2055	0.036
|>	In	115		**ug/L**		55940	55940.331
|	Sn	120	**0.186**	**ug/L**	4.128	428	0.006
|	Sb	121	**0.385**	**ug/L**	17.082	686	0.009
⌊	Sb	123		**ug/L**		581	0.007
⌈	Ba	135		**ug/L**		280	0.006
|	Ba	137	**0.643**	**ug/L**	6.346	468	0.010
|	Ho	165		**ug/L**		191	0.004
|>	Lu	175		**ug/L**		46888	46888.291
|	Tl	205	**0.029**	**ug/L**	49.804	51	0.000
|	Pb	208	**0.165**	**ug/L**	1.010	793	0.013
|	Bi	209		**ug/L**		117	0.002
|	Th	232	**0.144**	**ug/L**	40.555	782	0.014
⌊	U	238	**-0.006**	**ug/L**	11.384	28	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23	96.291				
|	Mg	24	99.819				
|	Al	27	94.885				
|	P	31	96.730				
|	K	39	99.767				
|	Ca	43	97.120				
|>	Sc	45		103.6			
|	Ti	47	74.344				
|	V	51					
|	Cr	52	78.335				
|	Cr	53					
|	Mn	55	96.714				
|	Fe	57	96.044				
|	Co	59	95.339				
|	Ni	60	107.929				
|	Cu	63					
⌊	Cu	65	81.335				
⌈	Zn	66	98.608				
|	Zn	67					
|	Zn	68					
|>	Ge	74		99.4			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88	93.180				
|	Y	89					
|	Zr	90					
|	Mo	98	101.961				
|	Ag	107					
|	Cd	111	114.533				
|	Cd	114					
|>	In	115		98.8			
|	Sn	120					
|	Sb	121	385.161				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	95.923				
|	Ho	165					
|>	Lu	175		104.9			
|	Tl	205					
|	Pb	208	82.408				
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Ti	47	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Wednesday, January 06, 2010 17:26:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\QC Std 5.046

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**19.221**	**ug/L**	5.590	3724	0.015
|	Be	9	**20.452**	**ug/L**	5.163	1091	0.004
|	B	11	**21.271**	**ug/L**	4.661	1025	0.004
|	Na	23	**97916.465**	**ug/L**	3.661	117428458	479.584
|	Mg	24	**103486.244**	**ug/L**	2.997	80944434	330.656
|	Al	27	**96286.730**	**ug/L**	0.831	115051790	469.758
|	P	31	**99969.959**	**ug/L**	2.921	6083725	24.841
|	K	39	**107275.793**	**ug/L**	6.330	206852321	843.898
|	Ca	43	**99386.622**	**ug/L**	2.664	411167	1.677
|>	Sc	45		**ug/L**		244962	244961.927
|	Ti	47	**1518.585**	**ug/L**	1.815	290494	1.186
|	V	51	**18.537**	**ug/L**	5.217	39024	0.141
|	Cr	52	**22.965**	**ug/L**	2.910	45665	0.173
|	Cr	53		**ug/L**		126578	-0.196
|	Mn	55	**26.147**	**ug/L**	3.053	78606	0.318
|	Fe	57	**101289.936**	**ug/L**	2.792	6026266	24.597
|	Co	59	**19.684**	**ug/L**	3.367	43888	0.179
|	Ni	60	**22.614**	**ug/L**	4.453	10480	0.043
|	Cu	63		**ug/L**		21832	0.089
⌊	Cu	65	**20.847**	**ug/L**	2.120	10553	0.043
⌈	Zn	66	**22.609**	**ug/L**	2.688	5990	0.064
|	Zn	67		**ug/L**		6439	-0.006
|	Zn	68		**ug/L**		4230	0.039
|>	Ge	74		**ug/L**		92965	92964.549
|	As	75	**20.191**	**ug/L**	5.241	6448	0.065
|	Se	77		**ug/L**		4682	-0.022
|	Se	82	**20.850**	**ug/L**	3.898	604	0.007
⌊	Kr	83		**ug/L**		74	0.000
⌈	Sr	88	**21.828**	**ug/L**	1.293	98775	1.783
|	Y	89		**ug/L**		143	0.002
|	Zr	90	**21.302**	**ug/L**	3.647	51629	0.931
|	Mo	98	**2093.230**	**ug/L**	3.319	2176429	39.331
|	Ag	107	**19.391**	**ug/L**	1.694	31174	0.562
|	Cd	111	**20.150**	**ug/L**	3.233	7562	0.137
|	Cd	114		**ug/L**		19299	0.348
|>	In	115		**ug/L**		55367	55366.698
|	Sn	120	**20.387**	**ug/L**	2.094	34862	0.628
|	Sb	121	**22.153**	**ug/L**	2.648	28922	0.519
⌊	Sb	123		**ug/L**		22181	0.398
⌈	Ba	135		**ug/L**		7961	0.170
|	Ba	137	**19.540**	**ug/L**	3.271	13683	0.292
|	Ho	165		**ug/L**		191	0.004
|>	Lu	175		**ug/L**		46807	46807.052
|	Tl	205	**18.156**	**ug/L**	1.258	12528	0.267
|	Pb	208	**18.800**	**ug/L**	1.952	68514	1.460
|	Bi	209		**ug/L**		180	0.003
|	Th	232	**19.736**	**ug/L**	3.546	92274	1.970
⌊	U	238	**20.241**	**ug/L**	4.356	96578	2.064

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7	96.107				
|	Be	9	102.261				
|	B	11	106.354				
|	Na	23	97.916				
|	Mg	24	103.486				
|	Al	27	96.287				
|	P	31	99.970				
|	K	39	107.276				
|	Ca	43	99.387				
|>	Sc	45			102.0		
|	Ti	47	75.929				
|	V	51	92.686				
|	Cr	52	96.898				
|	Cr	53					
|	Mn	55	101.345				
|	Fe	57	101.290				
|	Co	59	97.207				
|	Ni	60	99.623				
|	Cu	63					
⌊	Cu	65	91.034				
⌈	Zn	66	95.802				
|	Zn	67					
|	Zn	68					
|>	Ge	74			97.5		
|	As	75	100.957				
|	Se	77					
|	Se	82	104.252				
⌊	Kr	83					
⌈	Sr	88	102.964				
|	Y	89					
|	Zr	90	106.512				
|	Mo	98	104.661				
|	Ag	107	96.955				
|	Cd	111	98.776				
|	Cd	114					
|>	In	115			97.7		
|	Sn	120	101.934				
|	Sb	121	110.212				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	94.533				
|	Ho	165					
|>	Lu	175			104.7		
|	Tl	205	90.779				
|	Pb	208	93.069				
|	Bi	209					
|	Th	232	98.679				
⌊	U	238	101.207				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Ti	47	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, January 06, 2010 17:32:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\QC Std 6.047

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.403**	**ug/L**	0.892	9905	0.040
	Be	9	**52.121**	**ug/L**	1.285	2819	0.011
	B	11	**101.619**	**ug/L**	0.859	4857	0.019
	Na	23	**4883.026**	**ug/L**	4.479	5960824	23.917
	Mg	24	**5168.871**	**ug/L**	3.782	4105480	16.515
	Al	27	**4741.368**	**ug/L**	2.630	5750963	23.132
	P	31	**4985.650**	**ug/L**	0.311	310455	1.239
	K	39	**5435.672**	**ug/L**	6.106	11039104	42.760
	Ca	43	**5024.270**	**ug/L**	0.292	21560	0.085
>	Sc	45		**ug/L**		248523	248522.600
	Ti	47	**52.259**	**ug/L**	1.662	10310	0.041
	V	51	**50.768**	**ug/L**	3.240	100563	0.386
	Cr	52	**50.381**	**ug/L**	0.916	97542	0.378
	Cr	53		**ug/L**		143094	-0.138
	Mn	55	**52.310**	**ug/L**	0.419	158767	0.635
	Fe	57	**5081.149**	**ug/L**	0.425	311638	1.234
	Co	59	**50.661**	**ug/L**	0.627	114432	0.460
	Ni	60	**52.263**	**ug/L**	0.576	24551	0.099
	Cu	63		**ug/L**		55314	0.222
	Cu	65	**51.012**	**ug/L**	0.382	26128	0.105
	Zn	66	**50.631**	**ug/L**	1.017	14294	0.143
	Zn	67		**ug/L**		7830	0.004
	Zn	68		**ug/L**		10715	0.101
>	Ge	74		**ug/L**		99638	99638.263
	As	75	**46.830**	**ug/L**	1.286	15469	0.151
	Se	77		**ug/L**		5720	-0.015
	Se	82	**50.492**	**ug/L**	1.726	1573	0.016
	Kr	83		**ug/L**		49	-0.000
	Sr	88	**50.929**	**ug/L**	1.416	240766	4.160
	Y	89		**ug/L**		28	0.000
	Zr	90	**49.418**	**ug/L**	0.959	125105	2.160
	Mo	98	**50.355**	**ug/L**	1.148	54758	0.946
	Ag	107	**50.328**	**ug/L**	2.153	84493	1.460
	Cd	111	**50.941**	**ug/L**	2.118	19975	0.345
	Cd	114		**ug/L**		46416	0.802
>	In	115		**ug/L**		57866	57866.137
	Sn	120	**50.149**	**ug/L**	0.836	89491	1.545
	Sb	121	**49.077**	**ug/L**	5.304	66809	1.151
	Sb	123		**ug/L**		50708	0.873
	Ba	135		**ug/L**		20526	0.437
	Ba	137	**50.076**	**ug/L**	1.614	35150	0.749
	Ho	165		**ug/L**		13	0.000
>	Lu	175		**ug/L**		46932	46931.768
	Tl	205	**48.344**	**ug/L**	1.146	33393	0.711
	Pb	208	**50.295**	**ug/L**	0.816	183475	3.905
	Bi	209		**ug/L**		43	0.001
	Th	232	**50.370**	**ug/L**	0.596	236100	5.028
	U	238	**51.772**	**ug/L**	0.523	247759	5.278

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7	100.805				
|	Be	9	104.242				
|	B	11	101.619				
|	Na	23	97.661				
|	Mg	24	103.377				
|	Al	27	93.888				
|	P	31	99.713				
|	K	39	108.713				
|	Ca	43	100.485				
|>	Sc	45			103.5		
|	Ti	47	104.518				
|	V	51	101.535				
|	Cr	52	100.761				
|	Cr	53					
|	Mn	55	104.619				
|	Fe	57	101.623				
|	Co	59	101.322				
|	Ni	60	104.526				
|	Cu	63					
⌊	Cu	65	102.024				
⌈	Zn	66	101.261				
|	Zn	67					
|	Zn	68					
|>	Ge	74			104.5		
|	As	75	93.659				
|	Se	77					
|	Se	82	100.984				
⌊	Kr	83					
⌈	Sr	88	101.858				
|	Y	89					
|	Zr	90	98.836				
|	Mo	98	100.709				
|	Ag	107	100.657				
|	Cd	111	101.881				
|	Cd	114					
|>	In	115			102.2		
|	Sn	120	100.298				
|	Sb	121	98.154				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	100.152				
|	Ho	165					
|>	Lu	175			105.0		
|	Tl	205	96.688				
|	Pb	208	100.590				
|	Bi	209					
|	Th	232	100.739				
⌊	U	238	103.543				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, January 06, 2010 17:39:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\QC Std 7.048

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**0.109**	**ug/L**	22.774	30	0.000
|	Be	9	**0.024**	**ug/L**	42.525	4	0.000
|	B	11	**3.522**	**ug/L**	12.539	193	0.001
|	Na	23	**5.690**	**ug/L**	48.910	22685	0.028
|	Mg	24	**1.691**	**ug/L**	200.501	2000	0.005
|	Al	27	**2.500**	**ug/L**	96.616	4668	0.012
|	P	31	**-3.488**	**ug/L**	24.558	2308	-0.001
|	K	39	**-8.746**	**ug/L**	87.994	386496	-0.069
|	Ca	43	**13.244**	**ug/L**	10.196	530	0.000
|>	Sc	45		**ug/L**		243616	243616.187
|	Ti	47	**0.468**	**ug/L**	4.823	255	0.000
|	V	51	**2.573**	**ug/L**	59.239	9229	0.020
|	Cr	52	**-1.129**	**ug/L**	3.787	1353	-0.008
|	Cr	53		**ug/L**		147430	-0.108
|	Mn	55	**-0.042**	**ug/L**	13.118	751	-0.001
|	Fe	57	**-2.461**	**ug/L**	125.279	4744	-0.001
|	Co	59	**0.002**	**ug/L**	302.417	162	0.000
|	Ni	60	**0.028**	**ug/L**	1.304	49	0.000
|	Cu	63		**ug/L**		84	0.000
⌞	Cu	65	**0.024**	**ug/L**	22.453	65	0.000
⌜	Zn	66	**0.061**	**ug/L**	66.863	83	0.000
|	Zn	67		**ug/L**		6041	-0.013
|	Zn	68		**ug/L**		514	-0.001
|>	Ge	74		**ug/L**		96804	96803.862
|	As	75	**-0.722**	**ug/L**	94.140	180	-0.002
|	Se	77		**ug/L**		5574	-0.015
|	Se	82	**0.057**	**ug/L**	590.469	-2	0.000
⌞	Kr	83		**ug/L**		47	-0.000
⌜	Sr	88	**0.006**	**ug/L**	54.819	95	0.000
|	Y	89		**ug/L**		10	-0.000
|	Zr	90	**0.221**	**ug/L**	19.313	660	0.010
|	Mo	98	**0.141**	**ug/L**	26.149	167	0.003
|	Ag	107	**0.015**	**ug/L**	34.487	75	0.000
|	Cd	111	**-0.003**	**ug/L**	385.138	6	-0.000
|	Cd	114		**ug/L**		25	0.000
|>	In	115		**ug/L**		57471	57471.434
|	Sn	120	**0.237**	**ug/L**	20.443	529	0.007
|	Sb	121	**0.881**	**ug/L**	18.175	1371	0.021
⌞	Sb	123		**ug/L**		1068	0.016
⌜	Ba	135		**ug/L**		16	0.000
|	Ba	137	**0.011**	**ug/L**	46.219	24	0.000
|	Ho	165		**ug/L**		12	0.000
|>	Lu	175		**ug/L**		45258	45257.699
|	Tl	205	**0.112**	**ug/L**	25.059	104	0.002
|	Pb	208	**0.008**	**ug/L**	47.565	215	0.001
|	Bi	209		**ug/L**		22	0.000
|	Th	232	**0.115**	**ug/L**	29.461	623	0.011
⌞	U	238	**0.011**	**ug/L**	36.722	105	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45			101.5		
|	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			101.5		
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115			101.5		
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175			101.2		
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Wednesday, January 06, 2010 17:45:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\QC Std 10.049

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**944.773**	**ug/L**	2.286	183207	0.746
|	Be	9	**999.188**	**ug/L**	0.608	53318	0.217
|	B	11	**1.847**	**ug/L**	23.096	116	0.000
|	Na	23	**48925.605**	**ug/L**	5.784	58864010	239.632
|	Mg	24	**49751.122**	**ug/L**	3.251	39038162	158.963
|	Al	27	**47206.730**	**ug/L**	6.223	56571468	230.309
|	P	31	**23593.570**	**ug/L**	1.227	1441879	5.863
|	K	39	**53647.028**	**ug/L**	11.722	103972425	422.021
|	Ca	43	**48949.098**	**ug/L**	0.702	203314	0.826
|>	Sc	45		**ug/L**		245504	245503.575
|	Ti	47	**31.114**	**ug/L**	1.747	6131	0.024
|	V	51	**950.017**	**ug/L**	0.927	1778885	7.227
|	Cr	52	**944.235**	**ug/L**	1.585	1744604	7.093
|	Cr	53		**ug/L**		335815	0.655
|	Mn	55	**990.233**	**ug/L**	2.557	2953072	12.025
|	Fe	57	**50036.105**	**ug/L**	1.871	2988141	12.151
|	Co	59	**960.558**	**ug/L**	1.957	2140395	8.718
|	Ni	60	**963.024**	**ug/L**	1.904	446254	1.818
|	Cu	63		**ug/L**		977618	3.982
⌊	Cu	65	**937.603**	**ug/L**	0.731	473506	1.928
⌈	Zn	66	**2372.797**	**ug/L**	2.460	641944	6.691
|	Zn	67		**ug/L**		104619	1.016
|	Zn	68		**ug/L**		450439	4.689
|>	Ge	74		**ug/L**		95950	95950.175
|	As	75	**943.610**	**ug/L**	1.224	292470	3.044
|	Se	77		**ug/L**		14697	0.081
|	Se	82	**472.150**	**ug/L**	1.201	14195	0.148
⌊	Kr	83		**ug/L**		55	0.000
⌈	Sr	88	**992.870**	**ug/L**	0.950	4499592	81.104
|	Y	89		**ug/L**		154	0.003
|	Zr	90	**496.758**	**ug/L**	0.153	1204834	21.715
|	Mo	98	**992.918**	**ug/L**	1.050	1034932	18.657
|	Ag	107	**239.682**	**ug/L**	1.460	385606	6.951
|	Cd	111	**990.190**	**ug/L**	2.093	372116	6.709
|	Cd	114		**ug/L**		861300	15.527
|>	In	115		**ug/L**		55479	55479.365
|	Sn	120	**1007.489**	**ug/L**	1.891	1721249	31.030
|	Sb	121	**255.005**	**ug/L**	2.011	331942	5.979
⌊	Sb	123		**ug/L**		254520	4.584
⌈	Ba	135		**ug/L**		387388	8.249
|	Ba	137	**940.064**	**ug/L**	1.886	659926	14.053
|	Ho	165		**ug/L**		62	0.001
|>	Lu	175		**ug/L**		46970	46969.914
|	Tl	205	**468.557**	**ug/L**	2.401	323588	6.890
|	Pb	208	**4798.518**	**ug/L**	2.602	17496918	372.581
|	Bi	209		**ug/L**		397	0.008
|	Th	232	**2419.731**	**ug/L**	2.268	11343960	241.559
⌊	U	238	**4965.430**	**ug/L**	1.775	23774504	506.219

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7	94.477				
|	Be	9	99.919				
|	B	11					
|	Na	23	97.851				
|	Mg	24	99.502				
|	Al	27	94.413				
|	P	31	94.374				
|	K	39	107.294				
|	Ca	43	97.898				
|>	Sc	45		102.3			
|	Ti	47					
|	V	51	95.002				
|	Cr	52	94.423				
|	Cr	53					
|	Mn	55	99.023				
|	Fe	57	100.072				
|	Co	59	96.056				
|	Ni	60	96.302				
|	Cu	63					
⌊	Cu	65	93.760				
⌈	Zn	66	94.912				
|	Zn	67					
|	Zn	68					
|>	Ge	74		100.6			
|	As	75	94.361				
|	Se	77					
|	Se	82	94.430				
⌊	Kr	83					
⌈	Sr	88	99.287				
|	Y	89					
|	Zr	90	99.352				
|	Mo	98	99.292				
|	Ag	107	95.873				
|	Cd	111	99.019				
|	Cd	114					
|>	In	115		97.9			
|	Sn	120	100.749				
|	Sb	121	102.002				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	94.006				
|	Ho	165					
|>	Lu	175		105.0			
|	Tl	205	93.711				
|	Pb	208	95.970				
|	Bi	209					
|	Th	232	96.789				
⌊	U	238	99.309				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Wednesday, January 06, 2010 17:51:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\QC Std 11.050

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**49.156**	**ug/L**	1.968	9851	0.039
|	Be	9	**51.548**	**ug/L**	2.935	2842	0.011
|	B	11	**98.996**	**ug/L**	0.379	4827	0.019
|	Na	23	**5228.494**	**ug/L**	0.798	6508461	25.609
|	Mg	24	**5623.160**	**ug/L**	2.759	4553622	17.967
|	Al	27	**5182.485**	**ug/L**	3.633	6409842	25.284
|	P	31	**4982.684**	**ug/L**	0.492	316481	1.238
|	K	39	**5364.940**	**ug/L**	2.513	11118767	42.204
|	Ca	43	**4993.365**	**ug/L**	0.747	21859	0.084
|>	Sc	45		**ug/L**		253484	253484.426
|	Ti	47	**50.503**	**ug/L**	1.027	10170	0.039
|	V	51	**50.454**	**ug/L**	2.765	101964	0.384
|	Cr	52	**50.789**	**ug/L**	1.468	100251	0.382
|	Cr	53		**ug/L**		144490	-0.143
|	Mn	55	**52.720**	**ug/L**	2.406	163162	0.640
|	Fe	57	**5060.450**	**ug/L**	2.168	316516	1.229
|	Co	59	**51.076**	**ug/L**	0.187	117672	0.464
|	Ni	60	**53.132**	**ug/L**	0.613	25458	0.100
|	Cu	63		**ug/L**		57058	0.225
⌊	Cu	65	**52.514**	**ug/L**	0.218	27434	0.108
⌈	Zn	66	**52.300**	**ug/L**	1.299	14848	0.147
|	Zn	67		**ug/L**		8112	0.006
|	Zn	68		**ug/L**		11273	0.106
|>	Ge	74		**ug/L**		100222	100221.736
|	As	75	**49.601**	**ug/L**	3.107	16459	0.160
|	Se	77		**ug/L**		5399	-0.018
|	Se	82	**51.414**	**ug/L**	4.209	1611	0.016
⌊	Kr	83		**ug/L**		54	0.000
⌈	Sr	88	**51.342**	**ug/L**	0.346	249653	4.194
|	Y	89		**ug/L**		25	0.000
|	Zr	90	**54.044**	**ug/L**	2.334	140709	2.362
|	Mo	98	**50.246**	**ug/L**	0.500	56200	0.944
|	Ag	107	**50.048**	**ug/L**	1.534	86424	1.451
|	Cd	111	**51.348**	**ug/L**	2.081	20712	0.348
|	Cd	114		**ug/L**		48137	0.809
|>	In	115		**ug/L**		59511	59510.836
|	Sn	120	**53.404**	**ug/L**	0.799	97998	1.645
|	Sb	121	**52.772**	**ug/L**	4.170	73816	1.237
⌊	Sb	123		**ug/L**		56148	0.940
⌈	Ba	135		**ug/L**		21102	0.441
|	Ba	137	**50.593**	**ug/L**	1.688	36195	0.756
|	Ho	165		**ug/L**		14	0.000
|>	Lu	175		**ug/L**		47843	47842.805
|	Tl	205	**49.546**	**ug/L**	0.924	34884	0.729
|	Pb	208	**51.793**	**ug/L**	1.493	192562	4.021
|	Bi	209		**ug/L**		46	0.001
|	Th	232	**52.049**	**ug/L**	0.674	248687	5.196
⌊	U	238	**53.776**	**ug/L**	1.039	262324	5.482

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7	98.313				
|	Be	9	103.095				
|	B	11	98.996				
|	Na	23	104.570				
|	Mg	24	112.463				
|	Al	27	102.623				
|	P	31	99.654				
|	K	39	107.299				
|	Ca	43	99.867				
|>	Sc	45			105.6		
|	Ti	47	101.006				
|	V	51	100.909				
|	Cr	52	101.578				
|	Cr	53					
|	Mn	55	105.440				
|	Fe	57	101.209				
|	Co	59	102.152				
|	Ni	60	106.265				
|	Cu	63					
⌊	Cu	65	105.028				
⌈	Zn	66	104.601				
|	Zn	67					
|	Zn	68					
|>	Ge	74			105.1		
|	As	75	99.201				
|	Se	77					
|	Se	82	102.827				
⌊	Kr	83					
⌈	Sr	88	102.684				
|	Y	89					
|	Zr	90	108.088				
|	Mo	98	100.492				
|	Ag	107	100.095				
|	Cd	111	102.697				
|	Cd	114					
|>	In	115			105.1		
|	Sn	120	106.807				
|	Sb	121	105.544				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	101.186				
|	Ho	165					
|>	Lu	175			107.0		
|	Tl	205	99.093				
|	Pb	208	103.586				
|	Bi	209					
|	Th	232	104.097				
⌊	U	238	107.553				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Mg		24CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Wednesday, January 06, 2010 17:57:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\QC Std 12.051

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**0.196**	**ug/L**	24.374	48	0.000
|	Be	9	**0.029**	**ug/L**	137.630	5	0.000
|	B	11	**3.663**	**ug/L**	15.667	205	0.001
|	Na	23	**2.769**	**ug/L**	138.124	19681	0.014
|	Mg	24	**4.159**	**ug/L**	31.781	4001	0.013
|	Al	27	**2.674**	**ug/L**	60.175	5001	0.013
|	P	31	**-4.080**	**ug/L**	15.011	2328	-0.001
|	K	39	**3.750**	**ug/L**	137.235	420432	0.029
|	Ca	43	**-5.675**	**ug/L**	66.806	463	-0.000
|>	Sc	45		**ug/L**		249547	249547.444
|	Ti	47	**0.082**	**ug/L**	73.581	186	0.000
|	V	51	**0.064**	**ug/L**	2636.304	4681	0.000
|	Cr	52	**-1.119**	**ug/L**	9.039	1405	-0.008
|	Cr	53		**ug/L**		150467	-0.110
|	Mn	55	**-0.019**	**ug/L**	36.548	837	-0.000
|	Fe	57	**-10.729**	**ug/L**	11.833	4359	-0.003
|	Co	59	**0.011**	**ug/L**	85.827	186	0.000
|	Ni	60	**0.032**	**ug/L**	31.296	52	0.000
|	Cu	63		**ug/L**		144	0.000
⌊	Cu	65	**0.038**	**ug/L**	19.604	74	0.000
⌈	Zn	66	**0.173**	**ug/L**	45.821	114	0.000
|	Zn	67		**ug/L**		6220	-0.011
|	Zn	68		**ug/L**		581	-0.001
|>	Ge	74		**ug/L**		97473	97472.733
|	As	75	**0.819**	**ug/L**	39.022	665	0.003
|	Se	77		**ug/L**		5183	-0.019
|	Se	82	**-0.163**	**ug/L**	135.162	-9	-0.000
⌊	Kr	83		**ug/L**		54	0.000
⌈	Sr	88	**0.018**	**ug/L**	25.196	154	0.001
|	Y	89		**ug/L**		9	-0.000
|	Zr	90	**0.468**	**ug/L**	5.499	1294	0.020
|	Mo	98	**0.199**	**ug/L**	11.346	232	0.004
|	Ag	107	**0.035**	**ug/L**	16.775	109	0.001
|	Cd	111	**0.063**	**ug/L**	36.251	32	0.000
|	Cd	114		**ug/L**		46	0.000
|>	In	115		**ug/L**		57996	57996.265
|	Sn	120	**1.393**	**ug/L**	7.312	2600	0.043
|	Sb	121	**2.470**	**ug/L**	9.541	3548	0.058
⌊	Sb	123		**ug/L**		2814	0.045
⌈	Ba	135		**ug/L**		21	0.000
|	Ba	137	**0.019**	**ug/L**	18.099	30	0.000
|	Ho	165		**ug/L**		10	0.000
|>	Lu	175		**ug/L**		46692	46692.047
|	Tl	205	**0.234**	**ug/L**	4.818	191	0.003
|	Pb	208	**0.244**	**ug/L**	5.116	1079	0.019
|	Bi	209		**ug/L**		18	-0.000
|	Th	232	**0.398**	**ug/L**	13.237	1967	0.040
⌊	U	238	**0.110**	**ug/L**	4.797	579	0.011

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			103.9		
	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			102.2		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			102.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			104.4		
	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#4 - Summary Report

Sample ID: 1202001488
Sample Date/Time: Wednesday, January 06, 2010 18:03:48
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 935378|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\1202001488.052

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**0.108**	**ug/L**	11.533	31	0.000
|	Be	9	**-0.015**	**ug/L**	68.566	2	-0.000
|	B	11	**2.019**	**ug/L**	16.980	128	0.000
|	Na	23	**11.475**	**ug/L**	11.230	30700	0.056
|	Mg	24	**1.188**	**ug/L**	58.252	1667	0.004
|	Al	27	**3.728**	**ug/L**	67.869	6335	0.018
|	P	31	**16.524**	**ug/L**	6.622	3652	0.004
|	K	39	**-3.970**	**ug/L**	191.120	410482	-0.031
|	Ca	43	**-1.571**	**ug/L**	235.070	487	-0.000
|>	Sc	45		**ug/L**		252807	252807.077
|	Ti	47	**0.147**	**ug/L**	38.680	202	0.000
|	V	51	**0.588**	**ug/L**	301.823	5745	0.004
|	Cr	52	**-0.507**	**ug/L**	14.175	2584	-0.004
|	Cr	53		**ug/L**		116944	-0.251
|	Mn	55	**0.115**	**ug/L**	13.835	1260	0.001
|	Fe	57	**-0.544**	**ug/L**	558.866	5040	-0.000
|	Co	59	**-0.005**	**ug/L**	175.543	152	-0.000
|	Ni	60	**0.052**	**ug/L**	47.516	62	0.000
|	Cu	63		**ug/L**		208	0.000
⌊	Cu	65	**0.108**	**ug/L**	15.909	111	0.000
⌈	Zn	66	**1.254**	**ug/L**	8.932	414	0.004
|	Zn	67		**ug/L**		5111	-0.023
|	Zn	68		**ug/L**		675	0.000
|>	Ge	74		**ug/L**		98131	98130.567
|	As	75	**-0.160**	**ug/L**	406.704	357	-0.001
|	Se	77		**ug/L**		3799	-0.034
|	Se	82	**0.317**	**ug/L**	38.689	6	0.000
⌊	Kr	83		**ug/L**		50	-0.000
⌈	Sr	88	**0.026**	**ug/L**	6.926	193	0.002
|	Y	89		**ug/L**		22	0.000
|	Zr	90	**0.614**	**ug/L**	16.969	1692	0.027
|	Mo	98	**0.088**	**ug/L**	11.278	112	0.002
|	Ag	107	**0.008**	**ug/L**	72.668	64	0.000
|	Cd	111	**0.025**	**ug/L**	63.469	17	0.000
|	Cd	114		**ug/L**		27	0.000
|>	In	115		**ug/L**		59054	59053.986
|	Sn	120	**0.599**	**ug/L**	6.182	1204	0.018
|	Sb	121	**1.133**	**ug/L**	17.104	1757	0.027
⌊	Sb	123		**ug/L**		1402	0.021
⌈	Ba	135		**ug/L**		27	0.000
|	Ba	137	**0.040**	**ug/L**	14.516	45	0.001
|	Ho	165		**ug/L**		7	0.000
|>	Lu	175		**ug/L**		46860	46859.879
|	Tl	205	**0.094**	**ug/L**	2.206	96	0.001
|	Pb	208	**0.196**	**ug/L**	8.050	905	0.015
|	Bi	209		**ug/L**		26	0.000
|	Th	232	**0.261**	**ug/L**	15.090	1325	0.026
⌊	U	238	**0.043**	**ug/L**	34.401	259	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			105.3		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			102.9		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			104.3		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			104.8		
	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#4 - Summary Report

Sample ID: 1202001489
Sample Date/Time: Wednesday, January 06, 2010 18:09:59
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 935378|40|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\1202001489.053

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**2.746**	**ug/L**	10.063	566	0.002
|	Be	9	**21.166**	**ug/L**	2.407	1182	0.005
|	B	11	**39.792**	**ug/L**	1.837	1980	0.008
|	Na	23	**261.873**	**ug/L**	3.612	345464	1.283
|	Mg	24	**1182.466**	**ug/L**	7.124	968868	3.778
|	Al	27	**3227.139**	**ug/L**	2.548	4037333	15.744
|	P	31	**199.343**	**ug/L**	1.168	15346	0.050
|	K	39	**1272.662**	**ug/L**	2.194	2990231	10.012
|	Ca	43	**2733.863**	**ug/L**	0.982	12327	0.046
|>	Sc	45		**ug/L**		256297	256296.580
|	Ti	47	**129.121**	**ug/L**	0.643	26014	0.101
|	V	51	**24.247**	**ug/L**	5.676	51991	0.184
|	Cr	52	**63.582**	**ug/L**	0.954	126007	0.478
|	Cr	53		**ug/L**		157059	-0.101
|	Mn	55	**151.303**	**ug/L**	1.161	471848	1.837
|	Fe	57	**4706.903**	**ug/L**	1.288	298101	1.143
|	Co	59	**25.624**	**ug/L**	1.016	59772	0.233
|	Ni	60	**38.066**	**ug/L**	1.653	18451	0.072
|	Cu	63		**ug/L**		52604	0.205
⌊	Cu	65	**47.857**	**ug/L**	0.901	25283	0.098
⌈	Zn	66	**159.483**	**ug/L**	1.479	44787	0.450
|	Zn	67		**ug/L**		12746	0.053
|	Zn	68		**ug/L**		32488	0.320
|>	Ge	74		**ug/L**		99443	99442.916
|	As	75	**28.186**	**ug/L**	1.938	9458	0.091
|	Se	77		**ug/L**		6890	-0.003
|	Se	82	**78.006**	**ug/L**	1.778	2427	0.024
⌊	Kr	83		**ug/L**		56	0.000
⌈	Sr	88	**61.909**	**ug/L**	1.097	299136	5.057
|	Y	89		**ug/L**		15211	0.257
|	Zr	90	**2.697**	**ug/L**	1.356	7082	0.118
|	Mo	98	**13.602**	**ug/L**	1.669	15130	0.256
|	Ag	107	**6.359**	**ug/L**	1.139	10958	0.184
|	Cd	111	**16.221**	**ug/L**	1.864	6507	0.110
|	Cd	114		**ug/L**		15468	0.261
|>	In	115		**ug/L**		59140	59140.056
|	Sn	120	**9.546**	**ug/L**	2.765	17502	0.294
|	Sb	121	**14.140**	**ug/L**	1.903	19796	0.332
⌊	Sb	123		**ug/L**		15250	0.255
⌈	Ba	135		**ug/L**		21545	0.464
|	Ba	137	**52.738**	**ug/L**	1.410	36628	0.788
|	Ho	165		**ug/L**		497	0.011
|>	Lu	175		**ug/L**		46438	46438.153
|	Tl	205	**33.060**	**ug/L**	0.500	22605	0.486
|	Pb	208	**23.612**	**ug/L**	0.436	85328	1.833
|	Bi	209		**ug/L**		685	0.014
|	Th	232	**2.578**	**ug/L**	2.257	12057	0.257
⌊	U	238	**0.519**	**ug/L**	0.781	2509	0.053

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			106.7		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			104.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			104.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			103.9		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 243270001
Sample Date/Time: Wednesday, January 06, 2010 18:16:10
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 935378|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\243270001.054

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**66.109**	**ug/L**	1.331	15064	0.052
|	Be	9	**4.234**	**ug/L**	5.995	269	0.001
|	B	11	**20.243**	**ug/L**	3.101	1150	0.004
|	Na	23	**1280.631**	**ug/L**	3.409	1827319	6.272
|	Mg	24	**13514.049**	**ug/L**	6.621	12453373	43.180
|	Al	27	**79445.217**	**ug/L**	3.526	111754680	387.593
|	P	31	**254.629**	**ug/L**	2.296	21222	0.063
|	K	39	**12315.153**	**ug/L**	2.298	28405776	96.879
|	Ca	43	**8962.096**	**ug/L**	1.168	44159	0.151
|>	Sc	45		**ug/L**		288244	288243.803
|	Ti	47	**1270.398**	**ug/L**	0.236	286109	0.992
|	V	51	**100.211**	**ug/L**	0.275	225041	0.762
|	Cr	52	**48.555**	**ug/L**	0.587	109172	0.365
|	Cr	53		**ug/L**		115049	-0.314
|	Mn	55	**909.013**	**ug/L**	0.826	3182738	11.039
|	Fe	57	**58953.837**	**ug/L**	0.891	4132169	14.316
|	Co	59	**20.586**	**ug/L**	1.629	54038	0.187
|	Ni	60	**37.528**	**ug/L**	2.509	20456	0.071
|	Cu	63		**ug/L**		37274	0.129
⌊	Cu	65	**30.973**	**ug/L**	2.587	18420	0.064
⌈	Zn	66	**141.497**	**ug/L**	1.612	36846	0.399
|	Zn	67		**ug/L**		11355	0.048
|	Zn	68		**ug/L**		28998	0.308
|>	Ge	74		**ug/L**		92195	92194.515
|	As	75	**9.327**	**ug/L**	3.435	3160	0.030
|	Se	77		**ug/L**		3042	-0.039
|	Se	82	**-0.140**	**ug/L**	446.194	-7	-0.000
⌊	Kr	83		**ug/L**		93	0.000
⌈	Sr	88	**158.375**	**ug/L**	1.271	730179	12.937
|	Y	89		**ug/L**		233795	4.143
|	Zr	90	**100.405**	**ug/L**	1.505	247804	4.389
|	Mo	98	**1.633**	**ug/L**	1.179	1746	0.031
|	Ag	107	**0.451**	**ug/L**	5.702	786	0.013
|	Cd	111	**1.523**	**ug/L**	5.062	589	0.010
|	Cd	114		**ug/L**		178	0.003
|>	In	115		**ug/L**		56437	56437.022
|	Sn	120	**0.945**	**ug/L**	1.600	1752	0.029
|	Sb	121	**0.746**	**ug/L**	17.473	1168	0.017
⌊	Sb	123		**ug/L**		940	0.014
⌈	Ba	135		**ug/L**		291706	5.870
|	Ba	137	**667.194**	**ug/L**	0.433	495634	9.974
|	Ho	165		**ug/L**		8204	0.165
|>	Lu	175		**ug/L**		49692	49691.779
|	Tl	205	**1.015**	**ug/L**	3.612	774	0.015
|	Pb	208	**48.654**	**ug/L**	1.563	187903	3.778
|	Bi	209		**ug/L**		2079	0.041
|	Th	232	**32.972**	**ug/L**	0.775	163664	3.292
⌊	U	238	**2.688**	**ug/L**	0.984	13677	0.274

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		120.1			
	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		96.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		111.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl	27	Sample is out of limits (over linear range)
Sc 45 Int Std for samSc	45	
Ti 47 Upper, S, EEETi	47	Sample is out of limits (over linear range)
V 51 Upper, S, EEE V	51	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEEFe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1202001490
Sample Date/Time: Wednesday, January 06, 2010 18:22:22
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 935378|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\1202001490.055

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**66.399**	**ug/L**	3.756	14735	0.052
	Be	9	**4.844**	**ug/L**	4.741	299	0.001
	B	11	**22.208**	**ug/L**	2.387	1226	0.004
	Na	23	**1238.724**	**ug/L**	4.832	1721180	6.067
	Mg	24	**13091.643**	**ug/L**	3.675	11746304	41.830
	Al	27	**81787.156**	**ug/L**	3.988	112101744	399.018
	P	31	**293.675**	**ug/L**	1.737	23396	0.073
	K	39	**12413.467**	**ug/L**	9.014	27859511	97.652
	Ca	43	**9625.370**	**ug/L**	0.821	46173	0.162
>	Sc	45		**ug/L**		280825	280825.328
	Ti	47	**1339.125**	**ug/L**	1.044	293822	1.046
	V	51	**99.939**	**ug/L**	2.000	218707	0.760
	Cr	52	**48.746**	**ug/L**	1.345	106760	0.366
	Cr	53		**ug/L**		112503	-0.313
	Mn	55	**1004.594**	**ug/L**	0.239	3426957	12.200
	Fe	57	**57986.744**	**ug/L**	0.666	3959804	14.081
	Co	59	**23.649**	**ug/L**	0.326	60459	0.215
	Ni	60	**38.391**	**ug/L**	0.707	20390	0.072
	Cu	63		**ug/L**		39298	0.140
	Cu	65	**33.376**	**ug/L**	1.258	19336	0.069
	Zn	66	**130.216**	**ug/L**	1.453	34132	0.367
	Zn	67		**ug/L**		10768	0.041
	Zn	68		**ug/L**		26851	0.283
>	Ge	74		**ug/L**		92793	92792.695
	As	75	**10.701**	**ug/L**	1.864	3590	0.035
	Se	77		**ug/L**		3039	-0.040
	Se	82	**0.609**	**ug/L**	82.318	14	0.000
	Kr	83		**ug/L**		83	0.000
	Sr	88	**155.141**	**ug/L**	0.807	722151	12.673
	Y	89		**ug/L**		259225	4.549
	Zr	90	**108.709**	**ug/L**	1.205	270874	4.752
	Mo	98	**1.746**	**ug/L**	0.390	1883	0.033
	Ag	107	**0.515**	**ug/L**	4.755	901	0.015
	Cd	111	**1.620**	**ug/L**	5.517	633	0.011
	Cd	114		**ug/L**		212	0.003
>	In	115		**ug/L**		56980	56979.832
	Sn	120	**0.872**	**ug/L**	3.092	1640	0.027
	Sb	121	**0.495**	**ug/L**	7.620	845	0.012
	Sb	123		**ug/L**		724	0.010
	Ba	135		**ug/L**		259027	5.180
	Ba	137	**589.936**	**ug/L**	2.596	441076	8.819
	Ho	165		**ug/L**		8748	0.175
>	Lu	175		**ug/L**		50022	50021.597
	Tl	205	**0.932**	**ug/L**	1.316	718	0.014
	Pb	208	**44.823**	**ug/L**	0.944	174287	3.480
	Bi	209		**ug/L**		2118	0.042
	Th	232	**33.378**	**ug/L**	1.009	166779	3.332
	U	238	**2.981**	**ug/L**	1.140	15261	0.304

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		117.0			
	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		97.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		111.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl	27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEETi	47	Sample is out of limits (over linear range)
Mn 55 Upper, S, EElMn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEEFe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1202001491
Sample Date/Time: Wednesday, January 06, 2010 18:28:35
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 935378|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\1202001491.056

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**100.877**	**ug/L**	1.687	23746	0.080
|	Be	9	**27.510**	**ug/L**	2.299	1784	0.006
|	B	11	**68.800**	**ug/L**	2.828	3953	0.013
|	Na	23	**2503.572**	**ug/L**	1.895	3671980	12.262
|	Mg	24	**16674.764**	**ug/L**	4.151	15874191	53.279
|	Al	27	**104519.551**	**ug/L**	4.918	151840597	509.924
|	P	31	**1140.620**	**ug/L**	0.669	87500	0.283
|	K	39	**16652.300**	**ug/L**	2.574	39513163	130.997
|	Ca	43	**11304.628**	**ug/L**	0.555	57411	0.191
|>	Sc	45		**ug/L**		297861	297861.024
|	Ti	47	**1771.861**	**ug/L**	0.590	412279	1.383
|	V	51	**143.686**	**ug/L**	1.445	331073	1.093
|	Cr	52	**80.501**	**ug/L**	0.466	184298	0.605
|	Cr	53		**ug/L**		121754	-0.305
|	Mn	55	**1138.735**	**ug/L**	0.534	4120106	13.829
|	Fe	57	**67071.845**	**ug/L**	1.202	4857492	16.288
|	Co	59	**43.507**	**ug/L**	1.260	117811	0.395
|	Ni	60	**63.746**	**ug/L**	1.372	35882	0.120
|	Cu	63		**ug/L**		70782	0.237
⌊	Cu	65	**55.299**	**ug/L**	0.972	33944	0.114
⌈	Zn	66	**181.383**	**ug/L**	1.392	48396	0.511
|	Zn	67		**ug/L**		13169	0.064
|	Zn	68		**ug/L**		37635	0.392
|>	Ge	74		**ug/L**		94488	94487.745
|	As	75	**51.273**	**ug/L**	2.393	16022	0.165
|	Se	77		**ug/L**		3151	-0.039
|	Se	82	**8.059**	**ug/L**	10.929	235	0.003
⌊	Kr	83		**ug/L**		90	0.000
⌈	Sr	88	**212.913**	**ug/L**	1.733	988645	17.392
|	Y	89		**ug/L**		291370	5.126
|	Zr	90	**170.955**	**ug/L**	0.920	424885	7.473
|	Mo	98	**24.542**	**ug/L**	1.804	26226	0.461
|	Ag	107	**24.704**	**ug/L**	0.723	40772	0.716
|	Cd	111	**7.483**	**ug/L**	1.901	2889	0.051
|	Cd	114		**ug/L**		4889	0.086
|>	In	115		**ug/L**		56841	56840.694
|	Sn	120	**8.098**	**ug/L**	0.849	14286	0.249
|	Sb	121	**22.164**	**ug/L**	1.264	29720	0.520
⌊	Sb	123		**ug/L**		22659	0.396
⌈	Ba	135		**ug/L**		328231	6.441
|	Ba	137	**731.273**	**ug/L**	1.492	557085	10.932
|	Ho	165		**ug/L**		10011	0.196
|>	Lu	175		**ug/L**		50959	50958.914
|	Tl	205	**48.085**	**ug/L**	1.431	36060	0.707
|	Pb	208	**71.326**	**ug/L**	1.535	282390	5.538
|	Bi	209		**ug/L**		2438	0.047
|	Th	232	**62.554**	**ug/L**	1.675	318308	6.245
⌊	U	238	**29.221**	**ug/L**	2.484	151840	2.979

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			124.1		
	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			99.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			100.3		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			114.0		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl	27	Sample is out of limits (over linear range)
Sc 45 Int Std for samSc	45	
Ti 47 Upper, S, EEETi	47	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, EEIMn	55	Sample is out of limits (over linear range)

Fe 57 Upper, S, EEEFe 57Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1202001493
Sample Date/Time: Wednesday, January 06, 2010 18:34:48
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 935378|2|sk|
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\1202001493.057

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**95.332**	**ug/L**	3.712	23056	0.075
|	Be	9	**26.640**	**ug/L**	2.477	1776	0.006
|	B	11	**67.091**	**ug/L**	2.721	3962	0.013
|	Na	23	**2389.982**	**ug/L**	3.323	3604110	11.706
|	Mg	24	**17878.366**	**ug/L**	1.478	17489993	57.124
|	Al	27	**105048.775**	**ug/L**	2.325	156873029	512.506
|	P	31	**1065.773**	**ug/L**	1.113	84225	0.265
|	K	39	**16579.991**	**ug/L**	2.278	40423605	130.428
|	Ca	43	**11457.075**	**ug/L**	1.458	59779	0.193
|>	Sc	45		**ug/L**		306108	306108.130
|	Ti	47	**1413.492**	**ug/L**	0.663	338027	1.104
|	V	51	**141.601**	**ug/L**	0.726	335372	1.077
|	Cr	52	**83.133**	**ug/L**	1.996	195417	0.624
|	Cr	53		**ug/L**		122166	-0.314
|	Mn	55	**941.565**	**ug/L**	0.204	3501289	11.434
|	Fe	57	**70171.850**	**ug/L**	0.760	5222051	17.040
|	Co	59	**40.540**	**ug/L**	1.258	112818	0.368
|	Ni	60	**65.092**	**ug/L**	1.830	37647	0.123
|	Cu	63		**ug/L**		69315	0.226
⌊	Cu	65	**52.916**	**ug/L**	1.292	33378	0.109
⌈	Zn	66	**188.257**	**ug/L**	0.838	50955	0.531
|	Zn	67		**ug/L**		13386	0.065
|	Zn	68		**ug/L**		39459	0.405
|>	Ge	74		**ug/L**		95856	95855.826
|	As	75	**50.811**	**ug/L**	0.667	16113	0.164
|	Se	77		**ug/L**		3111	-0.040
|	Se	82	**8.340**	**ug/L**	12.952	247	0.003
⌊	Kr	83		**ug/L**		87	0.000
⌈	Sr	88	**212.988**	**ug/L**	1.614	998462	17.398
|	Y	89		**ug/L**		252598	4.402
|	Zr	90	**168.740**	**ug/L**	0.606	423457	7.376
|	Mo	98	**23.073**	**ug/L**	0.857	24901	0.434
|	Ag	107	**24.277**	**ug/L**	2.087	40450	0.704
|	Cd	111	**7.043**	**ug/L**	3.169	2748	0.048
|	Cd	114		**ug/L**		4844	0.084
|>	In	115		**ug/L**		57399	57398.525
|	Sn	120	**6.853**	**ug/L**	1.251	12226	0.211
|	Sb	121	**19.772**	**ug/L**	1.506	26798	0.464
⌊	Sb	123		**ug/L**		20664	0.357
⌈	Ba	135		**ug/L**		293727	5.766
|	Ba	137	**660.980**	**ug/L**	1.405	503387	9.881
|	Ho	165		**ug/L**		8720	0.171
|>	Lu	175		**ug/L**		50944	50944.185
|	Tl	205	**47.261**	**ug/L**	0.796	35438	0.695
|	Pb	208	**66.679**	**ug/L**	0.856	263959	5.177
|	Bi	209		**ug/L**		2343	0.046
|	Th	232	**60.656**	**ug/L**	0.474	308599	6.055
⌊	U	238	**28.714**	**ug/L**	0.191	149194	2.927

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		127.5			
|	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		100.5			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		101.3			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175		113.9			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	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)
Sc 45 Int Std for sam	Sc	45	
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
V 51 Upper, S, EEE	V	51	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#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, January 06, 2010 18:41:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\QC Std 6.058

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**47.207**	**ug/L**	1.115	9555	0.037
	Be	9	**50.227**	**ug/L**	3.169	2798	0.011
	B	11	**100.197**	**ug/L**	3.040	4934	0.019
	Na	23	**4969.780**	**ug/L**	3.197	6248684	24.341
	Mg	24	**5334.325**	**ug/L**	2.602	4364407	17.044
	Al	27	**4743.605**	**ug/L**	2.213	5924495	23.143
	P	31	**4864.020**	**ug/L**	0.534	312028	1.209
	K	39	**5215.598**	**ug/L**	3.763	10922453	41.029
	Ca	43	**4938.948**	**ug/L**	1.008	21837	0.083
>	Sc	45		**ug/L**		255966	255965.939
	Ti	47	**50.045**	**ug/L**	0.751	10177	0.039
	V	51	**51.367**	**ug/L**	3.847	104708	0.391
	Cr	52	**50.423**	**ug/L**	1.663	100551	0.379
	Cr	53		**ug/L**		134143	-0.189
	Mn	55	**52.216**	**ug/L**	0.798	163238	0.634
	Fe	57	**4992.031**	**ug/L**	1.894	315490	1.212
	Co	59	**49.608**	**ug/L**	0.821	115422	0.450
	Ni	60	**51.115**	**ug/L**	1.560	24735	0.096
	Cu	63		**ug/L**		56404	0.220
	Cu	65	**50.922**	**ug/L**	1.972	26867	0.105
	Zn	66	**50.610**	**ug/L**	0.981	14472	0.143
	Zn	67		**ug/L**		7480	-0.001
	Zn	68		**ug/L**		10678	0.099
>	Ge	74		**ug/L**		100930	100930.383
	As	75	**47.208**	**ug/L**	2.533	15792	0.152
	Se	77		**ug/L**		5061	-0.022
	Se	82	**51.161**	**ug/L**	2.944	1615	0.016
	Kr	83		**ug/L**		51	-0.000
	Sr	88	**50.698**	**ug/L**	1.834	246631	4.141
	Y	89		**ug/L**		120	0.002
	Zr	90	**49.842**	**ug/L**	3.032	129799	2.179
	Mo	98	**49.397**	**ug/L**	3.604	55261	0.928
	Ag	107	**49.214**	**ug/L**	1.043	85040	1.427
	Cd	111	**50.189**	**ug/L**	0.619	20259	0.340
	Cd	114		**ug/L**		46987	0.789
>	In	115		**ug/L**		59550	59550.172
	Sn	120	**50.301**	**ug/L**	2.385	92335	1.549
	Sb	121	**49.034**	**ug/L**	4.535	68681	1.150
	Sb	123		**ug/L**		52467	0.877
	Ba	135		**ug/L**		20986	0.433
	Ba	137	**49.553**	**ug/L**	1.438	35889	0.741
	Ho	165		**ug/L**		17	0.000
>	Lu	175		**ug/L**		48428	48428.438
	Tl	205	**49.002**	**ug/L**	0.556	34926	0.721
	Pb	208	**50.007**	**ug/L**	1.213	188224	3.883
	Bi	209		**ug/L**		47	0.001
	Th	232	**50.588**	**ug/L**	1.072	244664	5.050
	U	238	**52.066**	**ug/L**	0.706	257104	5.308

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7	94.414				
|	Be	9	100.454				
|	B	11	100.197				
|	Na	23	99.396				
|	Mg	24	106.686				
|	Al	27	93.933				
|	P	31	97.280				
|	K	39	104.312				
|	Ca	43	98.779				
|>	Sc	45			106.6		
|	Ti	47	100.090				
|	V	51	102.733				
|	Cr	52	100.846				
|	Cr	53					
|	Mn	55	104.431				
|	Fe	57	99.841				
|	Co	59	99.215				
|	Ni	60	102.231				
|	Cu	63					
⌊	Cu	65	101.844				
⌈	Zn	66	101.219				
|	Zn	67					
|	Zn	68					
|>	Ge	74			105.9		
|	As	75	94.415				
|	Se	77					
|	Se	82	102.323				
⌊	Kr	83					
⌈	Sr	88	101.395				
|	Y	89					
|	Zr	90	99.683				
|	Mo	98	98.794				
|	Ag	107	98.429				
|	Cd	111	100.378				
|	Cd	114					
|>	In	115			105.1		
|	Sn	120	100.601				
|	Sb	121	98.068				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	99.106				
|	Ho	165					
|>	Lu	175			108.3		
|	Tl	205	98.004				
|	Pb	208	100.014				
|	Bi	209					
|	Th	232	101.176				
⌊	U	238	104.132				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, January 06, 2010 18:47:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\QC Std 7.059

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.166**	**ug/L**	32.898	41	0.000
	Be	9	**-0.001**	**ug/L**	2820.196	3	-0.000
	B	11	**4.241**	**ug/L**	15.938	226	0.001
	Na	23	**2.118**	**ug/L**	233.269	18346	0.010
	Mg	24	**-0.447**	**ug/L**	163.771	333	-0.001
	Al	27	**1.959**	**ug/L**	76.502	4001	0.010
	P	31	**-5.714**	**ug/L**	13.295	2169	-0.001
	K	39	**-13.969**	**ug/L**	40.432	375887	-0.110
	Ca	43	**-10.701**	**ug/L**	36.728	431	-0.000
>	Sc	45		**ug/L**		243133	243132.859
	Ti	47	**0.174**	**ug/L**	69.393	199	0.000
	V	51	**0.304**	**ug/L**	242.973	5016	0.002
	Cr	52	**-1.045**	**ug/L**	9.661	1503	-0.008
	Cr	53		**ug/L**		136183	-0.153
	Mn	55	**-0.016**	**ug/L**	75.370	825	-0.000
	Fe	57	**-9.689**	**ug/L**	24.279	4308	-0.002
	Co	59	**0.008**	**ug/L**	125.042	176	0.000
	Ni	60	**0.026**	**ug/L**	18.272	48	0.000
	Cu	63		**ug/L**		108	0.000
	Cu	65	**0.001**	**ug/L**	1129.748	53	0.000
	Zn	66	**0.081**	**ug/L**	45.017	88	0.000
	Zn	67		**ug/L**		5579	-0.017
	Zn	68		**ug/L**		455	-0.002
>	Ge	74		**ug/L**		96906	96905.534
	As	75	**0.696**	**ug/L**	87.002	623	0.002
	Se	77		**ug/L**		4551	-0.025
	Se	82	**0.004**	**ug/L**	15049.175	-4	0.000
	Kr	83		**ug/L**		47	-0.000
	Sr	88	**0.010**	**ug/L**	4.821	113	0.001
	Y	89		**ug/L**		18	0.000
	Zr	90	**0.304**	**ug/L**	12.446	864	0.013
	Mo	98	**0.050**	**ug/L**	16.826	68	0.001
	Ag	107	**0.017**	**ug/L**	89.431	77	0.000
	Cd	111	**0.009**	**ug/L**	296.727	11	0.000
	Cd	114		**ug/L**		30	0.000
>	In	115		**ug/L**		57029	57029.144
	Sn	120	**0.260**	**ug/L**	8.122	566	0.008
	Sb	121	**0.951**	**ug/L**	9.216	1456	0.022
	Sb	123		**ug/L**		1138	0.017
	Ba	135		**ug/L**		24	0.000
	Ba	137	**0.011**	**ug/L**	90.789	25	0.000
	Ho	165		**ug/L**		7	0.000
>	Lu	175		**ug/L**		46092	46092.032
	Tl	205	**0.132**	**ug/L**	26.589	120	0.002
	Pb	208	**0.061**	**ug/L**	7.885	408	0.005
	Bi	209		**ug/L**		15	-0.000
	Th	232	**0.123**	**ug/L**	22.796	669	0.012
	U	238	**0.017**	**ug/L**	18.117	135	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			101.3		
	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			101.6		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			100.7		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			103.1		
	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#4 - Summary Report

Sample ID: 1202001492
Sample Date/Time: Wednesday, January 06, 2010 18:53:28
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 935378|10|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\1202001492.060

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**16.282**	**ug/L**	2.230	3148	0.013
	Be	9	**1.157**	**ug/L**	8.545	64	0.000
	B	11	**6.227**	**ug/L**	6.027	320	0.001
	Na	23	**279.074**	**ug/L**	6.513	349224	1.367
	Mg	24	**3278.111**	**ug/L**	5.459	2556900	10.474
	Al	27	**18811.795**	**ug/L**	4.759	22385642	91.778
	P	31	**55.078**	**ug/L**	3.731	5861	0.014
	K	39	**2924.784**	**ug/L**	1.836	6017450	23.008
	Ca	43	**2124.780**	**ug/L**	1.888	9225	0.036
>	Sc	45		**ug/L**		243965	243965.287
	Ti	47	**300.604**	**ug/L**	0.654	57426	0.235
	V	51	**24.900**	**ug/L**	6.497	50665	0.189
	Cr	52	**10.365**	**ug/L**	2.747	22416	0.078
	Cr	53		**ug/L**		123975	-0.205
	Mn	55	**212.954**	**ug/L**	2.104	631747	2.586
	Fe	57	**13621.760**	**ug/L**	2.545	811807	3.308
	Co	59	**4.841**	**ug/L**	1.940	10877	0.044
	Ni	60	**9.154**	**ug/L**	5.390	4250	0.017
	Cu	63		**ug/L**		7821	0.032
	Cu	65	**7.395**	**ug/L**	2.267	3763	0.015
	Zn	66	**28.864**	**ug/L**	1.160	7565	0.081
	Zn	67		**ug/L**		6444	-0.005
	Zn	68		**ug/L**		6319	0.062
>	Ge	74		**ug/L**		92187	92187.126
	As	75	**1.990**	**ug/L**	34.229	976	0.006
	Se	77		**ug/L**		3702	-0.032
	Se	82	**0.100**	**ug/L**	191.890	-1	0.000
	Kr	83		**ug/L**		54	0.000
	Sr	88	**32.470**	**ug/L**	0.342	146917	2.652
	Y	89		**ug/L**		46450	0.839
	Zr	90	**19.121**	**ug/L**	4.743	46396	0.836
	Mo	98	**0.328**	**ug/L**	2.512	355	0.006
	Ag	107	**0.081**	**ug/L**	5.172	178	0.002
	Cd	111	**0.293**	**ug/L**	13.862	117	0.002
	Cd	114		**ug/L**		50	0.001
>	In	115		**ug/L**		55368	55367.786
	Sn	120	**0.239**	**ug/L**	4.971	514	0.007
	Sb	121	**0.411**	**ug/L**	10.350	712	0.010
	Sb	123		**ug/L**		595	0.008
	Ba	135		**ug/L**		58124	1.241
	Ba	137	**141.869**	**ug/L**	0.513	99325	2.121
	Ho	165		**ug/L**		1616	0.034
>	Lu	175		**ug/L**		46826	46825.759
	Tl	205	**0.232**	**ug/L**	5.286	190	0.003
	Pb	208	**10.527**	**ug/L**	0.807	38469	0.817
	Bi	209		**ug/L**		436	0.009
	Th	232	**6.985**	**ug/L**	1.869	32756	0.697
	U	238	**0.570**	**ug/L**	0.984	2775	0.058

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			101.6		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			96.7		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			97.7		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			104.7		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 243270002
Sample Date/Time: Wednesday, January 06, 2010 18:59:41
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 935378|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\243270002.061

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**91.898**	**ug/L**	3.886	20372	0.073
|	Be	9	**5.364**	**ug/L**	1.501	331	0.001
|	B	11	**22.689**	**ug/L**	1.201	1251	0.004
|	Na	23	**893.618**	**ug/L**	5.666	1247353	4.377
|	Mg	24	**12889.001**	**ug/L**	9.071	11549619	41.182
|	Al	27	**110719.639**	**ug/L**	3.880	151493533	540.172
|	P	31	**324.273**	**ug/L**	1.640	25509	0.081
|	K	39	**12824.198**	**ug/L**	8.813	28769953	100.883
|	Ca	43	**9252.674**	**ug/L**	1.063	44364	0.156
|>	Sc	45		**ug/L**		280625	280625.315
|	Ti	47	**1649.457**	**ug/L**	1.505	361532	1.288
|	V	51	**92.799**	**ug/L**	1.707	203216	0.706
|	Cr	52	**48.004**	**ug/L**	2.714	105085	0.361
|	Cr	53		**ug/L**		110322	-0.320
|	Mn	55	**824.842**	**ug/L**	2.277	2810944	10.017
|	Fe	57	**62437.112**	**ug/L**	2.839	4258556	15.162
|	Co	59	**25.744**	**ug/L**	1.342	65739	0.234
|	Ni	60	**37.542**	**ug/L**	2.236	19918	0.071
|	Cu	63		**ug/L**		41476	0.148
⌊	Cu	65	**35.165**	**ug/L**	4.064	20345	0.072
⌈	Zn	66	**136.357**	**ug/L**	0.100	35350	0.385
|	Zn	67		**ug/L**		10735	0.042
|	Zn	68		**ug/L**		27666	0.295
|>	Ge	74		**ug/L**		91770	91769.742
|	As	75	**9.733**	**ug/L**	10.287	3263	0.031
|	Se	77		**ug/L**		2862	-0.041
|	Se	82	**0.693**	**ug/L**	41.646	16	0.000
⌊	Kr	83		**ug/L**		81	0.000
⌈	Sr	88	**126.926**	**ug/L**	1.826	579585	10.368
|	Y	89		**ug/L**		258754	4.629
|	Zr	90	**137.439**	**ug/L**	2.572	335908	6.008
|	Mo	98	**1.903**	**ug/L**	2.631	2013	0.036
|	Ag	107	**0.606**	**ug/L**	3.942	1031	0.018
|	Cd	111	**1.829**	**ug/L**	2.350	700	0.012
|	Cd	114		**ug/L**		156	0.002
|>	In	115		**ug/L**		55906	55905.767
|	Sn	120	**1.199**	**ug/L**	4.986	2173	0.037
|	Sb	121	**0.471**	**ug/L**	4.460	797	0.011
⌊	Sb	123		**ug/L**		618	0.008
⌈	Ba	135		**ug/L**		266943	5.396
|	Ba	137	**616.238**	**ug/L**	1.328	455756	9.212
|	Ho	165		**ug/L**		8736	0.176
|>	Lu	175		**ug/L**		49470	49469.667
|	Tl	205	**0.862**	**ug/L**	1.089	660	0.013
|	Pb	208	**46.943**	**ug/L**	1.080	180517	3.645
|	Bi	209		**ug/L**		2169	0.043
|	Th	232	**36.084**	**ug/L**	1.447	178307	3.602
⌊	U	238	**4.307**	**ug/L**	1.491	21776	0.439

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		116.9			
	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		96.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		110.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl		27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEETi		47	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEEFe		57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 243270003
Sample Date/Time: Wednesday, January 06, 2010 19:05:52
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 935378|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\243270003.062

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**86.920**	**ug/L**	3.816	19377	0.069
	Be	9	**5.632**	**ug/L**	3.945	349	0.001
	B	11	**21.724**	**ug/L**	2.127	1205	0.004
	Na	23	**1333.243**	**ug/L**	2.333	1860405	6.530
	Mg	24	**13066.734**	**ug/L**	5.546	11773691	41.750
	Al	27	**112513.647**	**ug/L**	5.126	154790643	548.925
	P	31	**344.673**	**ug/L**	2.045	27078	0.086
	K	39	**13647.827**	**ug/L**	7.845	30772924	107.362
	Ca	43	**8371.479**	**ug/L**	1.287	40411	0.141
>	Sc	45		**ug/L**		282147	282146.965
	Ti	47	**2061.188**	**ug/L**	0.571	454260	1.609
	V	51	**113.344**	**ug/L**	1.641	248451	0.862
	Cr	52	**51.227**	**ug/L**	1.518	112540	0.385
	Cr	53		**ug/L**		110640	-0.321
	Mn	55	**1108.579**	**ug/L**	1.139	3799537	13.463
	Fe	57	**63858.744**	**ug/L**	1.677	4381207	15.507
	Co	59	**26.151**	**ug/L**	2.539	67141	0.237
	Ni	60	**40.193**	**ug/L**	1.461	21444	0.076
	Cu	63		**ug/L**		42697	0.151
	Cu	65	**35.950**	**ug/L**	0.884	20922	0.074
	Zn	66	**187.065**	**ug/L**	0.610	48984	0.528
	Zn	67		**ug/L**		12912	0.064
	Zn	68		**ug/L**		37411	0.397
>	Ge	74		**ug/L**		92737	92736.644
	As	75	**10.662**	**ug/L**	7.625	3578	0.034
	Se	77		**ug/L**		2853	-0.042
	Se	82	**0.172**	**ug/L**	566.902	1	0.000
	Kr	83		**ug/L**		101	0.001
	Sr	88	**135.940**	**ug/L**	2.273	632932	11.104
	Y	89		**ug/L**		290191	5.091
	Zr	90	**133.034**	**ug/L**	0.957	331555	5.815
	Mo	98	**1.728**	**ug/L**	0.341	1865	0.032
	Ag	107	**0.599**	**ug/L**	3.484	1039	0.017
	Cd	111	**2.074**	**ug/L**	8.966	809	0.014
	Cd	114		**ug/L**		352	0.006
>	In	115		**ug/L**		56995	56994.837
	Sn	120	**1.075**	**ug/L**	4.364	1997	0.033
	Sb	121	**0.456**	**ug/L**	7.992	793	0.011
	Sb	123		**ug/L**		672	0.009
	Ba	135		**ug/L**		325375	6.497
	Ba	137	**737.030**	**ug/L**	1.565	551790	11.018
	Ho	165		**ug/L**		9965	0.199
>	Lu	175		**ug/L**		50078	50078.457
	Tl	205	**1.058**	**ug/L**	4.832	812	0.016
	Pb	208	**130.099**	**ug/L**	0.870	506055	10.102
	Bi	209		**ug/L**		2855	0.057
	Th	232	**42.915**	**ug/L**	1.354	214642	4.284
	U	238	**6.498**	**ug/L**	2.445	33228	0.662

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		117.5			
|	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		97.3			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		100.6			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175		112.0			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	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)
Ti 47 Upper, S, EEE	Ti	47	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, EEI	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#4 - Summary Report

Sample ID: 243270004
Sample Date/Time: Wednesday, January 06, 2010 19:12:04
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 935378|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\243270004.063

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**72.623**	**ug/L**	2.163	16132	0.057
|	Be	9	**4.602**	**ug/L**	4.758	285	0.001
|	B	11	**23.320**	**ug/L**	3.840	1286	0.004
|	Na	23	**816.415**	**ug/L**	3.936	1142308	3.999
|	Mg	24	**12059.577**	**ug/L**	3.374	10830102	38.532
|	Al	27	**89106.395**	**ug/L**	0.674	122166606	434.727
|	P	31	**550.724**	**ug/L**	1.239	41363	0.137
|	K	39	**12720.316**	**ug/L**	2.361	28587865	100.066
|	Ca	43	**11079.743**	**ug/L**	1.159	53103	0.187
|>	Sc	45		**ug/L**		281019	281018.664
|	Ti	47	**2159.411**	**ug/L**	1.161	474033	1.686
|	V	51	**119.405**	**ug/L**	1.323	260452	0.908
|	Cr	52	**51.515**	**ug/L**	1.651	112690	0.387
|	Cr	53		**ug/L**		111739	-0.316
|	Mn	55	**1372.041**	**ug/L**	1.877	4683652	16.662
|	Fe	57	**59118.923**	**ug/L**	0.962	4040271	14.356
|	Co	59	**30.249**	**ug/L**	0.556	77338	0.275
|	Ni	60	**37.314**	**ug/L**	0.288	19833	0.070
|	Cu	63		**ug/L**		46271	0.164
⌊	Cu	65	**38.706**	**ug/L**	1.004	22433	0.080
⌈	Zn	66	**310.059**	**ug/L**	2.119	81995	0.874
|	Zn	67		**ug/L**		17661	0.114
|	Zn	68		**ug/L**		61292	0.648
|>	Ge	74		**ug/L**		93725	93724.827
|	As	75	**11.909**	**ug/L**	7.812	3988	0.038
|	Se	77		**ug/L**		2971	-0.041
|	Se	82	**1.360**	**ug/L**	11.005	36	0.000
⌊	Kr	83		**ug/L**		87	0.000
⌈	Sr	88	**158.260**	**ug/L**	1.947	732058	12.928
|	Y	89		**ug/L**		283681	5.010
|	Zr	90	**125.211**	**ug/L**	2.375	310016	5.474
|	Mo	98	**1.733**	**ug/L**	2.337	1858	0.033
|	Ag	107	**0.533**	**ug/L**	7.394	925	0.015
|	Cd	111	**2.400**	**ug/L**	6.458	928	0.016
|	Cd	114		**ug/L**		917	0.016
|>	In	115		**ug/L**		56638	56638.047
|	Sn	120	**1.241**	**ug/L**	0.258	2274	0.038
|	Sb	121	**1.116**	**ug/L**	3.930	1664	0.026
⌊	Sb	123		**ug/L**		1309	0.020
⌈	Ba	135		**ug/L**		324682	6.414
|	Ba	137	**723.970**	**ug/L**	0.634	547883	10.823
|	Ho	165		**ug/L**		10116	0.200
|>	Lu	175		**ug/L**		50622	50622.377
|	Tl	205	**1.075**	**ug/L**	2.958	833	0.016
|	Pb	208	**313.269**	**ug/L**	2.333	1231405	24.324
|	Bi	209		**ug/L**		3220	0.063
|	Th	232	**45.922**	**ug/L**	4.110	232125	4.584
⌊	U	238	**10.052**	**ug/L**	3.142	51926	1.025

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		117.0			
|	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		98.3			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		100.0			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175		113.2			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	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)
Ti 47 Upper, S, EEE	Ti	47	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, EEI	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#4 - Summary Report

Sample ID: 243270005
Sample Date/Time: Wednesday, January 06, 2010 19:18:17
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 935378|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\243270005.064

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**49.553**	**ug/L**	2.629	10687	0.039
|	Be	9	**2.637**	**ug/L**	8.215	160	0.001
|	B	11	**13.309**	**ug/L**	4.252	727	0.003
|	Na	23	**1966.499**	**ug/L**	2.935	2644574	9.632
|	Mg	24	**12301.479**	**ug/L**	0.954	10723046	39.305
|	Al	27	**62754.074**	**ug/L**	7.367	83468946	306.161
|	P	31	**1270.351**	**ug/L**	1.893	88922	0.316
|	K	39	**7438.821**	**ug/L**	2.990	16410709	58.518
|	Ca	43	**16217.013**	**ug/L**	2.350	75188	0.274
|>	Sc	45		**ug/L**		272827	272826.596
|	Ti	47	**1601.607**	**ug/L**	2.652	341247	1.251
|	V	51	**97.796**	**ug/L**	1.713	207953	0.744
|	Cr	52	**34.577**	**ug/L**	2.141	74674	0.260
|	Cr	53		**ug/L**		105780	-0.326
|	Mn	55	**1389.974**	**ug/L**	2.505	4605499	16.880
|	Fe	57	**46144.355**	**ug/L**	1.884	3062398	11.206
|	Co	59	**18.702**	**ug/L**	1.523	46487	0.170
|	Ni	60	**42.213**	**ug/L**	1.212	21777	0.080
|	Cu	63		**ug/L**		51182	0.187
⌊	Cu	65	**44.317**	**ug/L**	1.976	24923	0.091
⌈	Zn	66	**118.442**	**ug/L**	1.140	31208	0.334
|	Zn	67		**ug/L**		10272	0.035
|	Zn	68		**ug/L**		26757	0.280
|>	Ge	74		**ug/L**		93251	93250.976
|	As	75	**5.291**	**ug/L**	8.682	1982	0.017
|	Se	77		**ug/L**		3045	-0.040
|	Se	82	**0.332**	**ug/L**	57.949	6	0.000
⌊	Kr	83		**ug/L**		70	0.000
⌈	Sr	88	**170.663**	**ug/L**	2.029	788778	13.941
|	Y	89		**ug/L**		217313	3.841
|	Zr	90	**107.257**	**ug/L**	2.359	265372	4.689
|	Mo	98	**0.928**	**ug/L**	4.217	1001	0.017
|	Ag	107	**0.417**	**ug/L**	3.611	733	0.012
|	Cd	111	**1.606**	**ug/L**	5.781	623	0.011
|	Cd	114		**ug/L**		360	0.006
|>	In	115		**ug/L**		56576	56576.273
|	Sn	120	**0.884**	**ug/L**	3.484	1649	0.027
|	Sb	121	**0.255**	**ug/L**	10.701	520	0.006
⌊	Sb	123		**ug/L**		470	0.005
⌈	Ba	135		**ug/L**		463536	9.392
|	Ba	137	**1070.983**	**ug/L**	1.264	790155	16.010
|	Ho	165		**ug/L**		7666	0.155
|>	Lu	175		**ug/L**		49357	49356.992
|	Tl	205	**0.699**	**ug/L**	4.458	539	0.010
|	Pb	208	**40.366**	**ug/L**	1.256	154862	3.134
|	Bi	209		**ug/L**		1764	0.035
|	Th	232	**22.373**	**ug/L**	2.771	110292	2.233
⌊	U	238	**12.978**	**ug/L**	2.041	65335	1.323

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		113.6			
|	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		97.8			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		99.9			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175		110.4			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	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)
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEI	Mn	55	Sample is out of limits (over linear range)
Ba 137 Upper, S, EE	Ba	137	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 243270006
Sample Date/Time: Wednesday, January 06, 2010 19:24:30
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 935378|2|sk|
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\243270006.065

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**70.205**	**ug/L**	2.923	16079	0.055
	Be	9	**4.339**	**ug/L**	12.529	277	0.001
	B	11	**17.630**	**ug/L**	3.002	1012	0.003
	Na	23	**1589.618**	**ug/L**	3.169	2274802	7.786
	Mg	24	**12614.236**	**ug/L**	3.355	11684062	40.305
	Al	27	**77081.924**	**ug/L**	1.596	108978166	376.063
	P	31	**212.056**	**ug/L**	1.510	18267	0.053
	K	39	**11049.763**	**ug/L**	5.237	25674452	86.924
	Ca	43	**14339.035**	**ug/L**	0.245	70710	0.242
>	Sc	45		**ug/L**		289845	289844.723
	Ti	47	**1096.809**	**ug/L**	0.809	248397	0.856
	V	51	**86.046**	**ug/L**	1.800	195014	0.655
	Cr	52	**47.418**	**ug/L**	0.973	107290	0.356
	Cr	53		**ug/L**		107957	-0.341
	Mn	55	**780.151**	**ug/L**	1.740	2746762	9.474
	Fe	57	**58151.274**	**ug/L**	1.969	4098081	14.121
	Co	59	**19.595**	**ug/L**	1.307	51735	0.178
	Ni	60	**32.784**	**ug/L**	2.327	17971	0.062
	Cu	63		**ug/L**		29181	0.100
	Cu	65	**23.611**	**ug/L**	1.941	14134	0.049
	Zn	66	**140.887**	**ug/L**	3.268	37383	0.397
	Zn	67		**ug/L**		11031	0.042
	Zn	68		**ug/L**		30281	0.316
>	Ge	74		**ug/L**		93977	93977.472
	As	75	**9.260**	**ug/L**	4.247	3201	0.030
	Se	77		**ug/L**		2941	-0.041
	Se	82	**0.195**	**ug/L**	186.314	2	0.000
	Kr	83		**ug/L**		80	0.000
	Sr	88	**150.043**	**ug/L**	3.647	696508	12.256
	Y	89		**ug/L**		224643	3.953
	Zr	90	**114.059**	**ug/L**	3.578	283440	4.986
	Mo	98	**1.898**	**ug/L**	4.304	2041	0.036
	Ag	107	**0.461**	**ug/L**	8.060	808	0.013
	Cd	111	**1.551**	**ug/L**	6.568	605	0.011
	Cd	114		**ug/L**		145	0.002
>	In	115		**ug/L**		56831	56831.436
	Sn	120	**1.179**	**ug/L**	3.383	2174	0.036
	Sb	121	**0.255**	**ug/L**	4.914	523	0.006
	Sb	123		**ug/L**		415	0.004
	Ba	135		**ug/L**		367534	7.393
	Ba	137	**839.041**	**ug/L**	0.338	623520	12.543
	Ho	165		**ug/L**		7995	0.161
>	Lu	175		**ug/L**		49710	49709.515
	Tl	205	**0.776**	**ug/L**	2.243	600	0.011
	Pb	208	**33.656**	**ug/L**	1.006	130097	2.613
	Bi	209		**ug/L**		1654	0.033
	Th	232	**30.881**	**ug/L**	1.240	153339	3.083
	U	238	**2.591**	**ug/L**	2.554	13183	0.264

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		120.7			
|	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		98.6			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		100.3			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175		111.2			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl		27	Sample is out of limits (over linear range)
Sc 45 Int Std for samSc		45	
Ti 47 Upper, S, EEETi		47	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEEFe		57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, January 06, 2010 19:30:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\QC Std 6.066

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**48.783**	**ug/L**	4.716	9473	0.039
|	Be	9	**50.995**	**ug/L**	3.002	2727	0.011
|	B	11	**99.508**	**ug/L**	2.837	4705	0.019
|	Na	23	**5170.576**	**ug/L**	7.672	6239323	25.325
|	Mg	24	**5118.269**	**ug/L**	2.707	4018341	16.354
|	Al	27	**4752.149**	**ug/L**	2.461	5699445	23.184
|	P	31	**4890.546**	**ug/L**	1.681	301173	1.215
|	K	39	**5119.102**	**ug/L**	2.607	10299370	40.270
|	Ca	43	**4939.989**	**ug/L**	1.167	20967	0.083
| >	Sc	45		**ug/L**		245775	245774.777
|	Ti	47	**50.328**	**ug/L**	2.375	9822	0.039
|	V	51	**51.027**	**ug/L**	7.082	99863	0.388
|	Cr	52	**50.160**	**ug/L**	0.492	96052	0.377
|	Cr	53		**ug/L**		130468	-0.182
|	Mn	55	**52.127**	**ug/L**	1.325	156428	0.633
|	Fe	57	**5044.381**	**ug/L**	1.665	305906	1.225
|	Co	59	**50.132**	**ug/L**	2.227	111941	0.455
|	Ni	60	**52.385**	**ug/L**	1.542	24329	0.099
|	Cu	63		**ug/L**		55023	0.224
⌊	Cu	65	**51.971**	**ug/L**	0.943	26320	0.107
⌈	Zn	66	**50.641**	**ug/L**	0.624	14220	0.143
|	Zn	67		**ug/L**		7032	-0.004
|	Zn	68		**ug/L**		10613	0.101
| >	Ge	74		**ug/L**		99098	99098.247
|	As	75	**47.908**	**ug/L**	2.126	15727	0.155
|	Se	77		**ug/L**		4936	-0.023
|	Se	82	**49.841**	**ug/L**	3.031	1545	0.016
⌊	Kr	83		**ug/L**		44	-0.000
⌈	Sr	88	**50.712**	**ug/L**	0.732	240375	4.142
|	Y	89		**ug/L**		136	0.002
|	Zr	90	**50.426**	**ug/L**	1.229	127974	2.204
|	Mo	98	**49.440**	**ug/L**	1.039	53904	0.929
|	Ag	107	**49.377**	**ug/L**	0.645	83129	1.432
|	Cd	111	**50.567**	**ug/L**	3.681	19876	0.343
|	Cd	114		**ug/L**		46447	0.800
| >	In	115		**ug/L**		58015	58015.455
|	Sn	120	**49.682**	**ug/L**	1.846	88866	1.530
|	Sb	121	**48.803**	**ug/L**	4.097	66574	1.144
⌊	Sb	123		**ug/L**		51283	0.881
⌈	Ba	135		**ug/L**		20783	0.434
|	Ba	137	**49.421**	**ug/L**	1.362	35369	0.739
|	Ho	165		**ug/L**		19	0.000
| >	Lu	175		**ug/L**		47855	47854.503
|	Tl	205	**48.667**	**ug/L**	2.108	34273	0.716
|	Pb	208	**50.073**	**ug/L**	1.819	186224	3.888
|	Bi	209		**ug/L**		59	0.001
|	Th	232	**50.328**	**ug/L**	2.191	240501	5.024
⌊	U	238	**52.049**	**ug/L**	2.927	253928	5.306

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7	97.566				
|	Be	9	101.990				
|	B	11	99.508				
|	Na	23	103.412				
|	Mg	24	102.365				
|	Al	27	94.102				
|	P	31	97.811				
|	K	39	102.382				
|	Ca	43	98.800				
|>	Sc	45			102.4		
|	Ti	47	100.656				
|	V	51	102.054				
|	Cr	52	100.321				
|	Cr	53					
|	Mn	55	104.254				
|	Fe	57	100.888				
|	Co	59	100.265				
|	Ni	60	104.769				
|	Cu	63					
⌊	Cu	65	103.942				
⌈	Zn	66	101.283				
|	Zn	67					
|	Zn	68					
|>	Ge	74			103.9		
|	As	75	95.816				
|	Se	77					
|	Se	82	99.682				
⌊	Kr	83					
⌈	Sr	88	101.424				
|	Y	89					
|	Zr	90	100.851				
|	Mo	98	98.881				
|	Ag	107	98.755				
|	Cd	111	101.134				
|	Cd	114					
|>	In	115			102.4		
|	Sn	120	99.364				
|	Sb	121	97.606				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	98.841				
|	Ho	165					
|>	Lu	175			107.0		
|	Tl	205	97.334				
|	Pb	208	100.145				
|	Bi	209					
|	Th	232	100.657				
⌊	U	238	104.097				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, January 06, 2010 19:36:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\QC Std 7.067

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.154**	**ug/L**	5.935	38	0.000
	Be	9	**0.000**	**ug/L**	417.306	3	0.000
	B	11	**3.362**	**ug/L**	20.523	182	0.001
	Na	23	**-2.217**	**ug/L**	81.016	13006	-0.011
	Mg	24	**0.884**	**ug/L**	226.116	1333	0.003
	Al	27	**4.325**	**ug/L**	71.654	6669	0.021
	P	31	**-6.128**	**ug/L**	27.027	2109	-0.002
	K	39	**-6.351**	**ug/L**	118.336	384102	-0.050
	Ca	43	**-6.092**	**ug/L**	145.866	442	-0.000
>	Sc	45		**ug/L**		239197	239197.297
	Ti	47	**0.260**	**ug/L**	34.077	212	0.000
	V	51	**-1.781**	**ug/L**	71.388	1177	-0.014
	Cr	52	**-1.108**	**ug/L**	8.159	1364	-0.008
	Cr	53		**ug/L**		135240	-0.148
	Mn	55	**0.008**	**ug/L**	109.020	882	0.000
	Fe	57	**-9.354**	**ug/L**	15.368	4258	-0.002
	Co	59	**-0.001**	**ug/L**	339.567	153	-0.000
	Ni	60	**0.001**	**ug/L**	1635.958	36	0.000
	Cu	63		**ug/L**		102	0.000
	Cu	65	**0.012**	**ug/L**	59.242	58	0.000
	Zn	66	**0.036**	**ug/L**	89.649	75	0.000
	Zn	67		**ug/L**		5244	-0.020
	Zn	68		**ug/L**		416	-0.002
>	Ge	74		**ug/L**		95413	95412.894
	As	75	**-0.747**	**ug/L**	70.489	170	-0.002
	Se	77		**ug/L**		4363	-0.027
	Se	82	**-0.053**	**ug/L**	532.608	-5	-0.000
	Kr	83		**ug/L**		50	0.000
	Sr	88	**0.018**	**ug/L**	23.230	148	0.001
	Y	89		**ug/L**		21	0.000
	Zr	90	**0.299**	**ug/L**	11.163	845	0.013
	Mo	98	**0.047**	**ug/L**	42.564	65	0.001
	Ag	107	**0.011**	**ug/L**	35.128	67	0.000
	Cd	111	**0.024**	**ug/L**	74.219	16	0.000
	Cd	114		**ug/L**		28	0.000
>	In	115		**ug/L**		56545	56544.743
	Sn	120	**0.248**	**ug/L**	9.888	541	0.008
	Sb	121	**0.850**	**ug/L**	18.900	1309	0.020
	Sb	123		**ug/L**		1075	0.016
	Ba	135		**ug/L**		26	0.000
	Ba	137	**0.045**	**ug/L**	28.095	47	0.001
	Ho	165		**ug/L**		10	0.000
>	Lu	175		**ug/L**		45394	45394.480
	Tl	205	**0.074**	**ug/L**	36.624	79	0.001
	Pb	208	**0.053**	**ug/L**	19.782	376	0.004
	Bi	209		**ug/L**		18	0.000
	Th	232	**0.128**	**ug/L**	29.486	685	0.013
	U	238	**0.019**	**ug/L**	29.213	139	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		99.6			
|	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		100.1			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		99.8			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175		101.5			
|	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#4 - Summary Report

Sample ID: 243270007
Sample Date/Time: Wednesday, January 06, 2010 19:43:10
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 935378|2|sk|
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\243270007.068

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**84.817**	**ug/L**	1.372	18257	0.067
	Be	9	**5.231**	**ug/L**	3.290	313	0.001
	B	11	**18.353**	**ug/L**	5.937	988	0.004
	Na	23	**631.917**	**ug/L**	8.814	860236	3.095
	Mg	24	**11728.504**	**ug/L**	3.397	10210172	37.475
	Al	27	**106777.791**	**ug/L**	4.684	141949267	520.941
	P	31	**465.679**	**ug/L**	4.796	34328	0.116
	K	39	**10500.929**	**ug/L**	3.327	22943127	82.607
	Ca	43	**9604.831**	**ug/L**	2.566	44682	0.162
>	Sc	45		**ug/L**		272360	272359.770
	Ti	47	**1868.925**	**ug/L**	1.684	397634	1.459
	V	51	**103.722**	**ug/L**	2.487	219924	0.789
	Cr	52	**47.628**	**ug/L**	1.469	101257	0.358
	Cr	53		**ug/L**		107770	-0.318
	Mn	55	**900.738**	**ug/L**	2.337	2979637	10.939
	Fe	57	**60317.945**	**ug/L**	2.087	3994155	14.648
	Co	59	**19.115**	**ug/L**	2.395	47422	0.173
	Ni	60	**37.829**	**ug/L**	2.533	19482	0.071
	Cu	63		**ug/L**		42931	0.157
	Cu	65	**37.671**	**ug/L**	1.242	21160	0.077
	Zn	66	**129.187**	**ug/L**	0.513	32740	0.364
	Zn	67		**ug/L**		10240	0.039
	Zn	68		**ug/L**		26952	0.294
>	Ge	74		**ug/L**		89707	89706.714
	As	75	**9.677**	**ug/L**	8.650	3173	0.031
	Se	77		**ug/L**		2836	-0.041
	Se	82	**0.065**	**ug/L**	710.342	-2	0.000
	Kr	83		**ug/L**		93	0.001
	Sr	88	**130.391**	**ug/L**	1.943	571061	10.651
	Y	89		**ug/L**		259016	4.831
	Zr	90	**135.637**	**ug/L**	1.603	317989	5.929
	Mo	98	**1.174**	**ug/L**	3.903	1196	0.022
	Ag	107	**0.577**	**ug/L**	2.370	944	0.017
	Cd	111	**1.911**	**ug/L**	6.220	701	0.013
	Cd	114		**ug/L**		222	0.004
>	In	115		**ug/L**		53620	53620.206
	Sn	120	**0.938**	**ug/L**	3.351	1653	0.029
	Sb	121	**0.557**	**ug/L**	10.612	873	0.013
	Sb	123		**ug/L**		696	0.010
	Ba	135		**ug/L**		387434	7.723
	Ba	137	**879.413**	**ug/L**	1.580	659547	13.147
	Ho	165		**ug/L**		9506	0.189
>	Lu	175		**ug/L**		50174	50174.471
	Tl	205	**0.896**	**ug/L**	8.987	694	0.013
	Pb	208	**57.195**	**ug/L**	0.687	223016	4.441
	Bi	209		**ug/L**		2709	0.054
	Th	232	**38.123**	**ug/L**	1.954	191032	3.806
	U	238	**5.938**	**ug/L**	2.806	30424	0.605

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		113.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		112.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	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)
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
V 51 Upper, S, EEE	V	51	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#4 - Summary Report

Sample ID: 243270008
Sample Date/Time: Wednesday, January 06, 2010 19:49:25
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 935378|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\243270008.069

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**57.397**	**ug/L**	3.530	11790	0.045
	Be	9	**3.901**	**ug/L**	1.996	224	0.001
	B	11	**13.499**	**ug/L**	6.626	701	0.003
	Na	23	**723.368**	**ug/L**	7.713	937933	3.543
	Mg	24	**9659.324**	**ug/L**	4.197	8029214	30.863
	Al	27	**70142.606**	**ug/L**	3.632	89021973	342.207
	P	31	**544.945**	**ug/L**	0.858	37897	0.135
	K	39	**8358.682**	**ug/L**	4.764	17540226	65.755
	Ca	43	**8056.525**	**ug/L**	1.380	35867	0.136
>	Sc	45		**ug/L**		259971	259971.163
	Ti	47	**1775.831**	**ug/L**	1.238	360558	1.387
	V	51	**103.611**	**ug/L**	2.252	209620	0.788
	Cr	52	**35.919**	**ug/L**	2.672	73754	0.270
	Cr	53		**ug/L**		101278	-0.324
	Mn	55	**1026.737**	**ug/L**	2.535	3240875	12.469
	Fe	57	**49213.352**	**ug/L**	2.562	3110779	11.951
	Co	59	**19.362**	**ug/L**	3.736	45827	0.176
	Ni	60	**29.142**	**ug/L**	3.405	14329	0.055
	Cu	63		**ug/L**		31092	0.119
	Cu	65	**28.559**	**ug/L**	3.301	15321	0.059
	Zn	66	**104.188**	**ug/L**	1.515	26657	0.294
	Zn	67		**ug/L**		8937	0.024
	Zn	68		**ug/L**		21677	0.233
>	Ge	74		**ug/L**		90530	90529.558
	As	75	**8.260**	**ug/L**	6.314	2792	0.027
	Se	77		**ug/L**		2753	-0.042
	Se	82	**0.712**	**ug/L**	39.569	17	0.000
	Kr	83		**ug/L**		70	0.000
	Sr	88	**110.757**	**ug/L**	2.060	500683	9.047
	Y	89		**ug/L**		215844	3.900
	Zr	90	**98.023**	**ug/L**	1.816	237218	4.285
	Mo	98	**1.135**	**ug/L**	1.254	1195	0.021
	Ag	107	**0.386**	**ug/L**	4.555	667	0.011
	Cd	111	**1.380**	**ug/L**	5.602	525	0.009
	Cd	114		**ug/L**		233	0.004
>	In	115		**ug/L**		55349	55348.831
	Sn	120	**0.892**	**ug/L**	1.540	1626	0.027
	Sb	121	**0.380**	**ug/L**	8.536	672	0.009
	Sb	123		**ug/L**		553	0.007
	Ba	135		**ug/L**		269176	5.517
	Ba	137	**628.183**	**ug/L**	2.015	458134	9.391
	Ho	165		**ug/L**		7522	0.154
>	Lu	175		**ug/L**		48791	48791.014
	Tl	205	**0.789**	**ug/L**	3.947	598	0.012
	Pb	208	**52.757**	**ug/L**	2.077	200016	4.096
	Bi	209		**ug/L**		2212	0.045
	Th	232	**32.116**	**ug/L**	1.856	156528	3.206
	U	238	**11.119**	**ug/L**	1.458	55363	1.134

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
>	Sc	45		108.3			
|	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		94.9			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		97.7			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175		109.1			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	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)
Ti 47 Upper, S, EEE	Ti	47	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, EEI	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 243270009
Sample Date/Time: Wednesday, January 06, 2010 19:55:38
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 935378|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\243270009.070

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**58.091**	**ug/L**	0.764	11828	0.046
	Be	9	**3.792**	**ug/L**	11.870	215	0.001
	B	11	**13.184**	**ug/L**	5.080	680	0.003
	Na	23	**786.799**	**ug/L**	6.137	1009553	3.854
	Mg	24	**9099.693**	**ug/L**	1.344	7488954	29.075
	Al	27	**68360.179**	**ug/L**	3.401	85898395	333.511
	P	31	**551.996**	**ug/L**	0.783	37988	0.137
	K	39	**8282.367**	**ug/L**	2.408	17207345	65.154
	Ca	43	**8124.026**	**ug/L**	1.489	35815	0.137
>	Sc	45		**ug/L**		257532	257532.197
	Ti	47	**1612.788**	**ug/L**	1.190	324491	1.259
	V	51	**88.937**	**ug/L**	1.299	178985	0.677
	Cr	52	**33.362**	**ug/L**	0.597	68154	0.251
	Cr	53		**ug/L**		100009	-0.325
	Mn	55	**1082.123**	**ug/L**	0.685	3385324	13.141
	Fe	57	**43952.341**	**ug/L**	1.120	2754046	10.673
	Co	59	**18.956**	**ug/L**	1.389	44474	0.172
	Ni	60	**28.479**	**ug/L**	0.818	13880	0.054
	Cu	63		**ug/L**		30568	0.118
	Cu	65	**28.305**	**ug/L**	1.439	15049	0.058
	Zn	66	**97.537**	**ug/L**	0.643	24790	0.275
	Zn	67		**ug/L**		8610	0.021
	Zn	68		**ug/L**		20343	0.220
>	Ge	74		**ug/L**		89905	89904.629
	As	75	**6.381**	**ug/L**	3.370	2225	0.021
	Se	77		**ug/L**		2736	-0.042
	Se	82	**0.388**	**ug/L**	48.431	7	0.000
	Kr	83		**ug/L**		70	0.000
	Sr	88	**111.205**	**ug/L**	2.242	495746	9.084
	Y	89		**ug/L**		215052	3.941
	Zr	90	**97.170**	**ug/L**	0.756	231884	4.248
	Mo	98	**1.031**	**ug/L**	0.542	1071	0.019
	Ag	107	**0.396**	**ug/L**	5.446	674	0.011
	Cd	111	**1.464**	**ug/L**	5.110	548	0.010
	Cd	114		**ug/L**		226	0.004
>	In	115		**ug/L**		54565	54565.051
	Sn	120	**0.823**	**ug/L**	4.835	1487	0.025
	Sb	121	**0.341**	**ug/L**	6.578	613	0.008
	Sb	123		**ug/L**		523	0.007
	Ba	135		**ug/L**		269970	5.507
	Ba	137	**624.172**	**ug/L**	0.738	457461	9.331
	Ho	165		**ug/L**		7571	0.154
>	Lu	175		**ug/L**		49024	49023.796
	Tl	205	**0.765**	**ug/L**	3.174	584	0.011
	Pb	208	**48.192**	**ug/L**	1.984	183641	3.742
	Bi	209		**ug/L**		2199	0.044
	Th	232	**30.946**	**ug/L**	1.496	151558	3.089
	U	238	**7.150**	**ug/L**	1.481	35794	0.729

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		107.3			
	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		94.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		109.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl		27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEETi		47	Sample is out of limits (over linear range)
Mn 55 Upper, S, EElMn		55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 243270010
Sample Date/Time: Wednesday, January 06, 2010 20:01:50
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 935378|2|sk|
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\243270010.071

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**67.942**	**ug/L**	2.508	14158	0.054
|	Be	9	**3.941**	**ug/L**	4.494	229	0.001
|	B	11	**14.966**	**ug/L**	2.798	786	0.003
|	Na	23	**836.432**	**ug/L**	4.794	1097699	4.097
|	Mg	24	**10725.383**	**ug/L**	4.872	9035044	34.269
|	Al	27	**82948.957**	**ug/L**	2.277	106722249	404.686
|	P	31	**661.973**	**ug/L**	1.177	46100	0.164
|	K	39	**9510.671**	**ug/L**	1.652	20169126	74.817
|	Ca	43	**9143.738**	**ug/L**	1.171	41211	0.154
|>	Sc	45		**ug/L**		263698	263698.210
|	Ti	47	**1866.848**	**ug/L**	0.648	384513	1.458
|	V	51	**99.515**	**ug/L**	1.464	204434	0.757
|	Cr	52	**39.548**	**ug/L**	1.150	82030	0.297
|	Cr	53		**ug/L**		103283	-0.321
|	Mn	55	**992.845**	**ug/L**	2.229	3179150	12.057
|	Fe	57	**52299.184**	**ug/L**	3.328	3352451	12.700
|	Co	59	**19.333**	**ug/L**	3.620	46421	0.175
|	Ni	60	**32.130**	**ug/L**	3.672	16020	0.061
|	Cu	63		**ug/L**		33369	0.126
⌊	Cu	65	**30.162**	**ug/L**	1.979	16412	0.062
⌈	Zn	66	**123.894**	**ug/L**	1.002	31842	0.349
|	Zn	67		**ug/L**		9737	0.032
|	Zn	68		**ug/L**		25581	0.275
|>	Ge	74		**ug/L**		90974	90974.062
|	As	75	**7.807**	**ug/L**	4.982	2670	0.025
|	Se	77		**ug/L**		2743	-0.042
|	Se	82	**0.607**	**ug/L**	107.601	14	0.000
⌊	Kr	83		**ug/L**		82	0.000
⌈	Sr	88	**121.060**	**ug/L**	0.584	540653	9.889
|	Y	89		**ug/L**		235996	4.317
|	Zr	90	**117.507**	**ug/L**	1.228	280888	5.137
|	Mo	98	**1.210**	**ug/L**	1.824	1257	0.023
|	Ag	107	**0.448**	**ug/L**	8.913	757	0.013
|	Cd	111	**1.681**	**ug/L**	6.339	630	0.011
|	Cd	114		**ug/L**		222	0.004
|>	In	115		**ug/L**		54668	54668.340
|	Sn	120	**1.077**	**ug/L**	6.762	1920	0.033
|	Sb	121	**0.280**	**ug/L**	5.393	535	0.007
⌊	Sb	123		**ug/L**		473	0.006
⌈	Ba	135		**ug/L**		288238	5.904
|	Ba	137	**668.663**	**ug/L**	1.000	488058	9.996
|	Ho	165		**ug/L**		8454	0.173
|>	Lu	175		**ug/L**		48822	48821.771
|	Tl	205	**0.838**	**ug/L**	2.902	633	0.012
|	Pb	208	**56.453**	**ug/L**	0.925	214203	4.383
|	Bi	209		**ug/L**		2459	0.050
|	Th	232	**35.900**	**ug/L**	2.720	175090	3.584
⌊	U	238	**8.722**	**ug/L**	1.759	43470	0.889

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		109.8			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		95.4			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		96.5			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175		109.2			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl		27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEETi		47	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEEFe		57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, January 06, 2010 20:14:15
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\QC Std 6.073

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.984**	**ug/L**	2.780	9598	0.041
	Be	9	**52.102**	**ug/L**	2.387	2647	0.011
	B	11	**99.584**	**ug/L**	1.966	4473	0.019
	Na	23	**4915.627**	**ug/L**	6.238	5635518	24.076
	Mg	24	**5163.746**	**ug/L**	3.269	3854023	16.499
	Al	27	**5236.825**	**ug/L**	3.013	5970589	25.549
	P	31	**4989.171**	**ug/L**	0.926	291959	1.240
	K	39	**5296.423**	**ug/L**	4.772	10117282	41.665
	Ca	43	**4965.838**	**ug/L**	0.638	20031	0.084
>	Sc	45		**ug/L**		233577	233577.163
	Ti	47	**50.528**	**ug/L**	1.750	9377	0.039
	V	51	**52.922**	**ug/L**	2.498	98329	0.403
	Cr	52	**50.269**	**ug/L**	0.704	91485	0.378
	Cr	53		**ug/L**		121967	-0.191
	Mn	55	**53.195**	**ug/L**	1.211	151715	0.646
	Fe	57	**5121.388**	**ug/L**	1.403	295169	1.244
	Co	59	**51.131**	**ug/L**	0.593	108541	0.464
	Ni	60	**52.832**	**ug/L**	1.129	23328	0.100
	Cu	63		**ug/L**		52242	0.223
	Cu	65	**52.566**	**ug/L**	1.279	25302	0.108
	Zn	66	**52.210**	**ug/L**	2.622	13893	0.147
	Zn	67		**ug/L**		6487	-0.006
	Zn	68		**ug/L**		9994	0.100
>	Ge	74		**ug/L**		93956	93955.729
	As	75	**47.588**	**ug/L**	1.137	14818	0.154
	Se	77		**ug/L**		4536	-0.024
	Se	82	**51.334**	**ug/L**	3.806	1508	0.016
	Kr	83		**ug/L**		43	-0.000
	Sr	88	**50.480**	**ug/L**	2.456	229641	4.124
	Y	89		**ug/L**		100	0.002
	Zr	90	**48.840**	**ug/L**	1.876	118983	2.135
	Mo	98	**49.687**	**ug/L**	1.086	51996	0.934
	Ag	107	**49.855**	**ug/L**	1.141	80558	1.446
	Cd	111	**50.411**	**ug/L**	1.365	19025	0.342
	Cd	114		**ug/L**		44570	0.800
>	In	115		**ug/L**		55683	55682.980
	Sn	120	**49.502**	**ug/L**	1.374	84996	1.525
	Sb	121	**48.608**	**ug/L**	6.124	63635	1.140
	Sb	123		**ug/L**		49204	0.881
	Ba	135		**ug/L**		19781	0.427
	Ba	137	**48.927**	**ug/L**	1.790	33845	0.731
	Ho	165		**ug/L**		17	0.000
>	Lu	175		**ug/L**		46259	46259.255
	Tl	205	**49.700**	**ug/L**	1.093	33832	0.731
	Pb	208	**51.912**	**ug/L**	1.782	186617	4.031
	Bi	209		**ug/L**		45	0.001
	Th	232	**52.089**	**ug/L**	2.511	240581	5.200
	U	238	**53.958**	**ug/L**	2.078	254460	5.501

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7	103.968				
|	Be	9	104.205				
|	B	11	99.584				
|	Na	23	98.313				
|	Mg	24	103.275				
|	Al	27	103.700				
|	P	31	99.783				
|	K	39	105.928				
|	Ca	43	99.317				
|>	Sc	45			97.3		
|	Ti	47	101.055				
|	V	51	105.845				
|	Cr	52	100.539				
|	Cr	53					
|	Mn	55	106.389				
|	Fe	57	102.428				
|	Co	59	102.261				
|	Ni	60	105.665				
|	Cu	63					
⌊	Cu	65	105.132				
⌈	Zn	66	104.421				
|	Zn	67					
|	Zn	68					
|>	Ge	74			98.5		
|	As	75	95.176				
|	Se	77					
|	Se	82	102.669				
⌊	Kr	83					
⌈	Sr	88	100.961				
|	Y	89					
|	Zr	90	97.680				
|	Mo	98	99.373				
|	Ag	107	99.711				
|	Cd	111	100.821				
|	Cd	114					
|>	In	115			98.3		
|	Sn	120	99.003				
|	Sb	121	97.216				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	97.854				
|	Ho	165					
|>	Lu	175			103.5		
|	Tl	205	99.399				
|	Pb	208	103.824				
|	Bi	209					
|	Th	232	104.179				
⌊	U	238	107.915				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, January 06, 2010 20:20:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100106\QC Std 7.074

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.130**	**ug/L**	19.474	32	0.000
	Be	9	**0.057**	**ug/L**	74.395	6	0.000
	B	11	**3.190**	**ug/L**	9.440	167	0.001
	Na	23	**0.368**	**ug/L**	774.361	15342	0.002
	Mg	24	**0.955**	**ug/L**	218.608	1333	0.003
	Al	27	**0.968**	**ug/L**	106.977	2667	0.005
	P	31	**-6.837**	**ug/L**	11.113	1976	-0.002
	K	39	**-18.735**	**ug/L**	29.958	344780	-0.147
	Ca	43	**-11.124**	**ug/L**	52.243	403	-0.000
>	Sc	45		**ug/L**		228618	228618.068
	Ti	47	**0.219**	**ug/L**	24.768	195	0.000
	V	51	**-0.107**	**ug/L**	1624.223	4010	-0.001
	Cr	52	**-1.204**	**ug/L**	1.369	1140	-0.009
	Cr	53		**ug/L**		124298	-0.170
	Mn	55	**-0.000**	**ug/L**	8176.595	821	-0.000
	Fe	57	**-12.377**	**ug/L**	27.216	3903	-0.003
	Co	59	**-0.001**	**ug/L**	1952.437	147	-0.000
	Ni	60	**0.026**	**ug/L**	55.159	45	0.000
	Cu	63		**ug/L**		89	0.000
	Cu	65	**-0.004**	**ug/L**	461.386	48	-0.000
	Zn	66	**0.015**	**ug/L**	67.921	66	0.000
	Zn	67		**ug/L**		4819	-0.022
	Zn	68		**ug/L**		354	-0.003
>	Ge	74		**ug/L**		91064	91063.621
	As	75	**0.158**	**ug/L**	491.069	424	0.001
	Se	77		**ug/L**		3943	-0.029
	Se	82	**0.339**	**ug/L**	223.721	6	0.000
	Kr	83		**ug/L**		37	-0.000
	Sr	88	**0.014**	**ug/L**	31.307	128	0.001
	Y	89		**ug/L**		16	0.000
	Zr	90	**0.279**	**ug/L**	4.579	763	0.012
	Mo	98	**0.065**	**ug/L**	28.465	80	0.001
	Ag	107	**0.016**	**ug/L**	24.930	72	0.000
	Cd	111	**0.036**	**ug/L**	22.717	20	0.000
	Cd	114		**ug/L**		23	0.000
>	In	115		**ug/L**		54357	54356.812
	Sn	120	**0.248**	**ug/L**	8.914	521	0.008
	Sb	121	**0.835**	**ug/L**	16.020	1241	0.020
	Sb	123		**ug/L**		997	0.015
	Ba	135		**ug/L**		27	0.000
	Ba	137	**0.040**	**ug/L**	48.140	43	0.001
	Ho	165		**ug/L**		9	0.000
>	Lu	175		**ug/L**		45036	45036.000
	Tl	205	**0.085**	**ug/L**	20.028	86	0.001
	Pb	208	**0.046**	**ug/L**	19.519	347	0.004
	Bi	209		**ug/L**		20	0.000
	Th	232	**0.129**	**ug/L**	21.564	685	0.013
	U	238	**0.021**	**ug/L**	1.756	149	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌜	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
>	Sc	45			95.2		
|	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			95.5		
|	As	75					
|	Se	77					
|	Se	82					
⌞	Kr	83					
⌜	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115			96.0		
|	Sn	120					
|	Sb	121					
⌞	Sb	123					
⌜	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175			100.7		
|	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

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Thursday, January 07, 2010 10:41:36
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\090811\Sample.347
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	1035.6	1035.638	39.109	3.8
	Mg	24.0	19340.7	19340.684	122.061	0.6
	Co	58.9	50689.4	50689.371	155.025	0.3
	Rh	102.9	84264.2	84264.192	495.230	0.6
	In	114.9	107705.7	107705.718	943.088	0.9
	Pb	208.0	38437.6	38437.644	325.734	0.8
⌈>	Ba	137.9	85539.0	85538.975	598.451	0.7
⌊	Ba++	69.0	1678.6	0.020	0.000	1.0
⌈>	Ce	139.9	100755.1	100755.059	304.348	0.3
⌊	CeO	155.9	2306.1	0.023	0.001	2.4
	Bkgd	220.0	8.5	8.500	1.458	17.1

Current Optimization File Data

Current Value	Description
0.84	Nebulizer Gas Flow
6.00	Lens Voltage
1000.00	ICP RF Power
-1875.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

Current AutoIens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	17	7.0	862.7
Co	59	17	8.5	33104.6
In	115	17	9.5	79556.6

ICPMS #4 TUNING REPORT

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	617	2060	0.671
Be	9.0	9.1	2062	2045	0.678
Mg	24.0	24.0	5671	2075	0.585
Mg	25.0	24.9	5957	2080	0.645
Mg	26.0	26.0	6149	2085	0.616
Co	58.9	58.9	14186	2140	0.623
Rh	102.9	102.9	24869	2230	0.628
In	114.9	114.9	27789	2255	0.664
Ce	139.9	139.9	33855	2310	0.640
Pb	206.0	206.0	49930	2500	0.686
Pb	207.0	207.0	50101	2380	0.636
Pb	208.0	208.0	50448	2570	0.638
U	238.1	238.1	57705	2510	0.677

ICPMS#4 - Summary Report

Sample ID: Blank
Sample Date/Time: Thursday, January 07, 2010 11:14:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni only.mth
Dataset File: C:\elandata\Dataset\100107\Blank.001

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9		ug/L		3	
|>	Sc	45		ug/L		219020	
⌊	Ni	60		ug/L		29	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Simple Linear	
Sc	45	Simple Linear	
Ni	60	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
|>	Sc	45					
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Thursday, January 07, 2010 11:18:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni only.mth
Dataset File: C:\elandata\Dataset\100107\Standard 1.002

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**10.000**	**ug/L**	0.754	527	0.002
|>	Sc	45		**ug/L**		225178	225178.478
⌊	Ni	60	**10.000**	**ug/L**	1.051	4769	0.021

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
|>	Sc	45					
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Thursday, January 07, 2010 11:21:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni only.mth
Dataset File: C:\elandata\Dataset\100107\Standard 2.003

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**99.980**	**ug/L**	1.435	5180	0.023
|>	Sc	45		**ug/L**		227053	227053.421
⌊	Ni	60	**99.966**	**ug/L**	0.256	46210	0.203

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
|>	Sc	45					
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Thursday, January 07, 2010 11:25:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni only.mth
Dataset File: C:\elandata\Dataset\100107\QC Std 1.004

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**52.321**	**ug/L**	3.832	2745	0.012
|>	Sc	45		**ug/L**		229720	229720.071
⌊	Ni	60	**51.806**	**ug/L**	1.674	24242	0.105

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9	104.641				
|>	Sc	45		104.9			
⌊	Ni	60	103.612				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Thursday, January 07, 2010 11:28:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni only.mth
Dataset File: C:\elandata\Dataset\100107\QC Std 2.005

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.006**	**ug/L**	203.149	4	0.000
|>	Sc	45		**ug/L**		222215	222214.818
⌊	Ni	60	**0.011**	**ug/L**	22.443	35	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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
|>	Sc	45		101.5			
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Thursday, January 07, 2010 11:32:39
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni only.mth
Dataset File: C:\elandata\Dataset\100107\QC Std 3.006

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.499**	**ug/L**	28.438	29	0.000
|>	Sc	45		**ug/L**		221976	221976.487
⌊	Ni	60	**2.247**	**ug/L**	3.772	1045	0.005

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9	99.890				
|>	Sc	45		101.3			
⌊	Ni	60	112.372				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Thursday, January 07, 2010 11:36:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni only.mth
Dataset File: C:\elandata\Dataset\100107\QC Std 4.007

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.044**	**ug/L**	223.360	6	0.000
|>	Sc	45		**ug/L**		225823	225822.536
⌊	Ni	60	**3.314**	**ug/L**	1.259	1552	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
|>	Sc	45			103.1		
⌊	Ni	60	122.726				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Thursday, January 07, 2010 11:39:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni only.mth
Dataset File: C:\elandata\Dataset\100107\QC Std 5.008

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**19.866**	**ug/L**	3.628	1002	0.005
|>	Sc	45		**ug/L**		220391	220390.897
⌊	Ni	60	**21.817**	**ug/L**	0.701	9812	0.044

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9	99.330				
|>	Sc	45		100.6			
⌊	Ni	60	96.109				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, January 07, 2010 11:43:36
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni only.mth
Dataset File: C:\elandata\Dataset\100107\QC Std 6.009

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**51.685**	**ug/L**	2.111	2613	0.012
|>	Sc	45		**ug/L**		221366	221365.784
⌊	Ni	60	**51.465**	**ug/L**	1.795	23204	0.105

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9	103.370				
|>	Sc	45		101.1			
⌊	Ni	60	102.930				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, January 07, 2010 11:47:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni only.mth
Dataset File: C:\elandata\Dataset\100107\QC Std 7.010

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**-0.027**	**ug/L**	71.542	2	-0.000
|>	Sc	45		**ug/L**		222235	222234.508
⌊	Ni	60	**0.022**	**ug/L**	32.812	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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
|>	Sc	45		101.5			
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202001488
Sample Date/Time: Thursday, January 07, 2010 11:50:57
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 935378|2|skj
Method File: c:\elandata\Method\be and ni only.mth
Dataset File: C:\elandata\Dataset\100107\1202001488.011

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.032**	**ug/L**	146.084	5	0.000
|>	Sc	45		**ug/L**		216212	216211.959
⌊	Ni	60	**0.091**	**ug/L**	26.938	68	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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
|>	Sc	45		98.7			
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202001489
Sample Date/Time: Thursday, January 07, 2010 11:54:36
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 935378|40|skj
Method File: c:\elandata\Method\be and ni only.mth
Dataset File: C:\elandata\Dataset\100107\1202001489.012

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**21.728**	**ug/L**	2.373	1125	0.005
|>	Sc	45		**ug/L**		226363	226363.233
⌊	Ni	60	**37.798**	**ug/L**	1.056	17438	0.077

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
|>	Sc	45			103.4		
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 243270001
Sample Date/Time: Thursday, January 07, 2010 11:58:15
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 935378|2|sk|
Method File: c:\elandata\Method\be and ni only.mth
Dataset File: C:\elandata\Dataset\100107\243270001.013

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**4.912**	**ug/L**	6.144	288	0.001
|>	Sc	45		**ug/L**		253724	253723.626
⌊	Ni	60	**36.740**	**ug/L**	2.020	18996	0.075

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
|>	Sc	45			115.8		
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202001490
Sample Date/Time: Thursday, January 07, 2010 12:01:55
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 935378|2|sk|
Method File: c:\elandata\Method\be and ni only.mth
Dataset File: C:\elandata\Dataset\100107\1202001490.014

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**4.921**	**ug/L**	1.883	278	0.001
|>	Sc	45		**ug/L**		244738	244737.812
⌊	Ni	60	**37.218**	**ug/L**	1.266	18565	0.076

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
|>	Sc	45			111.7		
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202001491
Sample Date/Time: Thursday, January 07, 2010 12:05:35
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 935378|2|skj
Method File: c:\elandata\Method\be and ni only.mth
Dataset File: C:\elandata\Dataset\100107\1202001491.015

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**29.055**	**ug/L**	4.096	1706	0.007
|>	Sc	45		**ug/L**		256948	256947.786
⌊	Ni	60	**61.451**	**ug/L**	0.356	32160	0.125

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
|>	Sc	45			117.3		
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202001493
Sample Date/Time: Thursday, January 07, 2010 12:09:16
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 935378|2|skj
Method File: c:\elandata\Method\be and ni only.mth
Dataset File: C:\elandata\Dataset\100107\1202001493.016

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**28.572**	**ug/L**	3.527	1708	0.007
|>	Sc	45		**ug/L**		261488	261487.512
⌊	Ni	60	**63.636**	**ug/L**	0.937	33892	0.129

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
|>	Sc	45			119.4		
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202001492
Sample Date/Time: Thursday, January 07, 2010 12:12:58
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 935378|10|skj
Method File: c:\elandata\Method\be and ni only.mth
Dataset File: C:\elandata\Dataset\100107\1202001492.017

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**1.288**	**ug/L**	10.795	67	0.000
|>	Sc	45		**ug/L**		216899	216899.053
⌊	Ni	60	**8.871**	**ug/L**	1.686	3944	0.018

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
|>	Sc	45		99.0			
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 243270006
Sample Date/Time: Thursday, January 07, 2010 12:16:39
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 935378|2|skj
Method File: c:\elandata\Method\be and ni only.mth
Dataset File: C:\elandata\Dataset\100107\243270006.018

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**4.439**	**ug/L**	4.661	257	0.001
|>	Sc	45		**ug/L**		249791	249791.413
⌊	Ni	60	**31.804**	**ug/L**	1.138	16197	0.065

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
|>	Sc	45			114.0		
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, January 07, 2010 12:20:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni only.mth
Dataset File: C:\elandata\Dataset\100107\QC Std 6.019

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**52.825**	**ug/L**	3.606	2560	0.012
|>	Sc	45		**ug/L**		212162	212162.374
⌊	Ni	60	**50.350**	**ug/L**	0.515	21762	0.102

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9	105.651				
|>	Sc	45		96.9			
⌊	Ni	60	100.700				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, January 07, 2010 12:24:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be and ni only.mth
Dataset File: C:\elandata\Dataset\100107\QC Std 7.020

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**-0.004**	**ug/L**	537.028	3	-0.000
|>	Sc	45		**ug/L**		209239	209239.284
⌊	Ni	60	**-0.003**	**ug/L**	230.502	27	-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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
|>	Sc	45		95.5			
⌊	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Method Name: SOIL
Method Description: 7471A, ILM04 ANALYST JXL1
Element: Hg

Date: 01/08/2010
Technique:FI-MHS
Calibration Type:
Hg, Calc. Intercept : Linear
Wavelength: 253.7 nm
Sample Info Name: 010810S1.SIF Results Data Set Name: 010810S1

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 01/08/2010
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0032	0.0032	09:50:25	No
2			0.0030	0.0030	09:51:00	No
Mean:			0.0031			
SD :			0.0002			
%RSD:			5.9411			

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 01/08/2010
Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0021	0.0052	09:52:23	No
2			0.0018	0.0049	09:52:58	No
Mean:			0.0020			
SD :			0.0002			
%RSD:			10.6180			

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.00986
Intercept : 0.00000

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 01/08/2010
Sample ID: S0.5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0043	0.0073	09:54:21	No
2			0.0041	0.0072	09:54:56	No
Mean:			0.0042			
SD :			0.0001			
%RSD:			2.2433			

[Hg] Standard number 2 applied. [0.500]
Correlation Coefficient: 0.99675 Slope: 0.00831
Intercept : 0.00012

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 01/08/2010
Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0157	0.0187	09:56:20	No
2			0.0154	0.0185	09:56:54	No
Mean:			0.0155			
SD :			0.0002			
%RSD:			1.0558			

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99961 Slope: 0.00767
Intercept : 0.00025

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 01/08/2010
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0387	0.0418	09:58:20	No
2			0.0383	0.0413	09:58:55	No
Mean:			0.0385			
SD :			0.0003			
%RSD:			0.7545			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99994 Slope: 0.00764
Intercept : 0.00026

Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 01/08/2010
Sample ID: S10

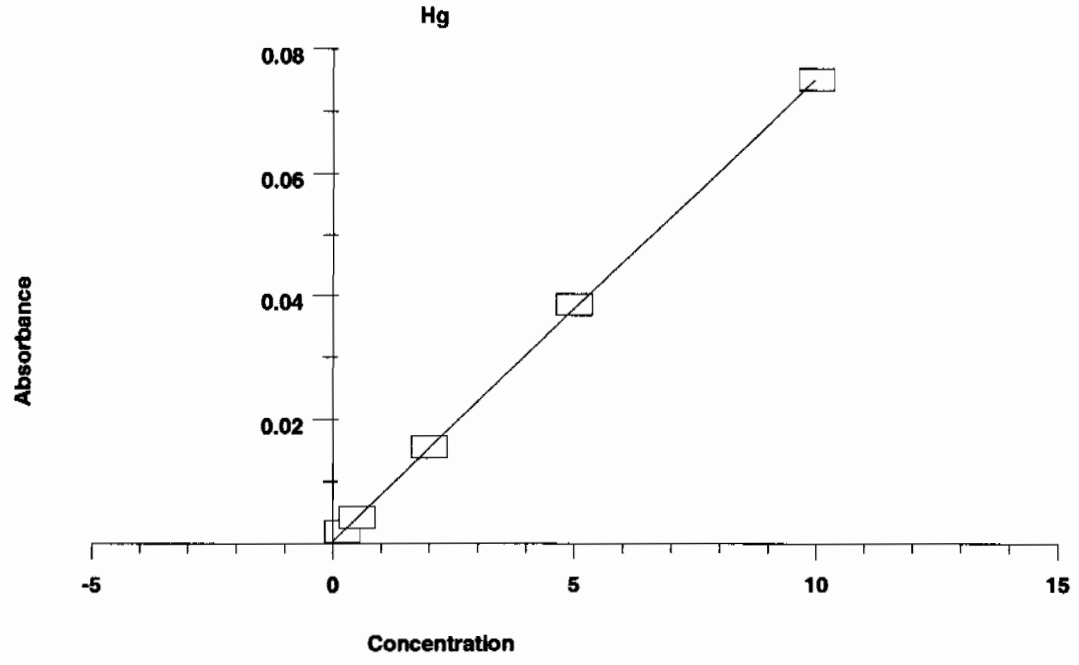
Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0762	0.0793	10:00:21	No
2			0.0739	0.0770	10:00:56	No
Mean:			0.0751			
SD :			0.0016			
%RSD:			2.1729			

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99993 Slope: 0.00749
Intercept : 0.00043

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0031	---	----	----	----
S0.2	0.0020	0.200	0.205	0.0002	10.6
S0.5	0.0042	0.500	0.502	0.0001	2.2
S2.0	0.0155	2.000	2.016	0.0002	1.1
S5.0	0.0385	5.000	5.076	0.0003	0.8
S10	0.0751	10.000	9.959	0.0016	2.2

Correlation Coefficient: 0.99993 Slope: 0.00749 Intercept: 0.0004



Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 01/08/2010
Sample ID: ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	4.978	4.978	0.0377	0.0408	10:02:24	No
2	5.084	5.084	0.0385	0.0416	10:02:59	No
Mean:	5.031	5.031	0.0381			
SD :	0.0752	0.0752	0.0006			
%RSD:	1.5	1.5	1.4774			

QC value within specified limits.

Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 01/08/2010
Sample ID: ICB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.049	-0.049	0.0001	0.0031	10:04:21	No
2	-0.045	-0.045	0.0001	0.0032	10:04:56	No
Mean:	-0.047	-0.047	0.0001			
SD :	0.0033	0.0033	0.0000			
%RSD:	7.0	7.0	30.5107			

QC value within specified limits.

Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 01/08/2010
Sample ID: CRDL

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.180	0.180	0.0018	0.0049	10:06:18	No
2	0.186	0.186	0.0018	0.0049	10:06:53	No
Mean:	0.183	0.183	0.0018			
SD :	0.0038	0.0038	0.0000			
%RSD:	2.1	2.1	1.5959			

QC value within specified limits.

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 01/08/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.011	5.011	0.0380	0.0411	10:08:18	No
2	4.983	4.983	0.0378	0.0409	10:08:54	No
Mean:	4.997	4.997	0.0379			
SD :	0.0202	0.0202	0.0002			
%RSD:	0.4	0.4	0.4003			

QC value within specified limits.

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 01/08/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.039	-0.039	0.0001	0.0032	10:10:22	No
2	-0.032	-0.032	0.0002	0.0033	10:10:57	No
Mean:	-0.036	-0.036	0.0002			
SD :	0.0045	0.0045	0.0000			
%RSD:	12.7	12.7	20.1775			

QC value within specified limits.

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 01/08/2010
Sample ID: 1202002063|i||935670|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.037	-0.037	0.0002	0.0032	10:12:23	No
2	-0.059	-0.059	0.0000	0.0031	10:12:58	No
Mean:	-0.048	-0.048	0.0001			
SD :	0.0158	0.0158	0.0001			
%RSD:	32.9	32.9	162.5804			

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 01/08/2010
Sample ID: 1202002064|i|10||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.408	3.408	0.0260	0.0291	10:14:22	No
2	3.427	3.427	0.0261	0.0292	10:14:57	No
Mean:	3.418	3.418	0.0260			
SD :	0.0138	0.0138	0.0001			
%RSD:	0.4	0.4	0.3959			

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 01/08/2010
Sample ID: 243270001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.311	0.311	0.0028	0.0058	10:16:23	No
2	0.311	0.311	0.0028	0.0058	10:16:58	No
Mean:	0.311	0.311	0.0028			
SD :	0.0001	0.0001	0.0000			
%RSD:						

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 01/08/2010
Sample ID: 1202002065|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.294	0.294	0.0026	0.0057	10:18:24	No
2	0.274	0.274	0.0025	0.0056	10:18:59	No
Mean:	0.284	0.284	0.0026			
SD :	0.0143	0.0143	0.0001			
%RSD:	5.0	5.0	4.1756			

Element: Hg Seq. No.: 16 AS Loc.: 16 Date: 01/08/2010
Sample ID: 1202002066|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.629	2.629	0.0201	0.0232	10:20:28	No
2	2.577	2.577	0.0197	0.0228	10:21:03	No
Mean:	2.603	2.603	0.0199			
SD :	0.0368	0.0368	0.0003			
%RSD:	1.4	1.4	1.3848			

Element: Hg Seq. No.: 17 AS Loc.: 17 Date: 01/08/2010
Sample ID: 1202002068|i|||MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.414	2.414	0.0185	0.0216	10:22:27	No
2	2.351	2.351	0.0180	0.0211	10:23:02	No
Mean:	2.382	2.382	0.0183			
SD :	0.0449	0.0449	0.0003			
%RSD:	1.9	1.9	1.8400			

Element: Hg Seq. No.: 18 AS Loc.: 18 Date: 01/08/2010
Sample ID: 1202002067|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.045	-0.045	0.0001	0.0032	10:24:23	No
2	-0.081	-0.081	-0.0002	0.0029	10:24:58	No
Mean:	-0.063	-0.063	0.0000			
SD :	0.0250	0.0250	0.0002			
%RSD:	39.7	39.7	475.1963			

Element: Hg Seq. No.: 19 AS Loc.: 19 Date: 01/08/2010
Sample ID: 243270002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.385	0.385	0.0033	0.0064	10:26:20	No
2	0.381	0.381	0.0033	0.0064	10:26:54	No
Mean:	0.383	0.383	0.0033			
SD :	0.0027	0.0027	0.0000			
%RSD:	0.7	0.7	0.6221			

Element: Hg Seq. No.: 20 AS Loc.: 20 Date: 01/08/2010
Sample ID: 243270003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.436	0.436	0.0037	0.0068	10:28:16	No
2	0.404	0.404	0.0035	0.0065	10:28:50	No
Mean:	0.420	0.420	0.0036			
SD :	0.0230	0.0230	0.0002			

%RSD: 5.5 5.5 4.8110

Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 01/08/2010
Sample ID: 243270004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.232	0.232	0.0022	0.0053	10:30:12	No
2	0.212	0.212	0.0020	0.0051	10:30:46	No
Mean:	0.222	0.222	0.0021			
SD :	0.0142	0.0142	0.0001			
%RSD:	6.4	6.4	5.0583			

Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 01/08/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.155	5.155	0.0391	0.0421	10:32:10	No
2	5.161	5.161	0.0391	0.0422	10:32:44	No
Mean:	5.158	5.158	0.0391			
SD :	0.0041	0.0041	0.0000			
%RSD:						

QC value within specified limits.

Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 01/08/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.082	-0.082	-0.0002	0.0029	10:34:12	No
2	-0.086	-0.086	-0.0002	0.0029	10:34:47	No
Mean:	-0.084	-0.084	-0.0002			
SD :	0.0031	0.0031	0.0000			
%RSD:	3.7	3.7	11.7413			

QC value within specified limits.

Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 01/08/2010
Sample ID: 243270005|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.234	0.234	0.0022	0.0053	10:36:12	No
2	0.218	0.218	0.0021	0.0051	10:36:47	No
Mean:	0.226	0.226	0.0021			
SD :	0.0115	0.0115	0.0001			
%RSD:	5.1	5.1	4.0405			

Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 01/08/2010
Sample ID: 243270006|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.475	0.475	0.0040	0.0071	10:38:10	No
2	0.455	0.455	0.0038	0.0069	10:38:45	No
Mean:	0.465	0.465	0.0039			
SD :	0.0142	0.0142	0.0001			
%RSD:	3.0	3.0	2.7092			

Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 01/08/2010
Sample ID: 243270007|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.324	0.324	0.0029	0.0059	10:40:09	No
2	0.300	0.300	0.0027	0.0058	10:40:44	No
Mean:	0.312	0.312	0.0028			
SD :	0.0176	0.0176	0.0001			
%RSD:	5.6	5.6	4.7608			

Element: Hg Seq. No.: 27 AS Loc.: 25 Date: 01/08/2010
Sample ID: 243270008|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.263	0.263	0.0024	0.0055	10:42:08	No
2	0.249	0.249	0.0023	0.0054	10:42:43	No
Mean:	0.256	0.256	0.0024			
SD :	0.0098	0.0098	0.0001			
%RSD:	3.8	3.8	3.1346			

Element: Hg Seq. No.: 28 AS Loc.: 26 Date: 01/08/2010
Sample ID: 243270009|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.321	0.321	0.0028	0.0059	10:44:09	No
2	0.318	0.318	0.0028	0.0059	10:44:44	No
Mean:	0.319	0.319	0.0028			
SD :	0.0024	0.0024	0.0000			
%RSD:	0.7	0.7	0.6301			

Element: Hg Seq. No.: 29 AS Loc.: 27 Date: 01/08/2010
Sample ID: 243270010|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.461	0.461	0.0039	0.0070	10:46:10	No
2	0.463	0.463	0.0039	0.0070	10:46:44	No
Mean:	0.462	0.462	0.0039			
SD :	0.0012	0.0012	0.0000			
%RSD:	0.3	0.3	0.2370			

Element: Hg Seq. No.: 30 AS Loc.: 28 Date: 01/08/2010
Sample ID: 243273001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.101	0.101	0.0012	0.0043	10:48:10	No
2	0.077	0.077	0.0010	0.0041	10:48:45	No
Mean:	0.089	0.089	0.0011			
SD :	0.0167	0.0167	0.0001			
%RSD:	18.8	18.8	11.3681			

Element: Hg Seq. No.: 31 AS Loc.: 29 Date: 01/08/2010
Sample ID: 1202006363|i||937607|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.030	-0.030	0.0002	0.0033	10:50:11	No
2	-0.052	-0.052	0.0000	0.0031	10:50:45	No
Mean:	-0.041	-0.041	0.0001			
SD :	0.0158	0.0158	0.0001			

%RSD: 38.5 38.5 93.4754

Element: Hg Seq. No.: 32 AS Loc.: 30 Date: 01/08/2010
Sample ID: 1202006368|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.778	3.778	0.0287	0.0318	10:52:11	No
2	3.786	3.786	0.0288	0.0319	10:52:46	No
Mean:	3.782	3.782	0.0288			
SD :	0.0057	0.0057	0.0000			
%RSD:	0.2	0.2	0.1489			

Element: Hg Seq. No.: 33 AS Loc.: 31 Date: 01/08/2010
Sample ID: 243514001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.316	0.316	0.0028	0.0059	10:54:13	No
2	0.311	0.311	0.0028	0.0058	10:54:48	No
Mean:	0.313	0.313	0.0028			
SD :	0.0036	0.0036	0.0000			
%RSD:	1.2	1.2	0.9778			

Element: Hg Seq. No.: 34 AS Loc.: 7 Date: 01/08/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.421	5.421	0.0411	0.0441	10:56:15	No
2	5.272	5.272	0.0399	0.0430	10:56:51	No
Mean:	5.347	5.347	0.0405			
SD :	0.1052	0.1052	0.0008			
%RSD:	2.0	2.0	1.9466			

QC value within specified limits.

Element: Hg Seq. No.: 35 AS Loc.: 8 Date: 01/08/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.050	-0.050	0.0001	0.0031	10:58:19	No
2	-0.074	-0.074	-0.0001	0.0030	10:58:54	No
Mean:	-0.062	-0.062	0.0000			
SD :	0.0169	0.0169	0.0001			
%RSD:	27.2	27.2	395.8322			

QC value within specified limits.

Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 01/08/2010
Sample ID: 1202006364|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.306	0.306	0.0027	0.0058	11:00:18	No
2	0.281	0.281	0.0025	0.0056	11:00:53	No
Mean:	0.294	0.294	0.0026			
SD :	0.0178	0.0178	0.0001			
%RSD:	6.1	6.1	5.0595			

Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 01/08/2010
Sample ID: 1202006366|i|||MS

Miscellaneous

Prep LogBook

Analyst: BXA1 Verified by:_____

Batch: 935377

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202001489	UI062540-MS	.519	g
MS	1202001491	UI090827-A	.5	mL
MS	1202001491	UI090827-B	.5	mL
MSD	1202001493	UI090827-A	.5	mL
MSD	1202001493	UI090827-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202001488		SW846 3050B	21-DEC-2009 17:56	0.512 g	50 mL	97.65625	SOIL
LCS	1202001489		SW846 3050B	21-DEC-2009 17:56	0.519 g	50 mL	96.33911	SOIL
SAMPLE	243270001		SW846 3050B	21-DEC-2009 17:56	0.5 g	50 mL	100	SOIL
DUP	1202001490	243270001	SW846 3050B	21-DEC-2009 17:56	0.515 g	50 mL	97.08738	SOIL
MS	1202001491	243270001	SW846 3050B	21-DEC-2009 17:56	0.552 g	50 mL	90.57971	SOIL
MSD	1202001493	243270001	SW846 3050B	21-DEC-2009 17:56	0.532 g	50 mL	93.98496	SOIL
SDILT	1202001492	243270001	SW846 3050B	21-DEC-2009 17:56	0.5 g	50 mL	100	SOIL
SAMPLE	243270002		SW846 3050B	21-DEC-2009 17:56	0.501 g	50 mL	99.8004	SOIL
SAMPLE	243270003		SW846 3050B	21-DEC-2009 17:56	0.5 g	50 mL	100	SOIL
SAMPLE	243270004		SW846 3050B	21-DEC-2009 17:56	0.588 g	50 mL	85.03401	SOIL
SAMPLE	243270005		SW846 3050B	21-DEC-2009 17:56	0.513 g	50 mL	97.46589	SOIL
SAMPLE	243270006		SW846 3050B	21-DEC-2009 17:56	0.5 g	50 mL	100	SOIL
SAMPLE	243270007		SW846 3050B	21-DEC-2009 17:56	0.541 g	50 mL	92.42144	SOIL
SAMPLE	243270008		SW846 3050B	21-DEC-2009 17:56	0.501 g	50 mL	99.8004	SOIL
SAMPLE	243270009		SW846 3050B	21-DEC-2009 17:56	0.503 g	50 mL	99.40358	SOIL
SAMPLE	243270010		SW846 3050B	21-DEC-2009 17:56	0.541 g	50 mL	92.42144	SOIL
SAMPLE	243273001		SW846 3050B	21-DEC-2009 17:56	0.521 g	50 mL	95.96929	SOIL

Reagent/Solvent Lot ID	Amount	Description
1203655-02	1.5 mL	Hydrogen Peroxide 30%
1234886	5 mL	Nitric Acid CONC.

Comments: sample#243270001 is brown, medium soil.

Prep LogBook

Analyst: BXA1 Verified by:_____

Batch: 935380

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202001495	UI062540-I	.525	g
MS	1202001497	UI091124-01	.25	mL
MS	1202001497	UI091124-06	.25	mL
MSD	1202001499	UI091124-01	.25	mL
MSD	1202001499	UI091124-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202001494		SW846 3050B	21-DEC-2009 18:19	0.521 g	50 mL	95.96929	SOIL
LCS	1202001495		SW846 3050B	21-DEC-2009 18:19	0.525 g	50 mL	95.2381	SOIL
SAMPLE	243270001		SW846 3050B	21-DEC-2009 18:19	0.506 g	50 mL	98.81423	SOIL
DUP	1202001496	243270001	SW846 3050B	21-DEC-2009 18:19	0.551 g	50 mL	90.7441	SOIL
MS	1202001497	243270001	SW846 3050B	21-DEC-2009 18:19	0.563 g	50 mL	88.80995	SOIL
MSD	1202001499	243270001	SW846 3050B	21-DEC-2009 18:19	0.519 g	50 mL	96.33911	SOIL
SDILT	1202001498	243270001	SW846 3050B	21-DEC-2009 18:19	0.506 g	50 mL	98.81423	SOIL
SAMPLE	243270002		SW846 3050B	21-DEC-2009 18:19	0.507 g	50 mL	98.61933	SOIL
SAMPLE	243270003		SW846 3050B	21-DEC-2009 18:19	0.5 g	50 mL	100	SOIL
SAMPLE	243270004		SW846 3050B	21-DEC-2009 18:19	0.531 g	50 mL	94.16196	SOIL
SAMPLE	243270005		SW846 3050B	21-DEC-2009 18:19	0.559 g	50 mL	89.44544	SOIL
SAMPLE	243270006		SW846 3050B	21-DEC-2009 18:19	0.566 g	50 mL	88.33922	SOIL
SAMPLE	243270007		SW846 3050B	21-DEC-2009 18:19	0.502 g	50 mL	99.60159	SOIL
SAMPLE	243270008		SW846 3050B	21-DEC-2009 18:19	0.502 g	50 mL	99.60159	SOIL
SAMPLE	243270009		SW846 3050B	21-DEC-2009 18:19	0.516 g	50 mL	96.89922	SOIL
SAMPLE	243270010		SW846 3050B	21-DEC-2009 18:19	0.521 g	50 mL	95.96929	SOIL
SAMPLE	243273001		SW846 3050B	21-DEC-2009 18:19	0.549 g	50 mL	91.07468	SOIL

Reagent/Solvent Lot ID	Amount	Description
1244970	10 mL	HYDROCHLORIC ACID
1234886	1.25 mL	Nitric Acid CONC.

Comments: sample# brown medium soil.

Prep LogBook

Analyst: AXG2 Verified by:_____

Batch: 935669

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202002064	UI031809A	.206	g
MS	1202002066	WHG100107-14	.3	mL
MSD	1202002068	WHG100107-14	.3	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202002063		SW846 7471A Prep	07-JAN-2010 13:30	0.5 g	30 mL	60	SOIL
LCS	1202002064		SW846 7471A Prep	07-JAN-2010 13:30	0.206 g	30 mL	145.63107	SOIL
SAMPLE	243270001		SW846 7471A Prep	07-JAN-2010 13:30	0.525 g	30 mL	57.14286	SOIL
DUP	1202002065	243270001	SW846 7471A Prep	07-JAN-2010 13:30	0.513 g	30 mL	58.47953	SOIL
MS	1202002066	243270001	SW846 7471A Prep	07-JAN-2010 13:30	0.591 g	30 mL	50.76142	SOIL
MSD	1202002068	243270001	SW846 7471A Prep	07-JAN-2010 13:30	0.517 g	30 mL	58.02708	SOIL
SDILT	1202002067	243270001	SW846 7471A Prep	07-JAN-2010 13:30	0.525 g	30 mL	57.14286	SOIL
SAMPLE	243270002		SW846 7471A Prep	07-JAN-2010 13:30	0.578 g	30 mL	51.90311	SOIL
SAMPLE	243270003		SW846 7471A Prep	07-JAN-2010 13:30	0.569 g	30 mL	52.72408	SOIL
SAMPLE	243270004		SW846 7471A Prep	07-JAN-2010 13:30	0.503 g	30 mL	59.64215	SOIL
SAMPLE	243270005		SW846 7471A Prep	07-JAN-2010 13:30	0.565 g	30 mL	53.09735	SOIL
SAMPLE	243270006		SW846 7471A Prep	07-JAN-2010 13:30	0.571 g	30 mL	52.5394	SOIL
SAMPLE	243270007		SW846 7471A Prep	07-JAN-2010 13:30	0.508 g	30 mL	59.05512	SOIL
SAMPLE	243270008		SW846 7471A Prep	07-JAN-2010 13:30	0.594 g	30 mL	50.50505	SOIL
SAMPLE	243270009		SW846 7471A Prep	07-JAN-2010 13:30	0.536 g	30 mL	55.97015	SOIL
SAMPLE	243270010		SW846 7471A Prep	07-JAN-2010 13:30	0.551 g	30 mL	54.44646	SOIL
SAMPLE	243273001		SW846 7471A Prep	07-JAN-2010 13:30	0.54 g	30 mL	55.55556	SOIL

Reagent/Solvent Lot ID	Amount	Description
1236355-A	1.125 mL	Hydrochloric Acid Conc.
1240182-1	.375 mL	NITRIC ACID
1244904-C	7.5 mL	5% KMnO4 solution
1206350-C	2 mL	Hg reducing agent
WHG100107-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG100107-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG100107-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG100107-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG100107-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG100107-12	750 uL	Mercury Working 2nd Source S 5.0/ICV

Comments: Sample 243270001 consist of brown, medium soil.
Digestion Start Date: 07-JAN-10 13:30
Digestion End Date: 07-JAN-10 14:00

DATA EXCEPTION REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
08-JAN-10	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
935381	See Below		

Potentially affected work order(s)(SDG): 243270(10-990),243273(10-988)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed Recovery for MSD/PSD

Specification and Requirements Exception Description:	DER Disposition:
1. Failed Recovery for MS/PS: QC 1202001497MS 2. Failed RPD for MS/MSD, or PS/PSD: QC 1202001499MSD 3. Failed Recovery for MSD/PSD: QC 1202001499MSD	1. The matrix spike recovery failed outside of the control limits for antimony and barium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for manganese due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 3. The matrix spike duplicate recovery failed outside of the control limits for 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:
Helen Camello 11-JAN-10

Data Validator/Group Leader:
Louise Smith 12-JAN-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

Analyte	Concentration	Analyte	Concentration
Strontium	227 mg/kg	Thallium	121 mg/kg
Thorium	9.84 mg/kg	Tin	104 mg/kg
Titanium	462 mg/kg	Uranium	2.13 mg/kg
Uranium-235	.0153 mg/kg	Uranium-238	2.11 mg/kg
Vanadium	92.4 mg/kg	Zinc	594 mg/kg
Zirconium	10.6 mg/kg		

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%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 S **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: 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

Analyte	Concentration	Analyte	Concentration
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L

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: UI090827-A **Opened:** 27-AUG-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 27-AUG-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 27-AUG-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI090827-B **Opened:** 27-AUG-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 27-AUG-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 27-AUG-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Standard Logbook

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
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

Standard Logbook

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Standard Logbook

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 :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS
Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091124-01 **Opened:** 24-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091124-06 **Opened:** 24-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Standard Logbook

Serial ID: UI091212-11 **Opened:** 12-DEC-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 12-DEC-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 12-DEC-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091212-60 **Opened:** 12-DEC-09 **Amount :** .5 mL
Name: ICPMS High Range Standar **Received:** 12-DEC-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 12-DEC-10 **Lot Number :** 1018064
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: UI091212-61 **Opened:** 12-DEC-09 **Amount :** .5 mL
Name: ICPMS High Range Standar **Received:** 12-DEC-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 12-DEC-10 **Lot Number :** 1018064
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: UI091215-48 **Opened:** 04-JAN-10 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 18-DEC-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 04-JAN-11 **Lot Number :** 1018219
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: UI091217-06 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 17-DEC-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018209
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI091217-07 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 17-DEC-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018210
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L

Analyte	Concentration	Analyte	Concentration
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: UI091228-40 **Opened:** 28-DEC-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 21-DEC-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 28-DEC-10 **Lot Number :** 1018160
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: UI091228-41 **Opened:** 28-DEC-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 21-DEC-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 28-DEC-10 **Lot Number :** 1018160
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

Analyte	Concentration	Analyte	Concentration
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/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
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG100107-01 **Opened:** 07-JAN-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 07-JAN-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 08-JAN-10 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG100107-02 **Opened:** 07-JAN-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 07-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Intermediate **Expires:** 08-JAN-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: WHG100107-07 **Opened:** 07-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 07-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 08-JAN-10
Employee: Jason Loy
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.
IHG100107-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG100107-08 **Opened:** 07-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 07-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 08-JAN-10
Employee: Jason Loy **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100107-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG100107-09 **Opened:** 07-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 07-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 08-JAN-10
Employee: Jason Loy **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100107-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG100107-10 **Opened:** 07-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 07-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 08-JAN-10
Employee: Jason Loy **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.
IHG100107-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100107-11 **Opened:** 07-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 07-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 08-JAN-10
Employee: Jason Loy
Supplier: GEL
Description: Mercury Working 1st Source CAL S 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100107-01	Mercury	200 ug/L	1.5 mL	30 mL	10 ug/L

Serial ID: WHG100107-12 **Opened:** 07-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 07-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 08-JAN-10
Employee: Jason Loy **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 2nd Source S 5.0/ICV
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100107-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100107-14 **Opened:** 07-JAN-10 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 07-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 08-JAN-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury soil working intermediate standard for MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI100105-42 **Opened:** 05-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 06-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1249941
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.
WI100105-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100105-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100105-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100105-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100105-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100105-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100105-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100105-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100105-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100105-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100105-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100105-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100105-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100105-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100105-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100105-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100105-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100105-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100105-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100105-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100105-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100105-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100105-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100105-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100105-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100105-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100105-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100105-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100105-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100105-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100105-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100105-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100105-43 **Opened:** 05-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 06-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1249941
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI100105-44 **Opened:** 05-JAN-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 06-JAN-10 **Solvent :** 3%HCL and 1 %HNO3-1249941
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

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI100105-45 **Opened:** 05-JAN-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 06-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1249941
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: WI100105-46 **Opened:** 05-JAN-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 06-JAN-10 **Solvent :** 3%HCL AND 1%HNO3-1249941
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI100105-47 **Opened:** 05-JAN-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 06-JAN-10 **Solvent :** 3%HCL &1%HNO3-1249941
Employee: Helen Carnello
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WI100106-42 **Opened:** 06-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 07-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1249941
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.
WI100106-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100106-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100106-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100106-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100106-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100106-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100106-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100106-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100106-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100106-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100106-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100106-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100106-43 **Opened:** 06-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 07-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1249941
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI100106-44 **Opened:** 06-JAN-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 07-JAN-10 **Solvent :** 3%HCL and 1 %HNO3-1249941
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI100106-45 **Opened:** 06-JAN-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 07-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1249941
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: WI100106-46 **Opened:** 06-JAN-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 07-JAN-10 **Solvent :** 3%HCL AND 1%HNO3-1249941
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

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI100106-47 **Opened:** 06-JAN-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 07-JAN-10 **Solvent :** 3%HCL &1%HNO3-1249941
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS100105-04B **Opened:** 05-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 05-JAN-10 **Balance Id :** 40245216
Type: Working **Expires:** 06-JAN-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl- 1238829
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: WMS100106-04 **Opened:** 06-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 06-JAN-10 **Balance Id :** 4025216
Type: Working **Expires:** 07-JAN-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1249336
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100106-04A **Opened:** 06-JAN-10 **Balance Id :** 4025216

Name: ICPMS Cal Standard 10 **Received:** 06-JAN-10 **Pipet Id :** 3541598

Type: Working **Expires:** 07-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1249336

Employee: Paul Boyd

Supplier: GEL

Description: ICPMS Calibration Standard (10 ppb)

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100105-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100105-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100105-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100105-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100105-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100105-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100105-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100105-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100105-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100105-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100105-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100105-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100105-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100105-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100105-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100105-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100105-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100105-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100105-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100105-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100105-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100105-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100105-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100105-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100105-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100105-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100105-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100105-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100105-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100105-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100105-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100105-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100105-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100106-05 **Opened:** 06-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 06-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 07-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1249336
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100106-06 **Opened:** 06-JAN-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 06-JAN-10 **Pipet Id :** 3820544
Type: Working **Expires:** 07-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1249336
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100106-07 **Opened:** 06-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 06-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 07-JAN-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1249336
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100106-08 **Opened:** 06-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 06-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 07-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1249336
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Serial ID: WMS100106-70 **Opened:** 06-JAN-10 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 06-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 07-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1249336
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091212-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS100107-04 **Opened:** 07-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 07-JAN-10 **Balance Id :** 4025216
Type: Working **Expires:** 08-JAN-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1249336
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100107-04A **Opened:** 07-JAN-10 **Balance Id :** 4025216

Name: ICPMS Cal Standard 10 **Received:** 07-JAN-10 **Pipet Id :** 3541598

Type: Working **Expires:** 08-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1249336

Employee: Paul Boyd

Supplier: GEL

Description: ICPMS Calibration Standard (10 ppb)

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100107-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100107-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100107-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100107-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100107-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100107-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100107-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100107-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100107-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100107-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100107-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100107-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100107-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100107-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100107-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100107-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100107-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100107-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100107-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100107-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100107-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100107-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100107-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100107-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100107-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100107-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100107-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100107-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100107-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100107-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100107-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100107-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100107-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100107-05 **Opened:** 07-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 07-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 08-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1249336
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100107-06 **Opened:** 07-JAN-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 07-JAN-10 **Pipet Id :** 3820544
Type: Working **Expires:** 08-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1249336
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100107-07 **Opened:** 07-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 07-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 08-JAN-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1249336
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100107-08 **Opened:** 07-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 07-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 08-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1249336
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
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

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Standard Logbook

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
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: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1234886 **Opened:** 27-NOV-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 27-NOV-09
Type: Reagent/Solvent **Expires:** 27-NOV-10
Employee: Bryan Davis
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1236355-A **Opened:** 01-DEC-09 **Lot Number :** 200930201
Name: B-HCl-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-DEC-10
Employee: Tara Griffin
Supplier: Aristar
Description: Hydrochloric Acid Conc.
Comments: None

Standard Logbook

Serial ID: 1238345 **Opened:** 04-DEC-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 04-DEC-09
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1240182-1 **Opened:** 09-DEC-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 09-DEC-09 **Lot Number :** H34040
Type: Reagent/Solvent **Expires:** 09-DEC-10
Employee: Tara Griffin
Supplier: Mallinckrodt Chemicals
Description: NITRIC ACID
Comments: None

Serial ID: 1244904-C **Opened:** 18-DEC-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 18-DEC-09
Type: Reagent/Solvent **Expires:** 18-JUN-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1244970 **Opened:** 18-DEC-09 **Lot Number :** H41032
Name: I-HCL **Received:** 18-DEC-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 18-DEC-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1249336 **Opened:** 04-JAN-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 04-JAN-10
Type: Reagent/Solvent **Expires:** 11-JAN-10
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1238345	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1244970	I-HCL	36.5-38.0	90 mL	9 l	N/A

Serial ID: 1249941 **Opened:** 04-JAN-10 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 15-DEC-10 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 10-JAN-10 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-990-1

Sample Analysis

Sample ID	Client ID
243272001	RE12-10-7366
1202001500	Method Blank (MB) **ICP**
1202001501	Laboratory Control Sample (LCS)
1202001504	243286001(CAPA-10-6389L) Serial Dilution (SD)
1202001502	243286001(CAPA-10-6389D) Sample Duplicate (DUP)
1202001503	243286001(CAPA-10-6389S) Matrix Spike (MS)
1202001514	Method Blank (MB) **ICP-MS**
1202001515	Laboratory Control Sample (LCS)
1202001518	243286002(CAPA-10-6390L) Serial Dilution (SD)
1202001516	243286002(CAPA-10-6390D) Sample Duplicate (DUP)
1202001517	243286002(CAPA-10-6390S) Matrix Spike (MS)
1202002069	Method Blank (MB) **CVAA**
1202002070	Laboratory Control Sample (LCS)
1202002073	243272001(RE12-10-7366L) Serial Dilution (SD)
1202002071	243272001(RE12-10-7366D) Sample Duplicate (DUP)
1202002072	243272001(RE12-10-7366S) Matrix Spike (MS)

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

Method/Analysis Information

Analytical Batch:	935389, 935396 and 935673
Prep Batch :	935386, 935394 and 935672
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-006 REV# 9, GL-MA-E-014 REV# 21 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3005/6010B, SW846 3005/6020 and SW846 7470A
Prep Method :	SW846 3005A and SW846 7470A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits with the exception of magnesium that recovered outside of the advisory control limits of 70-130%.

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

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

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 243286001 (CAPA-10-6389)-ICP, 243286002 (CAPA-10-6390)-ICP-MS and 243272001 (RE12-10-7366)-CVAA.

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

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

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

Technical Information

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

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

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

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

Miscellaneous Information

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

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

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

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

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

Review Validation:

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

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

Reviewer: Nick Code A Ehmore **Date:** 1·14·10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-990-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243272001 **BASIS:** As Received **DATE COLLECTED** 16-DEC-09

CLIENT ID: RE12-10-7366 **LEVEL:** Low **DATE RECEIVED** 18-DEC-09

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	01/06/10 16:35	010610A-1	935389
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	12/23/09 01:18	091222-3	935396
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	01/06/10 16:35	010610A-1	935389
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	01/06/10 16:35	010610A-1	935389
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	12/24/09 09:41	091223-14	935396
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	12/23/09 01:18	091222-3	935396
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	01/06/10 16:35	010610A-1	935389
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	01/06/10 16:35	010610A-1	935389
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	01/06/10 16:35	010610A-1	935389
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	01/06/10 16:35	010610A-1	935389
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	01/06/10 16:35	010610A-1	935389
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	12/23/09 01:18	091222-3	935396
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	01/06/10 16:35	010610A-1	935389
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	12/23/09 01:18	091222-3	935396
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	12/31/09 11:18	123109W1-15	935673
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	01/06/10 16:35	010610A-1	935389
7440-09-7	Potassium	84.1	ug/L	J	50	150	150	1	P	HSC	01/06/10 16:35	010610A-1	935389
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	01/06/10 16:35	010610A-1	935389
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	01/06/10 16:35	010610A-1	935389
7440-23-5	Sodium	219	ug/L	J	100	300	300	1	P	HSC	01/06/10 16:35	010610A-1	935389
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	12/23/09 01:18	091222-3	935396
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	12/23/09 01:18	091222-3	935396
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	01/06/10 16:35	010610A-1	935389
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	01/06/10 16:35	010610A-1	935389

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
935389	935386	SW846 3005A	50	mL	50	mL	12/22/09	AXG2
935396	935394	SW846 3005A	50	mL	50	mL	12/22/09	AXG2
935673	935672	SW846 7470A Prep	20	mL	20	mL	12/30/09	BCD1

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-990-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Antimony	50.2	ug/L	50	ug/L	100.4	90.0 - 110.0	MS	22-DEC-09 23:00	091222-3
	Cadmium	51.9	ug/L	50	ug/L	103.8	90.0 - 110.0	MS	22-DEC-09 23:00	091222-3
	Lead	52.2	ug/L	50	ug/L	104.4	90.0 - 110.0	MS	22-DEC-09 23:00	091222-3
	Manganese	48.5	ug/L	50	ug/L	96.9	90.0 - 110.0	MS	22-DEC-09 23:00	091222-3
	Thallium	50.5	ug/L	50	ug/L	101	90.0 - 110.0	MS	22-DEC-09 23:00	091222-3
	Uranium	54.5	ug/L	50	ug/L	109	90.0 - 110.0	MS	22-DEC-09 23:00	091222-3
	Beryllium	51.1	ug/L	50	ug/L	102.1	90.0 - 110.0	MS	24-DEC-09 08:37	091223-14
	Mercury	5.12	ug/L	5	ug/L	102.3	90.0 - 110.0	AV	31-DEC-09 09:11	123109W1-15
	Aluminum	5030	ug/L	5000	ug/L	100.6	90.0 - 110.0	P	06-JAN-10 10:37	010610A-1
	Arsenic	476	ug/L	500	ug/L	95.1	90.0 - 110.0	P	06-JAN-10 10:37	010610A-1
	Barium	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	06-JAN-10 10:37	010610A-1
	Calcium	4990	ug/L	5000	ug/L	99.9	90.0 - 110.0	P	06-JAN-10 10:37	010610A-1
	Chromium	485	ug/L	500	ug/L	97	90.0 - 110.0	P	06-JAN-10 10:37	010610A-1
	Cobalt	497	ug/L	500	ug/L	99.5	90.0 - 110.0	P	06-JAN-10 10:37	010610A-1
	Copper	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	06-JAN-10 10:37	010610A-1
	Iron	5140	ug/L	5000	ug/L	102.9	90.0 - 110.0	P	06-JAN-10 10:37	010610A-1
	Magnesium	5280	ug/L	5000	ug/L	105.6	90.0 - 110.0	P	06-JAN-10 10:37	010610A-1
	Nickel	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	06-JAN-10 10:37	010610A-1
	Potassium	2480	ug/L	2500	ug/L	99.2	90.0 - 110.0	P	06-JAN-10 10:37	010610A-1
	Selenium	2570	ug/L	2500	ug/L	102.7	90.0 - 110.0	P	06-JAN-10 10:37	010610A-1
	Silver	257	ug/L	250	ug/L	102.6	90.0 - 110.0	P	06-JAN-10 10:37	010610A-1
	Sodium	2590	ug/L	2500	ug/L	103.5	90.0 - 110.0	P	06-JAN-10 10:37	010610A-1
	Vanadium	510	ug/L	500	ug/L	102	90.0 - 110.0	P	06-JAN-10 10:37	010610A-1
	Zinc	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	06-JAN-10 10:37	010610A-1
	Potassium	2420	ug/L	2500	ug/L	96.8	90.0 - 110.0	P	07-JAN-10 11:30	010710-2
CCV01										
	Antimony	49.3	ug/L	50	ug/L	98.6	90.0 - 110.0	MS	22-DEC-09 23:29	091222-3
	Cadmium	51.6	ug/L	50	ug/L	103.2	90.0 - 110.0	MS	22-DEC-09 23:29	091222-3
	Lead	52.1	ug/L	50	ug/L	104.2	90.0 - 110.0	MS	22-DEC-09 23:29	091222-3
	Manganese	53.7	ug/L	50	ug/L	107.3	90.0 - 110.0	MS	22-DEC-09 23:29	091222-3

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–990–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Thallium	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	22–DEC–09 23:29	091222–3
	Uranium	54.5	ug/L	50	ug/L	108.9	90.0 – 110.0	MS	22–DEC–09 23:29	091222–3
	Beryllium	49.8	ug/L	50	ug/L	99.5	90.0 – 110.0	MS	24–DEC–09 08:45	091223–14
	Mercury	5.07	ug/L	5	ug/L	101.4	80.0 – 120.0	AV	31–DEC–09 09:16	123109W1–15
	Aluminum	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	06–JAN–10 11:40	010610A–1
	Arsenic	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	06–JAN–10 11:40	010610A–1
	Barium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	06–JAN–10 11:40	010610A–1
	Calcium	5060	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	06–JAN–10 11:40	010610A–1
	Chromium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	06–JAN–10 11:40	010610A–1
	Cobalt	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	06–JAN–10 11:40	010610A–1
	Copper	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	06–JAN–10 11:40	010610A–1
	Iron	4940	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	06–JAN–10 11:40	010610A–1
	Magnesium	5090	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	06–JAN–10 11:40	010610A–1
	Nickel	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	06–JAN–10 11:40	010610A–1
	Potassium	5060	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	06–JAN–10 11:40	010610A–1
	Selenium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	06–JAN–10 11:40	010610A–1
	Silver	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	06–JAN–10 11:40	010610A–1
	Sodium	9660	ug/L	10000	ug/L	96.6	90.0 – 110.0	P	06–JAN–10 11:40	010610A–1
	Vanadium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	06–JAN–10 11:40	010610A–1
	Zinc	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	06–JAN–10 11:40	010610A–1
	Potassium	5120	ug/L	5000	ug/L	102.4	90.0 – 110.0	P	07–JAN–10 12:14	010710–2
CCV02										
	Antimony	51.8	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	22–DEC–09 23:46	091222–3
	Cadmium	51.5	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	22–DEC–09 23:46	091222–3
	Lead	51.4	ug/L	50	ug/L	102.8	90.0 – 110.0	MS	22–DEC–09 23:46	091222–3
	Manganese	52.8	ug/L	50	ug/L	105.6	90.0 – 110.0	MS	22–DEC–09 23:46	091222–3
	Thallium	50.4	ug/L	50	ug/L	100.7	90.0 – 110.0	MS	22–DEC–09 23:46	091222–3
	Uranium	53.4	ug/L	50	ug/L	106.8	90.0 – 110.0	MS	22–DEC–09 23:46	091222–3
	Beryllium	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	24–DEC–09 08:50	091223–14
	Mercury	5.15	ug/L	5	ug/L	103	80.0 – 120.0	AV	31–DEC–09 09:39	123109W1–15

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–990–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Aluminum	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	06–JAN–10 13:00	010610A–1
	Arsenic	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	06–JAN–10 13:00	010610A–1
	Barium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	06–JAN–10 13:00	010610A–1
	Calcium	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	06–JAN–10 13:00	010610A–1
	Chromium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	06–JAN–10 13:00	010610A–1
	Cobalt	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	06–JAN–10 13:00	010610A–1
	Copper	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	06–JAN–10 13:00	010610A–1
	Iron	4840	ug/L	5000	ug/L	96.8	90.0 – 110.0	P	06–JAN–10 13:00	010610A–1
	Magnesium	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	06–JAN–10 13:00	010610A–1
	Nickel	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	06–JAN–10 13:00	010610A–1
	Potassium	4810	ug/L	5000	ug/L	96.2	90.0 – 110.0	P	06–JAN–10 13:00	010610A–1
	Selenium	525	ug/L	500	ug/L	105	90.0 – 110.0	P	06–JAN–10 13:00	010610A–1
	Silver	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	06–JAN–10 13:00	010610A–1
	Sodium	9970	ug/L	10000	ug/L	99.7	90.0 – 110.0	P	06–JAN–10 13:00	010610A–1
	Vanadium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	06–JAN–10 13:00	010610A–1
	Zinc	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	06–JAN–10 13:00	010610A–1
	Potassium	5100	ug/L	5000	ug/L	102	90.0 – 110.0	P	07–JAN–10 13:22	010710–2
CCV03										
	Antimony	48.4	ug/L	50	ug/L	96.8	90.0 – 110.0	MS	23–DEC–09 00:38	091222–3
	Cadmium	51.4	ug/L	50	ug/L	102.7	90.0 – 110.0	MS	23–DEC–09 00:38	091222–3
	Lead	51.9	ug/L	50	ug/L	103.8	90.0 – 110.0	MS	23–DEC–09 00:38	091222–3
	Manganese	51.2	ug/L	50	ug/L	102.4	90.0 – 110.0	MS	23–DEC–09 00:38	091222–3
	Thallium	49.2	ug/L	50	ug/L	98.4	90.0 – 110.0	MS	23–DEC–09 00:38	091222–3
	Uranium	54.4	ug/L	50	ug/L	108.8	90.0 – 110.0	MS	23–DEC–09 00:38	091222–3
	Beryllium	49.4	ug/L	50	ug/L	98.9	90.0 – 110.0	MS	24–DEC–09 09:05	091223–14
	Mercury	5.13	ug/L	5	ug/L	102.7	80.0 – 120.0	AV	31–DEC–09 10:02	123109W1–15
	Aluminum	5110	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	06–JAN–10 14:17	010610A–1
	Arsenic	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	06–JAN–10 14:17	010610A–1
	Barium	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	06–JAN–10 14:17	010610A–1
	Calcium	5090	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	06–JAN–10 14:17	010610A–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–990–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Chromium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	06–JAN–10 14:17	010610A–1
	Cobalt	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	06–JAN–10 14:17	010610A–1
	Copper	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	06–JAN–10 14:17	010610A–1
	Iron	4910	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	06–JAN–10 14:17	010610A–1
	Magnesium	5170	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	06–JAN–10 14:17	010610A–1
	Nickel	495	ug/L	500	ug/L	99	90.0 – 110.0	P	06–JAN–10 14:17	010610A–1
	Potassium	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	06–JAN–10 14:17	010610A–1
	Selenium	517	ug/L	500	ug/L	103.5	90.0 – 110.0	P	06–JAN–10 14:17	010610A–1
	Silver	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	06–JAN–10 14:17	010610A–1
	Sodium	9880	ug/L	10000	ug/L	98.8	90.0 – 110.0	P	06–JAN–10 14:17	010610A–1
	Vanadium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	06–JAN–10 14:17	010610A–1
	Zinc	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	06–JAN–10 14:17	010610A–1
	Potassium	5160	ug/L	5000	ug/L	103.3	90.0 – 110.0	P	07–JAN–10 14:28	010710–2
CCV04										
	Antimony	49.4	ug/L	50	ug/L	98.9	90.0 – 110.0	MS	23–DEC–09 01:30	091222–3
	Cadmium	51.2	ug/L	50	ug/L	102.3	90.0 – 110.0	MS	23–DEC–09 01:30	091222–3
	Lead	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	23–DEC–09 01:30	091222–3
	Manganese	52.3	ug/L	50	ug/L	104.5	90.0 – 110.0	MS	23–DEC–09 01:30	091222–3
	Thallium	46.7	ug/L	50	ug/L	93.5	90.0 – 110.0	MS	23–DEC–09 01:30	091222–3
	Uranium	54.4	ug/L	50	ug/L	108.8	90.0 – 110.0	MS	23–DEC–09 01:30	091222–3
	Beryllium	48.4	ug/L	50	ug/L	96.8	90.0 – 110.0	MS	24–DEC–09 09:17	091223–14
	Mercury	5.14	ug/L	5	ug/L	102.7	80.0 – 120.0	AV	31–DEC–09 10:26	123109W1–15
	Aluminum	5170	ug/L	5000	ug/L	103.4	90.0 – 110.0	P	06–JAN–10 14:45	010610A–1
	Arsenic	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	06–JAN–10 14:45	010610A–1
	Barium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	06–JAN–10 14:45	010610A–1
	Calcium	5170	ug/L	5000	ug/L	103.4	90.0 – 110.0	P	06–JAN–10 14:45	010610A–1
	Chromium	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	06–JAN–10 14:45	010610A–1
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	06–JAN–10 14:45	010610A–1
	Copper	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	06–JAN–10 14:45	010610A–1
	Iron	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	06–JAN–10 14:45	010610A–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-990-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Magnesium	5260	ug/L	5000	ug/L	105.2	90.0 – 110.0	P	06-JAN-10 14:45	010610A-1
	Nickel	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	06-JAN-10 14:45	010610A-1
	Potassium	5020	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	06-JAN-10 14:45	010610A-1
	Selenium	525	ug/L	500	ug/L	105	90.0 – 110.0	P	06-JAN-10 14:45	010610A-1
	Silver	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	06-JAN-10 14:45	010610A-1
	Sodium	10100	ug/L	10000	ug/L	100.6	90.0 – 110.0	P	06-JAN-10 14:45	010610A-1
	Vanadium	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	06-JAN-10 14:45	010610A-1
	Zinc	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	06-JAN-10 14:45	010610A-1
	Potassium	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	07-JAN-10 15:00	010710-2
CCV05										
	Antimony	48.6	ug/L	50	ug/L	97.3	90.0 – 110.0	MS	23-DEC-09 02:28	091222-3
	Cadmium	50.8	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	23-DEC-09 02:28	091222-3
	Lead	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	23-DEC-09 02:28	091222-3
	Manganese	53.5	ug/L	50	ug/L	106.9	90.0 – 110.0	MS	23-DEC-09 02:28	091222-3
	Thallium	48.9	ug/L	50	ug/L	97.7	90.0 – 110.0	MS	23-DEC-09 02:28	091222-3
	Uranium	54.8	ug/L	50	ug/L	109.6	90.0 – 110.0	MS	23-DEC-09 02:28	091222-3
	Beryllium	49.9	ug/L	50	ug/L	99.8	90.0 – 110.0	MS	24-DEC-09 09:27	091223-14
	Mercury	5.13	ug/L	5	ug/L	102.7	80.0 – 120.0	AV	31-DEC-09 10:49	123109W1-15
	Aluminum	5210	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	06-JAN-10 15:54	010610A-1
	Arsenic	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	06-JAN-10 15:54	010610A-1
	Barium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	06-JAN-10 15:54	010610A-1
	Calcium	5100	ug/L	5000	ug/L	102	90.0 – 110.0	P	06-JAN-10 15:54	010610A-1
	Chromium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	06-JAN-10 15:54	010610A-1
	Cobalt	500	ug/L	500	ug/L	100	90.0 – 110.0	P	06-JAN-10 15:54	010610A-1
	Copper	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	06-JAN-10 15:54	010610A-1
	Iron	4870	ug/L	5000	ug/L	97.3	90.0 – 110.0	P	06-JAN-10 15:54	010610A-1
	Magnesium	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	06-JAN-10 15:54	010610A-1
	Nickel	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	06-JAN-10 15:54	010610A-1
	Potassium	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	06-JAN-10 15:54	010610A-1
	Selenium	522	ug/L	500	ug/L	104.4	90.0 – 110.0	P	06-JAN-10 15:54	010610A-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–990–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Silver	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	06–JAN–10 15:54	010610A–1
	Sodium	9610	ug/L	10000	ug/L	96.1	90.0 – 110.0	P	06–JAN–10 15:54	010610A–1
	Vanadium	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	06–JAN–10 15:54	010610A–1
	Zinc	500	ug/L	500	ug/L	100	90.0 – 110.0	P	06–JAN–10 15:54	010610A–1
	Potassium	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	07–JAN–10 16:02	010710–2
CCV06										
	Beryllium	49.2	ug/L	50	ug/L	98.4	90.0 – 110.0	MS	24–DEC–09 09:33	091223–14
	Mercury	5.18	ug/L	5	ug/L	103.7	80.0 – 120.0	AV	31–DEC–09 11:12	123109W1–15
	Aluminum	5190	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	06–JAN–10 16:55	010610A–1
	Arsenic	516	ug/L	500	ug/L	103.1	90.0 – 110.0	P	06–JAN–10 16:55	010610A–1
	Barium	513	ug/L	500	ug/L	102.5	90.0 – 110.0	P	06–JAN–10 16:55	010610A–1
	Calcium	5210	ug/L	5000	ug/L	104.2	90.0 – 110.0	P	06–JAN–10 16:55	010610A–1
	Chromium	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	06–JAN–10 16:55	010610A–1
	Cobalt	511	ug/L	500	ug/L	102.1	90.0 – 110.0	P	06–JAN–10 16:55	010610A–1
	Copper	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	06–JAN–10 16:55	010610A–1
	Iron	5100	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	06–JAN–10 16:55	010610A–1
	Magnesium	5240	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	06–JAN–10 16:55	010610A–1
	Nickel	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	06–JAN–10 16:55	010610A–1
	Potassium	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	06–JAN–10 16:55	010610A–1
	Selenium	536	ug/L	500	ug/L	107.3	90.0 – 110.0	P	06–JAN–10 16:55	010610A–1
	Silver	512	ug/L	500	ug/L	102.3	90.0 – 110.0	P	06–JAN–10 16:55	010610A–1
	Sodium	10600	ug/L	10000	ug/L	105.5	90.0 – 110.0	P	06–JAN–10 16:55	010610A–1
	Vanadium	515	ug/L	500	ug/L	102.9	90.0 – 110.0	P	06–JAN–10 16:55	010610A–1
	Zinc	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	06–JAN–10 16:55	010610A–1
	Potassium	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	07–JAN–10 17:11	010710–2
CCV07										
	Beryllium	48.8	ug/L	50	ug/L	97.6	90.0 – 110.0	MS	24–DEC–09 09:50	091223–14
	Mercury	5.12	ug/L	5	ug/L	102.4	80.0 – 120.0	AV	31–DEC–09 11:35	123109W1–15
	Aluminum	5140	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	06–JAN–10 17:59	010610A–1
	Arsenic	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	06–JAN–10 17:59	010610A–1

METALS
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Initial and Continuing Calibration Verification

SDG No: 10-990-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Barium	508	ug/L	500	ug/L	101.6	90.0 - 110.0	P	06-JAN-10 17:59	010610A-1
	Calcium	5160	ug/L	5000	ug/L	103.2	90.0 - 110.0	P	06-JAN-10 17:59	010610A-1
	Chromium	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	06-JAN-10 17:59	010610A-1
	Cobalt	501	ug/L	500	ug/L	100.1	90.0 - 110.0	P	06-JAN-10 17:59	010610A-1
	Copper	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	06-JAN-10 17:59	010610A-1
	Iron	5030	ug/L	5000	ug/L	100.6	90.0 - 110.0	P	06-JAN-10 17:59	010610A-1
	Magnesium	5200	ug/L	5000	ug/L	104	90.0 - 110.0	P	06-JAN-10 17:59	010610A-1
	Nickel	500	ug/L	500	ug/L	100	90.0 - 110.0	P	06-JAN-10 17:59	010610A-1
	Potassium	4990	ug/L	5000	ug/L	99.8	90.0 - 110.0	P	06-JAN-10 17:59	010610A-1
	Selenium	525	ug/L	500	ug/L	105.1	90.0 - 110.0	P	06-JAN-10 17:59	010610A-1
	Silver	507	ug/L	500	ug/L	101.3	90.0 - 110.0	P	06-JAN-10 17:59	010610A-1
	Sodium	10400	ug/L	10000	ug/L	104	90.0 - 110.0	P	06-JAN-10 17:59	010610A-1
	Vanadium	510	ug/L	500	ug/L	102	90.0 - 110.0	P	06-JAN-10 17:59	010610A-1
	Zinc	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	06-JAN-10 17:59	010610A-1
	Potassium	4940	ug/L	5000	ug/L	98.8	90.0 - 110.0	P	07-JAN-10 18:26	010710-2
CCV08										
	Potassium	5030	ug/L	5000	ug/L	100.6	90.0 - 110.0	P	07-JAN-10 19:48	010710-2

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–990–1

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Lead	2.21	ug/L	2	ug/L	110.5	70.0 – 130.0	MS	22–DEC–09 23:12	091222–3
	Manganese	5.73	ug/L	5	ug/L	114.6	70.0 – 130.0	MS	22–DEC–09 23:12	091222–3
	Antimony	3.29	ug/L	3	ug/L	109.6	70.0 – 130.0	MS	22–DEC–09 23:12	091222–3
	Thallium	1.06	ug/L	1	ug/L	105.9	70.0 – 130.0	MS	22–DEC–09 23:12	091222–3
	Uranium	.228	ug/L	.2	ug/L	114	70.0 – 130.0	MS	22–DEC–09 23:12	091222–3
	Cadmium	1.16	ug/L	1	ug/L	115.5	70.0 – 130.0	MS	22–DEC–09 23:12	091222–3
	Beryllium	.516	ug/L	.5	ug/L	103.2	70.0 – 130.0	MS	24–DEC–09 08:40	091223–14
	Mercury	.181	ug/L	.2	ug/L	90.5	70.0 – 130.0	AV	31–DEC–09 09:14	123109W1–15
PQL01										
	Arsenic	29	ug/L	30	ug/L	96.6	70.0 – 130.0	P	06–JAN–10 10:51	010610A–1
	Barium	5.23	ug/L	5	ug/L	104.6	70.0 – 130.0	P	06–JAN–10 10:51	010610A–1
	Sodium	308	ug/L	300	ug/L	102.6	70.0 – 130.0	P	06–JAN–10 10:51	010610A–1
	Silver	4.94	ug/L	5	ug/L	98.9	70.0 – 130.0	P	06–JAN–10 10:51	010610A–1
	Potassium	147	ug/L	150	ug/L	98.2	70.0 – 130.0	P	06–JAN–10 10:51	010610A–1
	Nickel	5.31	ug/L	5	ug/L	106.1	70.0 – 130.0	P	06–JAN–10 10:51	010610A–1
	Magnesium	395	ug/L	300	ug/L	131.5	70.0 – 130.0	P	06–JAN–10 10:51	010610A–1
	Iron	104	ug/L	100	ug/L	103.8	70.0 – 130.0	P	06–JAN–10 10:51	010610A–1
	Aluminum	214	ug/L	200	ug/L	107.1	70.0 – 130.0	P	06–JAN–10 10:51	010610A–1
	Chromium	4.92	ug/L	5	ug/L	98.4	70.0 – 130.0	P	06–JAN–10 10:51	010610A–1
	Cobalt	4.75	ug/L	5	ug/L	95	70.0 – 130.0	P	06–JAN–10 10:51	010610A–1
	Copper	10.6	ug/L	10	ug/L	106.3	70.0 – 130.0	P	06–JAN–10 10:51	010610A–1
	Vanadium	5.42	ug/L	5	ug/L	108.4	70.0 – 130.0	P	06–JAN–10 10:51	010610A–1
	Zinc	10.6	ug/L	10	ug/L	106.4	70.0 – 130.0	P	06–JAN–10 10:51	010610A–1
	Calcium	210	ug/L	200	ug/L	104.8	70.0 – 130.0	P	06–JAN–10 10:51	010610A–1
	Selenium	33	ug/L	30	ug/L	109.8	70.0 – 130.0	P	06–JAN–10 10:51	010610A–1
	Potassium	160	ug/L	150	ug/L	106.9	70.0 – 130.0	P	07–JAN–10 11:43	010710–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-990-1

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	22-DEC-09 23:06	091222-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	22-DEC-09 23:06	091222-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	22-DEC-09 23:06	091222-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	22-DEC-09 23:06	091222-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	22-DEC-09 23:06	091222-3
	Uranium	0.05	+/-.2	U	0.05	0.2	LIQ	MS	22-DEC-09 23:06	091222-3
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	24-DEC-09 08:38	091223-14
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	31-DEC-09 09:13	123109W1-15
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	06-JAN-10 10:44	010610A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	06-JAN-10 10:44	010610A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 10:44	010610A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	06-JAN-10 10:44	010610A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 10:44	010610A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 10:44	010610A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	06-JAN-10 10:44	010610A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	06-JAN-10 10:44	010610A-1
	Magnesium	121.5	+/-300	J	85.0	300	LIQ	P	06-JAN-10 10:44	010610A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	06-JAN-10 10:44	010610A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	06-JAN-10 10:44	010610A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	06-JAN-10 10:44	010610A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 10:44	010610A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	06-JAN-10 10:44	010610A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 10:44	010610A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	06-JAN-10 10:44	010610A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	07-JAN-10 11:36	010710-2
CCB01										
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	22-DEC-09 23:35	091222-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	22-DEC-09 23:35	091222-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	22-DEC-09 23:35	091222-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	22-DEC-09 23:35	091222-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	22-DEC-09 23:35	091222-3

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-990-1

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Uranium	0.05	+/-.2	U	0.05	0.2	LIQ	MS	22-DEC-09 23:35	091222-3
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	24-DEC-09 08:47	091223-14
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	31-DEC-09 09:18	123109W1-15
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	06-JAN-10 11:47	010610A-1
	Arsenic	5.07	+/-30	J	5.0	30.0	LIQ	P	06-JAN-10 11:47	010610A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 11:47	010610A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	06-JAN-10 11:47	010610A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 11:47	010610A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 11:47	010610A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	06-JAN-10 11:47	010610A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	06-JAN-10 11:47	010610A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	06-JAN-10 11:47	010610A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	06-JAN-10 11:47	010610A-1
	Potassium	88.07	+/-150	J	50.0	150	LIQ	P	06-JAN-10 11:47	010610A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	06-JAN-10 11:47	010610A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 11:47	010610A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	06-JAN-10 11:47	010610A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 11:47	010610A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	06-JAN-10 11:47	010610A-1
	Potassium	134.87	+/-150	J	50.0	150	LIQ	P	07-JAN-10 12:21	010710-2
CCB02										
	Antimony	1.02	+/-3	J	1.0	3.0	LIQ	MS	22-DEC-09 23:52	091222-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	22-DEC-09 23:52	091222-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	22-DEC-09 23:52	091222-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	22-DEC-09 23:52	091222-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	22-DEC-09 23:52	091222-3
	Uranium	0.067	+/-.2	J	0.05	0.2	LIQ	MS	22-DEC-09 23:52	091222-3
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	24-DEC-09 08:52	091223-14
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	31-DEC-09 09:41	123109W1-15
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	06-JAN-10 13:06	010610A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	06-JAN-10 13:06	010610A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–990–1

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	06–JAN–10 13:06	010610A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	06–JAN–10 13:06	010610A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	06–JAN–10 13:06	010610A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	06–JAN–10 13:06	010610A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	06–JAN–10 13:06	010610A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	06–JAN–10 13:06	010610A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	06–JAN–10 13:06	010610A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	06–JAN–10 13:06	010610A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	06–JAN–10 13:06	010610A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	06–JAN–10 13:06	010610A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	06–JAN–10 13:06	010610A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	06–JAN–10 13:06	010610A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	06–JAN–10 13:06	010610A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	06–JAN–10 13:06	010610A–1
	Potassium	86.19	+/–150	J	50.0	150	LIQ	P	07–JAN–10 13:29	010710–2
CCB03										
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	23–DEC–09 00:44	091222–3
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	23–DEC–09 00:44	091222–3
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	23–DEC–09 00:44	091222–3
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	23–DEC–09 00:44	091222–3
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	23–DEC–09 00:44	091222–3
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	23–DEC–09 00:44	091222–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	24–DEC–09 09:07	091223–14
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	31–DEC–09 10:04	123109W1–15
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	06–JAN–10 14:24	010610A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	06–JAN–10 14:24	010610A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	06–JAN–10 14:24	010610A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	06–JAN–10 14:24	010610A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	06–JAN–10 14:24	010610A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	06–JAN–10 14:24	010610A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	06–JAN–10 14:24	010610A–1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-990-1

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	06-JAN-10 14:24	010610A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	06-JAN-10 14:24	010610A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	06-JAN-10 14:24	010610A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	06-JAN-10 14:24	010610A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	06-JAN-10 14:24	010610A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 14:24	010610A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	06-JAN-10 14:24	010610A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 14:24	010610A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	06-JAN-10 14:24	010610A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	07-JAN-10 14:35	010710-2
CCB04										
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	23-DEC-09 01:36	091222-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	23-DEC-09 01:36	091222-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	23-DEC-09 01:36	091222-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	23-DEC-09 01:36	091222-3
	Thallium	0.474	+/-1	J	0.3	1.0	LIQ	MS	23-DEC-09 01:36	091222-3
	Uranium	0.05	+/-.2	U	0.05	0.2	LIQ	MS	23-DEC-09 01:36	091222-3
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	24-DEC-09 09:19	091223-14
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	31-DEC-09 10:27	123109W1-15
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	06-JAN-10 14:52	010610A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	06-JAN-10 14:52	010610A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 14:52	010610A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	06-JAN-10 14:52	010610A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 14:52	010610A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 14:52	010610A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	06-JAN-10 14:52	010610A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	06-JAN-10 14:52	010610A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	06-JAN-10 14:52	010610A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	06-JAN-10 14:52	010610A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	06-JAN-10 14:52	010610A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	06-JAN-10 14:52	010610A-1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–990–1

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	06–JAN–10 14:52	010610A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	06–JAN–10 14:52	010610A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	06–JAN–10 14:52	010610A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	06–JAN–10 14:52	010610A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	07–JAN–10 15:07	010710–2
CCB05										
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	23–DEC–09 02:33	091222–3
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	23–DEC–09 02:33	091222–3
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	23–DEC–09 02:33	091222–3
	Manganese	1.39	+/–5	J	1.0	5.0	LIQ	MS	23–DEC–09 02:33	091222–3
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	23–DEC–09 02:33	091222–3
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	23–DEC–09 02:33	091222–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	24–DEC–09 09:29	091223–14
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	31–DEC–09 10:51	123109W1–15
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	06–JAN–10 16:00	010610A–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	06–JAN–10 16:00	010610A–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	06–JAN–10 16:00	010610A–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	06–JAN–10 16:00	010610A–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	06–JAN–10 16:00	010610A–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	06–JAN–10 16:00	010610A–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	06–JAN–10 16:00	010610A–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	06–JAN–10 16:00	010610A–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	06–JAN–10 16:00	010610A–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	06–JAN–10 16:00	010610A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	06–JAN–10 16:00	010610A–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	06–JAN–10 16:00	010610A–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	06–JAN–10 16:00	010610A–1
	Sodium	100	+/–300	U	100	300	LIQ	P	06–JAN–10 16:00	010610A–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	06–JAN–10 16:00	010610A–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	06–JAN–10 16:00	010610A–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	07–JAN–10 16:09	010710–2

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-990-1

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB06										
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	24-DEC-09 09:34	091223-14
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	31-DEC-09 11:14	123109W1-15
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	06-JAN-10 17:02	010610A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	06-JAN-10 17:02	010610A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 17:02	010610A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	06-JAN-10 17:02	010610A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 17:02	010610A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 17:02	010610A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	06-JAN-10 17:02	010610A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	06-JAN-10 17:02	010610A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	06-JAN-10 17:02	010610A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	06-JAN-10 17:02	010610A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	06-JAN-10 17:02	010610A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	06-JAN-10 17:02	010610A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 17:02	010610A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	06-JAN-10 17:02	010610A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 17:02	010610A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	06-JAN-10 17:02	010610A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	07-JAN-10 17:18	010710-2
CCB07										
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	24-DEC-09 09:51	091223-14
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	31-DEC-09 11:37	123109W1-15
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	06-JAN-10 18:06	010610A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	06-JAN-10 18:06	010610A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 18:06	010610A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	06-JAN-10 18:06	010610A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 18:06	010610A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 18:06	010610A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	06-JAN-10 18:06	010610A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	06-JAN-10 18:06	010610A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	06-JAN-10 18:06	010610A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-990-1

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	06-JAN-10 18:06	010610A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	06-JAN-10 18:06	010610A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	06-JAN-10 18:06	010610A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 18:06	010610A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	06-JAN-10 18:06	010610A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	06-JAN-10 18:06	010610A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	06-JAN-10 18:06	010610A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	07-JAN-10 18:33	010710-2
CCB08										
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	07-JAN-10 19:54	010710-2

METALS
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PREPARATION BLANK SUMMARY

SDG NO. 10-990-1
Contract: LANL01004
Matrix: GROUND WATER

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1202001500								
	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
	Calcium	50	ug/L	+/-200	U	P	50	200
	Cobalt	1	ug/L	+/-5	U	P	1	5
	Iron	30	ug/L	+/-100	U	P	30	100
	Nickel	1.5	ug/L	+/-5	U	P	1.5	5
	Selenium	5	ug/L	+/-30	U	P	5	30
	Potassium	50	ug/L	+/-150	U	P	50	150
	Magnesium	85	ug/L	+/-300	U	P	85	300
	Copper	3	ug/L	+/-10	U	P	3	10
	Chromium	1	ug/L	+/-5	U	P	1	5
	Barium	1	ug/L	+/-5	U	P	1	5
	Arsenic	5	ug/L	+/-30	U	P	5	30
	Aluminum	68	ug/L	+/-200	U	P	68	200
1202001514								
	Antimony	0.641	ug/L	+/-3	J	MS	0.5	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
1202002069								
	Mercury	0.066	ug/L	+/-0.2	U	AV	0.066	0.2

METALS
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Interference Check Sample

SDG No: 10-990-1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	524000	ug/L	500000	ug/L	105	80.0 - 120.0	06-JAN-10 10:58	010610A-1
	Arsenic	-3.6	ug/L					06-JAN-10 10:58	010610A-1
	Barium	-1.32	ug/L					06-JAN-10 10:58	010610A-1
	Calcium	490000	ug/L	500000	ug/L	98.1	80.0 - 120.0	06-JAN-10 10:58	010610A-1
	Chromium	1.56	ug/L					06-JAN-10 10:58	010610A-1
	Cobalt	-1.75	ug/L					06-JAN-10 10:58	010610A-1
	Copper	0.788	ug/L					06-JAN-10 10:58	010610A-1
	Iron	191000	ug/L	200000	ug/L	95.6	80.0 - 120.0	06-JAN-10 10:58	010610A-1
	Magnesium	494000	ug/L	500000	ug/L	98.9	80.0 - 120.0	06-JAN-10 10:58	010610A-1
	Nickel	3.43	ug/L					06-JAN-10 10:58	010610A-1
	Potassium	-8.89	ug/L					06-JAN-10 10:58	010610A-1
	Selenium	-0.0001	ug/L					06-JAN-10 10:58	010610A-1
	Silver	2.06	ug/L					06-JAN-10 10:58	010610A-1
	Sodium	7.21	ug/L					06-JAN-10 10:58	010610A-1
	Vanadium	-2.85	ug/L					06-JAN-10 10:58	010610A-1
	Zinc	-0.463	ug/L					06-JAN-10 10:58	010610A-1
ICSAB01									
	Aluminum	513000	ug/L	500000	ug/L	103	80.0 - 120.0	06-JAN-10 11:04	010610A-1
	Arsenic	519	ug/L	500	ug/L	104	80.0 - 120.0	06-JAN-10 11:04	010610A-1
	Barium	501	ug/L	500	ug/L	100	80.0 - 120.0	06-JAN-10 11:04	010610A-1
	Calcium	481000	ug/L	500000	ug/L	96.2	80.0 - 120.0	06-JAN-10 11:04	010610A-1
	Chromium	474	ug/L	500	ug/L	94.9	80.0 - 120.0	06-JAN-10 11:04	010610A-1
	Cobalt	463	ug/L	500	ug/L	92.5	80.0 - 120.0	06-JAN-10 11:04	010610A-1
	Copper	565	ug/L	500	ug/L	113	80.0 - 120.0	06-JAN-10 11:04	010610A-1
	Iron	186000	ug/L	200000	ug/L	92.9	80.0 - 120.0	06-JAN-10 11:04	010610A-1
	Magnesium	482000	ug/L	500000	ug/L	96.3	80.0 - 120.0	06-JAN-10 11:04	010610A-1
	Nickel	463	ug/L	500	ug/L	92.6	80.0 - 120.0	06-JAN-10 11:04	010610A-1
	Potassium	5350	ug/L	5000	ug/L	107	80.0 - 120.0	06-JAN-10 11:04	010610A-1
	Selenium	2600	ug/L	2500	ug/L	104	80.0 - 120.0	06-JAN-10 11:04	010610A-1

METALS
–4–
Interference Check Sample

SDG No: 10–990–1

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Silver	273	ug/L	250	ug/L	109	80.0 – 120.0	06–JAN–10 11:04	010610A–1
	Sodium	5430	ug/L	5000	ug/L	109	80.0 – 120.0	06–JAN–10 11:04	010610A–1
	Vanadium	508	ug/L	500	ug/L	102	80.0 – 120.0	06–JAN–10 11:04	010610A–1
	Zinc	488	ug/L	500	ug/L	97.6	80.0 – 120.0	06–JAN–10 11:04	010610A–1

METALS
–4–
Interference Check Sample

SDG No: 10–990–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.062	ug/L					24–DEC–09 08:42	091223–14
ICSAB01									
	Beryllium	17.6	ug/L	20	ug/L	87.8	80.0 – 120.0	24–DEC–09 08:44	091223–14

METALS
–4–
Interference Check Sample

SDG No: 10–990–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Potassium	–21.1	ug/L					07–JAN–10 11:50	010710–2
ICSAB01									
	Potassium	5350	ug/L	5000	ug/L	107	80.0 – 120.0	07–JAN–10 11:56	010710–2

METALS
–4–
Interference Check Sample

SDG No: 10–990–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Antimony	0.132	ug/L					22–DEC–09 23:17	091222–3
	Cadmium	0.55	ug/L					22–DEC–09 23:17	091222–3
	Lead	0.177	ug/L					22–DEC–09 23:17	091222–3
	Manganese	5.99	ug/L					22–DEC–09 23:17	091222–3
	Thallium	0.017	ug/L					22–DEC–09 23:17	091222–3
	Uranium	–0.004	ug/L					22–DEC–09 23:17	091222–3
ICSAB01									
	Antimony	21.8	ug/L	20.1	ug/L	109	80.0 – 120.0	22–DEC–09 23:23	091222–3
	Cadmium	21.1	ug/L	20.4	ug/L	103	80.0 – 120.0	22–DEC–09 23:23	091222–3
	Lead	20.2	ug/L	20.5	ug/L	98.4	80.0 – 120.0	22–DEC–09 23:23	091222–3
	Manganese	26.7	ug/L	25.8	ug/L	103	80.0 – 120.0	22–DEC–09 23:23	091222–3
	Thallium	19.4	ug/L	20	ug/L	97	80.0 – 120.0	22–DEC–09 23:23	091222–3
	Uranium	22.0	ug/L	20	ug/L	110	80.0 – 120.0	22–DEC–09 23:23	091222–3

METALS
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Matrix Spike Summary

SDG NO. 10-990-1 **Client ID** CAPA-10-6389S

Contract: ESHL01000 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 243286001 **Spike ID:** 1202001503

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75-125	5330		68	U	5000	106		P
Arsenic	ug/L	75-125	529		5	U	500	105		P
Barium	ug/L	75-125	1010		505		500	102		P
Calcium	ug/L		78000		74100		5000	77.3	N/A	P
Chromium	ug/L	75-125	515		6.87		500	102		P
Cobalt	ug/L	75-125	524		26.5		500	99.5		P
Copper	ug/L	75-125	536		3	U	500	107		P
Iron	ug/L		25300		20800		5000	89	N/A	P
Magnesium	ug/L	75-125	21200		16300		5000	97		P
Nickel	ug/L	75-125	511		10.9		500	100		P
Potassium	ug/L	75-125	13800		9270		5000	91		P
Selenium	ug/L	75-125	534		6.61	J	500	106		P
Silver	ug/L	75-125	522		2.17	J	500	104		P
Sodium	ug/L		27400		23600		5000	75.7	N/A	P
Vanadium	ug/L	75-125	527		1	U	500	105		P
Zinc	ug/L	75-125	508		5.84	J	500	100		P

METALS
-5a-

Matrix Spike Summary

SDG NO. 10-990-1 **Client ID** CAPA-10-6390S

Contract: ESHL01000 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 243286002 **Spike ID:** 1202001517

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Beryllium	ug/L	75-125	44.6		0.1	U	50	89.1		MS
Cadmium	ug/L	75-125	10.5		0.11	U	10	104		MS
Lead	ug/L	75-125	41		0.5	U	40	102		MS
Manganese	ug/L		12600		13300		50	-1490	N/A	MS
Thallium	ug/L	75-125	95.2		0.47	J	100	94.7		MS
Uranium	ug/L	75-125	58.9		3.91		50	110		MS
Antimony	ug/L	75-125	215		0.5	U	200	107		MS

METALS
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Matrix Spike Summary

SDG NO. 10-990-1 **Client ID** RE12-10-7366S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 243272001 **Spike ID:** 1202002072

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75-125	2.09		0.066	U	2	105		AV

Metals
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Duplicate Sample Summary

SDG No.: 10–990–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** CAPA–10–6389D

Sample ID: 243286001 **Duplicate ID:** 1202001502 **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	5.36	J	200		P
Barium	ug/L	+/–20%	505		503		.323		P
Calcium	ug/L	+/–20%	74100		72500		2.26		P
Chromium	ug/L	+/–5	6.87		6.98		1.61		P
Cobalt	ug/L	+/–20%	26.5		25.9		2.33		P
Copper	ug/L		3	U	3	U			P
Iron	ug/L	+/–20%	20800		19900		4.47		P
Magnesium	ug/L	+/–20%	16300		15900		3.08		P
Nickel	ug/L	+/–5	10.9		10.7		2.05		P
Potassium	ug/L	+/–20%	9270		9120		1.65		P
Selenium	ug/L		6.61	J	5	U	200		P
Silver	ug/L	+/–5	2.17	J	2.03	J	6.96		P
Sodium	ug/L	+/–20%	23600		21900		7.46		P
Vanadium	ug/L		1	U	1	U			P
Zinc	ug/L	+/–10	5.84	J	5.97	J	2.17		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–990–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** CAPA–10–6390D

Sample ID: 243286002 **Duplicate ID:** 1202001516 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		0.5	U	0.5	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	+/–20%	13300		12900		3.68		MS
Thallium	ug/L	+/–1	0.47	J	0.48	J	2.11		MS
Uranium	ug/L	+/–20%	3.91		3.87		1		MS

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-990-1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE12-10-7366D

Sample ID: 243272001 **Duplicate ID:** 1202002071 **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. 10-990-1

Contract: LANL01004

Aqueous LCS Source: OS2I **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202001501								
	Aluminum	ug/L	5000	5400		108	80-120	P
	Arsenic	ug/L	500	508		102	80-120	P
	Barium	ug/L	500	528		106	80-120	P
	Calcium	ug/L	5000	5280		106	80-120	P
	Chromium	ug/L	500	515		103	80-120	P
	Cobalt	ug/L	500	505		101	80-120	P
	Copper	ug/L	500	526		105	80-120	P
	Iron	ug/L	5000	5120		102	80-120	P
	Magnesium	ug/L	5000	5270		105	80-120	P
	Nickel	ug/L	500	511		102	80-120	P
	Potassium	ug/L	5000	5140		103	80-120	P
	Selenium	ug/L	500	520		104	80-120	P
	Silver	ug/L	500	514		103	80-120	P
	Sodium	ug/L	5000	5180		104	80-120	P
	Vanadium	ug/L	500	527		105	80-120	P
	Zinc	ug/L	500	506		101	80-120	P

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–990–1

Contract: LANL01004

Aqueous LCS Source: O2si **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202001515								
	Beryllium	ug/L	50	49.1		98.3	80–120	MS
	Cadmium	ug/L	50	51		102	80–120	MS
	Lead	ug/L	50	51.5		103	80–120	MS
	Manganese	ug/L	50	54		108	80–120	MS
	Thallium	ug/L	50	48.5		97	80–120	MS
	Antimony	ug/L	50	52.7		105	80–120	MS
	Uranium	ug/L	50	54.2		108	80–120	MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-990-1

Contract: LANL01004

Aqueous LCS Source: GEL **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202002070								
	Mercury	ug/L	2	2.1		105	80-120	AV

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-990-1 **Client ID** CAPA-10-6389L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 243286001 **Serial Dilution ID:** 1202001504

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	505		489		3.17		10	P
Calcium	74100		73000		1.48		10	P
Chromium	6.87		7.2	J	4.8			P
Cobalt	26.5		25.2		5.09			P
Copper	3	U	15	U				P
Iron	20800		20200		2.88		10	P
Magnesium	16300		16400		.613		10	P
Nickel	10.9		11.9	J	8.72			P
Potassium	927		855		7.77			P
Selenium	6.61	J	25	U	100			P
Silver	2.17	J	5	U	100			P
Sodium	23600		23400		.847		10	P
Vanadium	1	U	5	U				P
Zinc	5.84	J	16.5	U	100			P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-990-1 **Client ID** CAPA-10-6390L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 243286002 **Serial Dilution ID:** 1202001518

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	.5	U	2.5	U				MS
Beryllium	.1	U	.5	U				MS
Cadmium	.11	U	.55	U				MS
Lead	.5	U	2.5	U				MS
Manganese	13300		13800		3.76		10	MS
Thallium	.47	J	4.46	J	849			MS
Uranium	3.91		3.84		1.92			MS

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-990-1 **Client ID** RE12-10-7366L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 243272001 **Serial Dilution ID:** 1202002073

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: 10-990-1 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 935386							
1202001500	MB for batch 935386	MB	G	22-DEC-09	50mL	50mL	
1202001501	LCS for batch 935386	LCS	G	22-DEC-09	50mL	50mL	
1202001503	CAPA-10-6389S	MS	G	22-DEC-09	50mL	50mL	
1202001502	CAPA-10-6389D	DUP	G	22-DEC-09	50mL	50mL	
243272001	RE12-10-7366	SAMPLE	G	22-DEC-09	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-990-1 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 935394							
1202001514	MB for batch 935394	MB	G	22-DEC-09	50mL	50mL	
1202001515	LCS for batch 935394	LCS	G	22-DEC-09	50mL	50mL	
1202001517	CAPA-10-6390S	MS	G	22-DEC-09	50mL	50mL	
1202001516	CAPA-10-6390D	DUP	G	22-DEC-09	50mL	50mL	
243272001	RE12-10-7366	SAMPLE	G	22-DEC-09	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-990-1 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 935672							
1202002069	MB for batch 935672	MB	W	30-DEC-09	20mL	20mL	
1202002070	LCS for batch 935672	LCS	W	30-DEC-09	20mL	20mL	
1202002072	RE12-10-7366S	MS	W	30-DEC-09	20mL	20mL	
1202002071	RE12-10-7366D	DUP	W	30-DEC-09	20mL	20mL	
243272001	RE12-10-7366	SAMPLE	G	30-DEC-09	20mL	20mL	

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 24-DEC-09 **End Date:** 24-DEC-09

Client Sdg: 10-990-1
Method MS
Data File: 091223-14

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	08:32					X																			
S10	1	08:33					X																			
S100	1	08:35					X																			
ICV01	1	08:37					X																			
ICB01	1	08:38					X																			
CRDL01	1	08:40					X																			
ICSA01	1	08:42					X																			
ICSAB01	1	08:44					X																			
CCV01	1	08:45					X																			
CCB01	1	08:47					X																			
LR01	1	08:49					X																			
CCV02	1	08:50					X																			
CCB02	1	08:52					X																			
ZZZZZZ	2	08:54																								
ZZZZZZ	20	08:56																								
ZZZZZZ	2	08:58																								
ZZZZZZ	2	09:00																								
ZZZZZZ	2	09:01																								
ZZZZZZ	2	09:03																								
CCV03	1	09:05					X																			
CCB03	1	09:07					X																			
ZZZZZZ	2	09:08																								
ZZZZZZ	2	09:10																								
ZZZZZZ	2	09:12																								
ZZZZZZ	2	09:13																								
ZZZZZZ	10	09:15																								
CCV04	1	09:17					X																			
CCB04	1	09:19					X																			
ZZZZZZ	2	09:20																								
ZZZZZZ	2	09:22																								
ZZZZZZ	2	09:24																								
ZZZZZZ	2	09:26																								
CCV05	1	09:27					X																			
CCB05	1	09:29					X																			
ZZZZZZ	2	09:31																								
CCV06	1	09:33					X																			
CCB06	1	09:34					X																			
1202001514	1	09:37					X																			
1202001515	1	09:39					X																			
243272001	1	09:41					X																			

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time																							
ZZZZZZ	1	09:42																							
1202001516	1	09:44					X																		
1202001517	1	09:46					X																		
1202001518	5	09:48					X																		
CCV07	1	09:50					X																		
CCB07	1	09:51					X																		

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 06-JAN-10
End Date: 06-JAN-10
Client Sdg: 10-990-1
Method P
Data File: 010610A-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	10:05	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S0.1	1	10:12			X	X				X	X	X						X	X	X	X				X	X
S0.5	1	10:18	X		X	X			X	X	X	X			X			X	X	X	X				X	X
SCAL	1	10:25	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S10	1	10:32	X						X				X		X							X				
ICV01	1	10:37	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICB01	1	10:44	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
PQL01	1	10:51	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSA01	1	10:58	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSAB01	1	11:04	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR01	1	11:09	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR02	1	11:15	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	11:22																								
ZZZZZZ	1	11:29																								
CCV01	1	11:40	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB01	1	11:47	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	11:56																								
ZZZZZZ	1	12:03																								
ZZZZZZ	1	12:11																								
ZZZZZZ	1	12:18																								
ZZZZZZ	1	12:25																								
ZZZZZZ	1	12:32																								
ZZZZZZ	1	12:39																								
ZZZZZZ	1	12:46																								
ZZZZZZ	1	12:53																								
CCV02	1	13:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB02	1	13:06	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	2	13:16																								
ZZZZZZ	2	13:23																								
ZZZZZZ	2	13:29																								
ZZZZZZ	2	13:36																								
ZZZZZZ	10	13:43																								
ZZZZZZ	2	13:50																								
ZZZZZZ	2	13:57																								
ZZZZZZ	2	14:03																								
ZZZZZZ	2	14:10																								
CCV03	1	14:17	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB03	1	14:24	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV04	1	14:45	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB04	1	14:52	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																								
1202001500	1	14:59	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202001501	1	15:06	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	15:13																								
ZZZZZZ	1	15:19																								
ZZZZZZ	1	15:26																								
ZZZZZZ	1	15:33																								
ZZZZZZ	1	15:40																								
ZZZZZZ	1	15:47																								
CCV05	1	15:54	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB05	1	16:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	16:07																								
ZZZZZZ	1	16:14																								
ZZZZZZ	1	16:21																								
ZZZZZZ	1	16:28																								
243272001	1	16:35	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	16:42																								
ZZZZZZ	1	16:48																								
CCV06	1	16:55	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB06	1	17:02	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	17:09																								
1202001502	1	17:16	X		X	X			X	X	X	X	X		X			X		X	X	X			X	X
1202001503	1	17:23	X		X	X			X	X	X	X	X		X			X		X	X	X			X	X
1202001504	5	17:30	X		X	X			X	X	X	X	X		X			X		X	X	X			X	X
ZZZZZZ	1	17:38																								
ZZZZZZ	1	17:45																								
ZZZZZZ	1	17:52																								
CCV07	1	17:59	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB07	1	18:06	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 07-JAN-10 **End Date:** 07-JAN-10

Client Sdg: 10-990-1
Method P
Data File: 010710-2

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	10:57																	X							
S0.1	1	11:04																	X							
S0.5	1	11:10																	X							
SCAL	1	11:17																	X							
S10	1	11:24																								
ICV01	1	11:30																	X							
ICB01	1	11:36																	X							
PQL01	1	11:43																	X							
ICSA01	1	11:50																	X							
ICSAB01	1	11:56																	X							
LR01	1	12:01																	X							
LR02	1	12:07																	X							
CCV01	1	12:14																	X							
CCB01	1	12:21																	X							
ZZZZZZ	1	12:34																								
ZZZZZZ	1	12:41																								
ZZZZZZ	1	12:48																								
ZZZZZZ	1	12:55																								
ZZZZZZ	1	13:01																								
ZZZZZZ	1	13:08																								
ZZZZZZ	5	13:15																								
CCV02	1	13:22																	X							
CCB02	1	13:29																	X							
ZZZZZZ	1	13:39																								
ZZZZZZ	1	13:46																								
ZZZZZZ	1	13:53																								
ZZZZZZ	1	14:00																								
ZZZZZZ	1	14:07																								
ZZZZZZ	1	14:14																								
ZZZZZZ	5	14:21																								
CCV03	1	14:28																	X							
CCB03	1	14:35																	X							
CCV04	1	15:00																	X							
CCB04	1	15:07																	X							
ZZZZZZ	1	15:13																								
ZZZZZZ	1	15:20																								
ZZZZZZ	1	15:27																								
ZZZZZZ	1	15:34																								
ZZZZZZ	1	15:41																								
ZZZZZZ	1	15:48																								

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																								
ZZZZZZ	5	15:55																								
CCV05	1	16:02																X								
CCB05	1	16:09																X								
ZZZZZZ	1	16:16																								
ZZZZZZ	1	16:23																								
ZZZZZZ	1	16:30																								
ZZZZZZ	1	16:37																								
ZZZZZZ	1	16:44																								
ZZZZZZ	1	16:51																								
ZZZZZZ	1	16:58																								
ZZZZZZ	1	17:04																								
CCV06	1	17:11																X								
CCB06	1	17:18																X								
ZZZZZZ	5	17:25																								
ZZZZZZ	5	17:32																								
ZZZZZZ	5	17:39																								
ZZZZZZ	5	17:45																								
ZZZZZZ	5	17:52																								
ZZZZZZ	5	17:59																								
ZZZZZZ	5	18:06																								
ZZZZZZ	5	18:13																								
ZZZZZZ	5	18:19																								
CCV07	1	18:26																X								
CCB07	1	18:33																X								
ZZZZZZ	5	18:40																								
ZZZZZZ	5	18:46																								
ZZZZZZ	5	18:53																								
ZZZZZZ	10	19:00																								
1202001502	10	19:07																X								
1202001503	10	19:14																X								
1202001504	50	19:21																X								
ZZZZZZ	10	19:27																								
ZZZZZZ	10	19:34																								
ZZZZZZ	10	19:41																								
CCV08	1	19:48																X								
CCB08	1	19:54																X								

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: HG3
Start Date: 31–DEC–09 **End Date:** 31–DEC–09

Client Sdg: 10–990–1
Method AV
Data File: 123109W1–15

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	08:59															X									
S0.2	1	09:01															X									
S0.5	1	09:03															X									
S2.0	1	09:05															X									
S5.0	1	09:07															X									
S10.0	1	09:09															X									
ICV01	1	09:11															X									
ICB01	1	09:13															X									
CRDL01	1	09:14															X									
CCV01	1	09:16															X									
CCB01	1	09:18															X									
ZZZZZZ	1	09:20																								
ZZZZZZ	1	09:22																								
ZZZZZZ	1	09:24																								
ZZZZZZ	1	09:26																								
ZZZZZZ	1	09:28																								
ZZZZZZ	5	09:30																								
ZZZZZZ	1	09:32																								
ZZZZZZ	1	09:34																								
ZZZZZZ	1	09:36																								
ZZZZZZ	1	09:37																								
CCV02	1	09:39															X									
CCB02	1	09:41															X									
ZZZZZZ	1	09:43																								
ZZZZZZ	1	09:45																								
ZZZZZZ	1	09:47																								
ZZZZZZ	1	09:49																								
ZZZZZZ	1	09:51																								
ZZZZZZ	1	09:53																								
ZZZZZZ	1	09:55																								
ZZZZZZ	1	09:57																								
ZZZZZZ	1	09:59																								
ZZZZZZ	5	10:01																								
CCV03	1	10:02															X									
CCB03	1	10:04															X									
ZZZZZZ	1	10:06																								
ZZZZZZ	1	10:08																								
ZZZZZZ	1	10:10																								
ZZZZZZ	1	10:12																								
ZZZZZZ	1	10:14																								

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																								
ZZZZZZ	1	10:16																								
ZZZZZZ	1	10:18																								
ZZZZZZ	1	10:20																								
ZZZZZZ	1	10:22																								
ZZZZZZ	1	10:24																								
CCV04	1	10:26														X										
CCB04	1	10:27														X										
ZZZZZZ	1	10:29																								
ZZZZZZ	1	10:31																								
ZZZZZZ	5	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																								
CCV05	1	10:49														X										
CCB05	1	10:51														X										
ZZZZZZ	1	10:53																								
ZZZZZZ	5	10:54																								
ZZZZZZ	1	10:56																								
ZZZZZZ	1	10:58																								
ZZZZZZ	1	11:00																								
ZZZZZZ	1	11:02																								
ZZZZZZ	1	11:04																								
ZZZZZZ	1	11:06																								
ZZZZZZ	1	11:08																								
1202002069	1	11:10														X										
CCV06	1	11:12														X										
CCB06	1	11:14														X										
1202002070	1	11:16														X										
243272001	1	11:18														X										
1202002071	1	11:20														X										
1202002072	1	11:22														X										
1202002073	5	11:23														X										
ZZZZZZ	1	11:25																								
ZZZZZZ	1	11:27																								
ZZZZZZ	1	11:29																								
ZZZZZZ	1	11:31																								

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
ZZZZZZ	1	11:33																								
CCV07	1	11:35															X									
CCB07	1	11:37															X									

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS3
Start Date: 22-DEC-09
End Date: 23-DEC-09
Client Sdg: 10-990-1
Method MS
Data File: 091222-3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	22:43		X				X						X		X							X	X		
S10	1	22:49		X				X						X		X							X	X		
S100	1	22:55		X				X						X		X							X	X		
ICV01	1	23:00		X				X						X		X							X	X		
ICB01	1	23:06		X				X						X		X							X	X		
CRDL01	1	23:12		X				X						X		X							X	X		
ICSA01	1	23:17		X				X						X		X							X	X		
ICSAB01	1	23:23		X				X						X		X							X	X		
CCV01	1	23:29		X				X						X		X							X	X		
CCB01	1	23:35		X				X						X		X							X	X		
LR01	1	23:40		X				X						X		X							X	X		
CCV02	1	23:46		X				X						X		X							X	X		
CCB02	1	23:52		X				X						X		X							X	X		
1202001514	1	23:58		X				X						X		X							X	X		
1202001515	1	00:03		X				X						X		X							X	X		
ZZZZZZ	1	00:09																								
ZZZZZZ	1	00:15																								
ZZZZZZ	1	00:21																								
ZZZZZZ	1	00:26																								
ZZZZZZ	1	00:32																								
CCV03	1	00:38		X				X						X		X							X	X		
CCB03	1	00:44		X				X						X		X							X	X		
ZZZZZZ	1	00:49																								
ZZZZZZ	1	00:55																								
ZZZZZZ	1	01:01																								
ZZZZZZ	1	01:07																								
ZZZZZZ	1	01:13																								
243272001	1	01:18		X				X						X		X							X	X		
ZZZZZZ	1	01:24																								
CCV04	1	01:30		X				X						X		X							X	X		
CCB04	1	01:36		X				X						X		X							X	X		
ZZZZZZ	1	01:41																								
ZZZZZZ	1	01:47																								
ZZZZZZ	1	01:53																								
1202001516	1	01:59		X				X						X		X							X	X		
1202001517	1	02:05		X				X						X		X							X	X		
1202001518	5	02:10		X				X						X		X							X	X		
ZZZZZZ	1	02:16																								
ZZZZZZ	1	02:22																								
CCV05	1	02:28		X				X						X		X							X	X		

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time																								
CCB05	1	02:33		X				X						X		X							X	X		

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-990-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
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. 10–990–1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

		Wavelength (nm)	MDL ug/L	RDL ug/L
MERCURY	**Analyte**			
LIQUID	Mercury		0.066	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-990-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
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: 10-990-1
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
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	0.02738	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	-0.44940	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	-0.22121	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	-0.33886	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.13648	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05571	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.19671	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.02739	0.00000	0.00000	0.00000	0.00000
Tin	189.927	-0.00058	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
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-990-1
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
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	24.5549	0.00000	0.00000
Arsenic	188.979	0.52529	0.00000	-0.67113	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.54031	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	0.38952	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	-31.5465	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.78023
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	0.63859	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	160.41
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.22870	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.35099	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.93161	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.39273	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.19810

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-990-1
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	42.8126
Antimony	206.836	-0.01635	0.00000	0.00000	0.00000	-22.2146
Arsenic	188.979	-0.21271	0.00000	0.00000	0.00000	1.34645
Barium	233.527	-0.03709	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.13266	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.09998	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01788	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01425	0.00000	0.00000	0.00000	-2.64232
Copper	324.752	-0.05101	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09069	0.00000	0.00000	0.00000	-2.44485
Magnesium	279.077	0.85543	0.00000	0.00000	0.00000	-20.2401
Manganese	257.61	-0.09972	0.00000	0.01862	0.00000	0.00000
Molybdenum	202.031	-0.07094	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80633	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	-0.03176	0.00000	0.01823	12.4291	-3.60863
Selenium	196.026	-3.00009	0.00000	0.00000	0.00000	-3.17982
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	17.4444
Silver	328.068	-0.31825	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-5.85948	0.00000
Tin	189.927	-0.01337	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.12581	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.15211	0.00000	-0.02256	0.00000	-14.2921
Zinc	213.857	0.09548	0.00000	0.03423	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-990-1
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
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	-0.64279	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.44040	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.33191	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.38465	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-990-1
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-17.4077
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	-13.8713
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	3.10491
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-990-1
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	2.73145	0.00000	-2.31857	0.00000
Arsenic	188.979	-8.38419	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.24883	0.00000
Beryllium	313.107	-1.96555	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.32181	-1.76281	0.00000
Cobalt	228.616	2.12623	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.85359	-3.92851	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-7.67419	0.00000	2.18873	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.44145	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.10141	-1.94183	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
–12–
Linear Ranges

SDG NO. 10–990–1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Uranium	1000	5000	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09

METALS
-12-
Linear Ranges

SDG NO. 10-990-1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01-NOV-09
Antimony	20	10000	ug/L	01-NOV-09
Arsenic	20	10000	ug/L	01-NOV-09
Barium	20	15000	ug/L	01-NOV-09
Beryllium	20	3000	ug/L	01-NOV-09
Cadmium	20	10000	ug/L	01-NOV-09
Calcium	20	500000	ug/L	01-NOV-09
Chromium	20	25000	ug/L	01-NOV-09
Cobalt	20	10000	ug/L	01-NOV-09
Copper	20	20000	ug/L	01-NOV-09
Iron	20	500000	ug/L	01-NOV-09
Lead	20	25000	ug/L	01-NOV-09
Magnesium	20	500000	ug/L	01-NOV-09
Manganese	20	10000	ug/L	01-NOV-09
Nickel	20	10000	ug/L	01-NOV-09
Potassium	20	300000	ug/L	01-NOV-09
Selenium	20	10000	ug/L	01-NOV-09
Silver	20	1000	ug/L	01-NOV-09
Sodium	20	500000	ug/L	01-NOV-09
Thallium	20	10000	ug/L	01-NOV-09
Uranium	20	15000	ug/L	01-NOV-09
Vanadium	20	10000	ug/L	01-NOV-09
Zinc	20	15000	ug/L	01-NOV-09

METALS
–12–
Linear Ranges

SDG NO. 10–990–1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS3

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Uranium	1000	5000	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09

Raw Data

Reprocessing Begun
Logged In Analyst: Optima3 Technique: ICP Continuous

Results Data Set (original): 010610
Results Library (original): C:\pe\Optima3\Results\Results.mdb
Results Data Set (reprocessed): 010610A
Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

Method Loaded
Method Name: General Eng.2AX Method Last Saved: 1/6/2010 11:54:05
IEC File: 101209.iec MSF File:
Method Description:

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

Sequence No.: 1 Autosampler Location: 8
Sample ID: S0 Date Collected: 1/6/2010 10:05:16
Analyst: Data Type: Reprocessed on 1/6/2010 11:55:25
Logged In Analyst (Original) : Optima3
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	884204.5	884204.5	99.729	%	10:08:26
1	Sc Radial	4647.0	4647.0	99.6	%	10:07:09
1	Y 371.029	760145.0	760145.0	99.788	%	10:08:26
1	Y RADIAL	4888.3	4888.3	99.10	%	10:07:09
1	Ag 328.068†	383.7	384.7	[0.00]	ug/L	10:08:31

1	Al 396.153Radial†	-35.8	-36.0	[0.00] ug/L	10:07:09
1	As 188.979†	-40.4	-40.5	[0.00] ug/L	10:08:51
1	B 249.677†	-622.0	-623.7	[0.00] ug/L	10:08:31
1	Ba 233.527†	18.5	18.5	[0.00] ug/L	10:08:51
1	Be 313.107†	-4379.0	-4390.9	[0.00] ug/L	10:08:31
1	Ca 317.933Radial†	10.1	10.2	[0.00] ug/L	10:07:29
1	Cd 226.502†	-233.2	-233.9	[0.00] ug/L	10:08:51
1	Co 228.616†	-82.3	-82.5	[0.00] ug/L	10:08:51
1	Cr 267.716†	129.2	129.6	[0.00] ug/L	10:08:31
1	Cu 324.752†	8059.5	8081.4	[0.00] ug/L	10:08:31
1	Fe 238.204 Radial†	13.7	13.7	[0.00] ug/L	10:07:29
1	K 766.490 Radial†	3438.5	3453.7	[0.00] ug/L	10:07:09
1	Mg 279.077 IEC†	2.0	2.0	[0.00] ug/L	10:07:29
1	Mn 257.610†	555.5	557.0	[0.00] ug/L	10:08:31
1	Mo 202.031†	22.3	22.3	[0.00] ug/L	10:08:51
1	Na 589.592 Radial†	-1748.6	-1756.4	[0.00] ug/L	10:07:09
1	Ni 231.604†	114.8	115.1	[0.00] ug/L	10:08:51
1	P 214.914†	248.4	249.1	[0.00] ug/L	10:08:51
1	Pb 220.353†	-93.7	-94.0	[0.00] ug/L	10:08:51
1	S 181.975 Axial†	53.6	53.8	[0.00] ug/L	10:08:51
1	Sb 206.836†	40.2	40.3	[0.00] ug/L	10:08:51
1	Se 196.026†	-36.2	-36.3	[0.00] ug/L	10:08:51
1	Si 251.611†	623.9	625.6	[0.00] ug/L	10:08:51
1	Sn 189.927†	3.5	3.5	[0.00] ug/L	10:08:51
1	Sr 421.552†	33.7	33.8	[0.00] ug/L	10:07:09
1	Ti 334.940†	-1810.6	-1815.5	[0.00] ug/L	10:08:31
1	Tl 190.801†	-47.9	-48.0	[0.00] ug/L	10:08:51
1	U 409.014†	-2556.5	-2563.4	[0.00] ug/L	10:08:26
1	V 292.402†	-1786.0	-1790.8	[0.00] ug/L	10:08:31
1	Zn 213.857†	844.0	846.3	[0.00] ug/L	10:08:51
1	SiO2†	616.3	618.0	[0.00] ug/L	10:09:57
2	Sc 361.383	888077.5	888077.5	100.17 %	10:08:56
2	Sc Radial	4701.9	4701.9	101 %	10:07:34
2	Y 371.029	762915.3	762915.3	100.15 %	10:08:56
2	Y RADIAL	4987.9	4987.9	101.1 %	10:07:34
2	Ag 328.068†	601.4	600.4	[0.00] ug/L	10:09:01
2	Al 396.153Radial†	-6.8	-6.8	[0.00] ug/L	10:07:34
2	As 188.979†	-32.7	-32.6	[0.00] ug/L	10:09:21
2	B 249.677†	-682.2	-681.0	[0.00] ug/L	10:09:01
2	Ba 233.527†	-2.0	-1.9	[0.00] ug/L	10:09:21
2	Be 313.107†	-4308.2	-4301.1	[0.00] ug/L	10:09:01
2	Ca 317.933Radial†	14.5	14.4	[0.00] ug/L	10:07:54
2	Cd 226.502†	-234.7	-234.3	[0.00] ug/L	10:09:21
2	Co 228.616†	-75.6	-75.4	[0.00] ug/L	10:09:21
2	Cr 267.716†	138.6	138.4	[0.00] ug/L	10:09:01
2	Cu 324.752†	7960.6	7947.4	[0.00] ug/L	10:09:01
2	Fe 238.204 Radial†	12.8	12.7	[0.00] ug/L	10:07:54
2	K 766.490 Radial†	3279.2	3255.3	[0.00] ug/L	10:07:34
2	Mg 279.077 IEC†	2.5	2.5	[0.00] ug/L	10:07:54
2	Mn 257.610†	504.7	503.9	[0.00] ug/L	10:09:01
2	Mo 202.031†	7.4	7.4	[0.00] ug/L	10:09:21
2	Na 589.592 Radial†	-1789.0	-1775.9	[0.00] ug/L	10:07:34
2	Ni 231.604†	139.5	139.3	[0.00] ug/L	10:09:21
2	P 214.914†	244.1	243.7	[0.00] ug/L	10:09:21
2	Pb 220.353†	-73.5	-73.4	[0.00] ug/L	10:09:21
2	S 181.975 Axial†	64.8	64.7	[0.00] ug/L	10:09:21
2	Sb 206.836†	33.6	33.5	[0.00] ug/L	10:09:21
2	Se 196.026†	-33.5	-33.5	[0.00] ug/L	10:09:21
2	Si 251.611†	597.2	596.2	[0.00] ug/L	10:09:21
2	Sn 189.927†	6.0	6.0	[0.00] ug/L	10:09:21
2	Sr 421.552†	25.1	24.9	[0.00] ug/L	10:07:34
2	Ti 334.940†	-1812.8	-1809.8	[0.00] ug/L	10:09:01
2	Tl 190.801†	-65.1	-65.0	[0.00] ug/L	10:09:21
2	U 409.014†	-2701.8	-2697.3	[0.00] ug/L	10:08:56
2	V 292.402†	-1773.9	-1771.0	[0.00] ug/L	10:09:01
2	Zn 213.857†	830.2	828.8	[0.00] ug/L	10:09:21
2	SiO2†	650.9	649.9	[0.00] ug/L	10:10:02
3	Sc 361.383	887546.5	887546.5	100.11 %	10:09:27
3	Sc Radial	4653.8	4653.8	99.7 %	10:07:59
3	Y 371.029	762209.6	762209.6	100.06 %	10:09:27
3	Y RADIAL	4922.5	4922.5	99.79 %	10:07:59

3	Ag 328.068†	552.4	551.9	[0.00] ug/L	10:09:32
3	Al 396.153Radial†	-37.3	-37.4	[0.00] ug/L	10:07:59
3	As 188.979†	-27.2	-27.2	[0.00] ug/L	10:09:52
3	B 249.677†	-693.6	-692.8	[0.00] ug/L	10:09:32
3	Ba 233.527†	6.0	6.0	[0.00] ug/L	10:09:52
3	Be 313.107†	-4367.1	-4362.5	[0.00] ug/L	10:09:32
3	Ca 317.933Radial†	13.0	13.1	[0.00] ug/L	10:08:19
3	Cd 226.502†	-247.2	-247.0	[0.00] ug/L	10:09:52
3	Co 228.616†	-94.0	-93.9	[0.00] ug/L	10:09:52
3	Cr 267.716†	44.2	44.1	[0.00] ug/L	10:09:32
3	Cu 324.752†	7976.6	7968.2	[0.00] ug/L	10:09:32
3	Fe 238.204 Radial†	15.1	15.2	[0.00] ug/L	10:08:19
3	K 766.490 Radial†	3291.4	3301.2	[0.00] ug/L	10:07:59
3	Mg 279.077 IEC†	0.4	0.4	[0.00] ug/L	10:08:19
3	Mn 257.610†	488.9	488.4	[0.00] ug/L	10:09:32
3	Mo 202.031†	30.1	30.1	[0.00] ug/L	10:09:52
3	Na 589.592 Radial†	-1712.9	-1718.0	[0.00] ug/L	10:07:59
3	Ni 231.604†	121.0	120.8	[0.00] ug/L	10:09:52
3	P 214.914†	253.1	252.8	[0.00] ug/L	10:09:52
3	Pb 220.353†	-66.0	-65.9	[0.00] ug/L	10:09:52
3	S 181.975 Axial†	61.3	61.2	[0.00] ug/L	10:09:52
3	Sb 206.836†	37.5	37.5	[0.00] ug/L	10:09:52
3	Se 196.026†	-30.1	-30.0	[0.00] ug/L	10:09:52
3	Si 251.611†	628.5	627.8	[0.00] ug/L	10:09:52
3	Sn 189.927†	0.7	0.7	[0.00] ug/L	10:09:52
3	Sr 421.552†	-10.8	-10.8	[0.00] ug/L	10:07:59
3	Ti 334.940†	-1828.6	-1826.7	[0.00] ug/L	10:09:32
3	Tl 190.801†	-47.3	-47.2	[0.00] ug/L	10:09:52
3	U 409.014†	-2748.3	-2745.4	[0.00] ug/L	10:09:27
3	V 292.402†	-1845.7	-1843.7	[0.00] ug/L	10:09:32
3	Zn 213.857†	820.8	820.0	[0.00] ug/L	10:09:52
3	SiO2†	640.9	640.3	[0.00] ug/L	10:10:07

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	886609.5	2099.64	0.24%	100.00	%
Sc Radial	4667.6	29.96	0.64%	100	%
Y 371.029	761756.6	1439.64	0.19%	100.00	%
Y RADIAL	4932.9	50.59	1.03%	100.0	%
Ag 328.068†	512.3	113.13	22.08%	[0.00]	ug/L
Al 396.153Radial†	-26.7	17.27	64.64%	[0.00]	ug/L
As 188.979†	-33.4	6.69	20.02%	[0.00]	ug/L
B 249.677†	-665.8	37.00	5.56%	[0.00]	ug/L
Ba 233.527†	7.5	10.31	137.44%	[0.00]	ug/L
Be 313.107†	-4351.5	45.91	1.06%	[0.00]	ug/L
Ca 317.933Radial†	12.6	2.15	17.15%	[0.00]	ug/L
Cd 226.502†	-238.4	7.44	3.12%	[0.00]	ug/L
Co 228.616†	-84.0	9.33	11.12%	[0.00]	ug/L
Cr 267.716†	104.0	52.08	50.06%	[0.00]	ug/L
Cu 324.752†	7999.0	72.12	0.90%	[0.00]	ug/L
Fe 238.204 Radial†	13.9	1.22	8.80%	[0.00]	ug/L
K 766.490 Radial†	3336.7	103.88	3.11%	[0.00]	ug/L
Mg 279.077 IEC†	1.6	1.09	66.14%	[0.00]	ug/L
Mn 257.610†	516.4	35.95	6.96%	[0.00]	ug/L
Mo 202.031†	19.9	11.55	57.98%	[0.00]	ug/L
Na 589.592 Radial†	-1750.1	29.46	1.68%	[0.00]	ug/L
Ni 231.604†	125.1	12.63	10.10%	[0.00]	ug/L
P 214.914†	248.6	4.57	1.84%	[0.00]	ug/L
Pb 220.353†	-77.8	14.53	18.68%	[0.00]	ug/L
S 181.975 Axial†	59.9	5.58	9.32%	[0.00]	ug/L
Sb 206.836†	37.1	3.40	9.17%	[0.00]	ug/L
Se 196.026†	-33.3	3.12	9.39%	[0.00]	ug/L
Si 251.611†	616.6	17.63	2.86%	[0.00]	ug/L
Sn 189.927†	3.4	2.63	77.27%	[0.00]	ug/L
Sr 421.552†	16.0	23.64	147.88%	[0.00]	ug/L
Ti 334.940†	-1817.4	8.59	0.47%	[0.00]	ug/L
Tl 190.801†	-53.4	10.02	18.78%	[0.00]	ug/L
U 409.014†	-2668.7	94.31	3.53%	[0.00]	ug/L
V 292.402†	-1801.8	37.61	2.09%	[0.00]	ug/L

Zn 213.857†	831.7	13.39	1.61%	[0.00] ug/L
SiO2†	636.0	16.37	2.57%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 1/6/2010 10:12:18
Data Type: Reprocessed on 1/6/2010 11:55:26
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	858980.9	858980.9	96.884	%	10:14:42
1	Sc Radial	4680.0	4680.0	100	%	10:14:15
1	Y 371.029	737496.5	737496.5	96.815	%	10:14:42
1	Y RADIAL	4959.7	4959.7	100.5	%	10:14:15
1	Ag 328.068†	23297.9	23534.9	[100]	ug/L	10:14:42
1	As 188.979†	245.5	286.8	[100]	ug/L	10:15:02
1	B 249.677†	3857.1	4647.0	[100]	ug/L	10:14:42
1	Ba 233.527†	13535.2	13963.1	[100]	ug/L	10:14:42
1	Be 313.107†	285272.4	298799.6	[100]	ug/L	10:14:42
1	Cd 226.502†	9981.9	10541.4	[100]	ug/L	10:15:02
1	Co 228.616†	5125.3	5374.1	[100]	ug/L	10:15:02
1	Cr 267.716†	9927.5	10142.7	[100]	ug/L	10:14:42
1	Cu 324.752†	40691.6	34001.4	[100]	ug/L	10:14:42
1	K 766.490 Radial†	8407.9	5048.9	[1000]	ug/L	10:14:10
1	Mn 257.610†	95334.8	97884.8	[100]	ug/L	10:14:42
1	Mo 202.031†	1605.3	1637.0	[100]	ug/L	10:15:02
1	Ni 231.604†	4633.5	4657.5	[100]	ug/L	10:15:02
1	P 214.914†	1254.4	1046.2	[500]	ug/L	10:15:02
1	Pb 220.353†	853.5	958.8	[100]	ug/L	10:15:02
1	S 181.975 Axial†	233.2	180.8	[200]	ug/L	10:15:02
1	Sb 206.836†	367.3	342.0	[100]	ug/L	10:15:02
1	Se 196.026†	151.8	190.0	[100]	ug/L	10:15:02
1	Si 251.611†	17526.4	17473.5	[500]	ug/L	10:14:42
1	Sn 189.927†	662.1	680.0	[100]	ug/L	10:15:02
1	Sr 421.552†	13727.0	13674.7	[100]	ug/L	10:14:15
1	Ti 334.940†	60372.6	64131.8	[100]	ug/L	10:14:42
1	Tl 190.801†	306.6	369.9	[100]	ug/L	10:15:02
1	U 409.014†	488.3	3172.7	[100]	ug/L	10:14:42
1	V 292.402†	13700.9	15943.5	[100]	ug/L	10:14:42
1	Zn 213.857†	12421.0	11988.8	[100]	ug/L	10:15:02
1	SiO2†	17631.3	17562.4	[1069.5]	ug/L	10:15:58
2	Sc 361.383	855417.8	855417.8	96.482	%	10:15:07
2	Sc Radial	4654.0	4654.0	99.7	%	10:14:25
2	Y 371.029	735371.7	735371.7	96.536	%	10:15:07
2	Y RADIAL	4912.1	4912.1	99.58	%	10:14:25
2	Ag 328.068†	22993.6	23319.8	[100]	ug/L	10:15:07
2	As 188.979†	244.4	286.7	[100]	ug/L	10:15:27
2	B 249.677†	3820.7	4625.8	[100]	ug/L	10:15:07
2	Ba 233.527†	13432.1	13914.4	[100]	ug/L	10:15:07
2	Be 313.107†	283600.2	298292.9	[100]	ug/L	10:15:07
2	Cd 226.502†	9983.4	10585.8	[100]	ug/L	10:15:27
2	Co 228.616†	5125.5	5396.4	[100]	ug/L	10:15:27
2	Cr 267.716†	9891.3	10148.0	[100]	ug/L	10:15:07
2	Cu 324.752†	40378.4	33851.7	[100]	ug/L	10:15:07
2	K 766.490 Radial†	8231.9	4919.2	[1000]	ug/L	10:14:20
2	Mn 257.610†	94787.7	97727.6	[100]	ug/L	10:15:07
2	Mo 202.031†	1588.4	1626.4	[100]	ug/L	10:15:27
2	Ni 231.604†	4613.6	4656.7	[100]	ug/L	10:15:27
2	P 214.914†	1234.6	1031.1	[500]	ug/L	10:15:27
2	Pb 220.353†	854.4	963.3	[100]	ug/L	10:15:27
2	S 181.975 Axial†	222.7	170.9	[200]	ug/L	10:15:27
2	Sb 206.836†	368.9	345.2	[100]	ug/L	10:15:27
2	Se 196.026†	149.3	188.0	[100]	ug/L	10:15:27
2	Si 251.611†	17335.2	17350.7	[500]	ug/L	10:15:07
2	Sn 189.927†	671.0	692.0	[100]	ug/L	10:15:27
2	Sr 421.552†	13682.9	13706.8	[100]	ug/L	10:14:25
2	Ti 334.940†	60014.8	64020.5	[100]	ug/L	10:15:07
2	Tl 190.801†	307.2	371.8	[100]	ug/L	10:15:27

2	U 409.014†	295.8	2975.3	[100] ug/L	10:15:07
2	V 292.402†	13528.2	15823.3	[100] ug/L	10:15:07
2	Zn 213.857†	12466.1	12089.0	[100] ug/L	10:15:27
2	SiO2†	17384.6	17382.5	[1069.5] ug/L	10:16:03
3	Sc 361.383	859958.1	859958.1	96.994 %	10:15:33
3	Sc Radial	4766.0	4766.0	102 %	10:14:35
3	Y 371.029	739304.7	739304.7	97.053 %	10:15:33
3	Y RADIAL	5003.2	5003.2	101.4 %	10:14:35
3	Ag 328.068†	23212.3	23419.4	[100] ug/L	10:15:33
3	As 188.979†	253.6	294.9	[100] ug/L	10:15:53
3	B 249.677†	3961.8	4750.4	[100] ug/L	10:15:33
3	Ba 233.527†	13535.7	13947.7	[100] ug/L	10:15:33
3	Be 313.107†	285383.3	298579.3	[100] ug/L	10:15:33
3	Cd 226.502†	9988.9	10536.8	[100] ug/L	10:15:53
3	Co 228.616†	5127.3	5370.2	[100] ug/L	10:15:53
3	Cr 267.716†	9938.8	10142.8	[100] ug/L	10:15:33
3	Cu 324.752†	40815.8	34081.7	[100] ug/L	10:15:33
3	K 766.490 Radial†	8372.8	4863.1	[1000] ug/L	10:14:30
3	Mn 257.610†	95438.6	97880.0	[100] ug/L	10:15:33
3	Mo 202.031†	1597.4	1627.0	[100] ug/L	10:15:53
3	Ni 231.604†	4590.6	4607.8	[100] ug/L	10:15:53
3	P 214.914†	1236.1	1025.8	[500] ug/L	10:15:53
3	Pb 220.353†	853.0	957.2	[100] ug/L	10:15:53
3	S 181.975 Axial†	215.4	162.1	[200] ug/L	10:15:53
3	Sb 206.836†	363.9	338.1	[100] ug/L	10:15:53
3	Se 196.026†	147.6	185.4	[100] ug/L	10:15:53
3	Si 251.611†	17460.2	17384.8	[500] ug/L	10:15:33
3	Sn 189.927†	668.8	686.1	[100] ug/L	10:15:53
3	Sr 421.552†	13921.0	13617.4	[100] ug/L	10:14:35
3	Ti 334.940†	60486.7	64178.6	[100] ug/L	10:15:33
3	Tl 190.801†	311.4	374.4	[100] ug/L	10:15:53
3	U 409.014†	310.2	2988.5	[100] ug/L	10:15:33
3	V 292.402†	13652.1	15877.1	[100] ug/L	10:15:33
3	Zn 213.857†	12472.9	12027.8	[100] ug/L	10:15:53
3	SiO2†	17487.2	17393.2	[1069.5] ug/L	10:16:08

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	858118.9	2389.74	0.28%	96.787	%
Sc Radial	4700.0	58.64	1.25%	101	%
Y 371.029	737391.0	1968.61	0.27%	96.801	%
Y RADIAL	4958.3	45.59	0.92%	100.5	%
Ag 328.068†	23424.7	107.68	0.46%	[100]	ug/L
As 188.979†	289.5	4.67	1.61%	[100]	ug/L
B 249.677†	4674.4	66.66	1.43%	[100]	ug/L
Ba 233.527†	13941.7	24.90	0.18%	[100]	ug/L
Be 313.107†	298557.2	254.08	0.09%	[100]	ug/L
Cd 226.502†	10554.7	27.08	0.26%	[100]	ug/L
Co 228.616†	5380.2	14.13	0.26%	[100]	ug/L
Cr 267.716†	10144.5	2.99	0.03%	[100]	ug/L
Cu 324.752†	33978.3	116.72	0.34%	[100]	ug/L
K 766.490 Radial†	4943.7	95.30	1.93%	[1000]	ug/L
Mn 257.610†	97830.8	89.39	0.09%	[100]	ug/L
Mo 202.031†	1630.1	5.97	0.37%	[100]	ug/L
Ni 231.604†	4640.7	28.47	0.61%	[100]	ug/L
P 214.914†	1034.4	10.58	1.02%	[500]	ug/L
Pb 220.353†	959.8	3.20	0.33%	[100]	ug/L
S 181.975 Axial†	171.3	9.35	5.46%	[200]	ug/L
Sb 206.836†	341.8	3.59	1.05%	[100]	ug/L
Se 196.026†	187.8	2.27	1.21%	[100]	ug/L
Si 251.611†	17403.0	63.40	0.36%	[500]	ug/L
Sn 189.927†	686.0	6.02	0.88%	[100]	ug/L
Sr 421.552†	13666.3	45.28	0.33%	[100]	ug/L
Ti 334.940†	64110.3	81.19	0.13%	[100]	ug/L
Tl 190.801†	372.0	2.28	0.61%	[100]	ug/L
U 409.014†	3045.5	110.39	3.62%	[100]	ug/L
V 292.402†	15881.3	60.18	0.38%	[100]	ug/L
Zn 213.857†	12035.2	50.50	0.42%	[100]	ug/L
SiO2†	17446.0	100.94	0.58%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 1/6/2010 10:18:19
Data Type: Reprocessed on 1/6/2010 11:55:28

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	883512.7	883512.7	99.651	%	10:21:31
1	Sc Radial	4601.8	4601.8	98.6	%	10:20:12
1	Y 371.029	752079.9	752079.9	98.730	%	10:21:31
1	Y RADIAL	4817.5	4817.5	97.66	%	10:20:12
1	Ag 328.068†	114385.8	114274.4	[500]	ug/L	10:21:31
1	Al 396.153Radial†	5563.1	5669.3	[5000]	ug/L	10:20:12
1	As 188.979†	1380.3	1418.6	[500]	ug/L	10:21:51
1	B 249.677†	22915.8	23661.9	[500]	ug/L	10:21:31
1	Ba 233.527†	67394.6	67623.3	[500]	ug/L	10:21:31
1	Be 313.107†	1463962.1	1473445.0	[500]	ug/L	10:21:31
1	Ca 317.933Radial†	3026.4	3057.1	[5000]	ug/L	10:20:32
1	Cd 226.502†	52091.1	52512.1	[500]	ug/L	10:21:31
1	Co 228.616†	25883.0	26057.7	[500]	ug/L	10:21:51
1	Cr 267.716†	49100.1	49168.1	[500]	ug/L	10:21:31
1	Cu 324.752†	173485.5	166094.6	[500]	ug/L	10:21:31
1	K 766.490 Radial†	28039.4	25103.4	[5000]	ug/L	10:20:12
1	Mg 279.077 IEC†	160.2	160.9	[5000]	ug/L	10:20:32
1	Mn 257.610†	471058.4	472193.1	[500]	ug/L	10:21:31
1	Mo 202.031†	7928.7	7936.5	[500]	ug/L	10:21:51
1	Ni 231.604†	22462.4	22416.0	[500]	ug/L	10:21:51
1	P 214.914†	5312.3	5082.3	[2500]	ug/L	10:21:51
1	Pb 220.353†	4719.2	4813.5	[500]	ug/L	10:21:51
1	S 181.975 Axial†	934.0	877.4	[1000]	ug/L	10:21:51
1	Sb 206.836†	1674.2	1643.0	[500]	ug/L	10:21:51
1	Se 196.026†	933.0	969.5	[500]	ug/L	10:21:51
1	Si 251.611†	86137.1	85822.4	[2500]	ug/L	10:21:31
1	Sn 189.927†	3339.3	3347.7	[500]	ug/L	10:21:51
1	Sr 421.552†	68394.0	69355.4	[500]	ug/L	10:20:12
1	Ti 334.940†	312108.2	315019.5	[500]	ug/L	10:21:31
1	Tl 190.801†	1747.5	1807.0	[500]	ug/L	10:21:51
1	U 409.014†	13304.8	16020.2	[500]	ug/L	10:21:31
1	V 292.402†	76303.3	78372.6	[500]	ug/L	10:21:31
1	Zn 213.857†	60967.6	60349.6	[500]	ug/L	10:21:31
1	SiO2†	86414.0	86080.9	[5347.5]	ug/L	10:22:51
2	Sc 361.383	887225.8	887225.8	100.07	%	10:21:58
2	Sc Radial	4740.4	4740.4	102	%	10:20:37
2	Y 371.029	754809.6	754809.6	99.088	%	10:21:58
2	Y RADIAL	4960.4	4960.4	100.6	%	10:20:37
2	Ag 328.068†	115157.8	114565.5	[500]	ug/L	10:21:58
2	Al 396.153Radial†	5682.9	5622.3	[5000]	ug/L	10:20:37
2	As 188.979†	1369.6	1402.0	[500]	ug/L	10:22:18
2	B 249.677†	23171.9	23821.6	[500]	ug/L	10:21:58
2	Ba 233.527†	67955.3	67900.6	[500]	ug/L	10:21:58
2	Be 313.107†	1474743.7	1478070.7	[500]	ug/L	10:21:58
2	Ca 317.933Radial†	3029.9	2970.9	[5000]	ug/L	10:20:57
2	Cd 226.502†	52500.4	52702.3	[500]	ug/L	10:21:58
2	Co 228.616†	25759.0	25825.1	[500]	ug/L	10:22:18
2	Cr 267.716†	49400.6	49262.3	[500]	ug/L	10:21:58
2	Cu 324.752†	174589.1	166468.8	[500]	ug/L	10:21:58
2	K 766.490 Radial†	28831.9	25052.4	[5000]	ug/L	10:20:37
2	Mg 279.077 IEC†	165.0	160.9	[5000]	ug/L	10:20:57
2	Mn 257.610†	474451.9	473605.9	[500]	ug/L	10:21:58
2	Mo 202.031†	7868.6	7843.2	[500]	ug/L	10:22:18
2	Ni 231.604†	22362.2	22221.6	[500]	ug/L	10:22:18
2	P 214.914†	5271.4	5019.2	[2500]	ug/L	10:22:18
2	Pb 220.353†	4679.9	4754.4	[500]	ug/L	10:22:18
2	S 181.975 Axial†	927.7	867.1	[1000]	ug/L	10:22:18
2	Sb 206.836†	1664.7	1626.5	[500]	ug/L	10:22:18

2	Se 196.026†	938.7	971.3	[500] ug/L	10:22:18
2	Si 251.611†	86879.3	86202.4	[2500] ug/L	10:21:58
2	Sn 189.927†	3327.1	3321.4	[500] ug/L	10:22:18
2	Sr 421.552†	70252.9	69158.0	[500] ug/L	10:20:37
2	Ti 334.940†	313954.4	315553.7	[500] ug/L	10:21:58
2	Tl 190.801†	1748.5	1800.6	[500] ug/L	10:22:18
2	U 409.014†	13260.1	15919.6	[500] ug/L	10:21:58
2	V 292.402†	76752.0	78500.6	[500] ug/L	10:21:58
2	Zn 213.857†	61417.5	60543.2	[500] ug/L	10:21:58
2	SiO2†	85934.5	85238.8	[5347.5] ug/L	10:22:56
3	Sc 361.383	884330.4	884330.4	99.743 %	10:22:26
3	Sc Radial	4562.7	4562.7	97.8 %	10:21:02
3	Y 371.029	752217.8	752217.8	98.748 %	10:22:26
3	Y RADIAL	4788.6	4788.6	97.07 %	10:21:02
3	Ag 328.068†	114779.6	114563.1	[500] ug/L	10:22:26
3	Al 396.153Radial†	5525.6	5679.3	[5000] ug/L	10:21:02
3	As 188.979†	1366.0	1403.0	[500] ug/L	10:22:46
3	B 249.677†	22910.0	23634.9	[500] ug/L	10:22:26
3	Ba 233.527†	67647.5	67814.4	[500] ug/L	10:22:26
3	Be 313.107†	1467958.9	1476093.6	[500] ug/L	10:22:26
3	Ca 317.933Radial†	3015.8	3072.5	[5000] ug/L	10:21:22
3	Cd 226.502†	52364.8	52738.1	[500] ug/L	10:22:26
3	Co 228.616†	25760.2	25910.5	[500] ug/L	10:22:46
3	Cr 267.716†	49276.5	49299.5	[500] ug/L	10:22:26
3	Cu 324.752†	173800.1	166249.0	[500] ug/L	10:22:26
3	K 766.490 Radial†	28001.8	25308.7	[5000] ug/L	10:21:02
3	Mg 279.077 IEC†	162.2	164.3	[5000] ug/L	10:21:22
3	Mn 257.610†	472600.3	473301.9	[500] ug/L	10:22:26
3	Mo 202.031†	7885.0	7885.4	[500] ug/L	10:22:46
3	Ni 231.604†	22342.5	22275.0	[500] ug/L	10:22:46
3	P 214.914†	5269.3	5034.3	[2500] ug/L	10:22:46
3	Pb 220.353†	4660.7	4750.4	[500] ug/L	10:22:46
3	S 181.975 Axial†	923.8	866.3	[1000] ug/L	10:22:46
3	Sb 206.836†	1679.2	1646.4	[500] ug/L	10:22:46
3	Se 196.026†	930.9	966.5	[500] ug/L	10:22:46
3	Si 251.611†	86364.9	85970.9	[2500] ug/L	10:22:26
3	Sn 189.927†	3331.4	3336.5	[500] ug/L	10:22:46
3	Sr 421.552†	68237.4	69789.8	[500] ug/L	10:21:02
3	Ti 334.940†	312680.8	315304.0	[500] ug/L	10:22:26
3	Tl 190.801†	1748.9	1806.8	[500] ug/L	10:22:46
3	U 409.014†	13013.2	15715.4	[500] ug/L	10:22:26
3	V 292.402†	76468.7	78467.6	[500] ug/L	10:22:26
3	Zn 213.857†	61087.2	60413.0	[500] ug/L	10:22:26
3	SiO2†	86458.6	86045.4	[5347.5] ug/L	10:23:02

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	885023.0	1951.07	0.22%	99.821	%
Sc Radial	4635.0	93.36	2.01%	99.3	%
Y 371.029	753035.8	1537.71	0.20%	98.855	%
Y RADIAL	4855.5	92.01	1.89%	98.43	%
Ag 328.068†	114467.6	167.37	0.15%	[500]	ug/L
Al 396.153Radial†	5657.0	30.41	0.54%	[5000]	ug/L
As 188.979†	1407.9	9.28	0.66%	[500]	ug/L
B 249.677†	23706.2	100.93	0.43%	[500]	ug/L
Ba 233.527†	67779.4	141.90	0.21%	[500]	ug/L
Be 313.107†	1475869.8	2320.96	0.16%	[500]	ug/L
Ca 317.933Radial†	3033.5	54.79	1.81%	[5000]	ug/L
Cd 226.502†	52650.8	121.47	0.23%	[500]	ug/L
Co 228.616†	25931.1	117.66	0.45%	[500]	ug/L
Cr 267.716†	49243.3	67.70	0.14%	[500]	ug/L
Cu 324.752†	166270.8	188.05	0.11%	[500]	ug/L
K 766.490 Radial†	25154.8	135.66	0.54%	[5000]	ug/L
Mg 279.077 IEC†	162.0	1.99	1.23%	[5000]	ug/L
Mn 257.610†	473033.6	743.59	0.16%	[500]	ug/L
Mo 202.031†	7888.4	46.74	0.59%	[500]	ug/L
Ni 231.604†	22304.2	100.46	0.45%	[500]	ug/L
P 214.914†	5045.3	32.96	0.65%	[2500]	ug/L
Pb 220.353†	4772.8	35.35	0.74%	[500]	ug/L

S 181.975 Axial†	870.3	6.18	0.71%	[1000] ug/L
Sb 206.836†	1638.6	10.67	0.65%	[500] ug/L
Se 196.026†	969.1	2.40	0.25%	[500] ug/L
Si 251.611†	85998.6	191.49	0.22%	[2500] ug/L
Sn 189.927†	3335.2	13.17	0.39%	[500] ug/L
Sr 421.552†	69434.4	323.18	0.47%	[500] ug/L
Ti 334.940†	315292.4	267.26	0.08%	[500] ug/L
Tl 190.801†	1804.8	3.61	0.20%	[500] ug/L
U 409.014†	15885.1	155.29	0.98%	[500] ug/L
V 292.402†	78446.9	66.45	0.08%	[500] ug/L
Zn 213.857†	60435.3	98.69	0.16%	[500] ug/L
SiO2†	85788.4	476.26	0.56%	[5347.5] ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 1/6/2010 10:25:12
Data Type: Reprocessed on 1/6/2010 11:55:29

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	854575.1	854575.1	96.387	%	10:28:28
1	Sc Radial	4579.0	4579.0	98.1	%	10:27:25
1	Y 371.029	728537.8	728537.8	95.639	%	10:28:28
1	Y RADIAL	4758.3	4758.3	96.46	%	10:27:25
1	Ag 328.068†	225908.9	233865.0	[1000]	ug/L	10:28:28
1	Al 396.153Radial†	10920.1	11158.0	[10000]	ug/L	10:27:05
1	As 188.979†	2738.1	2874.1	[1000]	ug/L	10:28:49
1	B 249.677†	46350.1	48753.4	[1000]	ug/L	10:28:28
1	Ba 233.527†	132639.6	137604.2	[1000]	ug/L	10:28:28
1	Be 313.107†	2851071.1	2962297.1	[1000]	ug/L	10:28:23
1	Ca 317.933Radial†	5910.2	6011.9	[10000]	ug/L	10:27:25
1	Cd 226.502†	102524.3	106605.9	[1000]	ug/L	10:28:28
1	Co 228.616†	51547.3	53563.6	[1000]	ug/L	10:28:28
1	Cr 267.716†	96715.8	100237.2	[1000]	ug/L	10:28:28
1	Cu 324.752†	334819.6	339371.6	[1000]	ug/L	10:28:28
1	Fe 238.204 Radial†	1132.1	1140.1	[10000]	ug/L	10:27:25
1	K 766.490 Radial†	52192.2	49864.5	[10000]	ug/L	10:27:05
1	Mg 279.077 IEC†	320.5	325.0	[10000]	ug/L	10:27:25
1	Mn 257.610†	916466.8	950304.8	[1000]	ug/L	10:28:23
1	Mo 202.031†	15444.9	16003.9	[1000]	ug/L	10:28:49
1	Na 589.592 Radial†	30756.6	33101.3	[10000]	ug/L	10:27:05
1	Ni 231.604†	44283.7	45818.7	[1000]	ug/L	10:28:28
1	P 214.914†	10191.8	10325.2	[5000]	ug/L	10:28:49
1	Pb 220.353†	9273.6	9699.0	[1000]	ug/L	10:28:49
1	S 181.975 Axial†	1777.1	1783.8	[2000]	ug/L	10:28:49
1	Sb 206.836†	3289.2	3375.4	[1000]	ug/L	10:28:49
1	Se 196.026†	1867.2	1970.5	[1000]	ug/L	10:28:49
1	Si 251.611†	169164.9	174889.6	[5000]	ug/L	10:28:28
1	Sn 189.927†	6538.0	6779.7	[1000]	ug/L	10:28:49
1	Sr 421.552†	132173.6	134713.1	[1000]	ug/L	10:27:05
1	Ti 334.940†	605418.2	629930.1	[1000]	ug/L	10:28:28
1	Tl 190.801†	3494.5	3678.9	[1000]	ug/L	10:28:49
1	U 409.014†	30337.2	34143.1	[1000]	ug/L	10:28:28
1	V 292.402†	152445.1	159961.5	[1000]	ug/L	10:28:28
1	Zn 213.857†	118494.0	122104.1	[1000]	ug/L	10:28:28
1	SiO2†	169704.7	175430.1	[10695]	ug/L	10:29:57
2	Sc 361.383	858196.3	858196.3	96.795	%	10:29:00
2	Sc Radial	4524.0	4524.0	96.9	%	10:27:50
2	Y 371.029	732256.6	732256.6	96.127	%	10:29:00
2	Y RADIAL	4715.6	4715.6	95.59	%	10:27:50
2	Ag 328.068†	226859.1	233857.6	[1000]	ug/L	10:29:00
2	Al 396.153Radial†	10942.0	11316.0	[10000]	ug/L	10:27:30
2	As 188.979†	2707.6	2830.6	[1000]	ug/L	10:29:20
2	B 249.677†	46591.3	48799.7	[1000]	ug/L	10:29:00
2	Ba 233.527†	133100.4	137499.6	[1000]	ug/L	10:29:00
2	Be 313.107†	2844083.0	2942596.8	[1000]	ug/L	10:28:54
2	Ca 317.933Radial†	5868.1	6041.8	[10000]	ug/L	10:27:50
2	Cd 226.502†	102682.4	106320.4	[1000]	ug/L	10:29:00
2	Co 228.616†	51719.3	53515.6	[1000]	ug/L	10:29:00
2	Cr 267.716†	96914.5	100019.1	[1000]	ug/L	10:29:00
2	Cu 324.752†	336569.7	339713.9	[1000]	ug/L	10:29:00
2	Fe 238.204 Radial†	1122.1	1143.9	[10000]	ug/L	10:27:50
2	K 766.490 Radial†	52429.8	50757.1	[10000]	ug/L	10:27:30
2	Mg 279.077 IEC†	314.1	322.4	[10000]	ug/L	10:27:50
2	Mn 257.610†	914632.9	944398.2	[1000]	ug/L	10:28:54
2	Mo 202.031†	15333.9	15821.6	[1000]	ug/L	10:29:20
2	Na 589.592 Radial†	30925.2	33656.9	[10000]	ug/L	10:27:30
2	Ni 231.604†	44461.0	45808.0	[1000]	ug/L	10:29:00

2	P 214.914†	10085.9	10171.2	[5000] ug/L	10:29:20
2	Pb 220.353†	9186.3	9568.2	[1000] ug/L	10:29:20
2	S 181.975 Axial†	1757.9	1756.2	[2000] ug/L	10:29:20
2	Sb 206.836†	3244.2	3314.5	[1000] ug/L	10:29:20
2	Se 196.026†	1837.0	1931.0	[1000] ug/L	10:29:20
2	Si 251.611†	170090.1	175104.9	[5000] ug/L	10:29:00
2	Sn 189.927†	6497.8	6709.5	[1000] ug/L	10:29:20
2	Sr 421.552†	132770.8	136968.8	[1000] ug/L	10:27:30
2	Ti 334.940†	608846.1	630821.2	[1000] ug/L	10:29:00
2	Tl 190.801†	3461.5	3629.5	[1000] ug/L	10:29:20
2	U 409.014†	30543.7	34223.7	[1000] ug/L	10:29:00
2	V 292.402†	152968.7	159835.0	[1000] ug/L	10:29:00
2	Zn 213.857†	118722.7	121821.7	[1000] ug/L	10:29:00
2	SiO2†	170248.2	175248.8	[10695] ug/L	10:30:02
3	Sc 361.383	848819.7	848819.7	95.738 %	10:29:32
3	Sc Radial	4499.1	4499.1	96.4 %	10:28:16
3	Y 371.029	724197.9	724197.9	95.069 %	10:29:32
3	Y RADIAL	4687.7	4687.7	95.03 %	10:28:16
3	Ag 328.068†	224046.8	233509.2	[1000] ug/L	10:29:32
3	Al 396.153Radial†	10912.2	11347.6	[10000] ug/L	10:27:56
3	As 188.979†	2741.3	2896.8	[1000] ug/L	10:29:52
3	B 249.677†	46090.8	48808.7	[1000] ug/L	10:29:32
3	Ba 233.527†	131592.1	137443.1	[1000] ug/L	10:29:32
3	Be 313.107†	2844415.3	2975401.5	[1000] ug/L	10:29:26
3	Ca 317.933Radial†	5826.7	6032.3	[10000] ug/L	10:28:16
3	Cd 226.502†	101521.4	106279.5	[1000] ug/L	10:29:32
3	Co 228.616†	51116.9	53476.7	[1000] ug/L	10:29:32
3	Cr 267.716†	95939.3	100106.5	[1000] ug/L	10:29:32
3	Cu 324.752†	331317.2	338068.6	[1000] ug/L	10:29:32
3	Fe 238.204 Radial†	1112.8	1140.6	[10000] ug/L	10:28:16
3	K 766.490 Radial†	51979.0	50588.9	[10000] ug/L	10:27:56
3	Mg 279.077 IEC†	309.4	319.3	[10000] ug/L	10:28:16
3	Mn 257.610†	913765.8	953930.6	[1000] ug/L	10:29:26
3	Mo 202.031†	15519.8	16190.8	[1000] ug/L	10:29:52
3	Na 589.592 Radial†	30476.4	33367.8	[10000] ug/L	10:27:56
3	Ni 231.604†	43886.2	45715.0	[1000] ug/L	10:29:32
3	P 214.914†	10188.8	10393.9	[5000] ug/L	10:29:52
3	Pb 220.353†	9282.8	9773.9	[1000] ug/L	10:29:52
3	S 181.975 Axial†	1773.5	1792.6	[2000] ug/L	10:29:52
3	Sb 206.836†	3297.2	3406.9	[1000] ug/L	10:29:52
3	Se 196.026†	1859.1	1975.1	[1000] ug/L	10:29:52
3	Si 251.611†	167775.3	174628.2	[5000] ug/L	10:29:32
3	Sn 189.927†	6568.9	6858.0	[1000] ug/L	10:29:52
3	Sr 421.552†	131436.1	136342.3	[1000] ug/L	10:27:56
3	Ti 334.940†	600971.6	629544.5	[1000] ug/L	10:29:32
3	Tl 190.801†	3500.4	3709.6	[1000] ug/L	10:29:52
3	U 409.014†	30036.8	34042.8	[1000] ug/L	10:29:32
3	V 292.402†	151366.7	159907.4	[1000] ug/L	10:29:32
3	Zn 213.857†	117155.4	121539.5	[1000] ug/L	10:29:32
3	SiO2†	167148.2	173953.7	[10695] ug/L	10:30:08

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	853863.7	4728.60	0.55%	96.307	%
Sc Radial	4534.0	40.91	0.90%	97.1	%
Y 371.029	728330.8	4033.35	0.55%	95.612	%
Y RADIAL	4720.6	35.55	0.75%	95.70	%
Ag 328.068†	233743.9	203.34	0.09%	[1000]	ug/L
Al 396.153Radial†	11273.9	101.59	0.90%	[10000]	ug/L
As 188.979†	2867.2	33.62	1.17%	[1000]	ug/L
B 249.677†	48787.3	29.65	0.06%	[1000]	ug/L
Ba 233.527†	137515.6	81.75	0.06%	[1000]	ug/L
Be 313.107†	2960098.5	16512.52	0.56%	[1000]	ug/L
Ca 317.933Radial†	6028.6	15.28	0.25%	[10000]	ug/L
Cd 226.502†	106401.9	177.79	0.17%	[1000]	ug/L
Co 228.616†	53518.6	43.54	0.08%	[1000]	ug/L
Cr 267.716†	100120.9	109.77	0.11%	[1000]	ug/L
Cu 324.752†	339051.3	868.12	0.26%	[1000]	ug/L
Fe 238.204 Radial†	1141.5	2.02	0.18%	[10000]	ug/L

K 766.490 Radial†	50403.5	474.29	0.94%	[10000] ug/L
Mg 279.077 IEC†	322.3	2.85	0.88%	[10000] ug/L
Mn 257.610†	949544.6	4811.46	0.51%	[1000] ug/L
Mo 202.031†	16005.4	184.60	1.15%	[1000] ug/L
Na 589.592 Radial†	33375.3	277.85	0.83%	[10000] ug/L
Ni 231.604†	45780.5	57.00	0.12%	[1000] ug/L
P 214.914†	10296.8	114.02	1.11%	[5000] ug/L
Pb 220.353†	9680.4	104.09	1.08%	[1000] ug/L
S 181.975 Axial†	1777.5	19.00	1.07%	[2000] ug/L
Sb 206.836†	3365.6	46.99	1.40%	[1000] ug/L
Se 196.026†	1958.9	24.22	1.24%	[1000] ug/L
Si 251.611†	174874.3	238.73	0.14%	[5000] ug/L
Sn 189.927†	6782.4	74.28	1.10%	[1000] ug/L
Sr 421.552†	136008.0	1164.39	0.86%	[1000] ug/L
Ti 334.940†	630098.6	654.84	0.10%	[1000] ug/L
Tl 190.801†	3672.7	40.46	1.10%	[1000] ug/L
U 409.014†	34136.5	90.64	0.27%	[1000] ug/L
V 292.402†	159901.3	63.47	0.04%	[1000] ug/L
Zn 213.857†	121821.8	282.30	0.23%	[1000] ug/L
SiO2†	174877.5	805.17	0.46%	[10695] ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 1/6/2010 10:32:18
Data Type: Reprocessed on 1/6/2010 11:55:30
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	861751.7	861751.7	97.196	%	10:35:29
1	Sc Radial	4571.4	4571.4	97.9	%	10:34:32
1	Y 371.029	729816.8	729816.8	95.807	%	10:35:29
1	Y RADIAL	4793.7	4793.7	97.18	%	10:34:32
1	Al 396.153Radial†	54896.5	56078.0	[50000]	ug/L	10:34:12
1	Ca 317.933Radial†	29031.6	29629.7	[50000]	ug/L	10:34:12
1	Fe 238.204 Radial†	2245.0	2278.4	[20000]	ug/L	10:34:32
1	Mg 279.077 IEC†	1543.0	1573.8	[50000]	ug/L	10:34:32
1	Na 589.592 Radial†	62736.0	65805.8	[20000]	ug/L	10:34:12
2	Sc 361.383	845745.1	845745.1	95.391	%	10:35:34
2	Sc Radial	4549.2	4549.2	97.5	%	10:34:57
2	Y 371.029	716040.3	716040.3	93.999	%	10:35:34
2	Y RADIAL	4774.2	4774.2	96.78	%	10:34:57
2	Al 396.153Radial†	54557.8	56003.9	[50000]	ug/L	10:34:37
2	Ca 317.933Radial†	28909.0	29648.5	[50000]	ug/L	10:34:37
2	Fe 238.204 Radial†	2233.3	2277.5	[20000]	ug/L	10:34:57
2	Mg 279.077 IEC†	1522.9	1560.9	[50000]	ug/L	10:34:57
2	Na 589.592 Radial†	62157.3	65524.6	[20000]	ug/L	10:34:37
3	Sc 361.383	859471.0	859471.0	96.939	%	10:35:40
3	Sc Radial	4549.1	4549.1	97.5	%	10:35:22
3	Y 371.029	728245.3	728245.3	95.601	%	10:35:40
3	Y RADIAL	4768.4	4768.4	96.66	%	10:35:22
3	Al 396.153Radial†	55563.5	57036.8	[50000]	ug/L	10:35:02
3	Ca 317.933Radial†	29433.3	30187.0	[50000]	ug/L	10:35:02
3	Fe 238.204 Radial†	2223.3	2267.3	[20000]	ug/L	10:35:22
3	Mg 279.077 IEC†	1511.5	1549.2	[50000]	ug/L	10:35:22
3	Na 589.592 Radial†	63482.8	66885.7	[20000]	ug/L	10:35:02

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	855655.9	8658.47	1.01%	96.509	%
Sc Radial	4556.6	12.84	0.28%	97.6	%
Y 371.029	724700.8	7541.27	1.04%	95.135	%
Y RADIAL	4778.7	13.24	0.28%	96.87	%
Al 396.153Radial†	56372.9	576.17	1.02%	[50000]	ug/L
Ca 317.933Radial†	29821.8	316.47	1.06%	[50000]	ug/L
Fe 238.204 Radial†	2274.4	6.14	0.27%	[20000]	ug/L
Mg 279.077 IEC†	1561.3	12.27	0.79%	[50000]	ug/L
Na 589.592 Radial†	66072.1	718.58	1.09%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	232.8	0.00000	0.999966	
Al 396.153Radial	3	Lin Thru 0	0.0	1.127	0.00000	1.000000	
As 188.979	3	Lin Thru 0	0.0	2.857	0.00000	0.999974	
B 249.677	3	Lin Thru 0	0.0	48.50	0.00000	0.999931	
Ba 233.527	3	Lin Thru 0	0.0	137.1	0.00000	0.999983	
Be 313.107	3	Lin Thru 0	0.0	2959	0.00000	0.999999	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5968	0.00000	0.999997	
Cd 226.502	3	Lin Thru 0	0.0	106.2	0.00000	0.999991	
Co 228.616	3	Lin Thru 0	0.0	53.19	0.00000	0.999923	
Cr 267.716	3	Lin Thru 0	0.0	99.81	0.00000	0.999978	
Cu 324.752	3	Lin Thru 0	0.0	337.8	0.00000	0.999970	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1138	0.00000	0.999999	

K 766.490 Radial	3	Lin Thru 0	0.0	5.038	0.00000	0.999998
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0313	0.00000	0.999975
Mn 257.610	3	Lin Thru 0	0.0	949.1	0.00000	0.999995
Mo 202.031	3	Lin Thru 0	0.0	15.96	0.00000	0.999982
Na 589.592 Radia	2	Lin Thru 0	0.0	3.310	0.00000	0.999992
Ni 231.604	3	Lin Thru 0	0.0	45.55	0.00000	0.999946
P 214.914	3	Lin Thru 0	0.0	2.051	0.00000	0.999968
Pb 220.353	3	Lin Thru 0	0.0	9.653	0.00000	0.999984
S 181.975 Axial	3	Lin Thru 0	0.0	0.8848	0.00000	0.999961
Sb 206.836	3	Lin Thru 0	0.0	3.348	0.00000	0.999943
Se 196.026	3	Lin Thru 0	0.0	1.954	0.00000	0.999985
Si 251.611	3	Lin Thru 0	0.0	34.86	0.00000	0.999978
Sn 189.927	3	Lin Thru 0	0.0	6.761	0.00000	0.999977
Sr 421.552	3	Lin Thru 0	0.0	136.6	0.00000	0.999965
Ti 334.940	3	Lin Thru 0	0.0	630.3	0.00000	0.999999
Tl 190.801	3	Lin Thru 0	0.0	3.661	0.00000	0.999975
U 409.014	3	Lin Thru 0	0.0	33.64	0.00000	0.999572
V 292.402	3	Lin Thru 0	0.0	159.3	0.00000	0.999972
Zn 213.857	3	Lin Thru 0	0.0	121.6	0.00000	0.999995
SiO2	3	Lin Thru 0	0.0	16.29	0.00000	0.999972

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 1/6/2010 10:37:51
Data Type: Reprocessed on 1/6/2010 11:55:31
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	875249.9	875249.9	98.719	%			10:41:01
1	Sc Radial	4611.4	4611.4	98.8	%			10:39:44
1	Y 371.029	746029.3	746029.3	97.935	%			10:41:01
1	Y RADIAL	4861.5	4861.5	98.55	%			10:39:44
1	Ag 328.068†	58592.2	58840.3	255.97	ug/L	255.97	ppb	10:41:01
1	Al 396.153Radial†	5658.3	5754.0	5080.5	ug/L	5080.5	ppb	10:39:44
1	As 188.979†	1300.3	1350.6	477.00	ug/L	477.00	ppb	10:41:21
1	B 249.677†	23792.7	24767.3	508.73	ug/L	508.73	ppb	10:41:01
1	Ba 233.527†	68181.7	69059.1	504.81	ug/L	504.81	ppb	10:41:01
1	Be 313.107†	750258.5	764347.5	259.32	ug/L	259.32	ppb	10:41:01
1	Ca 317.933Radial†	2964.6	2988.2	5007.2	ug/L	5007.2	ppb	10:40:04
1	Cd 226.502†	51645.3	52554.0	494.77	ug/L	494.77	ppb	10:41:01
1	Co 228.616†	26107.0	26529.8	499.07	ug/L	499.07	ppb	10:41:21
1	Cr 267.716†	47678.5	48193.3	483.68	ug/L	483.68	ppb	10:41:01
1	Cu 324.752†	174605.9	168873.0	500.23	ug/L	500.23	ppb	10:41:01
1	Fe 238.204 Radial†	594.9	588.3	5184.9	ug/L	5184.9	ppb	10:40:04
1	K 766.490 Radial†	15727.6	12582.4	2492.3	ug/L	2492.3	ppb	10:39:44
1	Mg 279.077 IEC†	164.0	164.4	5262.6	ug/L	5262.6	ppb	10:40:04
1	Mn 257.610†	479368.3	485073.5	511.51	ug/L	511.51	ppb	10:41:01
1	Mo 202.031†	8416.8	8506.1	533.38	ug/L	533.38	ppb	10:41:21
1	Na 589.592 Radial†	6799.8	8632.7	2607.8	ug/L	2607.8	ppb	10:39:44
1	Ni 231.604†	22404.2	22569.9	495.15	ug/L	495.15	ppb	10:41:21
1	P 214.914†	5293.0	5113.1	2417.4	ug/L	2417.4	ppb	10:41:21
1	Pb 220.353†	4662.5	4800.8	498.97	ug/L	498.97	ppb	10:41:21
1	S 181.975 Axial†	2212.8	2181.6	2464.5	ug/L	2464.5	ppb	10:41:21
1	Sb 206.836†	1689.6	1674.4	509.06	ug/L	509.06	ppb	10:41:21
1	Se 196.026†	4904.6	5001.5	2577.8	ug/L	2577.8	ppb	10:41:21
1	Si 251.611†	164206.4	165721.0	4742.2	ug/L	4742.2	ppb	10:41:01
1	Sn 189.927†	3563.3	3606.1	533.98	ug/L	533.98	ppb	10:41:21
1	Sr 421.552†	72600.4	73468.6	537.87	ug/L	537.87	ppb	10:39:44
1	Ti 334.940†	306956.3	312757.6	496.10	ug/L	496.10	ppb	10:41:01
1	Tl 190.801†	1835.3	1912.5	525.70	ug/L	525.70	ppb	10:41:21
1	U 409.014†	13384.3	16226.8	480.81	ug/L	480.81	ppb	10:41:01
1	V 292.402†	76997.8	79799.0	508.10	ug/L	508.10	ppb	10:41:01
1	Zn 213.857†	61557.9	61525.2	501.66	ug/L	501.66	ppb	10:41:01
1	SiO2†	163209.8	164692.0	10085	ug/L	10085	ppb	10:42:19
2	Sc 361.383	875752.3	875752.3	98.775	%			10:41:27
2	Sc Radial	4643.7	4643.7	99.5	%			10:40:09
2	Y 371.029	745923.5	745923.5	97.922	%			10:41:27
2	Y RADIAL	4862.5	4862.5	98.57	%			10:40:09
2	Ag 328.068†	58994.0	59213.1	257.54	ug/L	257.54	ppb	10:41:27
2	Al 396.153Radial†	5570.1	5625.5	4966.6	ug/L	4966.6	ppb	10:40:09
2	As 188.979†	1303.5	1353.1	477.90	ug/L	477.90	ppb	10:41:47
2	B 249.677†	24003.0	24966.4	512.85	ug/L	512.85	ppb	10:41:27
2	Ba 233.527†	68768.7	69613.7	508.87	ug/L	508.87	ppb	10:41:27
2	Be 313.107†	757527.9	771271.0	261.67	ug/L	261.67	ppb	10:41:27
2	Ca 317.933Radial†	2967.9	2970.6	4977.8	ug/L	4977.8	ppb	10:40:29
2	Cd 226.502†	51932.9	52815.1	497.24	ug/L	497.24	ppb	10:41:27
2	Co 228.616†	26075.2	26482.4	498.17	ug/L	498.17	ppb	10:41:47
2	Cr 267.716†	48078.8	48570.9	487.47	ug/L	487.47	ppb	10:41:27
2	Cu 324.752†	176133.4	170318.0	504.51	ug/L	504.51	ppb	10:41:27
2	Fe 238.204 Radial†	587.9	577.0	5086.0	ug/L	5086.0	ppb	10:40:29
2	K 766.490 Radial†	15626.5	12370.1	2450.1	ug/L	2450.1	ppb	10:40:09
2	Mg 279.077 IEC†	163.2	162.4	5197.8	ug/L	5197.8	ppb	10:40:29
2	Mn 257.610†	483197.1	488671.2	515.30	ug/L	515.30	ppb	10:41:27
2	Mo 202.031†	8421.6	8506.1	533.37	ug/L	533.37	ppb	10:41:47
2	Na 589.592 Radial†	6730.1	8514.8	2572.2	ug/L	2572.2	ppb	10:40:09
2	Ni 231.604†	22358.8	22511.0	493.85	ug/L	493.85	ppb	10:41:47

2	P 214.914†	5291.5	5108.5	2414.5 ug/L	2414.5 ppb	10:41:47
2	Pb 220.353†	4645.7	4781.1	496.91 ug/L	496.91 ppb	10:41:47
2	S 181.975 Axial†	2208.4	2175.9	2458.1 ug/L	2458.1 ppb	10:41:47
2	Sb 206.836†	1662.2	1645.7	500.33 ug/L	500.33 ppb	10:41:47
2	Se 196.026†	4899.9	4993.9	2573.6 ug/L	2573.6 ppb	10:41:47
2	Si 251.611†	165602.3	167038.8	4780.0 ug/L	4780.0 ppb	10:41:27
2	Sn 189.927†	3536.1	3576.5	529.60 ug/L	529.60 ppb	10:41:47
2	Sr 421.552†	71798.5	72151.8	528.23 ug/L	528.23 ppb	10:40:09
2	Ti 334.940†	309702.6	315359.5	500.22 ug/L	500.22 ppb	10:41:27
2	Tl 190.801†	1842.0	1918.3	527.32 ug/L	527.32 ppb	10:41:47
2	U 409.014†	13830.5	16670.7	494.02 ug/L	494.02 ppb	10:41:27
2	V 292.402†	77815.0	80581.6	513.04 ug/L	513.04 ppb	10:41:27
2	Zn 213.857†	62091.2	62029.3	505.82 ug/L	505.82 ppb	10:41:27
2	SiO2†	164649.5	166054.7	10168 ug/L	10168 ppb	10:42:24
3	Sc 361.383	876292.2	876292.2	98.836 %		10:41:53
3	Sc Radial	4648.7	4648.7	99.6 %		10:40:34
3	Y 371.029	748097.3	748097.3	98.207 %		10:41:53
3	Y RADIAL	4889.0	4889.0	99.11 %		10:40:34
3	Ag 328.068†	58712.7	58891.7	256.18 ug/L	256.18 ppb	10:41:53
3	Al 396.153Radial†	5662.3	5712.0	5043.4 ug/L	5043.4 ppb	10:40:34
3	As 188.979†	1287.3	1335.9	471.85 ug/L	471.85 ppb	10:42:13
3	B 249.677†	23901.6	24848.9	510.43 ug/L	510.43 ppb	10:41:53
3	Ba 233.527†	68267.4	69063.7	504.85 ug/L	504.85 ppb	10:41:53
3	Be 313.107†	752113.5	765320.3	259.65 ug/L	259.65 ppb	10:41:53
3	Ca 317.933Radial†	2982.5	2982.1	4997.0 ug/L	4997.0 ppb	10:40:54
3	Cd 226.502†	51696.0	52543.0	494.66 ug/L	494.66 ppb	10:41:53
3	Co 228.616†	25907.2	26296.2	494.67 ug/L	494.67 ppb	10:42:13
3	Cr 267.716†	47758.4	48216.6	483.92 ug/L	483.92 ppb	10:41:53
3	Cu 324.752†	174915.4	168975.9	500.54 ug/L	500.54 ppb	10:41:53
3	Fe 238.204 Radial†	596.9	585.4	5159.8 ug/L	5159.8 ppb	10:40:54
3	K 766.490 Radial†	15874.5	12602.1	2496.2 ug/L	2496.2 ppb	10:40:34
3	Mg 279.077 IEC†	169.1	168.1	5381.8 ug/L	5381.8 ppb	10:40:54
3	Mn 257.610†	479775.8	484908.2	511.34 ug/L	511.34 ppb	10:41:53
3	Mo 202.031†	8365.9	8444.5	529.52 ug/L	529.52 ppb	10:42:13
3	Na 589.592 Radial†	6779.6	8557.2	2585.0 ug/L	2585.0 ppb	10:40:34
3	Ni 231.604†	22192.2	22328.4	489.85 ug/L	489.85 ppb	10:42:13
3	P 214.914†	5264.0	5077.4	2399.9 ug/L	2399.9 ppb	10:42:13
3	Pb 220.353†	4633.2	4765.5	495.30 ug/L	495.30 ppb	10:42:13
3	S 181.975 Axial†	2187.9	2153.8	2433.1 ug/L	2433.1 ppb	10:42:13
3	Sb 206.836†	1651.0	1633.3	496.56 ug/L	496.56 ppb	10:42:13
3	Se 196.026†	4863.7	4954.2	2553.5 ug/L	2553.5 ppb	10:42:13
3	Si 251.611†	164437.9	165757.4	4743.3 ug/L	4743.3 ppb	10:41:53
3	Sn 189.927†	3512.5	3550.4	525.74 ug/L	525.74 ppb	10:42:13
3	Sr 421.552†	72663.7	72942.4	534.01 ug/L	534.01 ppb	10:40:34
3	Ti 334.940†	307375.9	312812.2	496.18 ug/L	496.18 ppb	10:41:53
3	Tl 190.801†	1835.3	1910.3	525.13 ug/L	525.13 ppb	10:42:13
3	U 409.014†	13660.4	16490.0	488.64 ug/L	488.64 ppb	10:41:53
3	V 292.402†	77277.5	79989.2	509.26 ug/L	509.26 ppb	10:41:53
3	Zn 213.857†	61683.6	61578.2	502.13 ug/L	502.13 ppb	10:41:53
3	SiO2†	163090.9	164375.0	10065 ug/L	10065 ppb	10:42:30

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	875764.8	98.777	%	0.0588				0.06%
Sc Radial	4634.6	99.3	%	0.43				0.44%
Y 371.029	746683.4	98.021	%	0.1609				0.16%
Y RADIAL	4871.0	98.75	%	0.316				0.32%
Ag 328.068†	58981.7	256.56	ug/L	0.856	256.56	ppb	0.856	0.33%
QC value within limits for Ag 328.068 Recovery = 102.63%								
Al 396.153Radial†	5697.1	5030.2	ug/L	58.13	5030.2	ppb	58.13	1.16%
QC value within limits for Al 396.153Radial Recovery = 100.60%								
As 188.979†	1346.5	475.58	ug/L	3.265	475.58	ppb	3.265	0.69%
QC value within limits for As 188.979 Recovery = 95.12%								
B 249.677†	24860.9	510.67	ug/L	2.071	510.67	ppb	2.071	0.41%
QC value within limits for B 249.677 Recovery = 102.13%								
Ba 233.527†	69245.5	506.18	ug/L	2.330	506.18	ppb	2.330	0.46%
QC value within limits for Ba 233.527 Recovery = 101.24%								
Be 313.107†	766979.6	260.21	ug/L	1.271	260.21	ppb	1.271	0.49%
QC value within limits for Be 313.107 Recovery = 104.08%								

Ca 317.933Radial†	2980.3	4994.0 ug/L	14.95	4994.0 ppb	14.95	0.30%
QC value within limits for Ca 317.933Radial Recovery = 99.88%						
Cd 226.502†	52637.4	495.56 ug/L	1.456	495.56 ppb	1.456	0.29%
QC value within limits for Cd 226.502 Recovery = 99.11%						
Co 228.616†	26436.1	497.30 ug/L	2.326	497.30 ppb	2.326	0.47%
QC value within limits for Co 228.616 Recovery = 99.46%						
Cr 267.716†	48326.9	485.02 ug/L	2.122	485.02 ppb	2.122	0.44%
QC value within limits for Cr 267.716 Recovery = 97.00%						
Cu 324.752†	169389.0	501.76 ug/L	2.384	501.76 ppb	2.384	0.48%
QC value within limits for Cu 324.752 Recovery = 100.35%						
Fe 238.204 Radial†	583.6	5143.6 ug/L	51.43	5143.6 ppb	51.43	1.00%
QC value within limits for Fe 238.204 Radial Recovery = 102.87%						
K 766.490 Radial†	12518.2	2479.5 ug/L	25.56	2479.5 ppb	25.56	1.03%
QC value within limits for K 766.490 Radial Recovery = 99.18%						
Mg 279.077 IEC†	165.0	5280.7 ug/L	93.33	5280.7 ppb	93.33	1.77%
QC value within limits for Mg 279.077 IEC Recovery = 105.61%						
Mn 257.610†	486217.6	512.72 ug/L	2.237	512.72 ppb	2.237	0.44%
QC value within limits for Mn 257.610 Recovery = 102.54%						
Mo 202.031†	8485.6	532.09 ug/L	2.226	532.09 ppb	2.226	0.42%
QC value within limits for Mo 202.031 Recovery = 106.42%						
Na 589.592 Radial†	8568.3	2588.3 ug/L	18.04	2588.3 ppb	18.04	0.70%
QC value within limits for Na 589.592 Radial Recovery = 103.53%						
Ni 231.604†	22469.8	492.95 ug/L	2.762	492.95 ppb	2.762	0.56%
QC value within limits for Ni 231.604 Recovery = 98.59%						
P 214.914†	5099.7	2410.6 ug/L	9.41	2410.6 ppb	9.41	0.39%
QC value within limits for P 214.914 Recovery = 96.42%						
Pb 220.353†	4782.5	497.06 ug/L	1.840	497.06 ppb	1.840	0.37%
QC value within limits for Pb 220.353 Recovery = 99.41%						
S 181.975 Axial†	2170.4	2451.9 ug/L	16.61	2451.9 ppb	16.61	0.68%
QC value within limits for S 181.975 Axial Recovery = 98.08%						
Sb 206.836†	1651.1	501.98 ug/L	6.414	501.98 ppb	6.414	1.28%
QC value within limits for Sb 206.836 Recovery = 100.40%						
Se 196.026†	4983.2	2568.3 ug/L	12.98	2568.3 ppb	12.98	0.51%
QC value within limits for Se 196.026 Recovery = 102.73%						
Si 251.611†	166172.4	4755.2 ug/L	21.52	4755.2 ppb	21.52	0.45%
QC value within limits for Si 251.611 Recovery = 95.10%						
Sn 189.927†	3577.7	529.77 ug/L	4.123	529.77 ppb	4.123	0.78%
QC value within limits for Sn 189.927 Recovery = 105.95%						
Sr 421.552†	72854.3	533.37 ug/L	4.852	533.37 ppb	4.852	0.91%
QC value within limits for Sr 421.552 Recovery = 106.67%						
Ti 334.940†	313643.1	497.50 ug/L	2.355	497.50 ppb	2.355	0.47%
QC value within limits for Ti 334.940 Recovery = 99.50%						
Tl 190.801†	1913.7	526.05 ug/L	1.138	526.05 ppb	1.138	0.22%
QC value within limits for Tl 190.801 Recovery = 105.21%						
U 409.014†	16462.5	487.82 ug/L	6.639	487.82 ppb	6.639	1.36%
QC value within limits for U 409.014 Recovery = 97.56%						
V 292.402†	80123.3	510.13 ug/L	2.587	510.13 ppb	2.587	0.51%
QC value within limits for V 292.402 Recovery = 102.03%						
Zn 213.857†	61710.9	503.21 ug/L	2.277	503.21 ppb	2.277	0.45%
QC value within limits for Zn 213.857 Recovery = 100.64%						
SiO2†	165040.6	10106 ug/L	54.7	10106 ppb	54.7	0.54%
QC value within limits for SiO2 Recovery = 94.49%						

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 1/6/2010 10:44:40
Data Type: Reprocessed on 1/6/2010 11:55:32
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	887280.4	887280.4	100.08	%			10:47:50
1	Sc Radial	4700.6	4700.6	101	%			10:46:33
1	Y 371.029	762353.6	762353.6	100.08	%			10:47:50
1	Y RADIAL	4975.1	4975.1	100.9	%			10:46:33
1	Ag 328.068†	578.7	66.0	0.2835	ug/L	0.2835	ppb	10:47:55
1	Al 396.153Radial†	6.3	33.0	29.215	ug/L	29.215	ppb	10:46:33
1	As 188.979†	-34.7	-1.2	-0.4330	ug/L	-0.4330	ppb	10:48:15
1	B 249.677†	-414.0	252.1	5.2003	ug/L	5.2003	ppb	10:47:55
1	Ba 233.527†	32.2	24.6	0.1800	ug/L	0.1800	ppb	10:48:15
1	Be 313.107†	-4259.0	95.7	0.0324	ug/L	0.0324	ppb	10:47:55
1	Ca 317.933Radial†	23.7	11.0	18.355	ug/L	18.355	ppb	10:46:53
1	Cd 226.502†	-236.8	1.8	0.0179	ug/L	0.0179	ppb	10:48:15
1	Co 228.616†	-93.5	-9.5	-0.1754	ug/L	-0.1754	ppb	10:48:15
1	Cr 267.716†	169.9	65.7	0.6597	ug/L	0.6597	ppb	10:47:55
1	Cu 324.752†	7947.1	-57.9	-0.1719	ug/L	-0.1719	ppb	10:47:55
1	Fe 238.204 Radial†	12.8	-1.1	-9.8464	ug/L	-9.8464	ppb	10:46:53
1	K 766.490 Radial†	3328.9	-31.3	-6.2120	ug/L	-6.2120	ppb	10:46:33
1	Mg 279.077 IEC†	5.2	3.5	111.29	ug/L	111.29	ppb	10:46:53
1	Mn 257.610†	576.1	59.3	0.0594	ug/L	0.0594	ppb	10:47:55
1	Mo 202.031†	34.6	14.6	0.9162	ug/L	0.9162	ppb	10:48:15
1	Na 589.592 Radial†	-1693.2	68.9	20.802	ug/L	20.802	ppb	10:46:33
1	Ni 231.604†	154.8	29.6	0.6495	ug/L	0.6495	ppb	10:48:15
1	P 214.914†	270.5	21.7	10.641	ug/L	10.641	ppb	10:48:15
1	Pb 220.353†	-87.1	-9.2	-0.9477	ug/L	-0.9477	ppb	10:48:15
1	S 181.975 Axial†	57.7	-2.3	-2.5814	ug/L	-2.5814	ppb	10:48:15
1	Sb 206.836†	46.0	8.9	2.6823	ug/L	2.6823	ppb	10:48:15
1	Se 196.026†	-28.9	4.4	2.2057	ug/L	2.2057	ppb	10:48:15
1	Si 251.611†	668.3	51.3	1.4538	ug/L	1.4538	ppb	10:48:15
1	Sn 189.927†	9.4	6.0	0.8890	ug/L	0.8890	ppb	10:48:15
1	Sr 421.552†	31.7	15.5	0.1132	ug/L	0.1132	ppb	10:46:33
1	Ti 334.940†	-1819.0	-0.3	0.0015	ug/L	0.0015	ppb	10:47:55
1	Tl 190.801†	-44.2	9.2	2.5136	ug/L	2.5136	ppb	10:48:15
1	U 409.014†	-2765.4	-94.6	-2.8110	ug/L	-2.8110	ppb	10:47:50
1	V 292.402†	-1751.4	51.8	0.3365	ug/L	0.3365	ppb	10:47:55
1	Zn 213.857†	904.4	72.0	0.5850	ug/L	0.5850	ppb	10:48:15
1	SiO2†	710.9	74.3	4.5260	ug/L	4.5260	ppb	10:49:21
2	Sc 361.383	883890.9	883890.9	99.693	%			10:48:20
2	Sc Radial	4679.7	4679.7	100	%			10:46:58
2	Y 371.029	758461.0	758461.0	99.567	%			10:48:20
2	Y RADIAL	4921.0	4921.0	99.76	%			10:46:58
2	Ag 328.068†	470.6	-40.3	-0.1638	ug/L	-0.1638	ppb	10:48:25
2	Al 396.153Radial†	-17.6	9.1	8.0671	ug/L	8.0671	ppb	10:46:58
2	As 188.979†	-29.7	3.6	1.2519	ug/L	1.2519	ppb	10:48:45
2	B 249.677†	-379.8	284.8	5.8698	ug/L	5.8698	ppb	10:48:25
2	Ba 233.527†	-1.7	-9.3	-0.0668	ug/L	-0.0668	ppb	10:48:45
2	Be 313.107†	-4371.6	-33.6	-0.0115	ug/L	-0.0115	ppb	10:48:25
2	Ca 317.933Radial†	27.7	15.1	25.290	ug/L	25.290	ppb	10:47:18
2	Cd 226.502†	-245.6	-8.0	-0.0772	ug/L	-0.0772	ppb	10:48:45
2	Co 228.616†	-81.3	2.5	0.0475	ug/L	0.0475	ppb	10:48:45
2	Cr 267.716†	72.3	-31.5	-0.3142	ug/L	-0.3142	ppb	10:48:25
2	Cu 324.752†	8005.0	30.6	0.0918	ug/L	0.0918	ppb	10:48:25
2	Fe 238.204 Radial†	16.5	2.5	22.405	ug/L	22.405	ppb	10:47:18
2	K 766.490 Radial†	3266.9	-78.2	-15.531	ug/L	-15.531	ppb	10:46:58
2	Mg 279.077 IEC†	6.2	4.6	146.57	ug/L	146.57	ppb	10:47:18
2	Mn 257.610†	547.8	33.1	0.0344	ug/L	0.0344	ppb	10:48:25
2	Mo 202.031†	28.2	8.4	0.5288	ug/L	0.5288	ppb	10:48:45
2	Na 589.592 Radial†	-1736.9	17.6	5.3292	ug/L	5.3292	ppb	10:46:58
2	Ni 231.604†	122.0	-2.7	-0.0600	ug/L	-0.0600	ppb	10:48:45

2	P 214.914†	252.5	4.7	2.2638 ug/L	2.2638 ppb	10:48:45
2	Pb 220.353†	-87.6	-10.1	-1.0474 ug/L	-1.0474 ppb	10:48:45
2	S 181.975 Axial†	60.1	0.4	0.4845 ug/L	0.4845 ppb	10:48:45
2	Sb 206.836†	44.0	7.0	2.1190 ug/L	2.1190 ppb	10:48:45
2	Se 196.026†	-31.9	1.3	0.7134 ug/L	0.7134 ppb	10:48:45
2	Si 251.611†	664.7	50.2	1.4339 ug/L	1.4339 ppb	10:48:45
2	Sn 189.927†	6.7	3.3	0.4945 ug/L	0.4945 ppb	10:48:45
2	Sr 421.552†	19.9	3.9	0.0283 ug/L	0.0283 ppb	10:46:58
2	Ti 334.940†	-1853.3	-41.7	-0.0638 ug/L	-0.0638 ppb	10:48:25
2	Tl 190.801†	-47.7	5.6	1.5221 ug/L	1.5221 ppb	10:48:45
2	U 409.014†	-2732.6	-72.2	-2.1498 ug/L	-2.1498 ppb	10:48:20
2	V 292.402†	-1788.5	7.8	0.0523 ug/L	0.0523 ppb	10:48:25
2	Zn 213.857†	890.3	61.4	0.4990 ug/L	0.4990 ppb	10:48:45
2	SiO2†	656.1	22.1	1.3473 ug/L	1.3473 ppb	10:49:26
3	Sc 361.383	881844.3	881844.3	99.463 %		10:48:51
3	Sc Radial	4730.7	4730.7	101 %		10:47:23
3	Y 371.029	757223.1	757223.1	99.405 %		10:48:51
3	Y RADIAL	4981.0	4981.0	101.0 %		10:47:23
3	Ag 328.068†	598.1	89.0	0.3682 ug/L	0.3682 ppb	10:48:56
3	Al 396.153Radial†	-39.0	-11.7	-10.402 ug/L	-10.402 ppb	10:47:23
3	As 188.979†	-23.7	9.6	3.3395 ug/L	3.3395 ppb	10:49:16
3	B 249.677†	-385.7	278.1	5.7395 ug/L	5.7395 ppb	10:48:56
3	Ba 233.527†	2.2	-5.2	-0.0390 ug/L	-0.0390 ppb	10:49:16
3	Be 313.107†	-4297.4	30.9	0.0105 ug/L	0.0105 ppb	10:48:56
3	Ca 317.933Radial†	17.4	4.6	7.6932 ug/L	7.6932 ppb	10:47:43
3	Cd 226.502†	-225.4	11.7	0.1141 ug/L	0.1141 ppb	10:49:16
3	Co 228.616†	-92.2	-8.7	-0.1625 ug/L	-0.1625 ppb	10:49:16
3	Cr 267.716†	121.8	18.4	0.1828 ug/L	0.1828 ppb	10:48:56
3	Cu 324.752†	8074.5	119.1	0.3507 ug/L	0.3507 ppb	10:48:56
3	Fe 238.204 Radial†	9.9	-4.1	-36.031 ug/L	-36.031 ppb	10:47:43
3	K 766.490 Radial†	3300.1	-80.7	-16.033 ug/L	-16.033 ppb	10:47:23
3	Mg 279.077 IEC†	5.0	3.3	106.65 ug/L	106.65 ppb	10:47:43
3	Mn 257.610†	527.8	14.3	0.0095 ug/L	0.0095 ppb	10:48:56
3	Mo 202.031†	25.2	5.4	0.3373 ug/L	0.3373 ppb	10:49:16
3	Na 589.592 Radial†	-1666.8	105.5	31.869 ug/L	31.869 ppb	10:47:23
3	Ni 231.604†	115.1	-9.3	-0.2042 ug/L	-0.2042 ppb	10:49:16
3	P 214.914†	245.4	-1.8	-0.9247 ug/L	-0.9247 ppb	10:49:16
3	Pb 220.353†	-100.2	-23.0	-2.3814 ug/L	-2.3814 ppb	10:49:16
3	S 181.975 Axial†	55.0	-4.6	-5.1525 ug/L	-5.1525 ppb	10:49:16
3	Sb 206.836†	58.9	22.1	6.6083 ug/L	6.6083 ppb	10:49:16
3	Se 196.026†	-24.7	8.4	4.1781 ug/L	4.1781 ppb	10:49:16
3	Si 251.611†	670.0	57.0	1.6361 ug/L	1.6361 ppb	10:49:16
3	Sn 189.927†	1.5	-1.9	-0.2812 ug/L	-0.2812 ppb	10:49:16
3	Sr 421.552†	-14.3	-30.1	-0.2203 ug/L	-0.2203 ppb	10:47:23
3	Ti 334.940†	-1775.1	32.6	0.0509 ug/L	0.0509 ppb	10:48:56
3	Tl 190.801†	-51.0	2.1	0.5852 ug/L	0.5852 ppb	10:49:16
3	U 409.014†	-2560.8	94.1	2.8018 ug/L	2.8018 ppb	10:48:51
3	V 292.402†	-1781.6	10.6	0.0843 ug/L	0.0843 ppb	10:48:56
3	Zn 213.857†	874.0	47.1	0.3862 ug/L	0.3862 ppb	10:49:16
3	SiO2†	736.2	104.1	6.3943 ug/L	6.3943 ppb	10:49:31

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	884338.5	99.744	%	0.3097				0.31%
Sc Radial	4703.7	101	%	0.5				0.55%
Y 371.029	759345.9	99.684	%	0.3515				0.35%
Y RADIAL	4959.1	100.5	%	0.67				0.67%
Ag 328.068†	38.2	0.1626	ug/L	0.28587	0.1626	ppb	0.28587	175.79%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	10.1	8.9600	ug/L	19.82374	8.9600	ppb	19.82374	221.25%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.0	1.3861	ug/L	1.88986	1.3861	ppb	1.88986	136.34%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	271.7	5.6032	ug/L	0.35498	5.6032	ppb	0.35498	6.34%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	3.4	0.0247	ug/L	0.13521	0.0247	ppb	0.13521	546.69%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	31.0	0.0105	ug/L	0.02191	0.0105	ppb	0.02191	209.31%
QC value within limits for Be 313.107 Recovery = Not calculated								

Ca 317.933Radial†	10.2	17.113 ug/L	8.8641	17.113 ppb	8.8641	51.80%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	1.8	0.0183 ug/L	0.09567	0.0183 ppb	0.09567	523.59%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-5.2	-0.0968 ug/L	0.12513	-0.0968 ppb	0.12513	129.26%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	17.5	0.1761 ug/L	0.48700	0.1761 ppb	0.48700	276.53%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	30.6	0.0902 ug/L	0.26132	0.0902 ppb	0.26132	289.73%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.9	-7.8241 ug/L	29.27009	-7.8241 ppb	29.27009	374.10%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-63.4	-12.592 ug/L	5.5311	-12.592 ppb	5.5311	43.92%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	3.8	121.50 ug/L	21.831	121.50 ppb	21.831	17.97%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	35.5	0.0344 ug/L	0.02496	0.0344 ppb	0.02496	72.55%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	9.5	0.5941 ug/L	0.29489	0.5941 ppb	0.29489	49.64%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	64.0	19.333 ug/L	13.3307	19.333 ppb	13.3307	68.95%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	5.8	0.1284 ug/L	0.45698	0.1284 ppb	0.45698	355.80%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	8.2	3.9933 ug/L	5.97360	3.9933 ppb	5.97360	149.59%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-14.1	-1.4589 ug/L	0.80054	-1.4589 ppb	0.80054	54.87%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-2.1	-2.4165 ug/L	2.82211	-2.4165 ppb	2.82211	116.79%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	12.7	3.8032 ug/L	2.44553	3.8032 ppb	2.44553	64.30%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	4.7	2.3657 ug/L	1.73788	2.3657 ppb	1.73788	73.46%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	52.8	1.5080 ug/L	0.11146	1.5080 ppb	0.11146	7.39%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	2.5	0.3674 ug/L	0.59538	0.3674 ppb	0.59538	162.04%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-3.6	-0.0263 ug/L	0.17334	-0.0263 ppb	0.17334	659.55%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-3.1	-0.0038 ug/L	0.05750	-0.0038 ppb	0.05750	>999.9%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	5.6	1.5403 ug/L	0.96431	1.5403 ppb	0.96431	62.60%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-24.2	-0.7197 ug/L	3.06754	-0.7197 ppb	3.06754	426.23%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	23.4	0.1577 ug/L	0.15568	0.1577 ppb	0.15568	98.71%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	60.2	0.4901 ug/L	0.09967	0.4901 ppb	0.09967	20.34%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	66.9	4.0892 ug/L	2.55169	4.0892 ppb	2.55169	62.40%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 1/6/2010 10:51:42
Data Type: Reprocessed on 1/6/2010 11:55:33
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	864890.2	864890.2	97.550	%			10:54:52
1	Sc Radial	4615.5	4615.5	98.9	%			10:53:35
1	Y 371.029	744403.8	744403.8	97.722	%			10:54:52
1	Y RADIAL	4870.5	4870.5	98.73	%			10:53:35
1	Ag 328.068†	1666.1	1195.6	5.1487	ug/L	5.1487	ppb	10:54:52
1	Al 396.153Radial†	219.5	248.7	220.16	ug/L	220.16	ppb	10:53:35
1	As 188.979†	48.9	83.6	29.265	ug/L	29.265	ppb	10:55:12
1	B 249.677†	1786.7	2497.4	51.469	ug/L	51.469	ppb	10:55:12
1	Ba 233.527†	713.3	723.7	5.2911	ug/L	5.2911	ppb	10:55:12
1	Be 313.107†	10181.7	14788.9	5.0087	ug/L	5.0087	ppb	10:54:52
1	Ca 317.933Radial†	139.5	128.5	215.32	ug/L	215.32	ppb	10:53:55
1	Cd 226.502†	270.6	515.8	4.8513	ug/L	4.8513	ppb	10:55:12
1	Co 228.616†	165.6	253.7	4.7842	ug/L	4.7842	ppb	10:55:12
1	Cr 267.716†	602.9	514.0	5.1464	ug/L	5.1464	ppb	10:55:12
1	Cu 324.752†	11320.6	3605.9	10.681	ug/L	10.681	ppb	10:54:52
1	Fe 238.204 Radial†	24.7	11.1	97.487	ug/L	97.487	ppb	10:53:55
1	K 766.490 Radial†	4010.4	718.9	142.49	ug/L	142.49	ppb	10:53:35
1	Mg 279.077 IEC†	12.5	11.0	351.81	ug/L	351.81	ppb	10:53:55
1	Mn 257.610†	10207.6	9947.6	10.484	ug/L	10.484	ppb	10:54:52
1	Mo 202.031†	173.7	158.1	9.9167	ug/L	9.9167	ppb	10:55:12
1	Na 589.592 Radial†	-812.7	928.3	280.42	ug/L	280.42	ppb	10:53:35
1	Ni 231.604†	359.3	243.3	5.3375	ug/L	5.3375	ppb	10:55:12
1	P 214.914†	560.6	326.1	157.39	ug/L	157.39	ppb	10:55:12
1	Pb 220.353†	11.0	89.0	9.2802	ug/L	9.2802	ppb	10:55:12
1	S 181.975 Axial†	145.2	88.9	100.43	ug/L	100.43	ppb	10:55:12
1	Sb 206.836†	76.5	41.3	12.599	ug/L	12.599	ppb	10:55:12
1	Se 196.026†	34.9	69.1	35.713	ug/L	35.713	ppb	10:55:12
1	Si 251.611†	4048.3	3533.4	101.11	ug/L	101.11	ppb	10:55:12
1	Sn 189.927†	66.4	64.7	9.5959	ug/L	9.5959	ppb	10:55:12
1	Sr 421.552†	681.4	673.1	4.9260	ug/L	4.9260	ppb	10:53:35
1	Ti 334.940†	1405.7	3258.4	5.1599	ug/L	5.1599	ppb	10:54:52
1	Tl 190.801†	23.8	77.8	21.321	ug/L	21.321	ppb	10:55:12
1	U 409.014†	-1169.6	1469.8	43.672	ug/L	43.672	ppb	10:54:52
1	V 292.402†	-943.7	834.4	5.4501	ug/L	5.4501	ppb	10:55:12
1	Zn 213.857†	2094.7	1315.6	10.754	ug/L	10.754	ppb	10:55:12
1	SiO2†	4055.3	3521.1	215.61	ug/L	215.61	ppb	10:56:08
2	Sc 361.383	862681.9	862681.9	97.301	%			10:55:18
2	Sc Radial	4754.1	4754.1	102	%			10:54:00
2	Y 371.029	742521.1	742521.1	97.475	%			10:55:18
2	Y RADIAL	5002.0	5002.0	101.4	%			10:54:00
2	Ag 328.068†	1578.1	1109.5	4.7828	ug/L	4.7828	ppb	10:55:18
2	Al 396.153Radial†	210.6	233.5	206.60	ug/L	206.60	ppb	10:54:00
2	As 188.979†	48.6	83.4	29.197	ug/L	29.197	ppb	10:55:38
2	B 249.677†	1770.5	2485.5	51.222	ug/L	51.222	ppb	10:55:38
2	Ba 233.527†	700.4	712.3	5.2089	ug/L	5.2089	ppb	10:55:38
2	Be 313.107†	10220.4	14855.4	5.0311	ug/L	5.0311	ppb	10:55:18
2	Ca 317.933Radial†	134.8	119.8	200.76	ug/L	200.76	ppb	10:54:20
2	Cd 226.502†	289.3	535.7	5.0374	ug/L	5.0374	ppb	10:55:38
2	Co 228.616†	167.8	256.4	4.8384	ug/L	4.8384	ppb	10:55:38
2	Cr 267.716†	566.5	478.2	4.7880	ug/L	4.7880	ppb	10:55:38
2	Cu 324.752†	11291.1	3605.3	10.680	ug/L	10.680	ppb	10:55:18
2	Fe 238.204 Radial†	26.8	12.5	109.61	ug/L	109.61	ppb	10:54:20
2	K 766.490 Radial†	4121.7	710.0	140.70	ug/L	140.70	ppb	10:54:00
2	Mg 279.077 IEC†	14.7	12.8	410.58	ug/L	410.58	ppb	10:54:20
2	Mn 257.610†	10171.1	9936.8	10.473	ug/L	10.473	ppb	10:55:18
2	Mo 202.031†	193.2	178.6	11.199	ug/L	11.199	ppb	10:55:38
2	Na 589.592 Radial†	-664.3	1097.9	331.66	ug/L	331.66	ppb	10:54:00
2	Ni 231.604†	359.6	244.5	5.3646	ug/L	5.3646	ppb	10:55:38

2	P 214.914†	540.0	306.4	147.80 ug/L	147.80 ppb	10:55:38
2	Pb 220.353†	-4.4	73.3	7.6473 ug/L	7.6473 ppb	10:55:38
2	S 181.975 Axial†	153.9	98.2	110.96 ug/L	110.96 ppb	10:55:38
2	Sb 206.836†	82.6	47.8	14.571 ug/L	14.571 ppb	10:55:38
2	Se 196.026†	23.0	56.9	29.508 ug/L	29.508 ppb	10:55:38
2	Si 251.611†	4055.7	3551.6	101.61 ug/L	101.61 ppb	10:55:38
2	Sn 189.927†	69.5	68.0	10.077 ug/L	10.077 ppb	10:55:38
2	Sr 421.552†	680.6	652.3	4.7737 ug/L	4.7737 ppb	10:54:00
2	Ti 334.940†	1359.5	3214.5	5.0894 ug/L	5.0894 ppb	10:55:18
2	Tl 190.801†	32.2	86.5	23.700 ug/L	23.700 ppb	10:55:38
2	U 409.014†	-1144.5	1492.5	44.347 ug/L	44.347 ppb	10:55:18
2	V 292.402†	-926.4	849.7	5.5654 ug/L	5.5654 ppb	10:55:38
2	Zn 213.857†	2085.8	1312.0	10.721 ug/L	10.721 ppb	10:55:38
2	SiO2†	4086.4	3563.7	218.18 ug/L	218.18 ppb	10:56:13
3	Sc 361.383	872526.3	872526.3	98.412 %		10:55:43
3	Sc Radial	4661.1	4661.1	99.9 %		10:54:26
3	Y 371.029	750241.4	750241.4	98.488 %		10:55:43
3	Y RADIAL	4937.4	4937.4	100.1 %		10:54:26
3	Ag 328.068†	1623.4	1137.3	4.9014 ug/L	4.9014 ppb	10:55:43
3	Al 396.153Radial†	216.7	243.8	215.75 ug/L	215.75 ppb	10:54:26
3	As 188.979†	47.1	81.3	28.469 ug/L	28.469 ppb	10:56:03
3	B 249.677†	1751.4	2445.5	50.399 ug/L	50.399 ppb	10:56:03
3	Ba 233.527†	706.2	710.1	5.1916 ug/L	5.1916 ppb	10:56:03
3	Be 313.107†	10363.1	14881.9	5.0399 ug/L	5.0399 ppb	10:55:43
3	Ca 317.933Radial†	139.2	126.9	212.59 ug/L	212.59 ppb	10:54:46
3	Cd 226.502†	272.7	515.5	4.8480 ug/L	4.8480 ppb	10:56:03
3	Co 228.616†	158.4	245.0	4.6209 ug/L	4.6209 ppb	10:56:03
3	Cr 267.716†	576.9	482.2	4.8283 ug/L	4.8283 ppb	10:56:03
3	Cu 324.752†	11366.5	3551.0	10.518 ug/L	10.518 ppb	10:55:43
3	Fe 238.204 Radial†	25.7	11.8	104.23 ug/L	104.23 ppb	10:54:46
3	K 766.490 Radial†	4132.4	801.4	158.86 ug/L	158.86 ppb	10:54:26
3	Mg 279.077 IEC†	14.8	13.2	421.14 ug/L	421.14 ppb	10:54:46
3	Mn 257.610†	10368.6	10019.5	10.560 ug/L	10.560 ppb	10:55:43
3	Mo 202.031†	183.5	166.6	10.445 ug/L	10.445 ppb	10:56:03
3	Na 589.592 Radial†	-719.9	1029.2	310.91 ug/L	310.91 ppb	10:54:26
3	Ni 231.604†	357.1	237.8	5.2178 ug/L	5.2178 ppb	10:56:03
3	P 214.914†	529.6	289.5	139.61 ug/L	139.61 ppb	10:56:03
3	Pb 220.353†	1.8	79.6	8.3021 ug/L	8.3021 ppb	10:56:03
3	S 181.975 Axial†	142.6	85.0	96.017 ug/L	96.017 ppb	10:56:03
3	Sb 206.836†	69.5	33.5	10.312 ug/L	10.312 ppb	10:56:03
3	Se 196.026†	31.2	64.9	33.613 ug/L	33.613 ppb	10:56:03
3	Si 251.611†	4006.5	3454.6	98.832 ug/L	98.832 ppb	10:56:03
3	Sn 189.927†	76.4	74.3	11.010 ug/L	11.010 ppb	10:56:03
3	Sr 421.552†	673.2	658.2	4.8171 ug/L	4.8171 ppb	10:54:26
3	Ti 334.940†	1360.9	3200.2	5.0685 ug/L	5.0685 ppb	10:55:43
3	Tl 190.801†	31.5	85.3	23.387 ug/L	23.387 ppb	10:56:03
3	U 409.014†	-1259.2	1389.2	41.277 ug/L	41.277 ppb	10:55:43
3	V 292.402†	-985.6	800.3	5.2394 ug/L	5.2394 ppb	10:56:03
3	Zn 213.857†	2075.9	1277.8	10.440 ug/L	10.440 ppb	10:56:03
3	SiO2†	4122.9	3553.4	217.55 ug/L	217.55 ppb	10:56:18

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	866699.4	97.754	%	0.5826				0.60%
Sc Radial	4676.9	100	%	1.5				1.51%
Y 371.029	745722.1	97.895	%	0.5284				0.54%
Y RADIAL	4936.6	100.1	%	1.33				1.33%
Ag 328.068†	1147.5	4.9443	ug/L	0.18669	4.9443	ppb	0.18669	3.78%
QC value within limits for Ag 328.068 Recovery = 98.89%								
Al 396.153Radial†	242.0	214.17	ug/L	6.917	214.17	ppb	6.917	3.23%
QC value within limits for Al 396.153Radial Recovery = 107.09%								
As 188.979†	82.7	28.977	ug/L	0.4416	28.977	ppb	0.4416	1.52%
QC value within limits for As 188.979 Recovery = 96.59%								
B 249.677†	2476.1	51.030	ug/L	0.5600	51.030	ppb	0.5600	1.10%
QC value within limits for B 249.677 Recovery = 102.06%								
Ba 233.527†	715.4	5.2305	ug/L	0.05318	5.2305	ppb	0.05318	1.02%
QC value within limits for Ba 233.527 Recovery = 104.61%								
Be 313.107†	14842.1	5.0266	ug/L	0.01610	5.0266	ppb	0.01610	0.32%
QC value within limits for Be 313.107 Recovery = 100.53%								

Ca 317.933Radial†	125.1	209.56 ug/L	7.740	209.56 ppb	7.740	3.69%
QC value within limits for Ca 317.933Radial Recovery = 104.78%						
Cd 226.502†	522.3	4.9122 ug/L	0.10842	4.9122 ppb	0.10842	2.21%
QC value within limits for Cd 226.502 Recovery = 98.24%						
Co 228.616†	251.7	4.7478 ug/L	0.11318	4.7478 ppb	0.11318	2.38%
QC value within limits for Co 228.616 Recovery = 94.96%						
Cr 267.716†	491.4	4.9209 ug/L	0.19632	4.9209 ppb	0.19632	3.99%
QC value within limits for Cr 267.716 Recovery = 98.42%						
Cu 324.752†	3587.4	10.626 ug/L	0.0933	10.626 ppb	0.0933	0.88%
QC value within limits for Cu 324.752 Recovery = 106.26%						
Fe 238.204 Radial†	11.8	103.78 ug/L	6.074	103.78 ppb	6.074	5.85%
QC value within limits for Fe 238.204 Radial Recovery = 103.78%						
K 766.490 Radial†	743.5	147.35 ug/L	10.005	147.35 ppb	10.005	6.79%
QC value within limits for K 766.490 Radial Recovery = 98.23%						
Mg 279.077 IEC†	12.3	394.51 ug/L	37.353	394.51 ppb	37.353	9.47%
QC value greater than the upper limit for Mg 279.077 IEC Recovery = 131.50%						
Mn 257.610†	9968.0	10.506 ug/L	0.0470	10.506 ppb	0.0470	0.45%
QC value within limits for Mn 257.610 Recovery = 105.06%						
Mo 202.031†	167.8	10.520 ug/L	0.6446	10.520 ppb	0.6446	6.13%
QC value within limits for Mo 202.031 Recovery = 105.20%						
Na 589.592 Radial†	1018.5	307.66 ug/L	25.776	307.66 ppb	25.776	8.38%
QC value within limits for Na 589.592 Radial Recovery = 102.55%						
Ni 231.604†	241.9	5.3066 ug/L	0.07809	5.3066 ppb	0.07809	1.47%
QC value within limits for Ni 231.604 Recovery = 106.13%						
P 214.914†	307.4	148.27 ug/L	8.897	148.27 ppb	8.897	6.00%
QC value within limits for P 214.914 Recovery = 98.84%						
Pb 220.353†	80.6	8.4099 ug/L	0.82175	8.4099 ppb	0.82175	9.77%
QC value within limits for Pb 220.353 Recovery = 84.10%						
S 181.975 Axial†	90.7	102.47 ug/L	7.681	102.47 ppb	7.681	7.50%
QC value within limits for S 181.975 Axial Recovery = 102.47%						
Sb 206.836†	40.9	12.494 ug/L	2.1317	12.494 ppb	2.1317	17.06%
QC value within limits for Sb 206.836 Recovery = 124.94%						
Se 196.026†	63.6	32.945 ug/L	3.1563	32.945 ppb	3.1563	9.58%
QC value within limits for Se 196.026 Recovery = 109.82%						
Si 251.611†	3513.2	100.52 ug/L	1.482	100.52 ppb	1.482	1.47%
QC value within limits for Si 251.611 Recovery = 100.52%						
Sn 189.927†	69.0	10.228 ug/L	0.7190	10.228 ppb	0.7190	7.03%
QC value within limits for Sn 189.927 Recovery = 102.28%						
Sr 421.552†	661.2	4.8389 ug/L	0.07843	4.8389 ppb	0.07843	1.62%
QC value within limits for Sr 421.552 Recovery = 96.78%						
Ti 334.940†	3224.4	5.1059 ug/L	0.04787	5.1059 ppb	0.04787	0.94%
QC value within limits for Ti 334.940 Recovery = 102.12%						
Tl 190.801†	83.2	22.803 ug/L	1.2930	22.803 ppb	1.2930	5.67%
QC value within limits for Tl 190.801 Recovery = 114.01%						
U 409.014†	1450.5	43.099 ug/L	1.6133	43.099 ppb	1.6133	3.74%
QC value within limits for U 409.014 Recovery = 86.20%						
V 292.402†	828.1	5.4183 ug/L	0.16533	5.4183 ppb	0.16533	3.05%
QC value within limits for V 292.402 Recovery = 108.37%						
Zn 213.857†	1301.8	10.638 ug/L	0.1721	10.638 ppb	0.1721	1.62%
QC value within limits for Zn 213.857 Recovery = 106.38%						
SiO2†	3546.1	217.11 ug/L	1.338	217.11 ppb	1.338	0.62%
QC value within limits for SiO2 Recovery = 101.93%						

QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 1/6/2010 10:58:30
Data Type: Reprocessed on 1/6/2010 11:55:34
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	753202.5	753202.5	84.953	%			11:00:55
1	Sc Radial	4258.7	4258.7	91.2	%			11:00:28
1	Y 371.029	636756.7	636756.7	83.591	%			11:00:55
1	Y RADIAL	4458.6	4458.6	90.39	%			11:00:28
1	Ag 328.068†	-10379.9	-12730.8	1.7815	ug/L	1.7815	ppb	11:00:55
1	Al 396.153Radial†	543336.5	595526.4	528190	ug/L	528190	ppb	11:00:23
1	As 188.979†	-110.8	-97.0	-4.7044	ug/L	-4.7044	ppb	11:01:15
1	B 249.677†	4.9	671.6	-11.419	ug/L	-11.419	ppb	11:00:55
1	Ba 233.527†	-722.9	-858.4	-1.4244	ug/L	-1.4244	ppb	11:01:15
1	Be 313.107†	-4139.1	-520.6	-0.2187	ug/L	-0.2187	ppb	11:00:55
1	Ca 317.933Radial†	268839.9	294637.4	493710	ug/L	493710	ppb	11:00:23
1	Cd 226.502†	1292.9	1760.3	-2.4583	ug/L	-2.4583	ppb	11:01:15
1	Co 228.616†	-10.0	72.2	-1.3635	ug/L	-1.3635	ppb	11:01:15
1	Cr 267.716†	-61.3	-176.2	1.6644	ug/L	1.6644	ppb	11:01:15
1	Cu 324.752†	4196.3	-3059.4	0.6567	ug/L	0.6567	ppb	11:00:55
1	Fe 238.204 Radial†	19787.2	21673.0	190440	ug/L	190440	ppb	11:00:28
1	K 766.490 Radial†	2915.0	-141.9	-12.209	ug/L	-12.209	ppb	11:00:23
1	Mg 279.077 IEC†	14063.0	15411.5	492600	ug/L	492600	ppb	11:00:28
1	Mn 257.610†	-569.1	-1186.3	8.5667	ug/L	8.5667	ppb	11:00:55
1	Mo 202.031†	-238.4	-300.6	-0.5758	ug/L	-0.5758	ppb	11:01:15
1	Na 589.592 Radial†	-1538.9	63.5	19.169	ug/L	19.169	ppb	11:00:28
1	Ni 231.604†	227.1	142.3	3.1234	ug/L	3.1234	ppb	11:01:15
1	P 214.914†	231.9	24.4	37.831	ug/L	37.831	ppb	11:01:15
1	Pb 220.353†	-995.9	-1094.5	-10.525	ug/L	-10.525	ppb	11:01:15
1	S 181.975 Axial†	83.4	38.2	-60.693	ug/L	-60.693	ppb	11:01:15
1	Sb 206.836†	61.5	35.3	-2.2838	ug/L	-2.2838	ppb	11:01:15
1	Se 196.026†	-1144.8	-1314.3	-4.4475	ug/L	-4.4475	ppb	11:01:15
1	Si 251.611†	537.0	15.6	0.9976	ug/L	0.9976	ppb	11:01:15
1	Sn 189.927†	-390.5	-463.1	-14.397	ug/L	-14.397	ppb	11:01:15
1	Sr 421.552†	470.2	499.4	-0.9197	ug/L	-0.9197	ppb	11:00:28
1	Ti 334.940†	-13182.1	-13699.6	4.0139	ug/L	4.0139	ppb	11:00:55
1	Tl 190.801†	-107.0	-72.6	-5.5819	ug/L	-5.5819	ppb	11:01:15
1	U 409.014†	-1998.0	316.8	-14.537	ug/L	-14.537	ppb	11:00:55
1	V 292.402†	565.4	2467.3	-2.5903	ug/L	-2.5903	ppb	11:01:15
1	Zn 213.857†	3443.4	3221.6	-0.2562	ug/L	-0.2562	ppb	11:01:15
1	SiO2†	550.4	11.8	1.9222	ug/L	1.9222	ppb	11:02:12
2	Sc 361.383	759275.0	759275.0	85.638	%			11:01:21
2	Sc Radial	4214.5	4214.5	90.3	%			11:00:38
2	Y 371.029	641859.3	641859.3	84.260	%			11:01:21
2	Y RADIAL	4476.8	4476.8	90.75	%			11:00:38
2	Ag 328.068†	-10380.1	-12633.2	2.5928	ug/L	2.5928	ppb	11:01:21
2	Al 396.153Radial†	526541.1	583169.3	517230	ug/L	517230	ppb	11:00:33
2	As 188.979†	-100.8	-84.3	-0.1464	ug/L	-0.1464	ppb	11:01:41
2	B 249.677†	87.7	768.3	-9.5295	ug/L	-9.5295	ppb	11:01:21
2	Ba 233.527†	-705.8	-831.7	-1.2098	ug/L	-1.2098	ppb	11:01:41
2	Be 313.107†	-4067.1	-397.7	-0.1780	ug/L	-0.1780	ppb	11:01:21
2	Ca 317.933Radial†	261146.2	289206.0	484610	ug/L	484610	ppb	11:00:33
2	Cd 226.502†	1288.6	1743.1	-2.7001	ug/L	-2.7001	ppb	11:01:41
2	Co 228.616†	-36.7	41.2	-1.9559	ug/L	-1.9559	ppb	11:01:41
2	Cr 267.716†	-60.1	-174.2	1.6951	ug/L	1.6951	ppb	11:01:41
2	Cu 324.752†	4267.8	-3015.4	0.8279	ug/L	0.8279	ppb	11:01:21
2	Fe 238.204 Radial†	19664.5	21764.5	191240	ug/L	191240	ppb	11:00:38
2	K 766.490 Radial†	2915.7	-107.6	-5.9274	ug/L	-5.9274	ppb	11:00:33
2	Mg 279.077 IEC†	13981.2	15482.5	494870	ug/L	494870	ppb	11:00:38
2	Mn 257.610†	-551.4	-1160.3	8.6320	ug/L	8.6320	ppb	11:01:21
2	Mo 202.031†	-236.8	-296.4	-0.2373	ug/L	-0.2373	ppb	11:01:41
2	Na 589.592 Radial†	-1549.5	34.1	10.299	ug/L	10.299	ppb	11:00:38
2	Ni 231.604†	257.1	175.1	3.8435	ug/L	3.8435	ppb	11:01:41

2	P 214.914†	255.3	49.5	45.646 ug/L	45.646 ppb	11:01:41
2	Pb 220.353†	-991.5	-1080.0	-11.551 ug/L	-11.551 ppb	11:01:41
2	S 181.975 Axial†	88.3	43.2	-52.950 ug/L	-52.950 ppb	11:01:41
2	Sb 206.836†	77.5	53.4	3.4112 ug/L	3.4112 ppb	11:01:41
2	Se 196.026†	-1139.5	-1297.3	5.0374 ug/L	5.0374 ppb	11:01:41
2	Si 251.611†	573.3	52.9	2.0679 ug/L	2.0679 ppb	11:01:41
2	Sn 189.927†	-407.9	-479.7	-17.799 ug/L	-17.799 ppb	11:01:41
2	Sr 421.552†	452.7	485.4	-0.9382 ug/L	-0.9382 ppb	11:00:38
2	Ti 334.940†	-13537.0	-13989.8	3.0739 ug/L	3.0739 ppb	11:01:21
2	Tl 190.801†	-114.3	-80.1	-7.9393 ug/L	-7.9393 ppb	11:01:41
2	U 409.014†	-1707.5	674.9	-3.9930 ug/L	-3.9930 ppb	11:01:21
2	V 292.402†	546.7	2440.3	-2.8065 ug/L	-2.8065 ppb	11:01:41
2	Zn 213.857†	3441.4	3186.9	-0.6655 ug/L	-0.6655 ppb	11:01:41
2	SiO2†	505.9	-45.3	-1.5806 ug/L	-1.5806 ppb	11:02:17
3	Sc 361.383	751186.8	751186.8	84.726 %		11:01:46
3	Sc Radial	4186.9	4186.9	89.7 %		11:00:49
3	Y 371.029	635002.1	635002.1	83.360 %		11:01:46
3	Y RADIAL	4447.4	4447.4	90.16 %		11:00:49
3	Ag 328.068†	-10460.2	-12858.3	1.7968 ug/L	1.7968 ppb	11:01:46
3	Al 396.153Radial†	532654.5	593833.3	526690 ug/L	526690 ppb	11:00:44
3	As 188.979†	-114.1	-101.3	-5.9524 ug/L	-5.9524 ppb	11:02:06
3	B 249.677†	113.1	799.4	-9.0024 ug/L	-9.0024 ppb	11:01:46
3	Ba 233.527†	-713.1	-849.2	-1.3160 ug/L	-1.3160 ppb	11:02:06
3	Be 313.107†	-4125.4	-517.6	-0.2177 ug/L	-0.2177 ppb	11:01:46
3	Ca 317.933Radial†	263738.1	294004.4	492650 ug/L	492650 ppb	11:00:44
3	Cd 226.502†	1283.9	1753.7	-2.6857 ug/L	-2.6857 ppb	11:02:06
3	Co 228.616†	-34.4	43.3	-1.9279 ug/L	-1.9279 ppb	11:02:06
3	Cr 267.716†	-93.5	-214.4	1.3088 ug/L	1.3088 ppb	11:02:06
3	Cu 324.752†	4225.0	-3012.4	0.8806 ug/L	0.8806 ppb	11:01:46
3	Fe 238.204 Radial†	19622.8	21861.8	192100 ug/L	192100 ppb	11:00:49
3	K 766.490 Radial†	2882.8	-123.0	-8.5384 ug/L	-8.5384 ppb	11:00:44
3	Mg 279.077 IEC†	13916.3	15512.4	495830 ug/L	495830 ppb	11:00:49
3	Mn 257.610†	-533.9	-1146.5	8.7140 ug/L	8.7140 ppb	11:01:46
3	Mo 202.031†	-233.8	-295.9	-0.1250 ug/L	-0.1250 ppb	11:02:06
3	Na 589.592 Radial†	-1593.1	-25.9	-7.8365 ug/L	-7.8365 ppb	11:00:49
3	Ni 231.604†	234.5	151.7	3.3293 ug/L	3.3293 ppb	11:02:06
3	P 214.914†	250.9	47.5	47.212 ug/L	47.212 ppb	11:02:06
3	Pb 220.353†	-1005.0	-1108.4	-12.435 ug/L	-12.435 ppb	11:02:06
3	S 181.975 Axial†	96.9	54.5	-42.024 ug/L	-42.024 ppb	11:02:06
3	Sb 206.836†	74.2	50.4	2.3042 ug/L	2.3042 ppb	11:02:06
3	Se 196.026†	-1143.4	-1316.3	-0.5904 ug/L	-0.5904 ppb	11:02:06
3	Si 251.611†	593.1	83.5	2.9418 ug/L	2.9418 ppb	11:02:06
3	Sn 189.927†	-395.6	-470.4	-15.565 ug/L	-15.565 ppb	11:02:06
3	Sr 421.552†	518.1	561.7	-0.4542 ug/L	-0.4542 ppb	11:00:49
3	Ti 334.940†	-13154.2	-13708.3	3.9422 ug/L	3.9422 ppb	11:01:46
3	Tl 190.801†	-98.0	-62.3	-2.8132 ug/L	-2.8132 ppb	11:02:06
3	U 409.014†	-1817.7	523.3	-8.6066 ug/L	-8.6066 ppb	11:01:46
3	V 292.402†	510.1	2403.8	-3.1522 ug/L	-3.1522 ppb	11:02:06
3	Zn 213.857†	3432.7	3219.8	-0.4685 ug/L	-0.4685 ppb	11:02:06
3	SiO2†	498.3	-47.9	-1.7492 ug/L	-1.7492 ppb	11:02:22

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	754554.8	85.106	%	0.4749				0.56%
Sc Radial	4220.0	90.4	%	0.78				0.86%
Y 371.029	637872.7	83.737	%	0.4676				0.56%
Y RADIAL	4461.0	90.43	%	0.300				0.33%
Ag 328.068†	-12740.8	2.0571	ug/L	0.46404	2.0571	ppb	0.46404	22.56%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	590843.0	524030	ug/L	5941.8	524030	ppb	5941.8	1.13%
QC value within limits for Al 396.153Radial Recovery = 104.81%								
As 188.979†	-94.2	-3.6010	ug/L	3.05620	-3.6010	ppb	3.05620	84.87%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	746.4	-9.9835	ug/L	1.27043	-9.9835	ppb	1.27043	12.73%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-846.4	-1.3167	ug/L	0.10732	-1.3167	ppb	0.10732	8.15%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-478.7	-0.2048	ug/L	0.02319	-0.2048	ppb	0.02319	11.32%
QC value within limits for Be 313.107 Recovery = Not calculated								

Ca 317.933Radial†	292615.9	490330 ug/L	4976.7	490330 ppb	4976.7	1.01%
QC value within limits for Ca 317.933Radial Recovery = 98.07%						
Cd 226.502†	1752.4	-2.6147 ug/L	0.13567	-2.6147 ppb	0.13567	5.19%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	52.2	-1.7491 ug/L	0.33421	-1.7491 ppb	0.33421	19.11%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-188.3	1.5561 ug/L	0.21472	1.5561 ppb	0.21472	13.80%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-3029.1	0.7884 ug/L	0.11705	0.7884 ppb	0.11705	14.85%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	21766.4	191260 ug/L	829.5	191260 ppb	829.5	0.43%
QC value within limits for Fe 238.204 Radial Recovery = 95.63%						
K 766.490 Radial†	-124.2	-8.8918 ug/L	3.15589	-8.8918 ppb	3.15589	35.49%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	15468.8	494430 ug/L	1657.1	494430 ppb	1657.1	0.34%
QC value within limits for Mg 279.077 IEC Recovery = 98.89%						
Mn 257.610†	-1164.4	8.6375 ug/L	0.07379	8.6375 ppb	0.07379	0.85%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-297.6	-0.3127 ug/L	0.23467	-0.3127 ppb	0.23467	75.05%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	23.9	7.2102 ug/L	13.76491	7.2102 ppb	13.76491	190.91%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	156.4	3.4321 ug/L	0.37090	3.4321 ppb	0.37090	10.81%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	40.5	43.563 ug/L	5.0252	43.563 ppb	5.0252	11.54%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-1094.3	-11.504 ug/L	0.9561	-11.504 ppb	0.9561	8.31%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	45.3	-51.889 ug/L	9.3800	-51.889 ppb	9.3800	18.08%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	46.4	1.1439 ug/L	3.01962	1.1439 ppb	3.01962	263.98%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-1309.3	-0.0001 ug/L	4.76989	-0.0001 ppb	4.76989	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	50.6	2.0024 ug/L	0.97379	2.0024 ppb	0.97379	48.63%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-471.0	-15.920 ug/L	1.7286	-15.920 ppb	1.7286	10.86%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	515.5	-0.7707 ug/L	0.27428	-0.7707 ppb	0.27428	35.59%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-13799.2	3.6767 ug/L	0.52321	3.6767 ppb	0.52321	14.23%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-71.7	-5.4448 ug/L	2.56579	-5.4448 ppb	2.56579	47.12%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	505.0	-9.0456 ug/L	5.28573	-9.0456 ppb	5.28573	58.43%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	2437.2	-2.8497 ug/L	0.28341	-2.8497 ppb	0.28341	9.95%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	3209.4	-0.4634 ug/L	0.20471	-0.4634 ppb	0.20471	44.18%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	-27.1	-0.4692 ug/L	2.07277	-0.4692 ppb	2.07277	441.76%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 1/6/2010 11:04:33
Data Type: Reprocessed on 1/6/2010 11:55:35

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	779127.1	779127.1	87.877	%			11:06:59
1	Sc Radial	4454.4	4454.4	95.4	%			11:06:31
1	Y 371.029	656369.1	656369.1	86.165	%			11:06:59
1	Y RADIAL	4717.2	4717.2	95.63	%			11:06:31
1	Ag 328.068†	44700.6	50354.8	271.57	ug/L	271.57	ppb	11:06:59
1	Al 396.153Radial†	542854.2	568858.2	504510	ug/L	504510	ppb	11:06:26
1	As 188.979†	1186.0	1383.0	515.64	ug/L	515.64	ppb	11:07:04
1	B 249.677†	22144.7	25865.5	508.09	ug/L	508.09	ppb	11:06:59
1	Ba 233.527†	59785.3	68025.3	501.76	ug/L	501.76	ppb	11:06:59
1	Be 313.107†	638883.9	731370.9	248.18	ug/L	248.18	ppb	11:06:59
1	Ca 317.933Radial†	269440.5	282321.5	473080	ug/L	473080	ppb	11:06:26
1	Cd 226.502†	44934.9	51372.1	466.00	ug/L	466.00	ppb	11:07:04
1	Co 228.616†	21546.0	24602.3	460.14	ug/L	460.14	ppb	11:07:04
1	Cr 267.716†	41176.3	46752.7	472.42	ug/L	472.42	ppb	11:07:04
1	Cu 324.752†	172238.2	187999.8	565.85	ug/L	565.85	ppb	11:06:59
1	Fe 238.204 Radial†	19710.1	20639.4	181370	ug/L	181370	ppb	11:06:31
1	K 766.490 Radial†	28330.7	26349.7	5238.8	ug/L	5238.8	ppb	11:06:26
1	Mg 279.077 IEC†	14049.6	14720.3	470520	ug/L	470520	ppb	11:06:31
1	Mn 257.610†	413808.4	470377.9	504.94	ug/L	504.94	ppb	11:06:59
1	Mo 202.031†	6539.3	7421.5	482.32	ug/L	482.32	ppb	11:07:04
1	Na 589.592 Radial†	15160.6	17636.2	5327.5	ug/L	5327.5	ppb	11:06:31
1	Ni 231.604†	18561.1	20996.6	460.63	ug/L	460.63	ppb	11:07:04
1	P 214.914†	4828.3	5245.8	2498.8	ug/L	2498.8	ppb	11:07:04
1	Pb 220.353†	3022.4	3517.1	463.40	ug/L	463.40	ppb	11:07:04
1	S 181.975 Axial†	2097.2	2326.6	2530.2	ug/L	2530.2	ppb	11:07:04
1	Sb 206.836†	1597.3	1780.5	526.98	ug/L	526.98	ppb	11:07:04
1	Se 196.026†	3327.7	3820.0	2592.9	ug/L	2592.9	ppb	11:07:04
1	Si 251.611†	162299.0	184072.0	5269.3	ug/L	5269.3	ppb	11:06:59
1	Sn 189.927†	2534.0	2880.2	477.84	ug/L	477.84	ppb	11:07:04
1	Sr 421.552†	64399.4	67465.1	489.57	ug/L	489.57	ppb	11:06:26
1	Ti 334.940†	273893.2	313494.8	521.66	ug/L	521.66	ppb	11:06:59
1	Tl 190.801†	1424.0	1673.8	474.24	ug/L	474.24	ppb	11:07:04
1	U 409.014†	13388.8	17904.5	508.55	ug/L	508.55	ppb	11:06:59
1	V 292.402†	71020.6	82619.9	508.63	ug/L	508.63	ppb	11:06:59
1	Zn 213.857†	55652.9	62498.7	484.76	ug/L	484.76	ppb	11:07:04
1	SiO2†	160345.8	181829.9	11138	ug/L	11138	ppb	11:07:31
2	Sc 361.383	782551.7	782551.7	88.263	%			11:07:10
2	Sc Radial	4310.7	4310.7	92.4	%			11:06:41
2	Y 371.029	659175.2	659175.2	86.534	%			11:07:10
2	Y RADIAL	4569.4	4569.4	92.63	%			11:06:41
2	Ag 328.068†	44733.5	50169.5	271.97	ug/L	271.97	ppb	11:07:10
2	Al 396.153Radial†	524292.2	567719.1	503500	ug/L	503500	ppb	11:06:36
2	As 188.979†	1190.8	1382.6	516.02	ug/L	516.02	ppb	11:07:15
2	B 249.677†	22208.8	25827.8	506.84	ug/L	506.84	ppb	11:07:10
2	Ba 233.527†	59710.0	67642.3	499.05	ug/L	499.05	ppb	11:07:10
2	Be 313.107†	638538.1	727797.6	246.96	ug/L	246.96	ppb	11:07:10
2	Ca 317.933Radial†	260192.9	281718.8	472070	ug/L	472070	ppb	11:06:36
2	Cd 226.502†	45076.0	51308.3	465.04	ug/L	465.04	ppb	11:07:15
2	Co 228.616†	21732.6	24706.4	462.06	ug/L	462.06	ppb	11:07:15
2	Cr 267.716†	41362.7	46758.8	472.54	ug/L	472.54	ppb	11:07:15
2	Cu 324.752†	172268.0	187175.8	563.59	ug/L	563.59	ppb	11:07:10
2	Fe 238.204 Radial†	19447.4	21043.4	184920	ug/L	184920	ppb	11:06:41
2	K 766.490 Radial†	27448.6	26384.1	5245.5	ug/L	5245.5	ppb	11:06:36
2	Mg 279.077 IEC†	13853.6	14998.7	479420	ug/L	479420	ppb	11:06:41
2	Mn 257.610†	413221.7	467652.3	502.25	ug/L	502.25	ppb	11:07:10
2	Mo 202.031†	6615.2	7474.9	486.01	ug/L	486.01	ppb	11:07:15
2	Na 589.592 Radial†	14817.5	17794.2	5375.3	ug/L	5375.3	ppb	11:06:41
2	Ni 231.604†	18668.1	21025.4	461.26	ug/L	461.26	ppb	11:07:15

2	P 214.914†	4811.7	5202.9	2474.9 ug/L	2474.9 ppb	11:07:15
2	Pb 220.353†	3019.9	3499.2	461.03 ug/L	461.03 ppb	11:07:15
2	S 181.975 Axial†	2128.5	2351.6	2558.6 ug/L	2558.6 ppb	11:07:15
2	Sb 206.836†	1622.3	1800.9	533.15 ug/L	533.15 ppb	11:07:15
2	Se 196.026†	3297.2	3768.9	2577.5 ug/L	2577.5 ppb	11:07:15
2	Si 251.611†	162156.2	183101.9	5241.4 ug/L	5241.4 ppb	11:07:10
2	Sn 189.927†	2516.2	2847.4	472.92 ug/L	472.92 ppb	11:07:15
2	Sr 421.552†	62261.9	67399.9	489.10 ug/L	489.10 ppb	11:06:36
2	Ti 334.940†	273884.8	312121.3	519.44 ug/L	519.44 ppb	11:07:10
2	Tl 190.801†	1448.5	1694.4	479.82 ug/L	479.82 ppb	11:07:15
2	U 409.014†	13235.3	17663.9	500.95 ug/L	500.95 ppb	11:07:10
2	V 292.402†	70906.1	82136.5	505.30 ug/L	505.30 ppb	11:07:10
2	Zn 213.857†	56331.5	62990.4	488.31 ug/L	488.31 ppb	11:07:15
2	SiO2†	158587.0	179038.7	10966 ug/L	10966 ppb	11:07:36
3	Sc 361.383	775657.2	775657.2	87.486 %		11:07:21
3	Sc Radial	4197.2	4197.2	89.9 %		11:06:52
3	Y 371.029	654106.3	654106.3	85.868 %		11:07:21
3	Y RADIAL	4453.0	4453.0	90.27 %		11:06:52
3	Ag 328.068†	44493.8	50346.0	274.39 ug/L	274.39 ppb	11:07:21
3	Al 396.153Radial†	539688.6	600202.2	532310 ug/L	532310 ppb	11:06:47
3	As 188.979†	1204.7	1410.4	526.71 ug/L	526.71 ppb	11:07:26
3	B 249.677†	22061.1	25882.7	507.15 ug/L	507.15 ppb	11:07:21
3	Ba 233.527†	59567.4	68080.6	502.41 ug/L	502.41 ppb	11:07:21
3	Be 313.107†	635782.5	731078.2	248.08 ug/L	248.08 ppb	11:07:21
3	Ca 317.933Radial†	267429.2	297389.5	498320 ug/L	498320 ppb	11:06:47
3	Cd 226.502†	45046.1	51728.0	468.39 ug/L	468.39 ppb	11:07:26
3	Co 228.616†	21698.9	24886.7	465.37 ug/L	465.37 ppb	11:07:26
3	Cr 267.716†	41445.2	47269.6	477.77 ug/L	477.77 ppb	11:07:26
3	Cu 324.752†	171054.1	187523.2	564.93 ug/L	564.93 ppb	11:07:21
3	Fe 238.204 Radial†	19560.0	21738.4	191030 ug/L	191030 ppb	11:06:52
3	K 766.490 Radial†	28206.6	28031.2	5573.4 ug/L	5573.4 ppb	11:06:47
3	Mg 279.077 IEC†	13930.5	15490.2	495130 ug/L	495130 ppb	11:06:52
3	Mn 257.610†	411428.3	469763.8	504.79 ug/L	504.79 ppb	11:07:21
3	Mo 202.031†	6618.5	7545.3	491.00 ug/L	491.00 ppb	11:07:26
3	Na 589.592 Radial†	15048.5	18485.2	5584.0 ug/L	5584.0 ppb	11:06:52
3	Ni 231.604†	18707.8	21258.7	466.38 ug/L	466.38 ppb	11:07:26
3	P 214.914†	4808.0	5247.2	2501.4 ug/L	2501.4 ppb	11:07:26
3	Pb 220.353†	2979.3	3483.2	465.35 ug/L	465.35 ppb	11:07:26
3	S 181.975 Axial†	2148.9	2396.4	2603.6 ug/L	2603.6 ppb	11:07:26
3	Sb 206.836†	1590.7	1781.1	526.70 ug/L	526.70 ppb	11:07:26
3	Se 196.026†	3309.9	3816.6	2625.3 ug/L	2625.3 ppb	11:07:26
3	Si 251.611†	161445.6	183922.7	5264.7 ug/L	5264.7 ppb	11:07:21
3	Sn 189.927†	2557.6	2920.1	486.49 ug/L	486.49 ppb	11:07:26
3	Sr 421.552†	64130.0	71301.5	517.43 ug/L	517.43 ppb	11:06:47
3	Ti 334.940†	272561.7	313367.1	522.78 ug/L	522.78 ppb	11:07:21
3	Tl 190.801†	1491.8	1758.5	498.12 ug/L	498.12 ppb	11:07:26
3	U 409.014†	13359.2	17938.9	508.35 ug/L	508.35 ppb	11:07:21
3	V 292.402†	70827.0	82760.2	508.71 ug/L	508.71 ppb	11:07:21
3	Zn 213.857†	56121.4	63317.5	490.12 ug/L	490.12 ppb	11:07:26
3	SiO2†	161991.9	184527.6	11303 ug/L	11303 ppb	11:07:42

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	779112.0	87.875	%	0.3888				0.44%
Sc Radial	4320.8	92.6	%	2.76				2.98%
Y 371.029	656550.2	86.189	%	0.3333				0.39%
Y RADIAL	4579.9	92.84	%	2.683				2.89%
Ag 328.068†	50290.1	272.65	ug/L	1.527	272.65	ppb	1.527	0.56%
QC value within limits for Ag 328.068 Recovery = 109.06%								
Al 396.153Radial†	578926.5	513440	ug/L	16349.5	513440	ppb	16349.5	3.18%
QC value within limits for Al 396.153Radial Recovery = 102.69%								
As 188.979†	1392.0	519.46	ug/L	6.281	519.46	ppb	6.281	1.21%
QC value within limits for As 188.979 Recovery = 103.89%								
B 249.677†	25858.6	507.36	ug/L	0.652	507.36	ppb	0.652	0.13%
QC value within limits for B 249.677 Recovery = 101.47%								
Ba 233.527†	67916.1	501.07	ug/L	1.782	501.07	ppb	1.782	0.36%
QC value within limits for Ba 233.527 Recovery = 100.21%								
Be 313.107†	730082.2	247.74	ug/L	0.673	247.74	ppb	0.673	0.27%
QC value within limits for Be 313.107 Recovery = 99.10%								

Ca 317.933Radial†	287143.3	481160 ug/L	14877.5	481160 ppb	14877.5	3.09%
QC value within limits for Ca 317.933Radial Recovery = 96.23%						
Cd 226.502†	51469.4	466.48 ug/L	1.723	466.48 ppb	1.723	0.37%
QC value within limits for Cd 226.502 Recovery = 93.30%						
Co 228.616†	24731.8	462.53 ug/L	2.645	462.53 ppb	2.645	0.57%
QC value within limits for Co 228.616 Recovery = 92.51%						
Cr 267.716†	46927.0	474.24 ug/L	3.056	474.24 ppb	3.056	0.64%
QC value within limits for Cr 267.716 Recovery = 94.85%						
Cu 324.752†	187566.3	564.79 ug/L	1.136	564.79 ppb	1.136	0.20%
QC value within limits for Cu 324.752 Recovery = 112.96%						
Fe 238.204 Radial†	21140.4	185770 ug/L	4884.4	185770 ppb	4884.4	2.63%
QC value within limits for Fe 238.204 Radial Recovery = 92.89%						
K 766.490 Radial†	26921.7	5352.6 ug/L	191.29	5352.6 ppb	191.29	3.57%
QC value within limits for K 766.490 Radial Recovery = 107.05%						
Mg 279.077 IEC†	15069.7	481690 ug/L	12459.7	481690 ppb	12459.7	2.59%
QC value within limits for Mg 279.077 IEC Recovery = 96.34%						
Mn 257.610†	469264.6	503.99 ug/L	1.510	503.99 ppb	1.510	0.30%
QC value within limits for Mn 257.610 Recovery = 100.80%						
Mo 202.031†	7480.6	486.44 ug/L	4.356	486.44 ppb	4.356	0.90%
QC value within limits for Mo 202.031 Recovery = 97.29%						
Na 589.592 Radial†	17971.9	5428.9 ug/L	136.40	5428.9 ppb	136.40	2.51%
QC value within limits for Na 589.592 Radial Recovery = 108.58%						
Ni 231.604†	21093.6	462.76 ug/L	3.154	462.76 ppb	3.154	0.68%
QC value within limits for Ni 231.604 Recovery = 92.55%						
P 214.914†	5232.0	2491.7 ug/L	14.56	2491.7 ppb	14.56	0.58%
QC value within limits for P 214.914 Recovery = 99.67%						
Pb 220.353†	3499.9	463.26 ug/L	2.165	463.26 ppb	2.165	0.47%
QC value within limits for Pb 220.353 Recovery = 92.65%						
S 181.975 Axial†	2358.2	2564.1 ug/L	37.04	2564.1 ppb	37.04	1.44%
QC value within limits for S 181.975 Axial Recovery = 102.57%						
Sb 206.836†	1787.5	528.94 ug/L	3.648	528.94 ppb	3.648	0.69%
QC value within limits for Sb 206.836 Recovery = 105.79%						
Se 196.026†	3801.8	2598.5 ug/L	24.38	2598.5 ppb	24.38	0.94%
QC value within limits for Se 196.026 Recovery = 103.94%						
Si 251.611†	183698.9	5258.4 ug/L	14.95	5258.4 ppb	14.95	0.28%
QC value within limits for Si 251.611 Recovery = 105.17%						
Sn 189.927†	2882.5	479.08 ug/L	6.874	479.08 ppb	6.874	1.43%
QC value within limits for Sn 189.927 Recovery = 95.82%						
Sr 421.552†	68722.2	498.70 ug/L	16.219	498.70 ppb	16.219	3.25%
QC value within limits for Sr 421.552 Recovery = 99.74%						
Ti 334.940†	312994.4	521.29 ug/L	1.701	521.29 ppb	1.701	0.33%
QC value within limits for Ti 334.940 Recovery = 104.26%						
Tl 190.801†	1708.9	484.06 ug/L	12.491	484.06 ppb	12.491	2.58%
QC value within limits for Tl 190.801 Recovery = 96.81%						
U 409.014†	17835.8	505.95 ug/L	4.330	505.95 ppb	4.330	0.86%
QC value within limits for U 409.014 Recovery = 101.19%						
V 292.402†	82505.5	507.55 ug/L	1.950	507.55 ppb	1.950	0.38%
QC value within limits for V 292.402 Recovery = 101.51%						
Zn 213.857†	62935.5	487.73 ug/L	2.725	487.73 ppb	2.725	0.56%
QC value within limits for Zn 213.857 Recovery = 97.55%						
SiO2†	181798.7	11136 ug/L	168.2	11136 ppb	168.2	1.51%
QC value within limits for SiO2 Recovery = 104.12%						

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 1/6/2010 11:09:52
Data Type: Reprocessed on 1/6/2010 11:55:36
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	757190.3	757190.3	85.403	%			11:12:18
1	Sc Radial	4069.5	4069.5	87.2	%			11:11:50
1	Y 371.029	639627.2	639627.2	83.967	%			11:12:18
1	Y RADIAL	4307.8	4307.8	87.33	%			11:11:50
1	Ag 328.068†	-25114.7	-29919.6	3.2743	ug/L	3.2743	ppb	11:12:18
1	Al 396.153Radial†	510246.3	585257.6	519080	ug/L	519080	ppb	11:11:45
1	As 188.979†	-226.9	-232.3	-11.379	ug/L	-11.379	ppb	11:12:38
1	B 249.677†	930.6	1755.6	-23.986	ug/L	-23.986	ppb	11:12:18
1	Ba 233.527†	-1963.0	-2306.0	-5.3258	ug/L	-5.3258	ppb	11:12:38
1	Be 313.107†	-10999.8	-8528.4	-2.9251	ug/L	-2.9251	ppb	11:12:18
1	Ca 317.933Radial†	255686.9	293249.5	491390	ug/L	491390	ppb	11:11:45
1	Cd 226.502†	3401.1	4220.8	-5.5906	ug/L	-5.5906	ppb	11:12:38
1	Co 228.616†	183.2	298.5	-0.9238	ug/L	-0.9238	ppb	11:12:38
1	Cr 267.716†	44.1	-52.4	2.8440	ug/L	2.8440	ppb	11:12:38
1	Cu 324.752†	557.6	-7346.1	1.3885	ug/L	1.3885	ppb	11:12:18
1	Fe 238.204 Radial†	45017.9	51619.7	453570	ug/L	453570	ppb	11:11:50
1	K 766.490 Radial†	3444.5	613.9	-90.690	ug/L	-90.690	ppb	11:11:45
1	Mg 279.077 IEC†	13372.4	15335.9	489960	ug/L	489960	ppb	11:11:50
1	Mn 257.610†	-26979.7	-32107.5	2.2724	ug/L	2.2724	ppb	11:12:18
1	Mo 202.031†	-544.9	-658.0	2.2543	ug/L	2.2543	ppb	11:12:18
1	Na 589.592 Radial†	1546860.8	1775933.7	536470	ug/L	536470	ppb	11:11:45
1	Ni 231.604†	305.8	233.0	5.1111	ug/L	5.1111	ppb	11:12:38
1	P 214.914†	643.8	505.2	58.913	ug/L	58.913	ppb	11:12:38
1	Pb 220.353†	-720.0	-765.3	-0.1074	ug/L	-0.1074	ppb	11:12:38
1	S 181.975 Axial†	91.6	47.4	-48.518	ug/L	-48.518	ppb	11:12:38
1	Sb 206.836†	64.7	38.7	2.6602	ug/L	2.6602	ppb	11:12:38
1	Se 196.026†	-2673.6	-3097.3	-109.20	ug/L	-109.20	ppb	11:12:38
1	Si 251.611†	-394.3	-1078.3	-30.022	ug/L	-30.022	ppb	11:12:38
1	Sn 189.927†	-428.8	-505.5	-17.410	ug/L	-17.410	ppb	11:12:38
1	Sr 421.552†	654.3	734.5	0.8228	ug/L	0.8228	ppb	11:11:50
1	Ti 334.940†	-13218.6	-13660.6	-2.6075	ug/L	-2.6075	ppb	11:12:18
1	Tl 190.801†	-112.2	-78.0	-7.5455	ug/L	-7.5455	ppb	11:12:38
1	U 409.014†	424989.0	500297.0	14816	ug/L	14816	ppb	11:12:18
1	V 292.402†	1846.6	3964.0	-4.7330	ug/L	-4.7330	ppb	11:12:18
1	Zn 213.857†	6309.6	6556.3	13.614	ug/L	13.614	ppb	11:12:38
1	SiO2†	-467.6	-1183.5	-70.679	ug/L	-70.679	ppb	11:13:35
2	Sc 361.383	747932.4	747932.4	84.359	%			11:12:44
2	Sc Radial	4162.5	4162.5	89.2	%			11:12:00
2	Y 371.029	631266.1	631266.1	82.870	%			11:12:44
2	Y RADIAL	4406.2	4406.2	89.32	%			11:12:00
2	Ag 328.068†	-24896.5	-30025.0	2.7957	ug/L	2.7957	ppb	11:12:44
2	Al 396.153Radial†	513742.4	576099.8	510960	ug/L	510960	ppb	11:11:55
2	As 188.979†	-230.4	-239.8	-14.056	ug/L	-14.056	ppb	11:13:04
2	B 249.677†	877.2	1705.6	-24.970	ug/L	-24.970	ppb	11:12:44
2	Ba 233.527†	-1965.8	-2337.8	-5.5667	ug/L	-5.5667	ppb	11:13:04
2	Be 313.107†	-10971.6	-8654.3	-2.9684	ug/L	-2.9684	ppb	11:12:44
2	Ca 317.933Radial†	256858.8	288010.2	482610	ug/L	482610	ppb	11:11:55
2	Cd 226.502†	3363.5	4225.5	-5.5103	ug/L	-5.5103	ppb	11:13:04
2	Co 228.616†	225.5	351.3	0.0756	ug/L	0.0756	ppb	11:13:04
2	Cr 267.716†	11.6	-90.3	2.4440	ug/L	2.4440	ppb	11:13:04
2	Cu 324.752†	691.5	-7179.3	1.8641	ug/L	1.8641	ppb	11:12:44
2	Fe 238.204 Radial†	46010.4	51578.8	453210	ug/L	453210	ppb	11:12:00
2	K 766.490 Radial†	3371.7	444.0	-120.26	ug/L	-120.26	ppb	11:11:55
2	Mg 279.077 IEC†	13639.9	15293.2	488600	ug/L	488600	ppb	11:12:00
2	Mn 257.610†	-26627.6	-32081.1	2.2899	ug/L	2.2899	ppb	11:12:44
2	Mo 202.031†	-533.2	-652.0	2.5949	ug/L	2.5949	ppb	11:12:44
2	Na 589.592 Radial†	1553333.5	1743544.6	526690	ug/L	526690	ppb	11:11:55
2	Ni 231.604†	303.3	234.4	5.1418	ug/L	5.1418	ppb	11:13:04

2	P 214.914†	620.8	487.3	47.656 ug/L	47.656 ppb	11:13:04
2	Pb 220.353†	-807.2	-879.1	-13.693 ug/L	-13.693 ppb	11:13:04
2	S 181.975 Axial†	115.8	77.4	-13.020 ug/L	-13.020 ppb	11:13:04
2	Sb 206.836†	71.1	47.2	5.4744 ug/L	5.4744 ppb	11:13:04
2	Se 196.026†	-2683.9	-3148.3	-137.67 ug/L	-137.67 ppb	11:13:04
2	Si 251.611†	-403.6	-1095.0	-30.500 ug/L	-30.500 ppb	11:13:04
2	Sn 189.927†	-418.3	-499.2	-17.395 ug/L	-17.395 ppb	11:13:04
2	Sr 421.552†	692.7	760.8	1.0971 ug/L	1.0971 ppb	11:12:00
2	Ti 334.940†	-13250.4	-13889.9	-3.4473 ug/L	-3.4473 ppb	11:12:44
2	Tl 190.801†	-129.1	-99.7	-13.698 ug/L	-13.698 ppb	11:13:04
2	U 409.014†	420957.2	501677.2	14857 ug/L	14857 ppb	11:12:44
2	V 292.402†	1835.9	3978.1	-4.5353 ug/L	-4.5353 ppb	11:12:44
2	Zn 213.857†	6334.6	6677.4	14.674 ug/L	14.674 ppb	11:13:04
2	SiO2†	-393.1	-1102.1	-65.675 ug/L	-65.675 ppb	11:13:40
3	Sc 361.383	755624.4	755624.4	85.226 %		11:13:10
3	Sc Radial	4203.6	4203.6	90.1 %		11:12:11
3	Y 371.029	637710.9	637710.9	83.716 %		11:13:10
3	Y RADIAL	4489.0	4489.0	91.00 %		11:12:11
3	Ag 328.068†	-24986.3	-29829.9	2.9540 ug/L	2.9540 ppb	11:13:10
3	Al 396.153Radial†	523842.6	581687.2	515910 ug/L	515910 ppb	11:12:06
3	As 188.979†	-238.1	-245.9	-16.509 ug/L	-16.509 ppb	11:13:30
3	B 249.677†	950.0	1780.5	-23.167 ug/L	-23.167 ppb	11:13:10
3	Ba 233.527†	-1897.4	-2233.8	-4.8555 ug/L	-4.8555 ppb	11:13:30
3	Be 313.107†	-10926.8	-8469.5	-2.9039 ug/L	-2.9039 ppb	11:13:10
3	Ca 317.933Radial†	261514.2	290365.6	486560 ug/L	486560 ppb	11:12:06
3	Cd 226.502†	3385.8	4211.0	-5.4515 ug/L	-5.4515 ppb	11:13:30
3	Co 228.616†	222.9	345.5	-0.0118 ug/L	-0.0118 ppb	11:13:30
3	Cr 267.716†	23.1	-76.9	2.5547 ug/L	2.5547 ppb	11:13:30
3	Cu 324.752†	722.6	-7151.2	1.8478 ug/L	1.8478 ppb	11:13:10
3	Fe 238.204 Radial†	46264.7	51357.2	451270 ug/L	451270 ppb	11:12:11
3	K 766.490 Radial†	3543.4	597.7	-92.508 ug/L	-92.508 ppb	11:12:06
3	Mg 279.077 IEC†	13726.0	15239.3	486870 ug/L	486870 ppb	11:12:11
3	Mn 257.610†	-26793.1	-31954.0	2.2617 ug/L	2.2617 ppb	11:13:10
3	Mo 202.031†	-566.7	-684.9	0.3482 ug/L	0.3482 ppb	11:13:10
3	Na 589.592 Radial†	1588770.3	1765877.1	533430 ug/L	533430 ppb	11:12:06
3	Ni 231.604†	321.7	252.4	5.5371 ug/L	5.5371 ppb	11:13:30
3	P 214.914†	641.1	503.6	58.829 ug/L	58.829 ppb	11:13:30
3	Pb 220.353†	-758.3	-811.9	-5.4667 ug/L	-5.4667 ppb	11:13:30
3	S 181.975 Axial†	105.2	63.5	-29.686 ug/L	-29.686 ppb	11:13:30
3	Sb 206.836†	58.4	31.4	0.5209 ug/L	0.5209 ppb	11:13:30
3	Se 196.026†	-2673.4	-3103.6	-119.97 ug/L	-119.97 ppb	11:13:30
3	Si 251.611†	-378.8	-1061.0	-29.495 ug/L	-29.495 ppb	11:13:30
3	Sn 189.927†	-428.5	-506.2	-18.044 ug/L	-18.044 ppb	11:13:30
3	Sr 421.552†	720.4	783.9	1.2299 ug/L	1.2299 ppb	11:12:11
3	Ti 334.940†	-12836.6	-13244.5	-2.2045 ug/L	-2.2045 ppb	11:13:10
3	Tl 190.801†	-138.0	-108.6	-15.974 ug/L	-15.974 ppb	11:13:30
3	U 409.014†	424448.1	500693.5	14828 ug/L	14828 ppb	11:13:10
3	V 292.402†	1986.5	4132.7	-3.3948 ug/L	-3.3948 ppb	11:13:10
3	Zn 213.857†	6330.3	6595.9	14.161 ug/L	14.161 ppb	11:13:30
3	SiO2†	-463.9	-1180.3	-70.415 ug/L	-70.415 ppb	11:13:45

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	753582.4	84.996	%	0.5589				0.66%
Sc Radial	4145.2	88.8	%	1.47				1.66%
Y 371.029	636201.4	83.518	%	0.5750				0.69%
Y RADIAL	4401.0	89.22	%	1.839				2.06%
Ag 328.068†	-29924.8	3.0080	ug/L	0.24381	3.0080	ppb	0.24381	8.11%
Al 396.153Radial†	581014.9	515320	ug/L	4093.8	515320	ppb	4093.8	0.79%
QC value within limits for Al 396.153Radial Recovery = 103.06%								
As 188.979†	-239.3	-13.981	ug/L	2.5661	-13.981	ppb	2.5661	18.35%
B 249.677†	1747.2	-24.041	ug/L	0.9025	-24.041	ppb	0.9025	3.75%
Ba 233.527†	-2292.5	-5.2493	ug/L	0.36169	-5.2493	ppb	0.36169	6.89%
Be 313.107†	-8550.7	-2.9325	ug/L	0.03287	-2.9325	ppb	0.03287	1.12%
Ca 317.933Radial†	290541.7	486850	ug/L	4397.1	486850	ppb	4397.1	0.90%
QC value within limits for Ca 317.933Radial Recovery = 97.37%								
Cd 226.502†	4219.1	-5.5175	ug/L	0.06982	-5.5175	ppb	0.06982	1.27%
Co 228.616†	331.8	-0.2866	ug/L	0.55349	-0.2866	ppb	0.55349	193.09%
Cr 267.716†	-73.2	2.6142	ug/L	0.20654	2.6142	ppb	0.20654	7.90%

Cu 324.752†	-7225.5	1.7001 ug/L	0.26998	1.7001 ppb	0.26998	15.88%
Fe 238.204 Radial†	51518.6	452680 ug/L	1240.8	452680 ppb	1240.8	0.27%
QC value within limits for Fe 238.204 Radial Recovery = 90.54%						
K 766.490 Radial†	551.9	-101.15 ug/L	16.572	-101.15 ppb	16.572	16.38%
Mg 279.077 IEC†	15289.5	488480 ug/L	1547.1	488480 ppb	1547.1	0.32%
QC value within limits for Mg 279.077 IEC Recovery = 97.70%						
Mn 257.610†	-32047.5	2.2747 ug/L	0.01421	2.2747 ppb	0.01421	0.62%
Mo 202.031†	-665.0	1.7325 ug/L	1.21083	1.7325 ppb	1.21083	69.89%
Na 589.592 Radial†	1761785.1	532200 ug/L	5007.8	532200 ppb	5007.8	0.94%
QC value within limits for Na 589.592 Radial Recovery = 106.44%						
Ni 231.604†	239.9	5.2633 ug/L	0.23757	5.2633 ppb	0.23757	4.51%
P 214.914†	498.7	55.133 ug/L	6.4747	55.133 ppb	6.4747	11.74%
Pb 220.353†	-818.8	-6.4224 ug/L	6.84309	-6.4224 ppb	6.84309	106.55%
S 181.975 Axial†	62.8	-30.408 ug/L	17.7598	-30.408 ppb	17.7598	58.40%
Sb 206.836†	39.1	2.8852 ug/L	2.48438	2.8852 ppb	2.48438	86.11%
Se 196.026†	-3116.4	-122.28 ug/L	14.375	-122.28 ppb	14.375	11.76%
Si 251.611†	-1078.1	-30.006 ug/L	0.5029	-30.006 ppb	0.5029	1.68%
Sn 189.927†	-503.7	-17.617 ug/L	0.3704	-17.617 ppb	0.3704	2.10%
Sr 421.552†	759.7	1.0499 ug/L	0.20764	1.0499 ppb	0.20764	19.78%
Ti 334.940†	-13598.3	-2.7531 ug/L	0.63406	-2.7531 ppb	0.63406	23.03%
Tl 190.801†	-95.4	-12.406 ug/L	4.3601	-12.406 ppb	4.3601	35.15%
U 409.014†	500889.3	14834 ug/L	21.1	14834 ppb	21.1	0.14%
QC value within limits for U 409.014 Recovery = 98.89%						
V 292.402†	4024.9	-4.2210 ug/L	0.72230	-4.2210 ppb	0.72230	17.11%
Zn 213.857†	6609.9	14.150 ug/L	0.5302	14.150 ppb	0.5302	3.75%
SiO2†	-1155.3	-68.923 ug/L	2.8164	-68.923 ppb	2.8164	4.09%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 1/6/2010 11:15:55
Data Type: Reprocessed on 1/6/2010 11:55:37

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	855143.5	855143.5	96.451	%			11:19:29
1	Sc Radial	4532.6	4532.6	97.1	%			11:17:52
1	Y 371.029	719027.8	719027.8	94.391	%			11:19:29
1	Y RADIAL	4745.9	4745.9	96.21	%			11:17:52
1	Ag 328.068†	-7632.1	-8425.2	3.0535	ug/L	3.0535	ppb	11:19:35
1	Al 396.153Radial†	509.7	551.6	74.517	ug/L	74.517	ppb	11:17:52
1	As 188.979†	27888.2	28947.8	10215	ug/L	10215	ppb	11:19:35
1	B 249.677†	235236.7	244558.4	5018.7	ug/L	5018.7	ppb	11:19:29
1	Ba 233.527†	1893929.7	1963611.5	14341	ug/L	14341	ppb	11:19:29
1	Be 313.107†	8254992.6	8563096.1	2913.7	ug/L	2913.7	ppb	11:19:23
1	Ca 317.933Radial†	29.4	17.7	29.623	ug/L	29.623	ppb	11:18:12
1	Cd 226.502†	994256.1	1031079.3	9717.3	ug/L	9717.3	ppb	11:19:29
1	Co 228.616†	483605.0	501483.8	9429.4	ug/L	9429.4	ppb	11:19:35
1	Cr 267.716†	2313418.7	2398439.6	24048	ug/L	24048	ppb	11:19:29
1	Cu 324.752†	6593986.3	6828620.7	20217	ug/L	20217	ppb	11:19:23
1	Fe 238.204 Radial†	-18.7	-33.1	6.3256	ug/L	6.3256	ppb	11:18:12
1	K 766.490 Radial†	1422221.0	1461231.3	289970	ug/L	289970	ppb	11:17:47
1	Mg 279.077 IEC†	0.5	-1.2	158.74	ug/L	158.74	ppb	11:18:12
1	Mn 257.610†	8734405.4	9055281.5	9541.1	ug/L	9541.1	ppb	11:19:23
1	Mo 202.031†	149158.2	154626.7	9686.9	ug/L	9686.9	ppb	11:19:35
1	Na 589.592 Radial†	-946.1	775.9	234.37	ug/L	234.37	ppb	11:17:52
1	Ni 231.604†	433885.0	449725.2	9866.6	ug/L	9866.6	ppb	11:19:29
1	P 214.914†	35103.9	36147.0	14522	ug/L	14522	ppb	11:19:35
1	Pb 220.353†	225385.4	233756.5	24224	ug/L	24224	ppb	11:19:35
1	S 181.975 Axial†	43781.0	45332.1	51232	ug/L	51232	ppb	11:19:35
1	Sb 206.836†	33207.8	34392.6	10072	ug/L	10072	ppb	11:19:35
1	Se 196.026†	19445.2	20194.0	10364	ug/L	10364	ppb	11:19:35
1	Si 251.611†	1634255.5	1693773.3	48292	ug/L	48292	ppb	11:19:29
1	Sn 189.927†	67140.8	69607.9	10296	ug/L	10296	ppb	11:19:35
1	Sr 421.552†	1283469.1	1321668.7	9676.8	ug/L	9676.8	ppb	11:17:47
1	Ti 334.940†	6020668.2	6244023.1	9898.3	ug/L	9898.3	ppb	11:19:23
1	Tl 190.801†	34515.2	35838.6	9851.2	ug/L	9851.2	ppb	11:19:35
1	U 409.014†	-1575.9	1034.8	-15.619	ug/L	-15.619	ppb	11:19:35
1	V 292.402†	1537981.1	1596374.8	10140	ug/L	10140	ppb	11:19:29
1	Zn 213.857†	1663348.7	1723721.9	14086	ug/L	14086	ppb	11:19:29
1	SiO2†	1661507.8	1722008.9	105060	ug/L	105060	ppb	11:20:22
2	Sc 361.383	852719.5	852719.5	96.178	%			11:19:49
2	Sc Radial	4559.9	4559.9	97.7	%			11:18:22
2	Y 371.029	717455.3	717455.3	94.184	%			11:19:49
2	Y RADIAL	4799.5	4799.5	97.30	%			11:18:22
2	Ag 328.068†	-7539.2	-8351.2	3.3458	ug/L	3.3458	ppb	11:19:54
2	Al 396.153Radial†	529.3	568.5	92.510	ug/L	92.510	ppb	11:18:22
2	As 188.979†	27510.7	28637.5	10106	ug/L	10106	ppb	11:19:54
2	B 249.677†	234879.8	244880.5	5025.5	ug/L	5025.5	ppb	11:19:49
2	Ba 233.527†	1886474.8	1961442.2	14325	ug/L	14325	ppb	11:19:49
2	Be 313.107†	8221762.2	8552874.5	2910.2	ug/L	2910.2	ppb	11:19:43
2	Ca 317.933Radial†	27.6	15.7	26.326	ug/L	26.326	ppb	11:18:43
2	Cd 226.502†	990836.2	1030453.7	9711.4	ug/L	9711.4	ppb	11:19:49
2	Co 228.616†	479786.7	498939.0	9381.4	ug/L	9381.4	ppb	11:19:54
2	Cr 267.716†	2306239.8	2397793.6	24042	ug/L	24042	ppb	11:19:49
2	Cu 324.752†	6556528.0	6809107.7	20159	ug/L	20159	ppb	11:19:43
2	Fe 238.204 Radial†	-21.7	-36.1	-20.921	ug/L	-20.921	ppb	11:18:43
2	K 766.490 Radial†	1435740.8	1466307.3	290980	ug/L	290980	ppb	11:18:17
2	Mg 279.077 IEC†	-6.1	-7.8	-55.841	ug/L	-55.841	ppb	11:18:43
2	Mn 257.610†	8690389.9	9035259.1	9520.0	ug/L	9520.0	ppb	11:19:43
2	Mo 202.031†	147648.8	153497.0	9616.1	ug/L	9616.1	ppb	11:19:54
2	Na 589.592 Radial†	-1022.3	703.7	212.57	ug/L	212.57	ppb	11:18:22
2	Ni 231.604†	432587.9	449655.4	9865.1	ug/L	9865.1	ppb	11:19:49

2	P 214.914†	34621.3	35748.7	14337 ug/L	14337 ppb	11:19:54
2	Pb 220.353†	223665.0	232632.0	24107 ug/L	24107 ppb	11:19:54
2	S 181.975 Axial†	43159.2	44814.6	50647 ug/L	50647 ppb	11:19:54
2	Sb 206.836†	32939.0	34211.0	10015 ug/L	10015 ppb	11:19:54
2	Se 196.026†	19215.5	20012.5	10271 ug/L	10271 ppb	11:19:54
2	Si 251.611†	1630656.6	1694847.8	48323 ug/L	48323 ppb	11:19:49
2	Sn 189.927†	66660.2	69306.1	10251 ug/L	10251 ppb	11:19:54
2	Sr 421.552†	1293913.8	1324452.0	9697.2 ug/L	9697.2 ppb	11:18:17
2	Ti 334.940†	5988704.5	6228533.4	9873.7 ug/L	9873.7 ppb	11:19:43
2	Tl 190.801†	34232.4	35646.3	9798.7 ug/L	9798.7 ppb	11:19:54
2	U 409.014†	-1574.4	1031.7	-15.694 ug/L	-15.694 ppb	11:19:54
2	V 292.402†	1532941.9	1595668.1	10134 ug/L	10134 ppb	11:19:49
2	Zn 213.857†	1658548.0	1723632.6	14085 ug/L	14085 ppb	11:19:49
2	SiO2†	1655031.2	1720171.7	104950 ug/L	104950 ppb	11:20:29
3	Sc 361.383	857798.8	857798.8	96.750 %		11:20:09
3	Sc Radial	4449.0	4449.0	95.3 %		11:18:53
3	Y 371.029	721549.0	721549.0	94.722 %		11:20:09
3	Y RADIAL	4659.1	4659.1	94.45 %		11:18:53
3	Ag 328.068†	-7591.1	-8358.3	3.2878 ug/L	3.2878 ppb	11:20:14
3	Al 396.153Radial†	549.6	603.3	121.01 ug/L	121.01 ppb	11:18:53
3	As 188.979†	27884.6	28854.6	10183 ug/L	10183 ppb	11:20:14
3	B 249.677†	236512.7	245122.2	5030.4 ug/L	5030.4 ppb	11:20:09
3	Ba 233.527†	1897433.0	1961154.3	14323 ug/L	14323 ppb	11:20:09
3	Be 313.107†	8335052.1	8619351.9	2932.9 ug/L	2932.9 ppb	11:20:02
3	Ca 317.933Radial†	32.4	21.4	35.884 ug/L	35.884 ppb	11:19:13
3	Cd 226.502†	994033.2	1027658.0	9685.1 ug/L	9685.1 ppb	11:20:09
3	Co 228.616†	484126.0	500470.3	9410.2 ug/L	9410.2 ppb	11:20:14
3	Cr 267.716†	2315895.2	2393574.8	24000 ug/L	24000 ppb	11:20:09
3	Cu 324.752†	6658558.7	6874199.8	20352 ug/L	20352 ppb	11:20:02
3	Fe 238.204 Radial†	-19.0	-33.8	0.0691 ug/L	0.0691 ppb	11:19:13
3	K 766.490 Radial†	1453148.7	1521214.6	301880 ug/L	301880 ppb	11:18:48
3	Mg 279.077 IEC†	-5.4	-7.3	-36.118 ug/L	-36.118 ppb	11:19:13
3	Mn 257.610†	8805381.2	9100610.0	9588.8 ug/L	9588.8 ppb	11:20:02
3	Mo 202.031†	149382.4	154379.7	9671.4 ug/L	9671.4 ppb	11:20:14
3	Na 589.592 Radial†	-1048.5	650.1	196.38 ug/L	196.38 ppb	11:18:53
3	Ni 231.604†	434754.6	449231.6	9855.7 ug/L	9855.7 ppb	11:20:09
3	P 214.914†	35004.0	35931.1	14395 ug/L	14395 ppb	11:20:14
3	Pb 220.353†	225554.5	233207.9	24167 ug/L	24167 ppb	11:20:14
3	S 181.975 Axial†	43866.1	45279.5	51173 ug/L	51173 ppb	11:20:14
3	Sb 206.836†	33327.1	34409.3	10077 ug/L	10077 ppb	11:20:14
3	Se 196.026†	19458.9	20145.7	10339 ug/L	10339 ppb	11:20:14
3	Si 251.611†	1642305.9	1696849.3	48376 ug/L	48376 ppb	11:20:09
3	Sn 189.927†	67120.8	69371.7	10261 ug/L	10261 ppb	11:20:14
3	Sr 421.552†	1310935.2	1375334.0	10070 ug/L	10070 ppb	11:18:48
3	Ti 334.940†	6074754.7	6280604.0	9956.3 ug/L	9956.3 ppb	11:20:02
3	Tl 190.801†	34481.6	35693.1	9812.4 ug/L	9812.4 ppb	11:20:14
3	U 409.014†	-1695.1	916.7	-19.035 ug/L	-19.035 ppb	11:20:14
3	V 292.402†	1540635.9	1594182.9	10126 ug/L	10126 ppb	11:20:09
3	Zn 213.857†	1666183.8	1721314.0	14066 ug/L	14066 ppb	11:20:09
3	SiO2†	1649310.9	1704070.0	103950 ug/L	103950 ppb	11:20:36

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	855220.6	96.460	%	0.2865				0.30%
Sc Radial	4513.8	96.7	%	1.24				1.28%
Y 371.029	719344.0	94.432	%	0.2711				0.29%
Y RADIAL	4734.8	95.98	%	1.437				1.50%
Ag 328.068†	-8378.2	3.2290	ug/L	0.15473	3.2290	ppb	0.15473	4.79%
Al 396.153Radial†	574.5	96.012	ug/L	23.4424	96.012	ppb	23.4424	24.42%
As 188.979†	28813.3	10168	ug/L	55.9	10168	ppb	55.9	0.55%
QC value within limits for As 188.979 Recovery = 101.68%								
B 249.677†	244853.7	5024.9	ug/L	5.86	5024.9	ppb	5.86	0.12%
QC value within limits for B 249.677 Recovery = 100.50%								
Ba 233.527†	1962069.3	14329	ug/L	9.8	14329	ppb	9.8	0.07%
QC value within limits for Ba 233.527 Recovery = 95.53%								
Be 313.107†	8578440.8	2918.9	ug/L	12.18	2918.9	ppb	12.18	0.42%
QC value within limits for Be 313.107 Recovery = 97.30%								
Ca 317.933Radial†	18.3	30.611	ug/L	4.8545	30.611	ppb	4.8545	15.86%
Cd 226.502†	1029730.3	9704.6	ug/L	17.16	9704.6	ppb	17.16	0.18%

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   QC value within limits for Cd 226.502  Recovery = 97.05%
Co 228.616†          500297.7      9407.0 ug/L         24.15      9407.0 ppb          24.15   0.26%
   QC value within limits for Co 228.616  Recovery = 94.07%
Cr 267.716†         2396602.7       24030 ug/L          26.5       24030 ppb          26.5    0.11%
   QC value within limits for Cr 267.716  Recovery = 96.12%
Cu 324.752†         6837309.4       20243 ug/L          98.9       20243 ppb          98.9    0.49%
   QC value within limits for Cu 324.752  Recovery = 101.21%
Fe 238.204 Radial†      -34.3     -4.8420 ug/L       14.27150     -4.8420 ppb       14.27150 294.75%
K 766.490 Radial†    1482917.8      294280 ug/L        6602.4      294280 ppb         6602.4   2.24%
   QC value within limits for K 766.490 Radial  Recovery = 98.09%
Mg 279.077 IEC†          -5.4      22.261 ug/L       118.6075      22.261 ppb       118.6075 532.79%
Mn 257.610†         9063716.9       9549.9 ug/L         35.28      9549.9 ppb          35.28   0.37%
   QC value within limits for Mn 257.610  Recovery = 95.50%
Mo 202.031†          154167.8       9658.1 ug/L         37.21      9658.1 ppb          37.21   0.39%
   QC value within limits for Mo 202.031  Recovery = 96.58%
Na 589.592 Radial†       709.9      214.44 ug/L        19.065      214.44 ppb         19.065   8.89%
Ni 231.604†          449537.4       9862.5 ug/L          5.86      9862.5 ppb          5.86    0.06%
   QC value within limits for Ni 231.604  Recovery = 98.62%
P 214.914†           35942.3       14418 ug/L          94.9       14418 ppb          94.9    0.66%
   QC value within limits for P 214.914  Recovery = 96.12%
Pb 220.353†          233198.8       24166 ug/L          58.3       24166 ppb          58.3    0.24%
   QC value within limits for Pb 220.353  Recovery = 96.66%
S 181.975 Axial†      45142.1       51017 ug/L         321.9       51017 ppb         321.9    0.63%
   QC value within limits for S 181.975 Axial  Recovery = 102.03%
Sb 206.836†          34337.6       10055 ug/L          34.1       10055 ppb          34.1    0.34%
   QC value within limits for Sb 206.836  Recovery = 100.55%
Se 196.026†          20117.4       10325 ug/L          48.3       10325 ppb          48.3    0.47%
   QC value within limits for Se 196.026  Recovery = 103.25%
Si 251.611†         1695156.8       48330 ug/L          42.8       48330 ppb          42.8    0.09%
   QC value within limits for Si 251.611  Recovery = 96.66%
Sn 189.927†          69428.6       10269 ug/L          23.5       10269 ppb          23.5    0.23%
   QC value within limits for Sn 189.927  Recovery = 102.69%
Sr 421.552†         1340484.9       9814.6 ug/L        221.20      9814.6 ppb         221.20   2.25%
   QC value within limits for Sr 421.552  Recovery = 98.15%
Ti 334.940†         6251053.5       9909.4 ug/L         42.43      9909.4 ppb          42.43   0.43%
   QC value within limits for Ti 334.940  Recovery = 99.09%
Tl 190.801†          35726.0       9820.7 ug/L         27.28      9820.7 ppb          27.28   0.28%
   QC value within limits for Tl 190.801  Recovery = 98.21%
U 409.014†             994.4    -16.782 ug/L        1.9508     -16.782 ppb         1.9508  11.62%
V 292.402†          1595408.6       10133 ug/L           7.1       10133 ppb           7.1    0.07%
   QC value within limits for V 292.402  Recovery = 101.33%
Zn 213.857†         1722889.5       14079 ug/L          11.3       14079 ppb          11.3    0.08%
   QC value within limits for Zn 213.857  Recovery = 93.86%
SiO2†               1715416.9      104650 ug/L         611.0      104650 ppb         611.0    0.58%
   QC value within limits for SiO2  Recovery = 97.81%
All analyte(s) passed QC.
```

Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/6/2010 11:40:15
Data Type: Reprocessed on 1/6/2010 11:55:41
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	880607.9	880607.9	99.323	%			11:43:26
1	Sc Radial	4577.3	4577.3	98.1	%			11:42:07
1	Y 371.029	748816.6	748816.6	98.301	%			11:43:26
1	Y RADIAL	4817.1	4817.1	97.65	%			11:42:07
1	Ag 328.068†	113728.4	113991.1	492.76	ug/L	492.76	ppb	11:43:26
1	Al 396.153Radial†	5558.8	5695.1	5030.1	ug/L	5030.1	ppb	11:42:07
1	As 188.979†	1375.6	1418.4	500.79	ug/L	500.79	ppb	11:43:46
1	B 249.677†	23608.4	24435.1	501.95	ug/L	501.95	ppb	11:43:26
1	Ba 233.527†	66877.5	67325.8	492.14	ug/L	492.14	ppb	11:43:26
1	Be 313.107†	1452961.5	1467215.3	496.89	ug/L	496.89	ppb	11:43:26
1	Ca 317.933Radial†	2960.6	3006.4	5037.8	ug/L	5037.8	ppb	11:42:27
1	Cd 226.502†	51692.2	52282.8	492.23	ug/L	492.23	ppb	11:43:26
1	Co 228.616†	25597.3	25855.7	486.28	ug/L	486.28	ppb	11:43:46
1	Cr 267.716†	48593.4	48820.6	489.95	ug/L	489.95	ppb	11:43:26
1	Cu 324.752†	172560.6	165737.6	490.94	ug/L	490.94	ppb	11:43:26
1	Fe 238.204 Radial†	564.9	562.2	4955.2	ug/L	4955.2	ppb	11:42:27
1	K 766.490 Radial†	28441.4	25665.3	5086.2	ug/L	5086.2	ppb	11:42:07
1	Mg 279.077 IEC†	156.3	157.8	5049.8	ug/L	5049.8	ppb	11:42:27
1	Mn 257.610†	467681.0	470352.0	495.98	ug/L	495.98	ppb	11:43:26
1	Mo 202.031†	7795.0	7828.2	490.89	ug/L	490.89	ppb	11:43:46
1	Na 589.592 Radial†	29691.6	32027.0	9674.7	ug/L	9674.7	ppb	11:42:07
1	Ni 231.604†	22169.3	22195.3	486.93	ug/L	486.93	ppb	11:43:46
1	P 214.914†	5231.3	5018.4	2372.3	ug/L	2372.3	ppb	11:43:46
1	Pb 220.353†	4637.7	4747.1	493.32	ug/L	493.32	ppb	11:43:46
1	S 181.975 Axial†	914.5	860.8	971.85	ug/L	971.85	ppb	11:43:46
1	Sb 206.836†	1672.4	1646.7	498.92	ug/L	498.92	ppb	11:43:46
1	Se 196.026†	933.3	972.9	515.40	ug/L	515.40	ppb	11:43:46
1	Si 251.611†	85554.9	85521.4	2441.6	ug/L	2441.6	ppb	11:43:26
1	Sn 189.927†	3296.8	3315.9	491.05	ug/L	491.05	ppb	11:43:46
1	Sr 421.552†	65973.1	67257.6	492.39	ug/L	492.39	ppb	11:42:07
1	Ti 334.940†	309958.2	313888.0	497.89	ug/L	497.89	ppb	11:43:26
1	Tl 190.801†	1738.9	1804.1	496.11	ug/L	496.11	ppb	11:43:46
1	U 409.014†	13104.2	15862.3	469.99	ug/L	469.99	ppb	11:43:26
1	V 292.402†	75644.0	77961.4	495.96	ug/L	495.96	ppb	11:43:26
1	Zn 213.857†	60403.7	59983.7	489.07	ug/L	489.07	ppb	11:43:26
1	SiO2†	84375.4	84314.4	5150.3	ug/L	5150.3	ppb	11:44:46
2	Sc 361.383	881660.6	881660.6	99.442	%			11:43:54
2	Sc Radial	4591.0	4591.0	98.4	%			11:42:32
2	Y 371.029	749459.3	749459.3	98.386	%			11:43:54
2	Y RADIAL	4873.5	4873.5	98.80	%			11:42:32
2	Ag 328.068†	113707.1	113833.1	492.09	ug/L	492.09	ppb	11:43:54
2	Al 396.153Radial†	5586.7	5706.6	5040.2	ug/L	5040.2	ppb	11:42:32
2	As 188.979†	1370.8	1411.9	498.49	ug/L	498.49	ppb	11:44:14
2	B 249.677†	23565.3	24363.4	500.46	ug/L	500.46	ppb	11:43:54
2	Ba 233.527†	67254.5	67624.5	494.32	ug/L	494.32	ppb	11:43:54
2	Be 313.107†	1456068.8	1468593.5	497.35	ug/L	497.35	ppb	11:43:54
2	Ca 317.933Radial†	2992.2	3029.6	5076.6	ug/L	5076.6	ppb	11:42:52
2	Cd 226.502†	52002.1	52532.3	494.58	ug/L	494.58	ppb	11:43:54
2	Co 228.616†	25716.5	25944.8	487.96	ug/L	487.96	ppb	11:44:14
2	Cr 267.716†	48785.1	48954.9	491.30	ug/L	491.30	ppb	11:43:54
2	Cu 324.752†	172808.2	165779.2	491.06	ug/L	491.06	ppb	11:43:54
2	Fe 238.204 Radial†	569.0	564.6	4976.5	ug/L	4976.5	ppb	11:42:52
2	K 766.490 Radial†	28423.4	25560.6	5065.4	ug/L	5065.4	ppb	11:42:32
2	Mg 279.077 IEC†	156.7	157.7	5047.7	ug/L	5047.7	ppb	11:42:52
2	Mn 257.610†	469471.6	471590.5	497.29	ug/L	497.29	ppb	11:43:54
2	Mo 202.031†	7836.0	7860.0	492.88	ug/L	492.88	ppb	11:44:14
2	Na 589.592 Radial†	29774.4	32020.9	9672.9	ug/L	9672.9	ppb	11:42:32
2	Ni 231.604†	22217.9	22217.6	487.42	ug/L	487.42	ppb	11:44:14

2	P 214.914†	5265.1	5046.1	2385.8 ug/L	2385.8 ppb	11:44:14
2	Pb 220.353†	4670.1	4774.1	496.12 ug/L	496.12 ppb	11:44:14
2	S 181.975 Axial†	924.2	869.5	981.68 ug/L	981.68 ppb	11:44:14
2	Sb 206.836†	1678.1	1650.4	500.03 ug/L	500.03 ppb	11:44:14
2	Se 196.026†	922.1	960.5	509.14 ug/L	509.14 ppb	11:44:14
2	Si 251.611†	85834.1	85699.4	2446.6 ug/L	2446.6 ppb	11:43:54
2	Sn 189.927†	3300.3	3315.5	490.99 ug/L	490.99 ppb	11:44:14
2	Sr 421.552†	66332.7	67422.8	493.60 ug/L	493.60 ppb	11:42:32
2	Ti 334.940†	310595.5	314156.3	498.32 ug/L	498.32 ppb	11:43:54
2	Tl 190.801†	1745.4	1808.6	497.34 ug/L	497.34 ppb	11:44:14
2	U 409.014†	12971.1	15712.6	465.54 ug/L	465.54 ppb	11:43:54
2	V 292.402†	75758.6	77985.7	496.13 ug/L	496.13 ppb	11:43:54
2	Zn 213.857†	60678.4	60187.3	490.74 ug/L	490.74 ppb	11:43:54
2	SiO2†	85279.4	85122.1	5199.8 ug/L	5199.8 ppb	11:44:52
3	Sc 361.383	875525.0	875525.0	98.750 %		11:44:21
3	Sc Radial	4595.9	4595.9	98.5 %		11:42:57
3	Y 371.029	743592.4	743592.4	97.615 %		11:44:21
3	Y RADIAL	4837.2	4837.2	98.06 %		11:42:57
3	Ag 328.068†	113388.1	114311.3	494.11 ug/L	494.11 ppb	11:44:21
3	Al 396.153Radial†	5602.4	5716.4	5048.8 ug/L	5048.8 ppb	11:42:57
3	As 188.979†	1373.1	1423.9	502.68 ug/L	502.68 ppb	11:44:41
3	B 249.677†	23651.1	24616.4	505.68 ug/L	505.68 ppb	11:44:21
3	Ba 233.527†	66854.7	67693.6	494.82 ug/L	494.82 ppb	11:44:21
3	Be 313.107†	1447710.5	1470390.7	497.96 ug/L	497.96 ppb	11:44:21
3	Ca 317.933Radial†	2982.6	3016.6	5054.7 ug/L	5054.7 ppb	11:43:17
3	Cd 226.502†	51693.2	52586.0	495.10 ug/L	495.10 ppb	11:44:21
3	Co 228.616†	25676.6	26085.7	490.61 ug/L	490.61 ppb	11:44:41
3	Cr 267.716†	48536.4	49046.9	492.21 ug/L	492.21 ppb	11:44:21
3	Cu 324.752†	171989.4	166167.9	492.21 ug/L	492.21 ppb	11:44:21
3	Fe 238.204 Radial†	558.0	552.8	4873.3 ug/L	4873.3 ppb	11:43:17
3	K 766.490 Radial†	28341.4	25446.5	5042.8 ug/L	5042.8 ppb	11:42:57
3	Mg 279.077 IEC†	160.4	161.3	5161.7 ug/L	5161.7 ppb	11:43:17
3	Mn 257.610†	467425.0	472826.5	498.58 ug/L	498.58 ppb	11:44:21
3	Mo 202.031†	7819.0	7898.1	495.26 ug/L	495.26 ppb	11:44:41
3	Na 589.592 Radial†	29641.6	31853.8	9622.4 ug/L	9622.4 ppb	11:42:57
3	Ni 231.604†	22160.8	22316.3	489.58 ug/L	489.58 ppb	11:44:41
3	P 214.914†	5238.5	5056.3	2390.7 ug/L	2390.7 ppb	11:44:41
3	Pb 220.353†	4658.3	4795.0	498.31 ug/L	498.31 ppb	11:44:41
3	S 181.975 Axial†	919.0	870.7	983.04 ug/L	983.04 ppb	11:44:41
3	Sb 206.836†	1680.5	1664.7	504.38 ug/L	504.38 ppb	11:44:41
3	Se 196.026†	919.7	964.6	510.91 ug/L	510.91 ppb	11:44:41
3	Si 251.611†	85447.2	85912.4	2452.7 ug/L	2452.7 ppb	11:44:21
3	Sn 189.927†	3298.3	3336.7	494.12 ug/L	494.12 ppb	11:44:41
3	Sr 421.552†	66374.7	67393.4	493.39 ug/L	493.39 ppb	11:42:57
3	Ti 334.940†	309182.0	314913.7	499.52 ug/L	499.52 ppb	11:44:21
3	Tl 190.801†	1756.6	1832.2	503.78 ug/L	503.78 ppb	11:44:41
3	U 409.014†	13124.0	15958.8	472.87 ug/L	472.87 ppb	11:44:21
3	V 292.402†	75255.1	78009.7	496.34 ug/L	496.34 ppb	11:44:21
3	Zn 213.857†	60325.0	60257.1	491.30 ug/L	491.30 ppb	11:44:21
3	SiO2†	84657.8	85093.6	5198.0 ug/L	5198.0 ppb	11:44:57

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	879264.5	99.172	%	0.3701				0.37%
Sc Radial	4588.1	98.3	%	0.21				0.21%
Y 371.029	747289.4	98.101	%	0.4224				0.43%
Y RADIAL	4842.6	98.17	%	0.580				0.59%
Ag 328.068†	114045.2	492.99	ug/L	1.026	492.99	ppb	1.026	0.21%
QC value within limits for Ag 328.068 Recovery = 98.60%								
Al 396.153Radial†	5706.0	5039.7	ug/L	9.37	5039.7	ppb	9.37	0.19%
QC value within limits for Al 396.153Radial Recovery = 100.79%								
As 188.979†	1418.1	500.65	ug/L	2.096	500.65	ppb	2.096	0.42%
QC value within limits for As 188.979 Recovery = 100.13%								
B 249.677†	24471.6	502.70	ug/L	2.691	502.70	ppb	2.691	0.54%
QC value within limits for B 249.677 Recovery = 100.54%								
Ba 233.527†	67548.0	493.76	ug/L	1.425	493.76	ppb	1.425	0.29%
QC value within limits for Ba 233.527 Recovery = 98.75%								
Be 313.107†	1468733.2	497.40	ug/L	0.540	497.40	ppb	0.540	0.11%
QC value within limits for Be 313.107 Recovery = 99.48%								

Ca 317.933Radial†	3017.5	5056.4 ug/L	19.44	5056.4 ppb	19.44	0.38%
QC value within limits for Ca 317.933Radial Recovery = 101.13%						
Cd 226.502†	52467.1	493.97 ug/L	1.527	493.97 ppb	1.527	0.31%
QC value within limits for Cd 226.502 Recovery = 98.79%						
Co 228.616†	25962.1	488.28 ug/L	2.184	488.28 ppb	2.184	0.45%
QC value within limits for Co 228.616 Recovery = 97.66%						
Cr 267.716†	48940.8	491.15 ug/L	1.140	491.15 ppb	1.140	0.23%
QC value within limits for Cr 267.716 Recovery = 98.23%						
Cu 324.752†	165894.9	491.40 ug/L	0.700	491.40 ppb	0.700	0.14%
QC value within limits for Cu 324.752 Recovery = 98.28%						
Fe 238.204 Radial†	559.9	4935.0 ug/L	54.52	4935.0 ppb	54.52	1.10%
QC value within limits for Fe 238.204 Radial Recovery = 98.70%						
K 766.490 Radial†	25557.5	5064.8 ug/L	21.73	5064.8 ppb	21.73	0.43%
QC value within limits for K 766.490 Radial Recovery = 101.30%						
Mg 279.077 IEC†	158.9	5086.4 ug/L	65.22	5086.4 ppb	65.22	1.28%
QC value within limits for Mg 279.077 IEC Recovery = 101.73%						
Mn 257.610†	471589.6	497.29 ug/L	1.298	497.29 ppb	1.298	0.26%
QC value within limits for Mn 257.610 Recovery = 99.46%						
Mo 202.031†	7862.1	493.01 ug/L	2.187	493.01 ppb	2.187	0.44%
QC value within limits for Mo 202.031 Recovery = 98.60%						
Na 589.592 Radial†	31967.3	9656.6 ug/L	29.69	9656.6 ppb	29.69	0.31%
QC value within limits for Na 589.592 Radial Recovery = 96.57%						
Ni 231.604†	22243.0	487.98 ug/L	1.412	487.98 ppb	1.412	0.29%
QC value within limits for Ni 231.604 Recovery = 97.60%						
P 214.914†	5040.3	2383.0 ug/L	9.52	2383.0 ppb	9.52	0.40%
QC value within limits for P 214.914 Recovery = 95.32%						
Pb 220.353†	4772.1	495.91 ug/L	2.500	495.91 ppb	2.500	0.50%
QC value within limits for Pb 220.353 Recovery = 99.18%						
S 181.975 Axial†	867.0	978.86 ug/L	6.106	978.86 ppb	6.106	0.62%
QC value within limits for S 181.975 Axial Recovery = 97.89%						
Sb 206.836†	1653.9	501.11 ug/L	2.885	501.11 ppb	2.885	0.58%
QC value within limits for Sb 206.836 Recovery = 100.22%						
Se 196.026†	966.0	511.82 ug/L	3.226	511.82 ppb	3.226	0.63%
QC value within limits for Se 196.026 Recovery = 102.36%						
Si 251.611†	85711.1	2447.0 ug/L	5.58	2447.0 ppb	5.58	0.23%
QC value within limits for Si 251.611 Recovery = 97.88%						
Sn 189.927†	3322.7	492.06 ug/L	1.792	492.06 ppb	1.792	0.36%
QC value within limits for Sn 189.927 Recovery = 98.41%						
Sr 421.552†	67357.9	493.13 ug/L	0.645	493.13 ppb	0.645	0.13%
QC value within limits for Sr 421.552 Recovery = 98.63%						
Ti 334.940†	314319.4	498.58 ug/L	0.843	498.58 ppb	0.843	0.17%
QC value within limits for Ti 334.940 Recovery = 99.72%						
Tl 190.801†	1815.0	499.07 ug/L	4.120	499.07 ppb	4.120	0.83%
QC value within limits for Tl 190.801 Recovery = 99.81%						
U 409.014†	15844.6	469.47 ug/L	3.694	469.47 ppb	3.694	0.79%
QC value within limits for U 409.014 Recovery = 93.89%						
V 292.402†	77985.6	496.14 ug/L	0.192	496.14 ppb	0.192	0.04%
QC value within limits for V 292.402 Recovery = 99.23%						
Zn 213.857†	60142.7	490.37 ug/L	1.160	490.37 ppb	1.160	0.24%
QC value within limits for Zn 213.857 Recovery = 98.07%						
SiO2†	84843.4	5182.7 ug/L	28.07	5182.7 ppb	28.07	0.54%
QC value within limits for SiO2 Recovery = 96.92%						

All analyte(s) passed QC.

Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : Optima3
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/6/2010 11:47:06
Data Type: Reprocessed on 1/6/2010 11:55:42
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	853425.9	853425.9	96.257	%			11:50:16
1	Sc Radial	4639.9	4639.9	99.4	%			11:48:59
1	Y 371.029	734376.1	734376.1	96.406	%			11:50:16
1	Y RADIAL	4904.2	4904.2	99.42	%			11:48:59
1	Ag 328.068†	487.6	-5.7	-0.0153	ug/L	-0.0153	ppb	11:50:16
1	Al 396.153Radial†	0.7	27.4	24.328	ug/L	24.328	ppb	11:48:59
1	As 188.979†	-20.0	12.6	4.4098	ug/L	4.4098	ppb	11:50:36
1	B 249.677†	138.9	810.2	16.706	ug/L	16.706	ppb	11:50:16
1	Ba 233.527†	2.4	-5.0	-0.0370	ug/L	-0.0370	ppb	11:50:36
1	Be 313.107†	-4320.5	-137.0	-0.0464	ug/L	-0.0464	ppb	11:50:16
1	Ca 317.933Radial†	11.6	-0.9	-1.5441	ug/L	-1.5441	ppb	11:49:19
1	Cd 226.502†	-209.8	20.4	0.1926	ug/L	0.1926	ppb	11:50:36
1	Co 228.616†	-98.8	-18.6	-0.3493	ug/L	-0.3493	ppb	11:50:36
1	Cr 267.716†	104.7	4.7	0.0501	ug/L	0.0501	ppb	11:50:16
1	Cu 324.752†	8033.0	346.3	1.0255	ug/L	1.0255	ppb	11:50:16
1	Fe 238.204 Radial†	14.2	0.4	3.1714	ug/L	3.1714	ppb	11:49:19
1	K 766.490 Radial†	3805.5	491.5	97.544	ug/L	97.544	ppb	11:48:59
1	Mg 279.077 IEC†	0.6	-1.0	-33.016	ug/L	-33.016	ppb	11:49:19
1	Mn 257.610†	560.9	66.3	0.0707	ug/L	0.0707	ppb	11:50:16
1	Mo 202.031†	24.3	5.3	0.3311	ug/L	0.3311	ppb	11:50:36
1	Na 589.592 Radial†	-1577.7	163.0	49.249	ug/L	49.249	ppb	11:48:59
1	Ni 231.604†	151.8	32.7	0.7176	ug/L	0.7176	ppb	11:50:36
1	P 214.914†	245.6	6.6	3.0816	ug/L	3.0816	ppb	11:50:36
1	Pb 220.353†	-75.7	-0.9	-0.0843	ug/L	-0.0843	ppb	11:50:36
1	S 181.975 Axial†	57.4	-0.3	-0.3460	ug/L	-0.3460	ppb	11:50:36
1	Sb 206.836†	59.7	24.9	7.4621	ug/L	7.4621	ppb	11:50:36
1	Se 196.026†	-38.5	-6.7	-3.4348	ug/L	-3.4348	ppb	11:50:36
1	Si 251.611†	660.5	69.6	1.9575	ug/L	1.9575	ppb	11:50:36
1	Sn 189.927†	6.2	3.0	0.4452	ug/L	0.4452	ppb	11:50:36
1	Sr 421.552†	31.8	16.0	0.1172	ug/L	0.1172	ppb	11:48:59
1	Ti 334.940†	-1772.5	-24.1	-0.0337	ug/L	-0.0337	ppb	11:50:16
1	Tl 190.801†	-44.0	7.7	2.1129	ug/L	2.1129	ppb	11:50:36
1	U 409.014†	-2905.4	-349.7	-10.395	ug/L	-10.395	ppb	11:50:16
1	V 292.402†	-1761.0	-27.7	-0.1902	ug/L	-0.1902	ppb	11:50:16
1	Zn 213.857†	885.4	88.2	0.7201	ug/L	0.7201	ppb	11:50:36
1	SiO2†	691.8	82.7	4.9899	ug/L	4.9899	ppb	11:51:32
2	Sc 361.383	869080.1	869080.1	98.023	%			11:50:41
2	Sc Radial	4769.4	4769.4	102	%			11:49:24
2	Y 371.029	747962.0	747962.0	98.189	%			11:50:41
2	Y RADIAL	5060.7	5060.7	102.6	%			11:49:24
2	Ag 328.068†	532.8	31.3	0.1537	ug/L	0.1537	ppb	11:50:41
2	Al 396.153Radial†	-14.9	12.1	10.712	ug/L	10.712	ppb	11:49:24
2	As 188.979†	-17.2	15.8	5.5311	ug/L	5.5311	ppb	11:51:01
2	B 249.677†	127.0	795.4	16.399	ug/L	16.399	ppb	11:50:41
2	Ba 233.527†	23.8	16.8	0.1239	ug/L	0.1239	ppb	11:51:01
2	Be 313.107†	-4341.0	-77.1	-0.0263	ug/L	-0.0263	ppb	11:50:41
2	Ca 317.933Radial†	15.1	2.2	3.7179	ug/L	3.7179	ppb	11:49:44
2	Cd 226.502†	-221.8	12.1	0.1116	ug/L	0.1116	ppb	11:51:01
2	Co 228.616†	-104.7	-22.9	-0.4282	ug/L	-0.4282	ppb	11:51:01
2	Cr 267.716†	85.2	-17.2	-0.1670	ug/L	-0.1670	ppb	11:50:41
2	Cu 324.752†	8191.6	357.8	1.0606	ug/L	1.0606	ppb	11:50:41
2	Fe 238.204 Radial†	17.0	2.8	24.255	ug/L	24.255	ppb	11:49:44
2	K 766.490 Radial†	3825.8	407.3	80.820	ug/L	80.820	ppb	11:49:24
2	Mg 279.077 IEC†	4.7	3.0	94.742	ug/L	94.742	ppb	11:49:44
2	Mn 257.610†	530.5	24.7	0.0267	ug/L	0.0267	ppb	11:50:41
2	Mo 202.031†	29.1	9.8	0.6168	ug/L	0.6168	ppb	11:51:01
2	Na 589.592 Radial†	-1515.3	267.2	80.710	ug/L	80.710	ppb	11:49:24
2	Ni 231.604†	126.0	3.5	0.0763	ug/L	0.0763	ppb	11:51:01

2	P 214.914†	258.5	15.2	7.2242 ug/L	7.2242 ppb	11:51:01
2	Pb 220.353†	-78.5	-2.3	-0.2359 ug/L	-0.2359 ppb	11:51:01
2	S 181.975 Axial†	57.2	-1.5	-1.6884 ug/L	-1.6884 ppb	11:51:01
2	Sb 206.836†	66.5	30.8	9.2191 ug/L	9.2191 ppb	11:51:01
2	Se 196.026†	-40.1	-7.6	-3.8284 ug/L	-3.8284 ppb	11:51:01
2	Si 251.611†	656.8	53.5	1.4953 ug/L	1.4953 ppb	11:51:01
2	Sn 189.927†	6.6	3.3	0.4884 ug/L	0.4884 ppb	11:51:01
2	Sr 421.552†	30.0	13.3	0.0976 ug/L	0.0976 ppb	11:49:24
2	Ti 334.940†	-1843.9	-63.8	-0.0958 ug/L	-0.0958 ppb	11:50:41
2	Tl 190.801†	-38.8	13.8	3.7753 ug/L	3.7753 ppb	11:51:01
2	U 409.014†	-2996.6	-388.3	-11.548 ug/L	-11.548 ppb	11:50:41
2	V 292.402†	-1708.0	59.3	0.3575 ug/L	0.3575 ppb	11:50:41
2	Zn 213.857†	895.7	82.1	0.6691 ug/L	0.6691 ppb	11:51:01
2	SiO2†	718.4	96.9	5.8610 ug/L	5.8610 ppb	11:51:37
3	Sc 361.383	855687.9	855687.9	96.512 %		11:51:07
3	Sc Radial	4706.5	4706.5	101 %		11:49:49
3	Y 371.029	736491.2	736491.2	96.683 %		11:51:07
3	Y RADIAL	4963.4	4963.4	100.6 %		11:49:49
3	Ag 328.068†	448.2	-47.9	-0.2025 ug/L	-0.2025 ppb	11:51:07
3	Al 396.153Radial†	-29.2	-2.2	-2.0198 ug/L	-2.0198 ppb	11:49:49
3	As 188.979†	-17.7	15.1	5.2772 ug/L	5.2772 ppb	11:51:27
3	B 249.677†	117.7	787.8	16.244 ug/L	16.244 ppb	11:51:07
3	Ba 233.527†	7.8	0.5	0.0028 ug/L	0.0028 ppb	11:51:27
3	Be 313.107†	-4264.9	-67.5	-0.0227 ug/L	-0.0227 ppb	11:51:07
3	Ca 317.933Radial†	14.7	2.0	3.3743 ug/L	3.3743 ppb	11:50:09
3	Cd 226.502†	-208.0	22.8	0.2144 ug/L	0.2144 ppb	11:51:27
3	Co 228.616†	-108.7	-28.6	-0.5356 ug/L	-0.5356 ppb	11:51:27
3	Cr 267.716†	93.3	-7.4	-0.0731 ug/L	-0.0731 ppb	11:51:07
3	Cu 324.752†	8026.2	317.2	0.9391 ug/L	0.9391 ppb	11:51:07
3	Fe 238.204 Radial†	14.2	0.2	1.8112 ug/L	1.8112 ppb	11:50:09
3	K 766.490 Radial†	3800.7	432.5	85.837 ug/L	85.837 ppb	11:49:49
3	Mg 279.077 IEC†	3.1	1.4	45.216 ug/L	45.216 ppb	11:50:09
3	Mn 257.610†	551.8	55.3	0.0576 ug/L	0.0576 ppb	11:51:07
3	Mo 202.031†	35.1	16.4	1.0303 ug/L	1.0303 ppb	11:51:27
3	Na 589.592 Radial†	-1580.0	183.2	55.348 ug/L	55.348 ppb	11:49:49
3	Ni 231.604†	110.5	-10.5	-0.2312 ug/L	-0.2312 ppb	11:51:27
3	P 214.914†	242.8	3.0	1.3094 ug/L	1.3094 ppb	11:51:27
3	Pb 220.353†	-101.4	-27.3	-2.8273 ug/L	-2.8273 ppb	11:51:27
3	S 181.975 Axial†	56.1	-1.7	-1.9684 ug/L	-1.9684 ppb	11:51:27
3	Sb 206.836†	52.3	17.1	5.1370 ug/L	5.1370 ppb	11:51:27
3	Se 196.026†	-37.0	-5.1	-2.5822 ug/L	-2.5822 ppb	11:51:27
3	Si 251.611†	671.7	79.4	2.2299 ug/L	2.2299 ppb	11:51:27
3	Sn 189.927†	4.4	1.2	0.1772 ug/L	0.1772 ppb	11:51:27
3	Sr 421.552†	3.4	-12.6	-0.0920 ug/L	-0.0920 ppb	11:49:49
3	Ti 334.940†	-1711.2	44.3	0.0730 ug/L	0.0730 ppb	11:51:07
3	Tl 190.801†	-46.9	4.8	1.3094 ug/L	1.3094 ppb	11:51:27
3	U 409.014†	-2756.2	-187.0	-5.5607 ug/L	-5.5607 ppb	11:51:07
3	V 292.402†	-1813.5	-77.2	-0.4800 ug/L	-0.4800 ppb	11:51:07
3	Zn 213.857†	870.5	70.2	0.5763 ug/L	0.5763 ppb	11:51:27
3	SiO2†	683.0	71.6	4.2941 ug/L	4.2941 ppb	11:51:42

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	859398.0	96.931	%	0.9543				0.98%
Sc Radial	4705.3	101	%	1.4				1.38%
Y 371.029	739609.8	97.093	%	0.9596				0.99%
Y RADIAL	4976.1	100.9	%	1.60				1.59%
Ag 328.068†	-7.5	-0.0214	ug/L	0.17817	-0.0214	ppb	0.17817	833.12%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	12.4	11.007	ug/L	13.1764	11.007	ppb	13.1764	119.71%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	14.5	5.0727	ug/L	0.58799	5.0727	ppb	0.58799	11.59%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	797.8	16.450	ug/L	0.2350	16.450	ppb	0.2350	1.43%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.1	0.0299	ug/L	0.08381	0.0299	ppb	0.08381	280.45%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-93.9	-0.0318	ug/L	0.01279	-0.0318	ppb	0.01279	40.26%
QC value within limits for Be 313.107 Recovery = Not calculated								

Ca 317.933Radial†	1.1	1.8494 ug/L	2.94383	1.8494 ppb	2.94383	159.18%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	18.4	0.1729 ug/L	0.05420	0.1729 ppb	0.05420	31.35%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-23.4	-0.4377 ug/L	0.09355	-0.4377 ppb	0.09355	21.37%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-6.6	-0.0634 ug/L	0.10892	-0.0634 ppb	0.10892	171.93%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	340.4	1.0084 ug/L	0.06251	1.0084 ppb	0.06251	6.20%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.1	9.7460 ug/L	12.58394	9.7460 ppb	12.58394	129.12%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	443.8	88.067 ug/L	8.5823	88.067 ppb	8.5823	9.75%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.1	35.647 ug/L	64.4140	35.647 ppb	64.4140	180.70%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	48.8	0.0517 ug/L	0.02260	0.0517 ppb	0.02260	43.71%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	10.5	0.6594 ug/L	0.35156	0.6594 ppb	0.35156	53.31%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	204.5	61.769 ug/L	16.6847	61.769 ppb	16.6847	27.01%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	8.5	0.1876 ug/L	0.48411	0.1876 ppb	0.48411	258.07%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	8.3	3.8717 ug/L	3.03553	3.8717 ppb	3.03553	78.40%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-10.2	-1.0492 ug/L	1.54178	-1.0492 ppb	1.54178	146.95%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-1.2	-1.3343 ug/L	0.86725	-1.3343 ppb	0.86725	65.00%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	24.3	7.2727 ug/L	2.04763	7.2727 ppb	2.04763	28.16%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-6.5	-3.2818 ug/L	0.63701	-3.2818 ppb	0.63701	19.41%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	67.5	1.8942 ug/L	0.37137	1.8942 ppb	0.37137	19.60%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	2.5	0.3703 ug/L	0.16858	0.3703 ppb	0.16858	45.53%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	5.6	0.0409 ug/L	0.11554	0.0409 ppb	0.11554	282.26%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-14.5	-0.0189 ug/L	0.08539	-0.0189 ppb	0.08539	452.74%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	8.8	2.3992 ug/L	1.25764	2.3992 ppb	1.25764	52.42%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-308.3	-9.1679 ug/L	3.17654	-9.1679 ppb	3.17654	34.65%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-15.2	-0.1042 ug/L	0.42535	-0.1042 ppb	0.42535	408.06%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	80.2	0.6552 ug/L	0.07293	0.6552 ppb	0.07293	11.13%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	83.7	5.0483 ug/L	0.78506	5.0483 ppb	0.78506	15.55%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 10
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/6/2010 13:00:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4856.0	4856.0	104	%			13:01:59
1	Y RADIAL	5121.0	5121.0	103.8	%			13:01:59
1	Al 396.153Radial†	5697.4	5503.1	4858.6	ug/L	4858.6	ppb	13:01:59
1	Ca 317.933Radial†	3059.6	2928.3	4906.9	ug/L	4906.9	ppb	13:02:19
1	Fe 238.204 Radial†	578.8	542.4	4782.6	ug/L	4782.6	ppb	13:02:19
1	K 766.490 Radial†	28302.2	23867.6	4729.0	ug/L	4729.0	ppb	13:01:59
1	Mg 279.077 IEC†	164.4	156.4	5006.5	ug/L	5006.5	ppb	13:02:19
1	Na 589.592 Radial†	31958.0	32468.4	9808.0	ug/L	9808.0	ppb	13:01:59
1	Sr 421.552†	69958.6	67228.8	492.18	ug/L	492.18	ppb	13:01:59
1	Sc 361.383	842039.2	842039.2	94.973	%			13:03:18
1	Y 371.029	715710.2	715710.2	93.955	%			13:03:18
1	Ag 328.068†	114518.0	120067.2	518.88	ug/L	518.88	ppb	13:03:18
1	As 188.979†	1365.3	1471.0	519.37	ug/L	519.37	ppb	13:03:38
1	B 249.677†	22939.8	24819.9	509.82	ug/L	509.82	ppb	13:03:18
1	Ba 233.527†	67506.8	71072.5	519.52	ug/L	519.52	ppb	13:03:18
1	Be 313.107†	1460375.3	1542026.6	522.23	ug/L	522.23	ppb	13:03:18
1	Cd 226.502†	51942.2	54929.9	517.20	ug/L	517.20	ppb	13:03:18
1	Co 228.616†	25997.5	27457.5	516.41	ug/L	516.41	ppb	13:03:38
1	Cr 267.716†	48970.5	51458.5	516.41	ug/L	516.41	ppb	13:03:18
1	Cu 324.752†	173918.9	175125.7	518.73	ug/L	518.73	ppb	13:03:18
1	Mn 257.610†	471957.9	496422.9	523.44	ug/L	523.44	ppb	13:03:18
1	Mo 202.031†	7903.7	8302.2	520.56	ug/L	520.56	ppb	13:03:38
1	Ni 231.604†	22421.0	23482.7	515.17	ug/L	515.17	ppb	13:03:38
1	P 214.914†	5291.9	5323.4	2517.0	ug/L	2517.0	ppb	13:03:38
1	Pb 220.353†	4699.1	5025.6	522.20	ug/L	522.20	ppb	13:03:38
1	S 181.975 Axial†	932.7	922.2	1041.3	ug/L	1041.3	ppb	13:03:38
1	Sb 206.836†	1677.4	1729.1	523.96	ug/L	523.96	ppb	13:03:38
1	Se 196.026†	933.1	1015.8	536.88	ug/L	536.88	ppb	13:03:38
1	Si 251.611†	86436.0	90394.6	2580.9	ug/L	2580.9	ppb	13:03:18
1	Sn 189.927†	3316.2	3488.3	516.54	ug/L	516.54	ppb	13:03:38
1	Ti 334.940†	313158.3	331551.6	525.89	ug/L	525.89	ppb	13:03:18
1	Tl 190.801†	1738.2	1883.6	517.98	ug/L	517.98	ppb	13:03:38
1	U 409.014†	13404.7	16783.0	497.34	ug/L	497.34	ppb	13:03:18
1	V 292.402†	76181.2	82015.4	521.87	ug/L	521.87	ppb	13:03:18
1	Zn 213.857†	60758.2	63142.5	514.84	ug/L	514.84	ppb	13:03:18
1	SiO2†	86463.8	90404.4	5523.1	ug/L	5523.1	ppb	13:04:39
2	Sc Radial	4805.7	4805.7	103	%			13:02:24
2	Y RADIAL	5062.2	5062.2	102.6	%			13:02:24
2	Al 396.153Radial†	5749.5	5611.0	4955.1	ug/L	4955.1	ppb	13:02:24
2	Ca 317.933Radial†	3033.6	2933.9	4916.2	ug/L	4916.2	ppb	13:02:44
2	Fe 238.204 Radial†	577.5	547.0	4822.3	ug/L	4822.3	ppb	13:02:44
2	K 766.490 Radial†	28602.5	24443.8	4843.6	ug/L	4843.6	ppb	13:02:24
2	Mg 279.077 IEC†	163.4	157.0	5027.1	ug/L	5027.1	ppb	13:02:44
2	Na 589.592 Radial†	32358.7	33178.9	10023	ug/L	10023	ppb	13:02:24
2	Sr 421.552†	70895.8	68842.4	504.00	ug/L	504.00	ppb	13:02:24
2	Sc 361.383	874072.2	874072.2	98.586	%			13:03:46
2	Y 371.029	742675.6	742675.6	97.495	%			13:03:46
2	Ag 328.068†	112980.0	114088.2	493.13	ug/L	493.13	ppb	13:03:46
2	As 188.979†	1374.2	1427.3	503.90	ug/L	503.90	ppb	13:04:06
2	B 249.677†	22603.2	23593.2	484.58	ug/L	484.58	ppb	13:03:46
2	Ba 233.527†	66392.4	67337.2	492.22	ug/L	492.22	ppb	13:03:46
2	Be 313.107†	1437065.2	1462029.4	495.14	ug/L	495.14	ppb	13:03:46
2	Cd 226.502†	50968.4	51937.9	489.00	ug/L	489.00	ppb	13:03:46
2	Co 228.616†	25908.2	26363.8	495.85	ug/L	495.85	ppb	13:04:06
2	Cr 267.716†	48182.3	48769.4	489.43	ug/L	489.43	ppb	13:03:46
2	Cu 324.752†	171662.5	166125.8	492.08	ug/L	492.08	ppb	13:03:46
2	Mn 257.610†	464646.5	470794.8	496.44	ug/L	496.44	ppb	13:03:46
2	Mo 202.031†	7877.6	7970.6	499.80	ug/L	499.80	ppb	13:04:06
2	Ni 231.604†	22351.7	22547.2	494.65	ug/L	494.65	ppb	13:04:06

2	P 214.914†	5282.5	5109.7	2416.9 ug/L	2416.9 ppb	13:04:06
2	Pb 220.353†	4655.9	4800.4	498.86 ug/L	498.86 ppb	13:04:06
2	S 181.975 Axial†	925.7	879.1	992.57 ug/L	992.57 ppb	13:04:06
2	Sb 206.836†	1683.0	1670.0	506.21 ug/L	506.21 ppb	13:04:06
2	Se 196.026†	942.5	989.3	523.42 ug/L	523.42 ppb	13:04:06
2	Si 251.611†	85091.3	85695.2	2446.4 ug/L	2446.4 ppb	13:03:46
2	Sn 189.927†	3322.8	3367.1	498.60 ug/L	498.60 ppb	13:04:06
2	Ti 334.940†	308868.6	315116.3	499.84 ug/L	499.84 ppb	13:03:46
2	Tl 190.801†	1762.5	1841.2	506.21 ug/L	506.21 ppb	13:04:06
2	U 409.014†	13158.3	16015.7	474.57 ug/L	474.57 ppb	13:03:46
2	V 292.402†	75003.8	77881.4	495.61 ug/L	495.61 ppb	13:03:46
2	Zn 213.857†	59690.5	59715.0	486.82 ug/L	486.82 ppb	13:03:46
2	SiO2†	87595.3	88215.7	5389.6 ug/L	5389.6 ppb	13:04:44
3	Sc Radial	4717.8	4717.8	101 %		13:02:50
3	Y RADIAL	4979.5	4979.5	100.9 %		13:02:50
3	Al 396.153Radial†	5700.2	5666.2	5004.1 ug/L	5004.1 ppb	13:02:50
3	Ca 317.933Radial†	3031.7	2986.8	5005.0 ug/L	5005.0 ppb	13:03:10
3	Fe 238.204 Radial†	577.5	557.4	4913.7 ug/L	4913.7 ppb	13:03:10
3	K 766.490 Radial†	28171.1	24534.3	4861.4 ug/L	4861.4 ppb	13:02:50
3	Mg 279.077 IEC†	161.3	157.9	5056.0 ug/L	5056.0 ppb	13:03:10
3	Na 589.592 Radial†	31937.2	33347.1	10073 ug/L	10073 ppb	13:02:50
3	Sr 421.552†	69652.2	68894.3	504.37 ug/L	504.37 ppb	13:02:50
3	Sc 361.383	873987.6	873987.6	98.576 %		13:04:13
3	Y 371.029	742146.3	742146.3	97.426 %		13:04:13
3	Ag 328.068†	114711.1	115855.4	500.78 ug/L	500.78 ppb	13:04:13
3	As 188.979†	1371.9	1425.1	503.21 ug/L	503.21 ppb	13:04:33
3	B 249.677†	23028.3	24026.7	493.50 ug/L	493.50 ppb	13:04:13
3	Ba 233.527†	67698.4	68668.6	501.95 ug/L	501.95 ppb	13:04:13
3	Be 313.107†	1463549.1	1489036.8	504.28 ug/L	504.28 ppb	13:04:13
3	Cd 226.502†	52057.4	53047.6	499.44 ug/L	499.44 ppb	13:04:13
3	Co 228.616†	25979.4	26438.6	497.24 ug/L	497.24 ppb	13:04:33
3	Cr 267.716†	48922.0	49524.5	497.01 ug/L	497.01 ppb	13:04:13
3	Cu 324.752†	174448.1	168968.4	500.50 ug/L	500.50 ppb	13:04:13
3	Mn 257.610†	472896.4	479209.5	505.31 ug/L	505.31 ppb	13:04:13
3	Mo 202.031†	7888.3	7982.3	500.54 ug/L	500.54 ppb	13:04:33
3	Ni 231.604†	22358.9	22556.8	494.86 ug/L	494.86 ppb	13:04:33
3	P 214.914†	5279.2	5106.9	2414.0 ug/L	2414.0 ppb	13:04:33
3	Pb 220.353†	4680.4	4825.8	501.48 ug/L	501.48 ppb	13:04:33
3	S 181.975 Axial†	927.0	880.5	994.10 ug/L	994.10 ppb	13:04:33
3	Sb 206.836†	1676.1	1663.2	503.95 ug/L	503.95 ppb	13:04:33
3	Se 196.026†	926.0	972.6	515.15 ug/L	515.15 ppb	13:04:33
3	Si 251.611†	86441.6	87073.4	2486.0 ug/L	2486.0 ppb	13:04:13
3	Sn 189.927†	3297.2	3341.5	494.83 ug/L	494.83 ppb	13:04:33
3	Ti 334.940†	313960.0	320311.5	508.08 ug/L	508.08 ppb	13:04:13
3	Tl 190.801†	1765.9	1844.8	507.28 ug/L	507.28 ppb	13:04:33
3	U 409.014†	13331.1	16192.3	479.80 ug/L	479.80 ppb	13:04:13
3	V 292.402†	76340.9	79245.2	504.17 ug/L	504.17 ppb	13:04:13
3	Zn 213.857†	60884.5	60932.1	496.81 ug/L	496.81 ppb	13:04:13
3	SiO2†	86336.1	86946.9	5311.7 ug/L	5311.7 ppb	13:04:49

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	863366.3	97.378	%	2.0832				2.14%
Sc Radial	4793.2	103	%	1.5				1.46%
Y 371.029	733510.7	96.292	%	2.0240				2.10%
Y RADIAL	5054.2	102.5	%	1.44				1.41%
Ag 328.068†	116670.3	504.27	ug/L	13.225	504.27	ppb	13.225	2.62%
QC value within limits for Ag 328.068 Recovery = 100.85%								
Al 396.153Radial†	5593.4	4939.3	ug/L	74.04	4939.3	ppb	74.04	1.50%
QC value within limits for Al 396.153Radial Recovery = 98.79%								
As 188.979†	1441.2	508.83	ug/L	9.142	508.83	ppb	9.142	1.80%
QC value within limits for As 188.979 Recovery = 101.77%								
B 249.677†	24146.6	495.97	ug/L	12.802	495.97	ppb	12.802	2.58%
QC value within limits for B 249.677 Recovery = 99.19%								
Ba 233.527†	69026.1	504.56	ug/L	13.833	504.56	ppb	13.833	2.74%
QC value within limits for Ba 233.527 Recovery = 100.91%								
Be 313.107†	1497697.6	507.22	ug/L	13.781	507.22	ppb	13.781	2.72%
QC value within limits for Be 313.107 Recovery = 101.44%								
Ca 317.933Radial†	2949.7	4942.7	ug/L	54.14	4942.7	ppb	54.14	1.10%

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   QC value within limits for Ca 317.933Radial  Recovery = 98.85%
Cd 226.502†          53305.1      501.88 ug/L        14.256      501.88 ppb        14.256   2.84%
   QC value within limits for Cd 226.502  Recovery = 100.38%
Co 228.616†          26753.3      503.17 ug/L        11.492      503.17 ppb        11.492   2.28%
   QC value within limits for Co 228.616  Recovery = 100.63%
Cr 267.716†          49917.5      500.95 ug/L        13.915      500.95 ppb        13.915   2.78%
   QC value within limits for Cr 267.716  Recovery = 100.19%
Cu 324.752†         170073.3      503.77 ug/L        13.619      503.77 ppb        13.619   2.70%
   QC value within limits for Cu 324.752  Recovery = 100.75%
Fe 238.204 Radial†     549.0      4839.5 ug/L        67.25       4839.5 ppb         67.25   1.39%
   QC value within limits for Fe 238.204 Radial  Recovery = 96.79%
K 766.490 Radial†    24281.9      4811.3 ug/L        71.85       4811.3 ppb         71.85   1.49%
   QC value within limits for K 766.490 Radial  Recovery = 96.23%
Mg 279.077 IEC†        157.1      5029.8 ug/L        24.85       5029.8 ppb         24.85   0.49%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.60%
Mn 257.610†         482142.4      508.40 ug/L        13.761      508.40 ppb        13.761   2.71%
   QC value within limits for Mn 257.610  Recovery = 101.68%
Mo 202.031†          8085.0       506.97 ug/L        11.782      506.97 ppb        11.782   2.32%
   QC value within limits for Mo 202.031  Recovery = 101.39%
Na 589.592 Radial†   32998.1      9968.1 ug/L        140.90      9968.1 ppb        140.90   1.41%
   QC value within limits for Na 589.592 Radial  Recovery = 99.68%
Ni 231.604†          22862.2      501.56 ug/L        11.789      501.56 ppb        11.789   2.35%
   QC value within limits for Ni 231.604  Recovery = 100.31%
P 214.914†           5180.0       2449.3 ug/L        58.67       2449.3 ppb         58.67   2.40%
   QC value within limits for P 214.914  Recovery = 97.97%
Pb 220.353†          4883.9       507.51 ug/L        12.786      507.51 ppb        12.786   2.52%
   QC value within limits for Pb 220.353  Recovery = 101.50%
S 181.975 Axial†      893.9       1009.3 ug/L        27.69       1009.3 ppb         27.69   2.74%
   QC value within limits for S 181.975 Axial  Recovery = 100.93%
Sb 206.836†          1687.5       511.38 ug/L        10.959      511.38 ppb        10.959   2.14%
   QC value within limits for Sb 206.836  Recovery = 102.28%
Se 196.026†           992.6       525.15 ug/L        10.969      525.15 ppb        10.969   2.09%
   QC value within limits for Se 196.026  Recovery = 105.03%
Si 251.611†          87721.1      2504.4 ug/L        69.09       2504.4 ppb         69.09   2.76%
   QC value within limits for Si 251.611  Recovery = 100.18%
Sn 189.927†          3399.0       503.33 ug/L        11.602      503.33 ppb        11.602   2.31%
   QC value within limits for Sn 189.927  Recovery = 100.67%
Sr 421.552†          68321.8      500.18 ug/L        6.933       500.18 ppb         6.933   1.39%
   QC value within limits for Sr 421.552  Recovery = 100.04%
Ti 334.940†         322326.5      511.27 ug/L        13.318      511.27 ppb        13.318   2.60%
   QC value within limits for Ti 334.940  Recovery = 102.25%
Tl 190.801†          1856.5       510.49 ug/L        6.510       510.49 ppb         6.510   1.28%
   QC value within limits for Tl 190.801  Recovery = 102.10%
U 409.014†           16330.3      483.90 ug/L        11.923      483.90 ppb        11.923   2.46%
   QC value within limits for U 409.014  Recovery = 96.78%
V 292.402†           79714.0      507.22 ug/L        13.392      507.22 ppb        13.392   2.64%
   QC value within limits for V 292.402  Recovery = 101.44%
Zn 213.857†          61263.2      499.49 ug/L        14.202      499.49 ppb        14.202   2.84%
   QC value within limits for Zn 213.857  Recovery = 99.90%
SiO2†                88522.3      5408.1 ug/L        106.94      5408.1 ppb        106.94   1.98%
   QC value within limits for SiO2  Recovery = 101.13%
All analyte(s) passed QC.
```

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

Autosampler Location: 8
Date Collected: 1/6/2010 13:06:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4723.3	4723.3	101	%			13:08:51
1	Y RADIAL	4994.7	4994.7	101.3	%			13:08:51
1	Al 396.153Radial†	-28.6	-1.5	-1.3680	ug/L	-1.3680	ppb	13:08:51
1	Ca 317.933Radial†	13.3	0.6	1.0280	ug/L	1.0280	ppb	13:09:11
1	Fe 238.204 Radial†	10.5	-3.5	-30.742	ug/L	-30.742	ppb	13:09:11
1	K 766.490 Radial†	3481.9	104.1	20.621	ug/L	20.621	ppb	13:08:51
1	Mg 279.077 IEC†	1.9	0.2	7.1369	ug/L	7.1369	ppb	13:09:11
1	Na 589.592 Radial†	-1480.5	287.1	86.728	ug/L	86.728	ppb	13:08:51
1	Sr 421.552†	-36.2	-51.8	-0.3789	ug/L	-0.3789	ppb	13:08:51
1	Sc 361.383	861858.8	861858.8	97.208	%			13:10:08
1	Y 371.029	740906.7	740906.7	97.263	%			13:10:08
1	Ag 328.068†	518.8	21.3	0.0925	ug/L	0.0925	ppb	13:10:08
1	As 188.979†	-30.5	2.0	0.6959	ug/L	0.6959	ppb	13:10:28
1	B 249.677†	-522.9	127.9	2.6417	ug/L	2.6417	ppb	13:10:08
1	Ba 233.527†	-0.1	-7.6	-0.0555	ug/L	-0.0555	ppb	13:10:28
1	Be 313.107†	-4357.5	-131.2	-0.0441	ug/L	-0.0441	ppb	13:10:08
1	Cd 226.502†	-245.3	-14.0	-0.1287	ug/L	-0.1287	ppb	13:10:28
1	Co 228.616†	-86.0	-4.5	-0.0828	ug/L	-0.0828	ppb	13:10:28
1	Cr 267.716†	103.7	2.7	0.0306	ug/L	0.0306	ppb	13:10:08
1	Cu 324.752†	8041.2	273.1	0.8070	ug/L	0.8070	ppb	13:10:08
1	Mn 257.610†	590.9	91.4	0.0931	ug/L	0.0931	ppb	13:10:08
1	Mo 202.031†	33.1	14.1	0.8822	ug/L	0.8822	ppb	13:10:28
1	Ni 231.604†	114.2	-7.6	-0.1660	ug/L	-0.1660	ppb	13:10:28
1	P 214.914†	245.4	3.8	1.7810	ug/L	1.7810	ppb	13:10:28
1	Pb 220.353†	-73.6	2.0	0.2157	ug/L	0.2157	ppb	13:10:28
1	S 181.975 Axial†	59.9	1.7	1.9633	ug/L	1.9633	ppb	13:10:28
1	Sb 206.836†	49.1	13.5	4.0644	ug/L	4.0644	ppb	13:10:28
1	Se 196.026†	-39.0	-6.8	-3.5885	ug/L	-3.5885	ppb	13:10:28
1	Si 251.611†	654.5	56.7	1.5997	ug/L	1.5997	ppb	13:10:28
1	Sn 189.927†	12.2	9.1	1.3525	ug/L	1.3525	ppb	13:10:28
1	Ti 334.940†	-1683.9	85.1	0.1401	ug/L	0.1401	ppb	13:10:08
1	Tl 190.801†	-40.6	11.7	3.1853	ug/L	3.1853	ppb	13:10:28
1	U 409.014†	-2971.5	-388.1	-11.533	ug/L	-11.533	ppb	13:10:08
1	V 292.402†	-1701.2	51.8	0.3202	ug/L	0.3202	ppb	13:10:08
1	Zn 213.857†	814.7	6.4	0.0545	ug/L	0.0545	ppb	13:10:28
1	SiO2†	659.4	42.3	2.5374	ug/L	2.5374	ppb	13:11:24
2	Sc Radial	4629.7	4629.7	99.2	%			13:09:16
2	Y RADIAL	4889.1	4889.1	99.11	%			13:09:16
2	Al 396.153Radial†	-12.2	14.4	12.777	ug/L	12.777	ppb	13:09:16
2	Ca 317.933Radial†	18.1	5.7	9.5745	ug/L	9.5745	ppb	13:09:36
2	Fe 238.204 Radial†	12.8	-1.0	-8.4932	ug/L	-8.4932	ppb	13:09:36
2	K 766.490 Radial†	3521.1	213.2	42.283	ug/L	42.283	ppb	13:09:16
2	Mg 279.077 IEC†	2.8	1.2	39.321	ug/L	39.321	ppb	13:09:36
2	Na 589.592 Radial†	-1484.5	253.5	76.571	ug/L	76.571	ppb	13:09:16
2	Sr 421.552†	13.6	-2.2	-0.0164	ug/L	-0.0164	ppb	13:09:16
2	Sc 361.383	857375.9	857375.9	96.703	%			13:10:33
2	Y 371.029	736432.9	736432.9	96.676	%			13:10:33
2	Ag 328.068†	421.8	-76.1	-0.3214	ug/L	-0.3214	ppb	13:10:33
2	As 188.979†	-38.3	-6.2	-2.1704	ug/L	-2.1704	ppb	13:10:53
2	B 249.677†	-592.2	53.5	1.1047	ug/L	1.1047	ppb	13:10:33
2	Ba 233.527†	13.0	6.0	0.0447	ug/L	0.0447	ppb	13:10:53
2	Be 313.107†	-4316.0	-111.6	-0.0375	ug/L	-0.0375	ppb	13:10:33
2	Cd 226.502†	-226.8	3.9	0.0377	ug/L	0.0377	ppb	13:10:53
2	Co 228.616†	-93.4	-12.6	-0.2350	ug/L	-0.2350	ppb	13:10:53
2	Cr 267.716†	115.9	15.8	0.1616	ug/L	0.1616	ppb	13:10:33
2	Cu 324.752†	7932.6	204.0	0.6036	ug/L	0.6036	ppb	13:10:33
2	Mn 257.610†	576.2	79.5	0.0822	ug/L	0.0822	ppb	13:10:33
2	Mo 202.031†	28.0	9.0	0.5658	ug/L	0.5658	ppb	13:10:53
2	Ni 231.604†	140.4	20.1	0.4414	ug/L	0.4414	ppb	13:10:53

2	P 214.914†	256.3	16.5	7.9317 ug/L	7.9317 ppb	13:10:53
2	Pb 220.353†	-74.4	0.8	0.0874 ug/L	0.0874 ppb	13:10:53
2	S 181.975 Axial†	63.5	5.8	6.5329 ug/L	6.5329 ppb	13:10:53
2	Sb 206.836†	36.8	1.0	0.2943 ug/L	0.2943 ppb	13:10:53
2	Se 196.026†	-31.0	1.2	0.5889 ug/L	0.5889 ppb	13:10:53
2	Si 251.611†	653.3	59.1	1.6711 ug/L	1.6711 ppb	13:10:53
2	Sn 189.927†	1.1	-2.3	-0.3399 ug/L	-0.3399 ppb	13:10:53
2	Ti 334.940†	-1676.8	83.4	0.1358 ug/L	0.1358 ppb	13:10:33
2	Tl 190.801†	-43.1	8.8	2.4144 ug/L	2.4144 ppb	13:10:53
2	U 409.014†	-2807.1	-234.1	-6.9582 ug/L	-6.9582 ppb	13:10:33
2	V 292.402†	-1642.6	103.3	0.6448 ug/L	0.6448 ppb	13:10:33
2	Zn 213.857†	830.1	26.7	0.2152 ug/L	0.2152 ppb	13:10:53
2	SiO2†	675.5	62.5	3.7868 ug/L	3.7868 ppb	13:11:29
3	Sc Radial	4641.1	4641.1	99.4 %		13:09:41
3	Y RADIAL	4899.8	4899.8	99.33 %		13:09:41
3	Al 396.153Radial†	-37.6	-11.0	-9.8208 ug/L	-9.8208 ppb	13:09:41
3	Ca 317.933Radial†	17.1	4.6	7.7157 ug/L	7.7157 ppb	13:10:01
3	Fe 238.204 Radial†	8.5	-5.3	-46.933 ug/L	-46.933 ppb	13:10:01
3	K 766.490 Radial†	3545.5	229.0	45.418 ug/L	45.418 ppb	13:09:41
3	Mg 279.077 IEC†	0.1	-1.5	-48.406 ug/L	-48.406 ppb	13:10:01
3	Na 589.592 Radial†	-1461.4	280.3	84.676 ug/L	84.676 ppb	13:09:41
3	Sr 421.552†	-10.5	-26.5	-0.1943 ug/L	-0.1943 ppb	13:09:41
3	Sc 361.383	852049.0	852049.0	96.102 %		13:10:59
3	Y 371.029	732328.1	732328.1	96.137 %		13:10:59
3	Ag 328.068†	417.5	-77.9	-0.3474 ug/L	-0.3474 ppb	13:10:59
3	As 188.979†	-30.8	1.4	0.4873 ug/L	0.4873 ppb	13:11:19
3	B 249.677†	-557.3	85.9	1.7791 ug/L	1.7791 ppb	13:10:59
3	Ba 233.527†	-8.4	-16.2	-0.1204 ug/L	-0.1204 ppb	13:11:19
3	Be 313.107†	-4302.7	-125.7	-0.0424 ug/L	-0.0424 ppb	13:10:59
3	Cd 226.502†	-241.3	-12.7	-0.1148 ug/L	-0.1148 ppb	13:11:19
3	Co 228.616†	-96.6	-16.5	-0.3092 ug/L	-0.3092 ppb	13:11:19
3	Cr 267.716†	96.2	-3.9	-0.0387 ug/L	-0.0387 ppb	13:10:59
3	Cu 324.752†	8069.9	398.2	1.1765 ug/L	1.1765 ppb	13:10:59
3	Mn 257.610†	541.9	47.5	0.0462 ug/L	0.0462 ppb	13:10:59
3	Mo 202.031†	26.7	7.9	0.4875 ug/L	0.4875 ppb	13:11:19
3	Ni 231.604†	125.1	5.1	0.1124 ug/L	0.1124 ppb	13:11:19
3	P 214.914†	242.2	3.5	1.5427 ug/L	1.5427 ppb	13:11:19
3	Pb 220.353†	-74.8	-0.0	-0.0013 ug/L	-0.0013 ppb	13:11:19
3	S 181.975 Axial†	57.9	0.3	0.3542 ug/L	0.3542 ppb	13:11:19
3	Sb 206.836†	37.5	1.9	0.5855 ug/L	0.5855 ppb	13:11:19
3	Se 196.026†	-45.3	-13.9	-7.2614 ug/L	-7.2614 ppb	13:11:19
3	Si 251.611†	670.6	81.2	2.3048 ug/L	2.3048 ppb	13:11:19
3	Sn 189.927†	5.0	1.8	0.2708 ug/L	0.2708 ppb	13:11:19
3	Ti 334.940†	-1707.3	40.8	0.0676 ug/L	0.0676 ppb	13:10:59
3	Tl 190.801†	-36.7	15.2	4.1554 ug/L	4.1554 ppb	13:11:19
3	U 409.014†	-2740.6	-183.0	-5.4354 ug/L	-5.4354 ppb	13:10:59
3	V 292.402†	-1786.4	-57.1	-0.3558 ug/L	-0.3558 ppb	13:10:59
3	Zn 213.857†	831.9	33.9	0.2811 ug/L	0.2811 ppb	13:11:19
3	SiO2†	702.8	95.3	5.7935 ug/L	5.7935 ppb	13:11:34

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	857094.6	96.671	%	0.5539				0.57%
Sc Radial	4664.7	99.9	%	1.09				1.09%
Y 371.029	736555.9	96.692	%	0.5633				0.58%
Y RADIAL	4927.9	99.90	%	1.178				1.18%
Ag 328.068†	-44.2	-0.1921	ug/L	0.24681	-0.1921	ppb	0.24681	128.49%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.6	0.5294	ug/L	11.41775	0.5294	ppb	11.41775	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.9	-0.3291	ug/L	1.59804	-0.3291	ppb	1.59804	485.61%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	89.1	1.8418	ug/L	0.77039	1.8418	ppb	0.77039	41.83%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-6.0	-0.0437	ug/L	0.08313	-0.0437	ppb	0.08313	190.09%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-122.8	-0.0413	ug/L	0.00343	-0.0413	ppb	0.00343	8.29%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.6	6.1061	ug/L	4.49484	6.1061	ppb	4.49484	73.61%

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

Cd 226.502†	-7.6	-0.0686 ug/L	0.09233	-0.0686 ppb	0.09233	134.52%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-11.2	-0.2090 ug/L	0.11545	-0.2090 ppb	0.11545	55.24%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	4.9	0.0511 ug/L	0.10175	0.0511 ppb	0.10175	198.97%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	291.8	0.8624 ug/L	0.29040	0.8624 ppb	0.29040	33.67%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-3.3	-28.723 ug/L	19.2994	-28.723 ppb	19.2994	67.19%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	182.1	36.107 ug/L	13.5031	36.107 ppb	13.5031	37.40%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.0	-0.6497 ug/L	44.37884	-0.6497 ppb	44.37884	>999.9%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	72.8	0.0738 ug/L	0.02453	0.0738 ppb	0.02453	33.22%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	10.3	0.6451 ug/L	0.20898	0.6451 ppb	0.20898	32.39%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	273.6	82.658 ug/L	5.3706	82.658 ppb	5.3706	6.50%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	5.9	0.1293 ug/L	0.30403	0.1293 ppb	0.30403	235.19%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	7.9	3.7518 ug/L	3.62188	3.7518 ppb	3.62188	96.54%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	0.9	0.1006 ug/L	0.10913	0.1006 ppb	0.10913	108.46%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	2.6	2.9501 ug/L	3.20539	2.9501 ppb	3.20539	108.65%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	5.5	1.6481 ug/L	2.09765	1.6481 ppb	2.09765	127.28%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-6.5	-3.4203 ug/L	3.92786	-3.4203 ppb	3.92786	114.84%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	65.6	1.8586 ug/L	0.38813	1.8586 ppb	0.38813	20.88%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	2.9	0.4278 ug/L	0.85708	0.4278 ppb	0.85708	200.34%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-26.8	-0.1965 ug/L	0.18125	-0.1965 ppb	0.18125	92.22%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	69.8	0.1145 ug/L	0.04068	0.1145 ppb	0.04068	35.53%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	11.9	3.2517 ug/L	0.87238	3.2517 ppb	0.87238	26.83%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-268.4	-7.9756 ug/L	3.17367	-7.9756 ppb	3.17367	39.79%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	32.7	0.2030 ug/L	0.51048	0.2030 ppb	0.51048	251.43%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	22.4	0.1836 ug/L	0.11656	0.1836 ppb	0.11656	63.50%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	66.7	4.0392 ug/L	1.64266	4.0392 ppb	1.64266	40.67%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 10
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/6/2010 14:17:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4592.5	4592.5	98.4	%			14:19:36
1	Y RADIAL	4852.6	4852.6	98.37	%			14:19:36
1	Al 396.153Radial†	5729.8	5850.3	5167.5	ug/L	5167.5	ppb	14:19:36
1	Ca 317.933Radial†	3052.6	3090.0	5177.8	ug/L	5177.8	ppb	14:19:56
1	Fe 238.204 Radial†	574.3	569.8	5022.3	ug/L	5022.3	ppb	14:19:56
1	K 766.490 Radial†	28029.9	25151.6	4984.0	ug/L	4984.0	ppb	14:19:36
1	Mg 279.077 IEC†	164.0	165.0	5282.6	ug/L	5282.6	ppb	14:19:56
1	Na 589.592 Radial†	30800.6	33054.4	9985.0	ug/L	9985.0	ppb	14:19:36
1	Sr 421.552†	69088.6	70202.4	513.95	ug/L	513.95	ppb	14:19:36
1	Sc 361.383	885650.2	885650.2	99.892	%			14:20:55
1	Y 371.029	752424.8	752424.8	98.775	%			14:20:55
1	Ag 328.068†	116247.1	115860.7	500.83	ug/L	500.83	ppb	14:20:55
1	As 188.979†	1379.3	1414.2	499.40	ug/L	499.40	ppb	14:21:15
1	B 249.677†	23245.0	23936.0	491.63	ug/L	491.63	ppb	14:20:55
1	Ba 233.527†	68409.4	68475.9	500.55	ug/L	500.55	ppb	14:20:55
1	Be 313.107†	1479870.7	1485825.2	503.20	ug/L	503.20	ppb	14:20:55
1	Cd 226.502†	52556.5	52851.8	497.59	ug/L	497.59	ppb	14:20:55
1	Co 228.616†	26140.4	26252.7	493.74	ug/L	493.74	ppb	14:21:15
1	Cr 267.716†	49405.5	49354.9	495.31	ug/L	495.31	ppb	14:20:55
1	Cu 324.752†	177080.3	169273.1	501.41	ug/L	501.41	ppb	14:20:55
1	Mn 257.610†	478357.6	478359.3	504.42	ug/L	504.42	ppb	14:20:55
1	Mo 202.031†	7931.5	7920.2	496.66	ug/L	496.66	ppb	14:21:15
1	Ni 231.604†	22494.4	22393.7	491.28	ug/L	491.28	ppb	14:21:15
1	P 214.914†	5320.3	5077.5	2399.5	ug/L	2399.5	ppb	14:21:15
1	Pb 220.353†	4684.6	4767.4	495.46	ug/L	495.46	ppb	14:21:15
1	S 181.975 Axial†	934.2	875.3	988.18	ug/L	988.18	ppb	14:21:15
1	Sb 206.836†	1689.0	1653.7	501.05	ug/L	501.05	ppb	14:21:15
1	Se 196.026†	940.8	975.1	516.77	ug/L	516.77	ppb	14:21:15
1	Si 251.611†	87812.4	87291.0	2492.2	ug/L	2492.2	ppb	14:20:55
1	Sn 189.927†	3340.8	3341.0	494.79	ug/L	494.79	ppb	14:21:15
1	Ti 334.940†	317990.4	320152.2	507.83	ug/L	507.83	ppb	14:20:55
1	Tl 190.801†	1767.5	1822.8	501.28	ug/L	501.28	ppb	14:21:15
1	U 409.014†	13653.6	16337.1	484.09	ug/L	484.09	ppb	14:20:55
1	V 292.402†	77148.4	79033.8	502.78	ug/L	502.78	ppb	14:20:55
1	Zn 213.857†	61487.9	60722.9	495.10	ug/L	495.10	ppb	14:20:55
1	SiO2†	86806.3	86264.3	5269.8	ug/L	5269.8	ppb	14:22:15
2	Sc Radial	4715.5	4715.5	101	%			14:20:01
2	Y RADIAL	4946.8	4946.8	100.3	%			14:20:01
2	Al 396.153Radial†	5764.9	5733.1	5063.3	ug/L	5063.3	ppb	14:20:01
2	Ca 317.933Radial†	3087.8	3043.9	5100.6	ug/L	5100.6	ppb	14:20:21
2	Fe 238.204 Radial†	579.6	559.8	4934.6	ug/L	4934.6	ppb	14:20:21
2	K 766.490 Radial†	28482.0	24856.0	4925.4	ug/L	4925.4	ppb	14:20:01
2	Mg 279.077 IEC†	163.1	159.8	5115.5	ug/L	5115.5	ppb	14:20:21
2	Na 589.592 Radial†	31145.2	32578.9	9841.4	ug/L	9841.4	ppb	14:20:01
2	Sr 421.552†	69861.8	69136.3	506.15	ug/L	506.15	ppb	14:20:01
2	Sc 361.383	880318.0	880318.0	99.290	%			14:21:22
2	Y 371.029	747710.7	747710.7	98.156	%			14:21:22
2	Ag 328.068†	115510.3	115823.5	500.65	ug/L	500.65	ppb	14:21:22
2	As 188.979†	1389.6	1432.9	505.94	ug/L	505.94	ppb	14:21:42
2	B 249.677†	23035.9	23866.4	490.19	ug/L	490.19	ppb	14:21:22
2	Ba 233.527†	68015.6	68494.2	500.68	ug/L	500.68	ppb	14:21:22
2	Be 313.107†	1472331.7	1487205.9	503.66	ug/L	503.66	ppb	14:21:22
2	Cd 226.502†	52450.5	53063.8	499.60	ug/L	499.60	ppb	14:21:22
2	Co 228.616†	26315.5	26587.6	500.05	ug/L	500.05	ppb	14:21:42
2	Cr 267.716†	49356.1	49604.8	497.82	ug/L	497.82	ppb	14:21:22
2	Cu 324.752†	175642.7	168899.0	500.30	ug/L	500.30	ppb	14:21:22
2	Mn 257.610†	476045.3	478931.2	505.02	ug/L	505.02	ppb	14:21:22
2	Mo 202.031†	7994.2	8031.4	503.62	ug/L	503.62	ppb	14:21:42
2	Ni 231.604†	22605.3	22641.8	496.72	ug/L	496.72	ppb	14:21:42

2	P 214.914†	5351.2	5140.8	2430.7 ug/L	2430.7 ppb	14:21:42
2	Pb 220.353†	4713.5	4824.9	501.42 ug/L	501.42 ppb	14:21:42
2	S 181.975 Axial†	941.9	888.7	1003.3 ug/L	1003.3 ppb	14:21:42
2	Sb 206.836†	1703.9	1679.0	508.79 ug/L	508.79 ppb	14:21:42
2	Se 196.026†	944.2	984.2	521.17 ug/L	521.17 ppb	14:21:42
2	Si 251.611†	87094.2	87100.1	2486.7 ug/L	2486.7 ppb	14:21:22
2	Sn 189.927†	3353.9	3374.5	499.72 ug/L	499.72 ppb	14:21:42
2	Ti 334.940†	316021.8	320097.7	507.74 ug/L	507.74 ppb	14:21:22
2	Tl 190.801†	1776.8	1842.8	506.73 ug/L	506.73 ppb	14:21:42
2	U 409.014†	13442.9	16207.7	480.25 ug/L	480.25 ppb	14:21:22
2	V 292.402†	76778.3	79128.8	503.48 ug/L	503.48 ppb	14:21:22
2	Zn 213.857†	61323.0	60929.6	496.78 ug/L	496.78 ppb	14:21:22
2	SiO2†	87671.6	87662.2	5355.4 ug/L	5355.4 ppb	14:22:20
3	Sc Radial	4757.6	4757.6	102 %		14:20:26
3	Y RADIAL	5031.5	5031.5	102.0 %		14:20:26
3	Al 396.153Radial†	5867.2	5782.9	5107.6 ug/L	5107.6 ppb	14:20:26
3	Ca 317.933Radial†	3043.8	2973.7	4982.9 ug/L	4982.9 ppb	14:20:46
3	Fe 238.204 Radial†	567.4	542.8	4785.3 ug/L	4785.3 ppb	14:20:46
3	K 766.490 Radial†	28726.1	24845.7	4923.4 ug/L	4923.4 ppb	14:20:26
3	Mg 279.077 IEC†	164.8	160.1	5124.6 ug/L	5124.6 ppb	14:20:46
3	Na 589.592 Radial†	31346.5	32503.4	9818.6 ug/L	9818.6 ppb	14:20:26
3	Sr 421.552†	70530.9	69180.1	506.47 ug/L	506.47 ppb	14:20:26
3	Sc 361.383	878142.6	878142.6	99.045 %		14:21:50
3	Y 371.029	745386.1	745386.1	97.851 %		14:21:50
3	Ag 328.068†	115438.8	116039.5	501.52 ug/L	501.52 ppb	14:21:50
3	As 188.979†	1368.9	1415.5	499.84 ug/L	499.84 ppb	14:22:10
3	B 249.677†	23054.6	23942.7	491.79 ug/L	491.79 ppb	14:21:50
3	Ba 233.527†	68095.0	68744.0	502.50 ug/L	502.50 ppb	14:21:50
3	Be 313.107†	1469882.8	1488406.7	504.07 ug/L	504.07 ppb	14:21:50
3	Cd 226.502†	52261.3	53003.6	499.04 ug/L	499.04 ppb	14:21:50
3	Co 228.616†	26129.8	26465.7	497.75 ug/L	497.75 ppb	14:22:10
3	Cr 267.716†	49223.9	49594.4	497.71 ug/L	497.71 ppb	14:21:50
3	Cu 324.752†	175650.8	169345.4	501.61 ug/L	501.61 ppb	14:21:50
3	Mn 257.610†	475845.0	479916.6	506.04 ug/L	506.04 ppb	14:21:50
3	Mo 202.031†	7924.1	7980.6	500.42 ug/L	500.42 ppb	14:22:10
3	Ni 231.604†	22536.5	22628.7	496.44 ug/L	496.44 ppb	14:22:10
3	P 214.914†	5322.2	5124.9	2422.8 ug/L	2422.8 ppb	14:22:10
3	Pb 220.353†	4710.1	4833.3	502.30 ug/L	502.30 ppb	14:22:10
3	S 181.975 Axial†	939.2	888.3	1002.9 ug/L	1002.9 ppb	14:22:10
3	Sb 206.836†	1699.8	1679.1	508.70 ug/L	508.70 ppb	14:22:10
3	Se 196.026†	929.6	971.9	514.40 ug/L	514.40 ppb	14:22:10
3	Si 251.611†	87007.8	87230.2	2490.4 ug/L	2490.4 ppb	14:21:50
3	Sn 189.927†	3330.7	3359.4	497.48 ug/L	497.48 ppb	14:22:10
3	Ti 334.940†	315828.6	320691.1	508.68 ug/L	508.68 ppb	14:21:50
3	Tl 190.801†	1771.1	1841.6	506.41 ug/L	506.41 ppb	14:22:10
3	U 409.014†	13590.6	16390.4	485.70 ug/L	485.70 ppb	14:21:50
3	V 292.402†	76580.9	79121.1	503.42 ug/L	503.42 ppb	14:21:50
3	Zn 213.857†	61222.0	60980.6	497.20 ug/L	497.20 ppb	14:21:50
3	SiO2†	86439.4	86636.8	5292.6 ug/L	5292.6 ppb	14:22:25

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	881370.2	99.409	%	0.4357				0.44%
Sc Radial	4688.5	100	%	1.8				1.83%
Y 371.029	748507.2	98.261	%	0.4708				0.48%
Y RADIAL	4943.6	100.2	%	1.81				1.81%
Ag 328.068†	115907.9	501.00	ug/L	0.462	501.00	ppb	0.462	0.09%
QC value within limits for Ag 328.068 Recovery = 100.20%								
Al 396.153Radial†	5788.7	5112.8	ug/L	52.31	5112.8	ppb	52.31	1.02%
QC value within limits for Al 396.153Radial Recovery = 102.26%								
As 188.979†	1420.9	501.73	ug/L	3.653	501.73	ppb	3.653	0.73%
QC value within limits for As 188.979 Recovery = 100.35%								
B 249.677†	23915.0	491.20	ug/L	0.881	491.20	ppb	0.881	0.18%
QC value within limits for B 249.677 Recovery = 98.24%								
Ba 233.527†	68571.4	501.24	ug/L	1.090	501.24	ppb	1.090	0.22%
QC value within limits for Ba 233.527 Recovery = 100.25%								
Be 313.107†	1487145.9	503.64	ug/L	0.437	503.64	ppb	0.437	0.09%
QC value within limits for Be 313.107 Recovery = 100.73%								
Ca 317.933Radial†	3035.9	5087.1	ug/L	98.14	5087.1	ppb	98.14	1.93%

QC value within limits for Ca 317.933Radial Recovery = 101.74%

Cd 226.502†	52973.1	498.74 ug/L	1.038	498.74 ppb	1.038	0.21%
QC value within limits for Cd 226.502 Recovery = 99.75%						
Co 228.616†	26435.3	497.18 ug/L	3.196	497.18 ppb	3.196	0.64%
QC value within limits for Co 228.616 Recovery = 99.44%						
Cr 267.716†	49518.1	496.94 ug/L	1.416	496.94 ppb	1.416	0.28%
QC value within limits for Cr 267.716 Recovery = 99.39%						
Cu 324.752†	169172.5	501.11 ug/L	0.708	501.11 ppb	0.708	0.14%
QC value within limits for Cu 324.752 Recovery = 100.22%						
Fe 238.204 Radial†	557.5	4914.1 ug/L	119.83	4914.1 ppb	119.83	2.44%
QC value within limits for Fe 238.204 Radial Recovery = 98.28%						
K 766.490 Radial†	24951.1	4944.2 ug/L	34.43	4944.2 ppb	34.43	0.70%
QC value within limits for K 766.490 Radial Recovery = 98.88%						
Mg 279.077 IEC†	161.6	5174.2 ug/L	93.94	5174.2 ppb	93.94	1.82%
QC value within limits for Mg 279.077 IEC Recovery = 103.48%						
Mn 257.610†	479069.0	505.16 ug/L	0.819	505.16 ppb	0.819	0.16%
QC value within limits for Mn 257.610 Recovery = 101.03%						
Mo 202.031†	7977.4	500.23 ug/L	3.485	500.23 ppb	3.485	0.70%
QC value within limits for Mo 202.031 Recovery = 100.05%						
Na 589.592 Radial†	32712.2	9881.7 ug/L	90.23	9881.7 ppb	90.23	0.91%
QC value within limits for Na 589.592 Radial Recovery = 98.82%						
Ni 231.604†	22554.8	494.82 ug/L	3.063	494.82 ppb	3.063	0.62%
QC value within limits for Ni 231.604 Recovery = 98.96%						
P 214.914†	5114.4	2417.7 ug/L	16.21	2417.7 ppb	16.21	0.67%
QC value within limits for P 214.914 Recovery = 96.71%						
Pb 220.353†	4808.6	499.72 ug/L	3.721	499.72 ppb	3.721	0.74%
QC value within limits for Pb 220.353 Recovery = 99.94%						
S 181.975 Axial†	884.1	998.15 ug/L	8.636	998.15 ppb	8.636	0.87%
QC value within limits for S 181.975 Axial Recovery = 99.81%						
Sb 206.836†	1670.6	506.18 ug/L	4.439	506.18 ppb	4.439	0.88%
QC value within limits for Sb 206.836 Recovery = 101.24%						
Se 196.026†	977.0	517.45 ug/L	3.437	517.45 ppb	3.437	0.66%
QC value within limits for Se 196.026 Recovery = 103.49%						
Si 251.611†	87207.1	2489.8 ug/L	2.85	2489.8 ppb	2.85	0.11%
QC value within limits for Si 251.611 Recovery = 99.59%						
Sn 189.927†	3358.3	497.33 ug/L	2.470	497.33 ppb	2.470	0.50%
QC value within limits for Sn 189.927 Recovery = 99.47%						
Sr 421.552†	69506.3	508.85 ug/L	4.416	508.85 ppb	4.416	0.87%
QC value within limits for Sr 421.552 Recovery = 101.77%						
Ti 334.940†	320313.7	508.08 ug/L	0.515	508.08 ppb	0.515	0.10%
QC value within limits for Ti 334.940 Recovery = 101.62%						
Tl 190.801†	1835.7	504.81 ug/L	3.057	504.81 ppb	3.057	0.61%
QC value within limits for Tl 190.801 Recovery = 100.96%						
U 409.014†	16311.7	483.35 ug/L	2.800	483.35 ppb	2.800	0.58%
QC value within limits for U 409.014 Recovery = 96.67%						
V 292.402†	79094.6	503.23 ug/L	0.386	503.23 ppb	0.386	0.08%
QC value within limits for V 292.402 Recovery = 100.65%						
Zn 213.857†	60877.7	496.36 ug/L	1.112	496.36 ppb	1.112	0.22%
QC value within limits for Zn 213.857 Recovery = 99.27%						
SiO2†	86854.4	5305.9 ug/L	44.32	5305.9 ppb	44.32	0.84%
QC value within limits for SiO2 Recovery = 99.22%						

All analyte(s) passed QC.

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

Autosampler Location: 8
Date Collected: 1/6/2010 14:24:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4727.8	4727.8	101	%			14:26:29
1	Y RADIAL	4998.0	4998.0	101.3	%			14:26:29
1	Al 396.153Radial†	-12.7	14.2	12.590	ug/L	12.590	ppb	14:26:29
1	Ca 317.933Radial†	15.3	2.5	4.2105	ug/L	4.2105	ppb	14:26:49
1	Fe 238.204 Radial†	13.6	-0.4	-3.7059	ug/L	-3.7059	ppb	14:26:49
1	K 766.490 Radial†	3317.7	-61.3	-12.198	ug/L	-12.198	ppb	14:26:29
1	Mg 279.077 IEC†	4.3	2.6	84.467	ug/L	84.467	ppb	14:26:49
1	Na 589.592 Radial†	-1563.1	206.9	62.509	ug/L	62.509	ppb	14:26:29
1	Sr 421.552†	7.9	-8.2	-0.0597	ug/L	-0.0597	ppb	14:26:29
1	Sc 361.383	857544.5	857544.5	96.722	%			14:27:46
1	Y 371.029	736530.3	736530.3	96.688	%			14:27:46
1	Ag 328.068†	545.4	51.6	0.2217	ug/L	0.2217	ppb	14:27:46
1	As 188.979†	-28.2	4.3	1.4983	ug/L	1.4983	ppb	14:28:06
1	B 249.677†	-600.7	44.8	0.9257	ug/L	0.9257	ppb	14:27:46
1	Ba 233.527†	-8.1	-15.8	-0.1159	ug/L	-0.1159	ppb	14:28:06
1	Be 313.107†	-4328.8	-124.1	-0.0418	ug/L	-0.0418	ppb	14:27:46
1	Cd 226.502†	-226.8	3.9	0.0371	ug/L	0.0371	ppb	14:28:06
1	Co 228.616†	-99.9	-19.4	-0.3627	ug/L	-0.3627	ppb	14:28:06
1	Cr 267.716†	93.9	-6.9	-0.0689	ug/L	-0.0689	ppb	14:27:46
1	Cu 324.752†	8037.3	310.7	0.9197	ug/L	0.9197	ppb	14:27:46
1	Mn 257.610†	497.2	-2.3	-0.0044	ug/L	-0.0044	ppb	14:27:46
1	Mo 202.031†	27.3	8.3	0.5181	ug/L	0.5181	ppb	14:28:06
1	Ni 231.604†	119.0	-2.0	-0.0439	ug/L	-0.0439	ppb	14:28:06
1	P 214.914†	263.9	24.3	11.674	ug/L	11.674	ppb	14:28:06
1	Pb 220.353†	-95.4	-20.8	-2.1542	ug/L	-2.1542	ppb	14:28:06
1	S 181.975 Axial†	63.8	6.1	6.8789	ug/L	6.8789	ppb	14:28:06
1	Sb 206.836†	63.5	28.6	8.5365	ug/L	8.5365	ppb	14:28:06
1	Se 196.026†	-30.8	1.4	0.7324	ug/L	0.7324	ppb	14:28:06
1	Si 251.611†	670.9	77.1	2.2085	ug/L	2.2085	ppb	14:27:46
1	Sn 189.927†	-2.1	-5.6	-0.8234	ug/L	-0.8234	ppb	14:28:06
1	Ti 334.940†	-1712.2	47.2	0.0761	ug/L	0.0761	ppb	14:27:46
1	Tl 190.801†	-47.5	4.3	1.1835	ug/L	1.1835	ppb	14:28:06
1	U 409.014†	-2659.5	-80.9	-2.4057	ug/L	-2.4057	ppb	14:27:46
1	V 292.402†	-1763.3	-21.2	-0.1279	ug/L	-0.1279	ppb	14:27:46
1	Zn 213.857†	811.9	7.7	0.0602	ug/L	0.0602	ppb	14:28:06
1	SiO2†	717.6	105.9	6.4981	ug/L	6.4981	ppb	14:29:02
2	Sc Radial	4670.3	4670.3	100	%			14:26:54
2	Y RADIAL	4958.9	4958.9	100.5	%			14:26:54
2	Al 396.153Radial†	-5.7	21.0	18.641	ug/L	18.641	ppb	14:26:54
2	Ca 317.933Radial†	17.9	5.3	8.8644	ug/L	8.8644	ppb	14:27:14
2	Fe 238.204 Radial†	12.6	-1.3	-11.025	ug/L	-11.025	ppb	14:27:14
2	K 766.490 Radial†	3352.0	13.3	2.6138	ug/L	2.6138	ppb	14:26:54
2	Mg 279.077 IEC†	2.4	0.8	24.302	ug/L	24.302	ppb	14:27:14
2	Na 589.592 Radial†	-1527.7	223.3	67.441	ug/L	67.441	ppb	14:26:54
2	Sr 421.552†	59.8	43.8	0.3207	ug/L	0.3207	ppb	14:26:54
2	Sc 361.383	853085.6	853085.6	96.219	%			14:28:11
2	Y 371.029	733488.7	733488.7	96.289	%			14:28:11
2	Ag 328.068†	363.1	-135.0	-0.5779	ug/L	-0.5779	ppb	14:28:11
2	As 188.979†	-40.7	-8.9	-3.1054	ug/L	-3.1054	ppb	14:28:31
2	B 249.677†	-585.0	57.9	1.1953	ug/L	1.1953	ppb	14:28:11
2	Ba 233.527†	8.4	1.2	0.0082	ug/L	0.0082	ppb	14:28:31
2	Be 313.107†	-4328.3	-146.9	-0.0500	ug/L	-0.0500	ppb	14:28:11
2	Cd 226.502†	-237.4	-8.3	-0.0774	ug/L	-0.0774	ppb	14:28:31
2	Co 228.616†	-91.3	-10.9	-0.2043	ug/L	-0.2043	ppb	14:28:31
2	Cr 267.716†	118.6	19.2	0.1942	ug/L	0.1942	ppb	14:28:11
2	Cu 324.752†	7858.7	168.5	0.4983	ug/L	0.4983	ppb	14:28:11
2	Mn 257.610†	507.4	10.9	0.0099	ug/L	0.0099	ppb	14:28:11
2	Mo 202.031†	20.9	1.8	0.1094	ug/L	0.1094	ppb	14:28:31
2	Ni 231.604†	114.8	-5.8	-0.1266	ug/L	-0.1266	ppb	14:28:31

2	P 214.914†	254.2	15.6	7.5464 ug/L	7.5464 ppb	14:28:31
2	Pb 220.353†	-70.8	4.2	0.4400 ug/L	0.4400 ppb	14:28:31
2	S 181.975 Axial†	54.8	-2.9	-3.2738 ug/L	-3.2738 ppb	14:28:31
2	Sb 206.836†	37.6	2.0	0.6052 ug/L	0.6052 ppb	14:28:31
2	Se 196.026†	-41.6	-9.9	-5.1201 ug/L	-5.1201 ppb	14:28:31
2	Si 251.611†	690.0	100.5	2.8790 ug/L	2.8790 ppb	14:28:11
2	Sn 189.927†	6.0	2.8	0.4188 ug/L	0.4188 ppb	14:28:31
2	Ti 334.940†	-1841.8	-96.9	-0.1498 ug/L	-0.1498 ppb	14:28:11
2	Tl 190.801†	-51.8	-0.5	-0.1335 ug/L	-0.1335 ppb	14:28:31
2	U 409.014†	-2823.8	-266.0	-7.9072 ug/L	-7.9072 ppb	14:28:11
2	V 292.402†	-1770.1	-37.8	-0.2487 ug/L	-0.2487 ppb	14:28:11
2	Zn 213.857†	824.7	25.5	0.2094 ug/L	0.2094 ppb	14:28:31
2	SiO2†	703.8	95.4	5.8467 ug/L	5.8467 ppb	14:29:07
3	Sc Radial	4835.9	4835.9	104 %		14:27:19
3	Y RADIAL	5152.0	5152.0	104.4 %		14:27:19
3	Al 396.153Radial†	-3.8	23.0	20.400 ug/L	20.400 ppb	14:27:19
3	Ca 317.933Radial†	21.9	8.6	14.379 ug/L	14.379 ppb	14:27:39
3	Fe 238.204 Radial†	12.6	-1.7	-14.736 ug/L	-14.736 ppb	14:27:39
3	K 766.490 Radial†	3441.7	-14.7	-2.9570 ug/L	-2.9570 ppb	14:27:19
3	Mg 279.077 IEC†	4.8	3.0	94.870 ug/L	94.870 ppb	14:27:39
3	Na 589.592 Radial†	-1584.9	220.3	66.562 ug/L	66.562 ppb	14:27:19
3	Sr 421.552†	23.7	6.9	0.0506 ug/L	0.0506 ppb	14:27:19
3	Sc 361.383	859018.9	859018.9	96.888 %		14:28:36
3	Y 371.029	738418.3	738418.3	96.936 %		14:28:36
3	Ag 328.068†	431.9	-66.5	-0.2880 ug/L	-0.2880 ppb	14:28:36
3	As 188.979†	-36.0	-3.8	-1.3286 ug/L	-1.3286 ppb	14:28:57
3	B 249.677†	-600.6	45.9	0.9490 ug/L	0.9490 ppb	14:28:36
3	Ba 233.527†	-3.8	-11.4	-0.0846 ug/L	-0.0846 ppb	14:28:57
3	Be 313.107†	-4383.5	-172.8	-0.0583 ug/L	-0.0583 ppb	14:28:36
3	Cd 226.502†	-248.7	-18.3	-0.1713 ug/L	-0.1713 ppb	14:28:57
3	Co 228.616†	-92.9	-11.9	-0.2228 ug/L	-0.2228 ppb	14:28:57
3	Cr 267.716†	100.6	-0.2	-0.0014 ug/L	-0.0014 ppb	14:28:36
3	Cu 324.752†	7878.8	132.8	0.3926 ug/L	0.3926 ppb	14:28:36
3	Mn 257.610†	513.3	13.3	0.0108 ug/L	0.0108 ppb	14:28:36
3	Mo 202.031†	24.8	5.7	0.3554 ug/L	0.3554 ppb	14:28:57
3	Ni 231.604†	92.1	-30.0	-0.6589 ug/L	-0.6589 ppb	14:28:57
3	P 214.914†	251.7	11.3	5.4331 ug/L	5.4331 ppb	14:28:57
3	Pb 220.353†	-97.8	-23.2	-2.3983 ug/L	-2.3983 ppb	14:28:57
3	S 181.975 Axial†	59.6	1.6	1.7976 ug/L	1.7976 ppb	14:28:57
3	Sb 206.836†	44.7	9.1	2.7018 ug/L	2.7018 ppb	14:28:57
3	Se 196.026†	-24.0	8.5	4.2973 ug/L	4.2973 ppb	14:28:57
3	Si 251.611†	630.8	34.5	0.9880 ug/L	0.9880 ppb	14:28:36
3	Sn 189.927†	-2.0	-5.4	-0.8006 ug/L	-0.8006 ppb	14:28:57
3	Ti 334.940†	-1728.1	33.8	0.0565 ug/L	0.0565 ppb	14:28:36
3	Tl 190.801†	-65.3	-14.0	-3.8321 ug/L	-3.8321 ppb	14:28:57
3	U 409.014†	-2748.9	-168.5	-5.0077 ug/L	-5.0077 ppb	14:28:36
3	V 292.402†	-1798.1	-54.0	-0.3394 ug/L	-0.3394 ppb	14:28:36
3	Zn 213.857†	826.3	21.2	0.1755 ug/L	0.1755 ppb	14:28:57
3	SiO2†	675.6	61.3	3.7578 ug/L	3.7578 ppb	14:29:12

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	856549.7	96.610	%	0.3484				0.36%
Sc Radial	4744.6	102	%	1.8				1.77%
Y 371.029	736145.7	96.638	%	0.3265				0.34%
Y RADIAL	5036.3	102.1	%	2.07				2.03%
Ag 328.068†	-50.0	-0.2147	ug/L	0.40481	-0.2147	ppb	0.40481	188.54%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	19.4	17.210	ug/L	4.0970	17.210	ppb	4.0970	23.81%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.8	-0.9786	ug/L	2.32173	-0.9786	ppb	2.32173	237.25%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	49.5	1.0233	ug/L	0.14939	1.0233	ppb	0.14939	14.60%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-8.7	-0.0641	ug/L	0.06453	-0.0641	ppb	0.06453	100.69%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-147.9	-0.0500	ug/L	0.00825	-0.0500	ppb	0.00825	16.50%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	5.5	9.1514	ug/L	5.09049	9.1514	ppb	5.09049	55.63%

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

Cd 226.502†	-7.6	-0.0705 ug/L	0.10436	-0.0705 ppb	0.10436	147.99%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-14.1	-0.2632 ug/L	0.08659	-0.2632 ppb	0.08659	32.89%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	4.0	0.0413 ug/L	0.13667	0.0413 ppb	0.13667	331.04%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	204.0	0.6035 ug/L	0.27890	0.6035 ppb	0.27890	46.21%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-1.1	-9.8222 ug/L	5.61255	-9.8222 ppb	5.61255	57.14%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-20.9	-4.1805 ug/L	7.48155	-4.1805 ppb	7.48155	178.96%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	2.1	67.880 ug/L	38.0964	67.880 ppb	38.0964	56.12%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	7.3	0.0054 ug/L	0.00854	0.0054 ppb	0.00854	156.73%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	5.2	0.3276 ug/L	0.20579	0.3276 ppb	0.20579	62.81%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	216.8	65.504 ug/L	2.6308	65.504 ppb	2.6308	4.02%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-12.6	-0.2765 ug/L	0.33378	-0.2765 ppb	0.33378	120.73%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	17.0	8.2178 ug/L	3.17405	8.2178 ppb	3.17405	38.62%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-13.3	-1.3708 ug/L	1.57300	-1.3708 ppb	1.57300	114.75%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	1.6	1.8009 ug/L	5.07638	1.8009 ppb	5.07638	281.88%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	13.2	3.9479 ug/L	4.10984	3.9479 ppb	4.10984	104.10%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.0	-0.0301 ug/L	4.75477	-0.0301 ppb	4.75477	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	70.7	2.0252 ug/L	0.95875	2.0252 ppb	0.95875	47.34%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-2.7	-0.4017 ug/L	0.71068	-0.4017 ppb	0.71068	176.90%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	14.2	0.1039 ug/L	0.19573	0.1039 ppb	0.19573	188.45%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-5.3	-0.0057 ug/L	0.12517	-0.0057 ppb	0.12517	>999.9%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-3.4	-0.9274 ug/L	2.60033	-0.9274 ppb	2.60033	280.40%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-171.8	-5.1069 ug/L	2.75210	-5.1069 ppb	2.75210	53.89%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-37.7	-0.2387 ug/L	0.10613	-0.2387 ppb	0.10613	44.47%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	18.1	0.1484 ug/L	0.07822	0.1484 ppb	0.07822	52.72%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	87.5	5.3675 ug/L	1.43162	5.3675 ppb	1.43162	26.67%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Analysis Begun

Start Time: 1/6/2010 14:45:21
Logged In Analyst: Optima3
Spectrometer Model: Optima 5300 DV, S/N 077C7090601
Plasma On Time: 1/4/2010 06:33:21
Technique: ICP Continuous
Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\010610A.sif
Batch ID:
Results Data Set: 010610A
Results Library: C:\pe\Optima3\Results\Results.mdb

Sequence No.: 1
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 7
Date Collected: 1/6/2010 14:45:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4631.7	4631.7	99.2	%			14:47:14
1	Y RADIAL	4827.6	4827.6	97.87	%			14:47:14
1	Al 396.153Radial†	5764.3	5835.7	5153.6	ug/L	5153.6	ppb	14:47:14
1	Ca 317.933Radial†	3059.5	3070.6	5145.3	ug/L	5145.3	ppb	14:47:34
1	Fe 238.204 Radial†	578.5	569.1	5016.8	ug/L	5016.8	ppb	14:47:34
1	K 766.490 Radial†	28220.7	25102.3	4974.1	ug/L	4974.1	ppb	14:47:14
1	Mg 279.077 IEC†	165.8	165.4	5295.0	ug/L	5295.0	ppb	14:47:34
1	Na 589.592 Radial†	31223.4	33215.1	10034	ug/L	10034	ppb	14:47:14
1	Sr 421.552†	69786.8	70310.8	514.75	ug/L	514.75	ppb	14:47:14
1	Sc 361.383	852867.4	852867.4	96.194	%			14:48:33
1	Y 371.029	724458.9	724458.9	95.104	%			14:48:33
1	Ag 328.068†	115532.9	119591.4	516.91	ug/L	516.91	ppb	14:48:33
1	As 188.979†	1384.1	1472.3	519.83	ug/L	519.83	ppb	14:48:53
1	B 249.677†	23216.3	24800.7	509.40	ug/L	509.40	ppb	14:48:33
1	Ba 233.527†	68094.1	70780.6	517.39	ug/L	517.39	ppb	14:48:33
1	Be 313.107†	1473090.9	1535722.5	520.09	ug/L	520.09	ppb	14:48:33
1	Cd 226.502†	52381.1	54691.8	514.93	ug/L	514.93	ppb	14:48:33
1	Co 228.616†	26229.5	27351.2	514.41	ug/L	514.41	ppb	14:48:53
1	Cr 267.716†	49382.6	51232.3	514.15	ug/L	514.15	ppb	14:48:33
1	Cu 324.752†	175601.5	174549.9	517.03	ug/L	517.03	ppb	14:48:33
1	Mn 257.610†	476449.4	494782.8	521.73	ug/L	521.73	ppb	14:48:33
1	Mo 202.031†	7962.7	8257.8	517.81	ug/L	517.81	ppb	14:48:53
1	Ni 231.604†	22587.4	23356.0	512.39	ug/L	512.39	ppb	14:48:53
1	P 214.914†	5347.0	5310.0	2510.7	ug/L	2510.7	ppb	14:48:53
1	Pb 220.353†	4744.7	5010.2	520.64	ug/L	520.64	ppb	14:48:53
1	S 181.975 Axial†	937.4	914.6	1032.6	ug/L	1032.6	ppb	14:48:53
1	Sb 206.836†	1708.9	1739.4	527.04	ug/L	527.04	ppb	14:48:53
1	Se 196.026†	938.0	1008.4	533.85	ug/L	533.85	ppb	14:48:53
1	Si 251.611†	86985.0	89809.8	2564.1	ug/L	2564.1	ppb	14:48:33
1	Sn 189.927†	3358.9	3488.4	516.57	ug/L	516.57	ppb	14:48:53
1	Ti 334.940†	316344.6	330677.6	524.52	ug/L	524.52	ppb	14:48:33
1	Tl 190.801†	1771.2	1894.6	520.99	ug/L	520.99	ppb	14:48:53
1	U 409.014†	13595.8	16802.4	497.89	ug/L	497.89	ppb	14:48:33
1	V 292.402†	76932.1	81777.6	520.31	ug/L	520.31	ppb	14:48:33
1	Zn 213.857†	61321.7	62916.1	512.98	ug/L	512.98	ppb	14:48:33
1	SiO2†	87277.5	90094.4	5504.0	ug/L	5504.0	ppb	14:49:53
2	Sc Radial	4588.5	4588.5	98.3	%			14:47:39
2	Y RADIAL	4834.4	4834.4	98.00	%			14:47:39
2	Al 396.153Radial†	5697.7	5822.6	5142.9	ug/L	5142.9	ppb	14:47:39
2	Ca 317.933Radial†	3058.3	3098.5	5192.0	ug/L	5192.0	ppb	14:47:59
2	Fe 238.204 Radial†	576.2	572.3	5043.9	ug/L	5043.9	ppb	14:47:59
2	K 766.490 Radial†	28150.6	25299.1	5013.3	ug/L	5013.3	ppb	14:47:39
2	Mg 279.077 IEC†	163.8	165.0	5282.0	ug/L	5282.0	ppb	14:47:59
2	Na 589.592 Radial†	30769.2	33049.6	9983.6	ug/L	9983.6	ppb	14:47:39
2	Sr 421.552†	68620.8	69787.6	510.91	ug/L	510.91	ppb	14:47:39
2	Sc 361.383	881754.7	881754.7	99.452	%			14:49:00
2	Y 371.029	749059.9	749059.9	98.333	%			14:49:00

2	Ag 328.068†	115775.5	115900.6	501.01 ug/L	501.01 ppb	14:49:00
2	As 188.979†	1382.0	1423.0	502.47 ug/L	502.47 ppb	14:49:20
2	B 249.677†	23161.7	23955.0	492.02 ug/L	492.02 ppb	14:49:00
2	Ba 233.527†	68039.7	68406.8	500.04 ug/L	500.04 ppb	14:49:00
2	Be 313.107†	1470557.3	1483005.6	502.24 ug/L	502.24 ppb	14:49:00
2	Cd 226.502†	52216.8	52742.7	496.56 ug/L	496.56 ppb	14:49:00
2	Co 228.616†	26025.3	26252.5	493.74 ug/L	493.74 ppb	14:49:20
2	Cr 267.716†	49295.5	49462.9	496.39 ug/L	496.39 ppb	14:49:00
2	Cu 324.752†	175708.6	168677.0	499.65 ug/L	499.65 ppb	14:49:00
2	Mn 257.610†	475829.3	477932.7	503.98 ug/L	503.98 ppb	14:49:00
2	Mo 202.031†	7921.7	7945.3	498.24 ug/L	498.24 ppb	14:49:20
2	Ni 231.604†	22418.7	22417.1	491.80 ug/L	491.80 ppb	14:49:20
2	P 214.914†	5304.9	5085.6	2403.7 ug/L	2403.7 ppb	14:49:20
2	Pb 220.353†	4664.0	4767.5	495.46 ug/L	495.46 ppb	14:49:20
2	S 181.975 Axial†	930.0	875.2	988.13 ug/L	988.13 ppb	14:49:20
2	Sb 206.836†	1691.7	1664.0	504.11 ug/L	504.11 ppb	14:49:20
2	Se 196.026†	948.2	986.7	522.80 ug/L	522.80 ppb	14:49:20
2	Si 251.611†	86963.1	86825.3	2478.9 ug/L	2478.9 ppb	14:49:00
2	Sn 189.927†	3319.5	3334.4	493.80 ug/L	493.80 ppb	14:49:20
2	Ti 334.940†	316088.2	319645.9	507.03 ug/L	507.03 ppb	14:49:00
2	Tl 190.801†	1751.8	1814.8	499.09 ug/L	499.09 ppb	14:49:20
2	U 409.014†	13521.7	16264.9	481.94 ug/L	481.94 ppb	14:49:00
2	V 292.402†	76774.6	78999.1	502.58 ug/L	502.58 ppb	14:49:00
2	Zn 213.857†	61183.5	60688.7	494.82 ug/L	494.82 ppb	14:49:00
2	SiO2†	86679.9	86521.1	5285.5 ug/L	5285.5 ppb	14:49:58
3	Sc Radial	4618.4	4618.4	98.9 %		14:48:04
3	Y RADIAL	4874.8	4874.8	98.82 %		14:48:04
3	Al 396.153Radial†	5816.5	5905.2	5216.1 ug/L	5216.1 ppb	14:48:04
3	Ca 317.933Radial†	3068.9	3089.1	5176.2 ug/L	5176.2 ppb	14:48:24
3	Fe 238.204 Radial†	575.8	568.1	5007.1 ug/L	5007.1 ppb	14:48:24
3	K 766.490 Radial†	28566.3	25533.9	5059.9 ug/L	5059.9 ppb	14:48:04
3	Mg 279.077 IEC†	162.4	162.5	5200.9 ug/L	5200.9 ppb	14:48:24
3	Na 589.592 Radial†	31558.3	33644.7	10163 ug/L	10163 ppb	14:48:04
3	Sr 421.552†	70538.0	71273.7	521.79 ug/L	521.79 ppb	14:48:04
3	Sc 361.383	885196.0	885196.0	99.841 %		14:49:28
3	Y 371.029	751922.4	751922.4	98.709 %		14:49:28
3	Ag 328.068†	115568.4	115240.6	498.15 ug/L	498.15 ppb	14:49:28
3	As 188.979†	1373.4	1409.0	497.54 ug/L	497.54 ppb	14:49:48
3	B 249.677†	23145.2	23848.0	489.81 ug/L	489.81 ppb	14:49:28
3	Ba 233.527†	68027.1	68128.2	498.00 ug/L	498.00 ppb	14:49:28
3	Be 313.107†	1472124.0	1478826.2	500.82 ug/L	500.82 ppb	14:49:28
3	Cd 226.502†	52405.8	52727.9	496.42 ug/L	496.42 ppb	14:49:28
3	Co 228.616†	26210.0	26335.9	495.31 ug/L	495.31 ppb	14:49:48
3	Cr 267.716†	49262.6	49237.2	494.13 ug/L	494.13 ppb	14:49:28
3	Cu 324.752†	175315.5	167596.4	496.45 ug/L	496.45 ppb	14:49:28
3	Mn 257.610†	475877.2	476120.7	502.06 ug/L	502.06 ppb	14:49:28
3	Mo 202.031†	7959.3	7952.1	498.65 ug/L	498.65 ppb	14:49:48
3	Ni 231.604†	22564.4	22475.3	493.07 ug/L	493.07 ppb	14:49:48
3	P 214.914†	5344.4	5104.4	2413.4 ug/L	2413.4 ppb	14:49:48
3	Pb 220.353†	4701.2	4786.5	497.45 ug/L	497.45 ppb	14:49:48
3	S 181.975 Axial†	932.8	874.4	987.15 ug/L	987.15 ppb	14:49:48
3	Sb 206.836†	1706.8	1672.4	506.69 ug/L	506.69 ppb	14:49:48
3	Se 196.026†	942.4	977.2	517.80 ug/L	517.80 ppb	14:49:48
3	Si 251.611†	86836.5	86358.6	2465.4 ug/L	2465.4 ppb	14:49:28
3	Sn 189.927†	3331.1	3333.0	493.59 ug/L	493.59 ppb	14:49:48
3	Ti 334.940†	315842.5	318164.2	504.68 ug/L	504.68 ppb	14:49:28
3	Tl 190.801†	1766.3	1822.5	501.16 ug/L	501.16 ppb	14:49:48
3	U 409.014†	13483.6	16173.8	479.24 ug/L	479.24 ppb	14:49:28
3	V 292.402†	76631.4	78555.6	499.80 ug/L	499.80 ppb	14:49:28
3	Zn 213.857†	61215.3	60481.4	493.11 ug/L	493.11 ppb	14:49:28
3	SiO2†	87913.0	87417.4	5340.5 ug/L	5340.5 ppb	14:50:03

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	873272.7	98.496	%	2.0026				2.03%
Sc Radial	4612.9	98.8	%	0.47				0.48%
Y 371.029	741813.8	97.382	%	1.9820				2.04%
Y RADIAL	4845.6	98.23	%	0.517				0.53%
Ag 328.068†	116910.9	505.36	ug/L	10.106	505.36	ppb	10.106	2.00%

QC value within limits for Ag 328.068 Recovery = 101.07%

Al 396.153Radial†	5854.5	5170.9 ug/L	39.54	5170.9 ppb	39.54	0.76%
QC value within limits for Al 396.153Radial Recovery = 103.42%						
As 188.979†	1434.7	506.61 ug/L	11.709	506.61 ppb	11.709	2.31%
QC value within limits for As 188.979 Recovery = 101.32%						
B 249.677†	24201.2	497.08 ug/L	10.732	497.08 ppb	10.732	2.16%
QC value within limits for B 249.677 Recovery = 99.42%						
Ba 233.527†	69105.2	505.15 ug/L	10.653	505.15 ppb	10.653	2.11%
QC value within limits for Ba 233.527 Recovery = 101.03%						
Be 313.107†	1499184.8	507.72 ug/L	10.740	507.72 ppb	10.740	2.12%
QC value within limits for Be 313.107 Recovery = 101.54%						
Ca 317.933Radial†	3086.0	5171.2 ug/L	23.74	5171.2 ppb	23.74	0.46%
QC value within limits for Ca 317.933Radial Recovery = 103.42%						
Cd 226.502†	53387.5	502.64 ug/L	10.647	502.64 ppb	10.647	2.12%
QC value within limits for Cd 226.502 Recovery = 100.53%						
Co 228.616†	26646.5	501.15 ug/L	11.507	501.15 ppb	11.507	2.30%
QC value within limits for Co 228.616 Recovery = 100.23%						
Cr 267.716†	49977.5	501.56 ug/L	10.962	501.56 ppb	10.962	2.19%
QC value within limits for Cr 267.716 Recovery = 100.31%						
Cu 324.752†	170274.4	504.38 ug/L	11.078	504.38 ppb	11.078	2.20%
QC value within limits for Cu 324.752 Recovery = 100.88%						
Fe 238.204 Radial†	569.8	5022.6 ug/L	19.03	5022.6 ppb	19.03	0.38%
QC value within limits for Fe 238.204 Radial Recovery = 100.45%						
K 766.490 Radial†	25311.8	5015.7 ug/L	42.95	5015.7 ppb	42.95	0.86%
QC value within limits for K 766.490 Radial Recovery = 100.31%						
Mg 279.077 IEC†	164.3	5259.3 ug/L	50.98	5259.3 ppb	50.98	0.97%
QC value within limits for Mg 279.077 IEC Recovery = 105.19%						
Mn 257.610†	482945.4	509.26 ug/L	10.843	509.26 ppb	10.843	2.13%
QC value within limits for Mn 257.610 Recovery = 101.85%						
Mo 202.031†	8051.7	504.90 ug/L	11.180	504.90 ppb	11.180	2.21%
QC value within limits for Mo 202.031 Recovery = 100.98%						
Na 589.592 Radial†	33303.1	10060 ug/L	92.8	10060 ppb	92.8	0.92%
QC value within limits for Na 589.592 Radial Recovery = 100.60%						
Ni 231.604†	22749.5	499.09 ug/L	11.541	499.09 ppb	11.541	2.31%
QC value within limits for Ni 231.604 Recovery = 99.82%						
P 214.914†	5166.7	2442.6 ug/L	59.15	2442.6 ppb	59.15	2.42%
QC value within limits for P 214.914 Recovery = 97.70%						
Pb 220.353†	4854.7	504.52 ug/L	13.999	504.52 ppb	13.999	2.77%
QC value within limits for Pb 220.353 Recovery = 100.90%						
S 181.975 Axial†	888.1	1002.6 ug/L	25.98	1002.6 ppb	25.98	2.59%
QC value within limits for S 181.975 Axial Recovery = 100.26%						
Sb 206.836†	1691.9	512.61 ug/L	12.561	512.61 ppb	12.561	2.45%
QC value within limits for Sb 206.836 Recovery = 102.52%						
Se 196.026†	990.7	524.81 ug/L	8.210	524.81 ppb	8.210	1.56%
QC value within limits for Se 196.026 Recovery = 104.96%						
Si 251.611†	87664.6	2502.8 ug/L	53.49	2502.8 ppb	53.49	2.14%
QC value within limits for Si 251.611 Recovery = 100.11%						
Sn 189.927†	3385.2	501.32 ug/L	13.207	501.32 ppb	13.207	2.63%
QC value within limits for Sn 189.927 Recovery = 100.26%						
Sr 421.552†	70457.4	515.82 ug/L	5.519	515.82 ppb	5.519	1.07%
QC value within limits for Sr 421.552 Recovery = 103.16%						
Ti 334.940†	322829.2	512.08 ug/L	10.838	512.08 ppb	10.838	2.12%
QC value within limits for Ti 334.940 Recovery = 102.42%						
Tl 190.801†	1844.0	507.08 ug/L	12.094	507.08 ppb	12.094	2.39%
QC value within limits for Tl 190.801 Recovery = 101.42%						
U 409.014†	16413.7	486.36 ug/L	10.078	486.36 ppb	10.078	2.07%
QC value within limits for U 409.014 Recovery = 97.27%						
V 292.402†	79777.4	507.57 ug/L	11.126	507.57 ppb	11.126	2.19%
QC value within limits for V 292.402 Recovery = 101.51%						
Zn 213.857†	61362.1	500.30 ug/L	11.011	500.30 ppb	11.011	2.20%
QC value within limits for Zn 213.857 Recovery = 100.06%						
SiO2†	88011.0	5376.7 ug/L	113.65	5376.7 ppb	113.65	2.11%
QC value within limits for SiO2 Recovery = 100.55%						

All analyte(s) passed QC.

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/6/2010 14:52:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc Radial	4699.0	4699.0	101	%			14:54:06
1	Y RADIAL	4994.2	4994.2	101.2	%			14:54:06
1	Al 396.153Radial†	12.0	38.7	34.261	ug/L	34.261	ppb	14:54:06
1	Ca 317.933Radial†	9.8	-2.8	-4.7727	ug/L	-4.7727	ppb	14:54:26
1	Fe 238.204 Radial†	15.3	1.3	11.641	ug/L	11.641	ppb	14:54:26
1	K 766.490 Radial†	3303.6	-55.3	-10.995	ug/L	-10.995	ppb	14:54:06
1	Mg 279.077 IEC†	2.8	1.1	36.529	ug/L	36.529	ppb	14:54:26
1	Na 589.592 Radial†	-1496.5	263.6	79.638	ug/L	79.638	ppb	14:54:06
1	Sr 421.552†	-3.3	-19.3	-0.1410	ug/L	-0.1410	ppb	14:54:06
1	Sc 361.383	873450.3	873450.3	98.516	%			14:55:23
1	Y 371.029	749517.9	749517.9	98.393	%			14:55:23
1	Ag 328.068†	552.9	48.9	0.2189	ug/L	0.2189	ppb	14:55:28
1	As 188.979†	-37.3	-4.4	-1.5408	ug/L	-1.5408	ppb	14:55:48
1	B 249.677†	-609.9	46.7	0.9619	ug/L	0.9619	ppb	14:55:28
1	Ba 233.527†	4.1	-3.3	-0.0240	ug/L	-0.0240	ppb	14:55:48
1	Be 313.107†	-4356.1	-70.2	-0.0234	ug/L	-0.0234	ppb	14:55:28
1	Cd 226.502†	-218.7	16.3	0.1528	ug/L	0.1528	ppb	14:55:48
1	Co 228.616†	-83.9	-1.2	-0.0198	ug/L	-0.0198	ppb	14:55:48
1	Cr 267.716†	123.3	21.1	0.2136	ug/L	0.2136	ppb	14:55:28
1	Cu 324.752†	7938.3	58.9	0.1750	ug/L	0.1750	ppb	14:55:28
1	Mn 257.610†	575.2	67.4	0.0715	ug/L	0.0715	ppb	14:55:28
1	Mo 202.031†	36.1	16.8	1.0506	ug/L	1.0506	ppb	14:55:48
1	Ni 231.604†	119.4	-3.9	-0.0854	ug/L	-0.0854	ppb	14:55:48
1	P 214.914†	256.5	11.8	5.7007	ug/L	5.7007	ppb	14:55:48
1	Pb 220.353†	-89.5	-13.1	-1.3475	ug/L	-1.3475	ppb	14:55:48
1	S 181.975 Axial†	61.4	2.4	2.7237	ug/L	2.7237	ppb	14:55:48
1	Sb 206.836†	43.2	6.8	2.0386	ug/L	2.0386	ppb	14:55:48
1	Se 196.026†	-37.6	-4.9	-2.4450	ug/L	-2.4450	ppb	14:55:48
1	Si 251.611†	655.2	48.5	1.3772	ug/L	1.3772	ppb	14:55:48
1	Sn 189.927†	1.5	-1.9	-0.2765	ug/L	-0.2765	ppb	14:55:48
1	Ti 334.940†	-1674.7	117.4	0.1883	ug/L	0.1883	ppb	14:55:28
1	Tl 190.801†	-46.3	6.4	1.7545	ug/L	1.7545	ppb	14:55:48
1	U 409.014†	-2809.2	-182.8	-5.4370	ug/L	-5.4370	ppb	14:55:23
1	V 292.402†	-1767.3	7.9	0.0530	ug/L	0.0530	ppb	14:55:28
1	Zn 213.857†	823.0	3.7	0.0289	ug/L	0.0289	ppb	14:55:48
1	SiO2†	599.5	-27.5	-1.7151	ug/L	-1.7151	ppb	14:56:54
2	Sc Radial	4763.0	4763.0	102	%			14:54:31
2	Y RADIAL	5079.6	5079.6	103.0	%			14:54:31
2	Al 396.153Radial†	-29.2	-1.9	-1.6765	ug/L	-1.6765	ppb	14:54:31
2	Ca 317.933Radial†	19.3	6.4	10.715	ug/L	10.715	ppb	14:54:51
2	Fe 238.204 Radial†	12.0	-2.1	-18.328	ug/L	-18.328	ppb	14:54:51
2	K 766.490 Radial†	3351.4	-52.5	-10.453	ug/L	-10.453	ppb	14:54:31
2	Mg 279.077 IEC†	3.6	1.9	59.456	ug/L	59.456	ppb	14:54:51
2	Na 589.592 Radial†	-1499.0	281.1	84.926	ug/L	84.926	ppb	14:54:31
2	Sr 421.552†	-24.3	-39.8	-0.2912	ug/L	-0.2912	ppb	14:54:31
2	Sc 361.383	882928.9	882928.9	99.585	%			14:55:53
2	Y 371.029	756625.8	756625.8	99.326	%			14:55:53
2	Ag 328.068†	407.8	-102.8	-0.4499	ug/L	-0.4499	ppb	14:55:58
2	As 188.979†	-32.6	0.6	0.2208	ug/L	0.2208	ppb	14:56:18
2	B 249.677†	-558.6	104.9	2.1653	ug/L	2.1653	ppb	14:55:58
2	Ba 233.527†	6.5	-1.0	-0.0074	ug/L	-0.0074	ppb	14:56:18
2	Be 313.107†	-4349.1	-15.7	-0.0050	ug/L	-0.0050	ppb	14:55:58
2	Cd 226.502†	-228.8	8.6	0.0831	ug/L	0.0831	ppb	14:56:18
2	Co 228.616†	-93.0	-9.5	-0.1767	ug/L	-0.1767	ppb	14:56:18
2	Cr 267.716†	63.9	-39.8	-0.4002	ug/L	-0.4002	ppb	14:55:58
2	Cu 324.752†	8110.3	145.1	0.4288	ug/L	0.4288	ppb	14:55:58
2	Mn 257.610†	553.7	39.6	0.0388	ug/L	0.0388	ppb	14:55:58
2	Mo 202.031†	25.0	5.2	0.3247	ug/L	0.3247	ppb	14:56:18
2	Ni 231.604†	144.0	19.6	0.4299	ug/L	0.4299	ppb	14:56:18

2	P 214.914†	247.7	0.2	0.0416 ug/L	0.0416 ppb	14:56:18
2	Pb 220.353†	-72.1	5.4	0.5571 ug/L	0.5571 ppb	14:56:18
2	S 181.975 Axial†	64.3	4.6	5.2272 ug/L	5.2272 ppb	14:56:18
2	Sb 206.836†	41.7	4.7	1.4361 ug/L	1.4361 ppb	14:56:18
2	Se 196.026†	-36.3	-3.1	-1.6645 ug/L	-1.6645 ppb	14:56:18
2	Si 251.611†	640.5	26.6	0.7611 ug/L	0.7611 ppb	14:56:18
2	Sn 189.927†	4.1	0.7	0.1054 ug/L	0.1054 ppb	14:56:18
2	Ti 334.940†	-1717.0	93.2	0.1470 ug/L	0.1470 ppb	14:55:58
2	Tl 190.801†	-37.0	16.2	4.4240 ug/L	4.4240 ppb	14:56:18
2	U 409.014†	-2538.6	119.5	3.5556 ug/L	3.5556 ppb	14:55:53
2	V 292.402†	-1754.1	40.4	0.2694 ug/L	0.2694 ppb	14:55:58
2	Zn 213.857†	847.2	19.1	0.1526 ug/L	0.1526 ppb	14:56:18
2	SiO2†	663.7	30.4	1.8632 ug/L	1.8632 ppb	14:56:59
3	Sc Radial	4767.2	4767.2	102 %		14:54:56
3	Y RADIAL	5044.2	5044.2	102.3 %		14:54:56
3	Al 396.153Radial†	-32.4	-5.0	-4.5001 ug/L	-4.5001 ppb	14:54:56
3	Ca 317.933Radial†	20.2	7.3	12.151 ug/L	12.151 ppb	14:55:16
3	Fe 238.204 Radial†	11.2	-3.0	-25.930 ug/L	-25.930 ppb	14:55:16
3	K 766.490 Radial†	3252.3	-152.4	-30.293 ug/L	-30.293 ppb	14:54:56
3	Mg 279.077 IEC†	-0.3	-1.9	-61.489 ug/L	-61.489 ppb	14:55:16
3	Na 589.592 Radial†	-1508.3	273.4	82.577 ug/L	82.577 ppb	14:54:56
3	Sr 421.552†	-20.6	-36.1	-0.2646 ug/L	-0.2646 ppb	14:54:56
3	Sc 361.383	876040.7	876040.7	98.808 %		14:56:23
3	Y 371.029	751385.5	751385.5	98.639 %		14:56:23
3	Ag 328.068†	529.1	23.1	0.0905 ug/L	0.0905 ppb	14:56:28
3	As 188.979†	-33.0	-0.0	-0.0166 ug/L	-0.0166 ppb	14:56:49
3	B 249.677†	-556.9	102.2	2.1112 ug/L	2.1112 ppb	14:56:28
3	Ba 233.527†	2.6	-4.9	-0.0355 ug/L	-0.0355 ppb	14:56:49
3	Be 313.107†	-4400.1	-101.6	-0.0343 ug/L	-0.0343 ppb	14:56:28
3	Cd 226.502†	-248.1	-12.7	-0.1173 ug/L	-0.1173 ppb	14:56:49
3	Co 228.616†	-96.7	-13.9	-0.2588 ug/L	-0.2588 ppb	14:56:49
3	Cr 267.716†	85.3	-17.8	-0.1782 ug/L	-0.1782 ppb	14:56:28
3	Cu 324.752†	8040.9	138.9	0.4099 ug/L	0.4099 ppb	14:56:28
3	Mn 257.610†	526.6	16.5	0.0159 ug/L	0.0159 ppb	14:56:28
3	Mo 202.031†	29.4	9.9	0.6166 ug/L	0.6166 ppb	14:56:49
3	Ni 231.604†	119.1	-4.5	-0.0993 ug/L	-0.0993 ppb	14:56:49
3	P 214.914†	249.4	3.9	1.8566 ug/L	1.8566 ppb	14:56:49
3	Pb 220.353†	-75.9	1.0	0.1027 ug/L	0.1027 ppb	14:56:49
3	S 181.975 Axial†	58.1	-1.1	-1.2274 ug/L	-1.2274 ppb	14:56:49
3	Sb 206.836†	62.8	26.4	7.9282 ug/L	7.9282 ppb	14:56:49
3	Se 196.026†	-46.7	-14.0	-7.2285 ug/L	-7.2285 ppb	14:56:49
3	Si 251.611†	653.0	44.4	1.2684 ug/L	1.2684 ppb	14:56:49
3	Sn 189.927†	10.8	7.5	1.1112 ug/L	1.1112 ppb	14:56:49
3	Ti 334.940†	-1783.1	12.7	0.0202 ug/L	0.0202 ppb	14:56:28
3	Tl 190.801†	-39.5	13.4	3.6613 ug/L	3.6613 ppb	14:56:49
3	U 409.014†	-2579.5	58.1	1.7305 ug/L	1.7305 ppb	14:56:23
3	V 292.402†	-1721.1	60.0	0.3912 ug/L	0.3912 ppb	14:56:28
3	Zn 213.857†	835.2	13.6	0.1157 ug/L	0.1157 ppb	14:56:49
3	SiO2†	680.9	53.1	3.2490 ug/L	3.2490 ppb	14:57:04

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	877473.3	98.970	%	0.5526				0.56%
Sc Radial	4743.1	102	%	0.8				0.81%
Y 371.029	752509.7	98.786	%	0.4837				0.49%
Y RADIAL	5039.4	102.2	%	0.87				0.85%
Ag 328.068†	-10.2	-0.0468	ug/L	0.35496	-0.0468	ppb	0.35496	758.28%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	10.6	9.3613	ug/L	21.60954	9.3613	ppb	21.60954	230.84%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.3	-0.4455	ug/L	0.95591	-0.4455	ppb	0.95591	214.57%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	84.6	1.7461	ug/L	0.67970	1.7461	ppb	0.67970	38.93%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-3.1	-0.0223	ug/L	0.01416	-0.0223	ppb	0.01416	63.51%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-62.5	-0.0209	ug/L	0.01480	-0.0209	ppb	0.01480	70.82%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.6	6.0310	ug/L	9.38382	6.0310	ppb	9.38382	155.59%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†          4.1      0.0395 ug/L       0.14019      0.0395 ppb       0.14019 354.87%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†         -8.2     -0.1518 ug/L       0.12142     -0.1518 ppb       0.12142  79.99%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†        -12.2     -0.1216 ug/L       0.31079     -0.1216 ppb       0.31079 255.60%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†        114.3      0.3379 ug/L       0.14138      0.3379 ppb       0.14138  41.84%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†  -1.2     -10.872 ug/L       19.8644     -10.872 ppb       19.8644 182.71%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†  -86.7     -17.247 ug/L       11.3017     -17.247 ppb       11.3017  65.53%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†      0.4      11.499 ug/L       64.2404      11.499 ppb       64.2404 558.68%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†         41.2      0.0421 ug/L       0.02792      0.0421 ppb       0.02792  66.34%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†         10.6      0.6640 ug/L       0.36524      0.6640 ppb       0.36524  55.01%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial† 272.7      82.380 ug/L        2.6498      82.380 ppb        2.6498   3.22%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†          3.7      0.0817 ug/L       0.30159      0.0817 ppb       0.30159 369.01%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†           5.3      2.5330 ug/L       2.88953      2.5330 ppb       2.88953 114.08%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†         -2.3     -0.2292 ug/L       0.99477     -0.2292 ppb       0.99477 433.93%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†     2.0      2.2412 ug/L       3.25423      2.2412 ppb       3.25423 145.20%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†         12.7      3.8010 ug/L       3.58697      3.8010 ppb       3.58697  94.37%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†         -7.3     -3.7793 ug/L       3.01246     -3.7793 ppb       3.01246  79.71%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†         39.8      1.1356 ug/L       0.32884      1.1356 ppb       0.32884  28.96%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†          2.1      0.3133 ug/L       0.71685      0.3133 ppb       0.71685 228.78%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†        -31.7     -0.2323 ug/L       0.08015     -0.2323 ppb       0.08015  34.51%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†         74.4      0.1185 ug/L       0.08763      0.1185 ppb       0.08763  73.96%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†         12.0      3.2799 ug/L       1.37498      3.2799 ppb       1.37498  41.92%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†          -1.7     -0.0503 ug/L       4.75343     -0.0503 ppb       4.75343 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†          36.1      0.2379 ug/L       0.17128      0.2379 ppb       0.17128  72.00%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†         12.1      0.0991 ug/L       0.06351      0.0991 ppb       0.06351  64.12%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†               18.7      1.1324 ug/L       2.56147      1.1324 ppb       2.56147 226.21%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: 1202001500|935389|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 17
Date Collected: 1/6/2010 14:59:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202001500|935389|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4876.6	4876.6	104	%			15:01:07
1	Y RADIAL	5158.2	5158.2	104.6	%			15:01:07
1	Al 396.153Radial†	-5.0	21.9	19.427	ug/L	19.427	ppb	15:01:07
1	Ca 317.933Radial†	17.2	3.9	6.4903	ug/L	6.4903	ppb	15:01:27
1	Fe 238.204 Radial†	10.9	-3.5	-30.453	ug/L	-30.453	ppb	15:01:27
1	K 766.490 Radial†	3235.1	-240.3	-47.740	ug/L	-47.740	ppb	15:01:07
1	Mg 279.077 IEC†	3.2	1.5	46.790	ug/L	46.790	ppb	15:01:27
1	Na 589.592 Radial†	-1457.7	354.9	107.22	ug/L	107.22	ppb	15:01:07
1	Sr 421.552†	5.0	-11.2	-0.0818	ug/L	-0.0818	ppb	15:01:07
1	Sc 361.383	883785.9	883785.9	99.682	%			15:02:23
1	Y 371.029	757905.6	757905.6	99.494	%			15:02:23
1	Ag 328.068†	484.9	-25.8	-0.1256	ug/L	-0.1256	ppb	15:02:28
1	As 188.979†	-37.6	-4.3	-1.4965	ug/L	-1.4965	ppb	15:02:48
1	B 249.677†	-646.3	17.5	0.3661	ug/L	0.3661	ppb	15:02:28
1	Ba 233.527†	-16.2	-23.7	-0.1728	ug/L	-0.1728	ppb	15:02:48
1	Be 313.107†	-4358.3	-20.8	-0.0063	ug/L	-0.0063	ppb	15:02:28
1	Cd 226.502†	-245.4	-7.9	-0.0708	ug/L	-0.0708	ppb	15:02:48
1	Co 228.616†	-98.6	-14.9	-0.2789	ug/L	-0.2789	ppb	15:02:48
1	Cr 267.716†	130.1	26.5	0.2630	ug/L	0.2630	ppb	15:02:28
1	Cu 324.752†	7982.4	8.9	0.0248	ug/L	0.0248	ppb	15:02:28
1	Mn 257.610†	673.6	159.3	0.1639	ug/L	0.1639	ppb	15:02:28
1	Mo 202.031†	32.9	13.0	0.8141	ug/L	0.8141	ppb	15:02:48
1	Ni 231.604†	132.4	7.7	0.1699	ug/L	0.1699	ppb	15:02:48
1	P 214.914†	266.5	18.8	9.1820	ug/L	9.1820	ppb	15:02:48
1	Pb 220.353†	-102.2	-24.8	-2.5596	ug/L	-2.5596	ppb	15:02:48
1	S 181.975 Axial†	55.7	-4.0	-4.5556	ug/L	-4.5556	ppb	15:02:48
1	Sb 206.836†	39.0	2.0	0.6123	ug/L	0.6123	ppb	15:02:48
1	Se 196.026†	-40.7	-7.6	-3.9801	ug/L	-3.9801	ppb	15:02:48
1	Si 251.611†	1078.5	465.4	13.351	ug/L	13.351	ppb	15:02:48
1	Sn 189.927†	6.9	3.5	0.5226	ug/L	0.5226	ppb	15:02:48
1	Ti 334.940†	-1581.6	230.7	0.3631	ug/L	0.3631	ppb	15:02:28
1	Tl 190.801†	-51.2	2.0	0.5612	ug/L	0.5612	ppb	15:02:48
1	U 409.014†	-2416.9	244.1	7.2608	ug/L	7.2608	ppb	15:02:23
1	V 292.402†	-1721.7	74.6	0.4992	ug/L	0.4992	ppb	15:02:28
1	Zn 213.857†	978.6	150.1	1.2329	ug/L	1.2329	ppb	15:02:48
1	SiO2†	1163.0	530.7	32.580	ug/L	32.580	ppb	15:03:54
2	Sc Radial	4800.0	4800.0	103	%			15:01:32
2	Y RADIAL	5071.9	5071.9	102.8	%			15:01:32
2	Al 396.153Radial†	-19.0	8.3	7.2992	ug/L	7.2992	ppb	15:01:32
2	Ca 317.933Radial†	22.7	9.5	16.001	ug/L	16.001	ppb	15:01:52
2	Fe 238.204 Radial†	16.4	2.0	17.944	ug/L	17.944	ppb	15:01:52
2	K 766.490 Radial†	3220.4	-205.1	-40.756	ug/L	-40.756	ppb	15:01:32
2	Mg 279.077 IEC†	2.9	1.2	37.196	ug/L	37.196	ppb	15:01:52
2	Na 589.592 Radial†	-1523.0	269.1	81.303	ug/L	81.303	ppb	15:01:32
2	Sr 421.552†	-37.6	-52.5	-0.3846	ug/L	-0.3846	ppb	15:01:32
2	Sc 361.383	886836.1	886836.1	100.03	%			15:02:54
2	Y 371.029	760536.4	760536.4	99.840	%			15:02:54
2	Ag 328.068†	502.8	-9.7	-0.0372	ug/L	-0.0372	ppb	15:02:59
2	As 188.979†	-33.7	-0.3	-0.0869	ug/L	-0.0869	ppb	15:03:19
2	B 249.677†	-597.1	68.9	1.4194	ug/L	1.4194	ppb	15:02:59
2	Ba 233.527†	7.3	-0.2	0.0005	ug/L	0.0005	ppb	15:03:19
2	Be 313.107†	-4409.3	-56.6	-0.0184	ug/L	-0.0184	ppb	15:02:59
2	Cd 226.502†	-253.8	-15.4	-0.1464	ug/L	-0.1464	ppb	15:03:19
2	Co 228.616†	-97.6	-13.6	-0.2536	ug/L	-0.2536	ppb	15:03:19
2	Cr 267.716†	97.6	-6.4	-0.0644	ug/L	-0.0644	ppb	15:02:59
2	Cu 324.752†	8076.3	75.2	0.2236	ug/L	0.2236	ppb	15:02:59
2	Mn 257.610†	648.8	132.2	0.1404	ug/L	0.1404	ppb	15:02:59
2	Mo 202.031†	35.4	15.5	0.9733	ug/L	0.9733	ppb	15:03:19
2	Ni 231.604†	121.2	-3.9	-0.0853	ug/L	-0.0853	ppb	15:03:19

2	P 214.914†	253.5	4.8	2.3318 ug/L	2.3318 ppb	15:03:19
2	Pb 220.353†	-105.0	-27.2	-2.8125 ug/L	-2.8125 ppb	15:03:19
2	S 181.975 Axial†	64.5	4.6	5.1839 ug/L	5.1839 ppb	15:03:19
2	Sb 206.836†	54.4	17.3	5.2225 ug/L	5.2225 ppb	15:03:19
2	Se 196.026†	-32.6	0.7	0.4012 ug/L	0.4012 ppb	15:03:19
2	Si 251.611†	1071.7	454.8	13.041 ug/L	13.041 ppb	15:03:19
2	Sn 189.927†	11.2	7.8	1.1615 ug/L	1.1615 ppb	15:03:19
2	Ti 334.940†	-1571.7	246.1	0.3891 ug/L	0.3891 ppb	15:02:59
2	Tl 190.801†	-43.7	9.7	2.6615 ug/L	2.6615 ppb	15:03:19
2	U 409.014†	-2500.3	169.0	5.0228 ug/L	5.0228 ppb	15:02:54
2	V 292.402†	-1684.1	118.2	0.7633 ug/L	0.7633 ppb	15:02:59
2	Zn 213.857†	958.8	126.9	1.0417 ug/L	1.0417 ppb	15:03:19
2	SiO2†	1126.9	490.6	30.103 ug/L	30.103 ppb	15:03:59
3	Sc Radial	4872.3	4872.3	104 %		15:01:57
3	Y RADIAL	5170.3	5170.3	104.8 %		15:01:57
3	Al 396.153Radial†	-9.3	17.8	15.744 ug/L	15.744 ppb	15:01:57
3	Ca 317.933Radial†	24.9	11.3	18.942 ug/L	18.942 ppb	15:02:17
3	Fe 238.204 Radial†	9.4	-4.9	-42.959 ug/L	-42.959 ppb	15:02:17
3	K 766.490 Radial†	3229.1	-243.3	-48.338 ug/L	-48.338 ppb	15:01:57
3	Mg 279.077 IEC†	0.1	-1.5	-48.595 ug/L	-48.595 ppb	15:02:17
3	Na 589.592 Radial†	-1452.0	359.1	108.47 ug/L	108.47 ppb	15:01:57
3	Sr 421.552†	16.6	-0.0	-0.0005 ug/L	-0.0005 ppb	15:01:57
3	Sc 361.383	899774.2	899774.2	101.48 %		15:03:24
3	Y 371.029	771540.6	771540.6	101.28 %		15:03:24
3	Ag 328.068†	380.7	-137.2	-0.6044 ug/L	-0.6044 ppb	15:03:29
3	As 188.979†	-36.0	-2.1	-0.7403 ug/L	-0.7403 ppb	15:03:49
3	B 249.677†	-694.0	-18.0	-0.3665 ug/L	-0.3665 ppb	15:03:29
3	Ba 233.527†	8.7	1.1	0.0093 ug/L	0.0093 ppb	15:03:49
3	Be 313.107†	-4311.3	103.3	0.0356 ug/L	0.0356 ppb	15:03:29
3	Cd 226.502†	-243.3	-1.3	-0.0086 ug/L	-0.0086 ppb	15:03:49
3	Co 228.616†	-81.5	3.7	0.0707 ug/L	0.0707 ppb	15:03:49
3	Cr 267.716†	198.3	91.4	0.9149 ug/L	0.9149 ppb	15:03:29
3	Cu 324.752†	8097.8	-19.7	-0.0606 ug/L	-0.0606 ppb	15:03:29
3	Mn 257.610†	611.1	85.7	0.0869 ug/L	0.0869 ppb	15:03:29
3	Mo 202.031†	32.2	11.8	0.7378 ug/L	0.7378 ppb	15:03:49
3	Ni 231.604†	107.0	-19.7	-0.4319 ug/L	-0.4319 ppb	15:03:49
3	P 214.914†	260.9	8.5	4.2136 ug/L	4.2136 ppb	15:03:49
3	Pb 220.353†	-82.9	-3.9	-0.3967 ug/L	-0.3967 ppb	15:03:49
3	S 181.975 Axial†	67.4	6.5	7.3118 ug/L	7.3118 ppb	15:03:49
3	Sb 206.836†	42.8	5.1	1.5233 ug/L	1.5233 ppb	15:03:49
3	Se 196.026†	-38.3	-4.5	-2.4334 ug/L	-2.4334 ppb	15:03:49
3	Si 251.611†	1076.7	444.4	12.750 ug/L	12.750 ppb	15:03:49
3	Sn 189.927†	6.0	2.5	0.3707 ug/L	0.3707 ppb	15:03:49
3	Ti 334.940†	-1606.4	234.4	0.3699 ug/L	0.3699 ppb	15:03:29
3	Tl 190.801†	-46.5	7.6	2.0783 ug/L	2.0783 ppb	15:03:49
3	U 409.014†	-2503.7	201.6	5.9980 ug/L	5.9980 ppb	15:03:24
3	V 292.402†	-1641.0	184.9	1.1874 ug/L	1.1874 ppb	15:03:29
3	Zn 213.857†	955.9	110.2	0.9132 ug/L	0.9132 ppb	15:03:49
3	SiO2†	1102.4	450.2	27.642 ug/L	27.642 ppb	15:04:05

Mean Data: 1202001500|935389|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	890132.1	100.40	%	0.957				0.95%
Sc Radial	4849.6	104	%	0.9				0.89%
Y 371.029	763327.5	100.21	%	0.950				0.95%
Y RADIAL	5133.5	104.1	%	1.09				1.04%
Ag 328.068†	-57.6	-0.2557	ug/L	0.30519	-0.2557	ppb	0.30519	119.34%
Al 396.153Radial†	16.0	14.157	ug/L	6.2176	14.157	ppb	6.2176	43.92%
As 188.979†	-2.2	-0.7746	ug/L	0.70541	-0.7746	ppb	0.70541	91.07%
B 249.677†	22.8	0.4730	ug/L	0.89772	0.4730	ppb	0.89772	189.79%
Ba 233.527†	-7.6	-0.0543	ug/L	0.10267	-0.0543	ppb	0.10267	189.05%
Be 313.107†	8.6	0.0037	ug/L	0.02835	0.0037	ppb	0.02835	774.92%
Ca 317.933Radial†	8.2	13.811	ug/L	6.5082	13.811	ppb	6.5082	47.12%
Cd 226.502†	-8.2	-0.0753	ug/L	0.06903	-0.0753	ppb	0.06903	91.68%
Co 228.616†	-8.3	-0.1540	ug/L	0.19493	-0.1540	ppb	0.19493	126.62%
Cr 267.716†	37.1	0.3711	ug/L	0.49854	0.3711	ppb	0.49854	134.32%
Cu 324.752†	21.5	0.0626	ug/L	0.14581	0.0626	ppb	0.14581	232.92%
Fe 238.204 Radial†	-2.1	-18.489	ug/L	32.1660	-18.489	ppb	32.1660	173.97%
K 766.490 Radial†	-229.6	-45.611	ug/L	4.2154	-45.611	ppb	4.2154	9.24%

Mg 279.077 IEC†	0.4	11.797 ug/L	52.5205	11.797 ppb	52.5205	445.21%
Mn 257.610†	125.7	0.1304 ug/L	0.03946	0.1304 ppb	0.03946	30.26%
Mo 202.031†	13.5	0.8417 ug/L	0.12017	0.8417 ppb	0.12017	14.28%
Na 589.592 Radial†	327.7	98.996 ug/L	15.3351	98.996 ppb	15.3351	15.49%
Ni 231.604†	-5.3	-0.1158 ug/L	0.30205	-0.1158 ppb	0.30205	260.92%
P 214.914†	10.7	5.2425 ug/L	3.53913	5.2425 ppb	3.53913	67.51%
Pb 220.353†	-18.6	-1.9229 ug/L	1.32783	-1.9229 ppb	1.32783	69.05%
S 181.975 Axial†	2.3	2.6467 ug/L	6.32746	2.6467 ppb	6.32746	239.07%
Sb 206.836†	8.1	2.4527 ug/L	2.44154	2.4527 ppb	2.44154	99.54%
Se 196.026†	-3.8	-2.0041 ug/L	2.22198	-2.0041 ppb	2.22198	110.87%
Si 251.611†	454.9	13.047 ug/L	0.3006	13.047 ppb	0.3006	2.30%
Sn 189.927†	4.6	0.6849 ug/L	0.41967	0.6849 ppb	0.41967	61.27%
Sr 421.552†	-21.2	-0.1556 ug/L	0.20242	-0.1556 ppb	0.20242	130.09%
Ti 334.940†	237.1	0.3740 ug/L	0.01348	0.3740 ppb	0.01348	3.61%
Tl 190.801†	6.5	1.7670 ug/L	1.08422	1.7670 ppb	1.08422	61.36%
U 409.014†	204.9	6.0939 ug/L	1.12209	6.0939 ppb	1.12209	18.41%
V 292.402†	125.9	0.8166 ug/L	0.34719	0.8166 ppb	0.34719	42.52%
Zn 213.857†	129.1	1.0626 ug/L	0.16084	1.0626 ppb	0.16084	15.14%
SiO2†	490.5	30.109 ug/L	2.4687	30.109 ppb	2.4687	8.20%

Sequence No.: 4
Sample ID: 1202001501|935389|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 18
Date Collected: 1/6/2010 15:06:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202001501|935389|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4641.2	4641.2	99.4	%			15:08:07
1	Y RADIAL	4929.7	4929.7	99.93	%			15:08:07
1	Al 396.153Radial†	6052.1	6113.3	5400.1	ug/L	5400.1	ppb	15:08:07
1	Ca 317.933Radial†	3164.9	3170.3	5312.4	ug/L	5312.4	ppb	15:08:27
1	Fe 238.204 Radial†	593.3	582.8	5136.7	ug/L	5136.7	ppb	15:08:27
1	K 766.490 Radial†	29105.3	25934.1	5141.2	ug/L	5141.2	ppb	15:08:07
1	Mg 279.077 IEC†	167.2	166.5	5329.7	ug/L	5329.7	ppb	15:08:27
1	Na 589.592 Radial†	15336.2	17173.5	5187.8	ug/L	5187.8	ppb	15:08:07
1	Sr 421.552†	72338.0	72733.3	532.48	ug/L	532.48	ppb	15:08:07
1	Sc 361.383	884854.8	884854.8	99.802	%			15:09:26
1	Y 371.029	752383.6	752383.6	98.770	%			15:09:26
1	Ag 328.068†	119309.6	119033.8	514.55	ug/L	514.55	ppb	15:09:26
1	As 188.979†	1415.9	1452.2	512.88	ug/L	512.88	ppb	15:09:46
1	B 249.677†	23799.2	24512.3	503.46	ug/L	503.46	ppb	15:09:26
1	Ba 233.527†	72124.2	72259.7	528.19	ug/L	528.19	ppb	15:09:26
1	Be 313.107†	1527893.8	1535275.2	519.95	ug/L	519.95	ppb	15:09:26
1	Cd 226.502†	54116.6	54462.3	512.76	ug/L	512.76	ppb	15:09:26
1	Co 228.616†	26856.2	26993.4	507.66	ug/L	507.66	ppb	15:09:46
1	Cr 267.716†	51407.7	51405.6	515.89	ug/L	515.89	ppb	15:09:26
1	Cu 324.752†	185079.9	177447.9	525.62	ug/L	525.62	ppb	15:09:26
1	Mn 257.610†	502067.5	502546.7	529.92	ug/L	529.92	ppb	15:09:26
1	Mo 202.031†	8180.1	8176.4	512.72	ug/L	512.72	ppb	15:09:46
1	Ni 231.604†	23526.9	23448.5	514.43	ug/L	514.43	ppb	15:09:46
1	P 214.914†	1458.7	1213.1	512.14	ug/L	512.14	ppb	15:09:46
1	Pb 220.353†	4918.9	5006.4	520.27	ug/L	520.27	ppb	15:09:46
1	S 181.975 Axial†	4605.5	4554.7	5146.5	ug/L	5146.5	ppb	15:09:46
1	Sb 206.836†	1775.2	1741.6	527.74	ug/L	527.74	ppb	15:09:46
1	Se 196.026†	963.7	998.9	529.40	ug/L	529.40	ppb	15:09:46
1	Si 251.611†	178206.3	177943.1	5092.3	ug/L	5092.3	ppb	15:09:26
1	Sn 189.927†	3565.0	3568.6	528.47	ug/L	528.47	ppb	15:09:46
1	Ti 334.940†	331783.7	334258.9	530.20	ug/L	530.20	ppb	15:09:26
1	Tl 190.801†	1838.6	1895.6	521.38	ug/L	521.38	ppb	15:09:46
1	U 409.014†	15010.9	17709.3	524.83	ug/L	524.83	ppb	15:09:26
1	V 292.402†	80827.6	82789.7	526.62	ug/L	526.62	ppb	15:09:26
1	Zn 213.857†	62815.0	62107.9	506.30	ug/L	506.30	ppb	15:09:26
1	SiO2†	179470.8	179190.6	10973	ug/L	10973	ppb	15:10:46
2	Sc Radial	4748.2	4748.2	102	%			15:08:32
2	Y RADIAL	5032.8	5032.8	102.0	%			15:08:32
2	Al 396.153Radial†	6187.3	6109.0	5396.6	ug/L	5396.6	ppb	15:08:32
2	Ca 317.933Radial†	3198.0	3131.2	5246.8	ug/L	5246.8	ppb	15:08:52
2	Fe 238.204 Radial†	601.4	577.3	5088.5	ug/L	5088.5	ppb	15:08:52
2	K 766.490 Radial†	29818.1	25975.2	5149.4	ug/L	5149.4	ppb	15:08:32
2	Mg 279.077 IEC†	167.1	162.6	5206.2	ug/L	5206.2	ppb	15:08:52
2	Na 589.592 Radial†	15658.6	17142.9	5178.5	ug/L	5178.5	ppb	15:08:32
2	Sr 421.552†	74079.9	72806.3	533.02	ug/L	533.02	ppb	15:08:32
2	Sc 361.383	892313.3	892313.3	100.64	%			15:09:53
2	Y 371.029	757345.3	757345.3	99.421	%			15:09:53
2	Ag 328.068†	119945.7	118666.7	512.96	ug/L	512.96	ppb	15:09:53
2	As 188.979†	1396.4	1420.9	501.91	ug/L	501.91	ppb	15:10:13
2	B 249.677†	24163.1	24674.5	506.83	ug/L	506.83	ppb	15:09:53
2	Ba 233.527†	72774.5	72301.8	528.50	ug/L	528.50	ppb	15:09:53
2	Be 313.107†	1538183.2	1532702.5	519.08	ug/L	519.08	ppb	15:09:53
2	Cd 226.502†	54486.1	54376.2	511.95	ug/L	511.95	ppb	15:09:53
2	Co 228.616†	26736.8	26649.8	501.18	ug/L	501.18	ppb	15:10:13
2	Cr 267.716†	51755.6	51320.7	515.03	ug/L	515.03	ppb	15:09:53
2	Cu 324.752†	186441.7	177251.0	525.03	ug/L	525.03	ppb	15:09:53
2	Mn 257.610†	506040.5	502289.4	529.65	ug/L	529.65	ppb	15:09:53
2	Mo 202.031†	8126.5	8054.6	505.08	ug/L	505.08	ppb	15:10:13
2	Ni 231.604†	23403.6	23128.9	507.42	ug/L	507.42	ppb	15:10:13

2	P 214.914†	1435.7	1177.9	495.05 ug/L	495.05 ppb	15:10:13
2	Pb 220.353†	4872.2	4918.8	511.19 ug/L	511.19 ppb	15:10:13
2	S 181.975 Axial†	4584.4	4495.2	5079.1 ug/L	5079.1 ppb	15:10:13
2	Sb 206.836†	1768.1	1719.7	520.92 ug/L	520.92 ppb	15:10:13
2	Se 196.026†	940.9	968.1	513.47 ug/L	513.47 ppb	15:10:13
2	Si 251.611†	179701.5	177936.2	5092.3 ug/L	5092.3 ppb	15:09:53
2	Sn 189.927†	3551.1	3525.0	522.00 ug/L	522.00 ppb	15:10:13
2	Ti 334.940†	334292.2	333972.7	529.74 ug/L	529.74 ppb	15:09:53
2	Tl 190.801†	1827.6	1869.3	514.23 ug/L	514.23 ppb	15:10:13
2	U 409.014†	15390.2	17960.5	532.31 ug/L	532.31 ppb	15:09:53
2	V 292.402†	81540.5	82821.1	526.73 ug/L	526.73 ppb	15:09:53
2	Zn 213.857†	63202.0	61966.4	505.19 ug/L	505.19 ppb	15:09:53
2	SiO2†	178789.6	177010.7	10840 ug/L	10840 ppb	15:10:52
3	Sc Radial	4676.4	4676.4	100 %		15:08:57
3	Y RADIAL	4950.3	4950.3	100.4 %		15:08:57
3	Al 396.153Radial†	6084.5	6099.8	5388.2 ug/L	5388.2 ppb	15:08:57
3	Ca 317.933Radial†	3176.5	3157.9	5291.6 ug/L	5291.6 ppb	15:09:17
3	Fe 238.204 Radial†	596.5	581.5	5125.6 ug/L	5125.6 ppb	15:09:17
3	K 766.490 Radial†	29206.6	25814.7	5117.5 ug/L	5117.5 ppb	15:08:57
3	Mg 279.077 IEC†	166.8	164.8	5276.2 ug/L	5276.2 ppb	15:09:17
3	Na 589.592 Radial†	15388.5	17109.6	5168.4 ug/L	5168.4 ppb	15:08:57
3	Sr 421.552†	72506.3	72353.4	529.70 ug/L	529.70 ppb	15:08:57
3	Sc 361.383	892585.7	892585.7	100.67 %		15:10:21
3	Y 371.029	758701.5	758701.5	99.599 %		15:10:21
3	Ag 328.068†	120175.5	118858.5	513.80 ug/L	513.80 ppb	15:10:21
3	As 188.979†	1413.5	1437.5	507.74 ug/L	507.74 ppb	15:10:41
3	B 249.677†	24091.2	24595.7	505.19 ug/L	505.19 ppb	15:10:21
3	Ba 233.527†	72760.9	72266.3	528.24 ug/L	528.24 ppb	15:10:21
3	Be 313.107†	1539320.8	1533366.1	519.31 ug/L	519.31 ppb	15:10:21
3	Cd 226.502†	54329.2	54203.8	510.32 ug/L	510.32 ppb	15:10:21
3	Co 228.616†	26955.7	26859.2	505.13 ug/L	505.13 ppb	15:10:41
3	Cr 267.716†	51786.8	51336.0	515.19 ug/L	515.19 ppb	15:10:21
3	Cu 324.752†	186797.6	177547.9	525.91 ug/L	525.91 ppb	15:10:21
3	Mn 257.610†	505899.9	501996.3	529.34 ug/L	529.34 ppb	15:10:21
3	Mo 202.031†	8207.9	8133.0	510.00 ug/L	510.00 ppb	15:10:41
3	Ni 231.604†	23597.9	23314.8	511.50 ug/L	511.50 ppb	15:10:41
3	P 214.914†	1445.4	1187.2	499.43 ug/L	499.43 ppb	15:10:41
3	Pb 220.353†	4898.6	4943.6	513.76 ug/L	513.76 ppb	15:10:41
3	S 181.975 Axial†	4618.0	4527.2	5115.3 ug/L	5115.3 ppb	15:10:41
3	Sb 206.836†	1768.9	1719.9	521.17 ug/L	521.17 ppb	15:10:41
3	Se 196.026†	946.4	973.3	516.25 ug/L	516.25 ppb	15:10:41
3	Si 251.611†	179828.0	178007.4	5094.2 ug/L	5094.2 ppb	15:10:21
3	Sn 189.927†	3575.4	3548.0	525.42 ug/L	525.42 ppb	15:10:41
3	Ti 334.940†	334951.5	334526.3	530.62 ug/L	530.62 ppb	15:10:21
3	Tl 190.801†	1841.5	1882.5	517.81 ug/L	517.81 ppb	15:10:41
3	U 409.014†	15337.6	17903.6	530.61 ug/L	530.61 ppb	15:10:21
3	V 292.402†	81709.2	82964.0	527.69 ug/L	527.69 ppb	15:10:21
3	Zn 213.857†	63238.4	61983.3	505.30 ug/L	505.30 ppb	15:10:21
3	SiO2†	178017.3	176189.4	10789 ug/L	10789 ppb	15:10:57

Mean Data: 1202001501|935389|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	889917.9	100.37	%	0.495				0.49%
Sc Radial	4688.6	100	%	1.2				1.16%
Y 371.029	756143.5	99.263	%	0.4366				0.44%
Y RADIAL	4970.9	100.8	%	1.11				1.10%
Ag 328.068†	118853.0	513.77	ug/L	0.799	513.77	ppb	0.799	0.16%
Al 396.153Radial†	6107.3	5395.0	ug/L	6.09	5395.0	ppb	6.09	0.11%
As 188.979†	1436.8	507.51	ug/L	5.484	507.51	ppb	5.484	1.08%
B 249.677†	24594.2	505.16	ug/L	1.684	505.16	ppb	1.684	0.33%
Ba 233.527†	72275.9	528.31	ug/L	0.164	528.31	ppb	0.164	0.03%
Be 313.107†	1533781.3	519.45	ug/L	0.452	519.45	ppb	0.452	0.09%
Ca 317.933Radial†	3153.1	5283.6	ug/L	33.52	5283.6	ppb	33.52	0.63%
Cd 226.502†	54347.5	511.68	ug/L	1.240	511.68	ppb	1.240	0.24%
Co 228.616†	26834.1	504.66	ug/L	3.264	504.66	ppb	3.264	0.65%
Cr 267.716†	51354.1	515.37	ug/L	0.455	515.37	ppb	0.455	0.09%
Cu 324.752†	177415.6	525.52	ug/L	0.448	525.52	ppb	0.448	0.09%
Fe 238.204 Radial†	580.5	5116.9	ug/L	25.25	5116.9	ppb	25.25	0.49%
K 766.490 Radial†	25908.0	5136.0	ug/L	16.55	5136.0	ppb	16.55	0.32%

Mg 279.077 IEC†	164.7	5270.7 ug/L	61.94	5270.7 ppb	61.94	1.18%
Mn 257.610†	502277.5	529.63 ug/L	0.290	529.63 ppb	0.290	0.05%
Mo 202.031†	8121.3	509.27 ug/L	3.870	509.27 ppb	3.870	0.76%
Na 589.592 Radial†	17142.0	5178.2 ug/L	9.66	5178.2 ppb	9.66	0.19%
Ni 231.604†	23297.4	511.11 ug/L	3.521	511.11 ppb	3.521	0.69%
P 214.914†	1192.7	502.21 ug/L	8.874	502.21 ppb	8.874	1.77%
Pb 220.353†	4956.3	515.08 ug/L	4.682	515.08 ppb	4.682	0.91%
S 181.975 Axial†	4525.7	5113.6 ug/L	33.70	5113.6 ppb	33.70	0.66%
Sb 206.836†	1727.1	523.28 ug/L	3.871	523.28 ppb	3.871	0.74%
Se 196.026†	980.1	519.71 ug/L	8.506	519.71 ppb	8.506	1.64%
Si 251.611†	177962.3	5092.9 ug/L	1.12	5092.9 ppb	1.12	0.02%
Sn 189.927†	3547.2	525.30 ug/L	3.233	525.30 ppb	3.233	0.62%
Sr 421.552†	72631.0	531.73 ug/L	1.781	531.73 ppb	1.781	0.33%
Ti 334.940†	334252.6	530.18 ug/L	0.441	530.18 ppb	0.441	0.08%
Tl 190.801†	1882.5	517.81 ug/L	3.576	517.81 ppb	3.576	0.69%
U 409.014†	17857.8	529.25 ug/L	3.919	529.25 ppb	3.919	0.74%
V 292.402†	82858.3	527.01 ug/L	0.587	527.01 ppb	0.587	0.11%
Zn 213.857†	62019.2	505.60 ug/L	0.613	505.60 ppb	0.613	0.12%
SiO2†	177463.6	10868 ug/L	95.1	10868 ppb	95.1	0.88%

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

Autosampler Location: 7
Date Collected: 1/6/2010 15:54:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4610.7	4610.7	98.8	%			15:55:56
1	Y RADIAL	4870.6	4870.6	98.74	%			15:55:56
1	Al 396.153Radial†	5819.9	5918.4	5227.5	ug/L	5227.5	ppb	15:55:56
1	Ca 317.933Radial†	3067.3	3092.6	5182.2	ug/L	5182.2	ppb	15:56:16
1	Fe 238.204 Radial†	569.7	562.9	4961.7	ug/L	4961.7	ppb	15:56:16
1	K 766.490 Radial†	28492.3	25507.1	5054.7	ug/L	5054.7	ppb	15:55:56
1	Mg 279.077 IEC†	162.8	163.1	5222.0	ug/L	5222.0	ppb	15:56:16
1	Na 589.592 Radial†	29865.7	31984.3	9661.8	ug/L	9661.8	ppb	15:55:56
1	Sr 421.552†	68509.5	69338.7	507.63	ug/L	507.63	ppb	15:55:56
1	Sc 361.383	871692.2	871692.2	98.317	%			15:57:15
1	Y 371.029	739460.9	739460.9	97.073	%			15:57:15
1	Ag 328.068†	115237.2	116696.9	504.41	ug/L	504.41	ppb	15:57:15
1	As 188.979†	1375.1	1432.0	505.65	ug/L	505.65	ppb	15:57:35
1	B 249.677†	22960.3	24019.1	493.32	ug/L	493.32	ppb	15:57:15
1	Ba 233.527†	67903.3	69057.8	504.80	ug/L	504.80	ppb	15:57:15
1	Be 313.107†	1466976.1	1496432.2	506.79	ug/L	506.79	ppb	15:57:15
1	Cd 226.502†	52206.4	53338.1	502.18	ug/L	502.18	ppb	15:57:15
1	Co 228.616†	26201.3	26733.7	502.80	ug/L	502.80	ppb	15:57:35
1	Cr 267.716†	49145.9	49882.9	500.60	ug/L	500.60	ppb	15:57:15
1	Cu 324.752†	175299.0	170299.9	504.45	ug/L	504.45	ppb	15:57:15
1	Mn 257.610†	474924.7	482535.7	508.82	ug/L	508.82	ppb	15:57:15
1	Mo 202.031†	7973.8	8090.3	507.31	ug/L	507.31	ppb	15:57:35
1	Ni 231.604†	22584.3	22845.7	501.20	ug/L	501.20	ppb	15:57:35
1	P 214.914†	5345.1	5188.0	2453.1	ug/L	2453.1	ppb	15:57:35
1	Pb 220.353†	4710.4	4868.8	506.00	ug/L	506.00	ppb	15:57:35
1	S 181.975 Axial†	934.8	890.9	1005.8	ug/L	1005.8	ppb	15:57:35
1	Sb 206.836†	1708.0	1700.2	515.17	ug/L	515.17	ppb	15:57:35
1	Se 196.026†	946.2	995.7	527.16	ug/L	527.16	ppb	15:57:35
1	Si 251.611†	86888.1	87758.5	2505.4	ug/L	2505.4	ppb	15:57:15
1	Sn 189.927†	3343.6	3397.4	503.12	ug/L	503.12	ppb	15:57:35
1	Ti 334.940†	315337.5	322551.2	511.64	ug/L	511.64	ppb	15:57:15
1	Tl 190.801†	1776.1	1859.9	511.41	ug/L	511.41	ppb	15:57:35
1	U 409.014†	13585.4	16486.6	488.53	ug/L	488.53	ppb	15:57:15
1	V 292.402†	76496.7	79607.6	506.55	ug/L	506.55	ppb	15:57:15
1	Zn 213.857†	61213.1	61429.0	500.84	ug/L	500.84	ppb	15:57:15
1	SiO2†	88513.0	89391.7	5461.3	ug/L	5461.3	ppb	15:58:35
2	Sc Radial	4658.7	4658.7	99.8	%			15:56:21
2	Y RADIAL	4940.4	4940.4	100.2	%			15:56:21
2	Al 396.153Radial†	5876.7	5914.7	5224.4	ug/L	5224.4	ppb	15:56:21
2	Ca 317.933Radial†	3039.5	3032.7	5081.8	ug/L	5081.8	ppb	15:56:41
2	Fe 238.204 Radial†	562.1	549.3	4842.0	ug/L	4842.0	ppb	15:56:41
2	K 766.490 Radial†	28726.0	25443.9	5042.2	ug/L	5042.2	ppb	15:56:21
2	Mg 279.077 IEC†	160.8	159.5	5105.2	ug/L	5105.2	ppb	15:56:41
2	Na 589.592 Radial†	29943.3	31750.4	9591.1	ug/L	9591.1	ppb	15:56:21
2	Sr 421.552†	68755.8	68870.7	504.20	ug/L	504.20	ppb	15:56:21
2	Sc 361.383	882734.5	882734.5	99.563	%			15:57:42
2	Y 371.029	748832.0	748832.0	98.303	%			15:57:42
2	Ag 328.068†	116732.5	116732.6	504.53	ug/L	504.53	ppb	15:57:42
2	As 188.979†	1368.2	1407.6	497.09	ug/L	497.09	ppb	15:58:02
2	B 249.677†	23390.7	24159.2	496.24	ug/L	496.24	ppb	15:57:42
2	Ba 233.527†	68796.2	69090.7	505.03	ug/L	505.03	ppb	15:57:42
2	Be 313.107†	1489275.4	1500164.5	508.05	ug/L	508.05	ppb	15:57:42
2	Cd 226.502†	53023.9	53495.0	503.67	ug/L	503.67	ppb	15:57:42
2	Co 228.616†	26234.5	26433.6	497.14	ug/L	497.14	ppb	15:58:02
2	Cr 267.716†	49848.0	49962.8	501.40	ug/L	501.40	ppb	15:57:42
2	Cu 324.752†	177814.3	170595.8	505.32	ug/L	505.32	ppb	15:57:42
2	Mn 257.610†	481552.2	483149.7	509.46	ug/L	509.46	ppb	15:57:42
2	Mo 202.031†	7973.8	7988.8	500.94	ug/L	500.94	ppb	15:58:02
2	Ni 231.604†	22612.4	22586.6	495.52	ug/L	495.52	ppb	15:58:02

2	P 214.914†	5343.8	5118.7	2419.2 ug/L	2419.2 ppb	15:58:02
2	Pb 220.353†	4724.9	4823.4	501.29 ug/L	501.29 ppb	15:58:02
2	S 181.975 Axial†	946.1	890.3	1005.2 ug/L	1005.2 ppb	15:58:02
2	Sb 206.836†	1706.3	1676.7	507.89 ug/L	507.89 ppb	15:58:02
2	Se 196.026†	941.4	978.8	518.12 ug/L	518.12 ppb	15:58:02
2	Si 251.611†	88021.2	87791.0	2506.5 ug/L	2506.5 ppb	15:57:42
2	Sn 189.927†	3344.6	3355.9	496.97 ug/L	496.97 ppb	15:58:02
2	Ti 334.940†	319711.3	322932.1	512.24 ug/L	512.24 ppb	15:57:42
2	Tl 190.801†	1774.8	1835.9	504.91 ug/L	504.91 ppb	15:58:02
2	U 409.014†	13601.1	16329.6	483.88 ug/L	483.88 ppb	15:57:42
2	V 292.402†	77456.4	79598.2	506.40 ug/L	506.40 ppb	15:57:42
2	Zn 213.857†	61933.9	61374.1	500.44 ug/L	500.44 ppb	15:57:42
2	SiO2†	87490.1	87238.1	5329.4 ug/L	5329.4 ppb	15:58:40
3	Sc Radial	4682.1	4682.1	100 %		15:56:46
3	Y RADIAL	4927.4	4927.4	99.89 %		15:56:46
3	Al 396.153Radial†	5863.9	5872.5	5186.9 ug/L	5186.9 ppb	15:56:46
3	Ca 317.933Radial†	3029.4	3007.5	5039.6 ug/L	5039.6 ppb	15:57:06
3	Fe 238.204 Radial†	559.5	543.9	4794.8 ug/L	4794.8 ppb	15:57:06
3	K 766.490 Radial†	28786.4	25360.5	5025.6 ug/L	5025.6 ppb	15:56:46
3	Mg 279.077 IEC†	160.4	158.2	5064.8 ug/L	5064.8 ppb	15:57:06
3	Na 589.592 Radial†	30032.5	31689.5	9572.8 ug/L	9572.8 ppb	15:56:46
3	Sr 421.552†	68944.6	68715.0	503.06 ug/L	503.06 ppb	15:56:46
3	Sc 361.383	879347.8	879347.8	99.181 %		15:58:10
3	Y 371.029	745662.1	745662.1	97.887 %		15:58:10
3	Ag 328.068†	116194.7	116641.9	504.12 ug/L	504.12 ppb	15:58:10
3	As 188.979†	1378.7	1423.5	502.65 ug/L	502.65 ppb	15:58:30
3	B 249.677†	23325.2	24183.7	496.75 ug/L	496.75 ppb	15:58:10
3	Ba 233.527†	68467.3	69025.2	504.55 ug/L	504.55 ppb	15:58:10
3	Be 313.107†	1478139.4	1494697.4	506.20 ug/L	506.20 ppb	15:58:10
3	Cd 226.502†	52658.2	53331.4	502.13 ug/L	502.13 ppb	15:58:10
3	Co 228.616†	26293.9	26595.0	500.18 ug/L	500.18 ppb	15:58:30
3	Cr 267.716†	49557.0	49862.2	500.39 ug/L	500.39 ppb	15:58:10
3	Cu 324.752†	176820.5	170281.7	504.39 ug/L	504.39 ppb	15:58:10
3	Mn 257.610†	478645.0	482081.2	508.33 ug/L	508.33 ppb	15:58:10
3	Mo 202.031†	7984.1	8030.1	503.52 ug/L	503.52 ppb	15:58:30
3	Ni 231.604†	22632.2	22694.0	497.87 ug/L	497.87 ppb	15:58:30
3	P 214.914†	5378.1	5174.0	2446.3 ug/L	2446.3 ppb	15:58:30
3	Pb 220.353†	4745.2	4862.2	505.31 ug/L	505.31 ppb	15:58:30
3	S 181.975 Axial†	943.5	891.4	1006.4 ug/L	1006.4 ppb	15:58:30
3	Sb 206.836†	1704.7	1681.7	509.53 ug/L	509.53 ppb	15:58:30
3	Se 196.026†	943.4	984.4	520.86 ug/L	520.86 ppb	15:58:30
3	Si 251.611†	87498.9	87604.9	2501.1 ug/L	2501.1 ppb	15:58:10
3	Sn 189.927†	3350.0	3374.3	499.69 ug/L	499.69 ppb	15:58:30
3	Ti 334.940†	318120.6	322565.0	511.65 ug/L	511.65 ppb	15:58:10
3	Tl 190.801†	1764.5	1832.4	503.93 ug/L	503.93 ppb	15:58:30
3	U 409.014†	13682.2	16463.9	487.88 ug/L	487.88 ppb	15:58:10
3	V 292.402†	77016.9	79454.7	505.55 ug/L	505.55 ppb	15:58:10
3	Zn 213.857†	61569.7	61246.4	499.38 ug/L	499.38 ppb	15:58:10
3	SiO2†	87953.1	88043.4	5378.7 ug/L	5378.7 ppb	15:58:45

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	877924.8	99.020	%	0.6381				0.64%
Sc Radial	4650.5	99.6	%	0.78				0.78%
Y 371.029	744651.7	97.755	%	0.6257				0.64%
Y RADIAL	4912.8	99.59	%	0.753				0.76%
Ag 328.068†	116690.5	504.35	ug/L	0.212	504.35	ppb	0.212	0.04%
QC value within limits for Ag 328.068 Recovery = 100.87%								
Al 396.153Radial†	5901.9	5212.9	ug/L	22.59	5212.9	ppb	22.59	0.43%
QC value within limits for Al 396.153Radial Recovery = 104.26%								
As 188.979†	1421.0	501.80	ug/L	4.342	501.80	ppb	4.342	0.87%
QC value within limits for As 188.979 Recovery = 100.36%								
B 249.677†	24120.7	495.44	ug/L	1.848	495.44	ppb	1.848	0.37%
QC value within limits for B 249.677 Recovery = 99.09%								
Ba 233.527†	69057.9	504.79	ug/L	0.240	504.79	ppb	0.240	0.05%
QC value within limits for Ba 233.527 Recovery = 100.96%								
Be 313.107†	1497098.0	507.01	ug/L	0.945	507.01	ppb	0.945	0.19%
QC value within limits for Be 313.107 Recovery = 101.40%								
Ca 317.933Radial†	3044.3	5101.2	ug/L	73.28	5101.2	ppb	73.28	1.44%

QC value within limits for Ca 317.933Radial Recovery = 102.02%

Cd 226.502†	53388.2	502.66 ug/L	0.872	502.66 ppb	0.872	0.17%
QC value within limits for Cd 226.502 Recovery = 100.53%						
Co 228.616†	26587.4	500.04 ug/L	2.832	500.04 ppb	2.832	0.57%
QC value within limits for Co 228.616 Recovery = 100.01%						
Cr 267.716†	49902.6	500.80 ug/L	0.533	500.80 ppb	0.533	0.11%
QC value within limits for Cr 267.716 Recovery = 100.16%						
Cu 324.752†	170392.5	504.72 ug/L	0.521	504.72 ppb	0.521	0.10%
QC value within limits for Cu 324.752 Recovery = 100.94%						
Fe 238.204 Radial†	552.0	4866.2 ug/L	86.00	4866.2 ppb	86.00	1.77%
QC value within limits for Fe 238.204 Radial Recovery = 97.32%						
K 766.490 Radial†	25437.1	5040.8 ug/L	14.58	5040.8 ppb	14.58	0.29%
QC value within limits for K 766.490 Radial Recovery = 100.82%						
Mg 279.077 IEC†	160.3	5130.7 ug/L	81.61	5130.7 ppb	81.61	1.59%
QC value within limits for Mg 279.077 IEC Recovery = 102.61%						
Mn 257.610†	482588.9	508.87 ug/L	0.566	508.87 ppb	0.566	0.11%
QC value within limits for Mn 257.610 Recovery = 101.77%						
Mo 202.031†	8036.4	503.92 ug/L	3.202	503.92 ppb	3.202	0.64%
QC value within limits for Mo 202.031 Recovery = 100.78%						
Na 589.592 Radial†	31808.1	9608.6 ug/L	47.00	9608.6 ppb	47.00	0.49%
QC value within limits for Na 589.592 Radial Recovery = 96.09%						
Ni 231.604†	22708.8	498.19 ug/L	2.856	498.19 ppb	2.856	0.57%
QC value within limits for Ni 231.604 Recovery = 99.64%						
P 214.914†	5160.2	2439.5 ug/L	17.94	2439.5 ppb	17.94	0.74%
QC value within limits for P 214.914 Recovery = 97.58%						
Pb 220.353†	4851.5	504.20 ug/L	2.543	504.20 ppb	2.543	0.50%
QC value within limits for Pb 220.353 Recovery = 100.84%						
S 181.975 Axial†	890.9	1005.8 ug/L	0.61	1005.8 ppb	0.61	0.06%
QC value within limits for S 181.975 Axial Recovery = 100.58%						
Sb 206.836†	1686.2	510.86 ug/L	3.821	510.86 ppb	3.821	0.75%
QC value within limits for Sb 206.836 Recovery = 102.17%						
Se 196.026†	986.3	522.05 ug/L	4.636	522.05 ppb	4.636	0.89%
QC value within limits for Se 196.026 Recovery = 104.41%						
Si 251.611†	87718.1	2504.3 ug/L	2.85	2504.3 ppb	2.85	0.11%
QC value within limits for Si 251.611 Recovery = 100.17%						
Sn 189.927†	3375.9	499.93 ug/L	3.081	499.93 ppb	3.081	0.62%
QC value within limits for Sn 189.927 Recovery = 99.99%						
Sr 421.552†	68974.8	504.96 ug/L	2.376	504.96 ppb	2.376	0.47%
QC value within limits for Sr 421.552 Recovery = 100.99%						
Ti 334.940†	322682.8	511.84 ug/L	0.343	511.84 ppb	0.343	0.07%
QC value within limits for Ti 334.940 Recovery = 102.37%						
Tl 190.801†	1842.7	506.75 ug/L	4.067	506.75 ppb	4.067	0.80%
QC value within limits for Tl 190.801 Recovery = 101.35%						
U 409.014†	16426.7	486.76 ug/L	2.520	486.76 ppb	2.520	0.52%
QC value within limits for U 409.014 Recovery = 97.35%						
V 292.402†	79553.5	506.17 ug/L	0.537	506.17 ppb	0.537	0.11%
QC value within limits for V 292.402 Recovery = 101.23%						
Zn 213.857†	61349.8	500.22 ug/L	0.757	500.22 ppb	0.757	0.15%
QC value within limits for Zn 213.857 Recovery = 100.04%						
SiO2†	88224.4	5389.8 ug/L	66.65	5389.8 ppb	66.65	1.24%
QC value within limits for SiO2 Recovery = 100.79%						

All analyte(s) passed QC.

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

Autosampler Location: 8
Date Collected: 1/6/2010 16:00:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4715.1	4715.1	101	%			16:02:50
1	Y RADIAL	5003.8	5003.8	101.4	%			16:02:50
1	Al 396.153Radial†	-15.7	11.2	9.8883	ug/L	9.8883	ppb	16:02:50
1	Ca 317.933Radial†	15.8	3.1	5.2356	ug/L	5.2356	ppb	16:03:10
1	Fe 238.204 Radial†	12.6	-1.4	-12.456	ug/L	-12.456	ppb	16:03:10
1	K 766.490 Radial†	3502.3	130.3	25.820	ug/L	25.820	ppb	16:02:50
1	Mg 279.077 IEC†	6.2	4.5	144.87	ug/L	144.87	ppb	16:03:10
1	Na 589.592 Radial†	-1444.3	320.3	96.767	ug/L	96.767	ppb	16:02:50
1	Sr 421.552†	38.3	21.9	0.1603	ug/L	0.1603	ppb	16:02:50
1	Sc 361.383	863596.1	863596.1	97.404	%			16:04:07
1	Y 371.029	741696.3	741696.3	97.367	%			16:04:07
1	Ag 328.068†	539.1	41.2	0.1824	ug/L	0.1824	ppb	16:04:07
1	As 188.979†	-19.8	13.1	4.5942	ug/L	4.5942	ppb	16:04:27
1	B 249.677†	-631.3	17.7	0.3674	ug/L	0.3674	ppb	16:04:07
1	Ba 233.527†	-0.3	-7.8	-0.0563	ug/L	-0.0563	ppb	16:04:27
1	Be 313.107†	-4376.2	-141.3	-0.0477	ug/L	-0.0477	ppb	16:04:07
1	Cd 226.502†	-240.3	-8.3	-0.0771	ug/L	-0.0771	ppb	16:04:27
1	Co 228.616†	-89.1	-7.5	-0.1412	ug/L	-0.1412	ppb	16:04:27
1	Cr 267.716†	71.2	-31.0	-0.3065	ug/L	-0.3065	ppb	16:04:07
1	Cu 324.752†	8123.6	341.1	1.0092	ug/L	1.0092	ppb	16:04:07
1	Mn 257.610†	551.5	49.7	0.0485	ug/L	0.0485	ppb	16:04:07
1	Mo 202.031†	21.2	1.8	0.1131	ug/L	0.1131	ppb	16:04:27
1	Ni 231.604†	118.8	-3.1	-0.0686	ug/L	-0.0686	ppb	16:04:27
1	P 214.914†	259.6	17.9	8.6069	ug/L	8.6069	ppb	16:04:27
1	Pb 220.353†	-77.5	-1.8	-0.1873	ug/L	-0.1873	ppb	16:04:27
1	S 181.975 Axial†	58.0	-0.4	-0.4488	ug/L	-0.4488	ppb	16:04:27
1	Sb 206.836†	50.1	14.4	4.3200	ug/L	4.3200	ppb	16:04:27
1	Se 196.026†	-42.0	-9.8	-5.0618	ug/L	-5.0618	ppb	16:04:27
1	Si 251.611†	656.9	57.9	1.6457	ug/L	1.6457	ppb	16:04:27
1	Sn 189.927†	10.6	7.4	1.0995	ug/L	1.0995	ppb	16:04:27
1	Ti 334.940†	-1754.9	15.7	0.0295	ug/L	0.0295	ppb	16:04:07
1	Tl 190.801†	-43.7	8.5	2.3191	ug/L	2.3191	ppb	16:04:27
1	U 409.014†	-2911.1	-320.0	-9.5103	ug/L	-9.5103	ppb	16:04:07
1	V 292.402†	-1687.0	69.8	0.4269	ug/L	0.4269	ppb	16:04:07
1	Zn 213.857†	834.5	25.0	0.2006	ug/L	0.2006	ppb	16:04:27
1	SiO2†	684.1	66.3	4.0362	ug/L	4.0362	ppb	16:05:23
2	Sc Radial	4652.0	4652.0	99.7	%			16:03:15
2	Y RADIAL	4959.3	4959.3	100.5	%			16:03:15
2	Al 396.153Radial†	1.1	27.8	24.619	ug/L	24.619	ppb	16:03:15
2	Ca 317.933Radial†	20.2	7.8	13.006	ug/L	13.006	ppb	16:03:35
2	Fe 238.204 Radial†	14.4	0.5	4.6528	ug/L	4.6528	ppb	16:03:35
2	K 766.490 Radial†	3343.8	18.3	3.5918	ug/L	3.5918	ppb	16:03:15
2	Mg 279.077 IEC†	3.5	1.9	61.332	ug/L	61.332	ppb	16:03:35
2	Na 589.592 Radial†	-1462.4	282.8	85.440	ug/L	85.440	ppb	16:03:15
2	Sr 421.552†	6.9	-9.0	-0.0663	ug/L	-0.0663	ppb	16:03:15
2	Sc 361.383	860872.1	860872.1	97.097	%			16:04:32
2	Y 371.029	738933.4	738933.4	97.004	%			16:04:32
2	Ag 328.068†	437.2	-62.0	-0.2565	ug/L	-0.2565	ppb	16:04:32
2	As 188.979†	-27.8	4.7	1.6627	ug/L	1.6627	ppb	16:04:52
2	B 249.677†	-684.5	-39.1	-0.8045	ug/L	-0.8045	ppb	16:04:32
2	Ba 233.527†	-3.7	-11.3	-0.0821	ug/L	-0.0821	ppb	16:04:52
2	Be 313.107†	-4387.5	-167.1	-0.0562	ug/L	-0.0562	ppb	16:04:32
2	Cd 226.502†	-234.4	-3.0	-0.0287	ug/L	-0.0287	ppb	16:04:52
2	Co 228.616†	-124.3	-44.1	-0.8279	ug/L	-0.8279	ppb	16:04:52
2	Cr 267.716†	133.9	33.9	0.3432	ug/L	0.3432	ppb	16:04:32
2	Cu 324.752†	8102.1	345.3	1.0227	ug/L	1.0227	ppb	16:04:32
2	Mn 257.610†	554.1	54.2	0.0564	ug/L	0.0564	ppb	16:04:32
2	Mo 202.031†	24.7	5.5	0.3462	ug/L	0.3462	ppb	16:04:52
2	Ni 231.604†	125.8	4.5	0.0997	ug/L	0.0997	ppb	16:04:52

2	P 214.914†	255.7	14.8	7.0644 ug/L	7.0644 ppb	16:04:52
2	Pb 220.353†	-90.3	-15.2	-1.5683 ug/L	-1.5683 ppb	16:04:52
2	S 181.975 Axial†	63.3	5.2	5.9237 ug/L	5.9237 ppb	16:04:52
2	Sb 206.836†	40.9	5.0	1.5161 ug/L	1.5161 ppb	16:04:52
2	Se 196.026†	-45.0	-13.1	-6.6924 ug/L	-6.6924 ppb	16:04:52
2	Si 251.611†	681.7	85.5	2.4431 ug/L	2.4431 ppb	16:04:52
2	Sn 189.927†	7.4	4.3	0.6319 ug/L	0.6319 ppb	16:04:52
2	Ti 334.940†	-1680.5	86.7	0.1421 ug/L	0.1421 ppb	16:04:32
2	Tl 190.801†	-45.3	6.8	1.8576 ug/L	1.8576 ppb	16:04:52
2	U 409.014†	-2889.2	-306.9	-9.1246 ug/L	-9.1246 ppb	16:04:32
2	V 292.402†	-1721.2	29.1	0.1705 ug/L	0.1705 ppb	16:04:32
2	Zn 213.857†	839.3	32.7	0.2648 ug/L	0.2648 ppb	16:04:52
2	SiO2†	684.9	69.4	4.2385 ug/L	4.2385 ppb	16:05:28
3	Sc Radial	4651.2	4651.2	99.6 %		16:03:40
3	Y RADIAL	4941.9	4941.9	100.2 %		16:03:40
3	Al 396.153Radial†	-45.6	-19.1	-16.940 ug/L	-16.940 ppb	16:03:40
3	Ca 317.933Radial†	21.0	8.5	14.323 ug/L	14.323 ppb	16:04:00
3	Fe 238.204 Radial†	13.0	-0.8	-7.4234 ug/L	-7.4234 ppb	16:04:00
3	K 766.490 Radial†	3406.8	82.0	16.256 ug/L	16.256 ppb	16:03:40
3	Mg 279.077 IEC†	-0.2	-1.9	-60.201 ug/L	-60.201 ppb	16:04:00
3	Na 589.592 Radial†	-1533.2	211.5	63.903 ug/L	63.903 ppb	16:03:40
3	Sr 421.552†	-6.2	-22.2	-0.1628 ug/L	-0.1628 ppb	16:03:40
3	Sc 361.383	865258.0	865258.0	97.592 %		16:04:58
3	Y 371.029	743166.3	743166.3	97.560 %		16:04:58
3	Ag 328.068†	430.2	-71.5	-0.3062 ug/L	-0.3062 ppb	16:04:58
3	As 188.979†	-22.4	10.5	3.6605 ug/L	3.6605 ppb	16:05:18
3	B 249.677†	-647.9	2.0	0.0433 ug/L	0.0433 ppb	16:04:58
3	Ba 233.527†	2.8	-4.6	-0.0336 ug/L	-0.0336 ppb	16:05:18
3	Be 313.107†	-4335.5	-90.9	-0.0305 ug/L	-0.0305 ppb	16:04:58
3	Cd 226.502†	-255.4	-23.4	-0.2195 ug/L	-0.2195 ppb	16:05:18
3	Co 228.616†	-109.7	-28.4	-0.5316 ug/L	-0.5316 ppb	16:05:18
3	Cr 267.716†	117.1	15.9	0.1607 ug/L	0.1607 ppb	16:04:58
3	Cu 324.752†	8024.4	223.4	0.6612 ug/L	0.6612 ppb	16:04:58
3	Mn 257.610†	565.7	63.3	0.0670 ug/L	0.0670 ppb	16:04:58
3	Mo 202.031†	32.5	13.4	0.8398 ug/L	0.8398 ppb	16:05:18
3	Ni 231.604†	117.9	-4.2	-0.0923 ug/L	-0.0923 ppb	16:05:18
3	P 214.914†	245.7	3.2	1.4791 ug/L	1.4791 ppb	16:05:18
3	Pb 220.353†	-93.2	-17.7	-1.8348 ug/L	-1.8348 ppb	16:05:18
3	S 181.975 Axial†	68.3	10.1	11.416 ug/L	11.416 ppb	16:05:18
3	Sb 206.836†	52.9	17.1	5.1747 ug/L	5.1747 ppb	16:05:18
3	Se 196.026†	-29.8	2.7	1.3526 ug/L	1.3526 ppb	16:05:18
3	Si 251.611†	655.1	54.7	1.5406 ug/L	1.5406 ppb	16:05:18
3	Sn 189.927†	18.6	15.7	2.3215 ug/L	2.3215 ppb	16:05:18
3	Ti 334.940†	-1697.8	77.7	0.1256 ug/L	0.1256 ppb	16:04:58
3	Tl 190.801†	-46.7	5.5	1.5073 ug/L	1.5073 ppb	16:05:18
3	U 409.014†	-2731.4	-130.1	-3.8677 ug/L	-3.8677 ppb	16:04:58
3	V 292.402†	-1737.3	21.6	0.1397 ug/L	0.1397 ppb	16:04:58
3	Zn 213.857†	831.4	20.3	0.1690 ug/L	0.1690 ppb	16:05:18
3	SiO2†	676.5	57.2	3.4497 ug/L	3.4497 ppb	16:05:33

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	863242.1	97.364	%	0.2497				0.26%
Sc Radial	4672.8	100	%	0.8				0.78%
Y 371.029	741265.4	97.310	%	0.2821				0.29%
Y RADIAL	4968.3	100.7	%	0.65				0.64%
Ag 328.068†	-30.8	-0.1268	ug/L	0.26892	-0.1268	ppb	0.26892	212.13%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	6.6	5.8557	ug/L	21.07064	5.8557	ppb	21.07064	359.83%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	9.4	3.3058	ug/L	1.49760	3.3058	ppb	1.49760	45.30%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-6.5	-0.1312	ug/L	0.60515	-0.1312	ppb	0.60515	461.14%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-7.9	-0.0573	ug/L	0.02425	-0.0573	ppb	0.02425	42.31%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-133.1	-0.0448	ug/L	0.01310	-0.0448	ppb	0.01310	29.25%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.5	10.855	ug/L	4.9108	10.855	ppb	4.9108	45.24%

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

Cd 226.502†	-11.6	-0.1084 ug/L	0.09918	-0.1084 ppb	0.09918	91.47%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-26.7	-0.5002 ug/L	0.34442	-0.5002 ppb	0.34442	68.85%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	6.3	0.0658 ug/L	0.33509	0.0658 ppb	0.33509	509.25%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	303.3	0.8977 ug/L	0.20495	0.8977 ppb	0.20495	22.83%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.6	-5.0755 ug/L	8.79264	-5.0755 ppb	8.79264	173.24%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	76.9	15.223 ug/L	11.1502	15.223 ppb	11.1502	73.25%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.5	48.666 ug/L	103.1194	48.666 ppb	103.1194	211.89%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	55.7	0.0573 ug/L	0.00931	0.0573 ppb	0.00931	16.25%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	6.9	0.4330 ug/L	0.37102	0.4330 ppb	0.37102	85.68%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	271.6	82.037 ug/L	16.6944	82.037 ppb	16.6944	20.35%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-0.9	-0.0204 ug/L	0.10470	-0.0204 ppb	0.10470	513.57%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	12.0	5.7168 ug/L	3.75011	5.7168 ppb	3.75011	65.60%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-11.6	-1.1968 ug/L	0.88433	-1.1968 ppb	0.88433	73.89%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	5.0	5.6303 ug/L	5.93777	5.6303 ppb	5.93777	105.46%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	12.2	3.6703 ug/L	1.91389	3.6703 ppb	1.91389	52.15%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-6.7	-3.4672 ug/L	4.25296	-3.4672 ppb	4.25296	122.66%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	66.0	1.8765 ug/L	0.49350	1.8765 ppb	0.49350	26.30%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	9.1	1.3509 ug/L	0.87244	1.3509 ppb	0.87244	64.58%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-3.1	-0.0229 ug/L	0.16583	-0.0229 ppb	0.16583	723.07%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	60.0	0.0991 ug/L	0.06079	0.0991 ppb	0.06079	61.35%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	6.9	1.8947 ug/L	0.40716	1.8947 ppb	0.40716	21.49%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-252.3	-7.5008 ug/L	3.15234	-7.5008 ppb	3.15234	42.03%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	40.2	0.2457 ug/L	0.15766	0.2457 ppb	0.15766	64.16%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	26.0	0.2115 ug/L	0.04880	0.2115 ppb	0.04880	23.08%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	64.3	3.9081 ug/L	0.40971	3.9081 ppb	0.40971	10.48%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 17
Sample ID: 243272001|935389|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 1/6/2010 16:35:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243272001|935389|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4779.3	4779.3	102	%			16:36:55
1	Y RADIAL	5059.7	5059.7	102.6	%			16:36:55
1	Al 396.153Radial†	16.5	42.8	38.016	ug/L	38.016	ppb	16:36:55
1	Ca 317.933Radial†	41.4	27.9	46.743	ug/L	46.743	ppb	16:37:15
1	Fe 238.204 Radial†	15.4	1.1	9.9051	ug/L	9.9051	ppb	16:37:15
1	K 766.490 Radial†	3901.2	473.3	93.857	ug/L	93.857	ppb	16:36:55
1	Mg 279.077 IEC†	3.2	1.5	48.393	ug/L	48.393	ppb	16:37:15
1	Na 589.592 Radial†	-1075.0	700.3	211.54	ug/L	211.54	ppb	16:36:55
1	Sr 421.552†	44.2	27.2	0.1985	ug/L	0.1985	ppb	16:36:55
1	Sc 361.383	898074.9	898074.9	101.29	%			16:38:11
1	Y 371.029	768811.4	768811.4	100.93	%			16:38:11
1	Ag 328.068†	369.3	-147.8	-0.6307	ug/L	-0.6307	ppb	16:38:17
1	As 188.979†	-21.3	12.4	4.3431	ug/L	4.3431	ppb	16:38:37
1	B 249.677†	232.8	895.6	18.466	ug/L	18.466	ppb	16:38:17
1	Ba 233.527†	6.0	-1.5	-0.0087	ug/L	-0.0087	ppb	16:38:37
1	Be 313.107†	-4503.3	-94.3	-0.0308	ug/L	-0.0308	ppb	16:38:17
1	Cd 226.502†	-246.4	-4.9	-0.0472	ug/L	-0.0472	ppb	16:38:37
1	Co 228.616†	-84.6	0.5	0.0072	ug/L	0.0072	ppb	16:38:37
1	Cr 267.716†	140.4	34.6	0.3477	ug/L	0.3477	ppb	16:38:17
1	Cu 324.752†	8391.8	285.7	0.8463	ug/L	0.8463	ppb	16:38:17
1	Mn 257.610†	678.9	153.8	0.1622	ug/L	0.1622	ppb	16:38:17
1	Mo 202.031†	16.0	-4.1	-0.2577	ug/L	-0.2577	ppb	16:38:37
1	Ni 231.604†	126.1	-0.6	-0.0136	ug/L	-0.0136	ppb	16:38:37
1	P 214.914†	278.4	26.3	12.676	ug/L	12.676	ppb	16:38:37
1	Pb 220.353†	-90.0	-11.1	-1.1394	ug/L	-1.1394	ppb	16:38:37
1	S 181.975 Axial†	92.3	31.2	35.243	ug/L	35.243	ppb	16:38:37
1	Sb 206.836†	40.8	3.2	0.9331	ug/L	0.9331	ppb	16:38:37
1	Se 196.026†	-32.6	1.1	0.6063	ug/L	0.6063	ppb	16:38:37
1	Si 251.611†	46358.3	45149.9	1295.2	ug/L	1295.2	ppb	16:38:17
1	Sn 189.927†	3.5	0.1	0.0155	ug/L	0.0155	ppb	16:38:37
1	Ti 334.940†	-1472.8	363.4	0.5775	ug/L	0.5775	ppb	16:38:17
1	Tl 190.801†	-52.1	1.9	0.5276	ug/L	0.5276	ppb	16:38:37
1	U 409.014†	-2600.2	101.7	3.0224	ug/L	3.0224	ppb	16:38:11
1	V 292.402†	-1660.2	162.9	1.0233	ug/L	1.0233	ppb	16:38:17
1	Zn 213.857†	994.2	149.8	1.2286	ug/L	1.2286	ppb	16:38:37
1	SiO2†	46576.7	45346.0	2783.6	ug/L	2783.6	ppb	16:39:43
2	Sc Radial	4787.5	4787.5	103	%			16:37:20
2	Y RADIAL	5093.5	5093.5	103.3	%			16:37:20
2	Al 396.153Radial†	-7.8	19.1	16.921	ug/L	16.921	ppb	16:37:20
2	Ca 317.933Radial†	34.3	20.9	34.963	ug/L	34.963	ppb	16:37:40
2	Fe 238.204 Radial†	12.1	-2.1	-18.425	ug/L	-18.425	ppb	16:37:40
2	K 766.490 Radial†	3834.5	401.7	79.638	ug/L	79.638	ppb	16:37:20
2	Mg 279.077 IEC†	1.8	0.1	3.2568	ug/L	3.2568	ppb	16:37:40
2	Na 589.592 Radial†	-1020.8	754.9	228.03	ug/L	228.03	ppb	16:37:20
2	Sr 421.552†	31.8	15.0	0.1094	ug/L	0.1094	ppb	16:37:20
2	Sc 361.383	913718.6	913718.6	103.06	%			16:38:42
2	Y 371.029	782086.3	782086.3	102.67	%			16:38:42
2	Ag 328.068†	523.7	-4.2	-0.0310	ug/L	-0.0310	ppb	16:38:47
2	As 188.979†	-33.7	0.7	0.2500	ug/L	0.2500	ppb	16:39:07
2	B 249.677†	104.2	766.9	15.816	ug/L	15.816	ppb	16:38:47
2	Ba 233.527†	27.2	18.9	0.1376	ug/L	0.1376	ppb	16:39:07
2	Be 313.107†	-4447.2	36.3	0.0136	ug/L	0.0136	ppb	16:38:47
2	Cd 226.502†	-238.4	7.1	0.0683	ug/L	0.0683	ppb	16:39:07
2	Co 228.616†	-90.5	-3.9	-0.0732	ug/L	-0.0732	ppb	16:39:07
2	Cr 267.716†	134.0	26.0	0.2577	ug/L	0.2577	ppb	16:38:47
2	Cu 324.752†	8353.3	106.4	0.3141	ug/L	0.3141	ppb	16:38:47
2	Mn 257.610†	710.4	172.9	0.1802	ug/L	0.1802	ppb	16:38:47
2	Mo 202.031†	28.2	7.4	0.4645	ug/L	0.4645	ppb	16:39:07
2	Ni 231.604†	110.1	-18.2	-0.4000	ug/L	-0.4000	ppb	16:39:07

2	P 214.914†	264.4	8.0	3.8846 ug/L	3.8846 ppb	16:39:07
2	Pb 220.353†	-113.3	-32.2	-3.3284 ug/L	-3.3284 ppb	16:39:07
2	S 181.975 Axial†	93.1	30.4	34.356 ug/L	34.356 ppb	16:39:07
2	Sb 206.836†	32.5	-5.6	-1.6432 ug/L	-1.6432 ppb	16:39:07
2	Se 196.026†	-33.1	1.2	0.5372 ug/L	0.5372 ppb	16:39:07
2	Si 251.611†	46297.1	44307.0	1271.0 ug/L	1271.0 ppb	16:38:47
2	Sn 189.927†	8.9	5.2	0.7760 ug/L	0.7760 ppb	16:39:07
2	Ti 334.940†	-1425.3	434.4	0.6876 ug/L	0.6876 ppb	16:38:47
2	Tl 190.801†	-44.9	9.8	2.6875 ug/L	2.6875 ppb	16:39:07
2	U 409.014†	-2492.2	250.5	7.4482 ug/L	7.4482 ppb	16:38:42
2	V 292.402†	-1855.2	1.6	0.0335 ug/L	0.0335 ppb	16:38:47
2	Zn 213.857†	982.6	121.7	1.0039 ug/L	1.0039 ppb	16:39:07
2	SiO2†	45910.9	43912.8	2695.6 ug/L	2695.6 ppb	16:39:48
3	Sc Radial	4815.7	4815.7	103 %		16:37:45
3	Y RADIAL	5079.7	5079.7	103.0 %		16:37:45
3	Al 396.153Radial†	10.1	36.5	32.382 ug/L	32.382 ppb	16:37:45
3	Ca 317.933Radial†	38.8	25.0	41.905 ug/L	41.905 ppb	16:38:05
3	Fe 238.204 Radial†	12.4	-1.8	-16.230 ug/L	-16.230 ppb	16:38:05
3	K 766.490 Radial†	3852.5	397.2	78.756 ug/L	78.756 ppb	16:37:45
3	Mg 279.077 IEC†	1.5	-0.2	-4.8983 ug/L	-4.8983 ppb	16:38:05
3	Na 589.592 Radial†	-1066.8	716.2	216.34 ug/L	216.34 ppb	16:37:45
3	Sr 421.552†	5.4	-10.8	-0.0792 ug/L	-0.0792 ppb	16:37:45
3	Sc 361.383	900602.3	900602.3	101.58 %		16:39:12
3	Y 371.029	771804.2	771804.2	101.32 %		16:39:12
3	Ag 328.068†	324.5	-192.9	-0.8375 ug/L	-0.8375 ppb	16:39:17
3	As 188.979†	-35.5	-1.6	-0.5505 ug/L	-0.5505 ppb	16:39:37
3	B 249.677†	122.1	786.0	16.210 ug/L	16.210 ppb	16:39:17
3	Ba 233.527†	44.3	36.1	0.2649 ug/L	0.2649 ppb	16:39:37
3	Be 313.107†	-4474.6	-53.6	-0.0165 ug/L	-0.0165 ppb	16:39:17
3	Cd 226.502†	-232.5	9.4	0.0907 ug/L	0.0907 ppb	16:39:37
3	Co 228.616†	-109.2	-23.6	-0.4427 ug/L	-0.4427 ppb	16:39:37
3	Cr 267.716†	118.0	12.1	0.1201 ug/L	0.1201 ppb	16:39:17
3	Cu 324.752†	8379.4	250.2	0.7400 ug/L	0.7400 ppb	16:39:17
3	Mn 257.610†	678.2	151.3	0.1579 ug/L	0.1579 ppb	16:39:17
3	Mo 202.031†	29.9	9.5	0.5925 ug/L	0.5925 ppb	16:39:37
3	Ni 231.604†	132.0	4.9	0.1085 ug/L	0.1085 ppb	16:39:37
3	P 214.914†	273.9	21.1	10.222 ug/L	10.222 ppb	16:39:37
3	Pb 220.353†	-105.4	-26.0	-2.6821 ug/L	-2.6821 ppb	16:39:37
3	S 181.975 Axial†	92.5	31.2	35.229 ug/L	35.229 ppb	16:39:37
3	Sb 206.836†	46.7	8.9	2.6890 ug/L	2.6890 ppb	16:39:37
3	Se 196.026†	-33.1	0.7	0.2969 ug/L	0.2969 ppb	16:39:37
3	Si 251.611†	46454.4	45116.0	1294.2 ug/L	1294.2 ppb	16:39:17
3	Sn 189.927†	12.0	8.4	1.2450 ug/L	1.2450 ppb	16:39:37
3	Ti 334.940†	-1333.3	504.8	0.7999 ug/L	0.7999 ppb	16:39:17
3	Tl 190.801†	-55.5	-1.2	-0.3254 ug/L	-0.3254 ppb	16:39:37
3	U 409.014†	-2469.1	237.9	7.0757 ug/L	7.0757 ppb	16:39:12
3	V 292.402†	-1698.3	129.9	0.8392 ug/L	0.8392 ppb	16:39:17
3	Zn 213.857†	973.1	126.3	1.0377 ug/L	1.0377 ppb	16:39:37
3	SiO2†	46149.9	44796.8	2749.9 ug/L	2749.9 ppb	16:39:53

Mean Data: 243272001|935389|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	904131.9	101.98	%	0.947				0.93%
Sc Radial	4794.2	103	%	0.4				0.40%
Y 371.029	774233.9	101.64	%	0.914				0.90%
Y RADIAL	5077.6	102.9	%	0.34				0.33%
Ag 328.068†	-115.0	-0.4997	ug/L	0.41889	-0.4997	ppb	0.41889	83.82%
Al 396.153Radial†	32.8	29.106	ug/L	10.9222	29.106	ppb	10.9222	37.53%
As 188.979†	3.9	1.3475	ug/L	2.62495	1.3475	ppb	2.62495	194.80%
B 249.677†	816.2	16.831	ug/L	1.4297	16.831	ppb	1.4297	8.49%
Ba 233.527†	17.8	0.1313	ug/L	0.13695	0.1313	ppb	0.13695	104.31%
Be 313.107†	-37.2	-0.0112	ug/L	0.02266	-0.0112	ppb	0.02266	201.92%
Ca 317.933Radial†	24.6	41.203	ug/L	5.9209	41.203	ppb	5.9209	14.37%
Cd 226.502†	3.9	0.0373	ug/L	0.07397	0.0373	ppb	0.07397	198.47%
Co 228.616†	-9.0	-0.1696	ug/L	0.23991	-0.1696	ppb	0.23991	141.49%
Cr 267.716†	24.2	0.2418	ug/L	0.11465	0.2418	ppb	0.11465	47.41%
Cu 324.752†	214.1	0.6334	ug/L	0.28162	0.6334	ppb	0.28162	44.46%
Fe 238.204 Radial†	-0.9	-8.2500	ug/L	15.76098	-8.2500	ppb	15.76098	191.04%
K 766.490 Radial†	424.1	84.084	ug/L	8.4754	84.084	ppb	8.4754	10.08%

Mg 279.077 IEC†	0.5	15.584 ug/L	28.7045	15.584 ppb	28.7045	184.20%
Mn 257.610†	159.3	0.1667 ug/L	0.01187	0.1667 ppb	0.01187	7.12%
Mo 202.031†	4.3	0.2665 ug/L	0.45840	0.2665 ppb	0.45840	172.03%
Na 589.592 Radial†	723.8	218.63 ug/L	8.485	218.63 ppb	8.485	3.88%
Ni 231.604†	-4.6	-0.1017 ug/L	0.26546	-0.1017 ppb	0.26546	261.01%
P 214.914†	18.5	8.9275 ug/L	4.53628	8.9275 ppb	4.53628	50.81%
Pb 220.353†	-23.1	-2.3833 ug/L	1.12469	-2.3833 ppb	1.12469	47.19%
S 181.975 Axial†	30.9	34.943 ug/L	0.5080	34.943 ppb	0.5080	1.45%
Sb 206.836†	2.2	0.6596 ug/L	2.17902	0.6596 ppb	2.17902	330.34%
Se 196.026†	1.0	0.4801 ug/L	0.16238	0.4801 ppb	0.16238	33.82%
Si 251.611†	44857.6	1286.8 ug/L	13.69	1286.8 ppb	13.69	1.06%
Sn 189.927†	4.6	0.6788 ug/L	0.62050	0.6788 ppb	0.62050	91.41%
Sr 421.552†	10.5	0.0762 ug/L	0.14181	0.0762 ppb	0.14181	186.03%
Ti 334.940†	434.2	0.6883 ug/L	0.11121	0.6883 ppb	0.11121	16.16%
Tl 190.801†	3.5	0.9633 ug/L	1.55299	0.9633 ppb	1.55299	161.22%
U 409.014†	196.7	5.8488 ug/L	2.45476	5.8488 ppb	2.45476	41.97%
V 292.402†	98.1	0.6320 ug/L	0.52644	0.6320 ppb	0.52644	83.30%
Zn 213.857†	132.6	1.0901 ug/L	0.12115	1.0901 ppb	0.12115	11.11%
SiO2†	44685.2	2743.1 ug/L	44.40	2743.1 ppb	44.40	1.62%

Sequence No.: 20
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/6/2010 16:55:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4685.0	4685.0	100	%			16:57:33
1	Y RADIAL	4955.4	4955.4	100.5	%			16:57:33
1	Al 396.153Radial†	5814.4	5819.6	5139.1	ug/L	5139.1	ppb	16:57:33
1	Ca 317.933Radial†	3117.0	3092.8	5182.6	ug/L	5182.6	ppb	16:57:53
1	Fe 238.204 Radial†	593.1	577.0	5086.2	ug/L	5086.2	ppb	16:57:53
1	K 766.490 Radial†	28822.6	25378.9	5028.8	ug/L	5028.8	ppb	16:57:33
1	Mg 279.077 IEC†	164.1	161.9	5181.3	ug/L	5181.3	ppb	16:57:53
1	Na 589.592 Radial†	33244.0	34870.8	10534	ug/L	10534	ppb	16:57:33
1	Sr 421.552†	72111.5	71828.0	525.85	ug/L	525.85	ppb	16:57:33
1	Sc 361.383	857176.8	857176.8	96.680	%			16:58:52
1	Y 371.029	728322.0	728322.0	95.611	%			16:58:52
1	Ag 328.068†	115653.5	119112.3	514.87	ug/L	514.87	ppb	16:58:52
1	As 188.979†	1405.8	1487.4	525.14	ug/L	525.14	ppb	16:59:12
1	B 249.677†	22967.5	24421.9	501.57	ug/L	501.57	ppb	16:58:52
1	Ba 233.527†	68336.5	70675.5	516.62	ug/L	516.62	ppb	16:58:52
1	Be 313.107†	1479643.0	1534800.8	519.78	ug/L	519.78	ppb	16:58:52
1	Cd 226.502†	52746.4	54795.9	515.91	ug/L	515.91	ppb	16:58:52
1	Co 228.616†	26578.7	27575.3	518.64	ug/L	518.64	ppb	16:59:12
1	Cr 267.716†	49613.5	51213.0	513.95	ug/L	513.95	ppb	16:58:52
1	Cu 324.752†	175417.8	173442.0	513.76	ug/L	513.76	ppb	16:58:52
1	Mn 257.610†	478024.5	493921.9	520.83	ug/L	520.83	ppb	16:58:52
1	Mo 202.031†	8075.9	8333.3	522.54	ug/L	522.54	ppb	16:59:12
1	Ni 231.604†	22919.8	23581.7	517.35	ug/L	517.35	ppb	16:59:12
1	P 214.914†	5429.4	5367.3	2539.1	ug/L	2539.1	ppb	16:59:12
1	Pb 220.353†	4811.9	5054.9	525.28	ug/L	525.28	ppb	16:59:12
1	S 181.975 Axial†	957.0	929.9	1049.9	ug/L	1049.9	ppb	16:59:12
1	Sb 206.836†	1731.6	1754.0	531.57	ug/L	531.57	ppb	16:59:12
1	Se 196.026†	965.2	1031.6	545.97	ug/L	545.97	ppb	16:59:12
1	Si 251.611†	87126.8	89501.9	2555.1	ug/L	2555.1	ppb	16:58:52
1	Sn 189.927†	3402.0	3515.4	520.57	ug/L	520.57	ppb	16:59:12
1	Ti 334.940†	316863.5	329560.9	522.75	ug/L	522.75	ppb	16:58:52
1	Tl 190.801†	1795.1	1910.1	525.18	ug/L	525.18	ppb	16:59:12
1	U 409.014†	13418.0	16547.4	490.30	ug/L	490.30	ppb	16:58:52
1	V 292.402†	76945.0	81388.9	517.91	ug/L	517.91	ppb	16:58:52
1	Zn 213.857†	61564.8	62847.1	512.38	ug/L	512.38	ppb	16:58:52
1	SiO2†	88135.8	90526.1	5530.2	ug/L	5530.2	ppb	17:00:12
2	Sc Radial	4610.4	4610.4	98.8	%			16:57:58
2	Y RADIAL	4911.2	4911.2	99.56	%			16:57:58
2	Al 396.153Radial†	5771.4	5869.8	5184.1	ug/L	5184.1	ppb	16:57:58
2	Ca 317.933Radial†	3107.7	3133.7	5251.0	ug/L	5251.0	ppb	16:58:18
2	Fe 238.204 Radial†	590.3	583.7	5145.0	ug/L	5145.0	ppb	16:58:18
2	K 766.490 Radial†	28366.4	25381.8	5029.4	ug/L	5029.4	ppb	16:57:58
2	Mg 279.077 IEC†	166.4	166.9	5341.2	ug/L	5341.2	ppb	16:58:18
2	Na 589.592 Radial†	32735.8	34892.2	10540	ug/L	10540	ppb	16:57:58
2	Sr 421.552†	71284.3	72153.0	528.23	ug/L	528.23	ppb	16:57:58
2	Sc 361.383	872076.0	872076.0	98.361	%			16:59:20
2	Y 371.029	740502.4	740502.4	97.210	%			16:59:20
2	Ag 328.068†	116471.3	117900.1	509.66	ug/L	509.66	ppb	16:59:20
2	As 188.979†	1394.1	1450.7	512.26	ug/L	512.26	ppb	16:59:40
2	B 249.677†	23265.8	24319.3	499.48	ug/L	499.48	ppb	16:59:20
2	Ba 233.527†	68743.0	69881.2	510.82	ug/L	510.82	ppb	16:59:20
2	Be 313.107†	1488841.1	1518004.9	514.09	ug/L	514.09	ppb	16:59:20
2	Cd 226.502†	52993.7	54115.3	509.48	ug/L	509.48	ppb	16:59:20
2	Co 228.616†	26444.5	26969.2	507.22	ug/L	507.22	ppb	16:59:40
2	Cr 267.716†	49825.3	50551.6	507.32	ug/L	507.32	ppb	16:59:20
2	Cu 324.752†	177131.3	172084.3	509.74	ug/L	509.74	ppb	16:59:20
2	Mn 257.610†	481075.7	488576.6	515.20	ug/L	515.20	ppb	16:59:20
2	Mo 202.031†	8053.4	8167.7	512.17	ug/L	512.17	ppb	16:59:40
2	Ni 231.604†	22808.2	23063.3	505.97	ug/L	505.97	ppb	16:59:40

2	P 214.914†	5394.5	5235.9	2475.5 ug/L	2475.5 ppb	16:59:40
2	Pb 220.353†	4806.7	4964.6	515.91 ug/L	515.91 ppb	16:59:40
2	S 181.975 Axial†	945.6	901.5	1017.8 ug/L	1017.8 ppb	16:59:40
2	Sb 206.836†	1728.2	1719.9	521.11 ug/L	521.11 ppb	16:59:40
2	Se 196.026†	956.6	1005.8	532.93 ug/L	532.93 ppb	16:59:40
2	Si 251.611†	87867.7	88715.5	2532.8 ug/L	2532.8 ppb	16:59:20
2	Sn 189.927†	3383.9	3436.9	508.97 ug/L	508.97 ppb	16:59:40
2	Ti 334.940†	319168.4	326304.8	517.59 ug/L	517.59 ppb	16:59:20
2	Tl 190.801†	1783.9	1867.0	513.41 ug/L	513.41 ppb	16:59:40
2	U 409.014†	13563.6	16458.3	487.66 ug/L	487.66 ppb	16:59:20
2	V 292.402†	77499.4	80592.8	512.77 ug/L	512.77 ppb	16:59:20
2	Zn 213.857†	62029.5	62231.6	507.39 ug/L	507.39 ppb	16:59:20
2	SiO2†	87821.2	88648.8	5415.5 ug/L	5415.5 ppb	17:00:18
3	Sc Radial	4676.5	4676.5	100 %		16:58:23
3	Y RADIAL	4937.4	4937.4	100.1 %		16:58:23
3	Al 396.153Radial†	5908.0	5923.5	5231.9 ug/L	5231.9 ppb	16:58:23
3	Ca 317.933Radial†	3119.4	3101.0	5196.2 ug/L	5196.2 ppb	16:58:43
3	Fe 238.204 Radial†	591.5	576.5	5081.9 ug/L	5081.9 ppb	16:58:43
3	K 766.490 Radial†	28875.7	25484.1	5049.7 ug/L	5049.7 ppb	16:58:23
3	Mg 279.077 IEC†	163.9	161.9	5184.0 ug/L	5184.0 ppb	16:58:43
3	Na 589.592 Radial†	33359.1	35045.9	10587 ug/L	10587 ppb	16:58:23
3	Sr 421.552†	72459.8	72306.3	529.35 ug/L	529.35 ppb	16:58:23
3	Sc 361.383	867285.2	867285.2	97.820 %		16:59:47
3	Y 371.029	736080.6	736080.6	96.629 %		16:59:47
3	Ag 328.068†	115988.3	118060.4	510.33 ug/L	510.33 ppb	16:59:47
3	As 188.979†	1378.7	1442.8	509.49 ug/L	509.49 ppb	17:00:07
3	B 249.677†	23195.5	24378.2	500.70 ug/L	500.70 ppb	16:59:47
3	Ba 233.527†	68328.6	69843.6	510.54 ug/L	510.54 ppb	16:59:47
3	Be 313.107†	1480737.9	1518082.3	514.12 ug/L	514.12 ppb	16:59:47
3	Cd 226.502†	52612.7	54023.4	508.62 ug/L	508.62 ppb	16:59:47
3	Co 228.616†	26248.1	26916.9	506.24 ug/L	506.24 ppb	17:00:07
3	Cr 267.716†	49577.7	50578.3	507.59 ug/L	507.59 ppb	16:59:47
3	Cu 324.752†	176226.0	172153.5	509.94 ug/L	509.94 ppb	16:59:47
3	Mn 257.610†	478107.7	488244.2	514.85 ug/L	514.85 ppb	16:59:47
3	Mo 202.031†	7975.5	8133.3	510.02 ug/L	510.02 ppb	17:00:07
3	Ni 231.604†	22675.8	23056.0	505.81 ug/L	505.81 ppb	17:00:07
3	P 214.914†	5348.0	5218.6	2467.1 ug/L	2467.1 ppb	17:00:07
3	Pb 220.353†	4759.1	4942.9	513.67 ug/L	513.67 ppb	17:00:07
3	S 181.975 Axial†	942.5	903.6	1020.2 ug/L	1020.2 ppb	17:00:07
3	Sb 206.836†	1697.2	1698.0	514.49 ug/L	514.49 ppb	17:00:07
3	Se 196.026†	945.8	1000.1	529.82 ug/L	529.82 ppb	17:00:07
3	Si 251.611†	87458.4	88790.5	2535.0 ug/L	2535.0 ppb	16:59:47
3	Sn 189.927†	3357.4	3428.8	507.77 ug/L	507.77 ppb	17:00:07
3	Ti 334.940†	317274.1	326160.8	517.36 ug/L	517.36 ppb	16:59:47
3	Tl 190.801†	1752.8	1845.3	507.48 ug/L	507.48 ppb	17:00:07
3	U 409.014†	13499.4	16468.9	487.98 ug/L	487.98 ppb	16:59:47
3	V 292.402†	77117.7	80637.8	513.02 ug/L	513.02 ppb	16:59:47
3	Zn 213.857†	61578.1	62118.5	506.47 ug/L	506.47 ppb	16:59:47
3	SiO2†	88484.3	89819.8	5487.4 ug/L	5487.4 ppb	17:00:23

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	865512.7	97.621	%	0.8579				0.88%
Sc Radial	4657.3	99.8	%	0.87				0.88%
Y 371.029	734968.4	96.483	%	0.8094				0.84%
Y RADIAL	4934.7	100.0	%	0.45				0.45%
Ag 328.068†	118357.6	511.62	ug/L	2.832	511.62	ppb	2.832	0.55%
QC value within limits for Ag 328.068 Recovery = 102.32%								
Al 396.153Radial†	5871.0	5185.1	ug/L	46.39	5185.1	ppb	46.39	0.89%
QC value within limits for Al 396.153Radial Recovery = 103.70%								
As 188.979†	1460.3	515.63	ug/L	8.351	515.63	ppb	8.351	1.62%
QC value within limits for As 188.979 Recovery = 103.13%								
B 249.677†	24373.2	500.59	ug/L	1.052	500.59	ppb	1.052	0.21%
QC value within limits for B 249.677 Recovery = 100.12%								
Ba 233.527†	70133.4	512.66	ug/L	3.432	512.66	ppb	3.432	0.67%
QC value within limits for Ba 233.527 Recovery = 102.53%								
Be 313.107†	1523629.3	516.00	ug/L	3.276	516.00	ppb	3.276	0.63%
QC value within limits for Be 313.107 Recovery = 103.20%								
Ca 317.933Radial†	3109.2	5209.9	ug/L	36.22	5209.9	ppb	36.22	0.70%

QC value within limits for Ca 317.933Radial Recovery = 104.20%

Cd 226.502†	54311.5	511.34 ug/L	3.980	511.34 ppb	3.980	0.78%
QC value within limits for Cd 226.502 Recovery = 102.27%						
Co 228.616†	27153.8	510.70 ug/L	6.891	510.70 ppb	6.891	1.35%
QC value within limits for Co 228.616 Recovery = 102.14%						
Cr 267.716†	50781.0	509.62 ug/L	3.755	509.62 ppb	3.755	0.74%
QC value within limits for Cr 267.716 Recovery = 101.92%						
Cu 324.752†	172559.9	511.15 ug/L	2.263	511.15 ppb	2.263	0.44%
QC value within limits for Cu 324.752 Recovery = 102.23%						
Fe 238.204 Radial†	579.1	5104.4 ug/L	35.24	5104.4 ppb	35.24	0.69%
QC value within limits for Fe 238.204 Radial Recovery = 102.09%						
K 766.490 Radial†	25414.9	5035.9 ug/L	11.90	5035.9 ppb	11.90	0.24%
QC value within limits for K 766.490 Radial Recovery = 100.72%						
Mg 279.077 IEC†	163.6	5235.5 ug/L	91.55	5235.5 ppb	91.55	1.75%
QC value within limits for Mg 279.077 IEC Recovery = 104.71%						
Mn 257.610†	490247.6	516.96 ug/L	3.357	516.96 ppb	3.357	0.65%
QC value within limits for Mn 257.610 Recovery = 103.39%						
Mo 202.031†	8211.4	514.91 ug/L	6.696	514.91 ppb	6.696	1.30%
QC value within limits for Mo 202.031 Recovery = 102.98%						
Na 589.592 Radial†	34936.3	10554 ug/L	28.9	10554 ppb	28.9	0.27%
QC value within limits for Na 589.592 Radial Recovery = 105.54%						
Ni 231.604†	23233.6	509.71 ug/L	6.613	509.71 ppb	6.613	1.30%
QC value within limits for Ni 231.604 Recovery = 101.94%						
P 214.914†	5273.9	2493.9 ug/L	39.37	2493.9 ppb	39.37	1.58%
QC value within limits for P 214.914 Recovery = 99.76%						
Pb 220.353†	4987.4	518.28 ug/L	6.159	518.28 ppb	6.159	1.19%
QC value within limits for Pb 220.353 Recovery = 103.66%						
S 181.975 Axial†	911.7	1029.3 ug/L	17.91	1029.3 ppb	17.91	1.74%
QC value within limits for S 181.975 Axial Recovery = 102.93%						
Sb 206.836†	1724.0	522.39 ug/L	8.613	522.39 ppb	8.613	1.65%
QC value within limits for Sb 206.836 Recovery = 104.48%						
Se 196.026†	1012.5	536.24 ug/L	8.568	536.24 ppb	8.568	1.60%
QC value within limits for Se 196.026 Recovery = 107.25%						
Si 251.611†	89002.7	2541.0 ug/L	12.32	2541.0 ppb	12.32	0.48%
QC value within limits for Si 251.611 Recovery = 101.64%						
Sn 189.927†	3460.4	512.44 ug/L	7.070	512.44 ppb	7.070	1.38%
QC value within limits for Sn 189.927 Recovery = 102.49%						
Sr 421.552†	72095.8	527.81 ug/L	1.788	527.81 ppb	1.788	0.34%
QC value within limits for Sr 421.552 Recovery = 105.56%						
Ti 334.940†	327342.2	519.23 ug/L	3.048	519.23 ppb	3.048	0.59%
QC value within limits for Ti 334.940 Recovery = 103.85%						
Tl 190.801†	1874.1	515.36 ug/L	9.012	515.36 ppb	9.012	1.75%
QC value within limits for Tl 190.801 Recovery = 103.07%						
U 409.014†	16491.6	488.65 ug/L	1.442	488.65 ppb	1.442	0.30%
QC value within limits for U 409.014 Recovery = 97.73%						
V 292.402†	80873.1	514.57 ug/L	2.900	514.57 ppb	2.900	0.56%
QC value within limits for V 292.402 Recovery = 102.91%						
Zn 213.857†	62399.1	508.75 ug/L	3.181	508.75 ppb	3.181	0.63%
QC value within limits for Zn 213.857 Recovery = 101.75%						
SiO2†	89664.9	5477.7 ug/L	58.00	5477.7 ppb	58.00	1.06%
QC value within limits for SiO2 Recovery = 102.44%						

All analyte(s) passed QC.

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

Autosampler Location: 8
Date Collected: 1/6/2010 17:02:32
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	4706.9	4706.9	101	%			17:04:25
1	Y RADIAL	4979.2	4979.2	100.9	%			17:04:25
1	Al 396.153Radial†	-2.9	23.9	21.147	ug/L	21.147	ppb	17:04:25
1	Ca 317.933Radial†	16.4	3.7	6.2530	ug/L	6.2530	ppb	17:04:45
1	Fe 238.204 Radial†	13.5	-0.5	-3.9863	ug/L	-3.9863	ppb	17:04:45
1	K 766.490 Radial†	3334.7	-29.9	-5.9609	ug/L	-5.9609	ppb	17:04:25
1	Mg 279.077 IEC†	-1.0	-2.6	-82.826	ug/L	-82.826	ppb	17:04:45
1	Na 589.592 Radial†	-1520.3	242.5	73.254	ug/L	73.254	ppb	17:04:25
1	Sr 421.552†	9.7	-6.3	-0.0464	ug/L	-0.0464	ppb	17:04:25
1	Sc 361.383	886072.0	886072.0	99.939	%			17:05:42
1	Y 371.029	759683.3	759683.3	99.728	%			17:05:42
1	Ag 328.068†	540.0	28.0	0.1129	ug/L	0.1129	ppb	17:05:47
1	As 188.979†	-29.8	3.6	1.2429	ug/L	1.2429	ppb	17:06:07
1	B 249.677†	-607.3	58.2	1.2002	ug/L	1.2002	ppb	17:05:47
1	Ba 233.527†	2.1	-5.4	-0.0396	ug/L	-0.0396	ppb	17:06:07
1	Be 313.107†	-4281.0	67.9	0.0232	ug/L	0.0232	ppb	17:05:47
1	Cd 226.502†	-241.6	-3.4	-0.0318	ug/L	-0.0318	ppb	17:06:07
1	Co 228.616†	-87.2	-3.3	-0.0602	ug/L	-0.0602	ppb	17:06:07
1	Cr 267.716†	50.5	-53.5	-0.5382	ug/L	-0.5382	ppb	17:05:47
1	Cu 324.752†	8143.5	149.4	0.4422	ug/L	0.4422	ppb	17:05:47
1	Mn 257.610†	520.1	4.0	0.0054	ug/L	0.0054	ppb	17:05:47
1	Mo 202.031†	32.0	12.1	0.7581	ug/L	0.7581	ppb	17:06:07
1	Ni 231.604†	97.3	-27.7	-0.6087	ug/L	-0.6087	ppb	17:06:07
1	P 214.914†	259.2	10.8	5.1901	ug/L	5.1901	ppb	17:06:07
1	Pb 220.353†	-97.4	-19.7	-2.0349	ug/L	-2.0349	ppb	17:06:07
1	S 181.975 Axial†	65.4	5.5	6.2130	ug/L	6.2130	ppb	17:06:07
1	Sb 206.836†	38.3	1.3	0.4209	ug/L	0.4209	ppb	17:06:07
1	Se 196.026†	-38.4	-5.2	-2.6718	ug/L	-2.6718	ppb	17:06:07
1	Si 251.611†	675.6	59.4	1.6909	ug/L	1.6909	ppb	17:06:07
1	Sn 189.927†	7.7	4.3	0.6391	ug/L	0.6391	ppb	17:06:07
1	Ti 334.940†	-1724.0	92.3	0.1438	ug/L	0.1438	ppb	17:05:47
1	Tl 190.801†	-39.7	13.7	3.7364	ug/L	3.7364	ppb	17:06:07
1	U 409.014†	-2424.8	242.5	7.2094	ug/L	7.2094	ppb	17:05:42
1	V 292.402†	-1792.6	8.1	0.0745	ug/L	0.0745	ppb	17:05:47
1	Zn 213.857†	833.9	2.8	0.0292	ug/L	0.0292	ppb	17:06:07
1	SiO2†	704.4	68.8	4.1969	ug/L	4.1969	ppb	17:07:13
2	Sc Radial	4402.0	4402.0	94.3	%			17:04:50
2	Y RADIAL	4656.6	4656.6	94.40	%			17:04:50
2	Al 396.153Radial†	-12.6	13.3	11.791	ug/L	11.791	ppb	17:04:50
2	Ca 317.933Radial†	18.3	6.8	11.402	ug/L	11.402	ppb	17:05:10
2	Fe 238.204 Radial†	13.1	0.1	0.5926	ug/L	0.5926	ppb	17:05:10
2	K 766.490 Radial†	3385.7	253.2	50.250	ug/L	50.250	ppb	17:04:50
2	Mg 279.077 IEC†	1.2	-0.3	-10.798	ug/L	-10.798	ppb	17:05:10
2	Na 589.592 Radial†	-1515.0	143.7	43.422	ug/L	43.422	ppb	17:04:50
2	Sr 421.552†	18.4	3.5	0.0258	ug/L	0.0258	ppb	17:04:50
2	Sc 361.383	876925.8	876925.8	98.908	%			17:06:12
2	Y 371.029	752304.2	752304.2	98.759	%			17:06:12
2	Ag 328.068†	562.4	56.3	0.2414	ug/L	0.2414	ppb	17:06:17
2	As 188.979†	-27.2	6.0	2.0842	ug/L	2.0842	ppb	17:06:37
2	B 249.677†	-672.6	-14.2	-0.2933	ug/L	-0.2933	ppb	17:06:17
2	Ba 233.527†	-4.6	-12.2	-0.0883	ug/L	-0.0883	ppb	17:06:37
2	Be 313.107†	-4363.8	-60.5	-0.0205	ug/L	-0.0205	ppb	17:06:17
2	Cd 226.502†	-244.2	-8.5	-0.0805	ug/L	-0.0805	ppb	17:06:37
2	Co 228.616†	-83.0	0.1	0.0030	ug/L	0.0030	ppb	17:06:37
2	Cr 267.716†	83.6	-19.5	-0.1953	ug/L	-0.1953	ppb	17:06:17
2	Cu 324.752†	8037.2	127.0	0.3759	ug/L	0.3759	ppb	17:06:17
2	Mn 257.610†	475.7	-35.5	-0.0371	ug/L	-0.0371	ppb	17:06:17
2	Mo 202.031†	27.8	8.2	0.5141	ug/L	0.5141	ppb	17:06:37
2	Ni 231.604†	117.3	-6.5	-0.1426	ug/L	-0.1426	ppb	17:06:37

2	P 214.914†	242.8	-3.1	-1.5662 ug/L	-1.5662 ppb	17:06:37
2	Pb 220.353†	-93.9	-17.1	-1.7709 ug/L	-1.7709 ppb	17:06:37
2	S 181.975 Axial†	61.1	1.9	2.1724 ug/L	2.1724 ppb	17:06:37
2	Sb 206.836†	33.9	-2.8	-0.8123 ug/L	-0.8123 ppb	17:06:37
2	Se 196.026†	-37.0	-4.1	-2.1082 ug/L	-2.1082 ppb	17:06:37
2	Si 251.611†	652.6	43.2	1.2151 ug/L	1.2151 ppb	17:06:37
2	Sn 189.927†	2.9	-0.5	-0.0727 ug/L	-0.0727 ppb	17:06:37
2	Ti 334.940†	-1806.2	-8.8	-0.0142 ug/L	-0.0142 ppb	17:06:17
2	Tl 190.801†	-49.8	3.1	0.8415 ug/L	0.8415 ppb	17:06:37
2	U 409.014†	-2573.7	66.6	1.9804 ug/L	1.9804 ppb	17:06:12
2	V 292.402†	-1734.5	48.2	0.3134 ug/L	0.3134 ppb	17:06:17
2	Zn 213.857†	846.5	24.2	0.1994 ug/L	0.1994 ppb	17:06:37
2	SiO2†	699.4	71.1	4.3074 ug/L	4.3074 ppb	17:07:18
3	Sc Radial	4626.0	4626.0	99.1 %		17:05:15
3	Y RADIAL	4914.5	4914.5	99.63 %		17:05:15
3	Al 396.153Radial†	-16.5	10.0	8.8864 ug/L	8.8864 ppb	17:05:15
3	Ca 317.933Radial†	21.1	8.7	14.579 ug/L	14.579 ppb	17:05:35
3	Fe 238.204 Radial†	10.7	-3.0	-26.696 ug/L	-26.696 ppb	17:05:35
3	K 766.490 Radial†	3443.7	138.0	27.358 ug/L	27.358 ppb	17:05:15
3	Mg 279.077 IEC†	0.0	-1.6	-51.916 ug/L	-51.916 ppb	17:05:35
3	Na 589.592 Radial†	-1483.7	253.0	76.436 ug/L	76.436 ppb	17:05:15
3	Sr 421.552†	-22.5	-38.7	-0.2832 ug/L	-0.2832 ppb	17:05:15
3	Sc 361.383	886977.7	886977.7	100.04 %		17:06:42
3	Y 371.029	760417.0	760417.0	99.824 %		17:06:42
3	Ag 328.068†	480.1	-32.5	-0.1464 ug/L	-0.1464 ppb	17:06:47
3	As 188.979†	-22.7	10.7	3.7513 ug/L	3.7513 ppb	17:07:07
3	B 249.677†	-697.4	-31.2	-0.6403 ug/L	-0.6403 ppb	17:06:47
3	Ba 233.527†	-8.8	-16.3	-0.1181 ug/L	-0.1181 ppb	17:07:07
3	Be 313.107†	-4350.2	3.1	0.0011 ug/L	0.0011 ppb	17:06:47
3	Cd 226.502†	-258.9	-20.4	-0.1898 ug/L	-0.1898 ppb	17:07:07
3	Co 228.616†	-92.3	-8.3	-0.1551 ug/L	-0.1551 ppb	17:07:07
3	Cr 267.716†	77.6	-26.5	-0.2651 ug/L	-0.2651 ppb	17:06:47
3	Cu 324.752†	7905.5	-96.8	-0.2880 ug/L	-0.2880 ppb	17:06:47
3	Mn 257.610†	527.2	10.5	0.0094 ug/L	0.0094 ppb	17:06:47
3	Mo 202.031†	25.0	5.0	0.3129 ug/L	0.3129 ppb	17:07:07
3	Ni 231.604†	116.3	-8.8	-0.1923 ug/L	-0.1923 ppb	17:07:07
3	P 214.914†	256.2	7.6	3.7652 ug/L	3.7652 ppb	17:07:07
3	Pb 220.353†	-69.9	7.9	0.8237 ug/L	0.8237 ppb	17:07:07
3	S 181.975 Axial†	70.1	10.2	11.501 ug/L	11.501 ppb	17:07:07
3	Sb 206.836†	54.5	17.4	5.2316 ug/L	5.2316 ppb	17:07:07
3	Se 196.026†	-33.0	0.2	0.0453 ug/L	0.0453 ppb	17:07:07
3	Si 251.611†	658.4	41.6	1.1755 ug/L	1.1755 ppb	17:07:07
3	Sn 189.927†	9.6	6.2	0.9136 ug/L	0.9136 ppb	17:07:07
3	Ti 334.940†	-1814.0	4.1	0.0072 ug/L	0.0072 ppb	17:06:47
3	Tl 190.801†	-46.2	7.2	1.9728 ug/L	1.9728 ppb	17:07:07
3	U 409.014†	-2654.3	15.5	0.4659 ug/L	0.4659 ppb	17:06:42
3	V 292.402†	-1699.4	103.1	0.6558 ug/L	0.6558 ppb	17:06:47
3	Zn 213.857†	848.8	16.7	0.1422 ug/L	0.1422 ppb	17:07:07
3	SiO2†	634.3	-2.0	-0.1608 ug/L	-0.1608 ppb	17:07:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	883325.2	99.630	%	0.6272				0.63%
Sc Radial	4578.3	98.1	%	3.38				3.45%
Y 371.029	757468.2	99.437	%	0.5891				0.59%
Y RADIAL	4850.1	98.32	%	3.459				3.52%
Ag 328.068†	17.3	0.0693	ug/L	0.19754	0.0693	ppb	0.19754	285.15%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	15.7	13.941	ug/L	6.4067	13.941	ppb	6.4067	45.96%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.7	2.3594	ug/L	1.27665	2.3594	ppb	1.27665	54.11%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	4.2	0.0889	ug/L	0.97798	0.0889	ppb	0.97798	>999.9%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-11.3	-0.0820	ug/L	0.03958	-0.0820	ppb	0.03958	48.28%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	3.5	0.0013	ug/L	0.02186	0.0013	ppb	0.02186	>999.9%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.4	10.745	ug/L	4.2019	10.745	ppb	4.2019	39.11%

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

Cd 226.502†	-10.8	-0.1007 ug/L	0.08093	-0.1007 ppb	0.08093	80.36%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-3.8	-0.0708 ug/L	0.07956	-0.0708 ppb	0.07956	112.39%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-33.2	-0.3329 ug/L	0.18120	-0.3329 ppb	0.18120	54.44%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	59.9	0.1767 ug/L	0.40378	0.1767 ppb	0.40378	228.49%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-1.1	-10.030 ug/L	14.6139	-10.030 ppb	14.6139	145.70%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	120.4	23.882 ug/L	28.2660	23.882 ppb	28.2660	118.36%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-1.5	-48.514 ug/L	36.1343	-48.514 ppb	36.1343	74.48%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-7.0	-0.0074 ug/L	0.02577	-0.0074 ppb	0.02577	345.87%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	8.4	0.5284 ug/L	0.22294	0.5284 ppb	0.22294	42.19%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	213.1	64.371 ug/L	18.2116	64.371 ppb	18.2116	28.29%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-14.3	-0.3145 ug/L	0.25592	-0.3145 ppb	0.25592	81.36%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	5.1	2.4631 ug/L	3.56139	2.4631 ppb	3.56139	144.59%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-9.6	-0.9940 ug/L	1.57975	-0.9940 ppb	1.57975	158.92%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	5.9	6.6289 ug/L	4.67831	6.6289 ppb	4.67831	70.57%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	5.3	1.6134 ug/L	3.19355	1.6134 ppb	3.19355	197.94%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-3.0	-1.5782 ug/L	1.43398	-1.5782 ppb	1.43398	90.86%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	48.1	1.3605 ug/L	0.28681	1.3605 ppb	0.28681	21.08%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	3.3	0.4933 ug/L	0.50904	0.4933 ppb	0.50904	103.18%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-13.8	-0.1013 ug/L	0.16166	-0.1013 ppb	0.16166	159.62%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	29.2	0.0456 ug/L	0.08571	0.0456 ppb	0.08571	187.98%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	8.0	2.1836 ug/L	1.45894	2.1836 ppb	1.45894	66.81%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	108.2	3.2186 ug/L	3.53814	3.2186 ppb	3.53814	109.93%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	53.1	0.3479 ug/L	0.29219	0.3479 ppb	0.29219	83.99%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	14.6	0.1236 ug/L	0.08660	0.1236 ppb	0.08660	70.05%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	46.0	2.7812 ug/L	2.54842	2.7812 ppb	2.54842	91.63%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 23
Sample ID: 1202001502|935389|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 33
Date Collected: 1/6/2010 17:16:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202001502|935389|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4522.9	4522.9	96.9	%			17:18:53
1	Y RADIAL	4749.9	4749.9	96.29	%			17:18:53
1	Al 396.153Radial†	29.2	56.8	50.148	ug/L	50.148	ppb	17:18:53
1	Ca 317.933Radial†	41862.8	43189.0	72370	ug/L	72370	ppb	17:18:33
1	Fe 238.204 Radial†	2219.5	2276.6	20005	ug/L	20005	ppb	17:18:53
1	K 766.490 Radial†	47328.4	45505.1	8859.3	ug/L	8859.3	ppb	17:18:33
1	Mg 279.077 IEC†	488.6	502.6	16054	ug/L	16054	ppb	17:18:53
1	Na 589.592 Radial†	68493.3	72433.7	21881	ug/L	21881	ppb	17:18:33
1	Sr 421.552†	65586.1	67667.4	494.77	ug/L	494.77	ppb	17:18:33
1	Sc 361.383	849843.9	849843.9	95.853	%			17:19:56
1	Y 371.029	721772.2	721772.2	94.751	%			17:19:56
1	Ag 328.068†	-315.9	-841.9	2.0258	ug/L	2.0258	ppb	17:19:56
1	As 188.979†	-24.4	8.0	5.7945	ug/L	5.7945	ppb	17:20:16
1	B 249.677†	818.1	1519.3	28.609	ug/L	28.609	ppb	17:19:56
1	Ba 233.527†	65340.2	68159.4	497.51	ug/L	497.51	ppb	17:19:56
1	Be 313.107†	-4371.0	-208.6	-0.0858	ug/L	-0.0858	ppb	17:19:56
1	Cd 226.502†	-55.5	180.5	-0.2934	ug/L	-0.2934	ppb	17:20:16
1	Co 228.616†	1235.0	1372.4	25.768	ug/L	25.768	ppb	17:20:16
1	Cr 267.716†	681.8	607.3	6.4496	ug/L	6.4496	ppb	17:19:56
1	Cu 324.752†	7477.1	-198.5	0.4328	ug/L	0.4328	ppb	17:19:56
1	Mn 257.610†	11458645.2	11953849.0	12597	ug/L	12597	ppb	17:19:50
1	Mo 202.031†	110.7	95.6	7.9054	ug/L	7.9054	ppb	17:20:16
1	Ni 231.604†	583.5	483.7	10.602	ug/L	10.602	ppb	17:20:16
1	P 214.914†	434.6	204.9	83.234	ug/L	83.234	ppb	17:20:16
1	Pb 220.353†	-83.6	-9.4	-2.5934	ug/L	-2.5934	ppb	17:20:16
1	S 181.975 Axial†	1383.4	1383.4	1563.4	ug/L	1563.4	ppb	17:20:16
1	Sb 206.836†	46.3	11.2	2.9245	ug/L	2.9245	ppb	17:20:16
1	Se 196.026†	-136.2	-108.9	5.8243	ug/L	5.8243	ppb	17:20:16
1	Si 251.611†	584219.1	608876.8	17464	ug/L	17464	ppb	17:19:56
1	Sn 189.927†	-283.2	-298.8	-36.424	ug/L	-36.424	ppb	17:20:16
1	Ti 334.940†	-6438.3	-4899.4	-3.9966	ug/L	-3.9966	ppb	17:19:56
1	Tl 190.801†	-336.1	-297.3	-7.6021	ug/L	-7.6021	ppb	17:20:16
1	U 409.014†	-2849.3	-303.9	-11.562	ug/L	-11.562	ppb	17:19:56
1	V 292.402†	-1374.5	367.8	-0.2972	ug/L	-0.2972	ppb	17:19:56
1	Zn 213.857†	1666.2	906.6	5.8004	ug/L	5.8004	ppb	17:20:16
1	SiO2†	596058.2	621208.7	38128	ug/L	38128	ppb	17:21:25
2	Sc Radial	4527.2	4527.2	97.0	%			17:19:18
2	Y RADIAL	4766.1	4766.1	96.62	%			17:19:18
2	Al 396.153Radial†	-1.4	25.2	22.081	ug/L	22.081	ppb	17:19:18
2	Ca 317.933Radial†	41799.7	43083.1	72193	ug/L	72193	ppb	17:18:58
2	Fe 238.204 Radial†	2216.6	2271.5	19960	ug/L	19960	ppb	17:19:18
2	K 766.490 Radial†	47339.9	45471.0	8854.3	ug/L	8854.3	ppb	17:18:58
2	Mg 279.077 IEC†	478.6	491.8	15707	ug/L	15707	ppb	17:19:18
2	Na 589.592 Radial†	68445.9	72318.2	21846	ug/L	21846	ppb	17:18:58
2	Sr 421.552†	65640.3	67659.5	494.71	ug/L	494.71	ppb	17:18:58
2	Sc 361.383	860336.1	860336.1	97.037	%			17:20:28
2	Y 371.029	731500.3	731500.3	96.028	%			17:20:28
2	Ag 328.068†	-337.6	-860.3	1.9344	ug/L	1.9344	ppb	17:20:28
2	As 188.979†	-28.8	3.7	4.2912	ug/L	4.2912	ppb	17:20:48
2	B 249.677†	885.6	1578.5	29.835	ug/L	29.835	ppb	17:20:28
2	Ba 233.527†	66061.8	68071.7	496.87	ug/L	496.87	ppb	17:20:28
2	Be 313.107†	-4385.4	-167.8	-0.0718	ug/L	-0.0718	ppb	17:20:28
2	Cd 226.502†	-56.9	179.7	-0.2960	ug/L	-0.2960	ppb	17:20:48
2	Co 228.616†	1248.6	1370.7	25.739	ug/L	25.739	ppb	17:20:48
2	Cr 267.716†	746.7	665.4	7.0311	ug/L	7.0311	ppb	17:20:28
2	Cu 324.752†	7474.4	-296.3	0.1409	ug/L	0.1409	ppb	17:20:28
2	Mn 257.610†	11466906.6	11816573.2	12452	ug/L	12452	ppb	17:20:22
2	Mo 202.031†	130.0	114.1	9.0585	ug/L	9.0585	ppb	17:20:48
2	Ni 231.604†	582.5	475.2	10.415	ug/L	10.415	ppb	17:20:48

2	P 214.914†	439.5	204.4	83.100 ug/L	83.100 ppb	17:20:48
2	Pb 220.353†	-73.0	2.5	-1.3559 ug/L	-1.3559 ppb	17:20:48
2	S 181.975 Axial†	1410.4	1393.6	1575.0 ug/L	1575.0 ppb	17:20:48
2	Sb 206.836†	37.4	1.4	0.0345 ug/L	0.0345 ppb	17:20:48
2	Se 196.026†	-135.7	-106.6	6.8618 ug/L	6.8618 ppb	17:20:48
2	Si 251.611†	590287.7	607697.6	17430 ug/L	17430 ppb	17:20:28
2	Sn 189.927†	-276.2	-288.0	-34.845 ug/L	-34.845 ppb	17:20:48
2	Ti 334.940†	-6469.2	-4849.4	-3.9281 ug/L	-3.9281 ppb	17:20:28
2	Tl 190.801†	-332.2	-289.0	-6.1874 ug/L	-6.1874 ppb	17:20:48
2	U 409.014†	-2779.8	-196.0	-8.3505 ug/L	-8.3505 ppb	17:20:28
2	V 292.402†	-1291.5	470.9	0.3715 ug/L	0.3715 ppb	17:20:28
2	Zn 213.857†	1675.7	895.2	5.7229 ug/L	5.7229 ppb	17:20:48
2	SiO2†	589682.1	607054.1	37259 ug/L	37259 ppb	17:21:31
3	Sc Radial	4570.0	4570.0	97.9 %		17:19:43
3	Y RADIAL	4799.9	4799.9	97.30 %		17:19:43
3	Al 396.153Radial†	22.6	49.8	43.825 ug/L	43.825 ppb	17:19:43
3	Ca 317.933Radial†	42583.3	43479.8	72858 ug/L	72858 ppb	17:19:23
3	Fe 238.204 Radial†	2219.1	2252.6	19794 ug/L	19794 ppb	17:19:43
3	K 766.490 Radial†	48307.6	46002.1	8952.2 ug/L	8952.2 ppb	17:19:23
3	Mg 279.077 IEC†	485.7	494.4	15791 ug/L	15791 ppb	17:19:43
3	Na 589.592 Radial†	69591.7	72827.4	22000 ug/L	22000 ppb	17:19:23
3	Sr 421.552†	66740.5	68149.3	498.29 ug/L	498.29 ppb	17:19:23
3	Sc 361.383	831215.7	831215.7	93.752 %		17:20:59
3	Y 371.029	705697.2	705697.2	92.641 %		17:20:59
3	Ag 328.068†	-270.6	-801.0	2.1243 ug/L	2.1243 ppb	17:20:59
3	As 188.979†	-23.3	8.6	5.9812 ug/L	5.9812 ppb	17:21:19
3	B 249.677†	840.5	1562.3	29.522 ug/L	29.522 ppb	17:20:59
3	Ba 233.527†	66168.3	70570.4	515.08 ug/L	515.08 ppb	17:20:59
3	Be 313.107†	-4227.9	-158.1	-0.0689 ug/L	-0.0689 ppb	17:20:59
3	Cd 226.502†	-54.4	180.3	-0.2732 ug/L	-0.2732 ppb	17:21:19
3	Co 228.616†	1225.4	1391.1	26.134 ug/L	26.134 ppb	17:21:19
3	Cr 267.716†	762.1	708.9	7.4635 ug/L	7.4635 ppb	17:20:59
3	Cu 324.752†	7375.6	-131.8	0.6193 ug/L	0.6193 ppb	17:20:59
3	Mn 257.610†	11608474.2	12381568.8	13048 ug/L	13048 ppb	17:20:54
3	Mo 202.031†	124.1	112.4	8.9412 ug/L	8.9412 ppb	17:21:19
3	Ni 231.604†	589.9	504.2	11.051 ug/L	11.051 ppb	17:21:19
3	P 214.914†	441.3	222.2	91.800 ug/L	91.800 ppb	17:21:19
3	Pb 220.353†	-77.7	-5.1	-2.1272 ug/L	-2.1272 ppb	17:21:19
3	S 181.975 Axial†	1371.8	1403.3	1586.0 ug/L	1586.0 ppb	17:21:19
3	Sb 206.836†	46.4	12.4	3.2477 ug/L	3.2477 ppb	17:21:19
3	Se 196.026†	-144.5	-120.9	-0.9592 ug/L	-0.9592 ppb	17:21:19
3	Si 251.611†	589643.5	628322.0	18021 ug/L	18021 ppb	17:20:59
3	Sn 189.927†	-282.5	-304.7	-37.246 ug/L	-37.246 ppb	17:21:19
3	Ti 334.940†	-6341.6	-4946.8	-4.0456 ug/L	-4.0456 ppb	17:20:59
3	Tl 190.801†	-340.9	-310.3	-8.5140 ug/L	-8.5140 ppb	17:21:19
3	U 409.014†	-2864.2	-386.4	-13.991 ug/L	-13.991 ppb	17:20:59
3	V 292.402†	-1406.0	302.2	-0.6732 ug/L	-0.6732 ppb	17:20:59
3	Zn 213.857†	1693.8	975.0	6.3801 ug/L	6.3801 ppb	17:21:19
3	SiO2†	590796.9	629532.7	38639 ug/L	38639 ppb	17:21:36

Mean Data: 1202001502|935389|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	847131.9	95.547	%	1.6635				1.74%
Sc Radial	4540.1	97.3	%	0.56				0.57%
Y 371.029	719656.6	94.473	%	1.7107				1.81%
Y RADIAL	4772.0	96.74	%	0.517				0.53%
Ag 328.068†	-834.4	2.0282	ug/L	0.09498	2.0282	ppb	0.09498	4.68%
Al 396.153Radial†	43.9	38.685	ug/L	14.7226	38.685	ppb	14.7226	38.06%
As 188.979†	6.8	5.3556	ug/L	0.92658	5.3556	ppb	0.92658	17.30%
B 249.677†	1553.4	29.322	ug/L	0.6371	29.322	ppb	0.6371	2.17%
Ba 233.527†	68933.8	503.15	ug/L	10.336	503.15	ppb	10.336	2.05%
Be 313.107†	-178.2	-0.0755	ug/L	0.00902	-0.0755	ppb	0.00902	11.95%
Ca 317.933Radial†	43250.6	72474	ug/L	344.2	72474	ppb	344.2	0.47%
Cd 226.502†	180.2	-0.2875	ug/L	0.01250	-0.2875	ppb	0.01250	4.35%
Co 228.616†	1378.0	25.880	ug/L	0.2199	25.880	ppb	0.2199	0.85%
Cr 267.716†	660.5	6.9814	ug/L	0.50877	6.9814	ppb	0.50877	7.29%
Cu 324.752†	-208.9	0.3977	ug/L	0.24117	0.3977	ppb	0.24117	60.65%
Fe 238.204 Radial†	2266.9	19920	ug/L	111.3	19920	ppb	111.3	0.56%
K 766.490 Radial†	45659.4	8888.6	ug/L	55.14	8888.6	ppb	55.14	0.62%

Mg 279.077 IEC†	496.3	15851	ug/L	180.6	15851	ppb	180.6	1.14%
Mn 257.610†	12050663.7	12699	ug/L	310.5	12699	ppb	310.5	2.44%
Mo 202.031†	107.4	8.6351	ug/L	0.63458	8.6351	ppb	0.63458	7.35%
Na 589.592 Radial†	72526.4	21909	ug/L	80.6	21909	ppb	80.6	0.37%
Ni 231.604†	487.7	10.690	ug/L	0.3267	10.690	ppb	0.3267	3.06%
P 214.914†	210.5	86.045	ug/L	4.9845	86.045	ppb	4.9845	5.79%
Pb 220.353†	-4.0	-2.0255	ug/L	0.62495	-2.0255	ppb	0.62495	30.85%
S 181.975 Axial†	1393.4	1574.8	ug/L	11.27	1574.8	ppb	11.27	0.72%
Sb 206.836†	8.4	2.0689	ug/L	1.76922	2.0689	ppb	1.76922	85.52%
Se 196.026†	-112.1	3.9090	ug/L	4.24770	3.9090	ppb	4.24770	108.67%
Si 251.611†	614965.5	17638	ug/L	332.2	17638	ppb	332.2	1.88%
Sn 189.927†	-297.2	-36.171	ug/L	1.2203	-36.171	ppb	1.2203	3.37%
Sr 421.552†	67825.4	495.92	ug/L	2.051	495.92	ppb	2.051	0.41%
Ti 334.940†	-4898.6	-3.9901	ug/L	0.05901	-3.9901	ppb	0.05901	1.48%
Tl 190.801†	-298.8	-7.4345	ug/L	1.17230	-7.4345	ppb	1.17230	15.77%
U 409.014†	-295.4	-11.301	ug/L	2.8291	-11.301	ppb	2.8291	25.03%
V 292.402†	380.3	-0.1996	ug/L	0.52911	-0.1996	ppb	0.52911	265.05%
Zn 213.857†	925.6	5.9678	ug/L	0.35915	5.9678	ppb	0.35915	6.02%
SiO2†	619265.2	38009	ug/L	697.6	38009	ppb	697.6	1.84%

Sequence No.: 24
Sample ID: 1202001503|935389|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 34
Date Collected: 1/6/2010 17:23:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202001503|935389|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4510.3	4510.3	96.6	%			17:25:59
1	Y RADIAL	4726.9	4726.9	95.82	%			17:25:59
1	Al 396.153Radial†	5843.8	6074.3	5365.0	ug/L	5365.0	ppb	17:25:39
1	Ca 317.933Radial†	45269.4	46835.7	78481	ug/L	78481	ppb	17:25:39
1	Fe 238.204 Radial†	2787.8	2871.1	25245	ug/L	25245	ppb	17:25:59
1	K 766.490 Radial†	73431.4	72655.6	14240	ug/L	14240	ppb	17:25:39
1	Mg 279.077 IEC†	642.3	663.0	21189	ug/L	21189	ppb	17:25:59
1	Na 589.592 Radial†	86569.6	91338.8	27592	ug/L	27592	ppb	17:25:39
1	Sr 421.552†	136992.6	141754.3	1037.2	ug/L	1037.2	ppb	17:25:39
1	Sc 361.383	849311.6	849311.6	95.793	%			17:27:04
1	Y 371.029	718462.7	718462.7	94.317	%			17:27:04
1	Ag 328.068†	114854.2	119385.7	521.74	ug/L	521.74	ppb	17:27:04
1	As 188.979†	1416.1	1511.7	536.69	ug/L	536.69	ppb	17:27:24
1	B 249.677†	24832.0	26588.4	543.54	ug/L	543.54	ppb	17:27:04
1	Ba 233.527†	132784.8	138608.7	1012.5	ug/L	1012.5	ppb	17:27:04
1	Be 313.107†	1481199.0	1550598.1	525.12	ug/L	525.12	ppb	17:27:04
1	Cd 226.502†	51073.2	53554.5	502.20	ug/L	502.20	ppb	17:27:04
1	Co 228.616†	26885.8	28150.5	529.40	ug/L	529.40	ppb	17:27:24
1	Cr 267.716†	49277.9	51338.0	515.58	ug/L	515.58	ppb	17:27:04
1	Cu 324.752†	180855.9	180799.2	536.57	ug/L	536.57	ppb	17:27:04
1	Mn 257.610†	12054752.0	12583626.2	13261	ug/L	13261	ppb	17:26:57
1	Mo 202.031†	8052.9	8386.6	527.82	ug/L	527.82	ppb	17:27:24
1	Ni 231.604†	22656.1	23526.0	516.12	ug/L	516.12	ppb	17:27:24
1	P 214.914†	1611.8	1434.0	601.57	ug/L	601.57	ppb	17:27:24
1	Pb 220.353†	4670.6	4953.5	513.16	ug/L	513.16	ppb	17:27:24
1	S 181.975 Axial†	5936.6	6137.4	6935.1	ug/L	6935.1	ppb	17:27:24
1	Sb 206.836†	1736.5	1775.7	538.01	ug/L	538.01	ppb	17:27:24
1	Se 196.026†	827.0	896.6	538.89	ug/L	538.89	ppb	17:27:24
1	Si 251.611†	757551.5	790203.2	22653	ug/L	22653	ppb	17:27:04
1	Sn 189.927†	3213.4	3351.1	504.15	ug/L	504.15	ppb	17:27:24
1	Ti 334.940†	313209.0	328781.0	525.33	ug/L	525.33	ppb	17:27:04
1	Tl 190.801†	1450.2	1567.3	506.08	ug/L	506.08	ppb	17:27:24
1	U 409.014†	13851.3	17128.3	505.03	ug/L	505.03	ppb	17:27:04
1	V 292.402†	78094.9	83326.4	527.45	ug/L	527.45	ppb	17:27:04
1	Zn 213.857†	60653.1	62485.0	507.79	ug/L	507.79	ppb	17:27:04
1	SiO2†	773966.5	807319.6	49526	ug/L	49526	ppb	17:28:37
2	Sc Radial	4541.9	4541.9	97.3	%			17:26:24
2	Y RADIAL	4767.6	4767.6	96.65	%			17:26:24
2	Al 396.153Radial†	5843.8	6032.2	5327.8	ug/L	5327.8	ppb	17:26:04
2	Ca 317.933Radial†	45430.8	46675.6	78213	ug/L	78213	ppb	17:26:04
2	Fe 238.204 Radial†	2814.2	2878.2	25307	ug/L	25307	ppb	17:26:24
2	K 766.490 Radial†	73530.4	72228.6	14156	ug/L	14156	ppb	17:26:04
2	Mg 279.077 IEC†	646.3	662.6	21174	ug/L	21174	ppb	17:26:24
2	Na 589.592 Radial†	86809.8	90962.4	27478	ug/L	27478	ppb	17:26:04
2	Sr 421.552†	137450.7	141238.7	1033.4	ug/L	1033.4	ppb	17:26:04
2	Sc 361.383	849875.4	849875.4	95.857	%			17:27:38
2	Y 371.029	718515.3	718515.3	94.323	%			17:27:38
2	Ag 328.068†	114955.4	119411.8	521.88	ug/L	521.88	ppb	17:27:38
2	As 188.979†	1404.8	1498.9	532.26	ug/L	532.26	ppb	17:27:58
2	B 249.677†	24871.0	26611.9	544.03	ug/L	544.03	ppb	17:27:38
2	Ba 233.527†	133224.2	138975.0	1015.2	ug/L	1015.2	ppb	17:27:38
2	Be 313.107†	1482138.9	1550552.8	525.10	ug/L	525.10	ppb	17:27:38
2	Cd 226.502†	51135.6	53584.2	502.47	ug/L	502.47	ppb	17:27:38
2	Co 228.616†	26652.9	27888.8	524.47	ug/L	524.47	ppb	17:27:58
2	Cr 267.716†	49325.8	51353.8	515.74	ug/L	515.74	ppb	17:27:38
2	Cu 324.752†	180979.9	180803.4	536.58	ug/L	536.58	ppb	17:27:38
2	Mn 257.610†	12029665.5	12549106.9	13224	ug/L	13224	ppb	17:27:31
2	Mo 202.031†	8017.5	8344.1	525.16	ug/L	525.16	ppb	17:27:58
2	Ni 231.604†	22476.0	23322.4	511.65	ug/L	511.65	ppb	17:27:58

2	P 214.914†	1590.9	1411.1	590.25 ug/L	590.25 ppb	17:27:58
2	Pb 220.353†	4647.6	4926.3	510.32 ug/L	510.32 ppb	17:27:58
2	S 181.975 Axial†	5873.1	6067.1	6855.7 ug/L	6855.7 ppb	17:27:58
2	Sb 206.836†	1729.0	1766.7	535.16 ug/L	535.16 ppb	17:27:58
2	Se 196.026†	825.7	894.6	538.07 ug/L	538.07 ppb	17:27:58
2	Si 251.611†	759156.7	791353.1	22686 ug/L	22686 ppb	17:27:38
2	Sn 189.927†	3177.1	3311.0	498.19 ug/L	498.19 ppb	17:27:58
2	Ti 334.940†	314374.4	329780.0	526.90 ug/L	526.90 ppb	17:27:38
2	Tl 190.801†	1465.7	1582.4	510.04 ug/L	510.04 ppb	17:27:58
2	U 409.014†	13920.4	17190.8	506.88 ug/L	506.88 ppb	17:27:38
2	V 292.402†	78167.8	83348.3	527.55 ug/L	527.55 ppb	17:27:38
2	Zn 213.857†	60764.5	62559.2	508.43 ug/L	508.43 ppb	17:27:38
2	SiO2†	768119.8	800684.2	49119 ug/L	49119 ppb	17:28:42
3	Sc Radial	4548.2	4548.2	97.4 %		17:26:50
3	Y RADIAL	4796.0	4796.0	97.22 %		17:26:50
3	Al 396.153Radial†	5825.0	6004.7	5303.6 ug/L	5303.6 ppb	17:26:30
3	Ca 317.933Radial†	44958.6	46126.3	77292 ug/L	77292 ppb	17:26:30
3	Fe 238.204 Radial†	2816.4	2876.5	25292 ug/L	25292 ppb	17:26:50
3	K 766.490 Radial†	72854.9	71430.7	13999 ug/L	13999 ppb	17:26:30
3	Mg 279.077 IEC†	648.9	664.3	21229 ug/L	21229 ppb	17:26:50
3	Na 589.592 Radial†	85706.2	89706.3	27098 ug/L	27098 ppb	17:26:30
3	Sr 421.552†	135495.8	139036.9	1017.3 ug/L	1017.3 ppb	17:26:30
3	Sc 361.383	860224.9	860224.9	97.024 %		17:28:11
3	Y 371.029	727097.6	727097.6	95.450 %		17:28:11
3	Ag 328.068†	116146.3	119196.4	520.95 ug/L	520.95 ppb	17:28:11
3	As 188.979†	1379.6	1455.3	516.98 ug/L	516.98 ppb	17:28:31
3	B 249.677†	25184.4	26622.7	544.27 ug/L	544.27 ppb	17:28:11
3	Ba 233.527†	134296.4	138408.0	1011.0 ug/L	1011.0 ppb	17:28:11
3	Be 313.107†	1495018.0	1545224.3	523.30 ug/L	523.30 ppb	17:28:11
3	Cd 226.502†	51528.7	53347.5	500.24 ug/L	500.24 ppb	17:28:11
3	Co 228.616†	26632.9	27533.8	517.78 ug/L	517.78 ppb	17:28:31
3	Cr 267.716†	49808.2	51231.9	514.52 ug/L	514.52 ppb	17:28:11
3	Cu 324.752†	182526.6	180126.0	534.58 ug/L	534.58 ppb	17:28:11
3	Mn 257.610†	12070622.8	12440333.4	13110 ug/L	13110 ppb	17:28:04
3	Mo 202.031†	8017.2	8243.2	518.83 ug/L	518.83 ppb	17:28:31
3	Ni 231.604†	22445.6	23009.0	504.77 ug/L	504.77 ppb	17:28:31
3	P 214.914†	1589.2	1389.4	579.97 ug/L	579.97 ppb	17:28:31
3	Pb 220.353†	4614.2	4833.5	500.69 ug/L	500.69 ppb	17:28:31
3	S 181.975 Axial†	5856.2	5975.9	6752.6 ug/L	6752.6 ppb	17:28:31
3	Sb 206.836†	1727.3	1743.2	527.99 ug/L	527.99 ppb	17:28:31
3	Se 196.026†	811.9	870.1	525.46 ug/L	525.46 ppb	17:28:31
3	Si 251.611†	765146.8	787998.7	22590 ug/L	22590 ppb	17:28:11
3	Sn 189.927†	3196.2	3290.8	495.12 ug/L	495.12 ppb	17:28:31
3	Ti 334.940†	316655.8	328185.5	524.32 ug/L	524.32 ppb	17:28:11
3	Tl 190.801†	1432.7	1530.0	495.07 ug/L	495.07 ppb	17:28:31
3	U 409.014†	14103.5	17204.8	507.30 ug/L	507.30 ppb	17:28:11
3	V 292.402†	78930.7	83153.5	526.24 ug/L	526.24 ppb	17:28:11
3	Zn 213.857†	61314.8	62363.7	506.87 ug/L	506.87 ppb	17:28:11
3	SiO2†	765629.6	788476.8	48370 ug/L	48370 ppb	17:28:48

Mean Data: 1202001503|935389|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	853137.3	96.225	%	0.6930				0.72%
Sc Radial	4533.4	97.1	%	0.44				0.45%
Y 371.029	721358.5	94.697	%	0.6525				0.69%
Y RADIAL	4763.5	96.57	%	0.704				0.73%
Ag 328.068†	119331.3	521.52	ug/L	0.498	521.52	ppb	0.498	0.10%
Al 396.153Radial†	6037.1	5332.1	ug/L	30.92	5332.1	ppb	30.92	0.58%
As 188.979†	1488.6	528.64	ug/L	10.342	528.64	ppb	10.342	1.96%
B 249.677†	26607.6	543.95	ug/L	0.372	543.95	ppb	0.372	0.07%
Ba 233.527†	138663.9	1012.9	ug/L	2.10	1012.9	ppb	2.10	0.21%
Be 313.107†	1548791.8	524.51	ug/L	1.046	524.51	ppb	1.046	0.20%
Ca 317.933Radial†	46545.9	77995	ug/L	623.4	77995	ppb	623.4	0.80%
Cd 226.502†	53495.4	501.64	ug/L	1.218	501.64	ppb	1.218	0.24%
Co 228.616†	27857.7	523.88	ug/L	5.830	523.88	ppb	5.830	1.11%
Cr 267.716†	51307.9	515.28	ug/L	0.666	515.28	ppb	0.666	0.13%
Cu 324.752†	180576.2	535.91	ug/L	1.154	535.91	ppb	1.154	0.22%
Fe 238.204 Radial†	2875.3	25281	ug/L	32.1	25281	ppb	32.1	0.13%
K 766.490 Radial†	72105.0	14132	ug/L	122.3	14132	ppb	122.3	0.87%

Mg 279.077 IEC†	663.3	21197 ug/L	28.1	21197 ppb	28.1	0.13%
Mn 257.610†	12524355.5	13198 ug/L	78.8	13198 ppb	78.8	0.60%
Mo 202.031†	8324.6	523.94 ug/L	4.615	523.94 ppb	4.615	0.88%
Na 589.592 Radial†	90669.2	27389 ug/L	258.2	27389 ppb	258.2	0.94%
Ni 231.604†	23285.8	510.85 ug/L	5.713	510.85 ppb	5.713	1.12%
P 214.914†	1411.5	590.60 ug/L	10.804	590.60 ppb	10.804	1.83%
Pb 220.353†	4904.4	508.06 ug/L	6.537	508.06 ppb	6.537	1.29%
S 181.975 Axial†	6060.1	6847.8 ug/L	91.50	6847.8 ppb	91.50	1.34%
Sb 206.836†	1761.8	533.72 ug/L	5.163	533.72 ppb	5.163	0.97%
Se 196.026†	887.1	534.14 ug/L	7.531	534.14 ppb	7.531	1.41%
Si 251.611†	789851.7	22643 ug/L	48.8	22643 ppb	48.8	0.22%
Sn 189.927†	3317.6	499.15 ug/L	4.592	499.15 ppb	4.592	0.92%
Sr 421.552†	140676.6	1029.3 ug/L	10.56	1029.3 ppb	10.56	1.03%
Ti 334.940†	328915.5	525.52 ug/L	1.299	525.52 ppb	1.299	0.25%
Tl 190.801†	1559.9	503.73 ug/L	7.755	503.73 ppb	7.755	1.54%
U 409.014†	17174.6	506.40 ug/L	1.208	506.40 ppb	1.208	0.24%
V 292.402†	83276.0	527.08 ug/L	0.729	527.08 ppb	0.729	0.14%
Zn 213.857†	62469.3	507.70 ug/L	0.786	507.70 ppb	0.786	0.15%
SiO2†	798826.9	49005 ug/L	586.4	49005 ppb	586.4	1.20%

Sequence No.: 25
Sample ID: 1202001504|935389|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 35
Date Collected: 1/6/2010 17:30:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202001504|935389|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4715.8	4715.8	101	%			17:32:51
1	Y RADIAL	5033.1	5033.1	102.0	%			17:32:51
1	Al 396.153Radial†	-33.1	-6.0	-5.4291	ug/L	-5.4291	ppb	17:32:51
1	Ca 317.933Radial†	8809.6	8706.8	14590	ug/L	14590	ppb	17:32:51
1	Fe 238.204 Radial†	482.4	463.6	4073.9	ug/L	4073.9	ppb	17:33:11
1	K 766.490 Radial†	12670.0	9203.6	1790.6	ug/L	1790.6	ppb	17:32:51
1	Mg 279.077 IEC†	107.1	104.4	3334.0	ug/L	3334.0	ppb	17:33:11
1	Na 589.592 Radial†	13929.3	15536.8	4693.3	ug/L	4693.3	ppb	17:32:51
1	Sr 421.552†	14009.5	13850.2	101.27	ug/L	101.27	ppb	17:32:51
1	Sc 361.383	881174.4	881174.4	99.387	%			17:34:08
1	Y 371.029	749425.2	749425.2	98.381	%			17:34:08
1	Ag 328.068†	282.3	-228.3	0.1859	ug/L	0.1859	ppb	17:34:14
1	As 188.979†	-29.7	3.6	1.8561	ug/L	1.8561	ppb	17:34:34
1	B 249.677†	-296.4	367.6	7.0275	ug/L	7.0275	ppb	17:34:34
1	Ba 233.527†	13448.5	13523.9	98.718	ug/L	98.718	ppb	17:34:14
1	Be 313.107†	-4226.4	99.1	0.0304	ug/L	0.0304	ppb	17:34:14
1	Cd 226.502†	-202.8	34.4	-0.0820	ug/L	-0.0820	ppb	17:34:34
1	Co 228.616†	182.3	267.4	5.0198	ug/L	5.0198	ppb	17:34:34
1	Cr 267.716†	240.1	137.6	1.4585	ug/L	1.4585	ppb	17:34:34
1	Cu 324.752†	7837.3	-113.4	-0.1279	ug/L	-0.1279	ppb	17:34:14
1	Mn 257.610†	2490005.1	2504847.1	2639.6	ug/L	2639.6	ppb	17:34:08
1	Mo 202.031†	46.9	27.2	2.0959	ug/L	2.0959	ppb	17:34:34
1	Ni 231.604†	242.3	118.7	2.6032	ug/L	2.6032	ppb	17:34:34
1	P 214.914†	296.8	50.1	20.915	ug/L	20.915	ppb	17:34:34
1	Pb 220.353†	-92.3	-15.1	-1.8997	ug/L	-1.8997	ppb	17:34:34
1	S 181.975 Axial†	326.9	269.1	304.07	ug/L	304.07	ppb	17:34:34
1	Sb 206.836†	36.7	-0.1	-0.2812	ug/L	-0.2812	ppb	17:34:34
1	Se 196.026†	-52.3	-19.4	2.6100	ug/L	2.6100	ppb	17:34:34
1	Si 251.611†	120054.4	120178.3	3446.9	ug/L	3446.9	ppb	17:34:14
1	Sn 189.927†	-121.3	-125.5	-16.993	ug/L	-16.993	ppb	17:34:34
1	Ti 334.940†	-2777.2	-977.0	-0.7828	ug/L	-0.7828	ppb	17:34:14
1	Tl 190.801†	-104.9	-52.2	1.1749	ug/L	1.1749	ppb	17:34:34
1	U 409.014†	-3156.2	-506.9	-15.585	ug/L	-15.585	ppb	17:34:14
1	V 292.402†	-1556.5	235.7	0.9317	ug/L	0.9317	ppb	17:34:34
1	Zn 213.857†	1041.9	216.6	1.4395	ug/L	1.4395	ppb	17:34:34
1	SiO2†	118720.1	118816.3	7292.6	ug/L	7292.6	ppb	17:35:41
2	Sc Radial	4715.6	4715.6	101	%			17:33:16
2	Y RADIAL	4980.8	4980.8	101.0	%			17:33:16
2	Al 396.153Radial†	-14.9	11.9	10.555	ug/L	10.555	ppb	17:33:16
2	Ca 317.933Radial†	8777.7	8675.8	14538	ug/L	14538	ppb	17:33:16
2	Fe 238.204 Radial†	476.3	457.6	4020.6	ug/L	4020.6	ppb	17:33:36
2	K 766.490 Radial†	12525.1	9060.8	1762.2	ug/L	1762.2	ppb	17:33:16
2	Mg 279.077 IEC†	103.8	101.2	3230.8	ug/L	3230.8	ppb	17:33:36
2	Na 589.592 Radial†	13810.9	15420.4	4658.2	ug/L	4658.2	ppb	17:33:16
2	Sr 421.552†	13836.7	13679.8	100.02	ug/L	100.02	ppb	17:33:16
2	Sc 361.383	890453.9	890453.9	100.43	%			17:34:39
2	Y 371.029	757184.4	757184.4	99.400	%			17:34:39
2	Ag 328.068†	314.4	-199.2	0.2950	ug/L	0.2950	ppb	17:34:44
2	As 188.979†	-29.2	4.4	2.1406	ug/L	2.1406	ppb	17:35:04
2	B 249.677†	-311.6	355.6	6.7861	ug/L	6.7861	ppb	17:35:04
2	Ba 233.527†	13535.4	13469.5	98.319	ug/L	98.319	ppb	17:34:44
2	Be 313.107†	-4329.3	40.9	0.0111	ug/L	0.0111	ppb	17:34:44
2	Cd 226.502†	-178.0	61.1	0.1754	ug/L	0.1754	ppb	17:35:04
2	Co 228.616†	191.1	274.3	5.1477	ug/L	5.1477	ppb	17:35:04
2	Cr 267.716†	243.5	138.4	1.4664	ug/L	1.4664	ppb	17:35:04
2	Cu 324.752†	7960.2	-73.2	-0.0116	ug/L	-0.0116	ppb	17:34:44
2	Mn 257.610†	2518823.8	2507432.7	2642.3	ug/L	2642.3	ppb	17:34:39
2	Mo 202.031†	32.5	12.4	1.1637	ug/L	1.1637	ppb	17:35:04
2	Ni 231.604†	231.4	105.3	2.3087	ug/L	2.3087	ppb	17:35:04

2	P 214.914†	307.1	57.2	24.391 ug/L	24.391 ppb	17:35:04
2	Pb 220.353†	-87.6	-9.4	-1.3034 ug/L	-1.3034 ppb	17:35:04
2	S 181.975 Axial†	324.8	263.5	297.76 ug/L	297.76 ppb	17:35:04
2	Sb 206.836†	46.2	8.9	2.3673 ug/L	2.3673 ppb	17:35:04
2	Se 196.026†	-51.6	-18.1	3.0855 ug/L	3.0855 ppb	17:35:04
2	Si 251.611†	120909.3	119770.7	3435.3 ug/L	3435.3 ppb	17:34:44
2	Sn 189.927†	-130.3	-133.1	-18.131 ug/L	-18.131 ppb	17:35:04
2	Ti 334.940†	-2713.9	-884.8	-0.6384 ug/L	-0.6384 ppb	17:34:44
2	Tl 190.801†	-102.2	-48.4	2.2289 ug/L	2.2289 ppb	17:35:04
2	U 409.014†	-3264.0	-581.2	-17.786 ug/L	-17.786 ppb	17:34:44
2	V 292.402†	-1591.1	217.6	0.8060 ug/L	0.8060 ppb	17:35:04
2	Zn 213.857†	1061.2	224.9	1.5158 ug/L	1.5158 ppb	17:35:04
2	SiO2†	120012.6	118858.4	7295.3 ug/L	7295.3 ppb	17:35:46
3	Sc Radial	4700.1	4700.1	101 %		17:33:42
3	Y RADIAL	4965.2	4965.2	100.7 %		17:33:42
3	Al 396.153Radial†	-8.8	18.0	15.922 ug/L	15.922 ppb	17:33:42
3	Ca 317.933Radial†	8782.0	8708.7	14593 ug/L	14593 ppb	17:33:42
3	Fe 238.204 Radial†	476.8	459.6	4038.7 ug/L	4038.7 ppb	17:34:02
3	K 766.490 Radial†	12374.7	8952.4	1740.8 ug/L	1740.8 ppb	17:33:42
3	Mg 279.077 IEC†	105.2	102.9	3285.3 ug/L	3285.3 ppb	17:34:02
3	Na 589.592 Radial†	13821.5	15476.0	4675.0 ug/L	4675.0 ppb	17:33:42
3	Sr 421.552†	13840.9	13729.2	100.39 ug/L	100.39 ppb	17:33:42
3	Sc 361.383	896260.5	896260.5	101.09 %		17:35:10
3	Y 371.029	762040.9	762040.9	100.04 %		17:35:10
3	Ag 328.068†	291.5	-223.9	0.1947 ug/L	0.1947 ppb	17:35:15
3	As 188.979†	-36.0	-2.2	-0.1501 ug/L	-0.1501 ppb	17:35:35
3	B 249.677†	-306.4	362.8	6.9318 ug/L	6.9318 ppb	17:35:35
3	Ba 233.527†	13349.0	13197.8	96.339 ug/L	96.339 ppb	17:35:15
3	Be 313.107†	-4213.7	183.2	0.0592 ug/L	0.0592 ppb	17:35:15
3	Cd 226.502†	-182.8	57.5	0.1395 ug/L	0.1395 ppb	17:35:35
3	Co 228.616†	181.1	263.1	4.9372 ug/L	4.9372 ppb	17:35:35
3	Cr 267.716†	236.9	130.3	1.3863 ug/L	1.3863 ppb	17:35:35
3	Cu 324.752†	7747.2	-335.3	-0.7866 ug/L	-0.7866 ppb	17:35:15
3	Mn 257.610†	2527713.3	2499978.4	2634.4 ug/L	2634.4 ppb	17:35:10
3	Mo 202.031†	33.7	13.5	1.2306 ug/L	1.2306 ppb	17:35:35
3	Ni 231.604†	227.3	99.8	2.1867 ug/L	2.1867 ppb	17:35:35
3	P 214.914†	300.2	48.4	20.234 ug/L	20.234 ppb	17:35:35
3	Pb 220.353†	-103.9	-25.1	-2.9210 ug/L	-2.9210 ppb	17:35:35
3	S 181.975 Axial†	324.6	261.2	295.15 ug/L	295.15 ppb	17:35:35
3	Sb 206.836†	39.0	1.5	0.1736 ug/L	0.1736 ppb	17:35:35
3	Se 196.026†	-47.3	-13.5	5.5028 ug/L	5.5028 ppb	17:35:35
3	Si 251.611†	118995.1	117097.2	3358.6 ug/L	3358.6 ppb	17:35:15
3	Sn 189.927†	-129.1	-131.1	-17.818 ug/L	-17.818 ppb	17:35:35
3	Ti 334.940†	-2728.1	-881.4	-0.6296 ug/L	-0.6296 ppb	17:35:15
3	Tl 190.801†	-104.7	-50.2	1.6908 ug/L	1.6908 ppb	17:35:35
3	U 409.014†	-3316.1	-611.7	-18.695 ug/L	-18.695 ppb	17:35:15
3	V 292.402†	-1613.6	205.6	0.7285 ug/L	0.7285 ppb	17:35:35
3	Zn 213.857†	1065.6	222.5	1.4946 ug/L	1.4946 ppb	17:35:35
3	SiO2†	120240.4	118309.6	7261.6 ug/L	7261.6 ppb	17:35:51

Mean Data: 1202001504|935389|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	889296.3	100.30	%	0.858				0.86%
Sc Radial	4710.5	101	%	0.2				0.19%
Y 371.029	756216.8	99.273	%	0.8353				0.84%
Y RADIAL	4993.0	101.2	%	0.72				0.71%
Ag 328.068†	-217.1	0.2252	ug/L	0.06063	0.2252	ppb	0.06063	26.93%
Al 396.153Radial†	8.0	7.0159	ug/L	11.10670	7.0159	ppb	11.10670	158.31%
As 188.979†	1.9	1.2822	ug/L	1.24855	1.2822	ppb	1.24855	97.37%
B 249.677†	362.0	6.9151	ug/L	0.12154	6.9151	ppb	0.12154	1.76%
Ba 233.527†	13397.1	97.792	ug/L	1.2743	97.792	ppb	1.2743	1.30%
Be 313.107†	107.7	0.0336	ug/L	0.02420	0.0336	ppb	0.02420	72.10%
Ca 317.933Radial†	8697.1	14573	ug/L	31.0	14573	ppb	31.0	0.21%
Cd 226.502†	51.0	0.0776	ug/L	0.13942	0.0776	ppb	0.13942	179.61%
Co 228.616†	268.3	5.0349	ug/L	0.10607	5.0349	ppb	0.10607	2.11%
Cr 267.716†	135.4	1.4371	ug/L	0.04410	1.4371	ppb	0.04410	3.07%
Cu 324.752†	-174.0	-0.3087	ug/L	0.41790	-0.3087	ppb	0.41790	135.37%
Fe 238.204 Radial†	460.3	4044.4	ug/L	27.10	4044.4	ppb	27.10	0.67%
K 766.490 Radial†	9072.3	1764.5	ug/L	24.97	1764.5	ppb	24.97	1.42%

Mg 279.077 IEC†	102.8	3283.4 ug/L	51.66	3283.4 ppb	51.66	1.57%
Mn 257.610†	2504086.1	2638.8 ug/L	3.99	2638.8 ppb	3.99	0.15%
Mo 202.031†	17.7	1.4967 ug/L	0.51996	1.4967 ppb	0.51996	34.74%
Na 589.592 Radial†	15477.7	4675.5 ug/L	17.59	4675.5 ppb	17.59	0.38%
Ni 231.604†	107.9	2.3662 ug/L	0.21414	2.3662 ppb	0.21414	9.05%
P 214.914†	51.9	21.846 ug/L	2.2294	21.846 ppb	2.2294	10.20%
Pb 220.353†	-16.5	-2.0413 ug/L	0.81803	-2.0413 ppb	0.81803	40.07%
S 181.975 Axial†	264.6	298.99 ug/L	4.588	298.99 ppb	4.588	1.53%
Sb 206.836†	3.4	0.7533 ug/L	1.41622	0.7533 ppb	1.41622	188.01%
Se 196.026†	-17.0	3.7328 ug/L	1.55124	3.7328 ppb	1.55124	41.56%
Si 251.611†	119015.4	3413.6 ug/L	48.00	3413.6 ppb	48.00	1.41%
Sn 189.927†	-129.9	-17.647 ug/L	0.5878	-17.647 ppb	0.5878	3.33%
Sr 421.552†	13753.1	100.56 ug/L	0.641	100.56 ppb	0.641	0.64%
Ti 334.940†	-914.4	-0.6836 ug/L	0.08604	-0.6836 ppb	0.08604	12.59%
Tl 190.801†	-50.2	1.6982 ug/L	0.52702	1.6982 ppb	0.52702	31.03%
U 409.014†	-566.6	-17.355 ug/L	1.5995	-17.355 ppb	1.5995	9.22%
V 292.402†	219.7	0.8221 ug/L	0.10253	0.8221 ppb	0.10253	12.47%
Zn 213.857†	221.3	1.4833 ug/L	0.03941	1.4833 ppb	0.03941	2.66%
SiO2†	118661.4	7283.2 ug/L	18.73	7283.2 ppb	18.73	0.26%

Sequence No.: 29
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/6/2010 17:59:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4799.3	4799.3	103	%			18:01:19
1	Y RADIAL	5073.0	5073.0	102.8	%			18:01:19
1	Al 396.153Radial†	5861.1	5726.9	5058.0	ug/L	5058.0	ppb	18:01:19
1	Ca 317.933Radial†	3105.1	3007.4	5039.4	ug/L	5039.4	ppb	18:01:39
1	Fe 238.204 Radial†	588.8	558.7	4925.2	ug/L	4925.2	ppb	18:01:39
1	K 766.490 Radial†	28792.3	24665.5	4887.3	ug/L	4887.3	ppb	18:01:19
1	Mg 279.077 IEC†	164.2	158.1	5060.2	ug/L	5060.2	ppb	18:01:39
1	Na 589.592 Radial†	33099.6	33941.4	10253	ug/L	10253	ppb	18:01:19
1	Sr 421.552†	72304.5	70304.3	514.70	ug/L	514.70	ppb	18:01:19
1	Sc 361.383	886340.9	886340.9	99.970	%			18:02:38
1	Y 371.029	752822.2	752822.2	98.827	%			18:02:38
1	Ag 328.068†	117838.2	117361.5	507.27	ug/L	507.27	ppb	18:02:38
1	As 188.979†	1389.3	1423.2	502.58	ug/L	502.58	ppb	18:02:58
1	B 249.677†	23516.1	24189.1	496.85	ug/L	496.85	ppb	18:02:38
1	Ba 233.527†	69415.8	69429.4	507.51	ug/L	507.51	ppb	18:02:38
1	Be 313.107†	1505478.4	1510286.1	511.48	ug/L	511.48	ppb	18:02:38
1	Cd 226.502†	53419.8	53674.4	505.35	ug/L	505.35	ppb	18:02:38
1	Co 228.616†	26285.1	26377.0	496.07	ug/L	496.07	ppb	18:02:58
1	Cr 267.716†	50319.5	50230.7	504.09	ug/L	504.09	ppb	18:02:38
1	Cu 324.752†	179261.6	171316.9	507.46	ug/L	507.46	ppb	18:02:38
1	Mn 257.610†	485811.0	485441.7	511.88	ug/L	511.88	ppb	18:02:38
1	Mo 202.031†	7985.6	7968.1	499.65	ug/L	499.65	ppb	18:02:58
1	Ni 231.604†	22668.5	22550.3	494.72	ug/L	494.72	ppb	18:02:58
1	P 214.914†	5364.3	5117.4	2418.1	ug/L	2418.1	ppb	18:02:58
1	Pb 220.353†	4730.4	4809.6	499.81	ug/L	499.81	ppb	18:02:58
1	S 181.975 Axial†	943.4	883.8	997.81	ug/L	997.81	ppb	18:02:58
1	Sb 206.836†	1714.4	1677.8	508.19	ug/L	508.19	ppb	18:02:58
1	Se 196.026†	947.6	981.1	519.55	ug/L	519.55	ppb	18:02:58
1	Si 251.611†	88711.7	88122.0	2516.0	ug/L	2516.0	ppb	18:02:38
1	Sn 189.927†	3376.2	3373.8	499.62	ug/L	499.62	ppb	18:02:58
1	Ti 334.940†	322428.6	324343.7	514.47	ug/L	514.47	ppb	18:02:38
1	Tl 190.801†	1774.2	1828.1	502.80	ug/L	502.80	ppb	18:02:58
1	U 409.014†	13816.7	16489.6	488.62	ug/L	488.62	ppb	18:02:38
1	V 292.402†	78337.4	80163.0	509.92	ug/L	509.92	ppb	18:02:38
1	Zn 213.857†	62533.2	61720.5	503.29	ug/L	503.29	ppb	18:02:38
1	SiO2†	88196.5	87587.2	5350.9	ug/L	5350.9	ppb	18:03:59
2	Sc Radial	4622.8	4622.8	99.0	%			18:01:44
2	Y RADIAL	4877.6	4877.6	98.88	%			18:01:44
2	Al 396.153Radial†	5784.0	5866.8	5181.7	ug/L	5181.7	ppb	18:01:44
2	Ca 317.933Radial†	3105.7	3123.3	5233.6	ug/L	5233.6	ppb	18:02:04
2	Fe 238.204 Radial†	587.4	579.2	5105.4	ug/L	5105.4	ppb	18:02:04
2	K 766.490 Radial†	28645.8	25586.7	5070.1	ug/L	5070.1	ppb	18:01:44
2	Mg 279.077 IEC†	166.4	166.3	5324.7	ug/L	5324.7	ppb	18:02:04
2	Na 589.592 Radial†	32647.2	34713.7	10486	ug/L	10486	ppb	18:01:44
2	Sr 421.552†	71351.6	72027.0	527.31	ug/L	527.31	ppb	18:01:44
2	Sc 361.383	876653.7	876653.7	98.877	%			18:03:06
2	Y 371.029	745175.8	745175.8	97.823	%			18:03:06
2	Ag 328.068†	116367.2	117176.4	506.53	ug/L	506.53	ppb	18:03:06
2	As 188.979†	1403.7	1453.0	513.04	ug/L	513.04	ppb	18:03:26
2	B 249.677†	23245.2	24175.0	496.52	ug/L	496.52	ppb	18:03:06
2	Ba 233.527†	68746.0	69519.2	508.17	ug/L	508.17	ppb	18:03:06
2	Be 313.107†	1484837.8	1506052.1	510.04	ug/L	510.04	ppb	18:03:06
2	Cd 226.502†	52836.4	53674.8	505.34	ug/L	505.34	ppb	18:03:06
2	Co 228.616†	26373.7	26757.2	503.24	ug/L	503.24	ppb	18:03:26
2	Cr 267.716†	49744.4	50205.3	503.84	ug/L	503.84	ppb	18:03:06
2	Cu 324.752†	176976.9	170987.8	506.49	ug/L	506.49	ppb	18:03:06
2	Mn 257.610†	479927.8	484861.8	511.28	ug/L	511.28	ppb	18:03:06
2	Mo 202.031†	8030.6	8101.8	508.04	ug/L	508.04	ppb	18:03:26
2	Ni 231.604†	22788.2	22921.9	502.87	ug/L	502.87	ppb	18:03:26

2	P 214.914†	5378.6	5191.1	2454.1 ug/L	2454.1 ppb	18:03:26
2	Pb 220.353†	4761.0	4892.8	508.47 ug/L	508.47 ppb	18:03:26
2	S 181.975 Axial†	948.4	899.3	1015.3 ug/L	1015.3 ppb	18:03:26
2	Sb 206.836†	1709.3	1691.6	512.58 ug/L	512.58 ppb	18:03:26
2	Se 196.026†	947.3	991.3	525.38 ug/L	525.38 ppb	18:03:26
2	Si 251.611†	87763.7	88143.8	2516.5 ug/L	2516.5 ppb	18:03:06
2	Sn 189.927†	3371.5	3406.4	504.46 ug/L	504.46 ppb	18:03:26
2	Ti 334.940†	318447.9	323881.7	513.75 ug/L	513.75 ppb	18:03:06
2	Tl 190.801†	1784.4	1858.1	510.94 ug/L	510.94 ppb	18:03:26
2	U 409.014†	13696.1	16520.4	489.51 ug/L	489.51 ppb	18:03:06
2	V 292.402†	77480.6	80162.3	510.02 ug/L	510.02 ppb	18:03:06
2	Zn 213.857†	61783.9	61653.8	502.67 ug/L	502.67 ppb	18:03:06
2	SiO2†	87710.1	88070.2	5380.1 ug/L	5380.1 ppb	18:04:04
3	Sc Radial	4655.4	4655.4	99.7 %		18:02:09
3	Y RADIAL	4936.1	4936.1	100.1 %		18:02:09
3	Al 396.153Radial†	5839.5	5881.5	5194.7 ug/L	5194.7 ppb	18:02:09
3	Ca 317.933Radial†	3111.5	3107.1	5206.5 ug/L	5206.5 ppb	18:02:30
3	Fe 238.204 Radial†	587.1	574.7	5066.0 ug/L	5066.0 ppb	18:02:30
3	K 766.490 Radial†	28586.5	25324.6	5018.1 ug/L	5018.1 ppb	18:02:09
3	Mg 279.077 IEC†	164.1	162.9	5214.8 ug/L	5214.8 ppb	18:02:30
3	Na 589.592 Radial†	32791.2	34627.1	10460 ug/L	10460 ppb	18:02:09
3	Sr 421.552†	71844.1	72016.1	527.23 ug/L	527.23 ppb	18:02:09
3	Sc 361.383	878593.1	878593.1	99.096 %		18:03:33
3	Y 371.029	746219.3	746219.3	97.960 %		18:03:33
3	Ag 328.068†	116532.8	117083.7	506.12 ug/L	506.12 ppb	18:03:33
3	As 188.979†	1397.1	1443.3	509.63 ug/L	509.63 ppb	18:03:53
3	B 249.677†	23376.3	24255.4	498.18 ug/L	498.18 ppb	18:03:33
3	Ba 233.527†	68831.6	69452.1	507.68 ug/L	507.68 ppb	18:03:33
3	Be 313.107†	1490600.0	1508552.0	510.89 ug/L	510.89 ppb	18:03:33
3	Cd 226.502†	53080.8	53803.5	506.55 ug/L	506.55 ppb	18:03:33
3	Co 228.616†	26397.0	26721.8	502.57 ug/L	502.57 ppb	18:03:53
3	Cr 267.716†	49890.7	50241.8	504.21 ug/L	504.21 ppb	18:03:33
3	Cu 324.752†	176862.0	170476.7	504.98 ug/L	504.98 ppb	18:03:33
3	Mn 257.610†	481678.3	485556.8	512.01 ug/L	512.01 ppb	18:03:33
3	Mo 202.031†	8040.0	8093.5	507.52 ug/L	507.52 ppb	18:03:53
3	Ni 231.604†	22805.5	22888.5	502.14 ug/L	502.14 ppb	18:03:53
3	P 214.914†	5381.3	5181.8	2449.9 ug/L	2449.9 ppb	18:03:53
3	Pb 220.353†	4766.8	4888.0	507.98 ug/L	507.98 ppb	18:03:53
3	S 181.975 Axial†	938.4	887.0	1001.4 ug/L	1001.4 ppb	18:03:53
3	Sb 206.836†	1713.3	1691.9	512.62 ug/L	512.62 ppb	18:03:53
3	Se 196.026†	960.3	1002.3	530.86 ug/L	530.86 ppb	18:03:53
3	Si 251.611†	87908.3	88093.9	2515.0 ug/L	2515.0 ppb	18:03:33
3	Sn 189.927†	3370.4	3397.7	503.17 ug/L	503.17 ppb	18:03:53
3	Ti 334.940†	319041.2	323769.6	513.57 ug/L	513.57 ppb	18:03:33
3	Tl 190.801†	1768.8	1838.3	505.54 ug/L	505.54 ppb	18:03:53
3	U 409.014†	13626.6	16419.6	486.52 ug/L	486.52 ppb	18:03:33
3	V 292.402†	77656.5	80166.8	510.04 ug/L	510.04 ppb	18:03:33
3	Zn 213.857†	61955.7	61689.3	502.97 ug/L	502.97 ppb	18:03:33
3	SiO2†	86645.9	86800.4	5302.2 ug/L	5302.2 ppb	18:04:09

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	880529.2	99.314	%	0.5781				0.58%
Sc Radial	4692.5	101	%	2.0				2.00%
Y 371.029	748072.4	98.204	%	0.5443				0.55%
Y RADIAL	4962.2	100.6	%	2.03				2.02%
Ag 328.068†	117207.2	506.64	ug/L	0.581	506.64	ppb	0.581	0.11%
QC value within limits for Ag 328.068 Recovery = 101.33%								
Al 396.153Radial†	5825.1	5144.8	ug/L	75.45	5144.8	ppb	75.45	1.47%
QC value within limits for Al 396.153Radial Recovery = 102.90%								
As 188.979†	1439.8	508.42	ug/L	5.335	508.42	ppb	5.335	1.05%
QC value within limits for As 188.979 Recovery = 101.68%								
B 249.677†	24206.5	497.18	ug/L	0.882	497.18	ppb	0.882	0.18%
QC value within limits for B 249.677 Recovery = 99.44%								
Ba 233.527†	69466.9	507.79	ug/L	0.343	507.79	ppb	0.343	0.07%
QC value within limits for Ba 233.527 Recovery = 101.56%								
Be 313.107†	1508296.7	510.80	ug/L	0.720	510.80	ppb	0.720	0.14%
QC value within limits for Be 313.107 Recovery = 102.16%								
Ca 317.933Radial†	3079.3	5159.8	ug/L	105.19	5159.8	ppb	105.19	2.04%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.20%
Cd 226.502†          53717.6      505.75 ug/L         0.699      505.75 ppb          0.699   0.14%
   QC value within limits for Cd 226.502  Recovery = 101.15%
Co 228.616†          26618.7      500.62 ug/L         3.961      500.62 ppb          3.961   0.79%
   QC value within limits for Co 228.616  Recovery = 100.12%
Cr 267.716†          50225.9      504.05 ug/L         0.188      504.05 ppb          0.188   0.04%
   QC value within limits for Cr 267.716  Recovery = 100.81%
Cu 324.752†         170927.1      506.31 ug/L         1.250      506.31 ppb          1.250   0.25%
   QC value within limits for Cu 324.752  Recovery = 101.26%
Fe 238.204 Radial†     570.9      5032.2 ug/L         94.72      5032.2 ppb          94.72   1.88%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.64%
K 766.490 Radial†    25192.2      4991.8 ug/L         94.18      4991.8 ppb          94.18   1.89%
   QC value within limits for K 766.490 Radial  Recovery = 99.84%
Mg 279.077 IEC†        162.4      5199.9 ug/L        132.91      5199.9 ppb         132.91   2.56%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.00%
Mn 257.610†         485286.8      511.73 ug/L         0.389      511.73 ppb          0.389   0.08%
   QC value within limits for Mn 257.610  Recovery = 102.35%
Mo 202.031†          8054.5      505.07 ug/L         4.701      505.07 ppb          4.701   0.93%
   QC value within limits for Mo 202.031  Recovery = 101.01%
Na 589.592 Radial†   34427.4       10400 ug/L         127.8       10400 ppb          127.8   1.23%
   QC value within limits for Na 589.592 Radial  Recovery = 104.00%
Ni 231.604†          22786.9      499.91 ug/L         4.511      499.91 ppb          4.511   0.90%
   QC value within limits for Ni 231.604  Recovery = 99.98%
P 214.914†           5163.4      2440.7 ug/L         19.69      2440.7 ppb          19.69   0.81%
   QC value within limits for P 214.914  Recovery = 97.63%
Pb 220.353†          4863.5      505.42 ug/L         4.863      505.42 ppb          4.863   0.96%
   QC value within limits for Pb 220.353  Recovery = 101.08%
S 181.975 Axial†      890.0      1004.8 ug/L          9.23      1004.8 ppb          9.23   0.92%
   QC value within limits for S 181.975 Axial  Recovery = 100.48%
Sb 206.836†          1687.1      511.13 ug/L         2.546      511.13 ppb          2.546   0.50%
   QC value within limits for Sb 206.836  Recovery = 102.23%
Se 196.026†           991.6      525.26 ug/L         5.658      525.26 ppb          5.658   1.08%
   QC value within limits for Se 196.026  Recovery = 105.05%
Si 251.611†          88119.9      2515.9 ug/L          0.72      2515.9 ppb          0.72   0.03%
   QC value within limits for Si 251.611  Recovery = 100.63%
Sn 189.927†          3392.6      502.42 ug/L         2.508      502.42 ppb          2.508   0.50%
   QC value within limits for Sn 189.927  Recovery = 100.48%
Sr 421.552†          71449.1      523.08 ug/L         7.258      523.08 ppb          7.258   1.39%
   QC value within limits for Sr 421.552  Recovery = 104.62%
Ti 334.940†         323998.3      513.93 ug/L         0.477      513.93 ppb          0.477   0.09%
   QC value within limits for Ti 334.940  Recovery = 102.79%
Tl 190.801†          1841.5      506.43 ug/L         4.142      506.43 ppb          4.142   0.82%
   QC value within limits for Tl 190.801  Recovery = 101.29%
U 409.014†           16476.5      488.22 ug/L         1.535      488.22 ppb          1.535   0.31%
   QC value within limits for U 409.014  Recovery = 97.64%
V 292.402†           80164.1      509.99 ug/L         0.062      509.99 ppb          0.062   0.01%
   QC value within limits for V 292.402  Recovery = 102.00%
Zn 213.857†          61687.9      502.97 ug/L         0.309      502.97 ppb          0.309   0.06%
   QC value within limits for Zn 213.857  Recovery = 100.59%
SiO2†                87485.9      5344.4 ug/L         39.35      5344.4 ppb          39.35   0.74%
   QC value within limits for SiO2  Recovery = 99.94%
All analyte(s) passed QC.
```

Sequence No.: 30
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/6/2010 18:06:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4627.9	4627.9	99.1	%			18:08:11
1	Y RADIAL	4901.2	4901.2	99.36	%			18:08:11
1	Al 396.153Radial†	13.5	40.4	35.767	ug/L	35.767	ppb	18:08:11
1	Ca 317.933Radial†	20.5	8.1	13.579	ug/L	13.579	ppb	18:08:31
1	Fe 238.204 Radial†	12.1	-1.7	-14.998	ug/L	-14.998	ppb	18:08:31
1	K 766.490 Radial†	3482.3	175.4	34.792	ug/L	34.792	ppb	18:08:11
1	Mg 279.077 IEC†	-1.0	-2.7	-84.902	ug/L	-84.902	ppb	18:08:31
1	Na 589.592 Radial†	-1508.7	228.5	69.030	ug/L	69.030	ppb	18:08:11
1	Sr 421.552†	40.8	25.2	0.1841	ug/L	0.1841	ppb	18:08:11
1	Sc 361.383	857563.6	857563.6	96.724	%			18:09:28
1	Y 371.029	736898.6	736898.6	96.737	%			18:09:28
1	Ag 328.068†	502.2	6.9	0.0332	ug/L	0.0332	ppb	18:09:28
1	As 188.979†	-37.7	-5.6	-1.9582	ug/L	-1.9582	ppb	18:09:48
1	B 249.677†	-643.5	0.5	0.0125	ug/L	0.0125	ppb	18:09:28
1	Ba 233.527†	12.3	5.2	0.0373	ug/L	0.0373	ppb	18:09:48
1	Be 313.107†	-4321.5	-116.3	-0.0395	ug/L	-0.0395	ppb	18:09:28
1	Cd 226.502†	-226.6	4.1	0.0403	ug/L	0.0403	ppb	18:09:48
1	Co 228.616†	-79.1	2.2	0.0443	ug/L	0.0443	ppb	18:09:48
1	Cr 267.716†	111.6	11.3	0.1163	ug/L	0.1163	ppb	18:09:28
1	Cu 324.752†	8083.6	358.3	1.0602	ug/L	1.0602	ppb	18:09:28
1	Mn 257.610†	559.4	61.9	0.0653	ug/L	0.0653	ppb	18:09:28
1	Mo 202.031†	30.8	11.9	0.7443	ug/L	0.7443	ppb	18:09:48
1	Ni 231.604†	119.6	-1.4	-0.0318	ug/L	-0.0318	ppb	18:09:48
1	P 214.914†	238.7	-1.8	-1.0226	ug/L	-1.0226	ppb	18:09:48
1	Pb 220.353†	-83.9	-9.0	-0.9243	ug/L	-0.9243	ppb	18:09:48
1	S 181.975 Axial†	65.9	8.2	9.2691	ug/L	9.2691	ppb	18:09:48
1	Sb 206.836†	53.6	18.3	5.4663	ug/L	5.4663	ppb	18:09:48
1	Se 196.026†	-31.8	0.4	0.1519	ug/L	0.1519	ppb	18:09:48
1	Si 251.611†	680.5	87.0	2.4721	ug/L	2.4721	ppb	18:09:48
1	Sn 189.927†	1.2	-2.2	-0.3255	ug/L	-0.3255	ppb	18:09:48
1	Ti 334.940†	-1806.1	-49.9	-0.0735	ug/L	-0.0735	ppb	18:09:28
1	Tl 190.801†	-48.2	3.6	0.9717	ug/L	0.9717	ppb	18:09:48
1	U 409.014†	-2950.6	-381.8	-11.348	ug/L	-11.348	ppb	18:09:28
1	V 292.402†	-1776.9	-35.2	-0.2320	ug/L	-0.2320	ppb	18:09:28
1	Zn 213.857†	843.2	40.1	0.3324	ug/L	0.3324	ppb	18:09:48
1	SiO2†	650.5	36.5	2.1879	ug/L	2.1879	ppb	18:10:44
2	Sc Radial	4743.7	4743.7	102	%			18:08:36
2	Y RADIAL	5010.2	5010.2	101.6	%			18:08:36
2	Al 396.153Radial†	-26.9	0.3	0.2372	ug/L	0.2372	ppb	18:08:36
2	Ca 317.933Radial†	20.0	7.1	11.869	ug/L	11.869	ppb	18:08:56
2	Fe 238.204 Radial†	12.2	-1.9	-16.636	ug/L	-16.636	ppb	18:08:56
2	K 766.490 Radial†	3422.6	31.0	6.1060	ug/L	6.1060	ppb	18:08:36
2	Mg 279.077 IEC†	0.7	-0.9	-30.337	ug/L	-30.337	ppb	18:08:56
2	Na 589.592 Radial†	-1491.8	282.2	85.248	ug/L	85.248	ppb	18:08:36
2	Sr 421.552†	-21.0	-36.7	-0.2687	ug/L	-0.2687	ppb	18:08:36
2	Sc 361.383	868954.8	868954.8	98.009	%			18:09:53
2	Y 371.029	746739.3	746739.3	98.029	%			18:09:53
2	Ag 328.068†	408.2	-95.8	-0.4105	ug/L	-0.4105	ppb	18:09:53
2	As 188.979†	-26.3	6.6	2.3055	ug/L	2.3055	ppb	18:10:13
2	B 249.677†	-665.7	-13.4	-0.2729	ug/L	-0.2729	ppb	18:09:53
2	Ba 233.527†	23.2	16.1	0.1191	ug/L	0.1191	ppb	18:10:13
2	Be 313.107†	-4328.4	-64.8	-0.0220	ug/L	-0.0220	ppb	18:09:53
2	Cd 226.502†	-216.4	17.6	0.1670	ug/L	0.1670	ppb	18:10:13
2	Co 228.616†	-88.0	-5.8	-0.1092	ug/L	-0.1092	ppb	18:10:13
2	Cr 267.716†	74.6	-27.9	-0.2770	ug/L	-0.2770	ppb	18:09:53
2	Cu 324.752†	8200.1	367.7	1.0878	ug/L	1.0878	ppb	18:09:53
2	Mn 257.610†	599.8	95.5	0.0996	ug/L	0.0996	ppb	18:09:53
2	Mo 202.031†	19.5	-0.0	-0.0036	ug/L	-0.0036	ppb	18:10:13
2	Ni 231.604†	119.7	-2.9	-0.0636	ug/L	-0.0636	ppb	18:10:13

2	P 214.914†	255.1	11.7	5.5564 ug/L	5.5564 ppb	18:10:13
2	Pb 220.353†	-90.7	-14.8	-1.5344 ug/L	-1.5344 ppb	18:10:13
2	S 181.975 Axial†	66.5	7.9	8.9678 ug/L	8.9678 ppb	18:10:13
2	Sb 206.836†	48.4	12.2	3.6766 ug/L	3.6766 ppb	18:10:13
2	Se 196.026†	-42.7	-10.3	-5.3063 ug/L	-5.3063 ppb	18:10:13
2	Si 251.611†	636.9	33.3	0.9506 ug/L	0.9506 ppb	18:10:13
2	Sn 189.927†	7.6	4.4	0.6494 ug/L	0.6494 ppb	18:10:13
2	Ti 334.940†	-1801.9	-21.1	-0.0308 ug/L	-0.0308 ppb	18:09:53
2	Tl 190.801†	-38.1	14.5	3.9700 ug/L	3.9700 ppb	18:10:13
2	U 409.014†	-2765.9	-153.4	-4.5580 ug/L	-4.5580 ppb	18:09:53
2	V 292.402†	-1644.8	123.6	0.7688 ug/L	0.7688 ppb	18:09:53
2	Zn 213.857†	837.7	23.0	0.1902 ug/L	0.1902 ppb	18:10:13
2	SiO2†	654.3	31.6	1.9284 ug/L	1.9284 ppb	18:10:49
3	Sc Radial	4996.5	4996.5	107 %		18:09:01
3	Y RADIAL	5294.0	5294.0	107.3 %		18:09:01
3	Al 396.153Radial†	-0.5	26.2	23.242 ug/L	23.242 ppb	18:09:01
3	Ca 317.933Radial†	17.4	3.7	6.2637 ug/L	6.2637 ppb	18:09:21
3	Fe 238.204 Radial†	13.2	-1.5	-13.248 ug/L	-13.248 ppb	18:09:21
3	K 766.490 Radial†	3465.2	-99.6	-19.819 ug/L	-19.819 ppb	18:09:01
3	Mg 279.077 IEC†	3.8	2.0	62.468 ug/L	62.468 ppb	18:09:21
3	Na 589.592 Radial†	-1521.2	329.1	99.400 ug/L	99.400 ppb	18:09:01
3	Sr 421.552†	11.2	-5.5	-0.0402 ug/L	-0.0402 ppb	18:09:01
3	Sc 361.383	860563.0	860563.0	97.062 %		18:10:19
3	Y 371.029	739491.7	739491.7	97.077 %		18:10:19
3	Ag 328.068†	409.5	-90.5	-0.3878 ug/L	-0.3878 ppb	18:10:19
3	As 188.979†	-33.8	-1.4	-0.4963 ug/L	-0.4963 ppb	18:10:39
3	B 249.677†	-640.7	5.7	0.1208 ug/L	0.1208 ppb	18:10:19
3	Ba 233.527†	8.7	1.4	0.0096 ug/L	0.0096 ppb	18:10:39
3	Be 313.107†	-4300.2	-78.8	-0.0264 ug/L	-0.0264 ppb	18:10:19
3	Cd 226.502†	-233.0	-1.7	-0.0148 ug/L	-0.0148 ppb	18:10:39
3	Co 228.616†	-96.1	-15.1	-0.2808 ug/L	-0.2808 ppb	18:10:39
3	Cr 267.716†	141.0	41.2	0.4145 ug/L	0.4145 ppb	18:10:19
3	Cu 324.752†	8020.2	264.0	0.7808 ug/L	0.7808 ppb	18:10:19
3	Mn 257.610†	663.0	166.7	0.1731 ug/L	0.1731 ppb	18:10:19
3	Mo 202.031†	33.6	14.7	0.9198 ug/L	0.9198 ppb	18:10:39
3	Ni 231.604†	116.5	-5.1	-0.1109 ug/L	-0.1109 ppb	18:10:39
3	P 214.914†	258.7	18.0	8.6659 ug/L	8.6659 ppb	18:10:39
3	Pb 220.353†	-89.9	-14.9	-1.5350 ug/L	-1.5350 ppb	18:10:39
3	S 181.975 Axial†	58.5	0.4	0.4326 ug/L	0.4326 ppb	18:10:39
3	Sb 206.836†	52.0	16.5	4.9479 ug/L	4.9479 ppb	18:10:39
3	Se 196.026†	-41.0	-9.0	-4.6236 ug/L	-4.6236 ppb	18:10:39
3	Si 251.611†	655.7	59.0	1.6807 ug/L	1.6807 ppb	18:10:39
3	Sn 189.927†	7.0	3.8	0.5579 ug/L	0.5579 ppb	18:10:39
3	Ti 334.940†	-1702.8	63.0	0.1034 ug/L	0.1034 ppb	18:10:19
3	Tl 190.801†	-49.9	2.0	0.5561 ug/L	0.5561 ppb	18:10:39
3	U 409.014†	-2834.8	-251.9	-7.4873 ug/L	-7.4873 ppb	18:10:19
3	V 292.402†	-1792.0	-44.5	-0.2773 ug/L	-0.2773 ppb	18:10:19
3	Zn 213.857†	858.1	52.4	0.4289 ug/L	0.4289 ppb	18:10:39
3	SiO2†	707.2	92.6	5.6596 ug/L	5.6596 ppb	18:10:54

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	862360.5	97.265	%	0.6660				0.68%
Sc Radial	4789.4	103	%	4.0				3.94%
Y 371.029	741043.2	97.281	%	0.6696				0.69%
Y RADIAL	5068.5	102.7	%	4.11				4.00%
Ag 328.068†	-59.8	-0.2550	ug/L	0.24991	-0.2550	ppb	0.24991	97.99%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	22.3	19.749	ug/L	18.0206	19.749	ppb	18.0206	91.25%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.1	-0.0496	ug/L	2.16666	-0.0496	ppb	2.16666	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-2.4	-0.0465	ug/L	0.20338	-0.0465	ppb	0.20338	437.09%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.6	0.0553	ug/L	0.05692	0.0553	ppb	0.05692	102.86%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-86.6	-0.0293	ug/L	0.00909	-0.0293	ppb	0.00909	31.04%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.3	10.570	ug/L	3.8266	10.570	ppb	3.8266	36.20%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              6.7      0.0642 ug/L       0.09324      0.0642 ppb       0.09324 145.29%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†             -6.2     -0.1152 ug/L       0.16259     -0.1152 ppb       0.16259 141.11%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              8.2      0.0846 ug/L       0.34683      0.0846 ppb       0.34683 409.92%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            330.0      0.9763 ug/L       0.16984      0.9763 ppb       0.16984  17.40%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†      -1.7     -14.961 ug/L        1.6942     -14.961 ppb        1.6942  11.32%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       35.6      7.0266 ug/L      27.31713      7.0266 ppb      27.31713 388.77%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†         -0.6     -17.590 ug/L       74.5072     -17.590 ppb       74.5072 423.57%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†            108.0      0.1127 ug/L       0.05511      0.1127 ppb       0.05511  48.92%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              8.9      0.5535 ug/L       0.49036      0.5535 ppb       0.49036  88.59%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     279.9      84.559 ug/L       15.1967      84.559 ppb       15.1967  17.97%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -3.1     -0.0687 ug/L       0.03979     -0.0687 ppb       0.03979  57.88%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               9.3      4.3999 ug/L       4.94675      4.3999 ppb       4.94675 112.43%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -12.9      -1.3312 ug/L       0.35246     -1.3312 ppb       0.35246  26.48%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         5.5      6.2232 ug/L       5.01703      6.2232 ppb       5.01703  80.62%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†             15.7      4.6969 ug/L       0.92084      4.6969 ppb       0.92084  19.61%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†             -6.3     -3.2594 ug/L       2.97385     -3.2594 ppb       2.97385  91.24%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             59.8      1.7011 ug/L       0.76097      1.7011 ppb       0.76097  44.73%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              2.0      0.2939 ug/L       0.53840      0.2939 ppb       0.53840 183.17%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -5.7     -0.0416 ug/L       0.22642     -0.0416 ppb       0.22642 543.80%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -2.7     -0.0003 ug/L       0.09233     -0.0003 ppb       0.09233 >999.9%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              6.7      1.8326 ug/L       1.86270      1.8326 ppb       1.86270 101.64%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†            -262.4      -7.7979 ug/L       3.40575     -7.7979 ppb       3.40575  43.68%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              14.6      0.0865 ug/L       0.59132      0.0865 ppb       0.59132 683.68%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             38.5      0.3171 ug/L       0.12009      0.3171 ppb       0.12009  37.87%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   53.5      3.2586 ug/L       2.08333      3.2586 ppb       2.08333  63.93%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

1/7/2010 10:55:17 Hg ReAlign... Actual peak offset (nm): -0.009
Drift (nm): 0.000 Slit adjustment: -2

Analysis Begun

Start Time: 1/7/2010 10:57:45 **Plasma On Time: 1/4/2010 06:33:21**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\010710.sif
Batch ID:
Results Data Set: 010710
Results Library: C:\pe\Optima3\Results\Results.mdb

Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 1/6/2010 11:54:05**
IEC File: 101209.iec **MSF File:**
Method Description:

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

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 1/7/2010 10:57:47**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

	Net	Corrected	Calib.	Analysis

Repl#	Analyte	Intensity	Intensity	Conc.	Units	Time
1	Sc Radial	4621.2	4621.2	99.9	%	10:59:40
1	Y RADIAL	4884.3	4884.3	99.78	%	10:59:40
1	Al 396.153Radial†	-13.0	-13.0	[0.00]	ug/L	10:59:40
1	Ca 317.933Radial†	13.9	14.0	[0.00]	ug/L	11:00:00
1	Fe 238.204 Radial†	11.6	11.7	[0.00]	ug/L	11:00:00
1	K 766.490 Radial†	3182.9	3187.5	[0.00]	ug/L	10:59:40
1	Mg 279.077 IEC†	0.4	0.4	[0.00]	ug/L	11:00:00
1	Na 589.592 Radial†	-1745.3	-1747.9	[0.00]	ug/L	10:59:40
1	Sr 421.552†	2.9	2.9	[0.00]	ug/L	10:59:40
1	Sc 361.383	868411.4	868411.4	99.435	%	11:00:57
1	Y 371.029	745122.7	745122.7	99.439	%	11:00:57
1	Ag 328.068†	455.1	457.7	[0.00]	ug/L	11:00:57
1	As 188.979†	-34.1	-34.3	[0.00]	ug/L	11:01:17
1	B 249.677†	-786.4	-790.9	[0.00]	ug/L	11:00:57
1	Ba 233.527†	16.1	16.2	[0.00]	ug/L	11:01:17
1	Be 313.107†	-4371.2	-4396.1	[0.00]	ug/L	11:00:57
1	Cd 226.502†	-247.3	-248.7	[0.00]	ug/L	11:01:17
1	Co 228.616†	-102.7	-103.3	[0.00]	ug/L	11:01:17
1	Cr 267.716†	55.8	56.1	[0.00]	ug/L	11:00:57
1	Cu 324.752†	8094.2	8140.2	[0.00]	ug/L	11:00:57
1	Mn 257.610†	1290.8	1298.2	[0.00]	ug/L	11:00:57
1	Mo 202.031†	29.4	29.6	[0.00]	ug/L	11:01:17
1	Ni 231.604†	109.7	110.3	[0.00]	ug/L	11:01:17
1	P 214.914†	236.0	237.4	[0.00]	ug/L	11:01:17
1	Pb 220.353†	-102.5	-103.1	[0.00]	ug/L	11:01:17
1	S 181.975 Axial†	59.0	59.4	[0.00]	ug/L	11:01:17
1	Sb 206.836†	41.3	41.5	[0.00]	ug/L	11:01:17
1	Se 196.026†	-43.7	-43.9	[0.00]	ug/L	11:01:17
1	Si 251.611†	624.5	628.0	[0.00]	ug/L	11:01:17
1	Sn 189.927†	6.1	6.1	[0.00]	ug/L	11:01:17
1	Ti 334.940†	-1670.1	-1679.6	[0.00]	ug/L	11:00:57
1	Tl 190.801†	-49.7	-50.0	[0.00]	ug/L	11:01:17
1	U 409.014†	-2860.9	-2877.1	[0.00]	ug/L	11:00:57
1	V 292.402†	-1871.5	-1882.2	[0.00]	ug/L	11:00:57
1	Zn 213.857†	843.0	847.8	[0.00]	ug/L	11:01:17
1	SiO2†	659.9	663.6	[0.00]	ug/L	11:02:13
2	Sc Radial	4679.3	4679.3	101	%	11:00:05
2	Y RADIAL	4949.1	4949.1	101.1	%	11:00:05
2	Al 396.153Radial†	-29.4	-29.1	[0.00]	ug/L	11:00:05
2	Ca 317.933Radial†	15.2	15.0	[0.00]	ug/L	11:00:25
2	Fe 238.204 Radial†	12.8	12.7	[0.00]	ug/L	11:00:25
2	K 766.490 Radial†	3248.1	3212.5	[0.00]	ug/L	11:00:05
2	Mg 279.077 IEC†	2.6	2.6	[0.00]	ug/L	11:00:25
2	Na 589.592 Radial†	-1718.4	-1699.5	[0.00]	ug/L	11:00:05
2	Sr 421.552†	-3.8	-3.8	[0.00]	ug/L	11:00:05
2	Sc 361.383	873621.9	873621.9	100.03	%	11:01:22
2	Y 371.029	749911.3	749911.3	100.08	%	11:01:22
2	Ag 328.068†	482.2	482.0	[0.00]	ug/L	11:01:22
2	As 188.979†	-32.1	-32.0	[0.00]	ug/L	11:01:42
2	B 249.677†	-756.6	-756.3	[0.00]	ug/L	11:01:22
2	Ba 233.527†	11.1	11.1	[0.00]	ug/L	11:01:42
2	Be 313.107†	-4351.2	-4349.8	[0.00]	ug/L	11:01:22
2	Cd 226.502†	-253.1	-253.0	[0.00]	ug/L	11:01:42
2	Co 228.616†	-102.4	-102.4	[0.00]	ug/L	11:01:42
2	Cr 267.716†	105.1	105.0	[0.00]	ug/L	11:01:22
2	Cu 324.752†	8072.1	8069.5	[0.00]	ug/L	11:01:22
2	Mn 257.610†	1330.3	1329.9	[0.00]	ug/L	11:01:22
2	Mo 202.031†	22.3	22.3	[0.00]	ug/L	11:01:42
2	Ni 231.604†	118.4	118.4	[0.00]	ug/L	11:01:42
2	P 214.914†	278.7	278.6	[0.00]	ug/L	11:01:42
2	Pb 220.353†	-117.9	-117.9	[0.00]	ug/L	11:01:42
2	S 181.975 Axial†	51.9	51.9	[0.00]	ug/L	11:01:42
2	Sb 206.836†	51.8	51.8	[0.00]	ug/L	11:01:42
2	Se 196.026†	-35.1	-35.1	[0.00]	ug/L	11:01:42
2	Si 251.611†	633.5	633.3	[0.00]	ug/L	11:01:42
2	Sn 189.927†	2.8	2.8	[0.00]	ug/L	11:01:42
2	Ti 334.940†	-1736.4	-1735.9	[0.00]	ug/L	11:01:22
2	Tl 190.801†	-37.9	-37.9	[0.00]	ug/L	11:01:42
2	U 409.014†	-2928.2	-2927.2	[0.00]	ug/L	11:01:22
2	V 292.402†	-1781.9	-1781.3	[0.00]	ug/L	11:01:22

2	Zn 213.857†	861.3	861.0	[0.00] ug/L	11:01:42
2	SiO2†	640.3	640.1	[0.00] ug/L	11:02:18
3	Sc Radial	4583.5	4583.5	99.0 %	11:00:30
3	Y RADIAL	4851.3	4851.3	99.11 %	11:00:30
3	Al 396.153Radial†	-20.3	-20.5	[0.00] ug/L	11:00:30
3	Ca 317.933Radial†	12.9	13.0	[0.00] ug/L	11:00:50
3	Fe 238.204 Radial†	13.7	13.8	[0.00] ug/L	11:00:50
3	K 766.490 Radial†	3256.2	3287.8	[0.00] ug/L	11:00:30
3	Mg 279.077 IEC†	1.6	1.6	[0.00] ug/L	11:00:50
3	Na 589.592 Radial†	-1844.8	-1862.7	[0.00] ug/L	11:00:30
3	Sr 421.552†	34.4	34.8	[0.00] ug/L	11:00:30
3	Sc 361.383	877993.9	877993.9	100.53 %	11:01:47
3	Y 371.029	752947.1	752947.1	100.48 %	11:01:47
3	Ag 328.068†	535.9	533.0	[0.00] ug/L	11:01:47
3	As 188.979†	-28.3	-28.2	[0.00] ug/L	11:02:08
3	B 249.677†	-753.2	-749.2	[0.00] ug/L	11:01:47
3	Ba 233.527†	28.6	28.4	[0.00] ug/L	11:02:08
3	Be 313.107†	-4417.9	-4394.5	[0.00] ug/L	11:01:47
3	Cd 226.502†	-258.6	-257.2	[0.00] ug/L	11:02:08
3	Co 228.616†	-92.3	-91.8	[0.00] ug/L	11:02:08
3	Cr 267.716†	110.3	109.7	[0.00] ug/L	11:01:47
3	Cu 324.752†	8144.4	8101.3	[0.00] ug/L	11:01:47
3	Mn 257.610†	1297.8	1290.9	[0.00] ug/L	11:01:47
3	Mo 202.031†	28.4	28.2	[0.00] ug/L	11:02:08
3	Ni 231.604†	120.4	119.8	[0.00] ug/L	11:02:08
3	P 214.914†	243.2	241.9	[0.00] ug/L	11:02:08
3	Pb 220.353†	-83.4	-83.0	[0.00] ug/L	11:02:08
3	S 181.975 Axial†	62.1	61.8	[0.00] ug/L	11:02:08
3	Sb 206.836†	45.5	45.3	[0.00] ug/L	11:02:08
3	Se 196.026†	-37.4	-37.2	[0.00] ug/L	11:02:08
3	Si 251.611†	632.2	628.8	[0.00] ug/L	11:02:08
3	Sn 189.927†	5.3	5.3	[0.00] ug/L	11:02:08
3	Ti 334.940†	-1854.7	-1844.9	[0.00] ug/L	11:01:47
3	Tl 190.801†	-49.4	-49.1	[0.00] ug/L	11:02:08
3	U 409.014†	-2936.9	-2921.3	[0.00] ug/L	11:01:47
3	V 292.402†	-1765.1	-1755.7	[0.00] ug/L	11:01:47
3	Zn 213.857†	855.0	850.4	[0.00] ug/L	11:02:08
3	SiO2†	645.8	642.4	[0.00] ug/L	11:02:23

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	873342.4	4797.36	0.55%	100.00	%
Sc Radial	4628.0	48.26	1.04%	100	%
Y 371.029	749327.0	3944.80	0.53%	100.00	%
Y RADIAL	4894.9	49.75	1.02%	100.00	%
Ag 328.068†	490.9	38.44	7.83%	[0.00]	ug/L
Al 396.153Radial†	-20.9	8.06	38.66%	[0.00]	ug/L
As 188.979†	-31.5	3.09	9.82%	[0.00]	ug/L
B 249.677†	-765.5	22.30	2.91%	[0.00]	ug/L
Ba 233.527†	18.6	8.91	48.03%	[0.00]	ug/L
Be 313.107†	-4380.1	26.28	0.60%	[0.00]	ug/L
Ca 317.933Radial†	14.0	1.02	7.26%	[0.00]	ug/L
Cd 226.502†	-253.0	4.26	1.68%	[0.00]	ug/L
Co 228.616†	-99.2	6.39	6.44%	[0.00]	ug/L
Cr 267.716†	90.3	29.69	32.89%	[0.00]	ug/L
Cu 324.752†	8103.7	35.40	0.44%	[0.00]	ug/L
Fe 238.204 Radial†	12.7	1.08	8.48%	[0.00]	ug/L
K 766.490 Radial†	3229.3	52.22	1.62%	[0.00]	ug/L
Mg 279.077 IEC†	1.5	1.11	73.03%	[0.00]	ug/L
Mn 257.610†	1306.3	20.71	1.59%	[0.00]	ug/L
Mo 202.031†	26.7	3.85	14.42%	[0.00]	ug/L
Na 589.592 Radial†	-1770.0	83.80	4.73%	[0.00]	ug/L
Ni 231.604†	116.1	5.12	4.41%	[0.00]	ug/L
P 214.914†	252.6	22.64	8.96%	[0.00]	ug/L
Pb 220.353†	-101.3	17.51	17.29%	[0.00]	ug/L
S 181.975 Axial†	57.7	5.18	8.98%	[0.00]	ug/L
Sb 206.836†	46.2	5.19	11.24%	[0.00]	ug/L
Se 196.026†	-38.8	4.58	11.82%	[0.00]	ug/L
Si 251.611†	630.0	2.84	0.45%	[0.00]	ug/L

Sn 189.927†	4.7	1.73	36.63%	[0.00] ug/L
Sr 421.552†	11.3	20.60	182.33%	[0.00] ug/L
Ti 334.940†	-1753.4	84.03	4.79%	[0.00] ug/L
Tl 190.801†	-45.7	6.73	14.74%	[0.00] ug/L
U 409.014†	-2908.6	27.38	0.94%	[0.00] ug/L
V 292.402†	-1806.4	66.85	3.70%	[0.00] ug/L
Zn 213.857†	853.1	6.97	0.82%	[0.00] ug/L
SiO2†	648.7	12.96	2.00%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 1/7/2010 11:04:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	4805.9	4805.9	104	%	11:06:31
1	Y RADIAL	5039.6	5039.6	103.0	%	11:06:31
1	K 766.490 Radial†	8190.2	4657.8	[1000]	ug/L	11:06:26
1	Sr 421.552†	13647.5	13131.1	[100]	ug/L	11:06:31
1	Sc 361.383	894270.4	894270.4	102.40	%	11:06:58
1	Y 371.029	762962.4	762962.4	101.82	%	11:06:58
1	Ag 328.068†	23423.9	22384.8	[100]	ug/L	11:06:58
1	As 188.979†	254.9	280.4	[100]	ug/L	11:07:18
1	B 249.677†	3899.1	4573.4	[100]	ug/L	11:06:58
1	Ba 233.527†	13666.9	13328.5	[100]	ug/L	11:06:58
1	Be 313.107†	290199.3	287788.1	[100]	ug/L	11:06:58
1	Cd 226.502†	10066.0	10083.4	[100]	ug/L	11:07:18
1	Co 228.616†	5165.4	5143.8	[100]	ug/L	11:07:18
1	Cr 267.716†	9993.0	9668.9	[100]	ug/L	11:06:58
1	Cu 324.752†	41012.6	31949.1	[100]	ug/L	11:06:58
1	Mn 257.610†	97132.3	93552.9	[100]	ug/L	11:06:58
1	Mo 202.031†	1600.4	1536.2	[100]	ug/L	11:07:18
1	Ni 231.604†	4618.0	4393.8	[100]	ug/L	11:07:18
1	P 214.914†	1259.7	977.6	[500]	ug/L	11:07:18
1	Pb 220.353†	867.9	948.9	[100]	ug/L	11:07:18
1	S 181.975 Axial†	218.9	156.1	[200]	ug/L	11:07:18
1	Sb 206.836†	361.0	306.4	[100]	ug/L	11:07:18
1	Se 196.026†	158.9	193.9	[100]	ug/L	11:07:18
1	Si 251.611†	17667.4	16623.9	[500]	ug/L	11:06:58
1	Sn 189.927†	670.5	650.1	[100]	ug/L	11:07:18
1	Ti 334.940†	61039.3	61364.3	[100]	ug/L	11:06:58
1	Tl 190.801†	318.1	356.4	[100]	ug/L	11:07:18
1	U 409.014†	572.7	3467.9	[100]	ug/L	11:06:58
1	V 292.402†	13754.4	15238.9	[100]	ug/L	11:06:58
1	Zn 213.857†	12917.5	11762.2	[100]	ug/L	11:06:58
1	SiO2†	17625.1	16563.9	[1069.5]	ug/L	11:08:15
2	Sc Radial	4709.5	4709.5	102	%	11:06:41
2	Y RADIAL	5002.0	5002.0	102.2	%	11:06:41
2	K 766.490 Radial†	7991.9	4624.2	[1000]	ug/L	11:06:36
2	Sr 421.552†	13619.0	13371.9	[100]	ug/L	11:06:41
2	Sc 361.383	888071.4	888071.4	101.69	%	11:07:24
2	Y 371.029	757165.4	757165.4	101.05	%	11:07:24
2	Ag 328.068†	23314.3	22436.7	[100]	ug/L	11:07:24
2	As 188.979†	255.0	282.2	[100]	ug/L	11:07:44
2	B 249.677†	3931.4	4631.7	[100]	ug/L	11:07:24
2	Ba 233.527†	13612.5	13368.2	[100]	ug/L	11:07:24
2	Be 313.107†	289232.8	288815.9	[100]	ug/L	11:07:24
2	Cd 226.502†	10082.9	10168.6	[100]	ug/L	11:07:44
2	Co 228.616†	5187.4	5200.6	[100]	ug/L	11:07:44
2	Cr 267.716†	9871.4	9617.4	[100]	ug/L	11:07:24
2	Cu 324.752†	41010.2	32226.4	[100]	ug/L	11:07:24
2	Mn 257.610†	97936.0	95005.4	[100]	ug/L	11:07:24
2	Mo 202.031†	1604.8	1551.5	[100]	ug/L	11:07:44
2	Ni 231.604†	4620.8	4428.0	[100]	ug/L	11:07:44
2	P 214.914†	1273.9	1000.1	[500]	ug/L	11:07:44
2	Pb 220.353†	877.4	964.2	[100]	ug/L	11:07:44
2	S 181.975 Axial†	233.5	171.9	[200]	ug/L	11:07:44
2	Sb 206.836†	362.0	309.8	[100]	ug/L	11:07:44
2	Se 196.026†	153.4	189.7	[100]	ug/L	11:07:44
2	Si 251.611†	17621.0	16698.7	[500]	ug/L	11:07:24
2	Sn 189.927†	666.2	650.4	[100]	ug/L	11:07:44
2	Ti 334.940†	61006.5	61748.1	[100]	ug/L	11:07:24
2	Tl 190.801†	319.2	359.6	[100]	ug/L	11:07:44
2	U 409.014†	583.0	3481.9	[100]	ug/L	11:07:24

2	V 292.402†	13703.1	15282.2	[100]	ug/L	11:07:24
2	Zn 213.857†	12899.0	11832.0	[100]	ug/L	11:07:24
2	SiO2†	17887.7	16942.3	[1069.5]	ug/L	11:08:21
3	Sc Radial	4622.3	4622.3	99.9	%	11:06:51
3	Y RADIAL	4894.1	4894.1	99.98	%	11:06:51
3	K 766.490 Radial†	8065.0	4845.6	[1000]	ug/L	11:06:46
3	Sr 421.552†	13400.9	13406.1	[100]	ug/L	11:06:51
3	Sc 361.383	891029.5	891029.5	102.03	%	11:07:50
3	Y 371.029	760209.7	760209.7	101.45	%	11:07:50
3	Ag 328.068†	23530.2	22572.2	[100]	ug/L	11:07:50
3	As 188.979†	248.9	275.4	[100]	ug/L	11:08:10
3	B 249.677†	3922.0	4609.6	[100]	ug/L	11:07:50
3	Ba 233.527†	13671.7	13381.8	[100]	ug/L	11:07:50
3	Be 313.107†	291403.0	289998.7	[100]	ug/L	11:07:50
3	Cd 226.502†	10107.8	10160.1	[100]	ug/L	11:08:10
3	Co 228.616†	5214.1	5209.8	[100]	ug/L	11:08:10
3	Cr 267.716†	10027.3	9738.0	[100]	ug/L	11:07:50
3	Cu 324.752†	41204.4	32282.8	[100]	ug/L	11:07:50
3	Mn 257.610†	97563.2	94320.3	[100]	ug/L	11:07:50
3	Mo 202.031†	1616.6	1557.8	[100]	ug/L	11:08:10
3	Ni 231.604†	4644.7	4436.4	[100]	ug/L	11:08:10
3	P 214.914†	1270.7	992.9	[500]	ug/L	11:08:10
3	Pb 220.353†	865.6	949.7	[100]	ug/L	11:08:10
3	S 181.975 Axial†	227.8	165.6	[200]	ug/L	11:08:10
3	Sb 206.836†	358.6	305.3	[100]	ug/L	11:08:10
3	Se 196.026†	155.6	191.3	[100]	ug/L	11:08:10
3	Si 251.611†	17708.6	16727.0	[500]	ug/L	11:07:50
3	Sn 189.927†	687.1	668.8	[100]	ug/L	11:08:10
3	Ti 334.940†	61349.7	61885.3	[100]	ug/L	11:07:50
3	Tl 190.801†	311.1	350.6	[100]	ug/L	11:08:10
3	U 409.014†	833.0	3725.0	[100]	ug/L	11:07:50
3	V 292.402†	13772.6	15305.6	[100]	ug/L	11:07:50
3	Zn 213.857†	12967.7	11857.2	[100]	ug/L	11:07:50
3	SiO2†	17823.5	16821.0	[1069.5]	ug/L	11:08:26

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	891123.8	3100.60	0.35%	102.04	%
Sc Radial	4712.6	91.81	1.95%	102	%
Y 371.029	760112.5	2899.74	0.38%	101.44	%
Y RADIAL	4978.6	75.54	1.52%	101.7	%
Ag 328.068†	22464.6	96.77	0.43%	[100]	ug/L
As 188.979†	279.4	3.50	1.25%	[100]	ug/L
B 249.677†	4604.9	29.46	0.64%	[100]	ug/L
Ba 233.527†	13359.5	27.68	0.21%	[100]	ug/L
Be 313.107†	288867.6	1106.19	0.38%	[100]	ug/L
Cd 226.502†	10137.4	46.95	0.46%	[100]	ug/L
Co 228.616†	5184.7	35.78	0.69%	[100]	ug/L
Cr 267.716†	9674.7	60.50	0.63%	[100]	ug/L
Cu 324.752†	32152.8	178.62	0.56%	[100]	ug/L
K 766.490 Radial†	4709.2	119.32	2.53%	[1000]	ug/L
Mn 257.610†	94292.8	726.65	0.77%	[100]	ug/L
Mo 202.031†	1548.5	11.11	0.72%	[100]	ug/L
Ni 231.604†	4419.4	22.58	0.51%	[100]	ug/L
P 214.914†	990.2	11.51	1.16%	[500]	ug/L
Pb 220.353†	954.2	8.61	0.90%	[100]	ug/L
S 181.975 Axial†	164.6	7.95	4.83%	[200]	ug/L
Sb 206.836†	307.2	2.35	0.76%	[100]	ug/L
Se 196.026†	191.6	2.17	1.13%	[100]	ug/L
Si 251.611†	16683.2	53.30	0.32%	[500]	ug/L
Sn 189.927†	656.4	10.69	1.63%	[100]	ug/L
Sr 421.552†	13303.0	149.89	1.13%	[100]	ug/L
Ti 334.940†	61665.9	270.05	0.44%	[100]	ug/L
Tl 190.801†	355.5	4.54	1.28%	[100]	ug/L
U 409.014†	3558.3	144.59	4.06%	[100]	ug/L
V 292.402†	15275.6	33.84	0.22%	[100]	ug/L
Zn 213.857†	11817.1	49.23	0.42%	[100]	ug/L
SiO2†	16775.7	193.25	1.15%	[1069.5]	ug/L

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

Autosampler Location: 3
Date Collected: 1/7/2010 11:10:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	4514.9	4514.9	97.6	%	11:12:28
1	Y RADIAL	4740.2	4740.2	96.84	%	11:12:28
1	Al 396.153Radial†	5854.8	6022.3	[5000]	ug/L	11:12:28
1	Ca 317.933Radial†	2958.8	3018.9	[5000]	ug/L	11:12:48
1	K 766.490 Radial†	27581.7	25043.1	[5000]	ug/L	11:12:28
1	Mg 279.077 IEC†	157.3	159.8	[5000]	ug/L	11:12:48
1	Sr 421.552†	67765.7	69451.5	[500]	ug/L	11:12:28
1	Sc 361.383	890716.5	890716.5	101.99	%	11:13:47
1	Y 371.029	753305.7	753305.7	100.53	%	11:13:47
1	Ag 328.068†	116030.7	113276.6	[500]	ug/L	11:13:47
1	As 188.979†	1409.1	1413.1	[500]	ug/L	11:14:07
1	B 249.677†	23521.4	23828.1	[500]	ug/L	11:13:47
1	Ba 233.527†	68940.5	67577.2	[500]	ug/L	11:13:47
1	Be 313.107†	1504233.5	1479272.5	[500]	ug/L	11:13:47
1	Cd 226.502†	53326.0	52538.8	[500]	ug/L	11:13:47
1	Co 228.616†	26364.3	25949.2	[500]	ug/L	11:14:07
1	Cr 267.716†	49990.5	48925.1	[500]	ug/L	11:13:47
1	Cu 324.752†	177870.5	166297.3	[500]	ug/L	11:13:47
1	Mn 257.610†	483981.8	473235.1	[500]	ug/L	11:13:47
1	Mo 202.031†	7937.4	7755.9	[500]	ug/L	11:14:07
1	Ni 231.604†	22769.7	22209.4	[500]	ug/L	11:14:07
1	P 214.914†	5433.0	5074.4	[2500]	ug/L	11:14:07
1	Pb 220.353†	4790.9	4798.7	[500]	ug/L	11:14:07
1	S 181.975 Axial†	948.7	872.5	[1000]	ug/L	11:14:07
1	Sb 206.836†	1692.6	1613.4	[500]	ug/L	11:14:07
1	Se 196.026†	970.4	990.3	[500]	ug/L	11:14:07
1	Si 251.611†	87967.6	85621.7	[2500]	ug/L	11:13:47
1	Sn 189.927†	3361.4	3291.1	[500]	ug/L	11:14:07
1	Ti 334.940†	316255.4	311840.1	[500]	ug/L	11:13:47
1	Tl 190.801†	1783.1	1794.0	[500]	ug/L	11:14:07
1	U 409.014†	13481.4	16127.0	[500]	ug/L	11:13:47
1	V 292.402†	77632.6	77924.7	[500]	ug/L	11:13:47
1	Zn 213.857†	62728.5	60651.9	[500]	ug/L	11:13:47
1	SiO2†	86520.9	84184.6	[5347.5]	ug/L	11:15:08
2	Sc Radial	4539.5	4539.5	98.1	%	11:12:53
2	Y RADIAL	4783.3	4783.3	97.72	%	11:12:53
2	Al 396.153Radial†	5744.3	5877.1	[5000]	ug/L	11:12:53
2	Ca 317.933Radial†	2950.2	2993.7	[5000]	ug/L	11:13:13
2	K 766.490 Radial†	27350.5	24654.0	[5000]	ug/L	11:12:53
2	Mg 279.077 IEC†	152.7	154.1	[5000]	ug/L	11:13:13
2	Sr 421.552†	66796.4	68086.4	[500]	ug/L	11:12:53
2	Sc 361.383	883776.7	883776.7	101.19	%	11:14:15
2	Y 371.029	748804.6	748804.6	99.930	%	11:14:15
2	Ag 328.068†	115127.3	113277.2	[500]	ug/L	11:14:15
2	As 188.979†	1407.6	1422.5	[500]	ug/L	11:14:35
2	B 249.677†	23397.3	23886.5	[500]	ug/L	11:14:15
2	Ba 233.527†	68283.0	67458.3	[500]	ug/L	11:14:15
2	Be 313.107†	1490220.1	1477006.0	[500]	ug/L	11:14:15
2	Cd 226.502†	52771.6	52401.5	[500]	ug/L	11:14:15
2	Co 228.616†	26457.2	26244.0	[500]	ug/L	11:14:35
2	Cr 267.716†	49571.3	48895.8	[500]	ug/L	11:14:15
2	Cu 324.752†	176118.4	165935.4	[500]	ug/L	11:14:15
2	Mn 257.610†	479325.9	472360.5	[500]	ug/L	11:14:15
2	Mo 202.031†	7967.8	7847.1	[500]	ug/L	11:14:35
2	Ni 231.604†	22859.3	22473.2	[500]	ug/L	11:14:35
2	P 214.914†	5438.8	5122.0	[2500]	ug/L	11:14:35
2	Pb 220.353†	4803.9	4848.4	[500]	ug/L	11:14:35
2	S 181.975 Axial†	952.7	883.8	[1000]	ug/L	11:14:35
2	Sb 206.836†	1698.9	1632.6	[500]	ug/L	11:14:35

2	Se 196.026†	970.9	998.2	[500] ug/L	11:14:35
2	Si 251.611†	87193.6	85534.1	[2500] ug/L	11:14:15
2	Sn 189.927†	3370.3	3325.8	[500] ug/L	11:14:35
2	Ti 334.940†	313853.3	311901.2	[500] ug/L	11:14:15
2	Tl 190.801†	1810.9	1835.2	[500] ug/L	11:14:35
2	U 409.014†	13364.5	16115.3	[500] ug/L	11:14:15
2	V 292.402†	77087.3	77983.5	[500] ug/L	11:14:15
2	Zn 213.857†	62104.1	60517.8	[500] ug/L	11:14:15
2	SiO2†	86448.9	84779.5	[5347.5] ug/L	11:15:13
3	Sc Radial	4540.0	4540.0	98.1 %	11:13:18
3	Y RADIAL	4799.3	4799.3	98.05 %	11:13:18
3	Al 396.153Radial†	5775.4	5908.2	[5000] ug/L	11:13:18
3	Ca 317.933Radial†	2945.3	2988.4	[5000] ug/L	11:13:38
3	K 766.490 Radial†	27294.5	24594.4	[5000] ug/L	11:13:18
3	Mg 279.077 IEC†	153.5	154.9	[5000] ug/L	11:13:38
3	Sr 421.552†	66815.6	68099.9	[500] ug/L	11:13:18
3	Sc 361.383	910281.2	910281.2	104.23 %	11:14:42
3	Y 371.029	770360.4	770360.4	102.81 %	11:14:42
3	Ag 328.068†	115198.7	110033.1	[500] ug/L	11:14:42
3	As 188.979†	1401.4	1376.1	[500] ug/L	11:15:02
3	B 249.677†	23445.1	23259.2	[500] ug/L	11:14:42
3	Ba 233.527†	68372.5	65579.4	[500] ug/L	11:14:42
3	Be 313.107†	1491712.4	1435559.5	[500] ug/L	11:14:42
3	Cd 226.502†	52894.8	51001.3	[500] ug/L	11:14:42
3	Co 228.616†	26223.7	25258.8	[500] ug/L	11:15:02
3	Cr 267.716†	49460.7	47363.4	[500] ug/L	11:14:42
3	Cu 324.752†	176364.1	161103.6	[500] ug/L	11:14:42
3	Mn 257.610†	479902.8	459122.2	[500] ug/L	11:14:42
3	Mo 202.031†	7906.6	7559.1	[500] ug/L	11:15:02
3	Ni 231.604†	22673.2	21637.0	[500] ug/L	11:15:02
3	P 214.914†	5400.5	4928.7	[2500] ug/L	11:15:02
3	Pb 220.353†	4767.9	4675.7	[500] ug/L	11:15:02
3	S 181.975 Axial†	925.8	830.5	[1000] ug/L	11:15:02
3	Sb 206.836†	1679.8	1565.5	[500] ug/L	11:15:02
3	Se 196.026†	958.0	957.9	[500] ug/L	11:15:02
3	Si 251.611†	87364.3	83189.0	[2500] ug/L	11:14:42
3	Sn 189.927†	3329.9	3190.0	[500] ug/L	11:15:02
3	Ti 334.940†	313754.1	302775.5	[500] ug/L	11:14:42
3	Tl 190.801†	1787.4	1760.5	[500] ug/L	11:15:02
3	U 409.014†	13400.3	15765.1	[500] ug/L	11:14:42
3	V 292.402†	76981.8	75664.3	[500] ug/L	11:14:42
3	Zn 213.857†	62087.2	58714.6	[500] ug/L	11:14:42
3	SiO2†	89030.6	84769.1	[5347.5] ug/L	11:15:18

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	894924.8	13744.28	1.54%	102.47	%
Sc Radial	4531.5	14.34	0.32%	97.9	%
Y 371.029	757490.3	11370.84	1.50%	101.09	%
Y RADIAL	4774.3	30.52	0.64%	97.54	%
Ag 328.068†	112195.6	1872.82	1.67%	[500]	ug/L
Al 396.153Radial†	5935.9	76.46	1.29%	[5000]	ug/L
As 188.979†	1403.9	24.55	1.75%	[500]	ug/L
B 249.677†	23657.9	346.56	1.46%	[500]	ug/L
Ba 233.527†	66871.6	1120.67	1.68%	[500]	ug/L
Be 313.107†	1463946.0	24609.51	1.68%	[500]	ug/L
Ca 317.933Radial†	3000.3	16.32	0.54%	[5000]	ug/L
Cd 226.502†	51980.6	850.79	1.64%	[500]	ug/L
Co 228.616†	25817.3	505.71	1.96%	[500]	ug/L
Cr 267.716†	48394.8	893.35	1.85%	[500]	ug/L
Cu 324.752†	164445.4	2899.74	1.76%	[500]	ug/L
K 766.490 Radial†	24763.9	243.68	0.98%	[5000]	ug/L
Mg 279.077 IEC†	156.3	3.04	1.94%	[5000]	ug/L
Mn 257.610†	468239.3	7907.68	1.69%	[500]	ug/L
Mo 202.031†	7720.7	147.20	1.91%	[500]	ug/L
Ni 231.604†	22106.5	427.50	1.93%	[500]	ug/L
P 214.914†	5041.7	100.71	2.00%	[2500]	ug/L
Pb 220.353†	4774.3	88.90	1.86%	[500]	ug/L
S 181.975 Axial†	862.3	28.07	3.26%	[1000]	ug/L

Sb 206.836†	1603.8	34.59	2.16%	[500]	ug/L
Se 196.026†	982.1	21.35	2.17%	[500]	ug/L
Si 251.611†	84781.6	1379.93	1.63%	[2500]	ug/L
Sn 189.927†	3269.0	70.52	2.16%	[500]	ug/L
Sr 421.552†	68545.9	784.26	1.14%	[500]	ug/L
Ti 334.940†	308838.9	5251.15	1.70%	[500]	ug/L
Tl 190.801†	1796.6	37.42	2.08%	[500]	ug/L
U 409.014†	16002.5	205.65	1.29%	[500]	ug/L
V 292.402†	77190.9	1322.35	1.71%	[500]	ug/L
Zn 213.857†	59961.4	1081.84	1.80%	[500]	ug/L
SiO2†	84577.7	340.50	0.40%	[5347.5]	ug/L

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

Autosampler Location: 4
Date Collected: 1/7/2010 11:17:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	4502.5	4502.5	97.3	%	11:19:41
1	Y RADIAL	4714.2	4714.2	96.31	%	11:19:41
1	Al 396.153Radial†	11488.8	11830.0	[10000]	ug/L	11:19:21
1	Ca 317.933Radial†	5746.2	5892.4	[10000]	ug/L	11:19:41
1	Fe 238.204 Radial†	1051.8	1068.4	[10000]	ug/L	11:19:41
1	K 766.490 Radial†	51674.7	49885.9	[10000]	ug/L	11:19:21
1	Mg 279.077 IEC†	298.4	305.2	[10000]	ug/L	11:19:41
1	Na 589.592 Radial†	28497.5	31062.0	[10000]	ug/L	11:19:21
1	Sr 421.552†	133154.3	136855.0	[1000]	ug/L	11:19:21
1	Sc 361.383	860939.3	860939.3	98.580	%	11:20:44
1	Y 371.029	732914.2	732914.2	97.810	%	11:20:44
1	Ag 328.068†	228827.0	231632.7	[1000]	ug/L	11:20:44
1	As 188.979†	2782.4	2854.0	[1000]	ug/L	11:21:04
1	B 249.677†	47016.0	48458.8	[1000]	ug/L	11:20:44
1	Ba 233.527†	134387.8	136305.3	[1000]	ug/L	11:20:44
1	Be 313.107†	2877210.5	2923041.1	[1000]	ug/L	11:20:39
1	Cd 226.502†	103532.6	105277.1	[1000]	ug/L	11:20:44
1	Co 228.616†	52265.0	53117.2	[1000]	ug/L	11:20:44
1	Cr 267.716†	97534.1	98849.0	[1000]	ug/L	11:20:44
1	Cu 324.752†	340721.5	337526.4	[1000]	ug/L	11:20:44
1	Mn 257.610†	924111.3	936118.1	[1000]	ug/L	11:20:39
1	Mo 202.031†	15587.5	15785.4	[1000]	ug/L	11:21:04
1	Ni 231.604†	44843.8	45373.7	[1000]	ug/L	11:20:44
1	P 214.914†	10289.0	10184.6	[5000]	ug/L	11:21:04
1	Pb 220.353†	9329.3	9565.0	[1000]	ug/L	11:21:04
1	S 181.975 Axial†	1799.0	1767.2	[2000]	ug/L	11:21:04
1	Sb 206.836†	3320.3	3322.0	[1000]	ug/L	11:21:04
1	Se 196.026†	1890.7	1956.7	[1000]	ug/L	11:21:04
1	Si 251.611†	171875.4	173721.5	[5000]	ug/L	11:20:44
1	Sn 189.927†	6601.7	6692.1	[1000]	ug/L	11:21:04
1	Ti 334.940†	615414.3	626033.7	[1000]	ug/L	11:20:44
1	Tl 190.801†	3519.4	3615.8	[1000]	ug/L	11:21:04
1	U 409.014†	30541.0	33889.6	[1000]	ug/L	11:20:44
1	V 292.402†	154361.2	158391.4	[1000]	ug/L	11:20:44
1	Zn 213.857†	120274.7	121154.4	[1000]	ug/L	11:20:44
1	SiO2†	170151.6	171954.1	[10695]	ug/L	11:22:13
2	Sc Radial	4515.3	4515.3	97.6	%	11:20:06
2	Y RADIAL	4734.3	4734.3	96.72	%	11:20:06
2	Al 396.153Radial†	11454.5	11761.1	[10000]	ug/L	11:19:46
2	Ca 317.933Radial†	5751.6	5881.1	[10000]	ug/L	11:20:06
2	Fe 238.204 Radial†	1059.4	1073.1	[10000]	ug/L	11:20:06
2	K 766.490 Radial†	51379.1	49431.5	[10000]	ug/L	11:19:46
2	Mg 279.077 IEC†	298.3	304.2	[10000]	ug/L	11:20:06
2	Na 589.592 Radial†	28177.2	30650.2	[10000]	ug/L	11:19:46
2	Sr 421.552†	132208.5	135495.3	[1000]	ug/L	11:19:46
2	Sc 361.383	854441.2	854441.2	97.836	%	11:21:16
2	Y 371.029	726048.1	726048.1	96.893	%	11:21:16
2	Ag 328.068†	227553.5	232096.4	[1000]	ug/L	11:21:16
2	As 188.979†	2774.2	2867.1	[1000]	ug/L	11:21:36
2	B 249.677†	46735.6	48534.9	[1000]	ug/L	11:21:16
2	Ba 233.527†	133778.7	136719.5	[1000]	ug/L	11:21:16
2	Be 313.107†	2923939.4	2993000.4	[1000]	ug/L	11:21:10
2	Cd 226.502†	102949.4	105479.7	[1000]	ug/L	11:21:16
2	Co 228.616†	52127.5	53379.8	[1000]	ug/L	11:21:16
2	Cr 267.716†	97096.3	99153.9	[1000]	ug/L	11:21:16
2	Cu 324.752†	338393.6	337775.6	[1000]	ug/L	11:21:16
2	Mn 257.610†	938666.3	958124.4	[1000]	ug/L	11:21:10
2	Mo 202.031†	15655.3	15974.9	[1000]	ug/L	11:21:36
2	Ni 231.604†	44582.5	45452.6	[1000]	ug/L	11:21:16

2	P 214.914†	10310.3	10285.7	[5000] ug/L	11:21:36
2	Pb 220.353†	9366.8	9675.3	[1000] ug/L	11:21:36
2	S 181.975 Axial†	1810.5	1792.9	[2000] ug/L	11:21:36
2	Sb 206.836†	3320.3	3347.6	[1000] ug/L	11:21:36
2	Se 196.026†	1903.0	1983.9	[1000] ug/L	11:21:36
2	Si 251.611†	170992.6	174145.1	[5000] ug/L	11:21:16
2	Sn 189.927†	6628.6	6770.5	[1000] ug/L	11:21:36
2	Ti 334.940†	611788.9	627075.9	[1000] ug/L	11:21:16
2	Tl 190.801†	3553.6	3677.9	[1000] ug/L	11:21:36
2	U 409.014†	30621.0	34206.9	[1000] ug/L	11:21:16
2	V 292.402†	153540.2	158743.0	[1000] ug/L	11:21:16
2	Zn 213.857†	119432.1	121221.0	[1000] ug/L	11:21:16
2	SiO2†	171871.0	175024.3	[10695] ug/L	11:22:18
3	Sc Radial	4514.5	4514.5	97.5 %	11:20:31
3	Y RADIAL	4731.8	4731.8	96.67 %	11:20:31
3	Al 396.153Radial†	11296.6	11601.3	[10000] ug/L	11:20:11
3	Ca 317.933Radial†	5732.5	5862.6	[10000] ug/L	11:20:31
3	Fe 238.204 Radial†	1054.5	1068.2	[10000] ug/L	11:20:31
3	K 766.490 Radial†	50697.9	48742.5	[10000] ug/L	11:20:11
3	Mg 279.077 IEC†	296.1	302.0	[10000] ug/L	11:20:31
3	Na 589.592 Radial†	27716.3	30182.7	[10000] ug/L	11:20:11
3	Sr 421.552†	130630.1	133901.2	[1000] ug/L	11:20:11
3	Sc 361.383	849037.4	849037.4	97.217 %	11:21:47
3	Y 371.029	722399.3	722399.3	96.406 %	11:21:47
3	Ag 328.068†	225126.2	231079.8	[1000] ug/L	11:21:47
3	As 188.979†	2757.0	2867.4	[1000] ug/L	11:22:07
3	B 249.677†	46236.2	48325.2	[1000] ug/L	11:21:47
3	Ba 233.527†	132295.6	136064.3	[1000] ug/L	11:21:47
3	Be 313.107†	2929465.7	3017706.2	[1000] ug/L	11:21:42
3	Cd 226.502†	101889.3	105059.0	[1000] ug/L	11:21:47
3	Co 228.616†	51581.4	53157.1	[1000] ug/L	11:21:47
3	Cr 267.716†	96112.1	98773.2	[1000] ug/L	11:21:47
3	Cu 324.752†	334449.4	335919.8	[1000] ug/L	11:21:47
3	Mn 257.610†	940008.1	965610.9	[1000] ug/L	11:21:42
3	Mo 202.031†	15525.0	15942.7	[1000] ug/L	11:22:07
3	Ni 231.604†	44123.4	45270.3	[1000] ug/L	11:21:47
3	P 214.914†	10226.7	10266.8	[5000] ug/L	11:22:07
3	Pb 220.353†	9278.0	9644.9	[1000] ug/L	11:22:07
3	S 181.975 Axial†	1786.0	1779.4	[2000] ug/L	11:22:07
3	Sb 206.836†	3297.0	3345.2	[1000] ug/L	11:22:07
3	Se 196.026†	1868.8	1961.0	[1000] ug/L	11:22:07
3	Si 251.611†	169025.8	173234.4	[5000] ug/L	11:21:47
3	Sn 189.927†	6564.6	6747.8	[1000] ug/L	11:22:07
3	Ti 334.940†	605876.6	624974.1	[1000] ug/L	11:21:47
3	Tl 190.801†	3522.2	3668.7	[1000] ug/L	11:22:07
3	U 409.014†	29915.1	33680.0	[1000] ug/L	11:21:47
3	V 292.402†	152183.3	158346.1	[1000] ug/L	11:21:47
3	Zn 213.857†	118232.5	120764.0	[1000] ug/L	11:21:47
3	SiO2†	171445.5	175704.7	[10695] ug/L	11:22:23

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	854806.0	5959.31	0.70%	97.878	%
Sc Radial	4510.8	7.21	0.16%	97.5	%
Y 371.029	727120.5	5338.84	0.73%	97.036	%
Y RADIAL	4726.8	10.95	0.23%	96.57	%
Ag 328.068†	231603.0	508.92	0.22%	[1000]	ug/L
Al 396.153Radial†	11730.8	117.30	1.00%	[10000]	ug/L
As 188.979†	2862.8	7.68	0.27%	[1000]	ug/L
B 249.677†	48439.6	106.13	0.22%	[1000]	ug/L
Ba 233.527†	136363.0	331.39	0.24%	[1000]	ug/L
Be 313.107†	2977915.9	49102.19	1.65%	[1000]	ug/L
Ca 317.933Radial†	5878.7	15.06	0.26%	[10000]	ug/L
Cd 226.502†	105271.9	210.39	0.20%	[1000]	ug/L
Co 228.616†	53218.0	141.50	0.27%	[1000]	ug/L
Cr 267.716†	98925.4	201.55	0.20%	[1000]	ug/L
Cu 324.752†	337073.9	1007.23	0.30%	[1000]	ug/L
Fe 238.204 Radial†	1069.9	2.76	0.26%	[10000]	ug/L
K 766.490 Radial†	49353.3	575.72	1.17%	[10000]	ug/L

Mg 279.077 IEC†	303.8	1.66	0.55%	[10000] ug/L
Mn 257.610†	953284.5	15330.51	1.61%	[1000] ug/L
Mo 202.031†	15901.0	101.40	0.64%	[1000] ug/L
Na 589.592 Radial†	30631.6	439.91	1.44%	[10000] ug/L
Ni 231.604†	45365.5	91.41	0.20%	[1000] ug/L
P 214.914†	10245.7	53.76	0.52%	[5000] ug/L
Pb 220.353†	9628.4	56.93	0.59%	[1000] ug/L
S 181.975 Axial†	1779.8	12.83	0.72%	[2000] ug/L
Sb 206.836†	3338.2	14.16	0.42%	[1000] ug/L
Se 196.026†	1967.2	14.60	0.74%	[1000] ug/L
Si 251.611†	173700.3	455.72	0.26%	[5000] ug/L
Sn 189.927†	6736.8	40.35	0.60%	[1000] ug/L
Sr 421.552†	135417.2	1478.47	1.09%	[1000] ug/L
Ti 334.940†	626027.9	1050.88	0.17%	[1000] ug/L
Tl 190.801†	3654.1	33.50	0.92%	[1000] ug/L
U 409.014†	33925.5	265.28	0.78%	[1000] ug/L
V 292.402†	158493.5	217.25	0.14%	[1000] ug/L
Zn 213.857†	121046.5	246.84	0.20%	[1000] ug/L
SiO2†	174227.7	1998.14	1.15%	[10695] ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 1/7/2010 11:24:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	4554.3	4554.3	98.4	%	11:26:48
1	Y RADIAL	4800.1	4800.1	98.06	%	11:26:48
1	Al 396.153Radial†	56625.5	57563.0	[50000]	ug/L	11:26:28
1	Ca 317.933Radial†	28268.1	28711.7	[50000]	ug/L	11:26:28
1	Fe 238.204 Radial†	2042.4	2062.7	[20000]	ug/L	11:26:48
1	Mg 279.077 IEC†	1440.4	1462.2	[50000]	ug/L	11:26:48
1	Na 589.592 Radial†	54968.5	57628.3	[20000]	ug/L	11:26:28
1	Sc 361.383	883070.5	883070.5	101.11	%	11:27:45
1	Y 371.029	745063.9	745063.9	99.431	%	11:27:45
2	Sc Radial	4487.7	4487.7	97.0	%	11:27:13
2	Y RADIAL	4733.3	4733.3	96.70	%	11:27:13
2	Al 396.153Radial†	56753.2	58548.7	[50000]	ug/L	11:26:53
2	Ca 317.933Radial†	28292.1	29162.8	[50000]	ug/L	11:26:53
2	Fe 238.204 Radial†	2030.0	2080.7	[20000]	ug/L	11:27:13
2	Mg 279.077 IEC†	1422.8	1465.8	[50000]	ug/L	11:27:13
2	Na 589.592 Radial†	54803.6	58287.3	[20000]	ug/L	11:26:53
2	Sc 361.383	861070.7	861070.7	98.595	%	11:27:51
2	Y 371.029	726473.7	726473.7	96.950	%	11:27:51
3	Sc Radial	4532.6	4532.6	97.9	%	11:27:38
3	Y RADIAL	4777.3	4777.3	97.60	%	11:27:38
3	Al 396.153Radial†	56875.9	58093.8	[50000]	ug/L	11:27:18
3	Ca 317.933Radial†	28315.9	28897.9	[50000]	ug/L	11:27:18
3	Fe 238.204 Radial†	2041.5	2071.8	[20000]	ug/L	11:27:38
3	Mg 279.077 IEC†	1436.4	1465.1	[50000]	ug/L	11:27:38
3	Na 589.592 Radial†	54885.5	57810.6	[20000]	ug/L	11:27:18
3	Sc 361.383	864117.6	864117.6	98.944	%	11:27:56
3	Y 371.029	729013.9	729013.9	97.289	%	11:27:56

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	869419.6	11919.78	1.37%	99.551	%
Sc Radial	4524.8	33.97	0.75%	97.8	%
Y 371.029	733517.2	10080.12	1.37%	97.890	%
Y RADIAL	4770.2	33.94	0.71%	97.45	%
Al 396.153Radial†	58068.5	493.33	0.85%	[50000]	ug/L
Ca 317.933Radial†	28924.1	226.69	0.78%	[50000]	ug/L
Fe 238.204 Radial†	2071.8	9.00	0.43%	[20000]	ug/L
Mg 279.077 IEC†	1464.4	1.90	0.13%	[50000]	ug/L
Na 589.592 Radial†	57908.7	340.25	0.59%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	230.1	0.00000	0.999920	
Al 396.153Radial	3	Lin Thru 0	0.0	1.162	0.00000	0.999996	
As 188.979	3	Lin Thru 0	0.0	2.851	0.00000	0.999969	
B 249.677	3	Lin Thru 0	0.0	48.20	0.00000	0.999949	
Ba 233.527	3	Lin Thru 0	0.0	135.8	0.00000	0.999969	
Be 313.107	3	Lin Thru 0	0.0	2967	0.00000	0.999975	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5790	0.00000	0.999989	
Cd 226.502	3	Lin Thru 0	0.0	105.0	0.00000	0.999983	
Co 228.616	3	Lin Thru 0	0.0	52.89	0.00000	0.999927	
Cr 267.716	3	Lin Thru 0	0.0	98.48	0.00000	0.999961	
Cu 324.752	3	Lin Thru 0	0.0	335.3	0.00000	0.999946	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1043	0.00000	0.999915	
K 766.490 Radial	3	Lin Thru 0	0.0	4.937	0.00000	0.999990	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0293	0.00000	0.999954
Mn 257.610	3	Lin Thru 0	0.0	949.9	0.00000	0.999975
Mo 202.031	3	Lin Thru 0	0.0	15.81	0.00000	0.999931
Na 589.592 Radia	2	Lin Thru 0	0.0	2.929	0.00000	0.999738
Ni 231.604	3	Lin Thru 0	0.0	45.13	0.00000	0.999947
P 214.914	3	Lin Thru 0	0.0	2.042	0.00000	0.999976
Pb 220.353	3	Lin Thru 0	0.0	9.612	0.00000	0.999994
S 181.975 Axial	3	Lin Thru 0	0.0	0.8839	0.00000	0.999903
Sb 206.836	3	Lin Thru 0	0.0	3.310	0.00000	0.999856
Se 196.026	3	Lin Thru 0	0.0	1.966	0.00000	0.999997
Si 251.611	3	Lin Thru 0	0.0	34.56	0.00000	0.999950
Sn 189.927	3	Lin Thru 0	0.0	6.696	0.00000	0.999928
Sr 421.552	3	Lin Thru 0	0.0	135.7	0.00000	0.999986
Ti 334.940	3	Lin Thru 0	0.0	624.3	0.00000	0.999985
Tl 190.801	3	Lin Thru 0	0.0	3.641	0.00000	0.999976
U 409.014	3	Lin Thru 0	0.0	33.56	0.00000	0.999726
V 292.402	3	Lin Thru 0	0.0	157.6	0.00000	0.999942
Zn 213.857	3	Lin Thru 0	0.0	120.8	0.00000	0.999991
SiO2	3	Lin Thru 0	0.0	16.19	0.00000	0.999928

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

Autosampler Location: 9
Date Collected: 1/7/2010 11:30:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4721.0	4721.0	102	%			11:32:00
1	Y RADIAL	4975.1	4975.1	101.6	%			11:32:00
1	Al 396.153Radial†	5968.8	5872.1	5030.3	ug/L	5030.3	ppb	11:32:00
1	Ca 317.933Radial†	2877.9	2807.3	4848.1	ug/L	4848.1	ppb	11:32:20
1	Fe 238.204 Radial†	528.9	505.7	4865.8	ug/L	4865.8	ppb	11:32:20
1	K 766.490 Radial†	15428.4	11895.2	2404.2	ug/L	2404.2	ppb	11:32:00
1	Mg 279.077 IEC†	156.5	151.9	5183.3	ug/L	5183.3	ppb	11:32:20
1	Na 589.592 Radial†	5567.0	7227.4	2467.5	ug/L	2467.5	ppb	11:32:00
1	Sr 421.552†	69303.1	67926.7	500.41	ug/L	500.41	ppb	11:32:00
1	Sc 361.383	888226.6	888226.6	101.70	%			11:33:18
1	Y 371.029	754365.4	754365.4	100.67	%			11:33:18
1	Ag 328.068†	59850.7	58356.8	256.69	ug/L	256.69	ppb	11:33:18
1	As 188.979†	1341.6	1350.6	477.93	ug/L	477.93	ppb	11:33:38
1	B 249.677†	24239.4	24598.7	508.46	ug/L	508.46	ppb	11:33:18
1	Ba 233.527†	69568.0	68383.7	504.73	ug/L	504.73	ppb	11:33:18
1	Be 313.107†	769791.7	761272.3	257.53	ug/L	257.53	ppb	11:33:18
1	Cd 226.502†	52552.2	51924.5	494.44	ug/L	494.44	ppb	11:33:18
1	Co 228.616†	26718.3	26369.7	498.87	ug/L	498.87	ppb	11:33:38
1	Cr 267.716†	48427.0	47525.3	483.38	ug/L	483.38	ppb	11:33:18
1	Cu 324.752†	178572.5	167476.5	499.69	ug/L	499.69	ppb	11:33:18
1	Mn 257.610†	490228.1	480707.0	506.47	ug/L	506.47	ppb	11:33:18
1	Mo 202.031†	8612.1	8441.0	534.49	ug/L	534.49	ppb	11:33:38
1	Ni 231.604†	22820.5	22322.0	494.32	ug/L	494.32	ppb	11:33:38
1	P 214.914†	5438.9	5095.2	2420.1	ug/L	2420.1	ppb	11:33:38
1	Pb 220.353†	4758.2	4779.8	498.93	ug/L	498.93	ppb	11:33:38
1	S 181.975 Axial†	2270.7	2175.0	2459.6	ug/L	2459.6	ppb	11:33:38
1	Sb 206.836†	1713.0	1638.1	503.88	ug/L	503.88	ppb	11:33:38
1	Se 196.026†	5034.7	4989.1	2554.8	ug/L	2554.8	ppb	11:33:38
1	Si 251.611†	167991.8	164546.7	4748.7	ug/L	4748.7	ppb	11:33:18
1	Sn 189.927†	3623.0	3557.6	531.87	ug/L	531.87	ppb	11:33:38
1	Ti 334.940†	313777.8	310273.2	496.86	ug/L	496.86	ppb	11:33:18
1	Tl 190.801†	1895.2	1909.1	527.51	ug/L	527.51	ppb	11:33:38
1	U 409.014†	13995.2	16669.2	495.19	ug/L	495.19	ppb	11:33:18
1	V 292.402†	78527.9	79018.4	508.52	ug/L	508.52	ppb	11:33:18
1	Zn 213.857†	62907.9	61000.7	500.78	ug/L	500.78	ppb	11:33:18
1	SiO2†	166743.5	163300.6	10060	ug/L	10060	ppb	11:34:36
2	Sc Radial	4631.9	4631.9	100	%			11:32:25
2	Y RADIAL	4861.7	4861.7	99.32	%			11:32:25
2	Al 396.153Radial†	5848.8	5864.7	5024.2	ug/L	5024.2	ppb	11:32:25
2	Ca 317.933Radial†	2896.9	2880.4	4974.5	ug/L	4974.5	ppb	11:32:45
2	Fe 238.204 Radial†	528.1	515.0	4954.5	ug/L	4954.5	ppb	11:32:45
2	K 766.490 Radial†	15152.8	11910.8	2407.3	ug/L	2407.3	ppb	11:32:25
2	Mg 279.077 IEC†	155.8	154.2	5259.4	ug/L	5259.4	ppb	11:32:45
2	Na 589.592 Radial†	5254.6	7020.2	2396.8	ug/L	2396.8	ppb	11:32:25
2	Sr 421.552†	67756.1	67687.8	498.65	ug/L	498.65	ppb	11:32:25
2	Sc 361.383	896827.3	896827.3	102.69	%			11:33:44
2	Y 371.029	761131.6	761131.6	101.58	%			11:33:44
2	Ag 328.068†	60261.3	58192.3	256.01	ug/L	256.01	ppb	11:33:44
2	As 188.979†	1329.2	1325.9	469.27	ug/L	469.27	ppb	11:34:04
2	B 249.677†	24580.7	24702.5	510.61	ug/L	510.61	ppb	11:33:44
2	Ba 233.527†	70219.1	68361.7	504.57	ug/L	504.57	ppb	11:33:44
2	Be 313.107†	776063.6	760121.2	257.14	ug/L	257.14	ppb	11:33:44
2	Cd 226.502†	53003.5	51868.5	493.90	ug/L	493.90	ppb	11:33:44
2	Co 228.616†	26730.8	26130.0	494.33	ug/L	494.33	ppb	11:34:04
2	Cr 267.716†	48834.5	47465.4	482.77	ug/L	482.77	ppb	11:33:44
2	Cu 324.752†	180522.9	167692.0	500.34	ug/L	500.34	ppb	11:33:44
2	Mn 257.610†	494903.8	480637.6	506.40	ug/L	506.40	ppb	11:33:44
2	Mo 202.031†	8612.0	8359.8	529.36	ug/L	529.36	ppb	11:34:04
2	Ni 231.604†	22793.5	22080.4	488.97	ug/L	488.97	ppb	11:34:04

2	P 214.914†	5446.2	5051.0	2398.1 ug/L	2398.1 ppb	11:34:04
2	Pb 220.353†	4767.1	4743.6	495.14 ug/L	495.14 ppb	11:34:04
2	S 181.975 Axial†	2275.4	2158.1	2440.6 ug/L	2440.6 ppb	11:34:04
2	Sb 206.836†	1708.8	1617.9	497.55 ug/L	497.55 ppb	11:34:04
2	Se 196.026†	5045.6	4952.2	2536.3 ug/L	2536.3 ppb	11:34:04
2	Si 251.611†	169657.0	164584.2	4749.9 ug/L	4749.9 ppb	11:33:44
2	Sn 189.927†	3606.5	3507.3	524.38 ug/L	524.38 ppb	11:34:04
2	Ti 334.940†	316915.0	310369.5	497.02 ug/L	497.02 ppb	11:33:44
2	Tl 190.801†	1903.0	1898.8	524.71 ug/L	524.71 ppb	11:34:04
2	U 409.014†	13937.3	16480.9	489.57 ug/L	489.57 ppb	11:33:44
2	V 292.402†	79374.0	79101.9	508.96 ug/L	508.96 ppb	11:33:44
2	Zn 213.857†	63492.5	60976.8	500.61 ug/L	500.61 ppb	11:33:44
2	SiO2†	170964.9	165839.2	10217 ug/L	10217 ppb	11:34:41
3	Sc Radial	4586.9	4586.9	99.1 %		11:32:51
3	Y RADIAL	4847.7	4847.7	99.04 %		11:32:51
3	Al 396.153Radial†	5835.1	5908.2	5061.1 ug/L	5061.1 ppb	11:32:51
3	Ca 317.933Radial†	2926.7	2939.0	5075.5 ug/L	5075.5 ppb	11:33:11
3	Fe 238.204 Radial†	533.7	525.8	5058.7 ug/L	5058.7 ppb	11:33:11
3	K 766.490 Radial†	15216.2	12123.2	2450.4 ug/L	2450.4 ppb	11:32:51
3	Mg 279.077 IEC†	160.7	160.6	5479.4 ug/L	5479.4 ppb	11:33:11
3	Na 589.592 Radial†	5276.0	7093.3	2421.8 ug/L	2421.8 ppb	11:32:51
3	Sr 421.552†	67792.8	68388.8	503.81 ug/L	503.81 ppb	11:32:51
3	Sc 361.383	876511.8	876511.8	100.36 %		11:34:10
3	Y 371.029	744788.1	744788.1	99.394 %		11:34:10
3	Ag 328.068†	58968.7	58264.6	256.36 ug/L	256.36 ppb	11:34:10
3	As 188.979†	1336.2	1362.9	482.26 ug/L	482.26 ppb	11:34:30
3	B 249.677†	24004.7	24683.4	510.18 ug/L	510.18 ppb	11:34:10
3	Ba 233.527†	68744.6	68477.4	505.43 ug/L	505.43 ppb	11:34:10
3	Be 313.107†	760542.2	762172.3	257.84 ug/L	257.84 ppb	11:34:10
3	Cd 226.502†	51985.6	52050.6	495.63 ug/L	495.63 ppb	11:34:10
3	Co 228.616†	26675.6	26678.3	504.72 ug/L	504.72 ppb	11:34:30
3	Cr 267.716†	47929.7	47666.1	484.82 ug/L	484.82 ppb	11:34:10
3	Cu 324.752†	176145.4	167404.8	499.49 ug/L	499.49 ppb	11:34:10
3	Mn 257.610†	484502.9	481444.6	507.26 ug/L	507.26 ppb	11:34:10
3	Mo 202.031†	8598.2	8540.4	540.79 ug/L	540.79 ppb	11:34:30
3	Ni 231.604†	22796.0	22597.4	500.42 ug/L	500.42 ppb	11:34:30
3	P 214.914†	5432.9	5160.6	2452.1 ug/L	2452.1 ppb	11:34:30
3	Pb 220.353†	4748.6	4832.7	504.44 ug/L	504.44 ppb	11:34:30
3	S 181.975 Axial†	2272.2	2206.3	2495.1 ug/L	2495.1 ppb	11:34:30
3	Sb 206.836†	1699.0	1646.7	506.64 ug/L	506.64 ppb	11:34:30
3	Se 196.026†	5052.6	5073.0	2598.2 ug/L	2598.2 ppb	11:34:30
3	Si 251.611†	166043.9	164813.4	4756.3 ug/L	4756.3 ppb	11:34:10
3	Sn 189.927†	3600.6	3582.9	535.67 ug/L	535.67 ppb	11:34:30
3	Ti 334.940†	310127.7	310759.8	497.65 ug/L	497.65 ppb	11:34:10
3	Tl 190.801†	1888.8	1927.7	532.59 ug/L	532.59 ppb	11:34:30
3	U 409.014†	13657.6	16516.8	490.62 ug/L	490.62 ppb	11:34:10
3	V 292.402†	77755.0	79280.2	510.24 ug/L	510.24 ppb	11:34:10
3	Zn 213.857†	62222.1	61144.0	501.91 ug/L	501.91 ppb	11:34:10
3	SiO2†	168340.4	167083.0	10293 ug/L	10293 ppb	11:34:46

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	887188.6	101.59	%	1.168				1.15%
Sc Radial	4646.6	100	%	1.5				1.47%
Y 371.029	753428.4	100.55	%	1.096				1.09%
Y RADIAL	4894.8	100.00	%	1.428				1.43%
Ag 328.068†	58271.2	256.36	ug/L	0.340	256.36	ppb	0.340	0.13%
QC value within limits for Ag 328.068 Recovery = 102.54%								
Al 396.153Radial†	5881.7	5038.5	ug/L	19.80	5038.5	ppb	19.80	0.39%
QC value within limits for Al 396.153Radial Recovery = 100.77%								
As 188.979†	1346.5	476.49	ug/L	6.614	476.49	ppb	6.614	1.39%
QC value within limits for As 188.979 Recovery = 95.30%								
B 249.677†	24661.5	509.75	ug/L	1.138	509.75	ppb	1.138	0.22%
QC value within limits for B 249.677 Recovery = 101.95%								
Ba 233.527†	68407.6	504.91	ug/L	0.456	504.91	ppb	0.456	0.09%
QC value within limits for Ba 233.527 Recovery = 100.98%								
Be 313.107†	761188.6	257.50	ug/L	0.347	257.50	ppb	0.347	0.13%
QC value within limits for Be 313.107 Recovery = 103.00%								
Ca 317.933Radial†	2875.6	4966.0	ug/L	113.96	4966.0	ppb	113.96	2.29%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.32%
Cd 226.502†          51947.9      494.66 ug/L         0.885      494.66 ppb          0.885   0.18%
   QC value within limits for Cd 226.502  Recovery = 98.93%
Co 228.616†          26392.7      499.31 ug/L         5.210      499.31 ppb          5.210   1.04%
   QC value within limits for Co 228.616  Recovery = 99.86%
Cr 267.716†          47552.3      483.66 ug/L         1.049      483.66 ppb          1.049   0.22%
   QC value within limits for Cr 267.716  Recovery = 96.73%
Cu 324.752†         167524.4      499.84 ug/L         0.444      499.84 ppb          0.444   0.09%
   QC value within limits for Cu 324.752  Recovery = 99.97%
Fe 238.204 Radial†     515.5      4959.7 ug/L         96.53      4959.7 ppb          96.53   1.95%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.19%
K 766.490 Radial†    11976.4      2420.6 ug/L         25.81      2420.6 ppb          25.81   1.07%
   QC value within limits for K 766.490 Radial  Recovery = 96.82%
Mg 279.077 IEC†        155.6      5307.4 ug/L        153.75      5307.4 ppb         153.75   2.90%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.15%
Mn 257.610†         480929.7      506.71 ug/L         0.476      506.71 ppb          0.476   0.09%
   QC value within limits for Mn 257.610  Recovery = 101.34%
Mo 202.031†          8447.1      534.88 ug/L         5.729      534.88 ppb          5.729   1.07%
   QC value within limits for Mo 202.031  Recovery = 106.98%
Na 589.592 Radial†   7113.6      2428.7 ug/L         35.87      2428.7 ppb          35.87   1.48%
   QC value within limits for Na 589.592 Radial  Recovery = 97.15%
Ni 231.604†          22333.3      494.57 ug/L         5.728      494.57 ppb          5.728   1.16%
   QC value within limits for Ni 231.604  Recovery = 98.91%
P 214.914†           5102.3      2423.4 ug/L         27.12      2423.4 ppb          27.12   1.12%
   QC value within limits for P 214.914  Recovery = 96.94%
Pb 220.353†          4785.4      499.51 ug/L         4.677      499.51 ppb          4.677   0.94%
   QC value within limits for Pb 220.353  Recovery = 99.90%
S 181.975 Axial†     2179.8      2465.1 ug/L         27.64      2465.1 ppb          27.64   1.12%
   QC value within limits for S 181.975 Axial  Recovery = 98.60%
Sb 206.836†          1634.3      502.69 ug/L         4.664      502.69 ppb          4.664   0.93%
   QC value within limits for Sb 206.836  Recovery = 100.54%
Se 196.026†          5004.8      2563.1 ug/L         31.73      2563.1 ppb          31.73   1.24%
   QC value within limits for Se 196.026  Recovery = 102.52%
Si 251.611†         164648.1      4751.7 ug/L          4.07      4751.7 ppb           4.07   0.09%
   QC value within limits for Si 251.611  Recovery = 95.03%
Sn 189.927†          3549.2      530.64 ug/L         5.748      530.64 ppb          5.748   1.08%
   QC value within limits for Sn 189.927  Recovery = 106.13%
Sr 421.552†          68001.1      500.95 ug/L         2.625      500.95 ppb          2.625   0.52%
   QC value within limits for Sr 421.552  Recovery = 100.19%
Ti 334.940†         310467.5      497.18 ug/L         0.419      497.18 ppb          0.419   0.08%
   QC value within limits for Ti 334.940  Recovery = 99.44%
Tl 190.801†          1911.9      528.27 ug/L         3.994      528.27 ppb          3.994   0.76%
   QC value within limits for Tl 190.801  Recovery = 105.65%
U 409.014†           16555.6      491.80 ug/L         2.988      491.80 ppb          2.988   0.61%
   QC value within limits for U 409.014  Recovery = 98.36%
V 292.402†           79133.5      509.24 ug/L         0.894      509.24 ppb          0.894   0.18%
   QC value within limits for V 292.402  Recovery = 101.85%
Zn 213.857†          61040.5      501.10 ug/L         0.706      501.10 ppb          0.706   0.14%
   QC value within limits for Zn 213.857  Recovery = 100.22%
SiO2†               165407.6       10190 ug/L         119.0       10190 ppb          119.0   1.17%
   QC value within limits for SiO2  Recovery = 95.28%
All analyte(s) passed QC.
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Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 1/7/2010 11:36:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4566.0	4566.0	98.7	%			11:38:50
1	Y RADIAL	4848.9	4848.9	99.06	%			11:38:50
1	Al 396.153Radial†	4.1	25.0	21.481	ug/L	21.481	ppb	11:38:50
1	Ca 317.933Radial†	8.5	-5.4	-9.2794	ug/L	-9.2794	ppb	11:39:10
1	Fe 238.204 Radial†	13.0	0.5	4.3310	ug/L	4.3310	ppb	11:39:10
1	K 766.490 Radial†	3206.2	20.4	4.1462	ug/L	4.1462	ppb	11:38:50
1	Mg 279.077 IEC†	1.8	0.3	9.9254	ug/L	9.9254	ppb	11:39:10
1	Na 589.592 Radial†	-1754.8	-8.6	-2.9235	ug/L	-2.9235	ppb	11:38:50
1	Sr 421.552†	0.7	-10.6	-0.0780	ug/L	-0.0780	ppb	11:38:50
1	Sc 361.383	842859.9	842859.9	96.510	%			11:40:07
1	Y 371.029	735953.7	735953.7	98.215	%			11:40:07
1	Ag 328.068†	504.5	31.8	0.1405	ug/L	0.1405	ppb	11:40:07
1	As 188.979†	-30.9	-0.5	-0.1795	ug/L	-0.1795	ppb	11:40:27
1	B 249.677†	-494.0	253.6	5.2619	ug/L	5.2619	ppb	11:40:07
1	Ba 233.527†	7.5	-10.8	-0.0810	ug/L	-0.0810	ppb	11:40:27
1	Be 313.107†	-4308.3	-84.0	-0.0288	ug/L	-0.0288	ppb	11:40:07
1	Cd 226.502†	-237.2	7.2	0.0681	ug/L	0.0681	ppb	11:40:27
1	Co 228.616†	-94.3	1.5	0.0294	ug/L	0.0294	ppb	11:40:27
1	Cr 267.716†	90.8	3.9	0.0393	ug/L	0.0393	ppb	11:40:07
1	Cu 324.752†	8099.7	289.0	0.8620	ug/L	0.8620	ppb	11:40:07
1	Mn 257.610†	1170.6	-93.4	-0.0980	ug/L	-0.0980	ppb	11:40:07
1	Mo 202.031†	28.2	2.5	0.1591	ug/L	0.1591	ppb	11:40:27
1	Ni 231.604†	129.8	18.3	0.4055	ug/L	0.4055	ppb	11:40:27
1	P 214.914†	232.7	-11.5	-5.7811	ug/L	-5.7811	ppb	11:40:27
1	Pb 220.353†	-89.7	8.4	0.8761	ug/L	0.8761	ppb	11:40:27
1	S 181.975 Axial†	66.4	11.1	12.543	ug/L	12.543	ppb	11:40:27
1	Sb 206.836†	41.3	-3.4	-1.0322	ug/L	-1.0322	ppb	11:40:27
1	Se 196.026†	-43.1	-5.9	-2.9690	ug/L	-2.9690	ppb	11:40:27
1	Si 251.611†	679.8	74.3	2.1485	ug/L	2.1485	ppb	11:40:27
1	Sn 189.927†	-0.1	-4.8	-0.7237	ug/L	-0.7237	ppb	11:40:27
1	Ti 334.940†	-1836.7	-149.7	-0.2387	ug/L	-0.2387	ppb	11:40:07
1	Tl 190.801†	-46.1	-2.1	-0.5875	ug/L	-0.5875	ppb	11:40:27
1	U 409.014†	-2916.3	-113.2	-3.3754	ug/L	-3.3754	ppb	11:40:07
1	V 292.402†	-1834.7	-94.7	-0.6051	ug/L	-0.6051	ppb	11:40:07
1	Zn 213.857†	860.1	38.2	0.3117	ug/L	0.3117	ppb	11:40:27
1	SiO2†	708.1	85.0	5.2474	ug/L	5.2474	ppb	11:41:23
2	Sc Radial	4783.5	4783.5	103	%			11:39:15
2	Y RADIAL	5055.9	5055.9	103.3	%			11:39:15
2	Al 396.153Radial†	41.6	61.1	52.581	ug/L	52.581	ppb	11:39:15
2	Ca 317.933Radial†	9.1	-5.2	-8.9326	ug/L	-8.9326	ppb	11:39:35
2	Fe 238.204 Radial†	11.5	-1.6	-15.279	ug/L	-15.279	ppb	11:39:35
2	K 766.490 Radial†	3298.5	-38.0	-7.7177	ug/L	-7.7177	ppb	11:39:15
2	Mg 279.077 IEC†	-0.3	-1.8	-61.842	ug/L	-61.842	ppb	11:39:35
2	Na 589.592 Radial†	-1648.2	175.4	59.876	ug/L	59.876	ppb	11:39:15
2	Sr 421.552†	12.0	0.3	0.0025	ug/L	0.0025	ppb	11:39:15
2	Sc 361.383	849394.9	849394.9	97.258	%			11:40:32
2	Y 371.029	744334.1	744334.1	99.334	%			11:40:32
2	Ag 328.068†	491.6	14.6	0.0586	ug/L	0.0586	ppb	11:40:32
2	As 188.979†	-27.8	2.9	0.9974	ug/L	0.9974	ppb	11:40:52
2	B 249.677†	-430.6	322.7	6.6975	ug/L	6.6975	ppb	11:40:32
2	Ba 233.527†	5.9	-12.5	-0.0916	ug/L	-0.0916	ppb	11:40:52
2	Be 313.107†	-4412.2	-156.5	-0.0531	ug/L	-0.0531	ppb	11:40:32
2	Cd 226.502†	-240.6	5.6	0.0550	ug/L	0.0550	ppb	11:40:52
2	Co 228.616†	-88.8	7.9	0.1507	ug/L	0.1507	ppb	11:40:52
2	Cr 267.716†	89.3	1.5	0.0156	ug/L	0.0156	ppb	11:40:32
2	Cu 324.752†	8203.4	331.0	0.9863	ug/L	0.9863	ppb	11:40:32
2	Mn 257.610†	1518.8	255.3	0.2684	ug/L	0.2684	ppb	11:40:32
2	Mo 202.031†	35.6	9.9	0.6250	ug/L	0.6250	ppb	11:40:52
2	Ni 231.604†	121.6	8.9	0.1971	ug/L	0.1971	ppb	11:40:52

2	P 214.914†	250.1	4.6	2.0947 ug/L	2.0947 ppb	11:40:52
2	Pb 220.353†	-111.4	-13.2	-1.3630 ug/L	-1.3630 ppb	11:40:52
2	S 181.975 Axial†	59.8	3.8	4.3442 ug/L	4.3442 ppb	11:40:52
2	Sb 206.836†	37.5	-7.6	-2.2894 ug/L	-2.2894 ppb	11:40:52
2	Se 196.026†	-29.7	8.3	4.1652 ug/L	4.1652 ppb	11:40:52
2	Si 251.611†	674.1	63.0	1.8173 ug/L	1.8173 ppb	11:40:52
2	Sn 189.927†	1.3	-3.4	-0.5080 ug/L	-0.5080 ppb	11:40:52
2	Ti 334.940†	-1817.7	-115.5	-0.1859 ug/L	-0.1859 ppb	11:40:32
2	Tl 190.801†	-52.6	-8.4	-2.3037 ug/L	-2.3037 ppb	11:40:52
2	U 409.014†	-2804.6	24.9	0.7431 ug/L	0.7431 ppb	11:40:32
2	V 292.402†	-1719.6	38.3	0.2543 ug/L	0.2543 ppb	11:40:32
2	Zn 213.857†	834.0	4.4	0.0367 ug/L	0.0367 ppb	11:40:52
2	SiO2†	683.8	54.4	3.3456 ug/L	3.3456 ppb	11:41:28
3	Sc Radial	4507.0	4507.0	97.4 %		11:39:40
3	Y RADIAL	4794.4	4794.4	97.95 %		11:39:40
3	Al 396.153Radial†	-24.2	-4.0	-3.4559 ug/L	-3.4559 ppb	11:39:40
3	Ca 317.933Radial†	10.2	-3.5	-6.0539 ug/L	-6.0539 ppb	11:40:00
3	Fe 238.204 Radial†	13.4	1.0	9.7076 ug/L	9.7076 ppb	11:40:00
3	K 766.490 Radial†	3320.0	179.8	36.439 ug/L	36.439 ppb	11:39:40
3	Mg 279.077 IEC†	1.1	-0.4	-12.670 ug/L	-12.670 ppb	11:40:00
3	Na 589.592 Radial†	-1765.8	-43.2	-14.732 ug/L	-14.732 ppb	11:39:40
3	Sr 421.552†	-22.7	-34.6	-0.2548 ug/L	-0.2548 ppb	11:39:40
3	Sc 361.383	853130.5	853130.5	97.686 %		11:40:58
3	Y 371.029	748510.4	748510.4	99.891 %		11:40:58
3	Ag 328.068†	473.0	-6.7	-0.0277 ug/L	-0.0277 ppb	11:40:58
3	As 188.979†	-34.4	-3.7	-1.3092 ug/L	-1.3092 ppb	11:41:18
3	B 249.677†	-463.5	291.0	6.0352 ug/L	6.0352 ppb	11:40:58
3	Ba 233.527†	15.4	-2.8	-0.0207 ug/L	-0.0207 ppb	11:41:18
3	Be 313.107†	-4342.4	-65.2	-0.0223 ug/L	-0.0223 ppb	11:40:58
3	Cd 226.502†	-236.5	10.8	0.1022 ug/L	0.1022 ppb	11:41:18
3	Co 228.616†	-94.0	2.9	0.0566 ug/L	0.0566 ppb	11:41:18
3	Cr 267.716†	97.5	9.6	0.0966 ug/L	0.0966 ppb	11:40:58
3	Cu 324.752†	8143.9	233.1	0.6958 ug/L	0.6958 ppb	11:40:58
3	Mn 257.610†	1118.8	-161.0	-0.1683 ug/L	-0.1683 ppb	11:40:58
3	Mo 202.031†	31.4	5.4	0.3440 ug/L	0.3440 ppb	11:41:18
3	Ni 231.604†	116.9	3.5	0.0772 ug/L	0.0772 ppb	11:41:18
3	P 214.914†	238.1	-8.8	-4.4627 ug/L	-4.4627 ppb	11:41:18
3	Pb 220.353†	-115.6	-17.0	-1.7708 ug/L	-1.7708 ppb	11:41:18
3	S 181.975 Axial†	58.9	2.6	2.9451 ug/L	2.9451 ppb	11:41:18
3	Sb 206.836†	44.9	-0.2	-0.0712 ug/L	-0.0712 ppb	11:41:18
3	Se 196.026†	-31.5	6.5	3.3180 ug/L	3.3180 ppb	11:41:18
3	Si 251.611†	627.4	12.2	0.3384 ug/L	0.3384 ppb	11:41:18
3	Sn 189.927†	-1.3	-6.0	-0.9032 ug/L	-0.9032 ppb	11:41:18
3	Ti 334.940†	-1817.9	-107.5	-0.1731 ug/L	-0.1731 ppb	11:40:58
3	Tl 190.801†	-55.8	-11.4	-3.1400 ug/L	-3.1400 ppb	11:41:18
3	U 409.014†	-2799.6	42.6	1.2678 ug/L	1.2678 ppb	11:40:58
3	V 292.402†	-1797.7	-33.9	-0.2091 ug/L	-0.2091 ppb	11:40:58
3	Zn 213.857†	827.1	-6.4	-0.0543 ug/L	-0.0543 ppb	11:41:18
3	SiO2†	663.3	30.3	1.8374 ug/L	1.8374 ppb	11:41:33

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	848461.8	97.151	%	0.5952				0.61%
Sc Radial	4618.8	99.8	%	3.15				3.15%
Y 371.029	742932.7	99.147	%	0.8534				0.86%
Y RADIAL	4899.7	100.1	%	2.82				2.82%
Ag 328.068†	13.2	0.0571	ug/L	0.08413	0.0571	ppb	0.08413	147.26%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	27.4	23.535	ug/L	28.0746	23.535	ppb	28.0746	119.29%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.5	-0.1638	ug/L	1.15335	-0.1638	ppb	1.15335	704.31%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	289.1	5.9982	ug/L	0.71850	5.9982	ppb	0.71850	11.98%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-8.7	-0.0644	ug/L	0.03821	-0.0644	ppb	0.03821	59.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-101.9	-0.0347	ug/L	0.01624	-0.0347	ppb	0.01624	46.76%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-4.7	-8.0887	ug/L	1.77064	-8.0887	ppb	1.77064	21.89%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                7.9      0.0751 ug/L       0.02437      0.0751 ppb       0.02437  32.44%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                4.1      0.0789 ug/L       0.06367      0.0789 ppb       0.06367  80.70%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                5.0      0.0505 ug/L       0.04161      0.0505 ppb       0.04161  82.39%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              284.4      0.8480 ug/L       0.14574      0.8480 ppb       0.14574  17.19%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -0.0     -0.4133 ug/L      13.15137     -0.4133 ppb      13.15137 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         54.1      10.956 ug/L       22.8526      10.956 ppb       22.8526 208.59%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.6     -21.529 ug/L       36.6949     -21.529 ppb       36.6949 170.44%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                0.3      0.0007 ug/L       0.23451      0.0007 ppb       0.23451 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                5.9      0.3760 ug/L       0.23463      0.3760 ppb       0.23463  62.39%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        41.2      14.073 ug/L       40.1032      14.073 ppb       40.1032 284.96%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               10.2      0.2266 ug/L       0.16610      0.2266 ppb       0.16610  73.30%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -5.3     -2.7164 ug/L       4.21835     -2.7164 ppb       4.21835 155.29%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -7.3     -0.7526 ug/L       1.42513     -0.7526 ppb       1.42513 189.37%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           5.8      6.6108 ug/L       5.18496      6.6108 ppb       5.18496  78.43%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -3.7     -1.1309 ug/L       1.11241     -1.1309 ppb       1.11241  98.36%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                3.0      1.5047 ug/L       3.89745      1.5047 ppb       3.89745 259.01%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               49.9      1.4347 ug/L       0.96381      1.4347 ppb       0.96381  67.18%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -4.8     -0.7116 ug/L       0.19789     -0.7116 ppb       0.19789  27.81%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -15.0     -0.1101 ug/L       0.13164     -0.1101 ppb       0.13164 119.57%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -124.2     -0.1992 ug/L       0.03478     -0.1992 ppb       0.03478  17.46%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -7.3     -2.0104 ug/L       1.30125     -2.0104 ppb       1.30125  64.73%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -15.3     -0.4548 ug/L       2.54285     -0.4548 ppb       2.54285 559.06%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -30.1     -0.1866 ug/L       0.43009     -0.1866 ppb       0.43009 230.43%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               12.0      0.0980 ug/L       0.19054      0.0980 ppb       0.19054 194.37%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     56.6      3.4768 ug/L       1.70877      3.4768 ppb       1.70877  49.15%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 1/7/2010 11:43:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4642.7	4642.7	100	%			11:45:38
1	Y RADIAL	4943.5	4943.5	101.0	%			11:45:38
1	Al 396.153Radial†	226.9	247.1	212.18	ug/L	212.18	ppb	11:45:38
1	Ca 317.933Radial†	137.7	123.3	212.95	ug/L	212.95	ppb	11:45:58
1	Fe 238.204 Radial†	20.7	7.9	76.008	ug/L	76.008	ppb	11:45:58
1	K 766.490 Radial†	4005.8	763.8	154.47	ug/L	154.47	ppb	11:45:38
1	Mg 279.077 IEC†	11.1	9.6	326.69	ug/L	326.69	ppb	11:45:58
1	Na 589.592 Radial†	-790.7	981.8	335.20	ug/L	335.20	ppb	11:45:38
1	Sr 421.552†	686.6	673.2	4.9575	ug/L	4.9575	ppb	11:45:38
1	Sc 361.383	877705.4	877705.4	100.50	%			11:46:55
1	Y 371.029	750151.2	750151.2	100.11	%			11:46:55
1	Ag 328.068†	1634.6	1135.6	4.9277	ug/L	4.9277	ppb	11:46:55
1	As 188.979†	57.5	88.7	31.129	ug/L	31.129	ppb	11:47:15
1	B 249.677†	1781.2	2537.9	52.632	ug/L	52.632	ppb	11:47:15
1	Ba 233.527†	696.6	674.6	4.9801	ug/L	4.9801	ppb	11:47:15
1	Be 313.107†	10550.7	14878.4	5.0241	ug/L	5.0241	ppb	11:46:55
1	Cd 226.502†	259.6	511.3	4.8666	ug/L	4.8666	ppb	11:47:15
1	Co 228.616†	174.7	273.0	5.1764	ug/L	5.1764	ppb	11:47:15
1	Cr 267.716†	579.4	486.3	4.9297	ug/L	4.9297	ppb	11:47:15
1	Cu 324.752†	11547.9	3386.9	10.104	ug/L	10.104	ppb	11:46:55
1	Mn 257.610†	11047.7	9686.5	10.199	ug/L	10.199	ppb	11:46:55
1	Mo 202.031†	187.7	160.1	10.134	ug/L	10.134	ppb	11:47:15
1	Ni 231.604†	373.7	255.7	5.6619	ug/L	5.6619	ppb	11:47:15
1	P 214.914†	554.5	299.1	144.97	ug/L	144.97	ppb	11:47:15
1	Pb 220.353†	-2.9	98.4	10.296	ug/L	10.296	ppb	11:47:15
1	S 181.975 Axial†	137.9	79.5	89.894	ug/L	89.894	ppb	11:47:15
1	Sb 206.836†	91.0	44.3	13.653	ug/L	13.653	ppb	11:47:15
1	Se 196.026†	20.4	59.1	30.361	ug/L	30.361	ppb	11:47:15
1	Si 251.611†	4085.9	3435.6	99.138	ug/L	99.138	ppb	11:47:15
1	Sn 189.927†	67.9	62.9	9.4121	ug/L	9.4121	ppb	11:47:15
1	Ti 334.940†	1421.6	3168.0	5.0584	ug/L	5.0584	ppb	11:46:55
1	Tl 190.801†	19.9	65.5	18.055	ug/L	18.055	ppb	11:47:15
1	U 409.014†	-982.9	1930.5	57.509	ug/L	57.509	ppb	11:46:55
1	V 292.402†	-1011.9	799.5	5.3166	ug/L	5.3166	ppb	11:47:15
1	Zn 213.857†	2065.8	1202.4	9.8902	ug/L	9.8902	ppb	11:47:15
1	SiO2†	4093.5	3424.5	210.93	ug/L	210.93	ppb	11:48:12
2	Sc Radial	4742.5	4742.5	102	%			11:46:03
2	Y RADIAL	5000.0	5000.0	102.1	%			11:46:03
2	Al 396.153Radial†	205.0	220.9	189.67	ug/L	189.67	ppb	11:46:03
2	Ca 317.933Radial†	135.7	118.4	204.49	ug/L	204.49	ppb	11:46:23
2	Fe 238.204 Radial†	19.5	6.3	60.630	ug/L	60.630	ppb	11:46:23
2	K 766.490 Radial†	4021.4	695.0	140.54	ug/L	140.54	ppb	11:46:03
2	Mg 279.077 IEC†	8.7	7.0	237.08	ug/L	237.08	ppb	11:46:23
2	Na 589.592 Radial†	-804.8	984.7	336.20	ug/L	336.20	ppb	11:46:03
2	Sr 421.552†	668.2	640.7	4.7187	ug/L	4.7187	ppb	11:46:03
2	Sc 361.383	882838.6	882838.6	101.09	%			11:47:20
2	Y 371.029	754284.8	754284.8	100.66	%			11:47:20
2	Ag 328.068†	1707.8	1198.5	5.1960	ug/L	5.1960	ppb	11:47:20
2	As 188.979†	49.2	80.1	28.113	ug/L	28.113	ppb	11:47:41
2	B 249.677†	1772.0	2518.4	52.230	ug/L	52.230	ppb	11:47:41
2	Ba 233.527†	710.7	684.5	5.0535	ug/L	5.0535	ppb	11:47:41
2	Be 313.107†	10437.9	14705.7	4.9662	ug/L	4.9662	ppb	11:47:20
2	Cd 226.502†	262.1	512.2	4.8765	ug/L	4.8765	ppb	11:47:41
2	Co 228.616†	174.0	271.4	5.1448	ug/L	5.1448	ppb	11:47:41
2	Cr 267.716†	598.5	501.8	5.0868	ug/L	5.0868	ppb	11:47:41
2	Cu 324.752†	11383.3	3157.2	9.4184	ug/L	9.4184	ppb	11:47:20
2	Mn 257.610†	10827.2	9404.4	9.9024	ug/L	9.9024	ppb	11:47:20
2	Mo 202.031†	183.6	154.9	9.8082	ug/L	9.8082	ppb	11:47:41
2	Ni 231.604†	350.8	230.9	5.1125	ug/L	5.1125	ppb	11:47:41

2	P 214.914†	561.2	302.5	146.79 ug/L	146.79 ppb	11:47:41
2	Pb 220.353†	5.2	106.5	11.132 ug/L	11.132 ppb	11:47:41
2	S 181.975 Axial†	147.4	88.1	99.669 ug/L	99.669 ppb	11:47:41
2	Sb 206.836†	79.9	32.9	10.203 ug/L	10.203 ppb	11:47:41
2	Se 196.026†	22.2	60.7	31.122 ug/L	31.122 ppb	11:47:41
2	Si 251.611†	4081.5	3407.5	98.335 ug/L	98.335 ppb	11:47:41
2	Sn 189.927†	72.1	66.6	9.9654 ug/L	9.9654 ppb	11:47:41
2	Ti 334.940†	1502.7	3240.0	5.1722 ug/L	5.1722 ppb	11:47:20
2	Tl 190.801†	31.5	76.8	21.164 ug/L	21.164 ppb	11:47:41
2	U 409.014†	-909.2	2009.1	59.853 ug/L	59.853 ppb	11:47:20
2	V 292.402†	-956.4	860.3	5.7022 ug/L	5.7022 ppb	11:47:41
2	Zn 213.857†	2088.3	1212.7	9.9838 ug/L	9.9838 ppb	11:47:41
2	SiO2†	4179.8	3486.1	214.76 ug/L	214.76 ppb	11:48:17
3	Sc Radial	4540.4	4540.4	98.1 %		11:46:28
3	Y RADIAL	4811.0	4811.0	98.29 %		11:46:28
3	Al 396.153Radial†	236.1	261.5	224.62 ug/L	224.62 ppb	11:46:28
3	Ca 317.933Radial†	131.6	120.1	207.47 ug/L	207.47 ppb	11:46:48
3	Fe 238.204 Radial†	24.3	12.0	115.51 ug/L	115.51 ppb	11:46:48
3	K 766.490 Radial†	4069.5	918.7	185.85 ug/L	185.85 ppb	11:46:28
3	Mg 279.077 IEC†	13.6	12.3	420.48 ug/L	420.48 ppb	11:46:48
3	Na 589.592 Radial†	-828.7	925.3	315.93 ug/L	315.93 ppb	11:46:28
3	Sr 421.552†	639.7	640.7	4.7185 ug/L	4.7185 ppb	11:46:28
3	Sc 361.383	876850.8	876850.8	100.40 %		11:47:46
3	Y 371.029	749753.1	749753.1	100.06 %		11:47:46
3	Ag 328.068†	1636.5	1139.0	4.9500 ug/L	4.9500 ppb	11:47:46
3	As 188.979†	55.6	86.9	30.485 ug/L	30.485 ppb	11:48:06
3	B 249.677†	1790.2	2548.5	52.847 ug/L	52.847 ppb	11:48:06
3	Ba 233.527†	703.6	682.2	5.0373 ug/L	5.0373 ppb	11:48:06
3	Be 313.107†	10620.7	14958.4	5.0511 ug/L	5.0511 ppb	11:47:46
3	Cd 226.502†	278.0	529.9	5.0395 ug/L	5.0395 ppb	11:48:06
3	Co 228.616†	177.1	275.6	5.2235 ug/L	5.2235 ppb	11:48:06
3	Cr 267.716†	604.8	512.1	5.1904 ug/L	5.1904 ppb	11:48:06
3	Cu 324.752†	11580.7	3430.7	10.237 ug/L	10.237 ppb	11:47:46
3	Mn 257.610†	10987.3	9637.0	10.149 ug/L	10.149 ppb	11:47:46
3	Mo 202.031†	180.8	153.4	9.7170 ug/L	9.7170 ppb	11:48:06
3	Ni 231.604†	364.5	246.9	5.4684 ug/L	5.4684 ppb	11:48:06
3	P 214.914†	552.2	297.3	144.08 ug/L	144.08 ppb	11:48:06
3	Pb 220.353†	-2.6	98.7	10.323 ug/L	10.323 ppb	11:48:06
3	S 181.975 Axial†	143.4	85.2	96.308 ug/L	96.308 ppb	11:48:06
3	Sb 206.836†	62.5	16.1	5.1241 ug/L	5.1241 ppb	11:48:06
3	Se 196.026†	19.4	58.1	29.985 ug/L	29.985 ppb	11:48:06
3	Si 251.611†	4117.7	3471.2	100.16 ug/L	100.16 ppb	11:48:06
3	Sn 189.927†	74.4	69.4	10.385 ug/L	10.385 ppb	11:48:06
3	Ti 334.940†	1431.9	3179.6	5.0735 ug/L	5.0735 ppb	11:47:46
3	Tl 190.801†	31.3	76.9	21.178 ug/L	21.178 ppb	11:48:06
3	U 409.014†	-735.9	2175.6	64.809 ug/L	64.809 ppb	11:47:46
3	V 292.402†	-1002.8	807.6	5.3723 ug/L	5.3723 ppb	11:48:06
3	Zn 213.857†	2076.1	1214.7	9.9882 ug/L	9.9882 ppb	11:48:06
3	SiO2†	4200.4	3534.9	217.74 ug/L	217.74 ppb	11:48:22

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	879131.6	100.66	%	0.371				0.37%
Sc Radial	4641.9	100	%	2.2				2.18%
Y 371.029	751396.4	100.28	%	0.335				0.33%
Y RADIAL	4918.2	100.5	%	1.98				1.97%
Ag 328.068†	1157.7	5.0246	ug/L	0.14885	5.0246	ppb	0.14885	2.96%
QC value within limits for Ag 328.068 Recovery = 100.49%								
Al 396.153Radial†	243.2	208.82	ug/L	17.716	208.82	ppb	17.716	8.48%
QC value within limits for Al 396.153Radial Recovery = 104.41%								
As 188.979†	85.2	29.909	ug/L	1.5883	29.909	ppb	1.5883	5.31%
QC value within limits for As 188.979 Recovery = 99.70%								
B 249.677†	2534.9	52.570	ug/L	0.3129	52.570	ppb	0.3129	0.60%
QC value within limits for B 249.677 Recovery = 105.14%								
Ba 233.527†	680.4	5.0236	ug/L	0.03856	5.0236	ppb	0.03856	0.77%
QC value within limits for Ba 233.527 Recovery = 100.47%								
Be 313.107†	14847.5	5.0138	ug/L	0.04341	5.0138	ppb	0.04341	0.87%
QC value within limits for Be 313.107 Recovery = 100.28%								
Ca 317.933Radial†	120.6	208.30	ug/L	4.292	208.30	ppb	4.292	2.06%

QC value within limits for Ca 317.933Radial Recovery = 104.15%

Cd 226.502†	517.8	4.9275 ug/L	0.09709	4.9275 ppb	0.09709	1.97%
QC value within limits for Cd 226.502 Recovery = 98.55%						
Co 228.616†	273.3	5.1816 ug/L	0.03961	5.1816 ppb	0.03961	0.76%
QC value within limits for Co 228.616 Recovery = 103.63%						
Cr 267.716†	500.1	5.0690 ug/L	0.13123	5.0690 ppb	0.13123	2.59%
QC value within limits for Cr 267.716 Recovery = 101.38%						
Cu 324.752†	3324.9	9.9197 ug/L	0.43916	9.9197 ppb	0.43916	4.43%
QC value within limits for Cu 324.752 Recovery = 99.20%						
Fe 238.204 Radial†	8.7	84.050 ug/L	28.3113	84.050 ppb	28.3113	33.68%
QC value within limits for Fe 238.204 Radial Recovery = 84.05%						
K 766.490 Radial†	792.5	160.29 ug/L	23.210	160.29 ppb	23.210	14.48%
QC value within limits for K 766.490 Radial Recovery = 106.86%						
Mg 279.077 IEC†	9.6	328.08 ug/L	91.709	328.08 ppb	91.709	27.95%
QC value within limits for Mg 279.077 IEC Recovery = 109.36%						
Mn 257.610†	9576.0	10.084 ug/L	0.1589	10.084 ppb	0.1589	1.58%
QC value within limits for Mn 257.610 Recovery = 100.84%						
Mo 202.031†	156.1	9.8863 ug/L	0.21911	9.8863 ppb	0.21911	2.22%
QC value within limits for Mo 202.031 Recovery = 98.86%						
Na 589.592 Radial†	963.9	329.11 ug/L	11.426	329.11 ppb	11.426	3.47%
QC value within limits for Na 589.592 Radial Recovery = 109.70%						
Ni 231.604†	244.5	5.4142 ug/L	0.27867	5.4142 ppb	0.27867	5.15%
QC value within limits for Ni 231.604 Recovery = 108.28%						
P 214.914†	299.6	145.28 ug/L	1.382	145.28 ppb	1.382	0.95%
QC value within limits for P 214.914 Recovery = 96.85%						
Pb 220.353†	101.2	10.584 ug/L	0.4753	10.584 ppb	0.4753	4.49%
QC value within limits for Pb 220.353 Recovery = 105.84%						
S 181.975 Axial†	84.3	95.291 ug/L	4.9663	95.291 ppb	4.9663	5.21%
QC value within limits for S 181.975 Axial Recovery = 95.29%						
Sb 206.836†	31.1	9.6602 ug/L	4.29049	9.6602 ppb	4.29049	44.41%
QC value within limits for Sb 206.836 Recovery = 96.60%						
Se 196.026†	59.3	30.490 ug/L	0.5795	30.490 ppb	0.5795	1.90%
QC value within limits for Se 196.026 Recovery = 101.63%						
Si 251.611†	3438.1	99.211 ug/L	0.9151	99.211 ppb	0.9151	0.92%
QC value within limits for Si 251.611 Recovery = 99.21%						
Sn 189.927†	66.3	9.9209 ug/L	0.48815	9.9209 ppb	0.48815	4.92%
QC value within limits for Sn 189.927 Recovery = 99.21%						
Sr 421.552†	651.5	4.7982 ug/L	0.13792	4.7982 ppb	0.13792	2.87%
QC value within limits for Sr 421.552 Recovery = 95.96%						
Ti 334.940†	3195.8	5.1014 ug/L	0.06183	5.1014 ppb	0.06183	1.21%
QC value within limits for Ti 334.940 Recovery = 102.03%						
Tl 190.801†	73.1	20.132 ug/L	1.7990	20.132 ppb	1.7990	8.94%
QC value within limits for Tl 190.801 Recovery = 100.66%						
U 409.014†	2038.4	60.724 ug/L	3.7269	60.724 ppb	3.7269	6.14%
QC value within limits for U 409.014 Recovery = 121.45%						
V 292.402†	822.5	5.4637 ug/L	0.20839	5.4637 ppb	0.20839	3.81%
QC value within limits for V 292.402 Recovery = 109.27%						
Zn 213.857†	1210.0	9.9541 ug/L	0.05533	9.9541 ppb	0.05533	0.56%
QC value within limits for Zn 213.857 Recovery = 99.54%						
SiO2†	3481.8	214.48 ug/L	3.411	214.48 ppb	3.411	1.59%
QC value within limits for SiO2 Recovery = 100.69%						

All analyte(s) passed QC.

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

Autosampler Location: 13
Date Collected: 1/7/2010 11:50:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4137.4	4137.4	89.4	%			11:52:31
1	Y RADIAL	4389.0	4389.0	89.67	%			11:52:31
1	Al 396.153Radial†	537443.7	601186.2	517350	ug/L	517350	ppb	11:52:26
1	Ca 317.933Radial†	253484.2	283524.4	489640	ug/L	489640	ppb	11:52:26
1	Fe 238.204 Radial†	17746.6	19838.0	190260	ug/L	190260	ppb	11:52:31
1	K 766.490 Radial†	2725.9	-180.2	-21.542	ug/L	-21.542	ppb	11:52:26
1	Mg 279.077 IEC†	12843.5	14364.8	489310	ug/L	489310	ppb	11:52:31
1	Na 589.592 Radial†	-1479.1	115.5	39.442	ug/L	39.442	ppb	11:52:31
1	Sr 421.552†	468.8	513.1	-0.7581	ug/L	-0.7581	ppb	11:52:31
1	Sc 361.383	771134.2	771134.2	88.297	%			11:52:58
1	Y 371.029	648217.7	648217.7	86.507	%			11:52:58
1	Ag 328.068†	-10261.0	-12111.9	3.8200	ug/L	3.8200	ppb	11:52:58
1	As 188.979†	-88.7	-68.9	5.0464	ug/L	5.0464	ppb	11:53:18
1	B 249.677†	83.1	859.6	-7.4085	ug/L	-7.4085	ppb	11:52:58
1	Ba 233.527†	-707.5	-819.8	-1.2083	ug/L	-1.2083	ppb	11:53:18
1	Be 313.107†	-4187.9	-362.9	-0.1645	ug/L	-0.1645	ppb	11:52:58
1	Cd 226.502†	1316.1	1743.5	-2.4108	ug/L	-2.4108	ppb	11:53:18
1	Co 228.616†	-26.5	69.2	-1.4148	ug/L	-1.4148	ppb	11:53:18
1	Cr 267.716†	-30.1	-124.3	2.1584	ug/L	2.1584	ppb	11:53:18
1	Cu 324.752†	4149.2	-3404.6	-0.4475	ug/L	-0.4475	ppb	11:52:58
1	Mn 257.610†	-419.6	-1781.5	7.9848	ug/L	7.9848	ppb	11:52:58
1	Mo 202.031†	-260.9	-322.2	-2.1492	ug/L	-2.1492	ppb	11:53:18
1	Ni 231.604†	260.0	178.3	3.9500	ug/L	3.9500	ppb	11:53:18
1	P 214.914†	216.1	-7.9	18.739	ug/L	18.739	ppb	11:53:18
1	Pb 220.353†	-1012.2	-1045.0	-8.2825	ug/L	-8.2825	ppb	11:53:18
1	S 181.975 Axial†	84.0	37.5	-59.336	ug/L	-59.336	ppb	11:53:18
1	Sb 206.836†	81.7	46.3	1.4527	ug/L	1.4527	ppb	11:53:18
1	Se 196.026†	-1159.0	-1273.8	18.050	ug/L	18.050	ppb	11:53:18
1	Si 251.611†	538.0	-20.7	-0.0264	ug/L	-0.0264	ppb	11:53:18
1	Sn 189.927†	-387.4	-443.5	-12.569	ug/L	-12.569	ppb	11:53:18
1	Ti 334.940†	-13398.5	-13420.9	4.0340	ug/L	4.0340	ppb	11:52:58
1	Tl 190.801†	-96.3	-63.4	-3.4471	ug/L	-3.4471	ppb	11:53:18
1	U 409.014†	-1932.6	719.8	-2.4850	ug/L	-2.4850	ppb	11:52:58
1	V 292.402†	390.0	2248.1	-3.8644	ug/L	-3.8644	ppb	11:53:18
1	Zn 213.857†	3446.4	3050.1	-1.3780	ug/L	-1.3780	ppb	11:53:18
1	SiO2†	630.9	65.8	5.3138	ug/L	5.3138	ppb	11:54:15
2	Sc Radial	4066.0	4066.0	87.9	%			11:52:41
2	Y RADIAL	4326.6	4326.6	88.39	%			11:52:41
2	Al 396.153Radial†	543889.4	619086.9	532750	ug/L	532750	ppb	11:52:36
2	Ca 317.933Radial†	256049.4	291426.6	503290	ug/L	503290	ppb	11:52:36
2	Fe 238.204 Radial†	17543.5	19955.7	191390	ug/L	191390	ppb	11:52:41
2	K 766.490 Radial†	2850.4	15.1	18.653	ug/L	18.653	ppb	11:52:36
2	Mg 279.077 IEC†	12671.2	14421.2	491230	ug/L	491230	ppb	11:52:41
2	Na 589.592 Radial†	-1461.0	107.1	36.550	ug/L	36.550	ppb	11:52:41
2	Sr 421.552†	448.4	499.1	-0.9880	ug/L	-0.9880	ppb	11:52:41
2	Sc 361.383	775426.4	775426.4	88.788	%			11:53:24
2	Y 371.029	652272.5	652272.5	87.048	%			11:53:24
2	Ag 328.068†	-10612.3	-12443.3	2.5530	ug/L	2.5530	ppb	11:53:24
2	As 188.979†	-98.2	-79.1	1.6504	ug/L	1.6504	ppb	11:53:44
2	B 249.677†	6.8	773.2	-9.3506	ug/L	-9.3506	ppb	11:53:24
2	Ba 233.527†	-666.1	-768.8	-0.8048	ug/L	-0.8048	ppb	11:53:44
2	Be 313.107†	-4139.4	-282.0	-0.1377	ug/L	-0.1377	ppb	11:53:24
2	Cd 226.502†	1266.0	1678.9	-3.1395	ug/L	-3.1395	ppb	11:53:44
2	Co 228.616†	-25.2	70.8	-1.3981	ug/L	-1.3981	ppb	11:53:44
2	Cr 267.716†	-56.0	-153.3	1.8827	ug/L	1.8827	ppb	11:53:44
2	Cu 324.752†	4301.9	-3258.6	0.0455	ug/L	0.0455	ppb	11:53:24
2	Mn 257.610†	-441.0	-1803.0	8.0389	ug/L	8.0389	ppb	11:53:24
2	Mo 202.031†	-260.2	-319.7	-1.8811	ug/L	-1.8811	ppb	11:53:44
2	Ni 231.604†	266.5	184.0	4.0763	ug/L	4.0763	ppb	11:53:44

2	P 214.914†	242.2	20.2	36.676 ug/L	36.676 ppb	11:53:44
2	Pb 220.353†	-992.3	-1016.3	-1.9333 ug/L	-1.9333 ppb	11:53:44
2	S 181.975 Axial†	84.3	37.3	-62.595 ug/L	-62.595 ppb	11:53:44
2	Sb 206.836†	54.4	15.1	-8.4184 ug/L	-8.4184 ppb	11:53:44
2	Se 196.026†	-1142.2	-1247.7	37.229 ug/L	37.229 ppb	11:53:44
2	Si 251.611†	603.9	50.1	2.0156 ug/L	2.0156 ppb	11:53:44
2	Sn 189.927†	-404.5	-460.3	-13.644 ug/L	-13.644 ppb	11:53:44
2	Ti 334.940†	-13588.3	-13550.7	4.5362 ug/L	4.5362 ppb	11:53:24
2	Tl 190.801†	-92.6	-58.7	-1.7314 ug/L	-1.7314 ppb	11:53:44
2	U 409.014†	-1825.4	852.7	1.3345 ug/L	1.3345 ppb	11:53:24
2	V 292.402†	364.9	2217.3	-4.1776 ug/L	-4.1776 ppb	11:53:44
2	Zn 213.857†	3459.6	3043.4	-1.5592 ug/L	-1.5592 ppb	11:53:44
2	SiO2†	585.5	10.7	1.8900 ug/L	1.8900 ppb	11:54:20
3	Sc Radial	4298.7	4298.7	92.9 %		11:52:52
3	Y RADIAL	4535.0	4535.0	92.65 %		11:52:52
3	Al 396.153Radial†	540215.2	581621.4	500510 ug/L	500510 ppb	11:52:47
3	Ca 317.933Radial†	254682.4	274179.4	473500 ug/L	473500 ppb	11:52:47
3	Fe 238.204 Radial†	18327.8	19719.2	189120 ug/L	189120 ppb	11:52:52
3	K 766.490 Radial†	2656.6	-369.2	-60.342 ug/L	-60.342 ppb	11:52:47
3	Mg 279.077 IEC†	13233.7	14246.1	485270 ug/L	485270 ppb	11:52:52
3	Na 589.592 Radial†	-1481.8	174.7	59.630 ug/L	59.630 ppb	11:52:52
3	Sr 421.552†	486.1	512.0	-0.6165 ug/L	-0.6165 ppb	11:52:52
3	Sc 361.383	769777.4	769777.4	88.142 %		11:53:49
3	Y 371.029	647388.0	647388.0	86.396 %		11:53:49
3	Ag 328.068†	-10483.5	-12384.9	2.4812 ug/L	2.4812 ppb	11:53:49
3	As 188.979†	-106.4	-89.2	-2.2267 ug/L	-2.2267 ppb	11:54:09
3	B 249.677†	-9.4	754.8	-9.4310 ug/L	-9.4310 ppb	11:53:49
3	Ba 233.527†	-713.5	-828.0	-1.2972 ug/L	-1.2972 ppb	11:54:09
3	Be 313.107†	-4106.8	-279.2	-0.1365 ug/L	-0.1365 ppb	11:53:49
3	Cd 226.502†	1287.3	1713.4	-2.5841 ug/L	-2.5841 ppb	11:54:09
3	Co 228.616†	-20.4	76.0	-1.2643 ug/L	-1.2643 ppb	11:54:09
3	Cr 267.716†	-31.7	-126.2	2.1154 ug/L	2.1154 ppb	11:54:09
3	Cu 324.752†	4176.7	-3365.0	-0.3876 ug/L	-0.3876 ppb	11:53:49
3	Mn 257.610†	-507.9	-1882.5	7.8401 ug/L	7.8401 ppb	11:53:49
3	Mo 202.031†	-236.9	-295.4	-0.5635 ug/L	-0.5635 ppb	11:54:09
3	Ni 231.604†	235.2	150.6	3.3373 ug/L	3.3373 ppb	11:54:09
3	P 214.914†	220.6	-2.4	16.568 ug/L	16.568 ppb	11:54:09
3	Pb 220.353†	-975.2	-1005.1	-7.8098 ug/L	-7.8098 ppb	11:54:09
3	S 181.975 Axial†	87.3	41.4	-51.611 ug/L	-51.611 ppb	11:54:09
3	Sb 206.836†	75.9	40.0	-0.0547 ug/L	-0.0547 ppb	11:54:09
3	Se 196.026†	-1136.0	-1250.1	24.005 ug/L	24.005 ppb	11:54:09
3	Si 251.611†	566.6	12.8	0.9401 ug/L	0.9401 ppb	11:54:09
3	Sn 189.927†	-413.7	-474.1	-18.841 ug/L	-18.841 ppb	11:54:09
3	Ti 334.940†	-13430.5	-13484.0	3.0867 ug/L	3.0867 ppb	11:53:49
3	Tl 190.801†	-102.4	-70.5	-5.8572 ug/L	-5.8572 ppb	11:54:09
3	U 409.014†	-1630.9	1058.2	7.7434 ug/L	7.7434 ppb	11:53:49
3	V 292.402†	403.5	2264.2	-3.6364 ug/L	-3.6364 ppb	11:54:09
3	Zn 213.857†	3480.9	3096.1	-0.7961 ug/L	-0.7961 ppb	11:54:09
3	SiO2†	614.5	48.4	4.2325 ug/L	4.2325 ppb	11:54:25

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	772112.7	88.409	%	0.3376				0.38%
Sc Radial	4167.4	90.0	%	2.58				2.86%
Y 371.029	649292.7	86.650	%	0.3488				0.40%
Y RADIAL	4416.9	90.23	%	2.185				2.42%
Ag 328.068†	-12313.4	2.9514	ug/L	0.75312	2.9514	ppb	0.75312	25.52%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	600631.5	516870	ug/L	16125.6	516870	ppb	16125.6	3.12%
QC value within limits for Al 396.153Radial Recovery = 103.37%								
As 188.979†	-79.1	1.4900	ug/L	3.63921	1.4900	ppb	3.63921	244.24%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	795.9	-8.7301	ug/L	1.14518	-8.7301	ppb	1.14518	13.12%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-805.6	-1.1034	ug/L	0.26246	-1.1034	ppb	0.26246	23.79%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-308.0	-0.1463	ug/L	0.01584	-0.1463	ppb	0.01584	10.83%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	283043.5	488810	ug/L	14910.2	488810	ppb	14910.2	3.05%

QC value within limits for Ca 317.933Radial Recovery = 97.76%

Cd 226.502†	1711.9	-2.7115 ug/L	0.38069	-2.7115 ppb	0.38069	14.04%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	72.0	-1.3591 ug/L	0.08252	-1.3591 ppb	0.08252	6.07%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-134.6	2.0521 ug/L	0.14833	2.0521 ppb	0.14833	7.23%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-3342.7	-0.2632 ug/L	0.26900	-0.2632 ppb	0.26900	102.20%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	19837.6	190260 ug/L	1134.0	190260 ppb	1134.0	0.60%
QC value within limits for Fe 238.204 Radial Recovery = 95.13%						
K 766.490 Radial†	-178.1	-21.077 ug/L	39.4996	-21.077 ppb	39.4996	187.41%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	14344.0	488600 ug/L	3044.5	488600 ppb	3044.5	0.62%
QC value within limits for Mg 279.077 IEC Recovery = 97.72%						
Mn 257.610†	-1822.3	7.9546 ug/L	0.10275	7.9546 ppb	0.10275	1.29%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-312.5	-1.5313 ug/L	0.84874	-1.5313 ppb	0.84874	55.43%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	132.4	45.208 ug/L	12.5740	45.208 ppb	12.5740	27.81%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	171.0	3.7879 ug/L	0.39530	3.7879 ppb	0.39530	10.44%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	3.3	23.994 ug/L	11.0361	23.994 ppb	11.0361	45.99%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-1022.1	-6.0085 ug/L	3.53713	-6.0085 ppb	3.53713	58.87%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	38.7	-57.847 ug/L	5.6414	-57.847 ppb	5.6414	9.75%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	33.8	-2.3401 ug/L	5.31764	-2.3401 ppb	5.31764	227.24%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-1257.2	26.428 ug/L	9.8166	26.428 ppb	9.8166	37.14%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	14.1	0.9764 ug/L	1.02148	0.9764 ppb	1.02148	104.61%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-459.3	-15.018 ug/L	3.3538	-15.018 ppb	3.3538	22.33%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	508.1	-0.7875 ug/L	0.18751	-0.7875 ppb	0.18751	23.81%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-13485.2	3.8856 ug/L	0.73609	3.8856 ppb	0.73609	18.94%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-64.2	-3.6786 ug/L	2.07262	-3.6786 ppb	2.07262	56.34%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	876.9	2.1976 ug/L	5.16854	2.1976 ppb	5.16854	235.19%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	2243.2	-3.8928 ug/L	0.27170	-3.8928 ppb	0.27170	6.98%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	3063.2	-1.2444 ug/L	0.39869	-1.2444 ppb	0.39869	32.04%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	41.7	3.8121 ug/L	1.75022	3.8121 ppb	1.75022	45.91%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 1/7/2010 11:56:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4175.1	4175.1	90.2	%			11:58:34
1	Y RADIAL	4423.5	4423.5	90.37	%			11:58:34
1	Al 396.153Radial†	530261.5	587806.0	505810	ug/L	505810	ppb	11:58:29
1	Ca 317.933Radial†	249233.4	276256.7	477090	ug/L	477090	ppb	11:58:29
1	Fe 238.204 Radial†	17493.4	19378.3	185870	ug/L	185870	ppb	11:58:34
1	K 766.490 Radial†	26339.8	25967.9	5268.1	ug/L	5268.1	ppb	11:58:29
1	Mg 279.077 IEC†	12680.5	14054.6	478750	ug/L	478750	ppb	11:58:34
1	Na 589.592 Radial†	12374.7	15487.1	5287.6	ug/L	5287.6	ppb	11:58:34
1	Sr 421.552†	58713.0	65071.0	474.99	ug/L	474.99	ppb	11:58:29
1	Sc 361.383	771439.1	771439.1	88.332	%			11:59:02
1	Y 371.029	647937.9	647937.9	86.469	%			11:59:02
1	Ag 328.068†	44162.7	49505.4	271.82	ug/L	271.82	ppb	11:59:02
1	As 188.979†	1202.9	1393.3	520.87	ug/L	520.87	ppb	11:59:07
1	B 249.677†	21752.0	25390.9	500.97	ug/L	500.97	ppb	11:59:02
1	Ba 233.527†	58696.3	66431.3	494.94	ug/L	494.94	ppb	11:59:02
1	Be 313.107†	631337.7	719114.5	243.31	ug/L	243.31	ppb	11:59:02
1	Cd 226.502†	44973.3	51167.0	469.11	ug/L	469.11	ppb	11:59:07
1	Co 228.616†	21722.1	24690.7	464.39	ug/L	464.39	ppb	11:59:07
1	Cr 267.716†	41237.4	46594.4	477.17	ug/L	477.17	ppb	11:59:07
1	Cu 324.752†	169880.7	184217.5	558.85	ug/L	558.85	ppb	11:59:02
1	Mn 257.610†	407146.0	459621.7	493.50	ug/L	493.50	ppb	11:59:02
1	Mo 202.031†	6621.1	7469.0	490.34	ug/L	490.34	ppb	11:59:07
1	Ni 231.604†	18676.7	21027.6	465.66	ug/L	465.66	ppb	11:59:07
1	P 214.914†	4801.5	5183.1	2477.3	ug/L	2477.3	ppb	11:59:07
1	Pb 220.353†	3022.4	3523.0	465.51	ug/L	465.51	ppb	11:59:07
1	S 181.975 Axial†	2133.8	2358.0	2568.2	ug/L	2568.2	ppb	11:59:07
1	Sb 206.836†	1540.6	1698.0	508.14	ug/L	508.14	ppb	11:59:07
1	Se 196.026†	3283.8	3756.3	2562.6	ug/L	2562.6	ppb	11:59:07
1	Si 251.611†	159646.1	180104.6	5199.3	ug/L	5199.3	ppb	11:59:02
1	Sn 189.927†	2477.8	2800.4	470.52	ug/L	470.52	ppb	11:59:07
1	Ti 334.940†	269659.9	307034.1	516.30	ug/L	516.30	ppb	11:59:02
1	Tl 190.801†	1475.0	1715.6	488.05	ug/L	488.05	ppb	11:59:07
1	U 409.014†	12916.4	17531.2	498.12	ug/L	498.12	ppb	11:59:02
1	V 292.402†	69736.0	80754.2	501.87	ug/L	501.87	ppb	11:59:02
1	Zn 213.857†	56122.3	62682.7	489.24	ug/L	489.24	ppb	11:59:07
1	SiO2†	161400.9	182072.5	11220	ug/L	11220	ppb	11:59:34
2	Sc Radial	4174.4	4174.4	90.2	%			11:58:44
2	Y RADIAL	4457.7	4457.7	91.07	%			11:58:44
2	Al 396.153Radial†	540235.5	598964.4	515410	ug/L	515410	ppb	11:58:39
2	Ca 317.933Radial†	254206.3	281817.2	486690	ug/L	486690	ppb	11:58:39
2	Fe 238.204 Radial†	17724.7	19638.1	188360	ug/L	188360	ppb	11:58:44
2	K 766.490 Radial†	26806.6	26490.5	5374.1	ug/L	5374.1	ppb	11:58:39
2	Mg 279.077 IEC†	12896.6	14296.5	487000	ug/L	487000	ppb	11:58:44
2	Na 589.592 Radial†	12674.6	15822.0	5401.9	ug/L	5401.9	ppb	11:58:44
2	Sr 421.552†	59735.1	66215.3	483.33	ug/L	483.33	ppb	11:58:39
2	Sc 361.383	783747.4	783747.4	89.741	%			11:59:13
2	Y 371.029	658116.8	658116.8	87.828	%			11:59:13
2	Ag 328.068†	44487.9	49082.6	270.66	ug/L	270.66	ppb	11:59:13
2	As 188.979†	1160.2	1324.3	497.07	ug/L	497.07	ppb	11:59:18
2	B 249.677†	21957.7	25233.2	497.40	ug/L	497.40	ppb	11:59:13
2	Ba 233.527†	59198.8	65947.7	491.44	ug/L	491.44	ppb	11:59:13
2	Be 313.107†	637753.5	715039.2	241.93	ug/L	241.93	ppb	11:59:13
2	Cd 226.502†	44507.6	49848.6	456.30	ug/L	456.30	ppb	11:59:18
2	Co 228.616†	21402.2	23948.0	450.28	ug/L	450.28	ppb	11:59:18
2	Cr 267.716†	40694.5	45256.3	463.62	ug/L	463.62	ppb	11:59:18
2	Cu 324.752†	171213.8	182682.7	554.40	ug/L	554.40	ppb	11:59:13
2	Mn 257.610†	411212.8	456914.8	490.74	ug/L	490.74	ppb	11:59:13
2	Mo 202.031†	6462.7	7174.7	471.96	ug/L	471.96	ppb	11:59:18
2	Ni 231.604†	18452.8	20446.1	452.78	ug/L	452.78	ppb	11:59:18

2	P 214.914†	4825.7	5124.7	2450.6 ug/L	2450.6 ppb	11:59:18
2	Pb 220.353†	2905.9	3339.4	448.32 ug/L	448.32 ppb	11:59:18
2	S 181.975 Axial†	2135.0	2321.4	2524.9 ug/L	2524.9 ppb	11:59:18
2	Sb 206.836†	1587.5	1722.9	515.21 ug/L	515.21 ppb	11:59:18
2	Se 196.026†	3247.4	3657.4	2521.4 ug/L	2521.4 ppb	11:59:18
2	Si 251.611†	160944.9	178713.5	5159.4 ug/L	5159.4 ppb	11:59:13
2	Sn 189.927†	2465.4	2742.5	462.90 ug/L	462.90 ppb	11:59:18
2	Ti 334.940†	271910.2	304747.4	513.14 ug/L	513.14 ppb	11:59:13
2	Tl 190.801†	1426.0	1634.7	466.15 ug/L	466.15 ppb	11:59:18
2	U 409.014†	13220.3	17640.2	501.09 ug/L	501.09 ppb	11:59:13
2	V 292.402†	70320.3	80165.4	497.69 ug/L	497.69 ppb	11:59:13
2	Zn 213.857†	55437.9	60922.3	474.34 ug/L	474.34 ppb	11:59:18
2	SiO2†	161350.0	179146.2	11040 ug/L	11040 ppb	11:59:39
3	Sc Radial	4162.1	4162.1	89.9 %		11:58:55
3	Y RADIAL	4407.2	4407.2	90.04 %		11:58:55
3	Al 396.153Radial†	542645.0	603412.9	519240 ug/L	519240 ppb	11:58:50
3	Ca 317.933Radial†	254530.7	283010.4	488750 ug/L	488750 ppb	11:58:50
3	Fe 238.204 Radial†	17985.2	19985.9	191690 ug/L	191690 ppb	11:58:55
3	K 766.490 Radial†	26834.6	26609.3	5398.4 ug/L	5398.4 ppb	11:58:50
3	Mg 279.077 IEC†	13050.3	14509.7	494260 ug/L	494260 ppb	11:58:55
3	Na 589.592 Radial†	12870.8	16081.7	5490.5 ug/L	5490.5 ppb	11:58:55
3	Sr 421.552†	60170.2	66894.7	488.32 ug/L	488.32 ppb	11:58:50
3	Sc 361.383	789060.3	789060.3	90.349 %		11:59:24
3	Y 371.029	662562.6	662562.6	88.421 %		11:59:24
3	Ag 328.068†	44954.6	49265.4	272.55 ug/L	272.55 ppb	11:59:24
3	As 188.979†	1150.2	1304.6	490.63 ug/L	490.63 ppb	11:59:29
3	B 249.677†	22149.6	25281.0	497.94 ug/L	497.94 ppb	11:59:24
3	Ba 233.527†	59507.6	65845.2	490.77 ug/L	490.77 ppb	11:59:24
3	Be 313.107†	641170.3	714035.9	241.60 ug/L	241.60 ppb	11:59:24
3	Cd 226.502†	45319.4	50413.1	461.34 ug/L	461.34 ppb	11:59:29
3	Co 228.616†	21792.3	24219.1	455.38 ug/L	455.38 ppb	11:59:29
3	Cr 267.716†	41404.9	45737.2	468.57 ug/L	468.57 ppb	11:59:29
3	Cu 324.752†	172817.7	183173.2	556.03 ug/L	556.03 ppb	11:59:24
3	Mn 257.610†	413643.9	456520.2	490.52 ug/L	490.52 ppb	11:59:24
3	Mo 202.031†	6654.5	7338.6	482.65 ug/L	482.65 ppb	11:59:29
3	Ni 231.604†	18779.5	20669.3	457.73 ug/L	457.73 ppb	11:59:29
3	P 214.914†	4865.9	5133.0	2453.1 ug/L	2453.1 ppb	11:59:29
3	Pb 220.353†	3056.3	3484.0	463.97 ug/L	463.97 ppb	11:59:29
3	S 181.975 Axial†	2171.3	2345.5	2551.4 ug/L	2551.4 ppb	11:59:29
3	Sb 206.836†	1562.4	1683.1	503.48 ug/L	503.48 ppb	11:59:29
3	Se 196.026†	3324.1	3717.9	2563.0 ug/L	2563.0 ppb	11:59:29
3	Si 251.611†	162170.3	178862.2	5163.5 ug/L	5163.5 ppb	11:59:24
3	Sn 189.927†	2562.8	2831.8	476.50 ug/L	476.50 ppb	11:59:29
3	Ti 334.940†	273579.0	304554.3	512.94 ug/L	512.94 ppb	11:59:24
3	Tl 190.801†	1483.3	1687.4	480.69 ug/L	480.69 ppb	11:59:29
3	U 409.014†	13085.8	17392.1	493.27 ug/L	493.27 ppb	11:59:24
3	V 292.402†	70753.0	80116.8	497.17 ug/L	497.17 ppb	11:59:24
3	Zn 213.857†	56493.1	61674.3	480.11 ug/L	480.11 ppb	11:59:29
3	SiO2†	158464.7	174742.1	10768 ug/L	10768 ppb	11:59:45

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	781415.6	89.474	%	1.0350				1.16%
Sc Radial	4170.5	90.1	%	0.16				0.18%
Y 371.029	656205.8	87.573	%	1.0005				1.14%
Y RADIAL	4429.5	90.49	%	0.527				0.58%
Ag 328.068†	49284.5	271.68	ug/L	0.951	271.68	ppb	0.951	0.35%
QC value within limits for Ag 328.068 Recovery = 108.67%								
Al 396.153Radial†	596727.8	513490	ug/L	6919.2	513490	ppb	6919.2	1.35%
QC value within limits for Al 396.153Radial Recovery = 102.70%								
As 188.979†	1340.7	502.86	ug/L	15.930	502.86	ppb	15.930	3.17%
QC value within limits for As 188.979 Recovery = 100.57%								
B 249.677†	25301.7	498.77	ug/L	1.922	498.77	ppb	1.922	0.39%
QC value within limits for B 249.677 Recovery = 99.75%								
Ba 233.527†	66074.7	492.38	ug/L	2.243	492.38	ppb	2.243	0.46%
QC value within limits for Ba 233.527 Recovery = 98.48%								
Be 313.107†	716063.2	242.28	ug/L	0.911	242.28	ppb	0.911	0.38%
QC value within limits for Be 313.107 Recovery = 96.91%								
Ca 317.933Radial†	280361.4	484180	ug/L	6225.0	484180	ppb	6225.0	1.29%

QC value within limits for Ca 317.933Radial Recovery = 96.84%

Cd 226.502†	50476.2	462.25 ug/L	6.456	462.25 ppb	6.456	1.40%
QC value within limits for Cd 226.502 Recovery = 92.45%						
Co 228.616†	24286.0	456.69 ug/L	7.147	456.69 ppb	7.147	1.56%
QC value within limits for Co 228.616 Recovery = 91.34%						
Cr 267.716†	45862.6	469.79 ug/L	6.857	469.79 ppb	6.857	1.46%
QC value within limits for Cr 267.716 Recovery = 93.96%						
Cu 324.752†	183357.8	556.43 ug/L	2.251	556.43 ppb	2.251	0.40%
QC value within limits for Cu 324.752 Recovery = 111.29%						
Fe 238.204 Radial†	19667.5	188640 ug/L	2923.4	188640 ppb	2923.4	1.55%
QC value within limits for Fe 238.204 Radial Recovery = 94.32%						
K 766.490 Radial†	26355.9	5346.8 ug/L	69.29	5346.8 ppb	69.29	1.30%
QC value within limits for K 766.490 Radial Recovery = 106.94%						
Mg 279.077 IEC†	14286.9	486670 ug/L	7757.4	486670 ppb	7757.4	1.59%
QC value within limits for Mg 279.077 IEC Recovery = 97.33%						
Mn 257.610†	457685.6	491.59 ug/L	1.657	491.59 ppb	1.657	0.34%
QC value within limits for Mn 257.610 Recovery = 98.32%						
Mo 202.031†	7327.4	481.65 ug/L	9.228	481.65 ppb	9.228	1.92%
QC value within limits for Mo 202.031 Recovery = 96.33%						
Na 589.592 Radial†	15796.9	5393.3 ug/L	101.76	5393.3 ppb	101.76	1.89%
QC value within limits for Na 589.592 Radial Recovery = 107.87%						
Ni 231.604†	20714.3	458.72 ug/L	6.496	458.72 ppb	6.496	1.42%
QC value within limits for Ni 231.604 Recovery = 91.74%						
P 214.914†	5146.9	2460.3 ug/L	14.73	2460.3 ppb	14.73	0.60%
QC value within limits for P 214.914 Recovery = 98.41%						
Pb 220.353†	3448.8	459.27 ug/L	9.511	459.27 ppb	9.511	2.07%
QC value within limits for Pb 220.353 Recovery = 91.85%						
S 181.975 Axial†	2341.6	2548.2 ug/L	21.83	2548.2 ppb	21.83	0.86%
QC value within limits for S 181.975 Axial Recovery = 101.93%						
Sb 206.836†	1701.3	508.94 ug/L	5.906	508.94 ppb	5.906	1.16%
QC value within limits for Sb 206.836 Recovery = 101.79%						
Se 196.026†	3710.6	2549.0 ug/L	23.93	2549.0 ppb	23.93	0.94%
QC value within limits for Se 196.026 Recovery = 101.96%						
Si 251.611†	179226.7	5174.1 ug/L	21.97	5174.1 ppb	21.97	0.42%
QC value within limits for Si 251.611 Recovery = 103.48%						
Sn 189.927†	2791.6	469.97 ug/L	6.816	469.97 ppb	6.816	1.45%
QC value within limits for Sn 189.927 Recovery = 93.99%						
Sr 421.552†	66060.4	482.21 ug/L	6.734	482.21 ppb	6.734	1.40%
QC value within limits for Sr 421.552 Recovery = 96.44%						
Ti 334.940†	305445.3	514.12 ug/L	1.884	514.12 ppb	1.884	0.37%
QC value within limits for Ti 334.940 Recovery = 102.82%						
Tl 190.801†	1679.2	478.30 ug/L	11.142	478.30 ppb	11.142	2.33%
QC value within limits for Tl 190.801 Recovery = 95.66%						
U 409.014†	17521.2	497.49 ug/L	3.948	497.49 ppb	3.948	0.79%
QC value within limits for U 409.014 Recovery = 99.50%						
V 292.402†	80345.5	498.91 ug/L	2.576	498.91 ppb	2.576	0.52%
QC value within limits for V 292.402 Recovery = 99.78%						
Zn 213.857†	61759.7	481.23 ug/L	7.511	481.23 ppb	7.511	1.56%
QC value within limits for Zn 213.857 Recovery = 96.25%						
SiO2†	178653.6	11009 ug/L	227.8	11009 ppb	227.8	2.07%
QC value within limits for SiO2 Recovery = 102.94%						

All analyte(s) passed QC.

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

Autosampler Location: 15
Date Collected: 1/7/2010 12:01:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4045.2	4045.2	87.4	%			12:03:52
1	Y RADIAL	4293.6	4293.6	87.72	%			12:03:52
1	Al 396.153Radial†	521147.4	596249.8	513100	ug/L	513100	ppb	12:03:47
1	Ca 317.933Radial†	247139.4	282730.7	488270	ug/L	488270	ppb	12:03:47
1	Fe 238.204 Radial†	40995.6	46889.1	449700	ug/L	449700	ppb	12:03:52
1	K 766.490 Radial†	2955.3	151.8	-176.30	ug/L	-176.30	ppb	12:03:47
1	Mg 279.077 IEC†	12371.7	14152.6	481860	ug/L	481860	ppb	12:03:52
1	Na 589.592 Radial†	1337214.6	1531636.7	522920	ug/L	522920	ppb	12:03:47
1	Sr 421.552†	639.1	719.8	0.7776	ug/L	0.7776	ppb	12:03:52
1	Sc 361.383	757679.3	757679.3	86.756	%			12:04:20
1	Y 371.029	638146.7	638146.7	85.163	%			12:04:20
1	Ag 328.068†	-25181.3	-29516.2	2.4670	ug/L	2.4670	ppb	12:04:20
1	As 188.979†	-228.2	-231.5	-11.885	ug/L	-11.885	ppb	12:04:40
1	B 249.677†	941.1	1850.3	-21.284	ug/L	-21.284	ppb	12:04:20
1	Ba 233.527†	-1937.1	-2251.3	-5.1872	ug/L	-5.1872	ppb	12:04:40
1	Be 313.107†	-10869.5	-8148.7	-2.7880	ug/L	-2.7880	ppb	12:04:20
1	Cd 226.502†	3385.1	4154.8	-5.3790	ug/L	-5.3790	ppb	12:04:40
1	Co 228.616†	213.3	345.1	0.0429	ug/L	0.0429	ppb	12:04:40
1	Cr 267.716†	50.2	-32.4	3.0398	ug/L	3.0398	ppb	12:04:40
1	Cu 324.752†	678.0	-7322.2	1.1038	ug/L	1.1038	ppb	12:04:20
1	Mn 257.610†	-27348.8	-32830.1	1.3042	ug/L	1.3042	ppb	12:04:20
1	Mo 202.031†	-545.4	-655.4	1.6438	ug/L	1.6438	ppb	12:04:40
1	Ni 231.604†	292.9	221.4	4.9025	ug/L	4.9025	ppb	12:04:40
1	P 214.914†	625.6	468.4	43.092	ug/L	43.092	ppb	12:04:40
1	Pb 220.353†	-756.2	-770.3	-1.9974	ug/L	-1.9974	ppb	12:04:40
1	S 181.975 Axial†	109.9	69.0	-22.876	ug/L	-22.876	ppb	12:04:40
1	Sb 206.836†	68.2	32.5	0.9893	ug/L	0.9893	ppb	12:04:40
1	Se 196.026†	-2691.3	-3063.4	-95.073	ug/L	-95.073	ppb	12:04:40
1	Si 251.611†	-385.1	-1074.0	-30.121	ug/L	-30.121	ppb	12:04:40
1	Sn 189.927†	-438.9	-510.7	-19.283	ug/L	-19.283	ppb	12:04:40
1	Ti 334.940†	-13054.5	-13293.9	-2.2930	ug/L	-2.2930	ppb	12:04:20
1	Tl 190.801†	-119.0	-91.5	-11.517	ug/L	-11.517	ppb	12:04:40
1	U 409.014†	424047.0	491688.2	14595	ug/L	14595	ppb	12:04:20
1	V 292.402†	1676.4	3738.7	-5.9260	ug/L	-5.9260	ppb	12:04:20
1	Zn 213.857†	6363.2	6481.5	13.840	ug/L	13.840	ppb	12:04:40
1	SiO2†	-448.6	-1165.8	-69.936	ug/L	-69.936	ppb	12:05:37
2	Sc Radial	4119.8	4119.8	89.0	%			12:04:03
2	Y RADIAL	4368.0	4368.0	89.24	%			12:04:03
2	Al 396.153Radial†	519615.6	583734.4	502330	ug/L	502330	ppb	12:03:58
2	Ca 317.933Radial†	246656.6	277069.3	478490	ug/L	478490	ppb	12:03:58
2	Fe 238.204 Radial†	41705.6	46837.5	449200	ug/L	449200	ppb	12:04:03
2	K 766.490 Radial†	3093.1	245.4	-153.21	ug/L	-153.21	ppb	12:03:58
2	Mg 279.077 IEC†	12569.0	14117.9	480680	ug/L	480680	ppb	12:04:03
2	Na 589.592 Radial†	1335018.7	1501472.0	512630	ug/L	512630	ppb	12:03:58
2	Sr 421.552†	635.3	702.4	0.7395	ug/L	0.7395	ppb	12:04:03
2	Sc 361.383	758254.9	758254.9	86.822	%			12:04:46
2	Y 371.029	638234.4	638234.4	85.174	%			12:04:46
2	Ag 328.068†	-25079.9	-29377.5	3.0337	ug/L	3.0337	ppb	12:04:46
2	As 188.979†	-223.1	-225.5	-9.8474	ug/L	-9.8474	ppb	12:05:06
2	B 249.677†	801.5	1688.7	-24.570	ug/L	-24.570	ppb	12:04:46
2	Ba 233.527†	-1946.4	-2260.4	-5.2673	ug/L	-5.2673	ppb	12:05:06
2	Be 313.107†	-11042.3	-8338.2	-2.8533	ug/L	-2.8533	ppb	12:04:46
2	Cd 226.502†	3422.4	4194.8	-4.9476	ug/L	-4.9476	ppb	12:05:06
2	Co 228.616†	205.4	335.8	-0.1219	ug/L	-0.1219	ppb	12:05:06
2	Cr 267.716†	52.1	-30.3	3.0467	ug/L	3.0467	ppb	12:05:06
2	Cu 324.752†	787.6	-7196.5	1.4536	ug/L	1.4536	ppb	12:04:46
2	Mn 257.610†	-27459.9	-32934.0	1.1674	ug/L	1.1674	ppb	12:04:46
2	Mo 202.031†	-533.3	-641.0	2.5076	ug/L	2.5076	ppb	12:05:06
2	Ni 231.604†	326.1	259.4	5.7439	ug/L	5.7439	ppb	12:05:06

2	P 214.914†	613.3	453.8	32.651 ug/L	32.651 ppb	12:05:06
2	Pb 220.353†	-709.9	-716.4	1.2425 ug/L	1.2425 ppb	12:05:06
2	S 181.975 Axial†	103.2	61.2	-29.541 ug/L	-29.541 ppb	12:05:06
2	Sb 206.836†	59.2	22.0	-1.8037 ug/L	-1.8037 ppb	12:05:06
2	Se 196.026†	-2721.4	-3095.6	-114.66 ug/L	-114.66 ppb	12:05:06
2	Si 251.611†	-450.2	-1148.6	-32.312 ug/L	-32.312 ppb	12:05:06
2	Sn 189.927†	-419.9	-488.4	-16.976 ug/L	-16.976 ppb	12:05:06
2	Ti 334.940†	-13457.5	-13746.6	-3.5348 ug/L	-3.5348 ppb	12:04:46
2	Tl 190.801†	-138.3	-113.6	-17.908 ug/L	-17.908 ppb	12:05:06
2	U 409.014†	424800.3	492184.8	14610 ug/L	14610 ppb	12:04:46
2	V 292.402†	1630.2	3684.0	-6.1821 ug/L	-6.1821 ppb	12:04:46
2	Zn 213.857†	6370.2	6483.9	13.920 ug/L	13.920 ppb	12:05:06
2	SiO2†	-265.7	-954.8	-56.978 ug/L	-56.978 ppb	12:05:42
3	Sc Radial	4192.9	4192.9	90.6 %		12:04:13
3	Y RADIAL	4420.4	4420.4	90.31 %		12:04:13
3	Al 396.153Radial†	523634.4	577990.5	497390 ug/L	497390 ppb	12:04:08
3	Ca 317.933Radial†	248512.1	274285.1	473690 ug/L	473690 ppb	12:04:08
3	Fe 238.204 Radial†	42367.5	46751.0	448370 ug/L	448370 ppb	12:04:13
3	K 766.490 Radial†	3015.4	99.0	-179.99 ug/L	-179.99 ppb	12:04:08
3	Mg 279.077 IEC†	12789.4	14115.0	480580 ug/L	480580 ppb	12:04:13
3	Na 589.592 Radial†	1340360.4	1481213.7	505710 ug/L	505710 ppb	12:04:08
3	Sr 421.552†	667.2	725.1	0.9520 ug/L	0.9520 ppb	12:04:13
3	Sc 361.383	760474.2	760474.2	87.076 %		12:05:12
3	Y 371.029	639482.7	639482.7	85.341 %		12:05:12
3	Ag 328.068†	-25175.1	-29402.5	2.7246 ug/L	2.7246 ppb	12:05:12
3	As 188.979†	-211.2	-211.1	-4.9251 ug/L	-4.9251 ppb	12:05:32
3	B 249.677†	932.1	1835.9	-21.405 ug/L	-21.405 ppb	12:05:12
3	Ba 233.527†	-1966.1	-2276.5	-5.4073 ug/L	-5.4073 ppb	12:05:32
3	Be 313.107†	-11075.4	-8339.1	-2.8537 ug/L	-2.8537 ppb	12:05:12
3	Cd 226.502†	3401.9	4159.8	-5.1987 ug/L	-5.1987 ppb	12:05:32
3	Co 228.616†	200.3	329.2	-0.2347 ug/L	-0.2347 ppb	12:05:32
3	Cr 267.716†	34.2	-51.0	2.8234 ug/L	2.8234 ppb	12:05:32
3	Cu 324.752†	674.0	-7329.7	1.0140 ug/L	1.0140 ppb	12:05:12
3	Mn 257.610†	-27538.6	-32932.2	1.0886 ug/L	1.0886 ppb	12:05:12
3	Mo 202.031†	-536.0	-642.3	2.3444 ug/L	2.3444 ppb	12:05:32
3	Ni 231.604†	312.7	243.0	5.3801 ug/L	5.3801 ppb	12:05:32
3	P 214.914†	619.4	458.7	34.102 ug/L	34.102 ppb	12:05:32
3	Pb 220.353†	-740.6	-749.2	-3.2127 ug/L	-3.2127 ppb	12:05:32
3	S 181.975 Axial†	102.3	59.9	-30.113 ug/L	-30.113 ppb	12:05:32
3	Sb 206.836†	67.5	31.3	1.1175 ug/L	1.1175 ppb	12:05:32
3	Se 196.026†	-2701.6	-3063.8	-101.78 ug/L	-101.78 ppb	12:05:32
3	Si 251.611†	-376.0	-1061.8	-29.791 ug/L	-29.791 ppb	12:05:32
3	Sn 189.927†	-422.4	-489.9	-17.711 ug/L	-17.711 ppb	12:05:32
3	Ti 334.940†	-13507.9	-13759.3	-3.8017 ug/L	-3.8017 ppb	12:05:12
3	Tl 190.801†	-100.8	-70.0	-6.0673 ug/L	-6.0673 ppb	12:05:32
3	U 409.014†	425775.8	491877.3	14601 ug/L	14601 ppb	12:05:12
3	V 292.402†	1580.2	3621.2	-6.4758 ug/L	-6.4758 ppb	12:05:12
3	Zn 213.857†	6330.1	6416.5	13.411 ug/L	13.411 ppb	12:05:32
3	SiO2†	-503.7	-1227.2	-73.773 ug/L	-73.773 ppb	12:05:47

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	758802.8	86.885	%	0.1690				0.19%
Sc Radial	4119.3	89.0	%	1.60				1.79%
Y 371.029	638621.3	85.226	%	0.0997				0.12%
Y RADIAL	4360.7	89.09	%	1.302				1.46%
Ag 328.068†	-29432.0	2.7418	ug/L	0.28378	2.7418	ppb	0.28378	10.35%
Al 396.153Radial†	585991.6	504270	ug/L	8034.5	504270	ppb	8034.5	1.59%
QC value within limits for Al 396.153Radial Recovery = 100.85%								
As 188.979†	-222.7	-8.8858	ug/L	3.57822	-8.8858	ppb	3.57822	40.27%
B 249.677†	1791.6	-22.419	ug/L	1.8635	-22.419	ppb	1.8635	8.31%
Ba 233.527†	-2262.7	-5.2872	ug/L	0.11140	-5.2872	ppb	0.11140	2.11%
Be 313.107†	-8275.3	-2.8317	ug/L	0.03779	-2.8317	ppb	0.03779	1.33%
Ca 317.933Radial†	278028.4	480150	ug/L	7432.4	480150	ppb	7432.4	1.55%
QC value within limits for Ca 317.933Radial Recovery = 96.03%								
Cd 226.502†	4169.8	-5.1751	ug/L	0.21667	-5.1751	ppb	0.21667	4.19%
Co 228.616†	336.7	-0.1046	ug/L	0.13964	-0.1046	ppb	0.13964	133.52%
Cr 267.716†	-37.9	2.9700	ug/L	0.12696	2.9700	ppb	0.12696	4.27%
Cu 324.752†	-7282.8	1.1905	ug/L	0.23224	1.1905	ppb	0.23224	19.51%

Fe 238.204 Radial†	46825.9	449090 ug/L	669.2	449090 ppb	669.2	0.15%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 89.82%						
K 766.490 Radial†	165.4	-169.84 ug/L	14.512	-169.84 ppb	14.512	8.54%
Mg 279.077 IEC†	14128.5	481040 ug/L	712.1	481040 ppb	712.1	0.15%
QC value within limits for Mg 279.077 IEC Recovery = 96.21%						
Mn 257.610†	-32898.8	1.1867 ug/L	0.10913	1.1867 ppb	0.10913	9.20%
Mo 202.031†	-646.2	2.1653 ug/L	0.45891	2.1653 ppb	0.45891	21.19%
Na 589.592 Radial†	1504774.1	513750 ug/L	8662.8	513750 ppb	8662.8	1.69%
QC value within limits for Na 589.592 Radial Recovery = 102.75%						
Ni 231.604†	241.3	5.3422 ug/L	0.42199	5.3422 ppb	0.42199	7.90%
P 214.914†	460.3	36.615 ug/L	5.6562	36.615 ppb	5.6562	15.45%
Pb 220.353†	-745.3	-1.3226 ug/L	2.30302	-1.3226 ppb	2.30302	174.13%
S 181.975 Axial†	63.4	-27.510 ug/L	4.0233	-27.510 ppb	4.0233	14.62%
Sb 206.836†	28.6	0.1010 ug/L	1.65080	0.1010 ppb	1.65080	>999.9%
Se 196.026†	-3074.3	-103.84 ug/L	9.957	-103.84 ppb	9.957	9.59%
Si 251.611†	-1094.8	-30.741 ug/L	1.3701	-30.741 ppb	1.3701	4.46%
Sn 189.927†	-496.3	-17.990 ug/L	1.1782	-17.990 ppb	1.1782	6.55%
Sr 421.552†	715.8	0.8230 ug/L	0.11329	0.8230 ppb	0.11329	13.76%
Ti 334.940†	-13599.9	-3.2098 ug/L	0.80511	-3.2098 ppb	0.80511	25.08%
Tl 190.801†	-91.7	-11.831 ug/L	5.9267	-11.831 ppb	5.9267	50.10%
U 409.014†	491916.8	14602 ug/L	7.5	14602 ppb	7.5	0.05%
QC value within limits for U 409.014 Recovery = 97.35%						
V 292.402†	3681.3	-6.1946 ug/L	0.27507	-6.1946 ppb	0.27507	4.44%
Zn 213.857†	6460.6	13.724 ug/L	0.2736	13.724 ppb	0.2736	1.99%
SiO2†	-1115.9	-66.896 ug/L	8.8010	-66.896 ppb	8.8010	13.16%

QC Failed. Continue with analysis.

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

Autosampler Location: 16
Date Collected: 1/7/2010 12:07:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4190.9	4190.9	90.6	%			12:10:16
1	Y RADIAL	4618.3	4618.3	94.35	%			12:09:56
1	Al 396.153Radial†	551.4	629.8	93.135	ug/L	93.135	ppb	12:09:56
1	Ca 317.933Radial†	28.5	17.5	30.215	ug/L	30.215	ppb	12:10:16
1	Fe 238.204 Radial†	-20.0	-34.8	-13.217	ug/L	-13.217	ppb	12:10:16
1	K 766.490 Radial†	1368972.6	1508531.2	305470	ug/L	305470	ppb	12:09:50
1	Mg 279.077 IEC†	-5.8	-7.9	-56.157	ug/L	-56.157	ppb	12:10:16
1	Na 589.592 Radial†	-1055.3	604.7	206.45	ug/L	206.45	ppb	12:09:56
1	Sr 421.552†	1205877.8	1331643.1	9810.9	ug/L	9810.9	ppb	12:09:50
1	Sc 361.383	789179.4	789179.4	90.363	%			12:11:33
1	Y 371.029	660812.0	660812.0	88.187	%			12:11:33
1	Ag 328.068†	-7479.3	-8767.8	4.4450	ug/L	4.4450	ppb	12:11:38
1	As 188.979†	27901.7	30908.8	10929	ug/L	10929	ppb	12:11:38
1	B 249.677†	236301.1	262267.2	5415.7	ug/L	5415.7	ppb	12:11:33
1	Ba 233.527†	1895685.4	2097834.5	15470	ug/L	15470	ppb	12:11:33
1	Be 313.107†	8206687.1	9086279.1	3083.0	ug/L	3083.0	ppb	12:11:26
1	Cd 226.502†	993382.8	1099576.2	10481	ug/L	10481	ppb	12:11:33
1	Co 228.616†	485748.9	537651.3	10167	ug/L	10167	ppb	12:11:38
1	Cr 267.716†	2321650.1	2569154.9	26106	ug/L	26106	ppb	12:11:33
1	Cu 324.752†	6546042.5	7236049.3	21579	ug/L	21579	ppb	12:11:26
1	Mn 257.610†	8645747.7	9566477.4	10071	ug/L	10071	ppb	12:11:26
1	Mo 202.031†	149753.5	165697.4	10483	ug/L	10483	ppb	12:11:38
1	Ni 231.604†	435659.9	482005.2	10674	ug/L	10674	ppb	12:11:33
1	P 214.914†	34998.1	38477.8	15535	ug/L	15535	ppb	12:11:38
1	Pb 220.353†	225359.1	249494.1	25966	ug/L	25966	ppb	12:11:38
1	S 181.975 Axial†	44105.5	48751.5	55155	ug/L	55155	ppb	12:11:38
1	Sb 206.836†	33381.9	36895.8	10929	ug/L	10929	ppb	12:11:38
1	Se 196.026†	19630.6	21762.9	11101	ug/L	11101	ppb	12:11:38
1	Si 251.611†	1644585.8	1819344.6	52317	ug/L	52317	ppb	12:11:33
1	Sn 189.927†	67403.1	74586.6	11139	ug/L	11139	ppb	12:11:38
1	Ti 334.940†	5967191.8	6605323.6	10571	ug/L	10571	ppb	12:11:26
1	Tl 190.801†	34584.7	38318.7	10587	ug/L	10587	ppb	12:11:38
1	U 409.014†	-1242.2	1533.9	-4.6383	ug/L	-4.6383	ppb	12:11:38
1	V 292.402†	1546514.6	1713250.9	10997	ug/L	10997	ppb	12:11:33
1	Zn 213.857†	1670041.6	1847292.1	15198	ug/L	15198	ppb	12:11:33
1	SiO2†	1640195.9	1814467.8	111360	ug/L	111360	ppb	12:12:25
2	Sc Radial	4174.8	4174.8	90.2	%			12:10:46
2	Y RADIAL	4587.3	4587.3	93.72	%			12:10:26
2	Al 396.153Radial†	537.4	616.6	113.35	ug/L	113.35	ppb	12:10:26
2	Ca 317.933Radial†	24.5	13.2	22.774	ug/L	22.774	ppb	12:10:46
2	Fe 238.204 Radial†	-16.4	-30.9	2.8401	ug/L	2.8401	ppb	12:10:46
2	K 766.490 Radial†	1378393.9	1524806.8	308770	ug/L	308770	ppb	12:10:21
2	Mg 279.077 IEC†	-8.0	-10.4	-155.96	ug/L	-155.96	ppb	12:10:46
2	Na 589.592 Radial†	-1177.8	464.3	158.53	ug/L	158.53	ppb	12:10:26
2	Sr 421.552†	1218000.6	1350218.8	9947.8	ug/L	9947.8	ppb	12:10:21
2	Sc 361.383	837765.8	837765.8	95.926	%			12:11:53
2	Y 371.029	702693.4	702693.4	93.777	%			12:11:53
2	Ag 328.068†	-7363.7	-8167.3	3.4658	ug/L	3.4658	ppb	12:11:58
2	As 188.979†	27620.2	28824.6	10193	ug/L	10193	ppb	12:11:58
2	B 249.677†	229614.0	240130.3	4958.2	ug/L	4958.2	ppb	12:11:53
2	Ba 233.527†	1845376.3	1923723.7	14186	ug/L	14186	ppb	12:11:53
2	Be 313.107†	8211470.3	8564559.6	2905.9	ug/L	2905.9	ppb	12:11:46
2	Cd 226.502†	967606.6	1008950.0	9617.1	ug/L	9617.1	ppb	12:11:53
2	Co 228.616†	480581.1	501088.7	9475.2	ug/L	9475.2	ppb	12:11:58
2	Cr 267.716†	2257509.9	2353287.3	23913	ug/L	23913	ppb	12:11:53
2	Cu 324.752†	6548764.9	6818761.7	20335	ug/L	20335	ppb	12:11:46
2	Mn 257.610†	8663634.9	9030239.3	9506.8	ug/L	9506.8	ppb	12:11:46
2	Mo 202.031†	147801.8	154051.6	9746.1	ug/L	9746.1	ppb	12:11:58
2	Ni 231.604†	423334.5	441195.7	9770.6	ug/L	9770.6	ppb	12:11:53

2	P 214.914†	34616.2	35833.6	14429 ug/L	14429 ppb	12:11:58
2	Pb 220.353†	223012.0	232583.7	24206 ug/L	24206 ppb	12:11:58
2	S 181.975 Axial†	43464.9	45253.0	51197 ug/L	51197 ppb	12:11:58
2	Sb 206.836†	32995.9	34350.9	10183 ug/L	10183 ppb	12:11:58
2	Se 196.026†	19290.1	20148.0	10277 ug/L	10277 ppb	12:11:58
2	Si 251.611†	1598241.2	1665482.2	47879 ug/L	47879 ppb	12:11:53
2	Sn 189.927†	66492.5	69311.5	10351 ug/L	10351 ppb	12:11:58
2	Ti 334.940†	5971232.7	6226561.1	9965.3 ug/L	9965.3 ppb	12:11:46
2	Tl 190.801†	34266.5	35767.3	9883.8 ug/L	9883.8 ppb	12:11:58
2	U 409.014†	-1611.3	1228.8	-9.5003 ug/L	-9.5003 ppb	12:11:58
2	V 292.402†	1502804.0	1568428.6	10069 ug/L	10069 ppb	12:11:53
2	Zn 213.857†	1627295.6	1695547.5	13949 ug/L	13949 ppb	12:11:53
2	SiO2†	1623327.2	1691614.8	103810 ug/L	103810 ppb	12:12:33
3	Sc Radial	4185.1	4185.1	90.4 %		12:11:17
3	Y RADIAL	4579.8	4579.8	93.56 %		12:10:56
3	Al 396.153Radial†	492.3	565.2	74.996 ug/L	74.996 ppb	12:10:56
3	Ca 317.933Radial†	23.6	12.1	20.882 ug/L	20.882 ppb	12:11:17
3	Fe 238.204 Radial†	-19.5	-34.2	-33.779 ug/L	-33.779 ppb	12:11:17
3	K 766.490 Radial†	1387747.5	1531371.2	310100 ug/L	310100 ppb	12:10:51
3	Mg 279.077 IEC†	-5.1	-7.2	-50.445 ug/L	-50.445 ppb	12:11:17
3	Na 589.592 Radial†	-1158.4	489.1	166.98 ug/L	166.98 ppb	12:10:56
3	Sr 421.552†	1223766.3	1353255.3	9970.2 ug/L	9970.2 ppb	12:10:51
3	Sc 361.383	851474.1	851474.1	97.496 %		12:12:13
3	Y 371.029	713161.6	713161.6	95.174 %		12:12:13
3	Ag 328.068†	-7333.1	-8012.4	4.0058 ug/L	4.0058 ppb	12:12:18
3	As 188.979†	27749.1	28493.2	10076 ug/L	10076 ppb	12:12:18
3	B 249.677†	233652.0	240418.3	4964.5 ug/L	4964.5 ppb	12:12:13
3	Ba 233.527†	1870648.9	1918674.1	14149 ug/L	14149 ppb	12:12:13
3	Be 313.107†	8219798.2	8435286.7	2862.1 ug/L	2862.1 ppb	12:12:06
3	Cd 226.502†	980672.4	1006111.9	9590.1 ug/L	9590.1 ppb	12:12:13
3	Co 228.616†	481411.3	493874.5	9338.8 ug/L	9338.8 ppb	12:12:18
3	Cr 267.716†	2286175.2	2344800.6	23826 ug/L	23826 ppb	12:12:13
3	Cu 324.752†	6569087.2	6729696.8	20069 ug/L	20069 ppb	12:12:06
3	Mn 257.610†	8666608.4	8887885.8	9356.9 ug/L	9356.9 ppb	12:12:06
3	Mo 202.031†	148117.2	151894.6	9609.6 ug/L	9609.6 ppb	12:12:18
3	Ni 231.604†	429446.8	440360.1	9752.2 ug/L	9752.2 ppb	12:12:13
3	P 214.914†	34571.6	35206.9	14163 ug/L	14163 ppb	12:12:18
3	Pb 220.353†	223632.3	229477.2	23882 ug/L	23882 ppb	12:12:18
3	S 181.975 Axial†	43560.9	44622.0	50483 ug/L	50483 ppb	12:12:18
3	Sb 206.836†	32970.9	33771.6	10005 ug/L	10005 ppb	12:12:18
3	Se 196.026†	19398.6	19935.6	10169 ug/L	10169 ppb	12:12:18
3	Si 251.611†	1622891.0	1663941.6	47837 ug/L	47837 ppb	12:12:13
3	Sn 189.927†	66584.4	68289.7	10199 ug/L	10199 ppb	12:12:18
3	Ti 334.940†	5983532.5	6138960.4	9825.0 ug/L	9825.0 ppb	12:12:06
3	Tl 190.801†	34356.2	35284.2	9749.9 ug/L	9749.9 ppb	12:12:18
3	U 409.014†	-1525.9	1343.5	-5.9139 ug/L	-5.9139 ppb	12:12:18
3	V 292.402†	1522709.2	1563623.2	10037 ug/L	10037 ppb	12:12:13
3	Zn 213.857†	1647815.6	1689283.2	13898 ug/L	13898 ppb	12:12:13
3	SiO2†	1626637.3	1667765.4	102340 ug/L	102340 ppb	12:12:40

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	826139.8	94.595	%	3.7482				3.96%
Sc Radial	4183.6	90.4	%	0.18				0.20%
Y 371.029	692222.4	92.379	%	3.6968				4.00%
Y RADIAL	4595.1	93.88	%	0.417				0.44%
Ag 328.068†	-8315.8	3.9722	ug/L	0.49045	3.9722	ppb	0.49045	12.35%
Al 396.153Radial†	603.9	93.827	ug/L	19.1867	93.827	ppb	19.1867	20.45%
As 188.979†	29408.9	10399	ug/L	462.7	10399	ppb	462.7	4.45%
QC value within limits for As 188.979 Recovery = 103.99%								
B 249.677†	247605.3	5112.8	ug/L	262.36	5112.8	ppb	262.36	5.13%
QC value within limits for B 249.677 Recovery = 102.26%								
Ba 233.527†	1980077.4	14602	ug/L	752.3	14602	ppb	752.3	5.15%
QC value within limits for Ba 233.527 Recovery = 97.34%								
Be 313.107†	8695375.1	2950.3	ug/L	116.93	2950.3	ppb	116.93	3.96%
QC value within limits for Be 313.107 Recovery = 98.34%								
Ca 317.933Radial†	14.3	24.624	ug/L	4.9337	24.624	ppb	4.9337	20.04%
Cd 226.502†	1038212.7	9896.0	ug/L	506.73	9896.0	ppb	506.73	5.12%
QC value within limits for Cd 226.502 Recovery = 98.96%								

Co 228.616†	510871.5	9660.3 ug/L	443.97	9660.3 ppb	443.97	4.60%
QC value within limits for Co 228.616 Recovery = 96.60%						
Cr 267.716†	2422414.3	24615 ug/L	1292.0	24615 ppb	1292.0	5.25%
QC value within limits for Cr 267.716 Recovery = 98.46%						
Cu 324.752†	6928169.3	20661 ug/L	806.2	20661 ppb	806.2	3.90%
QC value within limits for Cu 324.752 Recovery = 103.30%						
Fe 238.204 Radial†	-33.3	-14.719 ug/L	18.3558	-14.719 ppb	18.3558	124.71%
K 766.490 Radial†	1521569.8	308110 ug/L	2384.8	308110 ppb	2384.8	0.77%
QC value within limits for K 766.490 Radial Recovery = 102.70%						
Mg 279.077 IEC†	-8.5	-87.521 ug/L	59.3397	-87.521 ppb	59.3397	67.80%
Mn 257.610†	9161534.2	9645.0 ug/L	376.73	9645.0 ppb	376.73	3.91%
QC value within limits for Mn 257.610 Recovery = 96.45%						
Mo 202.031†	157214.5	9946.2 ug/L	469.75	9946.2 ppb	469.75	4.72%
QC value within limits for Mo 202.031 Recovery = 99.46%						
Na 589.592 Radial†	519.4	177.32 ug/L	25.576	177.32 ppb	25.576	14.42%
Ni 231.604†	454520.3	10066 ug/L	527.3	10066 ppb	527.3	5.24%
QC value within limits for Ni 231.604 Recovery = 100.66%						
P 214.914†	36506.1	14709 ug/L	727.8	14709 ppb	727.8	4.95%
QC value within limits for P 214.914 Recovery = 98.06%						
Pb 220.353†	237185.0	24685 ug/L	1121.3	24685 ppb	1121.3	4.54%
QC value within limits for Pb 220.353 Recovery = 98.74%						
S 181.975 Axial†	46208.9	52278 ug/L	2516.6	52278 ppb	2516.6	4.81%
QC value within limits for S 181.975 Axial Recovery = 104.56%						
Sb 206.836†	35006.1	10372 ug/L	490.1	10372 ppb	490.1	4.72%
QC value within limits for Sb 206.836 Recovery = 103.72%						
Se 196.026†	20615.5	10516 ug/L	509.7	10516 ppb	509.7	4.85%
QC value within limits for Se 196.026 Recovery = 105.16%						
Si 251.611†	1716256.1	49344 ug/L	2574.1	49344 ppb	2574.1	5.22%
QC value within limits for Si 251.611 Recovery = 98.69%						
Sn 189.927†	70729.3	10563 ug/L	504.7	10563 ppb	504.7	4.78%
QC value within limits for Sn 189.927 Recovery = 105.63%						
Sr 421.552†	1345039.1	9909.6 ug/L	86.20	9909.6 ppb	86.20	0.87%
QC value within limits for Sr 421.552 Recovery = 99.10%						
Ti 334.940†	6323615.0	10121 ug/L	396.6	10121 ppb	396.6	3.92%
QC value within limits for Ti 334.940 Recovery = 101.21%						
Tl 190.801†	36456.8	10074 ug/L	449.5	10074 ppb	449.5	4.46%
QC value within limits for Tl 190.801 Recovery = 100.74%						
U 409.014†	1368.7	-6.6842 ug/L	2.52086	-6.6842 ppb	2.52086	37.71%
V 292.402†	1615100.9	10367 ug/L	545.2	10367 ppb	545.2	5.26%
QC value within limits for V 292.402 Recovery = 103.67%						
Zn 213.857†	1744040.9	14348 ug/L	736.3	14348 ppb	736.3	5.13%
QC value within limits for Zn 213.857 Recovery = 95.66%						
SiO2†	1724616.0	105840 ug/L	4842.5	105840 ppb	4842.5	4.58%
QC value within limits for SiO2 Recovery = 98.91%						

All analyte(s) passed QC.

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

Autosampler Location: 7
Date Collected: 1/7/2010 12:14:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4561.5	4561.5	98.6	%			12:16:41
1	Y RADIAL	4818.4	4818.4	98.44	%			12:16:41
1	Al 396.153Radial†	5634.6	5737.6	4916.6	ug/L	4916.6	ppb	12:16:41
1	Ca 317.933Radial†	2903.6	2931.9	5063.4	ug/L	5063.4	ppb	12:17:01
1	Fe 238.204 Radial†	538.8	533.9	5135.5	ug/L	5135.5	ppb	12:17:01
1	K 766.490 Radial†	28292.5	25475.3	5151.4	ug/L	5151.4	ppb	12:16:41
1	Mg 279.077 IEC†	153.9	154.6	5274.1	ug/L	5274.1	ppb	12:17:01
1	Na 589.592 Radial†	27740.9	29915.0	10213	ug/L	10213	ppb	12:16:41
1	Sr 421.552†	64713.8	65645.1	483.60	ug/L	483.60	ppb	12:16:41
1	Sc 361.383	893556.6	893556.6	102.31	%			12:18:00
1	Y 371.029	755927.1	755927.1	100.88	%			12:18:00
1	Ag 328.068†	114709.5	111623.6	488.22	ug/L	488.22	ppb	12:18:00
1	As 188.979†	1454.6	1453.1	513.96	ug/L	513.96	ppb	12:18:20
1	B 249.677†	24780.2	24985.1	516.48	ug/L	516.48	ppb	12:18:00
1	Ba 233.527†	68035.4	66477.8	490.67	ug/L	490.67	ppb	12:18:00
1	Be 313.107†	1487079.8	1457819.1	492.27	ug/L	492.27	ppb	12:18:00
1	Cd 226.502†	52735.9	51795.8	493.18	ug/L	493.18	ppb	12:18:00
1	Co 228.616†	26141.7	25649.5	485.12	ug/L	485.12	ppb	12:18:20
1	Cr 267.716†	49263.9	48059.2	488.78	ug/L	488.78	ppb	12:18:00
1	Cu 324.752†	176315.9	164223.6	490.00	ug/L	490.00	ppb	12:18:00
1	Mn 257.610†	477728.6	465615.1	490.60	ug/L	490.60	ppb	12:18:00
1	Mo 202.031†	7878.0	7673.1	485.93	ug/L	485.93	ppb	12:18:20
1	Ni 231.604†	22522.3	21896.7	484.91	ug/L	484.91	ppb	12:18:20
1	P 214.914†	5356.3	4982.5	2365.5	ug/L	2365.5	ppb	12:18:20
1	Pb 220.353†	4724.2	4718.6	492.41	ug/L	492.41	ppb	12:18:20
1	S 181.975 Axial†	945.7	866.6	979.51	ug/L	979.51	ppb	12:18:20
1	Sb 206.836†	1700.5	1615.9	495.15	ug/L	495.15	ppb	12:18:20
1	Se 196.026†	968.0	984.9	518.96	ug/L	518.96	ppb	12:18:20
1	Si 251.611†	87144.7	84543.3	2434.2	ug/L	2434.2	ppb	12:18:00
1	Sn 189.927†	3335.2	3255.0	486.71	ug/L	486.71	ppb	12:18:20
1	Ti 334.940†	312950.0	307623.8	492.64	ug/L	492.64	ppb	12:18:00
1	Tl 190.801†	1775.3	1780.8	492.27	ug/L	492.27	ppb	12:18:20
1	U 409.014†	13368.0	15974.1	474.43	ug/L	474.43	ppb	12:18:00
1	V 292.402†	76625.8	76698.8	493.04	ug/L	493.04	ppb	12:18:00
1	Zn 213.857†	62068.1	59810.9	490.99	ug/L	490.99	ppb	12:18:00
1	SiO2†	86510.1	83904.3	5156.5	ug/L	5156.5	ppb	12:19:21
2	Sc Radial	4636.6	4636.6	100	%			12:17:06
2	Y RADIAL	4843.6	4843.6	98.95	%			12:17:06
2	Al 396.153Radial†	5631.5	5641.9	4834.2	ug/L	4834.2	ppb	12:17:06
2	Ca 317.933Radial†	2924.4	2904.9	5016.7	ug/L	5016.7	ppb	12:17:26
2	Fe 238.204 Radial†	544.5	530.8	5105.7	ug/L	5105.7	ppb	12:17:26
2	K 766.490 Radial†	28426.4	25144.3	5084.4	ug/L	5084.4	ppb	12:17:06
2	Mg 279.077 IEC†	156.4	154.6	5274.6	ug/L	5274.6	ppb	12:17:26
2	Na 589.592 Radial†	28036.7	29754.6	10159	ug/L	10159	ppb	12:17:06
2	Sr 421.552†	65002.5	64870.3	477.89	ug/L	477.89	ppb	12:17:06
2	Sc 361.383	895585.4	895585.4	102.55	%			12:18:28
2	Y 371.029	758020.0	758020.0	101.16	%			12:18:28
2	Ag 328.068†	115177.8	111826.3	489.10	ug/L	489.10	ppb	12:18:28
2	As 188.979†	1454.0	1449.3	512.62	ug/L	512.62	ppb	12:18:48
2	B 249.677†	25007.9	25152.3	519.95	ug/L	519.95	ppb	12:18:28
2	Ba 233.527†	68499.4	66779.6	492.90	ug/L	492.90	ppb	12:18:28
2	Be 313.107†	1493159.3	1460455.0	493.16	ug/L	493.16	ppb	12:18:28
2	Cd 226.502†	52967.5	51905.0	494.23	ug/L	494.23	ppb	12:18:28
2	Co 228.616†	26259.9	25706.9	486.21	ug/L	486.21	ppb	12:18:48
2	Cr 267.716†	49464.8	48146.0	489.67	ug/L	489.67	ppb	12:18:28
2	Cu 324.752†	176822.4	164327.2	490.31	ug/L	490.31	ppb	12:18:28
2	Mn 257.610†	480131.7	466900.7	491.95	ug/L	491.95	ppb	12:18:28
2	Mo 202.031†	7922.3	7698.8	487.56	ug/L	487.56	ppb	12:18:48
2	Ni 231.604†	22623.2	21945.1	485.98	ug/L	485.98	ppb	12:18:48

2	P 214.914†	5373.8	4987.7	2368.0 ug/L	2368.0 ppb	12:18:48
2	Pb 220.353†	4746.2	4729.6	493.54 ug/L	493.54 ppb	12:18:48
2	S 181.975 Axial†	954.5	873.1	986.81 ug/L	986.81 ppb	12:18:48
2	Sb 206.836†	1727.0	1638.0	501.83 ug/L	501.83 ppb	12:18:48
2	Se 196.026†	966.2	981.0	516.87 ug/L	516.87 ppb	12:18:48
2	Si 251.611†	87534.9	84730.8	2439.7 ug/L	2439.7 ppb	12:18:28
2	Sn 189.927†	3341.3	3253.6	486.49 ug/L	486.49 ppb	12:18:48
2	Ti 334.940†	314057.0	308010.4	493.25 ug/L	493.25 ppb	12:18:28
2	Tl 190.801†	1787.6	1788.8	494.46 ug/L	494.46 ppb	12:18:48
2	U 409.014†	13148.3	15730.3	467.17 ug/L	467.17 ppb	12:18:28
2	V 292.402†	76921.7	76817.6	493.80 ug/L	493.80 ppb	12:18:28
2	Zn 213.857†	62259.9	59860.5	491.40 ug/L	491.40 ppb	12:18:28
2	SiO2†	86302.1	83510.0	5132.1 ug/L	5132.1 ppb	12:19:26
3	Sc Radial	4635.1	4635.1	100 %		12:17:32
3	Y RADIAL	4864.0	4864.0	99.37 %		12:17:32
3	Al 396.153Radial†	5668.7	5680.8	4867.9 ug/L	4867.9 ppb	12:17:32
3	Ca 317.933Radial†	2900.8	2882.3	4977.7 ug/L	4977.7 ppb	12:17:52
3	Fe 238.204 Radial†	541.1	527.5	5074.5 ug/L	5074.5 ppb	12:17:52
3	K 766.490 Radial†	28588.7	25315.5	5119.1 ug/L	5119.1 ppb	12:17:32
3	Mg 279.077 IEC†	153.0	151.2	5158.4 ug/L	5158.4 ppb	12:17:52
3	Na 589.592 Radial†	27996.5	29723.5	10148 ug/L	10148 ppb	12:17:32
3	Sr 421.552†	65049.4	64938.1	478.39 ug/L	478.39 ppb	12:17:32
3	Sc 361.383	901048.9	901048.9	103.17 %		12:18:55
3	Y 371.029	762848.3	762848.3	101.80 %		12:18:55
3	Ag 328.068†	115223.6	111189.7	486.31 ug/L	486.31 ppb	12:18:55
3	As 188.979†	1458.2	1444.8	511.03 ug/L	511.03 ppb	12:19:15
3	B 249.677†	24908.3	24907.9	514.89 ug/L	514.89 ppb	12:18:55
3	Ba 233.527†	68625.4	66496.7	490.81 ug/L	490.81 ppb	12:18:55
3	Be 313.107†	1495543.2	1453936.6	490.96 ug/L	490.96 ppb	12:18:55
3	Cd 226.502†	52990.3	51613.8	491.45 ug/L	491.45 ppb	12:18:55
3	Co 228.616†	26180.9	25475.0	481.82 ug/L	481.82 ppb	12:19:15
3	Cr 267.716†	49535.2	47921.7	487.39 ug/L	487.39 ppb	12:18:55
3	Cu 324.752†	177432.1	163872.5	488.95 ug/L	488.95 ppb	12:18:55
3	Mn 257.610†	481978.4	465851.6	490.85 ug/L	490.85 ppb	12:18:55
3	Mo 202.031†	7909.7	7639.8	483.82 ug/L	483.82 ppb	12:19:15
3	Ni 231.604†	22581.1	21770.6	482.12 ug/L	482.12 ppb	12:19:15
3	P 214.914†	5370.0	4952.2	2350.9 ug/L	2350.9 ppb	12:19:15
3	Pb 220.353†	4726.8	4682.8	488.67 ug/L	488.67 ppb	12:19:15
3	S 181.975 Axial†	944.2	857.5	969.13 ug/L	969.13 ppb	12:19:15
3	Sb 206.836†	1702.5	1604.0	491.46 ug/L	491.46 ppb	12:19:15
3	Se 196.026†	959.6	968.9	510.63 ug/L	510.63 ppb	12:19:15
3	Si 251.611†	87684.7	84358.4	2428.9 ug/L	2428.9 ppb	12:18:55
3	Sn 189.927†	3329.6	3222.5	481.84 ug/L	481.84 ppb	12:19:15
3	Ti 334.940†	314992.5	307060.2	491.73 ug/L	491.73 ppb	12:18:55
3	Tl 190.801†	1795.8	1786.3	493.76 ug/L	493.76 ppb	12:19:15
3	U 409.014†	13435.6	15931.0	473.16 ug/L	473.16 ppb	12:18:55
3	V 292.402†	77070.0	76506.6	491.79 ug/L	491.79 ppb	12:18:55
3	Zn 213.857†	62324.8	59555.3	488.90 ug/L	488.90 ppb	12:18:55
3	SiO2†	86160.5	82862.4	5092.3 ug/L	5092.3 ppb	12:19:31

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	896730.3	102.68	%	0.444				0.43%
Sc Radial	4611.1	99.6	%	0.93				0.93%
Y 371.029	758931.8	101.28	%	0.474				0.47%
Y RADIAL	4842.0	98.92	%	0.466				0.47%
Ag 328.068†	111546.5	487.87	ug/L	1.426	487.87	ppb	1.426	0.29%
QC value within limits for Ag 328.068 Recovery = 97.57%								
Al 396.153Radial†	5686.7	4872.9	ug/L	41.43	4872.9	ppb	41.43	0.85%
QC value within limits for Al 396.153Radial Recovery = 97.46%								
As 188.979†	1449.1	512.54	ug/L	1.468	512.54	ppb	1.468	0.29%
QC value within limits for As 188.979 Recovery = 102.51%								
B 249.677†	25015.1	517.10	ug/L	2.586	517.10	ppb	2.586	0.50%
QC value within limits for B 249.677 Recovery = 103.42%								
Ba 233.527†	66584.7	491.46	ug/L	1.246	491.46	ppb	1.246	0.25%
QC value within limits for Ba 233.527 Recovery = 98.29%								
Be 313.107†	1457403.5	492.13	ug/L	1.107	492.13	ppb	1.107	0.22%
QC value within limits for Be 313.107 Recovery = 98.43%								
Ca 317.933Radial†	2906.4	5019.3	ug/L	42.91	5019.3	ppb	42.91	0.85%

QC value within limits for Ca 317.933Radial Recovery = 100.39%

Cd 226.502†	51771.5	492.95 ug/L	1.400	492.95 ppb	1.400	0.28%
QC value within limits for Cd 226.502 Recovery = 98.59%						
Co 228.616†	25610.5	484.39 ug/L	2.286	484.39 ppb	2.286	0.47%
QC value within limits for Co 228.616 Recovery = 96.88%						
Cr 267.716†	48042.3	488.61 ug/L	1.151	488.61 ppb	1.151	0.24%
QC value within limits for Cr 267.716 Recovery = 97.72%						
Cu 324.752†	164141.1	489.76 ug/L	0.712	489.76 ppb	0.712	0.15%
QC value within limits for Cu 324.752 Recovery = 97.95%						
Fe 238.204 Radial†	530.7	5105.2 ug/L	30.52	5105.2 ppb	30.52	0.60%
QC value within limits for Fe 238.204 Radial Recovery = 102.10%						
K 766.490 Radial†	25311.7	5118.3 ug/L	33.53	5118.3 ppb	33.53	0.66%
QC value within limits for K 766.490 Radial Recovery = 102.37%						
Mg 279.077 IEC†	153.5	5235.7 ug/L	66.94	5235.7 ppb	66.94	1.28%
QC value within limits for Mg 279.077 IEC Recovery = 104.71%						
Mn 257.610†	466122.5	491.13 ug/L	0.719	491.13 ppb	0.719	0.15%
QC value within limits for Mn 257.610 Recovery = 98.23%						
Mo 202.031†	7670.6	485.77 ug/L	1.875	485.77 ppb	1.875	0.39%
QC value within limits for Mo 202.031 Recovery = 97.15%						
Na 589.592 Radial†	29797.7	10173 ug/L	35.1	10173 ppb	35.1	0.35%
QC value within limits for Na 589.592 Radial Recovery = 101.73%						
Ni 231.604†	21870.8	484.33 ug/L	1.995	484.33 ppb	1.995	0.41%
QC value within limits for Ni 231.604 Recovery = 96.87%						
P 214.914†	4974.1	2361.5 ug/L	9.28	2361.5 ppb	9.28	0.39%
QC value within limits for P 214.914 Recovery = 94.46%						
Pb 220.353†	4710.3	491.54 ug/L	2.548	491.54 ppb	2.548	0.52%
QC value within limits for Pb 220.353 Recovery = 98.31%						
S 181.975 Axial†	865.7	978.48 ug/L	8.883	978.48 ppb	8.883	0.91%
QC value within limits for S 181.975 Axial Recovery = 97.85%						
Sb 206.836†	1619.3	496.15 ug/L	5.257	496.15 ppb	5.257	1.06%
QC value within limits for Sb 206.836 Recovery = 99.23%						
Se 196.026†	978.2	515.49 ug/L	4.333	515.49 ppb	4.333	0.84%
QC value within limits for Se 196.026 Recovery = 103.10%						
Si 251.611†	84544.2	2434.3 ug/L	5.35	2434.3 ppb	5.35	0.22%
QC value within limits for Si 251.611 Recovery = 97.37%						
Sn 189.927†	3243.7	485.02 ug/L	2.750	485.02 ppb	2.750	0.57%
QC value within limits for Sn 189.927 Recovery = 97.00%						
Sr 421.552†	65151.2	479.96 ug/L	3.161	479.96 ppb	3.161	0.66%
QC value within limits for Sr 421.552 Recovery = 95.99%						
Ti 334.940†	307564.8	492.54 ug/L	0.767	492.54 ppb	0.767	0.16%
QC value within limits for Ti 334.940 Recovery = 98.51%						
Tl 190.801†	1785.3	493.50 ug/L	1.123	493.50 ppb	1.123	0.23%
QC value within limits for Tl 190.801 Recovery = 98.70%						
U 409.014†	15878.5	471.59 ug/L	3.878	471.59 ppb	3.878	0.82%
QC value within limits for U 409.014 Recovery = 94.32%						
V 292.402†	76674.3	492.88 ug/L	1.015	492.88 ppb	1.015	0.21%
QC value within limits for V 292.402 Recovery = 98.58%						
Zn 213.857†	59742.2	490.43 ug/L	1.339	490.43 ppb	1.339	0.27%
QC value within limits for Zn 213.857 Recovery = 98.09%						
SiO2†	83425.6	5127.0 ug/L	32.41	5127.0 ppb	32.41	0.63%
QC value within limits for SiO2 Recovery = 95.88%						

All analyte(s) passed QC.

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

Autosampler Location: 8
Date Collected: 1/7/2010 12:21:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4551.7	4551.7	98.4	%			12:23:33
1	Y RADIAL	4774.4	4774.4	97.54	%			12:23:33
1	Al 396.153Radial†	7.9	28.9	24.852	ug/L	24.852	ppb	12:23:33
1	Ca 317.933Radial†	14.5	0.8	1.3319	ug/L	1.3319	ppb	12:23:53
1	Fe 238.204 Radial†	14.8	2.3	22.197	ug/L	22.197	ppb	12:23:53
1	K 766.490 Radial†	3834.1	669.1	135.49	ug/L	135.49	ppb	12:23:33
1	Mg 279.077 IEC†	2.9	1.4	48.508	ug/L	48.508	ppb	12:23:53
1	Na 589.592 Radial†	-1454.6	291.1	99.376	ug/L	99.376	ppb	12:23:33
1	Sr 421.552†	10.3	-0.8	-0.0062	ug/L	-0.0062	ppb	12:23:33
1	Sc 361.383	903216.3	903216.3	103.42	%			12:24:50
1	Y 371.029	771331.8	771331.8	102.94	%			12:24:50
1	Ag 328.068†	631.7	119.9	0.5223	ug/L	0.5223	ppb	12:24:55
1	As 188.979†	0.5	31.9	11.189	ug/L	11.189	ppb	12:25:15
1	B 249.677†	288.5	1044.4	21.666	ug/L	21.666	ppb	12:24:55
1	Ba 233.527†	-6.8	-25.1	-0.1820	ug/L	-0.1820	ppb	12:25:15
1	Be 313.107†	-4343.3	180.4	0.0612	ug/L	0.0612	ppb	12:24:55
1	Cd 226.502†	-202.9	56.8	0.5388	ug/L	0.5388	ppb	12:25:15
1	Co 228.616†	-76.7	25.0	0.4732	ug/L	0.4732	ppb	12:25:15
1	Cr 267.716†	121.1	26.8	0.2706	ug/L	0.2706	ppb	12:24:55
1	Cu 324.752†	8268.4	-108.7	-0.3232	ug/L	-0.3232	ppb	12:24:55
1	Mn 257.610†	1120.7	-222.7	-0.2332	ug/L	-0.2332	ppb	12:24:55
1	Mo 202.031†	37.6	9.6	0.6109	ug/L	0.6109	ppb	12:25:15
1	Ni 231.604†	146.0	25.0	0.5537	ug/L	0.5537	ppb	12:25:15
1	P 214.914†	238.1	-22.4	-10.898	ug/L	-10.898	ppb	12:25:15
1	Pb 220.353†	-89.6	14.7	1.5332	ug/L	1.5332	ppb	12:25:15
1	S 181.975 Axial†	62.7	2.9	3.3140	ug/L	3.3140	ppb	12:25:15
1	Sb 206.836†	44.8	-2.9	-0.8464	ug/L	-0.8464	ppb	12:25:15
1	Se 196.026†	-33.6	6.3	3.2646	ug/L	3.2646	ppb	12:25:15
1	Si 251.611†	755.0	100.0	2.8355	ug/L	2.8355	ppb	12:25:15
1	Sn 189.927†	9.8	4.7	0.7023	ug/L	0.7023	ppb	12:25:15
1	Ti 334.940†	-1694.5	115.0	0.1790	ug/L	0.1790	ppb	12:24:55
1	Tl 190.801†	-49.7	-2.3	-0.6455	ug/L	-0.6455	ppb	12:25:15
1	U 409.014†	-2600.0	394.6	11.755	ug/L	11.755	ppb	12:24:50
1	V 292.402†	-1705.7	157.1	1.0257	ug/L	1.0257	ppb	12:24:55
1	Zn 213.857†	900.0	17.1	0.1360	ug/L	0.1360	ppb	12:25:15
1	SiO2†	738.2	65.1	3.8911	ug/L	3.8911	ppb	12:26:21
2	Sc Radial	4695.6	4695.6	101	%			12:23:58
2	Y RADIAL	4935.0	4935.0	100.8	%			12:23:58
2	Al 396.153Radial†	-25.9	-4.7	-4.0840	ug/L	-4.0840	ppb	12:23:58
2	Ca 317.933Radial†	17.4	3.1	5.3760	ug/L	5.3760	ppb	12:24:18
2	Fe 238.204 Radial†	10.2	-2.7	-25.566	ug/L	-25.566	ppb	12:24:18
2	K 766.490 Radial†	3826.8	542.4	109.83	ug/L	109.83	ppb	12:23:58
2	Mg 279.077 IEC†	2.6	1.0	34.653	ug/L	34.653	ppb	12:24:18
2	Na 589.592 Radial†	-1519.2	272.7	93.095	ug/L	93.095	ppb	12:23:58
2	Sr 421.552†	16.3	4.8	0.0351	ug/L	0.0351	ppb	12:23:58
2	Sc 361.383	897774.1	897774.1	102.80	%			12:25:20
2	Y 371.029	765862.1	765862.1	102.21	%			12:25:20
2	Ag 328.068†	556.8	50.8	0.2010	ug/L	0.2010	ppb	12:25:25
2	As 188.979†	16.1	47.1	16.518	ug/L	16.518	ppb	12:25:46
2	B 249.677†	232.3	991.5	20.574	ug/L	20.574	ppb	12:25:25
2	Ba 233.527†	16.5	-2.5	-0.0191	ug/L	-0.0191	ppb	12:25:46
2	Be 313.107†	-4489.1	13.2	0.0047	ug/L	0.0047	ppb	12:25:25
2	Cd 226.502†	-209.1	49.5	0.4743	ug/L	0.4743	ppb	12:25:46
2	Co 228.616†	-83.3	18.2	0.3472	ug/L	0.3472	ppb	12:25:46
2	Cr 267.716†	137.6	43.6	0.4380	ug/L	0.4380	ppb	12:25:25
2	Cu 324.752†	8364.0	32.8	0.0964	ug/L	0.0964	ppb	12:25:25
2	Mn 257.610†	1058.6	-276.6	-0.2944	ug/L	-0.2944	ppb	12:25:25
2	Mo 202.031†	47.8	19.7	1.2468	ug/L	1.2468	ppb	12:25:46
2	Ni 231.604†	129.0	9.4	0.2077	ug/L	0.2077	ppb	12:25:46

2	P 214.914†	248.3	-11.1	-5.3975 ug/L	-5.3975 ppb	12:25:46
2	Pb 220.353†	-75.3	28.0	2.9176 ug/L	2.9176 ppb	12:25:46
2	S 181.975 Axial†	62.1	2.7	3.0502 ug/L	3.0502 ppb	12:25:46
2	Sb 206.836†	69.8	21.8	6.6100 ug/L	6.6100 ppb	12:25:46
2	Se 196.026†	-34.8	4.9	2.3987 ug/L	2.3987 ppb	12:25:46
2	Si 251.611†	778.8	127.6	3.6299 ug/L	3.6299 ppb	12:25:46
2	Sn 189.927†	12.0	7.0	1.0417 ug/L	1.0417 ppb	12:25:46
2	Ti 334.940†	-1722.4	78.0	0.1192 ug/L	0.1192 ppb	12:25:25
2	Tl 190.801†	-37.3	9.4	2.5670 ug/L	2.5670 ppb	12:25:46
2	U 409.014†	-2540.2	437.5	13.039 ug/L	13.039 ppb	12:25:20
2	V 292.402†	-1850.7	6.1	0.0859 ug/L	0.0859 ppb	12:25:25
2	Zn 213.857†	916.0	38.0	0.3131 ug/L	0.3131 ppb	12:25:46
2	SiO2†	783.0	113.0	6.8411 ug/L	6.8411 ppb	12:26:26
3	Sc Radial	4529.2	4529.2	97.9 %		12:24:23
3	Y RADIAL	4770.5	4770.5	97.46 %		12:24:23
3	Al 396.153Radial†	-8.4	12.2	10.513 ug/L	10.513 ppb	12:24:23
3	Ca 317.933Radial†	18.4	4.8	8.3327 ug/L	8.3327 ppb	12:24:44
3	Fe 238.204 Radial†	11.4	-1.0	-9.8412 ug/L	-9.8412 ppb	12:24:44
3	K 766.490 Radial†	3930.2	786.6	159.31 ug/L	159.31 ppb	12:24:23
3	Mg 279.077 IEC†	3.1	1.6	55.631 ug/L	55.631 ppb	12:24:44
3	Na 589.592 Radial†	-1564.3	171.6	58.601 ug/L	58.601 ppb	12:24:23
3	Sr 421.552†	4.8	-6.4	-0.0474 ug/L	-0.0474 ppb	12:24:23
3	Sc 361.383	885034.6	885034.6	101.34 %		12:25:51
3	Y 371.029	755287.8	755287.8	100.80 %		12:25:51
3	Ag 328.068†	502.3	4.8	0.0115 ug/L	0.0115 ppb	12:25:56
3	As 188.979†	7.0	38.4	13.458 ug/L	13.458 ppb	12:26:16
3	B 249.677†	243.2	1005.4	20.863 ug/L	20.863 ppb	12:25:56
3	Ba 233.527†	-1.2	-19.8	-0.1447 ug/L	-0.1447 ppb	12:26:16
3	Be 313.107†	-4425.1	13.5	0.0047 ug/L	0.0047 ppb	12:25:56
3	Cd 226.502†	-204.8	50.9	0.4857 ug/L	0.4857 ppb	12:26:16
3	Co 228.616†	-119.8	-19.0	-0.3588 ug/L	-0.3588 ppb	12:26:16
3	Cr 267.716†	146.5	54.3	0.5489 ug/L	0.5489 ppb	12:25:56
3	Cu 324.752†	8254.5	41.8	0.1240 ug/L	0.1240 ppb	12:25:56
3	Mn 257.610†	1122.0	-199.2	-0.2117 ug/L	-0.2117 ppb	12:25:56
3	Mo 202.031†	36.1	8.9	0.5604 ug/L	0.5604 ppb	12:26:16
3	Ni 231.604†	108.9	-8.6	-0.1914 ug/L	-0.1914 ppb	12:26:16
3	P 214.914†	260.3	4.2	2.0892 ug/L	2.0892 ppb	12:26:16
3	Pb 220.353†	-95.0	7.6	0.7937 ug/L	0.7937 ppb	12:26:16
3	S 181.975 Axial†	72.2	13.6	15.383 ug/L	15.383 ppb	12:26:16
3	Sb 206.836†	55.7	8.8	2.6840 ug/L	2.6840 ppb	12:26:16
3	Se 196.026†	-40.4	-1.1	-0.5750 ug/L	-0.5750 ppb	12:26:16
3	Si 251.611†	737.3	97.5	2.7537 ug/L	2.7537 ppb	12:26:16
3	Sn 189.927†	14.3	9.4	1.4053 ug/L	1.4053 ppb	12:26:16
3	Ti 334.940†	-1741.0	35.4	0.0530 ug/L	0.0530 ppb	12:25:56
3	Tl 190.801†	-27.3	18.7	5.1398 ug/L	5.1398 ppb	12:26:16
3	U 409.014†	-2636.5	306.9	9.1447 ug/L	9.1447 ppb	12:25:51
3	V 292.402†	-1750.3	79.2	0.5307 ug/L	0.5307 ppb	12:25:56
3	Zn 213.857†	915.3	50.2	0.4149 ug/L	0.4149 ppb	12:26:16
3	SiO2†	795.1	135.9	8.2443 ug/L	8.2443 ppb	12:26:31

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	895341.7	102.52	%	1.069				1.04%
Sc Radial	4592.1	99.2	%	1.95				1.97%
Y 371.029	764160.6	101.98	%	1.088				1.07%
Y RADIAL	4826.6	98.61	%	1.917				1.94%
Ag 328.068†	58.5	0.2450	ug/L	0.25823	0.2450	ppb	0.25823	105.42%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	12.2	10.427	ug/L	14.4684	10.427	ppb	14.4684	138.76%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	39.2	13.722	ug/L	2.6747	13.722	ppb	2.6747	19.49%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1013.8	21.034	ug/L	0.5657	21.034	ppb	0.5657	2.69%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-15.8	-0.1153	ug/L	0.08533	-0.1153	ppb	0.08533	74.02%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	69.0	0.0235	ug/L	0.03262	0.0235	ppb	0.03262	138.75%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.9	5.0135	ug/L	3.51448	5.0135	ppb	3.51448	70.10%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†          52.4      0.4996 ug/L       0.03441      0.4996 ppb       0.03441   6.89%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†           8.0      0.1538 ug/L       0.44844      0.1538 ppb       0.44844 291.53%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†          41.6      0.4192 ug/L       0.14006      0.4192 ppb       0.14006  33.41%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†         -11.4     -0.0342 ug/L       0.25060     -0.0342 ppb       0.25060 732.07%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†   -0.5     -4.4032 ug/L      24.34159     -4.4032 ppb      24.34159 552.82%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†   666.0      134.87 ug/L        24.746      134.87 ppb        24.746  18.35%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       1.4      46.264 ug/L       10.6677      46.264 ppb       10.6677  23.06%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†        -232.8     -0.2464 ug/L       0.04289     -0.2464 ppb       0.04289  17.41%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†          12.7      0.8060 ug/L       0.38258      0.8060 ppb       0.38258  47.46%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†  245.1      83.691 ug/L       21.9545      83.691 ppb       21.9545  26.23%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†           8.6      0.1900 ug/L       0.37288      0.1900 ppb       0.37288 196.27%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†           -9.7     -4.7353 ug/L       6.51862     -4.7353 ppb       6.51862 137.66%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†          16.8      1.7482 ug/L       1.07814      1.7482 ppb       1.07814  61.67%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†      6.4      7.2492 ug/L       7.04565      7.2492 ppb       7.04565  97.19%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†           9.2      2.8159 ug/L       3.72994      2.8159 ppb       3.72994 132.46%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†           3.4      1.6961 ug/L       2.01392      1.6961 ppb       2.01392 118.74%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†         108.4      3.0730 ug/L       0.48401      3.0730 ppb       0.48401  15.75%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†           7.0      1.0498 ug/L       0.35155      1.0498 ppb       0.35155  33.49%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†          -0.8     -0.0062 ug/L       0.04126     -0.0062 ppb       0.04126 670.32%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†          76.1      0.1171 ug/L       0.06304      0.1171 ppb       0.06304  53.85%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†           8.6      2.3537 ug/L       2.89853      2.3537 ppb       2.89853 123.15%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†          379.6      11.313 ug/L        1.9843      11.313 ppb        1.9843  17.54%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†           80.8      0.5474 ug/L       0.47011      0.5474 ppb       0.47011  85.87%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†          35.1      0.2880 ug/L       0.14114      0.2880 ppb       0.14114  49.01%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†               104.7      6.3255 ug/L       2.22193      6.3255 ppb       2.22193  35.13%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/7/2010 13:22:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4294.4	4294.4	92.8	%			13:24:09
1	Y RADIAL	4527.0	4527.0	92.48	%			13:24:09
1	Al 396.153Radial†	5472.2	5918.2	5072.0	ug/L	5072.0	ppb	13:24:09
1	Ca 317.933Radial†	2829.3	3035.0	5241.5	ug/L	5241.5	ppb	13:24:29
1	Fe 238.204 Radial†	528.3	556.7	5354.2	ug/L	5354.2	ppb	13:24:29
1	K 766.490 Radial†	26854.9	25711.7	5199.2	ug/L	5199.2	ppb	13:24:09
1	Mg 279.077 IEC†	149.6	159.7	5446.8	ug/L	5446.8	ppb	13:24:29
1	Na 589.592 Radial†	26374.7	30193.6	10309	ug/L	10309	ppb	13:24:09
1	Sr 421.552†	62089.6	66901.6	492.85	ug/L	492.85	ppb	13:24:09
1	Sc 361.383	875760.1	875760.1	100.28	%			13:25:28
1	Y 371.029	741764.8	741764.8	98.991	%			13:25:28
1	Ag 328.068†	113537.1	112732.7	493.12	ug/L	493.12	ppb	13:25:28
1	As 188.979†	1356.7	1384.4	489.94	ug/L	489.94	ppb	13:25:48
1	B 249.677†	23713.6	24413.6	504.58	ug/L	504.58	ppb	13:25:28
1	Ba 233.527†	67356.8	67152.3	495.66	ug/L	495.66	ppb	13:25:28
1	Be 313.107†	1467012.6	1467342.7	495.49	ug/L	495.49	ppb	13:25:28
1	Cd 226.502†	51870.8	51980.6	494.92	ug/L	494.92	ppb	13:25:28
1	Co 228.616†	25748.5	25776.6	487.52	ug/L	487.52	ppb	13:25:48
1	Cr 267.716†	48768.8	48543.9	493.72	ug/L	493.72	ppb	13:25:28
1	Cu 324.752†	174353.1	165768.1	494.62	ug/L	494.62	ppb	13:25:28
1	Mn 257.610†	472803.0	470191.4	495.44	ug/L	495.44	ppb	13:25:28
1	Mo 202.031†	7746.2	7698.1	487.53	ug/L	487.53	ppb	13:25:48
1	Ni 231.604†	22231.8	22054.3	488.40	ug/L	488.40	ppb	13:25:48
1	P 214.914†	5257.8	4990.6	2368.6	ug/L	2368.6	ppb	13:25:48
1	Pb 220.353†	4636.7	4725.2	493.11	ug/L	493.11	ppb	13:25:48
1	S 181.975 Axial†	935.4	875.1	989.06	ug/L	989.06	ppb	13:25:48
1	Sb 206.836†	1632.9	1582.3	484.84	ug/L	484.84	ppb	13:25:48
1	Se 196.026†	931.3	967.5	510.81	ug/L	510.81	ppb	13:25:48
1	Si 251.611†	85919.5	85052.2	2448.9	ug/L	2448.9	ppb	13:25:28
1	Sn 189.927†	3248.9	3235.2	483.77	ug/L	483.77	ppb	13:25:48
1	Ti 334.940†	310275.9	311172.7	498.32	ug/L	498.32	ppb	13:25:28
1	Tl 190.801†	1739.5	1780.4	492.20	ug/L	492.20	ppb	13:25:48
1	U 409.014†	13349.5	16221.2	481.76	ug/L	481.76	ppb	13:25:28
1	V 292.402†	75992.7	77589.3	498.68	ug/L	498.68	ppb	13:25:28
1	Zn 213.857†	61128.9	60107.1	493.40	ug/L	493.40	ppb	13:25:28
1	SiO2†	86113.7	85227.2	5238.1	ug/L	5238.1	ppb	13:26:48
2	Sc Radial	4431.2	4431.2	95.7	%			13:24:34
2	Y RADIAL	4666.4	4666.4	95.33	%			13:24:34
2	Al 396.153Radial†	5545.7	5812.9	4981.0	ug/L	4981.0	ppb	13:24:34
2	Ca 317.933Radial†	2822.0	2933.3	5065.8	ug/L	5065.8	ppb	13:24:54
2	Fe 238.204 Radial†	525.2	535.8	5154.6	ug/L	5154.6	ppb	13:24:54
2	K 766.490 Radial†	27097.6	25071.7	5069.7	ug/L	5069.7	ppb	13:24:34
2	Mg 279.077 IEC†	151.9	157.1	5358.6	ug/L	5358.6	ppb	13:24:54
2	Na 589.592 Radial†	26812.6	29773.3	10165	ug/L	10165	ppb	13:24:34
2	Sr 421.552†	62944.3	65728.1	484.21	ug/L	484.21	ppb	13:24:34
2	Sc 361.383	859269.8	859269.8	98.389	%			13:25:55
2	Y 371.029	728312.9	728312.9	97.196	%			13:25:55
2	Ag 328.068†	112063.2	113407.6	496.00	ug/L	496.00	ppb	13:25:55
2	As 188.979†	1364.0	1417.8	501.63	ug/L	501.63	ppb	13:26:15
2	B 249.677†	23271.7	24418.3	504.69	ug/L	504.69	ppb	13:25:55
2	Ba 233.527†	66403.3	67472.2	498.01	ug/L	498.01	ppb	13:25:55
2	Be 313.107†	1448461.0	1476563.3	498.60	ug/L	498.60	ppb	13:25:55
2	Cd 226.502†	51281.0	52373.8	498.69	ug/L	498.69	ppb	13:25:55
2	Co 228.616†	25728.9	26249.5	496.48	ug/L	496.48	ppb	13:26:15
2	Cr 267.716†	48196.0	48895.1	497.29	ug/L	497.29	ppb	13:25:55
2	Cu 324.752†	171388.3	166091.5	495.57	ug/L	495.57	ppb	13:25:55
2	Mn 257.610†	466542.5	472876.9	498.25	ug/L	498.25	ppb	13:25:55
2	Mo 202.031†	7743.0	7843.1	496.69	ug/L	496.69	ppb	13:26:15
2	Ni 231.604†	22183.0	22430.2	496.72	ug/L	496.72	ppb	13:26:15

2	P 214.914†	5264.7	5098.3	2421.5 ug/L	2421.5 ppb	13:26:15
2	Pb 220.353†	4616.7	4793.6	500.24 ug/L	500.24 ppb	13:26:15
2	S 181.975 Axial†	929.7	887.2	1002.8 ug/L	1002.8 ppb	13:26:15
2	Sb 206.836†	1643.4	1624.2	497.81 ug/L	497.81 ppb	13:26:15
2	Se 196.026†	936.1	990.2	521.79 ug/L	521.79 ppb	13:26:15
2	Si 251.611†	84773.9	85532.2	2462.7 ug/L	2462.7 ppb	13:25:55
2	Sn 189.927†	3260.7	3309.4	494.83 ug/L	494.83 ppb	13:26:15
2	Ti 334.940†	305996.4	312761.3	500.86 ug/L	500.86 ppb	13:25:55
2	Tl 190.801†	1735.5	1809.6	500.19 ug/L	500.19 ppb	13:26:15
2	U 409.014†	12969.1	16090.0	477.87 ug/L	477.87 ppb	13:25:55
2	V 292.402†	74893.8	77926.7	500.97 ug/L	500.97 ppb	13:25:55
2	Zn 213.857†	60240.2	60373.7	495.56 ug/L	495.56 ppb	13:25:55
2	SiO2†	85356.4	86105.6	5292.0 ug/L	5292.0 ppb	13:26:53
3	Sc Radial	4445.0	4445.0	96.0 %		13:24:59
3	Y RADIAL	4631.7	4631.7	94.62 %		13:24:59
3	Al 396.153Radial†	5486.2	5732.9	4912.5 ug/L	4912.5 ppb	13:24:59
3	Ca 317.933Radial†	2828.6	2931.1	5061.9 ug/L	5061.9 ppb	13:25:19
3	Fe 238.204 Radial†	526.8	535.7	5153.5 ug/L	5153.5 ppb	13:25:19
3	K 766.490 Radial†	27002.9	24885.1	5031.9 ug/L	5031.9 ppb	13:24:59
3	Mg 279.077 IEC†	152.3	157.1	5356.9 ug/L	5356.9 ppb	13:25:19
3	Na 589.592 Radial†	26613.1	29478.5	10064 ug/L	10064 ppb	13:24:59
3	Sr 421.552†	62350.8	64905.9	478.15 ug/L	478.15 ppb	13:24:59
3	Sc 361.383	876996.0	876996.0	100.42 %		13:26:23
3	Y 371.029	742334.7	742334.7	99.067 %		13:26:23
3	Ag 328.068†	113873.2	112907.9	493.82 ug/L	493.82 ppb	13:26:23
3	As 188.979†	1364.9	1390.7	492.12 ug/L	492.12 ppb	13:26:43
3	B 249.677†	23695.9	24362.6	503.55 ug/L	503.55 ppb	13:26:23
3	Ba 233.527†	67481.5	67181.8	495.87 ug/L	495.87 ppb	13:26:23
3	Be 313.107†	1469158.5	1467418.1	495.51 ug/L	495.51 ppb	13:26:23
3	Cd 226.502†	51836.2	51873.3	493.92 ug/L	493.92 ppb	13:26:23
3	Co 228.616†	25784.7	25776.5	487.52 ug/L	487.52 ppb	13:26:43
3	Cr 267.716†	48742.4	48449.1	492.75 ug/L	492.75 ppb	13:26:23
3	Cu 324.752†	174746.7	165915.1	495.05 ug/L	495.05 ppb	13:26:23
3	Mn 257.610†	473590.8	470311.5	495.55 ug/L	495.55 ppb	13:26:23
3	Mo 202.031†	7774.3	7715.2	488.59 ug/L	488.59 ppb	13:26:43
3	Ni 231.604†	22222.6	22013.9	487.50 ug/L	487.50 ppb	13:26:43
3	P 214.914†	5260.5	4986.0	2366.4 ug/L	2366.4 ppb	13:26:43
3	Pb 220.353†	4657.5	4739.4	494.57 ug/L	494.57 ppb	13:26:43
3	S 181.975 Axial†	930.5	868.9	982.09 ug/L	982.09 ppb	13:26:43
3	Sb 206.836†	1655.4	1602.3	490.95 ug/L	490.95 ppb	13:26:43
3	Se 196.026†	953.1	987.9	520.56 ug/L	520.56 ppb	13:26:43
3	Si 251.611†	86150.4	85161.4	2452.1 ug/L	2452.1 ppb	13:26:23
3	Sn 189.927†	3255.7	3237.5	484.09 ug/L	484.09 ppb	13:26:43
3	Ti 334.940†	311343.1	311799.5	499.32 ug/L	499.32 ppb	13:26:23
3	Tl 190.801†	1743.1	1781.5	492.50 ug/L	492.50 ppb	13:26:43
3	U 409.014†	13297.0	16150.2	479.67 ug/L	479.67 ppb	13:26:23
3	V 292.402†	76048.5	77538.1	498.40 ug/L	498.40 ppb	13:26:23
3	Zn 213.857†	61110.1	60002.4	492.55 ug/L	492.55 ppb	13:26:23
3	SiO2†	85751.9	84745.9	5208.5 ug/L	5208.5 ppb	13:26:58

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	870675.3	99.695	%	1.1332				1.14%
Sc Radial	4390.2	94.9	%	1.80				1.90%
Y 371.029	737470.8	98.418	%	1.0591				1.08%
Y RADIAL	4608.4	94.15	%	1.482				1.57%
Ag 328.068†	113016.1	494.31	ug/L	1.503	494.31	ppb	1.503	0.30%
QC value within limits for Ag 328.068 Recovery = 98.86%								
Al 396.153Radial†	5821.3	4988.5	ug/L	80.00	4988.5	ppb	80.00	1.60%
QC value within limits for Al 396.153Radial Recovery = 99.77%								
As 188.979†	1397.6	494.56	ug/L	6.212	494.56	ppb	6.212	1.26%
QC value within limits for As 188.979 Recovery = 98.91%								
B 249.677†	24398.2	504.27	ug/L	0.627	504.27	ppb	0.627	0.12%
QC value within limits for B 249.677 Recovery = 100.85%								
Ba 233.527†	67268.8	496.51	ug/L	1.303	496.51	ppb	1.303	0.26%
QC value within limits for Ba 233.527 Recovery = 99.30%								
Be 313.107†	1470441.4	496.53	ug/L	1.789	496.53	ppb	1.789	0.36%
QC value within limits for Be 313.107 Recovery = 99.31%								
Ca 317.933Radial†	2966.5	5123.1	ug/L	102.55	5123.1	ppb	102.55	2.00%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.46%
Cd 226.502†          52075.9      495.85 ug/L         2.517      495.85 ppb          2.517   0.51%
   QC value within limits for Cd 226.502  Recovery = 99.17%
Co 228.616†          25934.2      490.50 ug/L         5.173      490.50 ppb          5.173   1.05%
   QC value within limits for Co 228.616  Recovery = 98.10%
Cr 267.716†          48629.4      494.58 ug/L         2.388      494.58 ppb          2.388   0.48%
   QC value within limits for Cr 267.716  Recovery = 98.92%
Cu 324.752†         165924.9      495.08 ug/L         0.478      495.08 ppb          0.478   0.10%
   QC value within limits for Cu 324.752  Recovery = 99.02%
Fe 238.204 Radial†     542.7      5220.8 ug/L        115.54      5220.8 ppb        115.54   2.21%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.42%
K 766.490 Radial†    25222.8      5100.3 ug/L         87.77      5100.3 ppb          87.77   1.72%
   QC value within limits for K 766.490 Radial  Recovery = 102.01%
Mg 279.077 IEC†        157.9      5387.4 ug/L         51.44      5387.4 ppb          51.44   0.95%
   QC value within limits for Mg 279.077 IEC  Recovery = 107.75%
Mn 257.610†         471126.6      496.41 ug/L         1.591      496.41 ppb          1.591   0.32%
   QC value within limits for Mn 257.610  Recovery = 99.28%
Mo 202.031†          7752.2      490.94 ug/L         5.008      490.94 ppb          5.008   1.02%
   QC value within limits for Mo 202.031  Recovery = 98.19%
Na 589.592 Radial†   29815.1       10179 ug/L         122.7       10179 ppb          122.7   1.21%
   QC value within limits for Na 589.592 Radial  Recovery = 101.79%
Ni 231.604†          22166.1      490.87 ug/L         5.084      490.87 ppb          5.084   1.04%
   QC value within limits for Ni 231.604  Recovery = 98.17%
P 214.914†           5025.0      2385.5 ug/L         31.17      2385.5 ppb          31.17   1.31%
   QC value within limits for P 214.914  Recovery = 95.42%
Pb 220.353†          4752.7      495.97 ug/L         3.766      495.97 ppb          3.766   0.76%
   QC value within limits for Pb 220.353  Recovery = 99.19%
S 181.975 Axial†      877.1      991.30 ug/L        10.513      991.30 ppb         10.513   1.06%
   QC value within limits for S 181.975 Axial  Recovery = 99.13%
Sb 206.836†          1602.9      491.20 ug/L         6.487      491.20 ppb          6.487   1.32%
   QC value within limits for Sb 206.836  Recovery = 98.24%
Se 196.026†           981.9      517.72 ug/L         6.014      517.72 ppb          6.014   1.16%
   QC value within limits for Se 196.026  Recovery = 103.54%
Si 251.611†          85248.6      2454.6 ug/L          7.19      2454.6 ppb           7.19   0.29%
   QC value within limits for Si 251.611  Recovery = 98.18%
Sn 189.927†          3260.7      487.56 ug/L         6.298      487.56 ppb          6.298   1.29%
   QC value within limits for Sn 189.927  Recovery = 97.51%
Sr 421.552†          65845.2      485.07 ug/L         7.388      485.07 ppb          7.388   1.52%
   QC value within limits for Sr 421.552  Recovery = 97.01%
Ti 334.940†         311911.1      499.50 ug/L         1.278      499.50 ppb          1.278   0.26%
   QC value within limits for Ti 334.940  Recovery = 99.90%
Tl 190.801†          1790.5      494.96 ug/L         4.531      494.96 ppb          4.531   0.92%
   QC value within limits for Tl 190.801  Recovery = 98.99%
U 409.014†           16153.8      479.77 ug/L         1.947      479.77 ppb          1.947   0.41%
   QC value within limits for U 409.014  Recovery = 95.95%
V 292.402†           77684.7      499.35 ug/L         1.411      499.35 ppb          1.411   0.28%
   QC value within limits for V 292.402  Recovery = 99.87%
Zn 213.857†          60161.1      493.84 ug/L         1.554      493.84 ppb          1.554   0.31%
   QC value within limits for Zn 213.857  Recovery = 98.77%
SiO2†                85359.6      5246.2 ug/L         42.37      5246.2 ppb          42.37   0.81%
   QC value within limits for SiO2  Recovery = 98.11%
All analyte(s) passed QC.
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Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/7/2010 13:29:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4241.1	4241.1	91.6	%			13:31:21
1	Y RADIAL	4687.0	4687.0	95.75	%			13:31:01
1	Al 396.153Radial†	-20.8	-1.8	-1.5770	ug/L	-1.5770	ppb	13:31:01
1	Ca 317.933Radial†	18.9	6.6	11.349	ug/L	11.349	ppb	13:31:21
1	Fe 238.204 Radial†	13.1	1.5	14.817	ug/L	14.817	ppb	13:31:21
1	K 766.490 Radial†	3253.7	321.3	65.058	ug/L	65.058	ppb	13:31:01
1	Mg 279.077 IEC†	0.8	-0.7	-22.976	ug/L	-22.976	ppb	13:31:21
1	Na 589.592 Radial†	-1489.6	144.5	49.349	ug/L	49.349	ppb	13:31:01
1	Sr 421.552†	0.7	-10.5	-0.0774	ug/L	-0.0774	ppb	13:31:01
1	Sc 361.383	889003.4	889003.4	101.79	%			13:32:18
1	Y 371.029	760775.6	760775.6	101.53	%			13:32:18
1	Ag 328.068†	595.9	94.5	0.4037	ug/L	0.4037	ppb	13:32:23
1	As 188.979†	-38.6	-6.4	-2.2617	ug/L	-2.2617	ppb	13:32:43
1	B 249.677†	-34.3	731.8	15.180	ug/L	15.180	ppb	13:32:23
1	Ba 233.527†	19.3	0.4	0.0038	ug/L	0.0038	ppb	13:32:43
1	Be 313.107†	-4368.4	88.7	0.0304	ug/L	0.0304	ppb	13:32:23
1	Cd 226.502†	-226.7	30.3	0.2874	ug/L	0.2874	ppb	13:32:43
1	Co 228.616†	-91.3	9.5	0.1796	ug/L	0.1796	ppb	13:32:43
1	Cr 267.716†	141.1	48.4	0.4873	ug/L	0.4873	ppb	13:32:23
1	Cu 324.752†	8082.5	-163.5	-0.4868	ug/L	-0.4868	ppb	13:32:23
1	Mn 257.610†	1208.9	-118.7	-0.1231	ug/L	-0.1231	ppb	13:32:23
1	Mo 202.031†	29.4	2.2	0.1407	ug/L	0.1407	ppb	13:32:43
1	Ni 231.604†	138.5	19.9	0.4414	ug/L	0.4414	ppb	13:32:43
1	P 214.914†	251.4	-5.7	-2.6907	ug/L	-2.6907	ppb	13:32:43
1	Pb 220.353†	-82.5	20.2	2.1012	ug/L	2.1012	ppb	13:32:43
1	S 181.975 Axial†	64.4	5.5	6.2781	ug/L	6.2781	ppb	13:32:43
1	Sb 206.836†	44.2	-2.7	-0.8198	ug/L	-0.8198	ppb	13:32:43
1	Se 196.026†	-30.5	8.8	4.5180	ug/L	4.5180	ppb	13:32:43
1	Si 251.611†	639.1	-2.2	-0.0903	ug/L	-0.0903	ppb	13:32:43
1	Sn 189.927†	11.1	6.1	0.9167	ug/L	0.9167	ppb	13:32:43
1	Ti 334.940†	-1633.7	148.5	0.2318	ug/L	0.2318	ppb	13:32:23
1	Tl 190.801†	-52.7	-6.1	-1.6779	ug/L	-1.6779	ppb	13:32:43
1	U 409.014†	-2453.7	498.1	14.839	ug/L	14.839	ppb	13:32:18
1	V 292.402†	-1801.7	36.5	0.2589	ug/L	0.2589	ppb	13:32:23
1	Zn 213.857†	846.0	-22.0	-0.1844	ug/L	-0.1844	ppb	13:32:43
1	SiO2†	673.1	12.5	0.7108	ug/L	0.7108	ppb	13:33:49
2	Sc Radial	4209.6	4209.6	91.0	%			13:31:46
2	Y RADIAL	4681.8	4681.8	95.65	%			13:31:26
2	Al 396.153Radial†	-10.7	9.1	7.8124	ug/L	7.8124	ppb	13:31:26
2	Ca 317.933Radial†	10.0	-3.1	-5.2721	ug/L	-5.2721	ppb	13:31:46
2	Fe 238.204 Radial†	13.7	2.4	22.652	ug/L	22.652	ppb	13:31:46
2	K 766.490 Radial†	3381.7	488.5	98.923	ug/L	98.923	ppb	13:31:26
2	Mg 279.077 IEC†	-0.6	-2.1	-72.585	ug/L	-72.585	ppb	13:31:46
2	Na 589.592 Radial†	-1450.2	175.7	59.983	ug/L	59.983	ppb	13:31:26
2	Sr 421.552†	4.7	-6.1	-0.0450	ug/L	-0.0450	ppb	13:31:26
2	Sc 361.383	885685.2	885685.2	101.41	%			13:32:48
2	Y 371.029	757488.3	757488.3	101.09	%			13:32:48
2	Ag 328.068†	535.6	37.2	0.1608	ug/L	0.1608	ppb	13:32:53
2	As 188.979†	-34.1	-2.1	-0.7534	ug/L	-0.7534	ppb	13:33:13
2	B 249.677†	-91.9	674.9	13.999	ug/L	13.999	ppb	13:32:53
2	Ba 233.527†	4.1	-14.5	-0.1061	ug/L	-0.1061	ppb	13:33:13
2	Be 313.107†	-4426.4	15.4	0.0055	ug/L	0.0055	ppb	13:32:53
2	Cd 226.502†	-248.9	7.5	0.0694	ug/L	0.0694	ppb	13:33:13
2	Co 228.616†	-86.5	13.9	0.2633	ug/L	0.2633	ppb	13:33:13
2	Cr 267.716†	117.4	25.5	0.2561	ug/L	0.2561	ppb	13:32:53
2	Cu 324.752†	8139.8	-77.3	-0.2293	ug/L	-0.2293	ppb	13:32:53
2	Mn 257.610†	1258.9	-65.0	-0.0648	ug/L	-0.0648	ppb	13:32:53
2	Mo 202.031†	32.3	5.1	0.3250	ug/L	0.3250	ppb	13:33:13
2	Ni 231.604†	118.1	0.3	0.0076	ug/L	0.0076	ppb	13:33:13

2	P 214.914†	261.4	5.1	2.5031 ug/L	2.5031 ppb	13:33:13
2	Pb 220.353†	-71.3	31.0	3.2230 ug/L	3.2230 ppb	13:33:13
2	S 181.975 Axial†	72.3	13.6	15.402 ug/L	15.402 ppb	13:33:13
2	Sb 206.836†	49.0	2.2	0.6549 ug/L	0.6549 ppb	13:33:13
2	Se 196.026†	-34.1	5.2	2.7042 ug/L	2.7042 ppb	13:33:13
2	Si 251.611†	644.1	5.0	0.1085 ug/L	0.1085 ppb	13:33:13
2	Sn 189.927†	2.9	-1.9	-0.2786 ug/L	-0.2786 ppb	13:33:13
2	Ti 334.940†	-1675.1	101.7	0.1577 ug/L	0.1577 ppb	13:32:53
2	Tl 190.801†	-45.6	0.7	0.1999 ug/L	0.1999 ppb	13:33:13
2	U 409.014†	-2578.6	365.9	10.899 ug/L	10.899 ppb	13:32:48
2	V 292.402†	-1807.2	24.4	0.1754 ug/L	0.1754 ppb	13:32:53
2	Zn 213.857†	843.4	-21.4	-0.1760 ug/L	-0.1760 ppb	13:33:13
2	SiO2†	697.3	38.9	2.3182 ug/L	2.3182 ppb	13:33:54
3	Sc Radial	4220.3	4220.3	91.2 %		13:32:11
3	Y RADIAL	4668.7	4668.7	95.38 %		13:31:51
3	Al 396.153Radial†	-21.3	-2.5	-2.1863 ug/L	-2.1863 ppb	13:31:51
3	Ca 317.933Radial†	20.9	8.9	15.383 ug/L	15.383 ppb	13:32:11
3	Fe 238.204 Radial†	11.6	0.0	0.0330 ug/L	0.0330 ppb	13:32:11
3	K 766.490 Radial†	3370.7	467.0	94.574 ug/L	94.574 ppb	13:31:51
3	Mg 279.077 IEC†	0.7	-0.8	-25.682 ug/L	-25.682 ppb	13:32:11
3	Na 589.592 Radial†	-1472.3	155.5	53.097 ug/L	53.097 ppb	13:31:51
3	Sr 421.552†	-6.9	-18.8	-0.1389 ug/L	-0.1389 ppb	13:31:51
3	Sc 361.383	880088.6	880088.6	100.77 %		13:33:19
3	Y 371.029	753711.0	753711.0	100.59 %		13:33:19
3	Ag 328.068†	484.0	-10.6	-0.0540 ug/L	-0.0540 ppb	13:33:24
3	As 188.979†	-37.8	-6.0	-2.1173 ug/L	-2.1173 ppb	13:33:44
3	B 249.677†	-41.5	724.3	15.027 ug/L	15.027 ppb	13:33:24
3	Ba 233.527†	15.9	-2.7	-0.0187 ug/L	-0.0187 ppb	13:33:44
3	Be 313.107†	-4285.7	127.3	0.0433 ug/L	0.0433 ppb	13:33:24
3	Cd 226.502†	-243.1	11.8	0.1125 ug/L	0.1125 ppb	13:33:44
3	Co 228.616†	-94.3	5.6	0.1079 ug/L	0.1079 ppb	13:33:44
3	Cr 267.716†	109.9	18.8	0.1884 ug/L	0.1884 ppb	13:33:24
3	Cu 324.752†	8091.0	-74.7	-0.2228 ug/L	-0.2228 ppb	13:33:24
3	Mn 257.610†	1246.1	-69.8	-0.0730 ug/L	-0.0730 ppb	13:33:24
3	Mo 202.031†	38.8	11.8	0.7463 ug/L	0.7463 ppb	13:33:44
3	Ni 231.604†	141.5	24.3	0.5380 ug/L	0.5380 ppb	13:33:44
3	P 214.914†	247.6	-6.9	-3.3487 ug/L	-3.3487 ppb	13:33:44
3	Pb 220.353†	-109.3	-7.2	-0.7478 ug/L	-0.7478 ppb	13:33:44
3	S 181.975 Axial†	69.6	11.4	12.923 ug/L	12.923 ppb	13:33:44
3	Sb 206.836†	54.3	7.7	2.3287 ug/L	2.3287 ppb	13:33:44
3	Se 196.026†	-37.4	1.6	0.8339 ug/L	0.8339 ppb	13:33:44
3	Si 251.611†	643.1	8.2	0.1945 ug/L	0.1945 ppb	13:33:44
3	Sn 189.927†	-1.0	-5.7	-0.8522 ug/L	-0.8522 ppb	13:33:44
3	Ti 334.940†	-1649.1	117.0	0.1828 ug/L	0.1828 ppb	13:33:24
3	Tl 190.801†	-49.4	-3.4	-0.9314 ug/L	-0.9314 ppb	13:33:44
3	U 409.014†	-2523.8	404.1	12.043 ug/L	12.043 ppb	13:33:19
3	V 292.402†	-1714.5	105.0	0.6993 ug/L	0.6993 ppb	13:33:24
3	Zn 213.857†	845.9	-13.7	-0.1154 ug/L	-0.1154 ppb	13:33:44
3	SiO2†	654.7	1.0	-0.0322 ug/L	-0.0322 ppb	13:33:59

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	884925.7	101.33	%	0.516				0.51%
Sc Radial	4223.6	91.3	%	0.35				0.38%
Y 371.029	757325.0	101.07	%	0.472				0.47%
Y RADIAL	4679.1	95.59	%	0.193				0.20%
Ag 328.068†	40.4	0.1702	ug/L	0.22898	0.1702	ppb	0.22898	134.56%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.6	1.3497	ug/L	5.60516	1.3497	ppb	5.60516	415.28%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-4.9	-1.7108	ug/L	0.83231	-1.7108	ppb	0.83231	48.65%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	710.3	14.735	ug/L	0.6425	14.735	ppb	0.6425	4.36%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-5.6	-0.0404	ug/L	0.05803	-0.0404	ppb	0.05803	143.78%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	77.2	0.0264	ug/L	0.01919	0.0264	ppb	0.01919	72.71%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.1	7.1535	ug/L	10.94828	7.1535	ppb	10.94828	153.05%

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

Cd 226.502†	16.5	0.1564 ug/L	0.11545	0.1564 ppb	0.11545	73.80%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	9.7	0.1836 ug/L	0.07777	0.1836 ppb	0.07777	42.36%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	30.9	0.3106 ug/L	0.15671	0.3106 ppb	0.15671	50.45%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-105.2	-0.3130 ug/L	0.15059	-0.3130 ppb	0.15059	48.12%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.3	12.501 ug/L	11.4860	12.501 ppb	11.4860	91.88%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	425.6	86.185 ug/L	18.4254	86.185 ppb	18.4254	21.38%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-1.2	-40.414 ug/L	27.8932	-40.414 ppb	27.8932	69.02%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-84.5	-0.0870 ug/L	0.03155	-0.0870 ppb	0.03155	36.28%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	6.4	0.4040 ug/L	0.31043	0.4040 ppb	0.31043	76.84%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	158.6	54.143 ug/L	5.3939	54.143 ppb	5.3939	9.96%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	14.9	0.3290 ug/L	0.28250	0.3290 ppb	0.28250	85.87%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-2.5	-1.1788 ug/L	3.20555	-1.1788 ppb	3.20555	271.94%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	14.7	1.5255 ug/L	2.04702	1.5255 ppb	2.04702	134.19%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	10.2	11.534 ug/L	4.7176	11.534 ppb	4.7176	40.90%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	2.4	0.7212 ug/L	1.57526	0.7212 ppb	1.57526	218.41%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	5.2	2.6853 ug/L	1.84210	2.6853 ppb	1.84210	68.60%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	3.7	0.0709 ug/L	0.14605	0.0709 ppb	0.14605	205.97%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-0.5	-0.0714 ug/L	0.90247	-0.0714 ppb	0.90247	>999.9%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-11.8	-0.0871 ug/L	0.04770	-0.0871 ppb	0.04770	54.76%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	122.4	0.1908 ug/L	0.03770	0.1908 ppb	0.03770	19.76%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-2.9	-0.8032 ug/L	0.94546	-0.8032 ppb	0.94546	117.72%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	422.7	12.594 ug/L	2.0271	12.594 ppb	2.0271	16.10%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	55.3	0.3778 ug/L	0.28149	0.3778 ppb	0.28149	74.50%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-19.0	-0.1586 ug/L	0.03763	-0.1586 ppb	0.03763	23.73%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	17.4	0.9990 ug/L	1.20140	0.9990 ppb	1.20140	120.27%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/7/2010 14:28:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4379.6	4379.6	94.6	%			14:30:05
1	Y RADIAL	4616.1	4616.1	94.30	%			14:30:05
1	Al 396.153Radial†	5432.0	5760.9	4936.4	ug/L	4936.4	ppb	14:30:05
1	Ca 317.933Radial†	2852.9	3000.8	5182.3	ug/L	5182.3	ppb	14:30:25
1	Fe 238.204 Radial†	534.9	552.5	5314.7	ug/L	5314.7	ppb	14:30:25
1	K 766.490 Radial†	27107.3	25415.5	5139.1	ug/L	5139.1	ppb	14:30:05
1	Mg 279.077 IEC†	150.6	157.6	5375.9	ug/L	5375.9	ppb	14:30:25
1	Na 589.592 Radial†	27459.4	30787.0	10511	ug/L	10511	ppb	14:30:05
1	Sr 421.552†	62631.4	66172.7	487.48	ug/L	487.48	ppb	14:30:05
1	Sc 361.383	872056.7	872056.7	99.853	%			14:31:24
1	Y 371.029	738575.2	738575.2	98.565	%			14:31:24
1	Ag 328.068†	113309.2	112985.3	494.21	ug/L	494.21	ppb	14:31:24
1	As 188.979†	1385.3	1418.8	502.00	ug/L	502.00	ppb	14:31:44
1	B 249.677†	23115.2	23914.8	494.22	ug/L	494.22	ppb	14:31:24
1	Ba 233.527†	67250.3	67330.9	496.97	ug/L	496.97	ppb	14:31:24
1	Be 313.107†	1466409.2	1472951.4	497.38	ug/L	497.38	ppb	14:31:24
1	Cd 226.502†	52036.1	52365.8	498.60	ug/L	498.60	ppb	14:31:24
1	Co 228.616†	26090.6	26228.2	496.07	ug/L	496.07	ppb	14:31:44
1	Cr 267.716†	48781.2	48762.8	495.94	ug/L	495.94	ppb	14:31:24
1	Cu 324.752†	173648.6	165801.0	494.72	ug/L	494.72	ppb	14:31:24
1	Mn 257.610†	471962.8	471352.3	496.66	ug/L	496.66	ppb	14:31:24
1	Mo 202.031†	7828.7	7813.6	494.83	ug/L	494.83	ppb	14:31:44
1	Ni 231.604†	22494.7	22411.7	496.31	ug/L	496.31	ppb	14:31:44
1	P 214.914†	5361.8	5117.0	2430.6	ug/L	2430.6	ppb	14:31:44
1	Pb 220.353†	4703.6	4811.8	502.11	ug/L	502.11	ppb	14:31:44
1	S 181.975 Axial†	928.3	872.0	985.54	ug/L	985.54	ppb	14:31:44
1	Sb 206.836†	1662.3	1618.5	496.07	ug/L	496.07	ppb	14:31:44
1	Se 196.026†	956.3	996.4	525.43	ug/L	525.43	ppb	14:31:44
1	Si 251.611†	85829.0	85325.5	2456.7	ug/L	2456.7	ppb	14:31:24
1	Sn 189.927†	3295.2	3295.4	492.75	ug/L	492.75	ppb	14:31:44
1	Ti 334.940†	309342.3	311551.8	498.93	ug/L	498.93	ppb	14:31:24
1	Tl 190.801†	1757.3	1805.6	499.06	ug/L	499.06	ppb	14:31:44
1	U 409.014†	13305.1	16233.3	482.12	ug/L	482.12	ppb	14:31:24
1	V 292.402†	75772.3	77690.4	499.43	ug/L	499.43	ppb	14:31:24
1	Zn 213.857†	61117.4	60354.4	495.40	ug/L	495.40	ppb	14:31:24
1	SiO2†	87585.6	87066.0	5351.4	ug/L	5351.4	ppb	14:32:44
2	Sc Radial	4389.8	4389.8	94.9	%			14:30:30
2	Y RADIAL	4607.4	4607.4	94.13	%			14:30:30
2	Al 396.153Radial†	5535.7	5856.9	5019.3	ug/L	5019.3	ppb	14:30:30
2	Ca 317.933Radial†	2819.7	2958.7	5109.6	ug/L	5109.6	ppb	14:30:50
2	Fe 238.204 Radial†	526.5	542.3	5216.4	ug/L	5216.4	ppb	14:30:50
2	K 766.490 Radial†	27311.0	25563.4	5169.1	ug/L	5169.1	ppb	14:30:30
2	Mg 279.077 IEC†	150.4	157.1	5357.7	ug/L	5357.7	ppb	14:30:50
2	Na 589.592 Radial†	27749.7	31025.3	10593	ug/L	10593	ppb	14:30:30
2	Sr 421.552†	63449.4	66880.5	492.70	ug/L	492.70	ppb	14:30:30
2	Sc 361.383	888194.7	888194.7	101.70	%			14:31:51
2	Y 371.029	752363.6	752363.6	100.41	%			14:31:51
2	Ag 328.068†	114574.9	112168.1	490.62	ug/L	490.62	ppb	14:31:51
2	As 188.979†	1384.2	1392.5	492.74	ug/L	492.74	ppb	14:32:11
2	B 249.677†	23495.6	23868.1	493.28	ug/L	493.28	ppb	14:31:51
2	Ba 233.527†	68113.6	66956.0	494.21	ug/L	494.21	ppb	14:31:51
2	Be 313.107†	1484636.8	1464191.0	494.42	ug/L	494.42	ppb	14:31:51
2	Cd 226.502†	52565.5	51939.5	494.54	ug/L	494.54	ppb	14:31:51
2	Co 228.616†	26138.5	25800.6	487.97	ug/L	487.97	ppb	14:32:11
2	Cr 267.716†	49260.1	48346.1	491.70	ug/L	491.70	ppb	14:31:51
2	Cu 324.752†	175598.8	164558.8	491.01	ug/L	491.01	ppb	14:31:51
2	Mn 257.610†	477829.7	468533.2	493.68	ug/L	493.68	ppb	14:31:51
2	Mo 202.031†	7844.7	7686.8	486.80	ug/L	486.80	ppb	14:32:11
2	Ni 231.604†	22497.5	22005.1	487.31	ug/L	487.31	ppb	14:32:11

2	P 214.914†	5372.4	5030.0	2388.6 ug/L	2388.6 ppb	14:32:11
2	Pb 220.353†	4709.9	4732.5	493.87 ug/L	493.87 ppb	14:32:11
2	S 181.975 Axial†	943.0	869.5	982.77 ug/L	982.77 ppb	14:32:11
2	Sb 206.836†	1684.1	1609.8	493.21 ug/L	493.21 ppb	14:32:11
2	Se 196.026†	945.1	968.1	510.69 ug/L	510.69 ppb	14:32:11
2	Si 251.611†	86833.6	84751.5	2440.2 ug/L	2440.2 ppb	14:31:51
2	Sn 189.927†	3298.1	3238.2	484.21 ug/L	484.21 ppb	14:32:11
2	Ti 334.940†	313291.1	309805.7	496.13 ug/L	496.13 ppb	14:31:51
2	Tl 190.801†	1763.7	1779.9	492.02 ug/L	492.02 ppb	14:32:11
2	U 409.014†	13475.7	16159.0	479.93 ug/L	479.93 ppb	14:31:51
2	V 292.402†	76810.7	77332.7	497.07 ug/L	497.07 ppb	14:31:51
2	Zn 213.857†	61712.5	59827.5	491.10 ug/L	491.10 ppb	14:31:51
2	SiO2†	88103.2	85981.2	5284.7 ug/L	5284.7 ppb	14:32:49
3	Sc Radial	4345.4	4345.4	93.9 %		14:30:55
3	Y RADIAL	4574.2	4574.2	93.45 %		14:30:55
3	Al 396.153Radial†	5461.0	5837.0	5002.0 ug/L	5002.0 ppb	14:30:55
3	Ca 317.933Radial†	2825.8	2995.6	5173.3 ug/L	5173.3 ppb	14:31:15
3	Fe 238.204 Radial†	528.2	549.8	5288.6 ug/L	5288.6 ppb	14:31:15
3	K 766.490 Radial†	27103.7	25637.1	5184.1 ug/L	5184.1 ppb	14:30:55
3	Mg 279.077 IEC†	152.2	160.6	5478.7 ug/L	5478.7 ppb	14:31:15
3	Na 589.592 Radial†	27220.1	30760.3	10502 ug/L	10502 ppb	14:30:55
3	Sr 421.552†	62758.3	66828.4	492.31 ug/L	492.31 ppb	14:30:55
3	Sc 361.383	892664.1	892664.1	102.21 %		14:32:19
3	Y 371.029	755775.3	755775.3	100.86 %		14:32:19
3	Ag 328.068†	114422.1	111454.5	487.53 ug/L	487.53 ppb	14:32:19
3	As 188.979†	1401.3	1402.4	496.20 ug/L	496.20 ppb	14:32:39
3	B 249.677†	23526.3	23782.6	491.50 ug/L	491.50 ppb	14:32:19
3	Ba 233.527†	68160.3	66666.4	492.07 ug/L	492.07 ppb	14:32:19
3	Be 313.107†	1480986.7	1453310.9	490.75 ug/L	490.75 ppb	14:32:19
3	Cd 226.502†	52466.4	51583.7	491.15 ug/L	491.15 ppb	14:32:19
3	Co 228.616†	26317.8	25847.3	488.87 ug/L	488.87 ppb	14:32:39
3	Cr 267.716†	49199.7	48044.6	488.64 ug/L	488.64 ppb	14:32:19
3	Cu 324.752†	175823.9	163914.5	489.09 ug/L	489.09 ppb	14:32:19
3	Mn 257.610†	476982.1	465351.5	490.34 ug/L	490.34 ppb	14:32:19
3	Mo 202.031†	7922.3	7724.1	489.17 ug/L	489.17 ppb	14:32:39
3	Ni 231.604†	22703.6	22096.0	489.32 ug/L	489.32 ppb	14:32:39
3	P 214.914†	5388.0	5018.8	2383.4 ug/L	2383.4 ppb	14:32:39
3	Pb 220.353†	4763.1	4761.3	496.86 ug/L	496.86 ppb	14:32:39
3	S 181.975 Axial†	953.9	875.5	989.56 ug/L	989.56 ppb	14:32:39
3	Sb 206.836†	1693.8	1611.0	493.71 ug/L	493.71 ppb	14:32:39
3	Se 196.026†	974.7	992.4	523.26 ug/L	523.26 ppb	14:32:39
3	Si 251.611†	86783.9	84275.4	2426.4 ug/L	2426.4 ppb	14:32:19
3	Sn 189.927†	3318.8	3242.2	484.82 ug/L	484.82 ppb	14:32:39
3	Ti 334.940†	312938.0	307917.9	493.11 ug/L	493.11 ppb	14:32:19
3	Tl 190.801†	1783.1	1790.2	494.82 ug/L	494.82 ppb	14:32:39
3	U 409.014†	13536.4	16151.9	479.71 ug/L	479.71 ppb	14:32:19
3	V 292.402†	76650.5	76797.8	493.70 ug/L	493.70 ppb	14:32:19
3	Zn 213.857†	61605.5	59419.0	487.70 ug/L	487.70 ppb	14:32:19
3	SiO2†	86885.5	84356.1	5184.3 ug/L	5184.3 ppb	14:32:54

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	884305.2	101.26	%	1.241				1.23%
Sc Radial	4371.6	94.5	%	0.50				0.53%
Y 371.029	748904.7	99.944	%	1.2153				1.22%
Y RADIAL	4599.2	93.96	%	0.451				0.48%
Ag 328.068†	112202.6	490.79	ug/L	3.344	490.79	ppb	3.344	0.68%
QC value within limits for Ag 328.068 Recovery = 98.16%								
Al 396.153Radial†	5818.3	4985.9	ug/L	43.75	4985.9	ppb	43.75	0.88%
QC value within limits for Al 396.153Radial Recovery = 99.72%								
As 188.979†	1404.6	496.98	ug/L	4.677	496.98	ppb	4.677	0.94%
QC value within limits for As 188.979 Recovery = 99.40%								
B 249.677†	23855.2	493.00	ug/L	1.383	493.00	ppb	1.383	0.28%
QC value within limits for B 249.677 Recovery = 98.60%								
Ba 233.527†	66984.5	494.42	ug/L	2.460	494.42	ppb	2.460	0.50%
QC value within limits for Ba 233.527 Recovery = 98.88%								
Be 313.107†	1463484.4	494.18	ug/L	3.322	494.18	ppb	3.322	0.67%
QC value within limits for Be 313.107 Recovery = 98.84%								
Ca 317.933Radial†	2985.0	5155.0	ug/L	39.63	5155.0	ppb	39.63	0.77%

QC value within limits for Ca 317.933Radial Recovery = 103.10%

Cd 226.502†	51963.0	494.77 ug/L	3.731	494.77 ppb	3.731	0.75%
QC value within limits for Cd 226.502 Recovery = 98.95%						
Co 228.616†	25958.7	490.97 ug/L	4.440	490.97 ppb	4.440	0.90%
QC value within limits for Co 228.616 Recovery = 98.19%						
Cr 267.716†	48384.5	492.09 ug/L	3.667	492.09 ppb	3.667	0.75%
QC value within limits for Cr 267.716 Recovery = 98.42%						
Cu 324.752†	164758.1	491.60 ug/L	2.861	491.60 ppb	2.861	0.58%
QC value within limits for Cu 324.752 Recovery = 98.32%						
Fe 238.204 Radial†	548.2	5273.2 ug/L	50.89	5273.2 ppb	50.89	0.96%
QC value within limits for Fe 238.204 Radial Recovery = 105.46%						
K 766.490 Radial†	25538.7	5164.1 ug/L	22.88	5164.1 ppb	22.88	0.44%
QC value within limits for K 766.490 Radial Recovery = 103.28%						
Mg 279.077 IEC†	158.4	5404.1 ug/L	65.28	5404.1 ppb	65.28	1.21%
QC value within limits for Mg 279.077 IEC Recovery = 108.08%						
Mn 257.610†	468412.3	493.56 ug/L	3.163	493.56 ppb	3.163	0.64%
QC value within limits for Mn 257.610 Recovery = 98.71%						
Mo 202.031†	7741.5	490.27 ug/L	4.127	490.27 ppb	4.127	0.84%
QC value within limits for Mo 202.031 Recovery = 98.05%						
Na 589.592 Radial†	30857.5	10535 ug/L	49.8	10535 ppb	49.8	0.47%
QC value within limits for Na 589.592 Radial Recovery = 105.35%						
Ni 231.604†	22170.9	490.98 ug/L	4.726	490.98 ppb	4.726	0.96%
QC value within limits for Ni 231.604 Recovery = 98.20%						
P 214.914†	5055.3	2400.9 ug/L	25.92	2400.9 ppb	25.92	1.08%
QC value within limits for P 214.914 Recovery = 96.03%						
Pb 220.353†	4768.5	497.61 ug/L	4.174	497.61 ppb	4.174	0.84%
QC value within limits for Pb 220.353 Recovery = 99.52%						
S 181.975 Axial†	872.4	985.96 ug/L	3.414	985.96 ppb	3.414	0.35%
QC value within limits for S 181.975 Axial Recovery = 98.60%						
Sb 206.836†	1613.1	494.33 ug/L	1.528	494.33 ppb	1.528	0.31%
QC value within limits for Sb 206.836 Recovery = 98.87%						
Se 196.026†	985.6	519.79 ug/L	7.959	519.79 ppb	7.959	1.53%
QC value within limits for Se 196.026 Recovery = 103.96%						
Si 251.611†	84784.1	2441.1 ug/L	15.15	2441.1 ppb	15.15	0.62%
QC value within limits for Si 251.611 Recovery = 97.64%						
Sn 189.927†	3258.6	487.26 ug/L	4.766	487.26 ppb	4.766	0.98%
QC value within limits for Sn 189.927 Recovery = 97.45%						
Sr 421.552†	66627.2	490.83 ug/L	2.907	490.83 ppb	2.907	0.59%
QC value within limits for Sr 421.552 Recovery = 98.17%						
Ti 334.940†	309758.5	496.06 ug/L	2.910	496.06 ppb	2.910	0.59%
QC value within limits for Ti 334.940 Recovery = 99.21%						
Tl 190.801†	1791.9	495.30 ug/L	3.546	495.30 ppb	3.546	0.72%
QC value within limits for Tl 190.801 Recovery = 99.06%						
U 409.014†	16181.4	480.59 ug/L	1.333	480.59 ppb	1.333	0.28%
QC value within limits for U 409.014 Recovery = 96.12%						
V 292.402†	77273.6	496.73 ug/L	2.881	496.73 ppb	2.881	0.58%
QC value within limits for V 292.402 Recovery = 99.35%						
Zn 213.857†	59866.9	491.40 ug/L	3.856	491.40 ppb	3.856	0.78%
QC value within limits for Zn 213.857 Recovery = 98.28%						
SiO2†	85801.1	5273.5 ug/L	84.13	5273.5 ppb	84.13	1.60%
QC value within limits for SiO2 Recovery = 98.62%						

All analyte(s) passed QC.

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

Autosampler Location: 8
Date Collected: 1/7/2010 14:35:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4534.9	4534.9	98.0	%			14:36:57
1	Y RADIAL	4824.6	4824.6	98.56	%			14:36:57
1	Al 396.153Radial†	-19.7	0.8	0.6736	ug/L	0.6736	ppb	14:36:57
1	Ca 317.933Radial†	16.5	2.9	4.9587	ug/L	4.9587	ppb	14:37:17
1	Fe 238.204 Radial†	11.3	-1.2	-11.582	ug/L	-11.582	ppb	14:37:17
1	K 766.490 Radial†	3296.8	135.2	27.341	ug/L	27.341	ppb	14:36:57
1	Mg 279.077 IEC†	2.2	0.8	26.559	ug/L	26.559	ppb	14:37:17
1	Na 589.592 Radial†	-1397.4	343.9	117.41	ug/L	117.41	ppb	14:36:57
1	Sr 421.552†	20.5	9.6	0.0710	ug/L	0.0710	ppb	14:36:57
1	Sc 361.383	899157.9	899157.9	102.96	%			14:38:14
1	Y 371.029	768477.8	768477.8	102.56	%			14:38:14
1	Ag 328.068†	496.5	-8.7	-0.0543	ug/L	-0.0543	ppb	14:38:19
1	As 188.979†	-21.7	10.5	3.6613	ug/L	3.6613	ppb	14:38:39
1	B 249.677†	-462.9	315.8	6.5537	ug/L	6.5537	ppb	14:38:19
1	Ba 233.527†	-8.4	-26.7	-0.1946	ug/L	-0.1946	ppb	14:38:39
1	Be 313.107†	-4369.5	136.0	0.0460	ug/L	0.0460	ppb	14:38:19
1	Cd 226.502†	-231.7	27.9	0.2671	ug/L	0.2671	ppb	14:38:39
1	Co 228.616†	-94.5	7.4	0.1396	ug/L	0.1396	ppb	14:38:39
1	Cr 267.716†	132.2	38.1	0.3822	ug/L	0.3822	ppb	14:38:19
1	Cu 324.752†	8147.3	-190.3	-0.5680	ug/L	-0.5680	ppb	14:38:19
1	Mn 257.610†	1215.7	-125.6	-0.1339	ug/L	-0.1339	ppb	14:38:19
1	Mo 202.031†	22.4	-4.9	-0.3114	ug/L	-0.3114	ppb	14:38:39
1	Ni 231.604†	114.7	-4.7	-0.1051	ug/L	-0.1051	ppb	14:38:39
1	P 214.914†	259.0	-1.0	-0.4076	ug/L	-0.4076	ppb	14:38:39
1	Pb 220.353†	-87.6	16.2	1.6896	ug/L	1.6896	ppb	14:38:39
1	S 181.975 Axial†	62.5	3.1	3.4656	ug/L	3.4656	ppb	14:38:39
1	Sb 206.836†	42.7	-4.7	-1.4266	ug/L	-1.4266	ppb	14:38:39
1	Se 196.026†	-43.6	-3.6	-1.8594	ug/L	-1.8594	ppb	14:38:39
1	Si 251.611†	682.5	32.9	0.9479	ug/L	0.9479	ppb	14:38:39
1	Sn 189.927†	5.6	0.7	0.1088	ug/L	0.1088	ppb	14:38:39
1	Ti 334.940†	-1756.0	47.9	0.0684	ug/L	0.0684	ppb	14:38:19
1	Tl 190.801†	-52.8	-5.6	-1.5369	ug/L	-1.5369	ppb	14:38:39
1	U 409.014†	-2333.0	642.5	19.148	ug/L	19.148	ppb	14:38:14
1	V 292.402†	-1702.5	152.7	1.0038	ug/L	1.0038	ppb	14:38:19
1	Zn 213.857†	870.2	-7.9	-0.0641	ug/L	-0.0641	ppb	14:38:39
1	SiO2†	711.8	42.7	2.6262	ug/L	2.6262	ppb	14:39:45
2	Sc Radial	4527.1	4527.1	97.8	%			14:37:22
2	Y RADIAL	4779.7	4779.7	97.65	%			14:37:22
2	Al 396.153Radial†	-23.4	-3.1	-2.6755	ug/L	-2.6755	ppb	14:37:22
2	Ca 317.933Radial†	13.1	-0.6	-1.1006	ug/L	-1.1006	ppb	14:37:42
2	Fe 238.204 Radial†	8.2	-4.3	-41.392	ug/L	-41.392	ppb	14:37:42
2	K 766.490 Radial†	3380.5	226.6	45.831	ug/L	45.831	ppb	14:37:22
2	Mg 279.077 IEC†	3.7	2.3	78.915	ug/L	78.915	ppb	14:37:42
2	Na 589.592 Radial†	-1334.9	405.4	138.41	ug/L	138.41	ppb	14:37:22
2	Sr 421.552†	37.4	26.9	0.1985	ug/L	0.1985	ppb	14:37:22
2	Sc 361.383	899713.6	899713.6	103.02	%			14:38:44
2	Y 371.029	768998.7	768998.7	102.63	%			14:38:44
2	Ag 328.068†	519.2	13.0	0.0331	ug/L	0.0331	ppb	14:38:49
2	As 188.979†	-36.7	-4.2	-1.4646	ug/L	-1.4646	ppb	14:39:09
2	B 249.677†	-381.9	394.8	8.1962	ug/L	8.1962	ppb	14:38:49
2	Ba 233.527†	4.6	-14.1	-0.1045	ug/L	-0.1045	ppb	14:39:09
2	Be 313.107†	-4487.7	24.0	0.0085	ug/L	0.0085	ppb	14:38:49
2	Cd 226.502†	-237.8	22.1	0.2153	ug/L	0.2153	ppb	14:39:09
2	Co 228.616†	-110.8	-8.3	-0.1575	ug/L	-0.1575	ppb	14:39:09
2	Cr 267.716†	99.8	6.6	0.0630	ug/L	0.0630	ppb	14:38:49
2	Cu 324.752†	8077.7	-262.7	-0.7855	ug/L	-0.7855	ppb	14:38:49
2	Mn 257.610†	1200.5	-141.0	-0.1540	ug/L	-0.1540	ppb	14:38:49
2	Mo 202.031†	27.9	0.4	0.0206	ug/L	0.0206	ppb	14:39:09
2	Ni 231.604†	136.2	16.1	0.3563	ug/L	0.3563	ppb	14:39:09

2	P 214.914†	262.4	2.1	1.1733 ug/L	1.1733 ppb	14:39:09
2	Pb 220.353†	-73.4	30.0	3.1272 ug/L	3.1272 ppb	14:39:09
2	S 181.975 Axial†	67.0	7.4	8.3363 ug/L	8.3363 ppb	14:39:09
2	Sb 206.836†	40.8	-6.6	-2.0104 ug/L	-2.0104 ppb	14:39:09
2	Se 196.026†	-35.4	4.4	2.0900 ug/L	2.0900 ppb	14:39:09
2	Si 251.611†	660.3	10.9	0.3021 ug/L	0.3021 ppb	14:39:09
2	Sn 189.927†	-0.0	-4.8	-0.7109 ug/L	-0.7109 ppb	14:39:09
2	Ti 334.940†	-1668.0	134.4	0.2096 ug/L	0.2096 ppb	14:38:49
2	Tl 190.801†	-55.0	-7.7	-2.1211 ug/L	-2.1211 ppb	14:39:09
2	U 409.014†	-2561.5	422.1	12.585 ug/L	12.585 ppb	14:38:44
2	V 292.402†	-1820.4	39.3	0.2821 ug/L	0.2821 ppb	14:38:49
2	Zn 213.857†	853.7	-24.4	-0.2042 ug/L	-0.2042 ppb	14:39:09
2	SiO2†	666.6	-1.7	-0.1349 ug/L	-0.1349 ppb	14:39:50
3	Sc Radial	4629.8	4629.8	100 %		14:37:47
3	Y RADIAL	4838.7	4838.7	98.85 %		14:37:47
3	Al 396.153Radial†	7.1	27.9	23.977 ug/L	23.977 ppb	14:37:47
3	Ca 317.933Radial†	21.0	7.0	12.040 ug/L	12.040 ppb	14:38:07
3	Fe 238.204 Radial†	11.8	-0.9	-8.9852 ug/L	-8.9852 ppb	14:38:07
3	K 766.490 Radial†	3337.1	106.5	21.515 ug/L	21.515 ppb	14:37:47
3	Mg 279.077 IEC†	2.5	1.0	32.667 ug/L	32.667 ppb	14:38:07
3	Na 589.592 Radial†	-1338.6	432.0	147.48 ug/L	147.48 ppb	14:37:47
3	Sr 421.552†	8.6	-2.7	-0.0201 ug/L	-0.0201 ppb	14:37:47
3	Sc 361.383	888038.3	888038.3	101.68 %		14:39:14
3	Y 371.029	758681.6	758681.6	101.25 %		14:39:14
3	Ag 328.068†	420.6	-77.3	-0.3479 ug/L	-0.3479 ppb	14:39:19
3	As 188.979†	-30.6	1.4	0.4756 ug/L	0.4756 ppb	14:39:39
3	B 249.677†	-440.7	332.1	6.8909 ug/L	6.8909 ppb	14:39:19
3	Ba 233.527†	18.1	-0.8	-0.0057 ug/L	-0.0057 ppb	14:39:39
3	Be 313.107†	-4386.7	66.0	0.0222 ug/L	0.0222 ppb	14:39:19
3	Cd 226.502†	-226.2	30.5	0.2919 ug/L	0.2919 ppb	14:39:39
3	Co 228.616†	-100.7	0.1	0.0047 ug/L	0.0047 ppb	14:39:39
3	Cr 267.716†	59.2	-32.1	-0.3292 ug/L	-0.3292 ppb	14:39:19
3	Cu 324.752†	8134.0	-104.2	-0.3113 ug/L	-0.3113 ppb	14:39:19
3	Mn 257.610†	1221.1	-105.4	-0.1125 ug/L	-0.1125 ppb	14:39:19
3	Mo 202.031†	41.5	14.1	0.8917 ug/L	0.8917 ppb	14:39:39
3	Ni 231.604†	123.8	5.6	0.1238 ug/L	0.1238 ppb	14:39:39
3	P 214.914†	253.9	-2.9	-1.3677 ug/L	-1.3677 ppb	14:39:39
3	Pb 220.353†	-90.9	11.9	1.2506 ug/L	1.2506 ppb	14:39:39
3	S 181.975 Axial†	59.8	1.1	1.2314 ug/L	1.2314 ppb	14:39:39
3	Sb 206.836†	28.5	-18.2	-5.4581 ug/L	-5.4581 ppb	14:39:39
3	Se 196.026†	-33.2	6.1	3.0941 ug/L	3.0941 ppb	14:39:39
3	Si 251.611†	670.4	29.3	0.8244 ug/L	0.8244 ppb	14:39:39
3	Sn 189.927†	5.3	0.5	0.0758 ug/L	0.0758 ppb	14:39:39
3	Ti 334.940†	-1790.8	-7.7	-0.0165 ug/L	-0.0165 ppb	14:39:19
3	Tl 190.801†	-37.1	9.2	2.5157 ug/L	2.5157 ppb	14:39:39
3	U 409.014†	-2584.2	367.1	10.941 ug/L	10.941 ppb	14:39:14
3	V 292.402†	-1821.2	15.3	0.1336 ug/L	0.1336 ppb	14:39:19
3	Zn 213.857†	867.7	0.2	0.0010 ug/L	0.0010 ppb	14:39:39
3	SiO2†	683.3	23.2	1.3843 ug/L	1.3843 ppb	14:39:55

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	895636.6	102.55	%	0.754				0.74%
Sc Radial	4563.9	98.6	%	1.24				1.25%
Y 371.029	765386.0	102.14	%	0.776				0.76%
Y RADIAL	4814.3	98.35	%	0.629				0.64%
Ag 328.068†	-24.3	-0.1230	ug/L	0.19960	-0.1230	ppb	0.19960	162.22%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	8.5	7.3251	ug/L	14.51810	7.3251	ppb	14.51810	198.20%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.6	0.8908	ug/L	2.58804	0.8908	ppb	2.58804	290.54%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	347.5	7.2136	ug/L	0.86751	7.2136	ppb	0.86751	12.03%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-13.9	-0.1016	ug/L	0.09448	-0.1016	ppb	0.09448	92.98%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	75.3	0.0256	ug/L	0.01897	0.0256	ppb	0.01897	74.16%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.1	5.2992	ug/L	6.57671	5.2992	ppb	6.57671	124.11%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              26.9      0.2581 ug/L       0.03912      0.2581 ppb       0.03912  15.16%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -0.3     -0.0044 ug/L       0.14877     -0.0044 ppb       0.14877 >999.9%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               4.2      0.0387 ug/L       0.35635      0.0387 ppb       0.35635 921.79%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -185.7     -0.5549 ug/L       0.23737     -0.5549 ppb       0.23737  42.77%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -2.2     -20.653 ug/L       18.0076     -20.653 ppb       18.0076  87.19%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       156.1      31.562 ug/L       12.6958      31.562 ppb       12.6958  40.22%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           1.4      46.047 ug/L       28.6281      46.047 ppb       28.6281  62.17%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†            -124.0     -0.1334 ug/L       0.02079     -0.1334 ppb       0.02079  15.58%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               3.2      0.2003 ug/L       0.62133      0.2003 ppb       0.62133 310.20%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      393.7      134.43 ug/L        15.424      134.43 ppb        15.424  11.47%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               5.6      0.1250 ug/L       0.23067      0.1250 ppb       0.23067 184.54%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -0.6     -0.2007 ug/L       1.28307     -0.2007 ppb       1.28307 639.45%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              19.4      2.0225 ug/L       0.98158      2.0225 ppb       0.98158  48.53%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          3.8      4.3444 ug/L       3.63308      4.3444 ppb       3.63308  83.63%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -9.8     -2.9650 ug/L       2.17872     -2.9650 ppb       2.17872  73.48%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               2.3      1.1082 ug/L       2.61863      1.1082 ppb       2.61863 236.29%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              24.4      0.6914 ug/L       0.34280      0.6914 ppb       0.34280  49.58%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -1.2     -0.1754 ug/L       0.46404     -0.1754 ppb       0.46404 264.51%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              11.3      0.0831 ug/L       0.10983      0.0831 ppb       0.10983 132.13%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              58.2      0.0872 ug/L       0.11419      0.0872 ppb       0.11419 130.99%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -1.4     -0.3807 ug/L       2.52539     -0.3807 ppb       2.52539 663.27%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              477.3      14.224 ug/L        4.3422      14.224 ppb        4.3422  30.53%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               69.1      0.4732 ug/L       0.46551      0.4732 ppb       0.46551  98.38%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -10.7     -0.0891 ug/L       0.10486     -0.0891 ppb       0.10486 117.67%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    21.4      1.2918 ug/L       1.38286      1.2918 ppb       1.38286 107.05%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Analysis Begun

Start Time: 1/7/2010 15:00:17 Plasma On Time: 1/4/2010 06:33:21
Logged In Analyst: Optima3 Technique: ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601 Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\010710A.sif
Batch ID:
Results Data Set: 010710
Results Library: C:\pe\Optima3\Results\Results.mdb

Sequence No.: 1 Autosampler Location: 7
Sample ID: CCV Date Collected: 1/7/2010 15:00:18
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4415.3	4415.3	95.4	%			15:02:10
1	Y RADIAL	4633.1	4633.1	94.65	%			15:02:10
1	Al 396.153Radial†	5462.0	5746.0	4923.5	ug/L	4923.5	ppb	15:02:10
1	Ca 317.933Radial†	2826.1	2948.3	5091.6	ug/L	5091.6	ppb	15:02:30
1	Fe 238.204 Radial†	529.1	541.8	5212.0	ug/L	5212.0	ppb	15:02:30
1	K 766.490 Radial†	27184.3	25264.7	5108.5	ug/L	5108.5	ppb	15:02:10
1	Mg 279.077 IEC†	150.1	155.9	5316.5	ug/L	5316.5	ppb	15:02:30
1	Na 589.592 Radial†	27710.2	30815.3	10521	ug/L	10521	ppb	15:02:10
1	Sr 421.552†	63400.8	66444.1	489.48	ug/L	489.48	ppb	15:02:10
1	Sc 361.383	879377.8	879377.8	100.69	%			15:03:29
1	Y 371.029	744698.6	744698.6	99.382	%			15:03:29
1	Ag 328.068†	115117.4	113836.4	497.89	ug/L	497.89	ppb	15:03:29
1	As 188.979†	1387.2	1409.1	498.64	ug/L	498.64	ppb	15:03:49
1	B 249.677†	23510.2	24114.3	498.37	ug/L	498.37	ppb	15:03:29
1	Ba 233.527†	68523.1	68034.2	502.16	ug/L	502.16	ppb	15:03:29
1	Be 313.107†	1493710.3	1487838.7	502.41	ug/L	502.41	ppb	15:03:29
1	Cd 226.502†	52825.9	52716.3	501.95	ug/L	501.95	ppb	15:03:29
1	Co 228.616†	26276.1	26194.9	495.43	ug/L	495.43	ppb	15:03:49
1	Cr 267.716†	49596.2	49165.6	500.04	ug/L	500.04	ppb	15:03:29
1	Cu 324.752†	176578.4	167262.8	499.07	ug/L	499.07	ppb	15:03:29
1	Mn 257.610†	480773.2	476167.2	501.72	ug/L	501.72	ppb	15:03:29
1	Mo 202.031†	7890.6	7809.7	494.58	ug/L	494.58	ppb	15:03:49
1	Ni 231.604†	22621.2	22349.8	494.94	ug/L	494.94	ppb	15:03:49
1	P 214.914†	5391.7	5102.1	2422.7	ug/L	2422.7	ppb	15:03:49
1	Pb 220.353†	4706.5	4775.5	498.33	ug/L	498.33	ppb	15:03:49
1	S 181.975 Axial†	945.2	881.1	995.80	ug/L	995.80	ppb	15:03:49
1	Sb 206.836†	1667.9	1610.3	493.46	ug/L	493.46	ppb	15:03:49
1	Se 196.026†	969.0	1001.1	527.48	ug/L	527.48	ppb	15:03:49
1	Si 251.611†	87261.7	86032.8	2477.2	ug/L	2477.2	ppb	15:03:29
1	Sn 189.927†	3324.5	3296.9	492.97	ug/L	492.97	ppb	15:03:49
1	Ti 334.940†	315169.2	314759.5	504.06	ug/L	504.06	ppb	15:03:29
1	Tl 190.801†	1760.1	1793.7	495.87	ug/L	495.87	ppb	15:03:49
1	U 409.014†	13392.2	16208.9	481.40	ug/L	481.40	ppb	15:03:29
1	V 292.402†	77133.3	78410.3	504.00	ug/L	504.00	ppb	15:03:29
1	Zn 213.857†	62091.7	60812.5	499.20	ug/L	499.20	ppb	15:03:29
1	SiO2†	88451.4	87195.6	5359.4	ug/L	5359.4	ppb	15:04:50
2	Sc Radial	4407.9	4407.9	95.2	%			15:02:35
2	Y RADIAL	4651.0	4651.0	95.02	%			15:02:35
2	Al 396.153Radial†	5452.0	5745.0	4922.5	ug/L	4922.5	ppb	15:02:35
2	Ca 317.933Radial†	2898.9	3029.7	5232.2	ug/L	5232.2	ppb	15:02:56
2	Fe 238.204 Radial†	542.1	556.4	5352.0	ug/L	5352.0	ppb	15:02:56
2	K 766.490 Radial†	27215.1	25344.5	5124.7	ug/L	5124.7	ppb	15:02:35
2	Mg 279.077 IEC†	153.9	160.1	5460.3	ug/L	5460.3	ppb	15:02:56
2	Na 589.592 Radial†	27562.2	30708.3	10484	ug/L	10484	ppb	15:02:35
2	Sr 421.552†	63049.6	66186.1	487.58	ug/L	487.58	ppb	15:02:35
2	Sc 361.383	873023.6	873023.6	99.963	%			15:03:57
2	Y 371.029	739049.8	739049.8	98.628	%			15:03:57

2	Ag 328.068†	114333.5	113884.4	498.14 ug/L	498.14 ppb	15:03:57
2	As 188.979†	1391.3	1423.3	503.60 ug/L	503.60 ppb	15:04:17
2	B 249.677†	23483.3	24257.4	501.31 ug/L	501.31 ppb	15:03:57
2	Ba 233.527†	68030.7	68037.0	502.18 ug/L	502.18 ppb	15:03:57
2	Be 313.107†	1481817.6	1486739.0	502.03 ug/L	502.03 ppb	15:03:57
2	Cd 226.502†	52604.7	52876.9	503.47 ug/L	503.47 ppb	15:03:57
2	Co 228.616†	26316.7	26425.5	499.80 ug/L	499.80 ppb	15:04:17
2	Cr 267.716†	49265.1	49192.9	500.32 ug/L	500.32 ppb	15:03:57
2	Cu 324.752†	175161.9	167122.2	498.66 ug/L	498.66 ppb	15:03:57
2	Mn 257.610†	477378.3	476246.3	501.81 ug/L	501.81 ppb	15:03:57
2	Mo 202.031†	7910.1	7886.3	499.44 ug/L	499.44 ppb	15:04:17
2	Ni 231.604†	22697.8	22589.9	500.26 ug/L	500.26 ppb	15:04:17
2	P 214.914†	5378.9	5128.2	2435.5 ug/L	2435.5 ppb	15:04:17
2	Pb 220.353†	4734.4	4837.4	504.77 ug/L	504.77 ppb	15:04:17
2	S 181.975 Axial†	942.1	884.8	1000.0 ug/L	1000.0 ppb	15:04:17
2	Sb 206.836†	1693.0	1647.4	504.89 ug/L	504.89 ppb	15:04:17
2	Se 196.026†	969.3	1008.5	531.67 ug/L	531.67 ppb	15:04:17
2	Si 251.611†	86684.0	86085.6	2478.6 ug/L	2478.6 ppb	15:03:57
2	Sn 189.927†	3333.8	3330.3	497.98 ug/L	497.98 ppb	15:04:17
2	Ti 334.940†	312886.5	314754.2	504.06 ug/L	504.06 ppb	15:03:57
2	Tl 190.801†	1774.2	1820.5	503.21 ug/L	503.21 ppb	15:04:17
2	U 409.014†	13476.0	16389.5	486.76 ug/L	486.76 ppb	15:03:57
2	V 292.402†	76606.6	78441.0	504.26 ug/L	504.26 ppb	15:03:57
2	Zn 213.857†	61672.2	60841.7	499.40 ug/L	499.40 ppb	15:03:57
2	SiO2†	86472.7	85855.6	5276.4 ug/L	5276.4 ppb	15:04:55
3	Sc Radial	4475.4	4475.4	96.7 %		15:03:01
3	Y RADIAL	4723.9	4723.9	96.51 %		15:03:01
3	Al 396.153Radial†	5527.7	5737.1	4915.8 ug/L	4915.8 ppb	15:03:01
3	Ca 317.933Radial†	2869.2	2953.0	5099.8 ug/L	5099.8 ppb	15:03:21
3	Fe 238.204 Radial†	534.5	540.0	5194.5 ug/L	5194.5 ppb	15:03:21
3	K 766.490 Radial†	27503.4	25211.8	5097.8 ug/L	5097.8 ppb	15:03:01
3	Mg 279.077 IEC†	149.8	153.4	5233.2 ug/L	5233.2 ppb	15:03:21
3	Na 589.592 Radial†	28196.1	30927.4	10559 ug/L	10559 ppb	15:03:01
3	Sr 421.552†	64389.8	66573.8	490.44 ug/L	490.44 ppb	15:03:01
3	Sc 361.383	888113.7	888113.7	101.69 %		15:04:24
3	Y 371.029	751582.9	751582.9	100.30 %		15:04:24
3	Ag 328.068†	116285.7	113860.7	497.99 ug/L	497.99 ppb	15:04:24
3	As 188.979†	1409.3	1417.4	501.51 ug/L	501.51 ppb	15:04:44
3	B 249.677†	23845.8	24214.7	500.46 ug/L	500.46 ppb	15:04:24
3	Ba 233.527†	69024.1	67857.6	500.86 ug/L	500.86 ppb	15:04:24
3	Be 313.107†	1507852.3	1487153.5	502.17 ug/L	502.17 ppb	15:04:24
3	Cd 226.502†	53376.8	52742.0	502.20 ug/L	502.20 ppb	15:04:24
3	Co 228.616†	26528.4	26186.4	495.27 ug/L	495.27 ppb	15:04:44
3	Cr 267.716†	50039.8	49117.3	499.55 ug/L	499.55 ppb	15:04:24
3	Cu 324.752†	178488.9	167416.6	499.53 ug/L	499.53 ppb	15:04:24
3	Mn 257.610†	484901.2	475529.9	501.05 ug/L	501.05 ppb	15:04:24
3	Mo 202.031†	7968.1	7808.8	494.52 ug/L	494.52 ppb	15:04:44
3	Ni 231.604†	22808.6	22313.1	494.13 ug/L	494.13 ppb	15:04:44
3	P 214.914†	5443.3	5100.1	2421.7 ug/L	2421.7 ppb	15:04:44
3	Pb 220.353†	4778.8	4800.6	500.95 ug/L	500.95 ppb	15:04:44
3	S 181.975 Axial†	945.9	872.5	986.08 ug/L	986.08 ppb	15:04:44
3	Sb 206.836†	1697.0	1622.6	497.20 ug/L	497.20 ppb	15:04:44
3	Se 196.026†	975.6	998.1	525.92 ug/L	525.92 ppb	15:04:44
3	Si 251.611†	88192.0	86095.1	2479.0 ug/L	2479.0 ppb	15:04:24
3	Sn 189.927†	3351.9	3291.4	492.15 ug/L	492.15 ppb	15:04:44
3	Ti 334.940†	317852.2	314319.0	503.35 ug/L	503.35 ppb	15:04:24
3	Tl 190.801†	1800.4	1816.1	502.01 ug/L	502.01 ppb	15:04:44
3	U 409.014†	13499.6	16183.6	480.65 ug/L	480.65 ppb	15:04:24
3	V 292.402†	77885.1	78396.1	503.91 ug/L	503.91 ppb	15:04:24
3	Zn 213.857†	62731.3	60834.8	499.39 ug/L	499.39 ppb	15:04:24
3	SiO2†	87408.6	85306.1	5242.7 ug/L	5242.7 ppb	15:05:00

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	880171.7	100.78	%	0.868				0.86%
Sc Radial	4432.9	95.8	%	0.80				0.84%
Y 371.029	745110.4	99.437	%	0.8376				0.84%
Y RADIAL	4669.3	95.39	%	0.983				1.03%
Ag 328.068†	113860.5	498.01	ug/L	0.125	498.01	ppb	0.125	0.03%

QC value within limits for Ag 328.068 Recovery = 99.60%

Al 396.153Radial†	5742.7	4920.6 ug/L	4.18	4920.6 ppb	4.18	0.08%
QC value within limits for Al 396.153Radial Recovery = 98.41%						
As 188.979†	1416.6	501.25 ug/L	2.494	501.25 ppb	2.494	0.50%
QC value within limits for As 188.979 Recovery = 100.25%						
B 249.677†	24195.4	500.05 ug/L	1.512	500.05 ppb	1.512	0.30%
QC value within limits for B 249.677 Recovery = 100.01%						
Ba 233.527†	67976.3	501.73 ug/L	0.759	501.73 ppb	0.759	0.15%
QC value within limits for Ba 233.527 Recovery = 100.35%						
Be 313.107†	1487243.7	502.20 ug/L	0.187	502.20 ppb	0.187	0.04%
QC value within limits for Be 313.107 Recovery = 100.44%						
Ca 317.933Radial†	2977.0	5141.2 ug/L	78.91	5141.2 ppb	78.91	1.53%
QC value within limits for Ca 317.933Radial Recovery = 102.82%						
Cd 226.502†	52778.4	502.54 ug/L	0.815	502.54 ppb	0.815	0.16%
QC value within limits for Cd 226.502 Recovery = 100.51%						
Co 228.616†	26268.9	496.84 ug/L	2.571	496.84 ppb	2.571	0.52%
QC value within limits for Co 228.616 Recovery = 99.37%						
Cr 267.716†	49158.6	499.97 ug/L	0.390	499.97 ppb	0.390	0.08%
QC value within limits for Cr 267.716 Recovery = 99.99%						
Cu 324.752†	167267.2	499.09 ug/L	0.435	499.09 ppb	0.435	0.09%
QC value within limits for Cu 324.752 Recovery = 99.82%						
Fe 238.204 Radial†	546.1	5252.9 ug/L	86.35	5252.9 ppb	86.35	1.64%
QC value within limits for Fe 238.204 Radial Recovery = 105.06%						
K 766.490 Radial†	25273.7	5110.4 ug/L	13.55	5110.4 ppb	13.55	0.27%
QC value within limits for K 766.490 Radial Recovery = 102.21%						
Mg 279.077 IEC†	156.5	5336.7 ug/L	114.89	5336.7 ppb	114.89	2.15%
QC value within limits for Mg 279.077 IEC Recovery = 106.73%						
Mn 257.610†	475981.1	501.53 ug/L	0.417	501.53 ppb	0.417	0.08%
QC value within limits for Mn 257.610 Recovery = 100.31%						
Mo 202.031†	7835.0	496.18 ug/L	2.820	496.18 ppb	2.820	0.57%
QC value within limits for Mo 202.031 Recovery = 99.24%						
Na 589.592 Radial†	30817.0	10521 ug/L	37.4	10521 ppb	37.4	0.36%
QC value within limits for Na 589.592 Radial Recovery = 105.21%						
Ni 231.604†	22417.6	496.44 ug/L	3.330	496.44 ppb	3.330	0.67%
QC value within limits for Ni 231.604 Recovery = 99.29%						
P 214.914†	5110.1	2426.6 ug/L	7.72	2426.6 ppb	7.72	0.32%
QC value within limits for P 214.914 Recovery = 97.06%						
Pb 220.353†	4804.5	501.35 ug/L	3.240	501.35 ppb	3.240	0.65%
QC value within limits for Pb 220.353 Recovery = 100.27%						
S 181.975 Axial†	879.4	993.97 ug/L	7.157	993.97 ppb	7.157	0.72%
QC value within limits for S 181.975 Axial Recovery = 99.40%						
Sb 206.836†	1626.8	498.52 ug/L	5.826	498.52 ppb	5.826	1.17%
QC value within limits for Sb 206.836 Recovery = 99.70%						
Se 196.026†	1002.6	528.35 ug/L	2.974	528.35 ppb	2.974	0.56%
QC value within limits for Se 196.026 Recovery = 105.67%						
Si 251.611†	86071.1	2478.2 ug/L	0.95	2478.2 ppb	0.95	0.04%
QC value within limits for Si 251.611 Recovery = 99.13%						
Sn 189.927†	3306.2	494.37 ug/L	3.155	494.37 ppb	3.155	0.64%
QC value within limits for Sn 189.927 Recovery = 98.87%						
Sr 421.552†	66401.3	489.17 ug/L	1.455	489.17 ppb	1.455	0.30%
QC value within limits for Sr 421.552 Recovery = 97.83%						
Ti 334.940†	314610.9	503.82 ug/L	0.406	503.82 ppb	0.406	0.08%
QC value within limits for Ti 334.940 Recovery = 100.76%						
Tl 190.801†	1810.1	500.37 ug/L	3.937	500.37 ppb	3.937	0.79%
QC value within limits for Tl 190.801 Recovery = 100.07%						
U 409.014†	16260.7	482.94 ug/L	3.334	482.94 ppb	3.334	0.69%
QC value within limits for U 409.014 Recovery = 96.59%						
V 292.402†	78415.8	504.06 ug/L	0.180	504.06 ppb	0.180	0.04%
QC value within limits for V 292.402 Recovery = 100.81%						
Zn 213.857†	60829.7	499.33 ug/L	0.112	499.33 ppb	0.112	0.02%
QC value within limits for Zn 213.857 Recovery = 99.87%						
SiO2†	86119.1	5292.9 ug/L	60.05	5292.9 ppb	60.05	1.13%
QC value within limits for SiO2 Recovery = 98.98%						

All analyte(s) passed QC.

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/7/2010 15:07:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4349.7	4349.7	94.0	%			15:09:02
1	Y RADIAL	4618.2	4618.2	94.35	%			15:09:02
1	Al 396.153Radial†	-21.9	-2.5	-2.1396	ug/L	-2.1396	ppb	15:09:02
1	Ca 317.933Radial†	18.1	5.3	9.0791	ug/L	9.0791	ppb	15:09:22
1	Fe 238.204 Radial†	13.7	1.8	17.374	ug/L	17.374	ppb	15:09:22
1	K 766.490 Radial†	3266.7	246.5	49.883	ug/L	49.883	ppb	15:09:02
1	Mg 279.077 IEC†	1.4	-0.0	-1.3918	ug/L	-1.3918	ppb	15:09:22
1	Na 589.592 Radial†	-1403.0	277.3	94.664	ug/L	94.664	ppb	15:09:02
1	Sr 421.552†	20.6	10.7	0.0785	ug/L	0.0785	ppb	15:09:02
1	Sc 361.383	844984.7	844984.7	96.753	%			15:10:19
1	Y 371.029	724308.8	724308.8	96.661	%			15:10:19
1	Ag 328.068†	400.5	-77.0	-0.3260	ug/L	-0.3260	ppb	15:10:19
1	As 188.979†	-29.0	1.5	0.5355	ug/L	0.5355	ppb	15:10:39
1	B 249.677†	-495.6	253.2	5.2522	ug/L	5.2522	ppb	15:10:19
1	Ba 233.527†	16.8	-1.2	-0.0087	ug/L	-0.0087	ppb	15:10:39
1	Be 313.107†	-4279.0	-42.5	-0.0144	ug/L	-0.0144	ppb	15:10:19
1	Cd 226.502†	-227.0	18.3	0.1734	ug/L	0.1734	ppb	15:10:39
1	Co 228.616†	-98.3	-2.5	-0.0459	ug/L	-0.0459	ppb	15:10:39
1	Cr 267.716†	90.4	3.2	0.0340	ug/L	0.0340	ppb	15:10:19
1	Cu 324.752†	7967.0	130.8	0.3908	ug/L	0.3908	ppb	15:10:19
1	Mn 257.610†	1085.7	-184.2	-0.1922	ug/L	-0.1922	ppb	15:10:19
1	Mo 202.031†	29.5	3.8	0.2411	ug/L	0.2411	ppb	15:10:39
1	Ni 231.604†	135.6	24.0	0.5313	ug/L	0.5313	ppb	15:10:39
1	P 214.914†	242.7	-1.8	-0.9769	ug/L	-0.9769	ppb	15:10:39
1	Pb 220.353†	-82.9	15.6	1.6210	ug/L	1.6210	ppb	15:10:39
1	S 181.975 Axial†	57.4	1.7	1.8913	ug/L	1.8913	ppb	15:10:39
1	Sb 206.836†	44.4	-0.3	-0.0901	ug/L	-0.0901	ppb	15:10:39
1	Se 196.026†	-27.8	10.0	5.1382	ug/L	5.1382	ppb	15:10:39
1	Si 251.611†	651.3	43.1	1.2262	ug/L	1.2262	ppb	15:10:39
1	Sn 189.927†	2.8	-1.9	-0.2791	ug/L	-0.2791	ppb	15:10:39
1	Ti 334.940†	-1724.4	-28.8	-0.0438	ug/L	-0.0438	ppb	15:10:19
1	Tl 190.801†	-44.6	-0.5	-0.1265	ug/L	-0.1265	ppb	15:10:39
1	U 409.014†	-2956.7	-147.4	-4.3939	ug/L	-4.3939	ppb	15:10:19
1	V 292.402†	-1776.1	-29.3	-0.1936	ug/L	-0.1936	ppb	15:10:19
1	Zn 213.857†	856.3	31.9	0.2597	ug/L	0.2597	ppb	15:10:39
1	SiO2†	664.1	37.7	2.2831	ug/L	2.2831	ppb	15:11:35
2	Sc Radial	4506.8	4506.8	97.4	%			15:09:27
2	Y RADIAL	4747.1	4747.1	96.98	%			15:09:27
2	Al 396.153Radial†	-14.9	5.6	4.7555	ug/L	4.7555	ppb	15:09:27
2	Ca 317.933Radial†	22.9	9.5	16.455	ug/L	16.455	ppb	15:09:47
2	Fe 238.204 Radial†	8.8	-3.7	-35.156	ug/L	-35.156	ppb	15:09:47
2	K 766.490 Radial†	3282.3	141.3	28.570	ug/L	28.570	ppb	15:09:27
2	Mg 279.077 IEC†	2.9	1.5	51.141	ug/L	51.141	ppb	15:09:47
2	Na 589.592 Radial†	-1413.5	318.5	108.75	ug/L	108.75	ppb	15:09:27
2	Sr 421.552†	-4.1	-15.5	-0.1147	ug/L	-0.1147	ppb	15:09:27
2	Sc 361.383	855649.7	855649.7	97.974	%			15:10:44
2	Y 371.029	733359.9	733359.9	97.869	%			15:10:44
2	Ag 328.068†	506.7	26.3	0.1022	ug/L	0.1022	ppb	15:10:44
2	As 188.979†	-32.8	-2.0	-0.7136	ug/L	-0.7136	ppb	15:11:04
2	B 249.677†	-471.5	284.3	5.9025	ug/L	5.9025	ppb	15:10:44
2	Ba 233.527†	-10.2	-29.0	-0.2132	ug/L	-0.2132	ppb	15:11:04
2	Be 313.107†	-4326.9	-36.3	-0.0120	ug/L	-0.0120	ppb	15:10:44
2	Cd 226.502†	-240.0	8.0	0.0796	ug/L	0.0796	ppb	15:11:04
2	Co 228.616†	-94.6	2.6	0.0501	ug/L	0.0501	ppb	15:11:04
2	Cr 267.716†	152.5	65.4	0.6638	ug/L	0.6638	ppb	15:10:44
2	Cu 324.752†	8085.5	149.0	0.4425	ug/L	0.4425	ppb	15:10:44
2	Mn 257.610†	1209.1	-72.2	-0.0805	ug/L	-0.0805	ppb	15:10:44
2	Mo 202.031†	33.6	7.6	0.4777	ug/L	0.4777	ppb	15:11:04
2	Ni 231.604†	132.1	18.6	0.4132	ug/L	0.4132	ppb	15:11:04

2	P 214.914†	267.9	20.8	10.153 ug/L	10.153 ppb	15:11:04
2	Pb 220.353†	-113.9	-14.9	-1.5493 ug/L	-1.5493 ppb	15:11:04
2	S 181.975 Axial†	68.1	11.8	13.403 ug/L	13.403 ppb	15:11:04
2	Sb 206.836†	46.5	1.3	0.4025 ug/L	0.4025 ppb	15:11:04
2	Se 196.026†	-38.4	-0.4	-0.3284 ug/L	-0.3284 ppb	15:11:04
2	Si 251.611†	628.5	11.4	0.3109 ug/L	0.3109 ppb	15:11:04
2	Sn 189.927†	8.5	3.9	0.5892 ug/L	0.5892 ppb	15:11:04
2	Ti 334.940†	-1646.3	73.1	0.1167 ug/L	0.1167 ppb	15:10:44
2	Tl 190.801†	-43.0	1.8	0.5037 ug/L	0.5037 ppb	15:11:04
2	U 409.014†	-2781.8	69.2	2.0665 ug/L	2.0665 ppb	15:10:44
2	V 292.402†	-1701.3	69.9	0.4603 ug/L	0.4603 ppb	15:10:44
2	Zn 213.857†	855.7	20.4	0.1654 ug/L	0.1654 ppb	15:11:04
2	SiO2†	655.2	20.1	1.1951 ug/L	1.1951 ppb	15:11:40
3	Sc Radial	4475.5	4475.5	96.7 %		15:09:52
3	Y RADIAL	4714.7	4714.7	96.32 %		15:09:52
3	Al 396.153Radial†	-3.0	17.7	15.252 ug/L	15.252 ppb	15:09:52
3	Ca 317.933Radial†	10.6	-3.0	-5.1907 ug/L	-5.1907 ppb	15:10:12
3	Fe 238.204 Radial†	13.6	1.3	12.839 ug/L	12.839 ppb	15:10:12
3	K 766.490 Radial†	3255.3	136.9	27.693 ug/L	27.693 ppb	15:09:52
3	Mg 279.077 IEC†	0.7	-0.8	-27.159 ug/L	-27.159 ppb	15:10:12
3	Na 589.592 Radial†	-1402.1	320.2	109.32 ug/L	109.32 ppb	15:09:52
3	Sr 421.552†	-17.8	-29.7	-0.2190 ug/L	-0.2190 ppb	15:09:52
3	Sc 361.383	860260.2	860260.2	98.502 %		15:11:10
3	Y 371.029	736775.4	736775.4	98.325 %		15:11:10
3	Ag 328.068†	426.1	-58.3	-0.2538 ug/L	-0.2538 ppb	15:11:10
3	As 188.979†	-33.8	-2.8	-0.9833 ug/L	-0.9833 ppb	15:11:30
3	B 249.677†	-496.3	261.7	5.4259 ug/L	5.4259 ppb	15:11:10
3	Ba 233.527†	9.1	-9.3	-0.0684 ug/L	-0.0684 ppb	15:11:30
3	Be 313.107†	-4374.8	-61.2	-0.0207 ug/L	-0.0207 ppb	15:11:10
3	Cd 226.502†	-253.2	-4.1	-0.0400 ug/L	-0.0400 ppb	15:11:30
3	Co 228.616†	-74.6	23.5	0.4446 ug/L	0.4446 ppb	15:11:30
3	Cr 267.716†	112.2	23.6	0.2382 ug/L	0.2382 ppb	15:11:10
3	Cu 324.752†	8034.2	52.7	0.1579 ug/L	0.1579 ppb	15:11:10
3	Mn 257.610†	1155.0	-133.7	-0.1390 ug/L	-0.1390 ppb	15:11:10
3	Mo 202.031†	31.7	5.5	0.3491 ug/L	0.3491 ppb	15:11:30
3	Ni 231.604†	131.7	17.6	0.3896 ug/L	0.3896 ppb	15:11:30
3	P 214.914†	261.1	12.4	6.0253 ug/L	6.0253 ppb	15:11:30
3	Pb 220.353†	-108.6	-8.9	-0.9274 ug/L	-0.9274 ppb	15:11:30
3	S 181.975 Axial†	67.5	10.9	12.325 ug/L	12.325 ppb	15:11:30
3	Sb 206.836†	42.1	-3.4	-1.0580 ug/L	-1.0580 ppb	15:11:30
3	Se 196.026†	-32.3	6.0	3.0810 ug/L	3.0810 ppb	15:11:30
3	Si 251.611†	634.3	13.9	0.3906 ug/L	0.3906 ppb	15:11:30
3	Sn 189.927†	-4.2	-9.0	-1.3444 ug/L	-1.3444 ppb	15:11:30
3	Ti 334.940†	-1764.4	-37.8	-0.0632 ug/L	-0.0632 ppb	15:11:10
3	Tl 190.801†	-60.2	-15.4	-4.2440 ug/L	-4.2440 ppb	15:11:30
3	U 409.014†	-2693.6	174.0	5.1821 ug/L	5.1821 ppb	15:11:10
3	V 292.402†	-1786.3	-7.1	-0.0325 ug/L	-0.0325 ppb	15:11:10
3	Zn 213.857†	867.6	27.7	0.2271 ug/L	0.2271 ppb	15:11:30
3	SiO2†	681.1	42.7	2.6156 ug/L	2.6156 ppb	15:11:45

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	853631.5	97.743	%	0.8972				0.92%
Sc Radial	4444.0	96.0	%	1.80				1.87%
Y 371.029	731481.4	97.618	%	0.8597				0.88%
Y RADIAL	4693.3	95.88	%	1.370				1.43%
Ag 328.068†	-36.4	-0.1592	ug/L	0.22921	-0.1592	ppb	0.22921	143.97%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	6.9	5.9561	ug/L	8.75797	5.9561	ppb	8.75797	147.04%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.1	-0.3872	ug/L	0.81030	-0.3872	ppb	0.81030	209.30%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	266.4	5.5269	ug/L	0.33671	5.5269	ppb	0.33671	6.09%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-13.2	-0.0968	ug/L	0.10515	-0.0968	ppb	0.10515	108.65%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-46.6	-0.0157	ug/L	0.00451	-0.0157	ppb	0.00451	28.73%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.9	6.7812	ug/L	11.00439	6.7812	ppb	11.00439	162.28%

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

Cd 226.502†	7.4	0.0710 ug/L	0.10693	0.0710 ppb	0.10693	150.60%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	7.9	0.1496 ug/L	0.25996	0.1496 ppb	0.25996	173.76%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	30.7	0.3120 ug/L	0.32129	0.3120 ppb	0.32129	102.97%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	110.8	0.3304 ug/L	0.15162	0.3304 ppb	0.15162	45.89%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.2	-1.6474 ug/L	29.10747	-1.6474 ppb	29.10747	>999.9%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	174.9	35.382 ug/L	12.5659	35.382 ppb	12.5659	35.52%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.2	7.5301 ug/L	39.90493	7.5301 ppb	39.90493	529.94%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-130.1	-0.1372 ug/L	0.05588	-0.1372 ppb	0.05588	40.73%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	5.6	0.3560 ug/L	0.11843	0.3560 ppb	0.11843	33.27%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	305.3	104.25 ug/L	8.303	104.25 ppb	8.303	7.97%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	20.1	0.4447 ug/L	0.07592	0.4447 ppb	0.07592	17.07%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	10.5	5.0671 ug/L	5.62646	5.0671 ppb	5.62646	111.04%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-2.8	-0.2852 ug/L	1.67988	-0.2852 ppb	1.67988	588.94%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	8.1	9.2064 ug/L	6.35798	9.2064 ppb	6.35798	69.06%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-0.8	-0.2486 ug/L	0.74303	-0.2486 ppb	0.74303	298.94%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	5.2	2.6303 ug/L	2.76101	2.6303 ppb	2.76101	104.97%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	22.8	0.6426 ug/L	0.50702	0.6426 ppb	0.50702	78.90%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-2.3	-0.3448 ug/L	0.96850	-0.3448 ppb	0.96850	280.93%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-11.5	-0.0851 ug/L	0.15094	-0.0851 ppb	0.15094	177.46%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	2.2	0.0033 ug/L	0.09875	0.0033 ppb	0.09875	>999.9%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-4.7	-1.2889 ug/L	2.57851	-1.2889 ppb	2.57851	200.05%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	31.9	0.9516 ug/L	4.88442	0.9516 ppb	4.88442	513.30%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	11.2	0.0781 ug/L	0.34068	0.0781 ppb	0.34068	436.36%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	26.7	0.2174 ug/L	0.04791	0.2174 ppb	0.04791	22.04%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	33.5	2.0313 ug/L	0.74296	2.0313 ppb	0.74296	36.58%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 10
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/7/2010 16:02:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4420.4	4420.4	95.5	%			16:04:39
1	Y RADIAL	4638.9	4638.9	94.77	%			16:04:39
1	Al 396.153Radial†	5484.3	5762.7	4937.7	ug/L	4937.7	ppb	16:04:39
1	Ca 317.933Radial†	2927.0	3050.5	5268.1	ug/L	5268.1	ppb	16:04:59
1	Fe 238.204 Radial†	542.8	555.5	5343.7	ug/L	5343.7	ppb	16:04:59
1	K 766.490 Radial†	27102.9	25146.6	5084.6	ug/L	5084.6	ppb	16:04:39
1	Mg 279.077 IEC†	153.2	158.9	5419.5	ug/L	5419.5	ppb	16:04:59
1	Na 589.592 Radial†	27472.2	30532.6	10424	ug/L	10424	ppb	16:04:39
1	Sr 421.552†	63064.1	66014.8	486.32	ug/L	486.32	ppb	16:04:39
1	Sc 361.383	881486.8	881486.8	100.93	%			16:05:58
1	Y 371.029	745806.0	745806.0	99.530	%			16:05:58
1	Ag 328.068†	116695.9	115126.8	503.56	ug/L	503.56	ppb	16:05:58
1	As 188.979†	1418.4	1436.8	508.38	ug/L	508.38	ppb	16:06:18
1	B 249.677†	23999.4	24543.2	507.24	ug/L	507.24	ppb	16:05:58
1	Ba 233.527†	69300.7	68641.8	506.65	ug/L	506.65	ppb	16:05:58
1	Be 313.107†	1515380.7	1505759.6	508.45	ug/L	508.45	ppb	16:05:58
1	Cd 226.502†	53619.8	53377.3	508.24	ug/L	508.24	ppb	16:05:58
1	Co 228.616†	26608.5	26461.9	500.48	ug/L	500.48	ppb	16:06:18
1	Cr 267.716†	50130.5	49577.0	504.23	ug/L	504.23	ppb	16:05:58
1	Cu 324.752†	178923.6	169166.8	504.75	ug/L	504.75	ppb	16:05:58
1	Mn 257.610†	486430.9	480630.3	506.43	ug/L	506.43	ppb	16:05:58
1	Mo 202.031†	7996.4	7895.8	500.04	ug/L	500.04	ppb	16:06:18
1	Ni 231.604†	22963.0	22634.7	501.25	ug/L	501.25	ppb	16:06:18
1	P 214.914†	5467.2	5164.0	2452.1	ug/L	2452.1	ppb	16:06:18
1	Pb 220.353†	4832.5	4889.1	510.16	ug/L	510.16	ppb	16:06:18
1	S 181.975 Axial†	950.3	883.8	998.92	ug/L	998.92	ppb	16:06:18
1	Sb 206.836†	1710.6	1648.6	505.15	ug/L	505.15	ppb	16:06:18
1	Se 196.026†	985.6	1015.3	535.12	ug/L	535.12	ppb	16:06:18
1	Si 251.611†	88985.8	87533.5	2520.5	ug/L	2520.5	ppb	16:05:58
1	Sn 189.927†	3365.3	3329.4	497.85	ug/L	497.85	ppb	16:06:18
1	Ti 334.940†	318947.9	317754.4	508.86	ug/L	508.86	ppb	16:05:58
1	Tl 190.801†	1800.4	1829.5	505.72	ug/L	505.72	ppb	16:06:18
1	U 409.014†	13602.1	16384.9	486.62	ug/L	486.62	ppb	16:05:58
1	V 292.402†	78204.4	79288.2	509.64	ug/L	509.64	ppb	16:05:58
1	Zn 213.857†	62918.3	61483.9	504.70	ug/L	504.70	ppb	16:05:58
1	SiO2†	87159.5	85705.5	5267.2	ug/L	5267.2	ppb	16:07:18
2	Sc Radial	4551.5	4551.5	98.3	%			16:05:04
2	Y RADIAL	4807.2	4807.2	98.21	%			16:05:04
2	Al 396.153Radial†	5574.8	5689.3	4874.6	ug/L	4874.6	ppb	16:05:04
2	Ca 317.933Radial†	2911.8	2946.8	5089.0	ug/L	5089.0	ppb	16:05:24
2	Fe 238.204 Radial†	545.4	541.8	5211.9	ug/L	5211.9	ppb	16:05:24
2	K 766.490 Radial†	27625.0	24860.0	5026.6	ug/L	5026.6	ppb	16:05:04
2	Mg 279.077 IEC†	156.5	157.6	5375.4	ug/L	5375.4	ppb	16:05:24
2	Na 589.592 Radial†	28017.6	30258.5	10331	ug/L	10331	ppb	16:05:04
2	Sr 421.552†	64332.8	65402.6	481.81	ug/L	481.81	ppb	16:05:04
2	Sc 361.383	881361.6	881361.6	100.92	%			16:06:26
2	Y 371.029	746491.0	746491.0	99.622	%			16:06:26
2	Ag 328.068†	116430.0	114879.7	502.44	ug/L	502.44	ppb	16:06:26
2	As 188.979†	1402.1	1420.8	502.76	ug/L	502.76	ppb	16:06:46
2	B 249.677†	24016.9	24563.8	507.69	ug/L	507.69	ppb	16:06:26
2	Ba 233.527†	69148.2	68500.5	505.60	ug/L	505.60	ppb	16:06:26
2	Be 313.107†	1513648.4	1504256.3	507.95	ug/L	507.95	ppb	16:06:26
2	Cd 226.502†	53584.1	53349.5	507.98	ug/L	507.98	ppb	16:06:26
2	Co 228.616†	26532.3	26390.1	499.13	ug/L	499.13	ppb	16:06:46
2	Cr 267.716†	50091.9	49545.9	503.90	ug/L	503.90	ppb	16:06:26
2	Cu 324.752†	178558.3	168830.0	503.74	ug/L	503.74	ppb	16:06:26
2	Mn 257.610†	485207.0	479486.0	505.21	ug/L	505.21	ppb	16:06:26
2	Mo 202.031†	7968.1	7868.9	498.33	ug/L	498.33	ppb	16:06:46
2	Ni 231.604†	22887.5	22563.1	499.67	ug/L	499.67	ppb	16:06:46

2	P 214.914†	5449.0	5146.8	2443.9 ug/L	2443.9 ppb	16:06:46
2	Pb 220.353†	4785.9	4843.7	505.42 ug/L	505.42 ppb	16:06:46
2	S 181.975 Axial†	946.6	880.4	995.03 ug/L	995.03 ppb	16:06:46
2	Sb 206.836†	1701.9	1640.3	502.62 ug/L	502.62 ppb	16:06:46
2	Se 196.026†	963.5	993.5	523.64 ug/L	523.64 ppb	16:06:46
2	Si 251.611†	88553.9	87118.2	2508.5 ug/L	2508.5 ppb	16:06:26
2	Sn 189.927†	3369.7	3334.3	498.56 ug/L	498.56 ppb	16:06:46
2	Ti 334.940†	318245.1	317103.0	507.81 ug/L	507.81 ppb	16:06:26
2	Tl 190.801†	1786.7	1816.2	502.06 ug/L	502.06 ppb	16:06:46
2	U 409.014†	13587.2	16372.2	486.26 ug/L	486.26 ppb	16:06:26
2	V 292.402†	77998.7	79095.4	508.41 ug/L	508.41 ppb	16:06:26
2	Zn 213.857†	63041.6	61614.9	505.81 ug/L	505.81 ppb	16:06:26
2	SiO2†	88138.3	86687.6	5327.9 ug/L	5327.9 ppb	16:07:24
3	Sc Radial	4354.3	4354.3	94.1 %		16:05:29
3	Y RADIAL	4584.0	4584.0	93.65 %		16:05:29
3	Al 396.153Radial†	5475.2	5840.1	5004.5 ug/L	5004.5 ppb	16:05:29
3	Ca 317.933Radial†	2894.2	3062.1	5288.2 ug/L	5288.2 ppb	16:05:49
3	Fe 238.204 Radial†	536.1	557.0	5357.8 ug/L	5357.8 ppb	16:05:49
3	K 766.490 Radial†	27039.5	25509.4	5158.0 ug/L	5158.0 ppb	16:05:29
3	Mg 279.077 IEC†	153.9	162.1	5528.4 ug/L	5528.4 ppb	16:05:49
3	Na 589.592 Radial†	27496.8	30994.8	10582 ug/L	10582 ppb	16:05:29
3	Sr 421.552†	62896.5	66837.8	492.38 ug/L	492.38 ppb	16:05:29
3	Sc 361.383	884362.3	884362.3	101.26 %		16:06:53
3	Y 371.029	747468.3	747468.3	99.752 %		16:06:53
3	Ag 328.068†	116858.0	114911.0	502.62 ug/L	502.62 ppb	16:06:53
3	As 188.979†	1413.0	1426.9	504.92 ug/L	504.92 ppb	16:07:13
3	B 249.677†	24146.7	24611.2	508.66 ug/L	508.66 ppb	16:06:53
3	Ba 233.527†	69490.1	68605.7	506.38 ug/L	506.38 ppb	16:06:53
3	Be 313.107†	1517013.2	1502490.1	507.35 ug/L	507.35 ppb	16:06:53
3	Cd 226.502†	53824.6	53406.9	508.51 ug/L	508.51 ppb	16:06:53
3	Co 228.616†	26475.1	26244.3	496.36 ug/L	496.36 ppb	16:07:13
3	Cr 267.716†	50243.4	49527.1	503.72 ug/L	503.72 ppb	16:06:53
3	Cu 324.752†	179624.7	169282.7	505.10 ug/L	505.10 ppb	16:06:53
3	Mn 257.610†	488010.6	480623.3	506.42 ug/L	506.42 ppb	16:06:53
3	Mo 202.031†	7941.5	7815.9	494.98 ug/L	494.98 ppb	16:07:13
3	Ni 231.604†	22805.3	22405.0	496.16 ug/L	496.16 ppb	16:07:13
3	P 214.914†	5416.7	5096.6	2419.0 ug/L	2419.0 ppb	16:07:13
3	Pb 220.353†	4778.6	4820.4	503.00 ug/L	503.00 ppb	16:07:13
3	S 181.975 Axial†	946.7	877.3	991.51 ug/L	991.51 ppb	16:07:13
3	Sb 206.836†	1681.1	1613.9	494.53 ug/L	494.53 ppb	16:07:13
3	Se 196.026†	976.3	1002.9	528.85 ug/L	528.85 ppb	16:07:13
3	Si 251.611†	89090.4	87350.2	2515.3 ug/L	2515.3 ppb	16:06:53
3	Sn 189.927†	3356.5	3309.9	494.94 ug/L	494.94 ppb	16:07:13
3	Ti 334.940†	320226.4	317989.6	509.24 ug/L	509.24 ppb	16:06:53
3	Tl 190.801†	1787.1	1810.5	500.53 ug/L	500.53 ppb	16:07:13
3	U 409.014†	13752.9	16490.1	489.75 ug/L	489.75 ppb	16:06:53
3	V 292.402†	78466.3	79295.0	509.61 ug/L	509.61 ppb	16:06:53
3	Zn 213.857†	63009.8	61371.6	503.80 ug/L	503.80 ppb	16:06:53
3	SiO2†	88029.2	86283.5	5303.0 ug/L	5303.0 ppb	16:07:29

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	882403.6	101.04	%	0.194				0.19%
Sc Radial	4442.1	96.0	%	2.17				2.26%
Y 371.029	746588.4	99.635	%	0.1115				0.11%
Y RADIAL	4676.7	95.54	%	2.376				2.49%
Ag 328.068†	114972.5	502.87	ug/L	0.600	502.87	ppb	0.600	0.12%
QC value within limits for Ag 328.068 Recovery = 100.57%								
Al 396.153Radial†	5764.1	4938.9	ug/L	64.94	4938.9	ppb	64.94	1.31%
QC value within limits for Al 396.153Radial Recovery = 98.78%								
As 188.979†	1428.1	505.35	ug/L	2.835	505.35	ppb	2.835	0.56%
QC value within limits for As 188.979 Recovery = 101.07%								
B 249.677†	24572.7	507.86	ug/L	0.726	507.86	ppb	0.726	0.14%
QC value within limits for B 249.677 Recovery = 101.57%								
Ba 233.527†	68582.7	506.21	ug/L	0.544	506.21	ppb	0.544	0.11%
QC value within limits for Ba 233.527 Recovery = 101.24%								
Be 313.107†	1504168.7	507.92	ug/L	0.551	507.92	ppb	0.551	0.11%
QC value within limits for Be 313.107 Recovery = 101.58%								
Ca 317.933Radial†	3019.8	5215.1	ug/L	109.66	5215.1	ppb	109.66	2.10%

QC value within limits for Ca 317.933Radial Recovery = 104.30%

Cd 226.502†	53377.9	508.25 ug/L	0.265	508.25 ppb	0.265	0.05%
QC value within limits for Cd 226.502 Recovery = 101.65%						
Co 228.616†	26365.4	498.66 ug/L	2.103	498.66 ppb	2.103	0.42%
QC value within limits for Co 228.616 Recovery = 99.73%						
Cr 267.716†	49550.0	503.95 ug/L	0.257	503.95 ppb	0.257	0.05%
QC value within limits for Cr 267.716 Recovery = 100.79%						
Cu 324.752†	169093.2	504.53 ug/L	0.705	504.53 ppb	0.705	0.14%
QC value within limits for Cu 324.752 Recovery = 100.91%						
Fe 238.204 Radial†	551.4	5304.5 ug/L	80.46	5304.5 ppb	80.46	1.52%
QC value within limits for Fe 238.204 Radial Recovery = 106.09%						
K 766.490 Radial†	25172.0	5089.7 ug/L	65.85	5089.7 ppb	65.85	1.29%
QC value within limits for K 766.490 Radial Recovery = 101.79%						
Mg 279.077 IEC†	159.5	5441.1 ug/L	78.70	5441.1 ppb	78.70	1.45%
QC value within limits for Mg 279.077 IEC Recovery = 108.82%						
Mn 257.610†	480246.5	506.02 ug/L	0.700	506.02 ppb	0.700	0.14%
QC value within limits for Mn 257.610 Recovery = 101.20%						
Mo 202.031†	7860.2	497.78 ug/L	2.573	497.78 ppb	2.573	0.52%
QC value within limits for Mo 202.031 Recovery = 99.56%						
Na 589.592 Radial†	30595.3	10446 ug/L	127.0	10446 ppb	127.0	1.22%
QC value within limits for Na 589.592 Radial Recovery = 104.46%						
Ni 231.604†	22534.2	499.03 ug/L	2.603	499.03 ppb	2.603	0.52%
QC value within limits for Ni 231.604 Recovery = 99.81%						
P 214.914†	5135.8	2438.3 ug/L	17.24	2438.3 ppb	17.24	0.71%
QC value within limits for P 214.914 Recovery = 97.53%						
Pb 220.353†	4851.0	506.19 ug/L	3.638	506.19 ppb	3.638	0.72%
QC value within limits for Pb 220.353 Recovery = 101.24%						
S 181.975 Axial†	880.5	995.15 ug/L	3.708	995.15 ppb	3.708	0.37%
QC value within limits for S 181.975 Axial Recovery = 99.52%						
Sb 206.836†	1634.3	500.77 ug/L	5.547	500.77 ppb	5.547	1.11%
QC value within limits for Sb 206.836 Recovery = 100.15%						
Se 196.026†	1003.9	529.20 ug/L	5.750	529.20 ppb	5.750	1.09%
QC value within limits for Se 196.026 Recovery = 105.84%						
Si 251.611†	87334.0	2514.8 ug/L	6.00	2514.8 ppb	6.00	0.24%
QC value within limits for Si 251.611 Recovery = 100.59%						
Sn 189.927†	3324.6	497.12 ug/L	1.922	497.12 ppb	1.922	0.39%
QC value within limits for Sn 189.927 Recovery = 99.42%						
Sr 421.552†	66085.1	486.84 ug/L	5.305	486.84 ppb	5.305	1.09%
QC value within limits for Sr 421.552 Recovery = 97.37%						
Ti 334.940†	317615.7	508.64 ug/L	0.741	508.64 ppb	0.741	0.15%
QC value within limits for Ti 334.940 Recovery = 101.73%						
Tl 190.801†	1818.7	502.77 ug/L	2.666	502.77 ppb	2.666	0.53%
QC value within limits for Tl 190.801 Recovery = 100.55%						
U 409.014†	16415.8	487.54 ug/L	1.923	487.54 ppb	1.923	0.39%
QC value within limits for U 409.014 Recovery = 97.51%						
V 292.402†	79226.2	509.22 ug/L	0.702	509.22 ppb	0.702	0.14%
QC value within limits for V 292.402 Recovery = 101.84%						
Zn 213.857†	61490.2	504.77 ug/L	1.005	504.77 ppb	1.005	0.20%
QC value within limits for Zn 213.857 Recovery = 100.95%						
SiO2†	86225.5	5299.4 ug/L	30.54	5299.4 ppb	30.54	0.58%
QC value within limits for SiO2 Recovery = 99.10%						

All analyte(s) passed QC.

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

Autosampler Location: 8
Date Collected: 1/7/2010 16:09:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4643.3	4643.3	100	%			16:11:31
1	Y RADIAL	4907.4	4907.4	100.3	%			16:11:31
1	Al 396.153Radial†	3.8	24.7	21.201	ug/L	21.201	ppb	16:11:31
1	Ca 317.933Radial†	14.2	0.2	0.2701	ug/L	0.2701	ppb	16:11:51
1	Fe 238.204 Radial†	10.9	-1.8	-17.377	ug/L	-17.377	ppb	16:11:51
1	K 766.490 Radial†	3215.9	-24.0	-4.9024	ug/L	-4.9024	ppb	16:11:31
1	Mg 279.077 IEC†	1.0	-0.5	-17.998	ug/L	-17.998	ppb	16:11:51
1	Na 589.592 Radial†	-1404.3	370.3	126.43	ug/L	126.43	ppb	16:11:31
1	Sr 421.552†	17.0	5.7	0.0419	ug/L	0.0419	ppb	16:11:31
1	Sc 361.383	907588.9	907588.9	103.92	%			16:12:48
1	Y 371.029	775096.1	775096.1	103.44	%			16:12:48
1	Ag 328.068†	483.4	-25.7	-0.1276	ug/L	-0.1276	ppb	16:12:53
1	As 188.979†	-25.8	6.7	2.3379	ug/L	2.3379	ppb	16:13:13
1	B 249.677†	-373.0	406.5	8.4368	ug/L	8.4368	ppb	16:12:53
1	Ba 233.527†	14.9	-4.2	-0.0303	ug/L	-0.0303	ppb	16:13:13
1	Be 313.107†	-4415.5	131.3	0.0447	ug/L	0.0447	ppb	16:12:53
1	Cd 226.502†	-235.0	26.8	0.2570	ug/L	0.2570	ppb	16:13:13
1	Co 228.616†	-102.1	1.0	0.0201	ug/L	0.0201	ppb	16:13:13
1	Cr 267.716†	66.5	-26.2	-0.2704	ug/L	-0.2704	ppb	16:12:53
1	Cu 324.752†	8104.7	-304.7	-0.9097	ug/L	-0.9097	ppb	16:12:53
1	Mn 257.610†	887.6	-452.2	-0.4775	ug/L	-0.4775	ppb	16:12:53
1	Mo 202.031†	39.9	11.7	0.7371	ug/L	0.7371	ppb	16:13:13
1	Ni 231.604†	115.2	-5.3	-0.1172	ug/L	-0.1172	ppb	16:13:13
1	P 214.914†	261.3	-1.2	-0.4315	ug/L	-0.4315	ppb	16:13:13
1	Pb 220.353†	-105.2	0.1	0.0163	ug/L	0.0163	ppb	16:13:13
1	S 181.975 Axial†	56.0	-3.8	-4.2539	ug/L	-4.2539	ppb	16:13:13
1	Sb 206.836†	50.8	2.7	0.8334	ug/L	0.8334	ppb	16:13:13
1	Se 196.026†	-45.8	-5.4	-2.7697	ug/L	-2.7697	ppb	16:13:13
1	Si 251.611†	846.4	184.4	5.3230	ug/L	5.3230	ppb	16:13:13
1	Sn 189.927†	6.5	1.5	0.2289	ug/L	0.2289	ppb	16:13:13
1	Ti 334.940†	-1661.9	154.3	0.2411	ug/L	0.2411	ppb	16:12:53
1	Tl 190.801†	-47.3	0.2	0.0414	ug/L	0.0414	ppb	16:13:13
1	U 409.014†	-2535.0	469.2	13.986	ug/L	13.986	ppb	16:12:48
1	V 292.402†	-1794.2	79.9	0.5469	ug/L	0.5469	ppb	16:12:53
1	Zn 213.857†	890.9	4.2	0.0382	ug/L	0.0382	ppb	16:13:13
1	SiO2†	902.3	219.5	13.531	ug/L	13.531	ppb	16:14:19
2	Sc Radial	4168.5	4168.5	90.1	%			16:11:56
2	Y RADIAL	4412.3	4412.3	90.14	%			16:11:56
2	Al 396.153Radial†	-17.9	1.0	0.8382	ug/L	0.8382	ppb	16:11:56
2	Ca 317.933Radial†	16.1	3.8	6.6187	ug/L	6.6187	ppb	16:12:16
2	Fe 238.204 Radial†	10.8	-0.7	-6.7233	ug/L	-6.7233	ppb	16:12:16
2	K 766.490 Radial†	3353.1	493.4	99.914	ug/L	99.914	ppb	16:11:56
2	Mg 279.077 IEC†	4.7	3.7	124.96	ug/L	124.96	ppb	16:12:16
2	Na 589.592 Radial†	-1402.9	212.5	72.558	ug/L	72.558	ppb	16:11:56
2	Sr 421.552†	15.9	6.4	0.0470	ug/L	0.0470	ppb	16:11:56
2	Sc 361.383	888012.4	888012.4	101.68	%			16:13:18
2	Y 371.029	758844.2	758844.2	101.27	%			16:13:18
2	Ag 328.068†	506.6	7.3	0.0187	ug/L	0.0187	ppb	16:13:23
2	As 188.979†	-39.2	-7.1	-2.4897	ug/L	-2.4897	ppb	16:13:43
2	B 249.677†	-308.9	461.7	9.5812	ug/L	9.5812	ppb	16:13:23
2	Ba 233.527†	16.0	-2.8	-0.0198	ug/L	-0.0198	ppb	16:13:43
2	Be 313.107†	-4412.3	40.8	0.0139	ug/L	0.0139	ppb	16:13:23
2	Cd 226.502†	-243.3	13.7	0.1315	ug/L	0.1315	ppb	16:13:43
2	Co 228.616†	-113.7	-12.6	-0.2380	ug/L	-0.2380	ppb	16:13:43
2	Cr 267.716†	85.4	-6.3	-0.0680	ug/L	-0.0680	ppb	16:13:23
2	Cu 324.752†	8188.5	-50.5	-0.1508	ug/L	-0.1508	ppb	16:13:23
2	Mn 257.610†	923.7	-397.9	-0.4219	ug/L	-0.4219	ppb	16:13:23
2	Mo 202.031†	32.4	5.1	0.3251	ug/L	0.3251	ppb	16:13:43
2	Ni 231.604†	133.1	14.7	0.3270	ug/L	0.3270	ppb	16:13:43

2	P 214.914†	262.6	5.6	2.7882 ug/L	2.7882 ppb	16:13:43
2	Pb 220.353†	-91.1	11.7	1.2162 ug/L	1.2162 ppb	16:13:43
2	S 181.975 Axial†	62.6	3.9	4.3799 ug/L	4.3799 ppb	16:13:43
2	Sb 206.836†	35.9	-10.8	-3.2750 ug/L	-3.2750 ppb	16:13:43
2	Se 196.026†	-32.0	7.3	3.7122 ug/L	3.7122 ppb	16:13:43
2	Si 251.611†	819.5	175.9	5.0524 ug/L	5.0524 ppb	16:13:43
2	Sn 189.927†	0.9	-3.9	-0.5815 ug/L	-0.5815 ppb	16:13:43
2	Ti 334.940†	-1717.4	64.4	0.0970 ug/L	0.0970 ppb	16:13:23
2	Tl 190.801†	-47.2	-0.8	-0.2179 ug/L	-0.2179 ppb	16:13:43
2	U 409.014†	-2450.9	498.1	14.845 ug/L	14.845 ppb	16:13:18
2	V 292.402†	-1756.9	78.6	0.5356 ug/L	0.5356 ppb	16:13:23
2	Zn 213.857†	870.5	3.0	0.0189 ug/L	0.0189 ppb	16:13:43
2	SiO2†	911.6	247.8	15.222 ug/L	15.222 ppb	16:14:24
3	Sc Radial	4420.8	4420.8	95.5 %		16:12:21
3	Y RADIAL	4690.7	4690.7	95.83 %		16:12:21
3	Al 396.153Radial†	23.7	45.7	39.299 ug/L	39.299 ppb	16:12:21
3	Ca 317.933Radial†	17.2	4.0	6.9571 ug/L	6.9571 ppb	16:12:41
3	Fe 238.204 Radial†	10.7	-1.6	-15.000 ug/L	-15.000 ppb	16:12:41
3	K 766.490 Radial†	3277.3	201.7	40.811 ug/L	40.811 ppb	16:12:21
3	Mg 279.077 IEC†	-0.6	-2.1	-71.659 ug/L	-71.659 ppb	16:12:41
3	Na 589.592 Radial†	-1394.0	310.7	106.07 ug/L	106.07 ppb	16:12:21
3	Sr 421.552†	9.1	-1.8	-0.0133 ug/L	-0.0133 ppb	16:12:21
3	Sc 361.383	902477.0	902477.0	103.34 %		16:13:48
3	Y 371.029	771067.0	771067.0	102.90 %		16:13:48
3	Ag 328.068†	548.4	39.8	0.1574 ug/L	0.1574 ppb	16:13:53
3	As 188.979†	-35.3	-2.7	-0.9537 ug/L	-0.9537 ppb	16:14:13
3	B 249.677†	-285.7	489.0	10.148 ug/L	10.148 ppb	16:13:53
3	Ba 233.527†	-14.8	-32.9	-0.2403 ug/L	-0.2403 ppb	16:14:13
3	Be 313.107†	-4351.2	169.4	0.0579 ug/L	0.0579 ppb	16:13:53
3	Cd 226.502†	-229.8	30.5	0.2925 ug/L	0.2925 ppb	16:14:13
3	Co 228.616†	-107.5	-4.9	-0.0922 ug/L	-0.0922 ppb	16:14:13
3	Cr 267.716†	114.8	20.9	0.2080 ug/L	0.2080 ppb	16:13:53
3	Cu 324.752†	8281.7	-89.3	-0.2671 ug/L	-0.2671 ppb	16:13:53
3	Mn 257.610†	845.0	-488.6	-0.5146 ug/L	-0.5146 ppb	16:13:53
3	Mo 202.031†	29.9	2.2	0.1366 ug/L	0.1366 ppb	16:14:13
3	Ni 231.604†	129.6	9.3	0.2060 ug/L	0.2060 ppb	16:14:13
3	P 214.914†	251.8	-8.9	-4.3354 ug/L	-4.3354 ppb	16:14:13
3	Pb 220.353†	-97.2	7.2	0.7619 ug/L	0.7619 ppb	16:14:13
3	S 181.975 Axial†	64.1	4.4	4.9408 ug/L	4.9408 ppb	16:14:13
3	Sb 206.836†	62.6	14.4	4.2996 ug/L	4.2996 ppb	16:14:13
3	Se 196.026†	-45.4	-5.1	-2.6530 ug/L	-2.6530 ppb	16:14:13
3	Si 251.611†	833.0	176.0	5.0848 ug/L	5.0848 ppb	16:14:13
3	Sn 189.927†	-12.2	-16.5	-2.4696 ug/L	-2.4696 ppb	16:14:13
3	Ti 334.940†	-1561.1	242.8	0.3819 ug/L	0.3819 ppb	16:13:53
3	Tl 190.801†	-41.8	5.3	1.4471 ug/L	1.4471 ppb	16:14:13
3	U 409.014†	-2433.7	553.4	16.494 ug/L	16.494 ppb	16:13:48
3	V 292.402†	-1708.9	152.6	1.0024 ug/L	1.0024 ppb	16:13:53
3	Zn 213.857†	888.7	6.9	0.0592 ug/L	0.0592 ppb	16:14:13
3	SiO2†	839.4	163.6	10.084 ug/L	10.084 ppb	16:14:29

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	899359.4	102.98	%	1.163				1.13%
Sc Radial	4410.9	95.3	%	5.13				5.39%
Y 371.029	768335.8	102.54	%	1.129				1.10%
Y RADIAL	4670.1	95.41	%	5.071				5.31%
Ag 328.068†	7.1	0.0162	ug/L	0.14249	0.0162	ppb	0.14249	880.37%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	23.8	20.446	ug/L	19.2414	20.446	ppb	19.2414	94.11%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.0	-0.3685	ug/L	2.46642	-0.3685	ppb	2.46642	669.26%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	452.4	9.3886	ug/L	0.87156	9.3886	ppb	0.87156	9.28%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-13.3	-0.0968	ug/L	0.12439	-0.0968	ppb	0.12439	128.53%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	113.8	0.0388	ug/L	0.02254	0.0388	ppb	0.02254	58.04%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.7	4.6153	ug/L	3.76685	4.6153	ppb	3.76685	81.62%

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

Cd 226.502†	23.7	0.2270 ug/L	0.08461	0.2270 ppb	0.08461	37.27%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-5.5	-0.1034 ug/L	0.12941	-0.1034 ppb	0.12941	125.19%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-3.9	-0.0435 ug/L	0.24016	-0.0435 ppb	0.24016	552.33%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-148.2	-0.4425 ug/L	0.40870	-0.4425 ppb	0.40870	92.35%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-1.4	-13.033 ug/L	5.5924	-13.033 ppb	5.5924	42.91%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	223.7	45.274 ug/L	52.5506	45.274 ppb	52.5506	116.07%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.3	11.767 ug/L	101.6326	11.767 ppb	101.6326	863.69%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-446.3	-0.4713 ug/L	0.04665	-0.4713 ppb	0.04665	9.90%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	6.3	0.3996 ug/L	0.30708	0.3996 ppb	0.30708	76.85%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	297.8	101.69 ug/L	27.202	101.69 ppb	27.202	26.75%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	6.3	0.1386 ug/L	0.22965	0.1386 ppb	0.22965	165.68%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-1.5	-0.6596 ug/L	3.56728	-0.6596 ppb	3.56728	540.84%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	6.3	0.6648 ug/L	0.60581	0.6648 ppb	0.60581	91.13%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	1.5	1.6889 ug/L	5.15430	1.6889 ppb	5.15430	305.18%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	2.1	0.6193 ug/L	3.79180	0.6193 ppb	3.79180	612.24%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-1.1	-0.5701 ug/L	3.70910	-0.5701 ppb	3.70910	650.57%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	178.8	5.1534 ug/L	0.14775	5.1534 ppb	0.14775	2.87%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-6.3	-0.9407 ug/L	1.38465	-0.9407 ppb	1.38465	147.19%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	3.4	0.0252 ug/L	0.03342	0.0252 ppb	0.03342	132.48%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	153.8	0.2400 ug/L	0.14241	0.2400 ppb	0.14241	59.34%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	1.5	0.4235 ug/L	0.89588	0.4235 ppb	0.89588	211.52%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	506.9	15.108 ug/L	1.2743	15.108 ppb	1.2743	8.43%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	103.7	0.6950 ug/L	0.26629	0.6950 ppb	0.26629	38.32%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	4.7	0.0388 ug/L	0.02014	0.0388 ppb	0.02014	51.95%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	210.3	12.946 ug/L	2.6185	12.946 ppb	2.6185	20.23%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 20
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/7/2010 17:11:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4555.8	4555.8	98.4	%			17:13:40
1	Y RADIAL	4765.6	4765.6	97.36	%			17:13:40
1	Al 396.153Radial†	5696.2	5807.3	4976.2	ug/L	4976.2	ppb	17:13:40
1	Ca 317.933Radial†	2940.1	2972.7	5133.8	ug/L	5133.8	ppb	17:14:00
1	Fe 238.204 Radial†	540.0	535.9	5155.0	ug/L	5155.0	ppb	17:14:00
1	K 766.490 Radial†	27637.2	24845.7	5023.8	ug/L	5023.8	ppb	17:13:40
1	Mg 279.077 IEC†	156.6	157.5	5373.6	ug/L	5373.6	ppb	17:14:00
1	Na 589.592 Radial†	27560.3	29766.9	10163	ug/L	10163	ppb	17:13:40
1	Sr 421.552†	64343.9	65351.8	481.43	ug/L	481.43	ppb	17:13:40
1	Sc 361.383	894809.6	894809.6	102.46	%			17:14:59
1	Y 371.029	757386.1	757386.1	101.08	%			17:14:59
1	Ag 328.068†	117306.3	114001.1	498.59	ug/L	498.59	ppb	17:14:59
1	As 188.979†	1418.4	1415.9	500.99	ug/L	500.99	ppb	17:15:19
1	B 249.677†	23842.6	24036.1	496.76	ug/L	496.76	ppb	17:14:59
1	Ba 233.527†	69506.8	67820.7	500.59	ug/L	500.59	ppb	17:14:59
1	Be 313.107†	1522298.5	1490157.5	503.19	ug/L	503.19	ppb	17:14:59
1	Cd 226.502†	53722.3	52686.4	501.67	ug/L	501.67	ppb	17:14:59
1	Co 228.616†	26783.9	26240.6	496.30	ug/L	496.30	ppb	17:15:19
1	Cr 267.716†	50363.1	49064.6	499.01	ug/L	499.01	ppb	17:14:59
1	Cu 324.752†	180467.4	168034.2	501.37	ug/L	501.37	ppb	17:14:59
1	Mn 257.610†	488246.3	475226.6	500.72	ug/L	500.72	ppb	17:14:59
1	Mo 202.031†	8042.7	7823.1	495.42	ug/L	495.42	ppb	17:15:19
1	Ni 231.604†	23059.9	22390.5	495.84	ug/L	495.84	ppb	17:15:19
1	P 214.914†	5507.6	5122.8	2432.5	ug/L	2432.5	ppb	17:15:19
1	Pb 220.353†	4832.3	4817.7	502.74	ug/L	502.74	ppb	17:15:19
1	S 181.975 Axial†	943.0	862.7	975.08	ug/L	975.08	ppb	17:15:19
1	Sb 206.836†	1712.2	1625.0	497.94	ug/L	497.94	ppb	17:15:19
1	Se 196.026†	991.2	1006.2	529.91	ug/L	529.91	ppb	17:15:19
1	Si 251.611†	88976.0	86211.3	2482.4	ug/L	2482.4	ppb	17:14:59
1	Sn 189.927†	3375.0	3289.3	491.84	ug/L	491.84	ppb	17:15:19
1	Ti 334.940†	320808.9	314865.9	504.23	ug/L	504.23	ppb	17:14:59
1	Tl 190.801†	1818.6	1820.6	503.26	ug/L	503.26	ppb	17:15:19
1	U 409.014†	13807.2	16384.5	486.64	ug/L	486.64	ppb	17:14:59
1	V 292.402†	78590.4	78511.3	504.68	ug/L	504.68	ppb	17:14:59
1	Zn 213.857†	63172.1	60803.4	499.12	ug/L	499.12	ppb	17:14:59
1	SiO2†	89086.4	86300.5	5304.2	ug/L	5304.2	ppb	17:16:19
2	Sc Radial	4416.8	4416.8	95.4	%			17:14:05
2	Y RADIAL	4674.2	4674.2	95.49	%			17:14:05
2	Al 396.153Radial†	5579.8	5867.5	5028.0	ug/L	5028.0	ppb	17:14:05
2	Ca 317.933Radial†	2923.9	3049.7	5266.8	ug/L	5266.8	ppb	17:14:25
2	Fe 238.204 Radial†	538.6	551.6	5306.1	ug/L	5306.1	ppb	17:14:25
2	K 766.490 Radial†	27270.9	25345.8	5125.1	ug/L	5125.1	ppb	17:14:05
2	Mg 279.077 IEC†	155.7	161.7	5514.6	ug/L	5514.6	ppb	17:14:25
2	Na 589.592 Radial†	26936.9	29995.1	10241	ug/L	10241	ppb	17:14:05
2	Sr 421.552†	63108.2	66114.7	487.05	ug/L	487.05	ppb	17:14:05
2	Sc 361.383	891194.5	891194.5	102.04	%			17:15:26
2	Y 371.029	754269.3	754269.3	100.66	%			17:15:26
2	Ag 328.068†	116754.6	113924.9	498.31	ug/L	498.31	ppb	17:15:26
2	As 188.979†	1413.9	1417.1	501.44	ug/L	501.44	ppb	17:15:46
2	B 249.677†	23800.7	24089.4	497.84	ug/L	497.84	ppb	17:15:26
2	Ba 233.527†	69235.7	67830.2	500.66	ug/L	500.66	ppb	17:15:26
2	Be 313.107†	1515425.0	1489448.7	502.95	ug/L	502.95	ppb	17:15:26
2	Cd 226.502†	53387.1	52570.6	500.55	ug/L	500.55	ppb	17:15:26
2	Co 228.616†	26756.1	26319.3	497.79	ug/L	497.79	ppb	17:15:46
2	Cr 267.716†	50084.6	48991.1	498.27	ug/L	498.27	ppb	17:15:26
2	Cu 324.752†	179531.7	167831.8	500.77	ug/L	500.77	ppb	17:15:26
2	Mn 257.610†	486238.1	475191.6	500.70	ug/L	500.70	ppb	17:15:26
2	Mo 202.031†	8033.9	7846.2	496.90	ug/L	496.90	ppb	17:15:46
2	Ni 231.604†	23041.2	22463.5	497.46	ug/L	497.46	ppb	17:15:46

2	P 214.914†	5478.7	5116.3	2429.4 ug/L	2429.4 ppb	17:15:46
2	Pb 220.353†	4839.0	4843.3	505.41 ug/L	505.41 ppb	17:15:46
2	S 181.975 Axial†	958.4	881.6	996.35 ug/L	996.35 ppb	17:15:46
2	Sb 206.836†	1705.9	1625.6	498.22 ug/L	498.22 ppb	17:15:46
2	Se 196.026†	982.2	1001.3	527.91 ug/L	527.91 ppb	17:15:46
2	Si 251.611†	88584.2	86179.7	2481.4 ug/L	2481.4 ppb	17:15:26
2	Sn 189.927†	3381.6	3309.2	494.82 ug/L	494.82 ppb	17:15:46
2	Ti 334.940†	319248.6	314607.0	503.82 ug/L	503.82 ppb	17:15:26
2	Tl 190.801†	1808.7	1818.1	502.56 ug/L	502.56 ppb	17:15:46
2	U 409.014†	13677.5	16312.1	484.47 ug/L	484.47 ppb	17:15:26
2	V 292.402†	78231.7	78470.9	504.42 ug/L	504.42 ppb	17:15:26
2	Zn 213.857†	62884.0	60771.3	498.83 ug/L	498.83 ppb	17:15:26
2	SiO2†	89606.9	87163.2	5357.3 ug/L	5357.3 ppb	17:16:24
3	Sc Radial	4548.2	4548.2	98.3 %		17:14:30
3	Y RADIAL	4806.6	4806.6	98.20 %		17:14:30
3	Al 396.153Radial†	5656.5	5776.6	4949.5 ug/L	4949.5 ppb	17:14:30
3	Ca 317.933Radial†	2948.3	2986.0	5156.7 ug/L	5156.7 ppb	17:14:50
3	Fe 238.204 Radial†	540.0	536.7	5163.3 ug/L	5163.3 ppb	17:14:50
3	K 766.490 Radial†	27482.5	24735.3	5001.5 ug/L	5001.5 ppb	17:14:30
3	Mg 279.077 IEC†	156.0	157.3	5364.2 ug/L	5364.2 ppb	17:14:50
3	Na 589.592 Radial†	27060.9	29305.6	10005 ug/L	10005 ppb	17:14:30
3	Sr 421.552†	63872.9	64982.0	478.71 ug/L	478.71 ppb	17:14:30
3	Sc 361.383	885045.6	885045.6	101.34 %		17:15:54
3	Y 371.029	748474.3	748474.3	99.886 %		17:15:54
3	Ag 328.068†	116086.9	114061.0	498.85 ug/L	498.85 ppb	17:15:54
3	As 188.979†	1424.7	1437.4	508.54 ug/L	508.54 ppb	17:16:14
3	B 249.677†	23679.5	24131.9	498.73 ug/L	498.73 ppb	17:15:54
3	Ba 233.527†	68977.6	68047.0	502.25 ug/L	502.25 ppb	17:15:54
3	Be 313.107†	1509079.1	1493504.3	504.32 ug/L	504.32 ppb	17:15:54
3	Cd 226.502†	53308.1	52856.2	503.29 ug/L	503.29 ppb	17:15:54
3	Co 228.616†	26803.7	26548.4	502.13 ug/L	502.13 ppb	17:16:14
3	Cr 267.716†	49906.2	49156.0	499.94 ug/L	499.94 ppb	17:15:54
3	Cu 324.752†	178470.8	168007.2	501.29 ug/L	501.29 ppb	17:15:54
3	Mn 257.610†	484719.0	477003.2	502.59 ug/L	502.59 ppb	17:15:54
3	Mo 202.031†	8052.0	7918.8	501.48 ug/L	501.48 ppb	17:16:14
3	Ni 231.604†	23073.8	22652.5	501.65 ug/L	501.65 ppb	17:16:14
3	P 214.914†	5478.5	5153.4	2447.6 ug/L	2447.6 ppb	17:16:14
3	Pb 220.353†	4861.5	4898.6	511.16 ug/L	511.16 ppb	17:16:14
3	S 181.975 Axial†	951.1	880.8	995.54 ug/L	995.54 ppb	17:16:14
3	Sb 206.836†	1721.8	1652.9	506.58 ug/L	506.58 ppb	17:16:14
3	Se 196.026†	995.3	1020.9	537.41 ug/L	537.41 ppb	17:16:14
3	Si 251.611†	88212.4	86415.9	2488.2 ug/L	2488.2 ppb	17:15:54
3	Sn 189.927†	3379.5	3330.1	497.93 ug/L	497.93 ppb	17:16:14
3	Ti 334.940†	317989.4	315538.0	505.31 ug/L	505.31 ppb	17:15:54
3	Tl 190.801†	1817.4	1839.1	508.31 ug/L	508.31 ppb	17:16:14
3	U 409.014†	13554.0	16283.3	483.62 ug/L	483.62 ppb	17:15:54
3	V 292.402†	77734.7	78513.2	504.77 ug/L	504.77 ppb	17:15:54
3	Zn 213.857†	62743.5	61060.8	501.21 ug/L	501.21 ppb	17:15:54
3	SiO2†	87312.5	85509.2	5255.0 ug/L	5255.0 ppb	17:16:30

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	890349.9	101.95	%	0.565				0.55%
Sc Radial	4506.9	97.4	%	1.69				1.73%
Y 371.029	753376.6	100.54	%	0.604				0.60%
Y RADIAL	4748.8	97.02	%	1.385				1.43%
Ag 328.068†	113995.6	498.58	ug/L	0.273	498.58	ppb	0.273	0.05%
QC value within limits for Ag 328.068 Recovery = 99.72%								
Al 396.153Radial†	5817.1	4984.6	ug/L	39.90	4984.6	ppb	39.90	0.80%
QC value within limits for Al 396.153Radial Recovery = 99.69%								
As 188.979†	1423.5	503.66	ug/L	4.233	503.66	ppb	4.233	0.84%
QC value within limits for As 188.979 Recovery = 100.73%								
B 249.677†	24085.8	497.77	ug/L	0.987	497.77	ppb	0.987	0.20%
QC value within limits for B 249.677 Recovery = 99.55%								
Ba 233.527†	67899.3	501.17	ug/L	0.942	501.17	ppb	0.942	0.19%
QC value within limits for Ba 233.527 Recovery = 100.23%								
Be 313.107†	1491036.8	503.48	ug/L	0.731	503.48	ppb	0.731	0.15%
QC value within limits for Be 313.107 Recovery = 100.70%								
Ca 317.933Radial†	3002.8	5185.8	ug/L	71.11	5185.8	ppb	71.11	1.37%

QC value within limits for Ca 317.933Radial Recovery = 103.72%

Cd 226.502†	52704.4	501.84 ug/L	1.376	501.84 ppb	1.376	0.27%
QC value within limits for Cd 226.502 Recovery = 100.37%						
Co 228.616†	26369.4	498.74 ug/L	3.031	498.74 ppb	3.031	0.61%
QC value within limits for Co 228.616 Recovery = 99.75%						
Cr 267.716†	49070.5	499.07 ug/L	0.838	499.07 ppb	0.838	0.17%
QC value within limits for Cr 267.716 Recovery = 99.81%						
Cu 324.752†	167957.7	501.14 ug/L	0.323	501.14 ppb	0.323	0.06%
QC value within limits for Cu 324.752 Recovery = 100.23%						
Fe 238.204 Radial†	541.4	5208.2 ug/L	84.95	5208.2 ppb	84.95	1.63%
QC value within limits for Fe 238.204 Radial Recovery = 104.16%						
K 766.490 Radial†	24975.6	5050.2 ug/L	65.85	5050.2 ppb	65.85	1.30%
QC value within limits for K 766.490 Radial Recovery = 101.00%						
Mg 279.077 IEC†	158.8	5417.5 ug/L	84.27	5417.5 ppb	84.27	1.56%
QC value within limits for Mg 279.077 IEC Recovery = 108.35%						
Mn 257.610†	475807.1	501.34 ug/L	1.088	501.34 ppb	1.088	0.22%
QC value within limits for Mn 257.610 Recovery = 100.27%						
Mo 202.031†	7862.7	497.93 ug/L	3.158	497.93 ppb	3.158	0.63%
QC value within limits for Mo 202.031 Recovery = 99.59%						
Na 589.592 Radial†	29689.2	10136 ug/L	119.9	10136 ppb	119.9	1.18%
QC value within limits for Na 589.592 Radial Recovery = 101.36%						
Ni 231.604†	22502.2	498.32 ug/L	2.994	498.32 ppb	2.994	0.60%
QC value within limits for Ni 231.604 Recovery = 99.66%						
P 214.914†	5130.9	2436.5 ug/L	9.74	2436.5 ppb	9.74	0.40%
QC value within limits for P 214.914 Recovery = 97.46%						
Pb 220.353†	4853.2	506.44 ug/L	4.303	506.44 ppb	4.303	0.85%
QC value within limits for Pb 220.353 Recovery = 101.29%						
S 181.975 Axial†	875.0	988.99 ug/L	12.055	988.99 ppb	12.055	1.22%
QC value within limits for S 181.975 Axial Recovery = 98.90%						
Sb 206.836†	1634.5	500.91 ug/L	4.910	500.91 ppb	4.910	0.98%
QC value within limits for Sb 206.836 Recovery = 100.18%						
Se 196.026†	1009.5	531.74 ug/L	5.009	531.74 ppb	5.009	0.94%
QC value within limits for Se 196.026 Recovery = 106.35%						
Si 251.611†	86269.0	2484.0 ug/L	3.67	2484.0 ppb	3.67	0.15%
QC value within limits for Si 251.611 Recovery = 99.36%						
Sn 189.927†	3309.5	494.86 ug/L	3.049	494.86 ppb	3.049	0.62%
QC value within limits for Sn 189.927 Recovery = 98.97%						
Sr 421.552†	65482.8	482.40 ug/L	4.255	482.40 ppb	4.255	0.88%
QC value within limits for Sr 421.552 Recovery = 96.48%						
Ti 334.940†	315003.6	504.45 ug/L	0.768	504.45 ppb	0.768	0.15%
QC value within limits for Ti 334.940 Recovery = 100.89%						
Tl 190.801†	1825.9	504.71 ug/L	3.140	504.71 ppb	3.140	0.62%
QC value within limits for Tl 190.801 Recovery = 100.94%						
U 409.014†	16326.7	484.91 ug/L	1.558	484.91 ppb	1.558	0.32%
QC value within limits for U 409.014 Recovery = 96.98%						
V 292.402†	78498.5	504.62 ug/L	0.181	504.62 ppb	0.181	0.04%
QC value within limits for V 292.402 Recovery = 100.92%						
Zn 213.857†	60878.5	499.72 ug/L	1.300	499.72 ppb	1.300	0.26%
QC value within limits for Zn 213.857 Recovery = 99.94%						
SiO2†	86324.3	5305.5 ug/L	51.14	5305.5 ppb	51.14	0.96%
QC value within limits for SiO2 Recovery = 99.21%						

All analyte(s) passed QC.

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

Autosampler Location: 8
Date Collected: 1/7/2010 17:18:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4583.0	4583.0	99.0	%			17:20:32
1	Y RADIAL	4841.4	4841.4	98.91	%			17:20:32
1	Al 396.153Radial†	-36.4	-15.9	-13.739	ug/L	-13.739	ppb	17:20:32
1	Ca 317.933Radial†	13.2	-0.6	-1.1171	ug/L	-1.1171	ppb	17:20:52
1	Fe 238.204 Radial†	11.2	-1.4	-13.710	ug/L	-13.710	ppb	17:20:52
1	K 766.490 Radial†	3361.1	164.9	33.346	ug/L	33.346	ppb	17:20:32
1	Mg 279.077 IEC†	0.8	-0.7	-24.350	ug/L	-24.350	ppb	17:20:52
1	Na 589.592 Radial†	-1415.1	341.0	116.43	ug/L	116.43	ppb	17:20:32
1	Sr 421.552†	25.7	14.6	0.1079	ug/L	0.1079	ppb	17:20:32
1	Sc 361.383	854861.9	854861.9	97.884	%			17:21:49
1	Y 371.029	731844.2	731844.2	97.667	%			17:21:49
1	Ag 328.068†	392.6	-89.9	-0.3998	ug/L	-0.3998	ppb	17:21:49
1	As 188.979†	-33.2	-2.5	-0.8653	ug/L	-0.8653	ppb	17:22:09
1	B 249.677†	-608.5	143.8	2.9860	ug/L	2.9860	ppb	17:21:49
1	Ba 233.527†	-1.6	-20.2	-0.1491	ug/L	-0.1491	ppb	17:22:09
1	Be 313.107†	-4361.3	-75.4	-0.0252	ug/L	-0.0252	ppb	17:21:49
1	Cd 226.502†	-246.0	1.6	0.0170	ug/L	0.0170	ppb	17:22:09
1	Co 228.616†	-99.0	-2.0	-0.0360	ug/L	-0.0360	ppb	17:22:09
1	Cr 267.716†	146.3	59.2	0.5993	ug/L	0.5993	ppb	17:21:49
1	Cu 324.752†	8187.8	261.2	0.7781	ug/L	0.7781	ppb	17:21:49
1	Mn 257.610†	853.3	-434.6	-0.4584	ug/L	-0.4584	ppb	17:21:49
1	Mo 202.031†	35.8	9.9	0.6249	ug/L	0.6249	ppb	17:22:09
1	Ni 231.604†	129.8	16.5	0.3659	ug/L	0.3659	ppb	17:22:09
1	P 214.914†	241.9	-5.5	-2.8246	ug/L	-2.8246	ppb	17:22:09
1	Pb 220.353†	-80.9	18.7	1.9398	ug/L	1.9398	ppb	17:22:09
1	S 181.975 Axial†	64.4	8.1	9.2106	ug/L	9.2106	ppb	17:22:09
1	Sb 206.836†	46.3	1.1	0.3069	ug/L	0.3069	ppb	17:22:09
1	Se 196.026†	-46.0	-8.2	-4.2239	ug/L	-4.2239	ppb	17:22:09
1	Si 251.611†	698.9	84.0	2.4128	ug/L	2.4128	ppb	17:22:09
1	Sn 189.927†	-5.3	-10.1	-1.5095	ug/L	-1.5095	ppb	17:22:09
1	Ti 334.940†	-1659.7	57.8	0.0901	ug/L	0.0901	ppb	17:21:49
1	Tl 190.801†	-56.1	-11.6	-3.1899	ug/L	-3.1899	ppb	17:22:09
1	U 409.014†	-2681.8	168.8	5.0300	ug/L	5.0300	ppb	17:21:49
1	V 292.402†	-1784.3	-16.4	-0.0843	ug/L	-0.0843	ppb	17:21:49
1	Zn 213.857†	872.5	38.3	0.3150	ug/L	0.3150	ppb	17:22:09
1	SiO2†	734.0	101.1	6.2081	ug/L	6.2081	ppb	17:23:05
2	Sc Radial	4529.8	4529.8	97.9	%			17:20:57
2	Y RADIAL	4820.8	4820.8	98.49	%			17:20:57
2	Al 396.153Radial†	1.7	22.6	19.454	ug/L	19.454	ppb	17:20:57
2	Ca 317.933Radial†	19.6	6.0	10.428	ug/L	10.428	ppb	17:21:17
2	Fe 238.204 Radial†	10.3	-2.2	-21.096	ug/L	-21.096	ppb	17:21:17
2	K 766.490 Radial†	3246.4	87.5	17.687	ug/L	17.687	ppb	17:20:57
2	Mg 279.077 IEC†	2.5	1.0	34.136	ug/L	34.136	ppb	17:21:17
2	Na 589.592 Radial†	-1492.8	244.8	83.595	ug/L	83.595	ppb	17:20:57
2	Sr 421.552†	-17.8	-29.4	-0.2170	ug/L	-0.2170	ppb	17:20:57
2	Sc 361.383	885365.2	885365.2	101.38	%			17:22:14
2	Y 371.029	759799.5	759799.5	101.40	%			17:22:14
2	Ag 328.068†	472.5	-24.9	-0.1149	ug/L	-0.1149	ppb	17:22:14
2	As 188.979†	-26.5	5.4	1.8793	ug/L	1.8793	ppb	17:22:34
2	B 249.677†	-581.1	192.2	3.9906	ug/L	3.9906	ppb	17:22:14
2	Ba 233.527†	5.1	-13.5	-0.0982	ug/L	-0.0982	ppb	17:22:34
2	Be 313.107†	-4422.2	17.9	0.0067	ug/L	0.0067	ppb	17:22:14
2	Cd 226.502†	-248.8	7.6	0.0744	ug/L	0.0744	ppb	17:22:34
2	Co 228.616†	-91.7	8.8	0.1667	ug/L	0.1667	ppb	17:22:34
2	Cr 267.716†	147.0	54.7	0.5557	ug/L	0.5557	ppb	17:22:14
2	Cu 324.752†	8246.3	30.7	0.0904	ug/L	0.0904	ppb	17:22:14
2	Mn 257.610†	788.7	-528.4	-0.5590	ug/L	-0.5590	ppb	17:22:14
2	Mo 202.031†	36.6	9.4	0.5916	ug/L	0.5916	ppb	17:22:34
2	Ni 231.604†	134.2	16.2	0.3593	ug/L	0.3593	ppb	17:22:34

2	P 214.914†	255.2	-0.9	-0.4094 ug/L	-0.4094 ppb	17:22:34
2	Pb 220.353†	-92.6	10.0	1.0456 ug/L	1.0456 ppb	17:22:34
2	S 181.975 Axial†	62.8	4.3	4.8156 ug/L	4.8156 ppb	17:22:34
2	Sb 206.836†	36.7	-9.9	-2.9923 ug/L	-2.9923 ppb	17:22:34
2	Se 196.026†	-41.3	-2.0	-1.0854 ug/L	-1.0854 ppb	17:22:34
2	Si 251.611†	692.4	53.0	1.5147 ug/L	1.5147 ppb	17:22:34
2	Sn 189.927†	7.4	2.6	0.3872 ug/L	0.3872 ppb	17:22:34
2	Ti 334.940†	-1569.3	205.4	0.3280 ug/L	0.3280 ppb	17:22:14
2	Tl 190.801†	-41.9	4.3	1.1898 ug/L	1.1898 ppb	17:22:34
2	U 409.014†	-2838.8	108.3	3.2287 ug/L	3.2287 ppb	17:22:14
2	V 292.402†	-1706.3	123.3	0.8004 ug/L	0.8004 ppb	17:22:14
2	Zn 213.857†	871.8	6.9	0.0543 ug/L	0.0543 ppb	17:22:34
2	SiO2†	676.5	18.6	1.1078 ug/L	1.1078 ppb	17:23:10
3	Sc Radial	4489.2	4489.2	97.0 %		17:21:22
3	Y RADIAL	4758.1	4758.1	97.21 %		17:21:22
3	Al 396.153Radial†	9.2	30.3	26.058 ug/L	26.058 ppb	17:21:22
3	Ca 317.933Radial†	19.6	6.2	10.673 ug/L	10.673 ppb	17:21:42
3	Fe 238.204 Radial†	8.2	-4.3	-41.436 ug/L	-41.436 ppb	17:21:42
3	K 766.490 Radial†	3190.3	59.6	12.031 ug/L	12.031 ppb	17:21:22
3	Mg 279.077 IEC†	6.3	5.0	170.26 ug/L	170.26 ppb	17:21:42
3	Na 589.592 Radial†	-1383.8	343.5	117.27 ug/L	117.27 ppb	17:21:22
3	Sr 421.552†	-18.0	-29.9	-0.2204 ug/L	-0.2204 ppb	17:21:22
3	Sc 361.383	871091.3	871091.3	99.742 %		17:22:40
3	Y 371.029	747429.8	747429.8	99.747 %		17:22:40
3	Ag 328.068†	610.8	121.4	0.5116 ug/L	0.5116 ppb	17:22:40
3	As 188.979†	-38.9	-7.5	-2.6283 ug/L	-2.6283 ppb	17:23:00
3	B 249.677†	-509.3	254.9	5.2931 ug/L	5.2931 ppb	17:22:40
3	Ba 233.527†	17.0	-1.5	-0.0125 ug/L	-0.0125 ppb	17:23:00
3	Be 313.107†	-4323.2	45.7	0.0156 ug/L	0.0156 ppb	17:22:40
3	Cd 226.502†	-237.1	15.3	0.1501 ug/L	0.1501 ppb	17:23:00
3	Co 228.616†	-95.5	3.5	0.0672 ug/L	0.0672 ppb	17:23:00
3	Cr 267.716†	152.4	62.6	0.6337 ug/L	0.6337 ppb	17:22:40
3	Cu 324.752†	8170.9	88.4	0.2615 ug/L	0.2615 ppb	17:22:40
3	Mn 257.610†	793.6	-510.6	-0.5449 ug/L	-0.5449 ppb	17:22:40
3	Mo 202.031†	37.1	10.5	0.6621 ug/L	0.6621 ppb	17:23:00
3	Ni 231.604†	138.5	22.8	0.5042 ug/L	0.5042 ppb	17:23:00
3	P 214.914†	247.4	-4.6	-2.2231 ug/L	-2.2231 ppb	17:23:00
3	Pb 220.353†	-102.0	-1.0	-0.0906 ug/L	-0.0906 ppb	17:23:00
3	S 181.975 Axial†	54.1	-3.4	-3.8792 ug/L	-3.8792 ppb	17:23:00
3	Sb 206.836†	43.9	-2.2	-0.6468 ug/L	-0.6468 ppb	17:23:00
3	Se 196.026†	-39.6	-0.9	-0.5865 ug/L	-0.5865 ppb	17:23:00
3	Si 251.611†	694.0	65.8	1.8854 ug/L	1.8854 ppb	17:23:00
3	Sn 189.927†	9.0	4.3	0.6480 ug/L	0.6480 ppb	17:23:00
3	Ti 334.940†	-1688.5	60.6	0.0969 ug/L	0.0969 ppb	17:22:40
3	Tl 190.801†	-52.1	-6.6	-1.8035 ug/L	-1.8035 ppb	17:23:00
3	U 409.014†	-2859.4	41.8	1.2491 ug/L	1.2491 ppb	17:22:40
3	V 292.402†	-1840.5	-38.9	-0.2249 ug/L	-0.2249 ppb	17:22:40
3	Zn 213.857†	877.9	27.0	0.2167 ug/L	0.2167 ppb	17:23:00
3	SiO2†	684.7	37.7	2.2910 ug/L	2.2910 ppb	17:23:15

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	870439.5	99.668	%	1.7475				1.75%
Sc Radial	4534.0	98.0	%	1.02				1.04%
Y 371.029	746357.8	99.604	%	1.8695				1.88%
Y RADIAL	4806.8	98.20	%	0.886				0.90%
Ag 328.068†	2.2	-0.0010	ug/L	0.46627	-0.0010	ppb	0.46627	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	12.3	10.591	ug/L	21.3275	10.591	ppb	21.3275	201.38%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.5	-0.5381	ug/L	2.27152	-0.5381	ppb	2.27152	422.14%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	197.0	4.0899	ug/L	1.15675	4.0899	ppb	1.15675	28.28%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-11.7	-0.0866	ug/L	0.06902	-0.0866	ppb	0.06902	79.69%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-3.9	-0.0010	ug/L	0.02148	-0.0010	ppb	0.02148	>999.9%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.9	6.6613	ug/L	6.73746	6.6613	ppb	6.73746	101.14%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              8.2      0.0805 ug/L       0.06675      0.0805 ppb       0.06675  82.89%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              3.4      0.0660 ug/L       0.10137      0.0660 ppb       0.10137 153.65%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             58.8      0.5962 ug/L       0.03912      0.5962 ppb       0.03912   6.56%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            126.7      0.3767 ug/L       0.35801      0.3767 ppb       0.35801  95.04%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†      -2.7     -25.414 ug/L       14.3584     -25.414 ppb       14.3584  56.50%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†      104.0      21.021 ug/L       11.0421      21.021 ppb       11.0421  52.53%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          1.8      60.016 ug/L       99.8534      60.016 ppb       99.8534 166.38%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†           -491.2      -0.5208 ug/L      0.05446     -0.5208 ppb       0.05446  10.46%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              9.9      0.6262 ug/L       0.03528      0.6262 ppb       0.03528   5.63%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     309.8      105.76 ug/L        19.204      105.76 ppb        19.204  18.16%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             18.5      0.4098 ug/L       0.08182      0.4098 ppb       0.08182  19.97%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -3.6     -1.8190 ug/L       1.25727     -1.8190 ppb       1.25727  69.12%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              9.2      0.9649 ug/L       1.01763      0.9649 ppb       1.01763 105.46%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         3.0      3.3823 ug/L       6.66155      3.3823 ppb       6.66155 196.95%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†             -3.7     -1.1107 ug/L       1.69784     -1.1107 ppb       1.69784 152.86%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†             -3.7     -1.9653 ug/L       1.97188     -1.9653 ppb       1.97188 100.34%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             67.6      1.9376 ug/L       0.45132      1.9376 ppb       0.45132  23.29%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -1.1     -0.1581 ug/L       1.17756     -0.1581 ppb       1.17756 744.83%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†            -14.9     -0.1098 ug/L       0.18857     -0.1098 ppb       0.18857 171.73%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†            108.0      0.1717 ug/L       0.13542      0.1717 ppb       0.13542  78.89%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -4.6     -1.2679 ug/L       2.23845     -1.2679 ppb       2.23845 176.55%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             106.3      3.1692 ug/L       1.89113      3.1692 ppb       1.89113  59.67%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              22.7      0.1637 ug/L       0.55583      0.1637 ppb       0.55583 339.50%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             24.1      0.1953 ug/L       0.13166      0.1953 ppb       0.13166  67.41%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   52.5      3.2023 ug/L       2.66951      3.2023 ppb       2.66951  83.36%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

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

Autosampler Location: 1
Date Collected: 1/7/2010 18:26:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4546.0	4546.0	98.2	%			18:28:26
1	Y RADIAL	4803.9	4803.9	98.14	%			18:28:26
1	Al 396.153Radial†	5605.5	5727.4	4907.5	ug/L	4907.5	ppb	18:28:26
1	Ca 317.933Radial†	2849.5	2886.8	4985.5	ug/L	4985.5	ppb	18:28:46
1	Fe 238.204 Radial†	521.6	518.2	4986.0	ug/L	4986.0	ppb	18:28:46
1	K 766.490 Radial†	27290.7	24553.4	4964.7	ug/L	4964.7	ppb	18:28:26
1	Mg 279.077 IEC†	150.1	151.3	5161.0	ug/L	5161.0	ppb	18:28:46
1	Na 589.592 Radial†	27229.6	29490.6	10069	ug/L	10069	ppb	18:28:26
1	Sr 421.552†	63356.2	64487.2	475.07	ug/L	475.07	ppb	18:28:26
1	Sc 361.383	888605.5	888605.5	101.75	%			18:29:45
1	Y 371.029	752134.0	752134.0	100.37	%			18:29:45
1	Ag 328.068†	116555.6	114062.7	498.81	ug/L	498.81	ppb	18:29:45
1	As 188.979†	1406.4	1413.7	500.20	ug/L	500.20	ppb	18:30:05
1	B 249.677†	23598.4	23958.6	495.17	ug/L	495.17	ppb	18:29:45
1	Ba 233.527†	69243.7	68035.8	502.17	ug/L	502.17	ppb	18:29:45
1	Be 313.107†	1514116.4	1492489.5	503.97	ug/L	503.97	ppb	18:29:45
1	Cd 226.502†	53489.0	52823.2	502.99	ug/L	502.99	ppb	18:29:45
1	Co 228.616†	26591.6	26234.0	496.18	ug/L	496.18	ppb	18:30:05
1	Cr 267.716†	50043.2	49093.3	499.30	ug/L	499.30	ppb	18:29:45
1	Cu 324.752†	178987.5	167809.4	500.69	ug/L	500.69	ppb	18:29:45
1	Mn 257.610†	485929.1	476276.2	501.81	ug/L	501.81	ppb	18:29:45
1	Mo 202.031†	7974.3	7810.6	494.62	ug/L	494.62	ppb	18:30:05
1	Ni 231.604†	22946.7	22436.4	496.86	ug/L	496.86	ppb	18:30:05
1	P 214.914†	5449.4	5103.1	2423.1	ug/L	2423.1	ppb	18:30:05
1	Pb 220.353†	4815.9	4834.5	504.49	ug/L	504.49	ppb	18:30:05
1	S 181.975 Axial†	949.6	875.6	989.61	ug/L	989.61	ppb	18:30:05
1	Sb 206.836†	1699.7	1624.4	497.77	ug/L	497.77	ppb	18:30:05
1	Se 196.026†	981.0	1002.9	527.72	ug/L	527.72	ppb	18:30:05
1	Si 251.611†	88367.3	86219.4	2482.6	ug/L	2482.6	ppb	18:29:45
1	Sn 189.927†	3367.4	3304.9	494.15	ug/L	494.15	ppb	18:30:05
1	Ti 334.940†	318705.9	314985.1	504.42	ug/L	504.42	ppb	18:29:45
1	Tl 190.801†	1800.3	1815.1	501.74	ug/L	501.74	ppb	18:30:05
1	U 409.014†	13550.8	16226.6	481.96	ug/L	481.96	ppb	18:29:45
1	V 292.402†	78114.7	78579.4	505.11	ug/L	505.11	ppb	18:29:45
1	Zn 213.857†	62831.3	60899.0	499.92	ug/L	499.92	ppb	18:29:45
1	SiO2†	87507.9	85356.1	5245.9	ug/L	5245.9	ppb	18:31:05
2	Sc Radial	4615.6	4615.6	99.7	%			18:28:51
2	Y RADIAL	4855.9	4855.9	99.20	%			18:28:51
2	Al 396.153Radial†	5466.6	5502.2	4713.6	ug/L	4713.6	ppb	18:28:51
2	Ca 317.933Radial†	2939.6	2933.5	5066.1	ug/L	5066.1	ppb	18:29:11
2	Fe 238.204 Radial†	536.9	525.6	5057.0	ug/L	5057.0	ppb	18:29:11
2	K 766.490 Radial†	27003.9	23847.2	4821.8	ug/L	4821.8	ppb	18:28:51
2	Mg 279.077 IEC†	157.4	156.3	5331.5	ug/L	5331.5	ppb	18:29:11
2	Na 589.592 Radial†	26657.2	28498.9	9730.0	ug/L	9730.0	ppb	18:28:51
2	Sr 421.552†	62199.9	62355.9	459.36	ug/L	459.36	ppb	18:28:51
2	Sc 361.383	888518.1	888518.1	101.74	%			18:30:12
2	Y 371.029	753187.6	753187.6	100.52	%			18:30:12
2	Ag 328.068†	116459.9	113979.8	498.46	ug/L	498.46	ppb	18:30:12
2	As 188.979†	1419.8	1427.0	504.87	ug/L	504.87	ppb	18:30:32
2	B 249.677†	23583.9	23946.6	494.91	ug/L	494.91	ppb	18:30:12
2	Ba 233.527†	68942.6	67746.5	500.04	ug/L	500.04	ppb	18:30:12
2	Be 313.107†	1510381.4	1488964.6	502.78	ug/L	502.78	ppb	18:30:12
2	Cd 226.502†	53296.2	52638.9	501.23	ug/L	501.23	ppb	18:30:12
2	Co 228.616†	26654.3	26298.3	497.40	ug/L	497.40	ppb	18:30:32
2	Cr 267.716†	49819.2	48878.0	497.11	ug/L	497.11	ppb	18:30:12
2	Cu 324.752†	178778.4	167621.3	500.13	ug/L	500.13	ppb	18:30:12
2	Mn 257.610†	484257.9	474680.5	500.14	ug/L	500.14	ppb	18:30:12
2	Mo 202.031†	8001.2	7837.9	496.35	ug/L	496.35	ppb	18:30:32
2	Ni 231.604†	22980.6	22471.9	497.65	ug/L	497.65	ppb	18:30:32

2	P 214.914†	5467.9	5121.8	2432.3 ug/L	2432.3 ppb	18:30:32
2	Pb 220.353†	4810.5	4829.6	503.93 ug/L	503.93 ppb	18:30:32
2	S 181.975 Axial†	947.0	873.1	986.86 ug/L	986.86 ppb	18:30:32
2	Sb 206.836†	1713.2	1637.7	501.95 ug/L	501.95 ppb	18:30:32
2	Se 196.026†	990.3	1012.1	532.57 ug/L	532.57 ppb	18:30:32
2	Si 251.611†	88106.6	85971.7	2475.5 ug/L	2475.5 ppb	18:30:12
2	Sn 189.927†	3384.6	3322.1	496.72 ug/L	496.72 ppb	18:30:32
2	Ti 334.940†	317873.8	314198.0	503.16 ug/L	503.16 ppb	18:30:12
2	Tl 190.801†	1790.2	1805.3	499.03 ug/L	499.03 ppb	18:30:32
2	U 409.014†	13576.0	16252.7	482.73 ug/L	482.73 ppb	18:30:12
2	V 292.402†	77904.2	78380.0	503.86 ug/L	503.86 ppb	18:30:12
2	Zn 213.857†	62575.1	60653.2	497.87 ug/L	497.87 ppb	18:30:12
2	SiO2†	87211.7	85073.5	5228.5 ug/L	5228.5 ppb	18:31:10
3	Sc Radial	4474.4	4474.4	96.7 %		18:29:16
3	Y RADIAL	4726.2	4726.2	96.55 %		18:29:16
3	Al 396.153Radial†	5573.9	5786.1	4957.9 ug/L	4957.9 ppb	18:29:16
3	Ca 317.933Radial†	2913.3	2999.3	5179.8 ug/L	5179.8 ppb	18:29:36
3	Fe 238.204 Radial†	527.5	532.8	5126.0 ug/L	5126.0 ppb	18:29:36
3	K 766.490 Radial†	27197.8	24902.4	5035.3 ug/L	5035.3 ppb	18:29:16
3	Mg 279.077 IEC†	155.9	159.8	5449.8 ug/L	5449.8 ppb	18:29:36
3	Na 589.592 Radial†	26902.6	29596.4	10105 ug/L	10105 ppb	18:29:16
3	Sr 421.552†	62856.4	65003.3	478.87 ug/L	478.87 ppb	18:29:16
3	Sc 361.383	886861.0	886861.0	101.55 %		18:30:40
3	Y 371.029	750947.6	750947.6	100.22 %		18:30:40
3	Ag 328.068†	116467.5	114201.2	499.46 ug/L	499.46 ppb	18:30:40
3	As 188.979†	1416.9	1426.8	504.83 ug/L	504.83 ppb	18:31:00
3	B 249.677†	23585.1	23991.1	495.82 ug/L	495.82 ppb	18:30:40
3	Ba 233.527†	69158.8	68086.0	502.54 ug/L	502.54 ppb	18:30:40
3	Be 313.107†	1511540.8	1492880.3	504.11 ug/L	504.11 ppb	18:30:40
3	Cd 226.502†	53369.0	52808.4	502.84 ug/L	502.84 ppb	18:30:40
3	Co 228.616†	26624.2	26317.6	497.76 ug/L	497.76 ppb	18:31:00
3	Cr 267.716†	49945.9	49094.3	499.31 ug/L	499.31 ppb	18:30:40
3	Cu 324.752†	178867.4	168037.3	501.38 ug/L	501.38 ppb	18:30:40
3	Mn 257.610†	484964.1	476265.4	501.81 ug/L	501.81 ppb	18:30:40
3	Mo 202.031†	8001.0	7852.3	497.27 ug/L	497.27 ppb	18:31:00
3	Ni 231.604†	22963.1	22496.9	498.20 ug/L	498.20 ppb	18:31:00
3	P 214.914†	5469.0	5133.0	2437.6 ug/L	2437.6 ppb	18:31:00
3	Pb 220.353†	4796.9	4825.1	503.51 ug/L	503.51 ppb	18:31:00
3	S 181.975 Axial†	959.0	886.7	1002.2 ug/L	1002.2 ppb	18:31:00
3	Sb 206.836†	1711.7	1639.5	502.42 ug/L	502.42 ppb	18:31:00
3	Se 196.026†	975.6	999.5	526.39 ug/L	526.39 ppb	18:31:00
3	Si 251.611†	88258.5	86283.1	2484.4 ug/L	2484.4 ppb	18:30:40
3	Sn 189.927†	3372.4	3316.2	495.86 ug/L	495.86 ppb	18:31:00
3	Ti 334.940†	318281.9	315183.7	504.75 ug/L	504.75 ppb	18:30:40
3	Tl 190.801†	1805.6	1823.8	504.12 ug/L	504.12 ppb	18:31:00
3	U 409.014†	13356.0	16061.0	477.00 ug/L	477.00 ppb	18:30:40
3	V 292.402†	77920.1	78538.8	504.86 ug/L	504.86 ppb	18:30:40
3	Zn 213.857†	62838.3	61027.3	500.96 ug/L	500.96 ppb	18:30:40
3	SiO2†	87683.1	85697.8	5266.8 ug/L	5266.8 ppb	18:31:15

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	887994.9	101.68	%	0.113				0.11%
Sc Radial	4545.3	98.2	%	1.53				1.55%
Y 371.029	752089.7	100.37	%	0.150				0.15%
Y RADIAL	4795.4	97.97	%	1.334				1.36%
Ag 328.068†	114081.3	498.91	ug/L	0.504	498.91	ppb	0.504	0.10%
QC value within limits for Ag 328.068 Recovery = 99.78%								
Al 396.153Radial†	5671.9	4859.7	ug/L	128.97	4859.7	ppb	128.97	2.65%
QC value within limits for Al 396.153Radial Recovery = 97.19%								
As 188.979†	1422.5	503.30	ug/L	2.682	503.30	ppb	2.682	0.53%
QC value within limits for As 188.979 Recovery = 100.66%								
B 249.677†	23965.4	495.30	ug/L	0.471	495.30	ppb	0.471	0.10%
QC value within limits for B 249.677 Recovery = 99.06%								
Ba 233.527†	67956.1	501.58	ug/L	1.351	501.58	ppb	1.351	0.27%
QC value within limits for Ba 233.527 Recovery = 100.32%								
Be 313.107†	1491444.8	503.62	ug/L	0.728	503.62	ppb	0.728	0.14%
QC value within limits for Be 313.107 Recovery = 100.72%								
Ca 317.933Radial†	2939.9	5077.1	ug/L	97.61	5077.1	ppb	97.61	1.92%

QC value within limits for Ca 317.933Radial Recovery = 101.54%

Cd 226.502†	52756.8	502.35 ug/L	0.976	502.35 ppb	0.976	0.19%
QC value within limits for Cd 226.502 Recovery = 100.47%						
Co 228.616†	26283.3	497.11 ug/L	0.830	497.11 ppb	0.830	0.17%
QC value within limits for Co 228.616 Recovery = 99.42%						
Cr 267.716†	49021.9	498.58 ug/L	1.267	498.58 ppb	1.267	0.25%
QC value within limits for Cr 267.716 Recovery = 99.72%						
Cu 324.752†	167822.7	500.73 ug/L	0.623	500.73 ppb	0.623	0.12%
QC value within limits for Cu 324.752 Recovery = 100.15%						
Fe 238.204 Radial†	525.6	5056.3 ug/L	70.01	5056.3 ppb	70.01	1.38%
QC value within limits for Fe 238.204 Radial Recovery = 101.13%						
K 766.490 Radial†	24434.3	4940.6 ug/L	108.80	4940.6 ppb	108.80	2.20%
QC value within limits for K 766.490 Radial Recovery = 98.81%						
Mg 279.077 IEC†	155.8	5314.1 ug/L	145.23	5314.1 ppb	145.23	2.73%
QC value within limits for Mg 279.077 IEC Recovery = 106.28%						
Mn 257.610†	475740.7	501.25 ug/L	0.967	501.25 ppb	0.967	0.19%
QC value within limits for Mn 257.610 Recovery = 100.25%						
Mo 202.031†	7833.6	496.08 ug/L	1.347	496.08 ppb	1.347	0.27%
QC value within limits for Mo 202.031 Recovery = 99.22%						
Na 589.592 Radial†	29195.3	9967.7 ug/L	206.69	9967.7 ppb	206.69	2.07%
QC value within limits for Na 589.592 Radial Recovery = 99.68%						
Ni 231.604†	22468.4	497.57 ug/L	0.674	497.57 ppb	0.674	0.14%
QC value within limits for Ni 231.604 Recovery = 99.51%						
P 214.914†	5119.3	2431.0 ug/L	7.30	2431.0 ppb	7.30	0.30%
QC value within limits for P 214.914 Recovery = 97.24%						
Pb 220.353†	4829.7	503.98 ug/L	0.490	503.98 ppb	0.490	0.10%
QC value within limits for Pb 220.353 Recovery = 100.80%						
S 181.975 Axial†	878.5	992.88 ug/L	8.171	992.88 ppb	8.171	0.82%
QC value within limits for S 181.975 Axial Recovery = 99.29%						
Sb 206.836†	1633.9	500.71 ug/L	2.560	500.71 ppb	2.560	0.51%
QC value within limits for Sb 206.836 Recovery = 100.14%						
Se 196.026†	1004.8	528.89 ug/L	3.255	528.89 ppb	3.255	0.62%
QC value within limits for Se 196.026 Recovery = 105.78%						
Si 251.611†	86158.1	2480.8 ug/L	4.73	2480.8 ppb	4.73	0.19%
QC value within limits for Si 251.611 Recovery = 99.23%						
Sn 189.927†	3314.4	495.58 ug/L	1.312	495.58 ppb	1.312	0.26%
QC value within limits for Sn 189.927 Recovery = 99.12%						
Sr 421.552†	63948.8	471.10 ug/L	10.340	471.10 ppb	10.340	2.19%
QC value within limits for Sr 421.552 Recovery = 94.22%						
Ti 334.940†	314788.9	504.11 ug/L	0.837	504.11 ppb	0.837	0.17%
QC value within limits for Ti 334.940 Recovery = 100.82%						
Tl 190.801†	1814.7	501.63 ug/L	2.547	501.63 ppb	2.547	0.51%
QC value within limits for Tl 190.801 Recovery = 100.33%						
U 409.014†	16180.1	480.56 ug/L	3.107	480.56 ppb	3.107	0.65%
QC value within limits for U 409.014 Recovery = 96.11%						
V 292.402†	78499.4	504.61 ug/L	0.659	504.61 ppb	0.659	0.13%
QC value within limits for V 292.402 Recovery = 100.92%						
Zn 213.857†	60859.9	499.58 ug/L	1.569	499.58 ppb	1.569	0.31%
QC value within limits for Zn 213.857 Recovery = 99.92%						
SiO2†	85375.8	5247.1 ug/L	19.21	5247.1 ppb	19.21	0.37%
QC value within limits for SiO2 Recovery = 98.12%						

All analyte(s) passed QC.

Sequence No.: 32
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 1/7/2010 18:33:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4398.4	4398.4	95.0	%			18:35:17
1	Y RADIAL	4654.2	4654.2	95.08	%			18:35:17
1	Al 396.153Radial†	-32.3	-13.1	-11.268	ug/L	-11.268	ppb	18:35:17
1	Ca 317.933Radial†	14.2	0.9	1.5863	ug/L	1.5863	ppb	18:35:37
1	Fe 238.204 Radial†	11.4	-0.7	-6.8188	ug/L	-6.8188	ppb	18:35:37
1	K 766.490 Radial†	3159.1	94.7	19.138	ug/L	19.138	ppb	18:35:17
1	Mg 279.077 IEC†	0.8	-0.7	-23.673	ug/L	-23.673	ppb	18:35:37
1	Na 589.592 Radial†	-1360.7	338.3	115.50	ug/L	115.50	ppb	18:35:17
1	Sr 421.552†	25.1	15.1	0.1112	ug/L	0.1112	ppb	18:35:17
1	Sc 361.383	871417.0	871417.0	99.780	%			18:36:34
1	Y 371.029	748070.9	748070.9	99.832	%			18:36:34
1	Ag 328.068†	453.3	-36.6	-0.1593	ug/L	-0.1593	ppb	18:36:34
1	As 188.979†	-28.0	3.5	1.2161	ug/L	1.2161	ppb	18:36:54
1	B 249.677†	-699.2	64.7	1.3438	ug/L	1.3438	ppb	18:36:34
1	Ba 233.527†	7.8	-10.7	-0.0783	ug/L	-0.0783	ppb	18:36:54
1	Be 313.107†	-4347.1	23.4	0.0081	ug/L	0.0081	ppb	18:36:34
1	Cd 226.502†	-252.7	-0.3	-0.0023	ug/L	-0.0023	ppb	18:36:54
1	Co 228.616†	-95.4	3.5	0.0676	ug/L	0.0676	ppb	18:36:54
1	Cr 267.716†	98.8	8.8	0.0900	ug/L	0.0900	ppb	18:36:34
1	Cu 324.752†	8252.9	167.5	0.4991	ug/L	0.4991	ppb	18:36:34
1	Mn 257.610†	813.1	-491.4	-0.5176	ug/L	-0.5176	ppb	18:36:34
1	Mo 202.031†	32.6	5.9	0.3743	ug/L	0.3743	ppb	18:36:54
1	Ni 231.604†	135.3	19.5	0.4316	ug/L	0.4316	ppb	18:36:54
1	P 214.914†	262.7	10.7	5.1408	ug/L	5.1408	ppb	18:36:54
1	Pb 220.353†	-92.9	8.2	0.8552	ug/L	0.8552	ppb	18:36:54
1	S 181.975 Axial†	57.6	0.1	0.1090	ug/L	0.1090	ppb	18:36:54
1	Sb 206.836†	53.9	7.8	2.3791	ug/L	2.3791	ppb	18:36:54
1	Se 196.026†	-26.3	12.4	6.3042	ug/L	6.3042	ppb	18:36:54
1	Si 251.611†	653.0	24.4	0.6940	ug/L	0.6940	ppb	18:36:54
1	Sn 189.927†	5.5	0.8	0.1137	ug/L	0.1137	ppb	18:36:54
1	Ti 334.940†	-1691.8	57.9	0.0928	ug/L	0.0928	ppb	18:36:34
1	Tl 190.801†	-54.2	-8.7	-2.3913	ug/L	-2.3913	ppb	18:36:54
1	U 409.014†	-2911.2	-9.1	-0.2700	ug/L	-0.2700	ppb	18:36:34
1	V 292.402†	-1730.0	72.6	0.4658	ug/L	0.4658	ppb	18:36:34
1	Zn 213.857†	836.2	-15.0	-0.1265	ug/L	-0.1265	ppb	18:36:54
1	SiO2†	686.8	39.5	2.4134	ug/L	2.4134	ppb	18:37:50
2	Sc Radial	4443.1	4443.1	96.0	%			18:35:42
2	Y RADIAL	4714.4	4714.4	96.31	%			18:35:42
2	Al 396.153Radial†	1.8	22.8	19.612	ug/L	19.612	ppb	18:35:42
2	Ca 317.933Radial†	18.0	4.8	8.2508	ug/L	8.2508	ppb	18:36:02
2	Fe 238.204 Radial†	8.8	-3.6	-34.049	ug/L	-34.049	ppb	18:36:02
2	K 766.490 Radial†	3063.8	-38.0	-7.7303	ug/L	-7.7303	ppb	18:35:42
2	Mg 279.077 IEC†	2.4	1.0	34.722	ug/L	34.722	ppb	18:36:02
2	Na 589.592 Radial†	-1464.1	245.0	83.641	ug/L	83.641	ppb	18:35:42
2	Sr 421.552†	23.9	13.6	0.1003	ug/L	0.1003	ppb	18:35:42
2	Sc 361.383	867427.4	867427.4	99.323	%			18:36:59
2	Y 371.029	744887.6	744887.6	99.408	%			18:36:59
2	Ag 328.068†	552.4	65.2	0.2686	ug/L	0.2686	ppb	18:36:59
2	As 188.979†	-38.3	-7.0	-2.4720	ug/L	-2.4720	ppb	18:37:19
2	B 249.677†	-723.5	37.0	0.7725	ug/L	0.7725	ppb	18:36:59
2	Ba 233.527†	21.8	3.4	0.0254	ug/L	0.0254	ppb	18:37:19
2	Be 313.107†	-4385.2	-35.0	-0.0116	ug/L	-0.0116	ppb	18:36:59
2	Cd 226.502†	-246.7	4.6	0.0474	ug/L	0.0474	ppb	18:37:19
2	Co 228.616†	-89.1	9.4	0.1784	ug/L	0.1784	ppb	18:37:19
2	Cr 267.716†	92.8	3.2	0.0309	ug/L	0.0309	ppb	18:36:59
2	Cu 324.752†	8263.1	215.8	0.6418	ug/L	0.6418	ppb	18:36:59
2	Mn 257.610†	785.9	-515.0	-0.5463	ug/L	-0.5463	ppb	18:36:59
2	Mo 202.031†	23.8	-2.7	-0.1752	ug/L	-0.1752	ppb	18:37:19
2	Ni 231.604†	116.9	1.5	0.0333	ug/L	0.0333	ppb	18:37:19

2	P 214.914†	242.8	-8.2	-4.0702 ug/L	-4.0702 ppb	18:37:19
2	Pb 220.353†	-87.6	13.1	1.3707 ug/L	1.3707 ppb	18:37:19
2	S 181.975 Axial†	58.0	0.7	0.8161 ug/L	0.8161 ppb	18:37:19
2	Sb 206.836†	45.0	-0.8	-0.2571 ug/L	-0.2571 ppb	18:37:19
2	Se 196.026†	-32.1	6.5	3.1864 ug/L	3.1864 ppb	18:37:19
2	Si 251.611†	621.1	-4.7	-0.1313 ug/L	-0.1313 ppb	18:37:19
2	Sn 189.927†	4.1	-0.6	-0.0837 ug/L	-0.0837 ppb	18:37:19
2	Ti 334.940†	-1674.4	67.7	0.1060 ug/L	0.1060 ppb	18:36:59
2	Tl 190.801†	-50.9	-5.6	-1.5410 ug/L	-1.5410 ppb	18:37:19
2	U 409.014†	-2675.0	215.4	6.4221 ug/L	6.4221 ppb	18:36:59
2	V 292.402†	-1708.8	85.9	0.5610 ug/L	0.5610 ppb	18:36:59
2	Zn 213.857†	822.1	-25.3	-0.2102 ug/L	-0.2102 ppb	18:37:19
2	SiO2†	618.1	-26.4	-1.6189 ug/L	-1.6189 ppb	18:37:55
3	Sc Radial	4563.9	4563.9	98.6 %		18:36:07
3	Y RADIAL	4832.1	4832.1	98.72 %		18:36:07
3	Al 396.153Radial†	7.8	28.7	24.740 ug/L	24.740 ppb	18:36:07
3	Ca 317.933Radial†	8.6	-5.3	-9.0786 ug/L	-9.0786 ppb	18:36:27
3	Fe 238.204 Radial†	10.2	-2.4	-23.110 ug/L	-23.110 ppb	18:36:27
3	K 766.490 Radial†	3164.9	-19.9	-4.0861 ug/L	-4.0861 ppb	18:36:07
3	Mg 279.077 IEC†	2.9	1.4	47.990 ug/L	47.990 ppb	18:36:27
3	Na 589.592 Radial†	-1351.1	400.0	136.57 ug/L	136.57 ppb	18:36:07
3	Sr 421.552†	-14.7	-26.2	-0.1931 ug/L	-0.1931 ppb	18:36:07
3	Sc 361.383	867536.6	867536.6	99.335 %		18:37:25
3	Y 371.029	745653.8	745653.8	99.510 %		18:37:25
3	Ag 328.068†	561.3	74.1	0.3084 ug/L	0.3084 ppb	18:37:25
3	As 188.979†	-25.2	6.1	2.1385 ug/L	2.1385 ppb	18:37:45
3	B 249.677†	-646.3	114.9	2.3875 ug/L	2.3875 ppb	18:37:25
3	Ba 233.527†	23.2	4.8	0.0356 ug/L	0.0356 ppb	18:37:45
3	Be 313.107†	-4385.5	-34.8	-0.0115 ug/L	-0.0115 ppb	18:37:25
3	Cd 226.502†	-234.0	17.4	0.1681 ug/L	0.1681 ppb	18:37:45
3	Co 228.616†	-113.5	-15.0	-0.2849 ug/L	-0.2849 ppb	18:37:45
3	Cr 267.716†	136.4	47.0	0.4747 ug/L	0.4747 ppb	18:37:25
3	Cu 324.752†	8163.5	114.5	0.3402 ug/L	0.3402 ppb	18:37:25
3	Mn 257.610†	847.0	-453.6	-0.4808 ug/L	-0.4808 ppb	18:37:25
3	Mo 202.031†	23.3	-3.2	-0.2075 ug/L	-0.2075 ppb	18:37:45
3	Ni 231.604†	115.7	0.3	0.0070 ug/L	0.0070 ppb	18:37:45
3	P 214.914†	278.9	28.1	13.757 ug/L	13.757 ppb	18:37:45
3	Pb 220.353†	-97.1	3.6	0.3805 ug/L	0.3805 ppb	18:37:45
3	S 181.975 Axial†	65.6	8.4	9.4976 ug/L	9.4976 ppb	18:37:45
3	Sb 206.836†	41.2	-4.7	-1.4415 ug/L	-1.4415 ppb	18:37:45
3	Se 196.026†	-32.6	5.9	2.9533 ug/L	2.9533 ppb	18:37:45
3	Si 251.611†	652.9	27.3	0.7932 ug/L	0.7932 ppb	18:37:45
3	Sn 189.927†	5.9	1.2	0.1733 ug/L	0.1733 ppb	18:37:45
3	Ti 334.940†	-1688.6	53.5	0.0809 ug/L	0.0809 ppb	18:37:25
3	Tl 190.801†	-47.3	-2.0	-0.5379 ug/L	-0.5379 ppb	18:37:45
3	U 409.014†	-2573.0	318.4	9.4894 ug/L	9.4894 ppb	18:37:25
3	V 292.402†	-1719.6	75.3	0.4973 ug/L	0.4973 ppb	18:37:25
3	Zn 213.857†	824.8	-22.8	-0.1897 ug/L	-0.1897 ppb	18:37:45
3	SiO2†	650.9	6.6	0.4158 ug/L	0.4158 ppb	18:38:00

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	868793.6	99.479	%	0.2602				0.26%
Sc Radial	4468.5	96.6	%	1.85				1.92%
Y 371.029	746204.1	99.583	%	0.2217				0.22%
Y RADIAL	4733.6	96.70	%	1.848				1.91%
Ag 328.068†	34.3	0.1392	ug/L	0.25932	0.1392	ppb	0.25932	186.28%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	12.8	11.028	ug/L	19.4785	11.028	ppb	19.4785	176.63%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.8	0.2942	ug/L	2.43959	0.2942	ppb	2.43959	829.15%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	72.2	1.5013	ug/L	0.81896	1.5013	ppb	0.81896	54.55%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.9	-0.0058	ug/L	0.06300	-0.0058	ppb	0.06300	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-15.4	-0.0050	ug/L	0.01134	-0.0050	ppb	0.01134	226.14%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.1	0.2528	ug/L	8.74134	0.2528	ppb	8.74134	>999.9%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              7.2      0.0711 ug/L       0.08763      0.0711 ppb       0.08763 123.29%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†             -0.7     -0.0130 ug/L       0.24194     -0.0130 ppb       0.24194 >999.9%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             19.7      0.1985 ug/L       0.24095      0.1985 ppb       0.24095 121.36%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            165.9      0.4937 ug/L       0.15087      0.4937 ppb       0.15087  30.56%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†      -2.2     -21.326 ug/L       13.7027     -21.326 ppb       13.7027  64.25%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       12.3      2.4404 ug/L      14.57461      2.4404 ppb      14.57461 597.22%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          0.6      19.680 ug/L       38.1263      19.680 ppb       38.1263 193.73%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†           -486.7     -0.5149 ug/L       0.03283     -0.5149 ppb       0.03283   6.38%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -0.0     -0.0028 ug/L       0.32694     -0.0028 ppb       0.32694 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     327.8      111.90 ug/L        26.647      111.90 ppb        26.647  23.81%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              7.1      0.1573 ug/L       0.23792      0.1573 ppb       0.23792 151.25%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              10.2      4.9425 ug/L       8.91524      4.9425 ppb       8.91524 180.38%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              8.3      0.8688 ug/L       0.49522      0.8688 ppb       0.49522  57.00%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         3.1      3.4743 ug/L       5.22836      3.4743 ppb       5.22836 150.49%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              0.8      0.2268 ug/L       1.95574      0.2268 ppb       1.95574 862.20%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              8.3      4.1479 ug/L       1.87101      4.1479 ppb       1.87101  45.11%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             15.7      0.4519 ug/L       0.50755      0.4519 ppb       0.50755 112.31%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              0.5      0.0678 ug/L       0.13452      0.0678 ppb       0.13452 198.43%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              0.8      0.0061 ug/L       0.17265      0.0061 ppb       0.17265 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             59.7      0.0932 ug/L       0.01255      0.0932 ppb       0.01255  13.46%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -5.4     -1.4901 ug/L       0.92776     -1.4901 ppb       0.92776  62.26%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             174.9      5.2138 ug/L       4.99067      5.2138 ppb       4.99067  95.72%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              77.9      0.5080 ug/L       0.04854      0.5080 ppb       0.04854   9.56%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            -21.1     -0.1755 ug/L       0.04365     -0.1755 ppb       0.04365  24.88%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    6.6      0.4034 ug/L       2.01620      0.4034 ppb       2.01620 499.78%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 37
Sample ID: 1202001502|935389|10
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 48
Date Collected: 1/7/2010 19:07:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202001502|935389|10

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4204.1	4204.1	90.8	%			19:09:16
1	Y RADIAL	4440.8	4440.8	90.72	%			19:09:16
1	Al 396.153Radial†	37.4	62.0	53.344	ug/L	53.344	ppb	19:09:16
1	Ca 317.933Radial†	4213.5	4624.4	7986.2	ug/L	7986.2	ppb	19:09:16
1	Fe 238.204 Radial†	225.7	235.7	2261.0	ug/L	2261.0	ppb	19:09:36
1	K 766.490 Radial†	7514.6	5043.0	1003.4	ug/L	1003.4	ppb	19:09:16
1	Mg 279.077 IEC†	53.4	57.2	1948.0	ug/L	1948.0	ppb	19:09:36
1	Na 589.592 Radial†	5169.0	7460.3	2547.0	ug/L	2547.0	ppb	19:09:16
1	Sr 421.552†	6190.8	6803.8	50.053	ug/L	50.053	ppb	19:09:16
1	Sc 361.383	900980.5	900980.5	103.16	%			19:10:33
1	Y 371.029	767565.1	767565.1	102.43	%			19:10:33
1	Ag 328.068†	327.5	-173.5	-0.1204	ug/L	-0.1204	ppb	19:10:33
1	As 188.979†	-34.1	-1.6	-0.2118	ug/L	-0.2118	ppb	19:10:53
1	B 249.677†	-603.1	180.9	3.4460	ug/L	3.4460	ppb	19:10:53
1	Ba 233.527†	6680.8	6457.3	47.603	ug/L	47.603	ppb	19:10:53
1	Be 313.107†	-4437.7	78.5	0.0253	ug/L	0.0253	ppb	19:10:33
1	Cd 226.502†	-251.2	9.4	-0.1350	ug/L	-0.1350	ppb	19:10:53
1	Co 228.616†	35.8	133.9	2.5226	ug/L	2.5226	ppb	19:10:53
1	Cr 267.716†	160.2	65.0	0.6993	ug/L	0.6993	ppb	19:10:53
1	Cu 324.752†	8244.5	-112.1	-0.2189	ug/L	-0.2189	ppb	19:10:33
1	Mn 257.610†	1270049.2	1229783.5	1294.9	ug/L	1294.9	ppb	19:10:33
1	Mo 202.031†	30.5	2.9	0.4001	ug/L	0.4001	ppb	19:10:53
1	Ni 231.604†	204.6	82.2	1.8200	ug/L	1.8200	ppb	19:10:53
1	P 214.914†	290.1	28.6	12.106	ug/L	12.106	ppb	19:10:53
1	Pb 220.353†	-80.0	23.8	2.3028	ug/L	2.3028	ppb	19:10:53
1	S 181.975 Axial†	196.1	132.4	149.80	ug/L	149.80	ppb	19:10:53
1	Sb 206.836†	43.6	-3.9	-1.3310	ug/L	-1.3310	ppb	19:10:53
1	Se 196.026†	-47.1	-6.9	3.4530	ug/L	3.4530	ppb	19:10:53
1	Si 251.611†	61130.3	58625.1	1695.8	ug/L	1695.8	ppb	19:10:33
1	Sn 189.927†	-68.6	-71.3	-9.7826	ug/L	-9.7826	ppb	19:10:53
1	Ti 334.940†	-2188.8	-368.2	-0.1790	ug/L	-0.1790	ppb	19:10:33
1	Tl 190.801†	-80.3	-32.2	-1.2731	ug/L	-1.2731	ppb	19:10:53
1	U 409.014†	-2558.7	428.4	12.480	ug/L	12.480	ppb	19:10:33
1	V 292.402†	-1622.5	233.6	1.2100	ug/L	1.2100	ppb	19:10:53
1	Zn 213.857†	1027.6	143.0	0.9888	ug/L	0.9888	ppb	19:10:53
1	SiO2†	60525.8	58020.4	3582.7	ug/L	3582.7	ppb	19:11:50
2	Sc Radial	4498.9	4498.9	97.2	%			19:09:41
2	Y RADIAL	4764.4	4764.4	97.33	%			19:09:41
2	Al 396.153Radial†	25.9	47.5	40.827	ug/L	40.827	ppb	19:09:41
2	Ca 317.933Radial†	4149.7	4254.8	7347.9	ug/L	7347.9	ppb	19:09:41
2	Fe 238.204 Radial†	221.4	215.0	2062.3	ug/L	2062.3	ppb	19:10:01
2	K 766.490 Radial†	7366.8	4348.8	862.89	ug/L	862.89	ppb	19:09:41
2	Mg 279.077 IEC†	50.6	50.5	1720.4	ug/L	1720.4	ppb	19:10:01
2	Na 589.592 Radial†	5081.3	6997.1	2388.9	ug/L	2388.9	ppb	19:09:41
2	Sr 421.552†	6108.3	6272.2	46.142	ug/L	46.142	ppb	19:09:41
2	Sc 361.383	896113.3	896113.3	102.61	%			19:10:59
2	Y 371.029	763511.3	763511.3	101.89	%			19:10:59
2	Ag 328.068†	392.9	-108.0	0.1092	ug/L	0.1092	ppb	19:10:59
2	As 188.979†	-32.4	-0.1	0.2630	ug/L	0.2630	ppb	19:11:19
2	B 249.677†	-614.1	166.9	3.1829	ug/L	3.1829	ppb	19:11:19
2	Ba 233.527†	6716.9	6527.7	48.116	ug/L	48.116	ppb	19:11:19
2	Be 313.107†	-4383.2	108.3	0.0348	ug/L	0.0348	ppb	19:10:59
2	Cd 226.502†	-208.7	49.5	0.2669	ug/L	0.2669	ppb	19:11:19
2	Co 228.616†	56.3	154.0	2.9072	ug/L	2.9072	ppb	19:11:19
2	Cr 267.716†	180.9	86.1	0.9100	ug/L	0.9100	ppb	19:11:19
2	Cu 324.752†	8178.8	-132.7	-0.2904	ug/L	-0.2904	ppb	19:10:59
2	Mn 257.610†	1269146.8	1235590.5	1301.0	ug/L	1301.0	ppb	19:10:59
2	Mo 202.031†	34.8	7.3	0.6564	ug/L	0.6564	ppb	19:11:19
2	Ni 231.604†	199.5	78.3	1.7334	ug/L	1.7334	ppb	19:11:19

2	P 214.914†	284.4	24.5	10.262 ug/L	10.262 ppb	19:11:19
2	Pb 220.353†	-107.7	-3.7	-0.5411 ug/L	-0.5411 ppb	19:11:19
2	S 181.975 Axial†	200.1	137.3	155.33 ug/L	155.33 ppb	19:11:19
2	Sb 206.836†	42.5	-4.8	-1.6124 ug/L	-1.6124 ppb	19:11:19
2	Se 196.026†	-39.2	0.5	6.6123 ug/L	6.6123 ppb	19:11:19
2	Si 251.611†	61004.3	58824.1	1701.6 ug/L	1701.6 ppb	19:10:59
2	Sn 189.927†	-72.5	-75.4	-10.468 ug/L	-10.468 ppb	19:11:19
2	Ti 334.940†	-2342.0	-529.1	-0.4687 ug/L	-0.4687 ppb	19:10:59
2	Tl 190.801†	-70.5	-23.0	1.2692 ug/L	1.2692 ppb	19:11:19
2	U 409.014†	-2657.2	318.9	9.2416 ug/L	9.2416 ppb	19:10:59
2	V 292.402†	-1650.1	198.2	1.0081 ug/L	1.0081 ppb	19:11:19
2	Zn 213.857†	1062.7	182.6	1.3350 ug/L	1.3350 ppb	19:11:19
2	SiO2†	59967.2	57794.6	3568.8 ug/L	3568.8 ppb	19:11:55
3	Sc Radial	4517.2	4517.2	97.6 %		19:10:06
3	Y RADIAL	4777.6	4777.6	97.60 %		19:10:06
3	Al 396.153Radial†	14.9	36.2	31.083 ug/L	31.083 ppb	19:10:06
3	Ca 317.933Radial†	4135.1	4222.4	7292.1 ug/L	7292.1 ppb	19:10:06
3	Fe 238.204 Radial†	229.5	222.4	2132.9 ug/L	2132.9 ppb	19:10:26
3	K 766.490 Radial†	7429.0	4381.8	869.59 ug/L	869.59 ppb	19:10:06
3	Mg 279.077 IEC†	52.8	52.5	1788.3 ug/L	1788.3 ppb	19:10:26
3	Na 589.592 Radial†	5073.7	6968.1	2379.0 ug/L	2379.0 ppb	19:10:06
3	Sr 421.552†	6116.8	6255.5	46.020 ug/L	46.020 ppb	19:10:06
3	Sc 361.383	892603.7	892603.7	102.21 %		19:11:24
3	Y 371.029	760650.5	760650.5	101.51 %		19:11:24
3	Ag 328.068†	412.9	-86.9	0.2234 ug/L	0.2234 ppb	19:11:24
3	As 188.979†	-31.9	0.2	0.4088 ug/L	0.4088 ppb	19:11:44
3	B 249.677†	-608.0	170.6	3.2483 ug/L	3.2483 ppb	19:11:44
3	Ba 233.527†	6654.5	6492.4	47.857 ug/L	47.857 ppb	19:11:44
3	Be 313.107†	-4452.4	23.8	0.0068 ug/L	0.0068 ppb	19:11:24
3	Cd 226.502†	-223.0	34.8	0.1190 ug/L	0.1190 ppb	19:11:44
3	Co 228.616†	59.7	157.6	2.9741 ug/L	2.9741 ppb	19:11:44
3	Cr 267.716†	177.1	83.1	0.8800 ug/L	0.8800 ppb	19:11:44
3	Cu 324.752†	8200.7	-79.9	-0.1294 ug/L	-0.1294 ppb	19:11:24
3	Mn 257.610†	1263396.2	1234827.4	1300.2 ug/L	1300.2 ppb	19:11:24
3	Mo 202.031†	37.4	9.8	0.8270 ug/L	0.8270 ppb	19:11:44
3	Ni 231.604†	208.2	87.5	1.9380 ug/L	1.9380 ppb	19:11:44
3	P 214.914†	276.1	17.5	6.7662 ug/L	6.7662 ppb	19:11:44
3	Pb 220.353†	-85.3	17.8	1.6886 ug/L	1.6886 ppb	19:11:44
3	S 181.975 Axial†	196.5	134.6	152.24 ug/L	152.24 ppb	19:11:44
3	Sb 206.836†	36.5	-10.5	-3.3168 ug/L	-3.3168 ppb	19:11:44
3	Se 196.026†	-39.3	0.3	6.7330 ug/L	6.7330 ppb	19:11:44
3	Si 251.611†	60856.5	58913.3	1704.1 ug/L	1704.1 ppb	19:11:24
3	Sn 189.927†	-68.0	-71.2	-9.8531 ug/L	-9.8531 ppb	19:11:44
3	Ti 334.940†	-2194.1	-393.3	-0.2549 ug/L	-0.2549 ppb	19:11:24
3	Tl 190.801†	-77.1	-29.7	-0.5697 ug/L	-0.5697 ppb	19:11:44
3	U 409.014†	-2585.5	378.9	11.021 ug/L	11.021 ppb	19:11:24
3	V 292.402†	-1656.0	186.1	0.9278 ug/L	0.9278 ppb	19:11:44
3	Zn 213.857†	1033.1	157.7	1.1217 ug/L	1.1217 ppb	19:11:44
3	SiO2†	60835.8	58874.3	3635.5 ug/L	3635.5 ppb	19:12:00

Mean Data: 1202001502|935389|10

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	896565.8	102.66	%	0.482				0.47%
Sc Radial	4406.8	95.2	%	3.80				3.99%
Y 371.029	763909.0	101.95	%	0.464				0.45%
Y RADIAL	4660.9	95.22	%	3.897				4.09%
Ag 328.068†	-122.8	0.0707	ug/L	0.17507	0.0707	ppb	0.17507	247.47%
Al 396.153Radial†	48.5	41.752	ug/L	11.1591	41.752	ppb	11.1591	26.73%
As 188.979†	-0.5	0.1533	ug/L	0.32451	0.1533	ppb	0.32451	211.67%
B 249.677†	172.8	3.2924	ug/L	0.13699	3.2924	ppb	0.13699	4.16%
Ba 233.527†	6492.4	47.859	ug/L	0.2564	47.859	ppb	0.2564	0.54%
Be 313.107†	70.2	0.0223	ug/L	0.01428	0.0223	ppb	0.01428	64.00%
Ca 317.933Radial†	4367.2	7542.1	ug/L	385.66	7542.1	ppb	385.66	5.11%
Cd 226.502†	31.2	0.0836	ug/L	0.20329	0.0836	ppb	0.20329	243.06%
Co 228.616†	148.5	2.8013	ug/L	0.24364	2.8013	ppb	0.24364	8.70%
Cr 267.716†	78.1	0.8298	ug/L	0.11394	0.8298	ppb	0.11394	13.73%
Cu 324.752†	-108.2	-0.2129	ug/L	0.08066	-0.2129	ppb	0.08066	37.89%
Fe 238.204 Radial†	224.4	2152.0	ug/L	100.76	2152.0	ppb	100.76	4.68%
K 766.490 Radial†	4591.2	911.98	ug/L	79.286	911.98	ppb	79.286	8.69%

Mg 279.077 IEC†	53.4	1818.9 ug/L	116.85	1818.9 ppb	116.85	6.42%
Mn 257.610†	1233400.4	1298.7 ug/L	3.31	1298.7 ppb	3.31	0.26%
Mo 202.031†	6.7	0.6278 ug/L	0.21486	0.6278 ppb	0.21486	34.22%
Na 589.592 Radial†	7141.8	2438.3 ug/L	94.29	2438.3 ppb	94.29	3.87%
Ni 231.604†	82.7	1.8305 ug/L	0.10269	1.8305 ppb	0.10269	5.61%
P 214.914†	23.5	9.7115 ug/L	2.71232	9.7115 ppb	2.71232	27.93%
Pb 220.353†	12.7	1.1501 ug/L	1.49648	1.1501 ppb	1.49648	130.11%
S 181.975 Axial†	134.8	152.46 ug/L	2.771	152.46 ppb	2.771	1.82%
Sb 206.836†	-6.4	-2.0867 ug/L	1.07448	-2.0867 ppb	1.07448	51.49%
Se 196.026†	-2.0	5.5995 ug/L	1.85989	5.5995 ppb	1.85989	33.22%
Si 251.611†	58787.5	1700.5 ug/L	4.29	1700.5 ppb	4.29	0.25%
Sn 189.927†	-72.6	-10.035 ug/L	0.3773	-10.035 ppb	0.3773	3.76%
Sr 421.552†	6443.8	47.405 ug/L	2.2940	47.405 ppb	2.2940	4.84%
Ti 334.940†	-430.2	-0.3009 ug/L	0.15017	-0.3009 ppb	0.15017	49.91%
Tl 190.801†	-28.3	-0.1912 ug/L	1.31272	-0.1912 ppb	1.31272	686.69%
U 409.014†	375.4	10.914 ug/L	1.6220	10.914 ppb	1.6220	14.86%
V 292.402†	206.0	1.0486 ug/L	0.14537	1.0486 ppb	0.14537	13.86%
Zn 213.857†	161.1	1.1485 ug/L	0.17469	1.1485 ppb	0.17469	15.21%
SiO2†	58229.8	3595.6 ug/L	35.18	3595.6 ppb	35.18	0.98%

Sequence No.: 38
Sample ID: 1202001503|935389|10
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 49
Date Collected: 1/7/2010 19:14:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202001503|935389|10

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4402.1	4402.1	95.1	%			19:16:04
1	Y RADIAL	4654.1	4654.1	95.08	%			19:16:04
1	Al 396.153Radial†	576.9	627.4	537.72	ug/L	537.72	ppb	19:16:04
1	Ca 317.933Radial†	4480.8	4696.8	8111.2	ug/L	8111.2	ppb	19:16:04
1	Fe 238.204 Radial†	281.3	283.0	2716.0	ug/L	2716.0	ppb	19:16:24
1	K 766.490 Radial†	9837.0	7112.6	1421.7	ug/L	1421.7	ppb	19:16:04
1	Mg 279.077 IEC†	68.0	70.0	2384.7	ug/L	2384.7	ppb	19:16:24
1	Na 589.592 Radial†	6569.0	8676.2	2962.2	ug/L	2962.2	ppb	19:16:04
1	Sr 421.552†	12635.1	13272.2	97.708	ug/L	97.708	ppb	19:16:04
1	Sc 361.383	883291.8	883291.8	101.14	%			19:17:21
1	Y 371.029	751632.0	751632.0	100.31	%			19:17:21
1	Ag 328.068†	12358.6	11728.4	51.900	ug/L	51.900	ppb	19:17:21
1	As 188.979†	114.9	145.1	51.678	ug/L	51.678	ppb	19:17:41
1	B 249.677†	1791.6	2536.9	52.138	ug/L	52.138	ppb	19:17:41
1	Ba 233.527†	14045.9	13869.1	102.30	ug/L	102.30	ppb	19:17:21
1	Be 313.107†	151610.7	154283.1	52.096	ug/L	52.096	ppb	19:17:21
1	Cd 226.502†	5233.0	5427.0	51.458	ug/L	51.458	ppb	19:17:41
1	Co 228.616†	2789.6	2857.4	54.034	ug/L	54.034	ppb	19:17:41
1	Cr 267.716†	5184.6	5035.9	51.252	ug/L	51.252	ppb	19:17:41
1	Cu 324.752†	25781.6	17387.5	51.991	ug/L	51.991	ppb	19:17:21
1	Mn 257.610†	1319881.4	1303707.9	1372.7	ug/L	1372.7	ppb	19:17:21
1	Mo 202.031†	841.0	804.8	51.179	ug/L	51.179	ppb	19:17:41
1	Ni 231.604†	2538.5	2393.8	53.010	ug/L	53.010	ppb	19:17:41
1	P 214.914†	405.1	147.9	62.703	ug/L	62.703	ppb	19:17:41
1	Pb 220.353†	427.8	524.3	54.532	ug/L	54.532	ppb	19:17:41
1	S 181.975 Axial†	657.0	591.9	669.58	ug/L	669.58	ppb	19:17:41
1	Sb 206.836†	209.6	161.1	49.272	ug/L	49.272	ppb	19:17:41
1	Se 196.026†	51.9	90.0	54.384	ug/L	54.384	ppb	19:17:41
1	Si 251.611†	79041.6	77521.2	2241.3	ug/L	2241.3	ppb	19:17:21
1	Sn 189.927†	289.5	281.5	42.920	ug/L	42.920	ppb	19:17:41
1	Ti 334.940†	30725.3	32132.6	51.844	ug/L	51.844	ppb	19:17:21
1	Tl 190.801†	106.9	151.4	49.634	ug/L	49.634	ppb	19:17:41
1	U 409.014†	-572.0	2343.0	69.381	ug/L	69.381	ppb	19:17:21
1	V 292.402†	6457.7	8191.4	52.393	ug/L	52.393	ppb	19:17:21
1	Zn 213.857†	7205.2	6270.9	51.288	ug/L	51.288	ppb	19:17:41
1	SiO2†	79698.2	78151.8	4823.4	ug/L	4823.4	ppb	19:18:38
2	Sc Radial	4534.1	4534.1	98.0	%			19:16:29
2	Y RADIAL	4802.0	4802.0	98.10	%			19:16:29
2	Al 396.153Radial†	596.9	630.1	540.07	ug/L	540.07	ppb	19:16:29
2	Ca 317.933Radial†	4521.3	4600.9	7945.7	ug/L	7945.7	ppb	19:16:29
2	Fe 238.204 Radial†	280.8	273.8	2628.0	ug/L	2628.0	ppb	19:16:49
2	K 766.490 Radial†	9840.6	6815.1	1361.5	ug/L	1361.5	ppb	19:16:29
2	Mg 279.077 IEC†	67.3	67.2	2289.0	ug/L	2289.0	ppb	19:16:49
2	Na 589.592 Radial†	6687.9	8596.4	2934.9	ug/L	2934.9	ppb	19:16:29
2	Sr 421.552†	12747.8	13000.5	95.708	ug/L	95.708	ppb	19:16:29
2	Sc 361.383	894493.7	894493.7	102.42	%			19:17:47
2	Y 371.029	761450.4	761450.4	101.62	%			19:17:47
2	Ag 328.068†	12567.5	11779.4	52.099	ug/L	52.099	ppb	19:17:47
2	As 188.979†	117.5	146.2	52.046	ug/L	52.046	ppb	19:18:07
2	B 249.677†	1825.4	2547.7	52.374	ug/L	52.374	ppb	19:18:07
2	Ba 233.527†	14171.4	13817.8	101.92	ug/L	101.92	ppb	19:17:47
2	Be 313.107†	153435.8	154187.8	52.064	ug/L	52.064	ppb	19:17:47
2	Cd 226.502†	5253.9	5382.6	51.044	ug/L	51.044	ppb	19:18:07
2	Co 228.616†	2801.0	2834.0	53.593	ug/L	53.593	ppb	19:18:07
2	Cr 267.716†	5201.2	4988.0	50.766	ug/L	50.766	ppb	19:18:07
2	Cu 324.752†	26010.6	17291.9	51.701	ug/L	51.701	ppb	19:17:47
2	Mn 257.610†	1333870.3	1301023.2	1369.9	ug/L	1369.9	ppb	19:17:47
2	Mo 202.031†	857.6	810.6	51.535	ug/L	51.535	ppb	19:18:07
2	Ni 231.604†	2573.4	2396.4	53.068	ug/L	53.068	ppb	19:18:07

2	P 214.914†	393.2	131.3	54.649 ug/L	54.649 ppb	19:18:07
2	Pb 220.353†	416.9	508.4	52.883 ug/L	52.883 ppb	19:18:07
2	S 181.975 Axial†	673.0	599.4	678.00 ug/L	678.00 ppb	19:18:07
2	Sb 206.836†	214.4	163.1	49.914 ug/L	49.914 ppb	19:18:07
2	Se 196.026†	51.5	89.1	53.629 ug/L	53.629 ppb	19:18:07
2	Si 251.611†	79982.4	77461.1	2239.5 ug/L	2239.5 ppb	19:17:47
2	Sn 189.927†	290.3	278.7	42.476 ug/L	42.476 ppb	19:18:07
2	Ti 334.940†	31303.5	32316.7	52.132 ug/L	52.132 ppb	19:17:47
2	Tl 190.801†	103.4	146.6	48.306 ug/L	48.306 ppb	19:18:07
2	U 409.014†	-671.6	2252.9	66.706 ug/L	66.706 ppb	19:17:47
2	V 292.402†	6636.5	8285.9	53.003 ug/L	53.003 ppb	19:17:47
2	Zn 213.857†	7192.3	6169.2	50.454 ug/L	50.454 ppb	19:18:07
2	SiO2†	79586.6	77056.0	4755.7 ug/L	4755.7 ppb	19:18:43
3	Sc Radial	4520.2	4520.2	97.7 %		19:16:54
3	Y RADIAL	4779.9	4779.9	97.65 %		19:16:54
3	Al 396.153Radial†	606.4	641.7	550.02 ug/L	550.02 ppb	19:16:54
3	Ca 317.933Radial†	4477.3	4570.1	7892.5 ug/L	7892.5 ppb	19:16:54
3	Fe 238.204 Radial†	277.7	271.6	2606.7 ug/L	2606.7 ppb	19:17:14
3	K 766.490 Radial†	9814.4	6819.1	1362.3 ug/L	1362.3 ppb	19:16:54
3	Mg 279.077 IEC†	64.5	64.5	2196.4 ug/L	2196.4 ppb	19:17:14
3	Na 589.592 Radial†	6645.1	8573.6	2927.2 ug/L	2927.2 ppb	19:16:54
3	Sr 421.552†	12728.9	13021.1	95.861 ug/L	95.861 ppb	19:16:54
3	Sc 361.383	896229.0	896229.0	102.62 %		19:18:13
3	Y 371.029	762770.3	762770.3	101.79 %		19:18:13
3	Ag 328.068†	12519.5	11708.9	51.791 ug/L	51.791 ppb	19:18:13
3	As 188.979†	114.7	143.2	51.008 ug/L	51.008 ppb	19:18:33
3	B 249.677†	1833.7	2552.4	52.476 ug/L	52.476 ppb	19:18:33
3	Ba 233.527†	14262.4	13879.6	102.37 ug/L	102.37 ppb	19:18:13
3	Be 313.107†	154097.2	154542.2	52.184 ug/L	52.184 ppb	19:18:13
3	Cd 226.502†	5229.5	5348.9	50.724 ug/L	50.724 ppb	19:18:33
3	Co 228.616†	2781.5	2809.7	53.134 ug/L	53.134 ppb	19:18:33
3	Cr 267.716†	5214.7	4991.3	50.800 ug/L	50.800 ppb	19:18:33
3	Cu 324.752†	25985.4	17218.2	51.480 ug/L	51.480 ppb	19:18:13
3	Mn 257.610†	1340097.6	1304569.8	1373.6 ug/L	1373.6 ppb	19:18:13
3	Mo 202.031†	853.5	805.0	51.181 ug/L	51.181 ppb	19:18:33
3	Ni 231.604†	2561.9	2380.3	52.713 ug/L	52.713 ppb	19:18:33
3	P 214.914†	402.9	139.9	58.969 ug/L	58.969 ppb	19:18:33
3	Pb 220.353†	415.7	506.4	52.682 ug/L	52.682 ppb	19:18:33
3	S 181.975 Axial†	651.2	576.9	652.61 ug/L	652.61 ppb	19:18:33
3	Sb 206.836†	203.7	152.3	46.645 ug/L	46.645 ppb	19:18:33
3	Se 196.026†	53.9	91.2	54.662 ug/L	54.662 ppb	19:18:33
3	Si 251.611†	80283.4	77603.2	2243.7 ug/L	2243.7 ppb	19:18:13
3	Sn 189.927†	298.7	286.3	43.615 ug/L	43.615 ppb	19:18:33
3	Ti 334.940†	31286.4	32240.9	52.010 ug/L	52.010 ppb	19:18:13
3	Tl 190.801†	110.7	153.5	50.228 ug/L	50.228 ppb	19:18:33
3	U 409.014†	-886.9	2044.3	60.494 ug/L	60.494 ppb	19:18:13
3	V 292.402†	6608.1	8245.7	52.733 ug/L	52.733 ppb	19:18:13
3	Zn 213.857†	7207.1	6169.9	50.467 ug/L	50.467 ppb	19:18:33
3	SiO2†	79751.1	77065.8	4756.4 ug/L	4756.4 ppb	19:18:49

Mean Data: 1202001503|935389|10

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	891338.2	102.06	%	0.804				0.79%
Sc Radial	4485.5	96.9	%	1.57				1.62%
Y 371.029	758617.5	101.24	%	0.812				0.80%
Y RADIAL	4745.4	96.95	%	1.630				1.68%
Ag 328.068†	11738.9	51.930	ug/L	0.1564	51.930	ppb	0.1564	0.30%
Al 396.153Radial†	633.1	542.60	ug/L	6.530	542.60	ppb	6.530	1.20%
As 188.979†	144.8	51.577	ug/L	0.5263	51.577	ppb	0.5263	1.02%
B 249.677†	2545.7	52.329	ug/L	0.1731	52.329	ppb	0.1731	0.33%
Ba 233.527†	13855.5	102.20	ug/L	0.243	102.20	ppb	0.243	0.24%
Be 313.107†	154337.7	52.115	ug/L	0.0618	52.115	ppb	0.0618	0.12%
Ca 317.933Radial†	4622.6	7983.1	ug/L	114.08	7983.1	ppb	114.08	1.43%
Cd 226.502†	5386.2	51.075	ug/L	0.3677	51.075	ppb	0.3677	0.72%
Co 228.616†	2833.7	53.587	ug/L	0.4500	53.587	ppb	0.4500	0.84%
Cr 267.716†	5005.1	50.939	ug/L	0.2715	50.939	ppb	0.2715	0.53%
Cu 324.752†	17299.2	51.724	ug/L	0.2561	51.724	ppb	0.2561	0.50%
Fe 238.204 Radial†	276.2	2650.3	ug/L	57.91	2650.3	ppb	57.91	2.19%
K 766.490 Radial†	6915.6	1381.9	ug/L	34.53	1381.9	ppb	34.53	2.50%

Mg 279.077 IEC†	67.2	2290.0 ug/L	94.14	2290.0 ppb	94.14	4.11%
Mn 257.610†	1303100.3	1372.1 ug/L	1.95	1372.1 ppb	1.95	0.14%
Mo 202.031†	806.8	51.298 ug/L	0.2053	51.298 ppb	0.2053	0.40%
Na 589.592 Radial†	8615.4	2941.4 ug/L	18.39	2941.4 ppb	18.39	0.63%
Ni 231.604†	2390.2	52.930 ug/L	0.1907	52.930 ppb	0.1907	0.36%
P 214.914†	139.7	58.774 ug/L	4.0305	58.774 ppb	4.0305	6.86%
Pb 220.353†	513.0	53.365 ug/L	1.0151	53.365 ppb	1.0151	1.90%
S 181.975 Axial†	589.4	666.73 ug/L	12.931	666.73 ppb	12.931	1.94%
Sb 206.836†	158.8	48.610 ug/L	1.7316	48.610 ppb	1.7316	3.56%
Se 196.026†	90.1	54.225 ug/L	0.5342	54.225 ppb	0.5342	0.99%
Si 251.611†	77528.5	2241.5 ug/L	2.07	2241.5 ppb	2.07	0.09%
Sn 189.927†	282.2	43.003 ug/L	0.5742	43.003 ppb	0.5742	1.34%
Sr 421.552†	13097.9	96.426 ug/L	1.1136	96.426 ppb	1.1136	1.15%
Ti 334.940†	32230.1	51.996 ug/L	0.1444	51.996 ppb	0.1444	0.28%
Tl 190.801†	150.5	49.389 ug/L	0.9840	49.389 ppb	0.9840	1.99%
U 409.014†	2213.4	65.527 ug/L	4.5595	65.527 ppb	4.5595	6.96%
V 292.402†	8241.0	52.710 ug/L	0.3060	52.710 ppb	0.3060	0.58%
Zn 213.857†	6203.3	50.736 ug/L	0.4780	50.736 ppb	0.4780	0.94%
SiO2†	77424.5	4778.5 ug/L	38.88	4778.5 ppb	38.88	0.81%

Sequence No.: 39
Sample ID: 1202001504|935389|50
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 50
Date Collected: 1/7/2010 19:21:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202001504|935389|50

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4521.7	4521.7	97.7	%			19:22:53
1	Y RADIAL	4759.4	4759.4	97.23	%			19:22:53
1	Al 396.153Radial†	-4.0	16.8	14.456	ug/L	14.456	ppb	19:22:53
1	Ca 317.933Radial†	842.4	848.2	1464.9	ug/L	1464.9	ppb	19:23:13
1	Fe 238.204 Radial†	51.2	39.6	380.27	ug/L	380.27	ppb	19:23:13
1	K 766.490 Radial†	4114.4	981.8	195.07	ug/L	195.07	ppb	19:22:53
1	Mg 279.077 IEC†	11.9	10.6	361.81	ug/L	361.81	ppb	19:23:13
1	Na 589.592 Radial†	-92.4	1675.5	572.04	ug/L	572.04	ppb	19:22:53
1	Sr 421.552†	1227.8	1245.3	9.1614	ug/L	9.1614	ppb	19:22:53
1	Sc 361.383	880714.9	880714.9	100.84	%			19:24:10
1	Y 371.029	755770.4	755770.4	100.86	%			19:24:10
1	Ag 328.068†	487.8	-7.2	0.0763	ug/L	0.0763	ppb	19:24:10
1	As 188.979†	-40.5	-8.7	-2.9872	ug/L	-2.9872	ppb	19:24:30
1	B 249.677†	-842.7	-70.2	-1.5088	ug/L	-1.5088	ppb	19:24:10
1	Ba 233.527†	1355.0	1325.1	9.7662	ug/L	9.7662	ppb	19:24:30
1	Be 313.107†	-4348.1	68.4	0.0230	ug/L	0.0230	ppb	19:24:10
1	Cd 226.502†	-237.3	17.6	0.1298	ug/L	0.1298	ppb	19:24:30
1	Co 228.616†	-61.6	38.1	0.7198	ug/L	0.7198	ppb	19:24:30
1	Cr 267.716†	78.7	-12.3	-0.1170	ug/L	-0.1170	ppb	19:24:10
1	Cu 324.752†	8334.5	161.1	0.4998	ug/L	0.4998	ppb	19:24:10
1	Mn 257.610†	262398.4	258895.5	272.59	ug/L	272.59	ppb	19:24:10
1	Mo 202.031†	23.9	-3.0	-0.1561	ug/L	-0.1561	ppb	19:24:30
1	Ni 231.604†	127.1	9.9	0.2188	ug/L	0.2188	ppb	19:24:30
1	P 214.914†	272.3	17.4	8.1214	ug/L	8.1214	ppb	19:24:30
1	Pb 220.353†	-100.9	1.3	0.1044	ug/L	0.1044	ppb	19:24:30
1	S 181.975 Axial†	83.6	25.3	28.571	ug/L	28.571	ppb	19:24:30
1	Sb 206.836†	33.6	-12.8	-3.9103	ug/L	-3.9103	ppb	19:24:30
1	Se 196.026†	-41.1	-2.0	0.1515	ug/L	0.1515	ppb	19:24:30
1	Si 251.611†	12704.8	11968.4	346.20	ug/L	346.20	ppb	19:24:10
1	Sn 189.927†	-12.1	-16.7	-2.3370	ug/L	-2.3370	ppb	19:24:30
1	Ti 334.940†	-1791.6	-23.1	0.0400	ug/L	0.0400	ppb	19:24:10
1	Tl 190.801†	-36.8	9.2	4.1122	ug/L	4.1122	ppb	19:24:30
1	U 409.014†	-2978.9	-45.4	-1.3994	ug/L	-1.3994	ppb	19:24:10
1	V 292.402†	-1792.5	28.9	0.1283	ug/L	0.1283	ppb	19:24:10
1	Zn 213.857†	886.9	26.4	0.1845	ug/L	0.1845	ppb	19:24:30
1	SiO2†	12803.6	12047.7	743.95	ug/L	743.95	ppb	19:25:26
2	Sc Radial	4499.3	4499.3	97.2	%			19:23:18
2	Y RADIAL	4790.3	4790.3	97.86	%			19:23:18
2	Al 396.153Radial†	21.1	42.6	36.649	ug/L	36.649	ppb	19:23:18
2	Ca 317.933Radial†	843.8	853.9	1474.7	ug/L	1474.7	ppb	19:23:38
2	Fe 238.204 Radial†	52.1	40.9	392.06	ug/L	392.06	ppb	19:23:38
2	K 766.490 Radial†	3941.6	825.0	163.01	ug/L	163.01	ppb	19:23:18
2	Mg 279.077 IEC†	11.6	10.5	355.91	ug/L	355.91	ppb	19:23:38
2	Na 589.592 Radial†	-139.0	1627.1	555.51	ug/L	555.51	ppb	19:23:18
2	Sr 421.552†	1207.0	1230.2	9.0500	ug/L	9.0500	ppb	19:23:18
2	Sc 361.383	811336.2	811336.2	92.900	%			19:24:35
2	Y 371.029	694227.6	694227.6	92.647	%			19:24:35
2	Ag 328.068†	405.1	-54.9	-0.1273	ug/L	-0.1273	ppb	19:24:35
2	As 188.979†	-30.1	-0.9	-0.2651	ug/L	-0.2651	ppb	19:24:55
2	B 249.677†	-809.4	-105.8	-2.2479	ug/L	-2.2479	ppb	19:24:35
2	Ba 233.527†	1361.0	1446.4	10.658	ug/L	10.658	ppb	19:24:55
2	Be 313.107†	-4307.4	-256.5	-0.0873	ug/L	-0.0873	ppb	19:24:35
2	Cd 226.502†	-231.4	3.9	-0.0018	ug/L	-0.0018	ppb	19:24:55
2	Co 228.616†	-67.1	26.9	0.5089	ug/L	0.5089	ppb	19:24:55
2	Cr 267.716†	127.9	47.4	0.4888	ug/L	0.4888	ppb	19:24:35
2	Cu 324.752†	8198.7	721.6	2.1720	ug/L	2.1720	ppb	19:24:35
2	Mn 257.610†	263600.0	282439.3	297.38	ug/L	297.38	ppb	19:24:35
2	Mo 202.031†	22.5	-2.5	-0.1181	ug/L	-0.1181	ppb	19:24:55
2	Ni 231.604†	140.5	35.1	0.7765	ug/L	0.7765	ppb	19:24:55

2	P 214.914†	269.3	37.2	17.531 ug/L	17.531 ppb	19:24:55
2	Pb 220.353†	-115.7	-23.2	-2.4424 ug/L	-2.4424 ppb	19:24:55
2	S 181.975 Axial†	93.3	42.8	48.423 ug/L	48.423 ppb	19:24:55
2	Sb 206.836†	32.9	-10.8	-3.3334 ug/L	-3.3334 ppb	19:24:55
2	Se 196.026†	-41.3	-5.7	-1.6928 ug/L	-1.6928 ppb	19:24:55
2	Si 251.611†	12819.4	13169.0	380.95 ug/L	380.95 ppb	19:24:35
2	Sn 189.927†	-18.1	-24.2	-3.4564 ug/L	-3.4564 ppb	19:24:55
2	Ti 334.940†	-1873.2	-262.9	-0.3421 ug/L	-0.3421 ppb	19:24:35
2	Tl 190.801†	-59.2	-18.0	-3.2148 ug/L	-3.2148 ppb	19:24:55
2	U 409.014†	-2863.0	-173.2	-5.2119 ug/L	-5.2119 ppb	19:24:35
2	V 292.402†	-1776.6	-106.0	-0.7359 ug/L	-0.7359 ppb	19:24:35
2	Zn 213.857†	883.9	98.4	0.7745 ug/L	0.7745 ppb	19:24:55
2	SiO2†	12578.1	12890.7	796.04 ug/L	796.04 ppb	19:25:31
3	Sc Radial	4543.7	4543.7	98.2 %		19:23:43
3	Y RADIAL	4769.0	4769.0	97.43 %		19:23:43
3	Al 396.153Radial†	-26.4	-6.0	-5.2272 ug/L	-5.2272 ppb	19:23:43
3	Ca 317.933Radial†	845.7	847.4	1463.4 ug/L	1463.4 ppb	19:24:03
3	Fe 238.204 Radial†	50.4	38.6	370.67 ug/L	370.67 ppb	19:24:03
3	K 766.490 Radial†	3934.7	778.4	153.77 ug/L	153.77 ppb	19:23:43
3	Mg 279.077 IEC†	14.4	13.2	447.90 ug/L	447.90 ppb	19:24:03
3	Na 589.592 Radial†	-142.1	1625.3	554.91 ug/L	554.91 ppb	19:23:43
3	Sr 421.552†	1219.4	1230.7	9.0540 ug/L	9.0540 ppb	19:23:43
3	Sc 361.383	850092.8	850092.8	97.338 %		19:25:00
3	Y 371.029	728006.9	728006.9	97.155 %		19:25:00
3	Ag 328.068†	524.8	48.2	0.3171 ug/L	0.3171 ppb	19:25:00
3	As 188.979†	-37.0	-6.5	-2.2233 ug/L	-2.2233 ppb	19:25:21
3	B 249.677†	-842.7	-100.3	-2.1313 ug/L	-2.1313 ppb	19:25:00
3	Ba 233.527†	1343.8	1362.0	10.037 ug/L	10.037 ppb	19:25:21
3	Be 313.107†	-4361.9	-101.1	-0.0340 ug/L	-0.0340 ppb	19:25:00
3	Cd 226.502†	-227.9	18.8	0.1423 ug/L	0.1423 ppb	19:25:21
3	Co 228.616†	-66.2	31.2	0.5903 ug/L	0.5903 ppb	19:25:21
3	Cr 267.716†	87.3	-0.5	0.0031 ug/L	0.0031 ppb	19:25:00
3	Cu 324.752†	8251.4	373.4	1.1325 ug/L	1.1325 ppb	19:25:00
3	Mn 257.610†	262076.4	267937.7	282.11 ug/L	282.11 ppb	19:25:00
3	Mo 202.031†	34.9	9.1	0.6139 ug/L	0.6139 ppb	19:25:21
3	Ni 231.604†	142.4	30.2	0.6680 ug/L	0.6680 ppb	19:25:21
3	P 214.914†	251.5	5.8	2.3142 ug/L	2.3142 ppb	19:25:21
3	Pb 220.353†	-100.0	-1.4	-0.1813 ug/L	-0.1813 ppb	19:25:21
3	S 181.975 Axial†	91.2	36.0	40.753 ug/L	40.753 ppb	19:25:21
3	Sb 206.836†	42.3	-2.7	-0.8533 ug/L	-0.8533 ppb	19:25:21
3	Se 196.026†	-33.3	4.5	3.4432 ug/L	3.4432 ppb	19:25:21
3	Si 251.611†	12731.0	12449.2	360.11 ug/L	360.11 ppb	19:25:00
3	Sn 189.927†	-14.5	-19.6	-2.7731 ug/L	-2.7731 ppb	19:25:21
3	Ti 334.940†	-1703.7	3.1	0.0844 ug/L	0.0844 ppb	19:25:00
3	Tl 190.801†	-49.0	-4.6	0.3746 ug/L	0.3746 ppb	19:25:21
3	U 409.014†	-3060.0	-235.1	-7.0533 ug/L	-7.0533 ppb	19:25:00
3	V 292.402†	-1786.4	-28.8	-0.2346 ug/L	-0.2346 ppb	19:25:00
3	Zn 213.857†	871.3	42.1	0.3082 ug/L	0.3082 ppb	19:25:21
3	SiO2†	12634.9	12331.7	761.49 ug/L	761.49 ppb	19:25:36

Mean Data: 1202001504|935389|50

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	847381.3	97.027	%	3.9811				4.10%
Sc Radial	4521.6	97.7	%	0.48				0.49%
Y 371.029	726001.6	96.887	%	4.1131				4.25%
Y RADIAL	4772.9	97.51	%	0.324				0.33%
Ag 328.068†	-4.6	0.0887	ug/L	0.22247	0.0887	ppb	0.22247	250.75%
Al 396.153Radial†	17.8	15.293	ug/L	20.9505	15.293	ppb	20.9505	137.00%
As 188.979†	-5.4	-1.8252	ug/L	1.40404	-1.8252	ppb	1.40404	76.92%
B 249.677†	-92.1	-1.9627	ug/L	0.39733	-1.9627	ppb	0.39733	20.24%
Ba 233.527†	1377.9	10.154	ug/L	0.4572	10.154	ppb	0.4572	4.50%
Be 313.107†	-96.4	-0.0328	ug/L	0.05514	-0.0328	ppb	0.05514	168.24%
Ca 317.933Radial†	849.8	1467.7	ug/L	6.13	1467.7	ppb	6.13	0.42%
Cd 226.502†	13.4	0.0901	ug/L	0.07984	0.0901	ppb	0.07984	88.60%
Co 228.616†	32.1	0.6063	ug/L	0.10639	0.6063	ppb	0.10639	17.55%
Cr 267.716†	11.5	0.1250	ug/L	0.32075	0.1250	ppb	0.32075	256.66%
Cu 324.752†	418.7	1.2681	ug/L	0.84430	1.2681	ppb	0.84430	66.58%
Fe 238.204 Radial†	39.7	381.00	ug/L	10.713	381.00	ppb	10.713	2.81%
K 766.490 Radial†	861.7	170.62	ug/L	21.674	170.62	ppb	21.674	12.70%

Mg 279.077 IEC†	11.4	388.54 ug/L	51.491	388.54 ppb	51.491	13.25%
Mn 257.610†	269757.5	284.03 ug/L	12.505	284.03 ppb	12.505	4.40%
Mo 202.031†	1.2	0.1132 ug/L	0.43401	0.1132 ppb	0.43401	383.26%
Na 589.592 Radial†	1642.6	560.82 ug/L	9.718	560.82 ppb	9.718	1.73%
Ni 231.604†	25.0	0.5544 ug/L	0.29569	0.5544 ppb	0.29569	53.33%
P 214.914†	20.1	9.3221 ug/L	7.67905	9.3221 ppb	7.67905	82.37%
Pb 220.353†	-7.8	-0.8398 ug/L	1.39522	-0.8398 ppb	1.39522	166.14%
S 181.975 Axial†	34.7	39.249 ug/L	10.0113	39.249 ppb	10.0113	25.51%
Sb 206.836†	-8.8	-2.6990 ug/L	1.62425	-2.6990 ppb	1.62425	60.18%
Se 196.026†	-1.1	0.6340 ug/L	2.60176	0.6340 ppb	2.60176	410.39%
Si 251.611†	12528.9	362.42 ug/L	17.489	362.42 ppb	17.489	4.83%
Sn 189.927†	-20.2	-2.8555 ug/L	0.56424	-2.8555 ppb	0.56424	19.76%
Sr 421.552†	1235.4	9.0885 ug/L	0.06321	9.0885 ppb	0.06321	0.70%
Ti 334.940†	-94.3	-0.0726 ug/L	0.23446	-0.0726 ppb	0.23446	323.11%
Tl 190.801†	-4.5	0.4240 ug/L	3.66377	0.4240 ppb	3.66377	864.06%
U 409.014†	-151.2	-4.5549 ug/L	2.88366	-4.5549 ppb	2.88366	63.31%
V 292.402†	-35.3	-0.2807 ug/L	0.43395	-0.2807 ppb	0.43395	154.59%
Zn 213.857†	55.6	0.4224 ug/L	0.31113	0.4224 ppb	0.31113	73.66%
SiO2†	12423.4	767.16 ug/L	26.503	767.16 ppb	26.503	3.45%

Sequence No.: 43
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 1/7/2010 19:48:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4557.2	4557.2	98.5	%			19:50:00
1	Y RADIAL	4811.2	4811.2	98.29	%			19:50:00
1	Al 396.153Radial†	5624.8	5733.0	4912.0	ug/L	4912.0	ppb	19:50:00
1	Ca 317.933Radial†	2958.9	2990.9	5165.2	ug/L	5165.2	ppb	19:50:20
1	Fe 238.204 Radial†	551.3	547.2	5263.8	ug/L	5263.8	ppb	19:50:20
1	K 766.490 Radial†	27610.4	24809.9	5016.4	ug/L	5016.4	ppb	19:50:00
1	Mg 279.077 IEC†	160.0	161.0	5491.2	ug/L	5491.2	ppb	19:50:20
1	Na 589.592 Radial†	28566.3	30779.9	10509	ug/L	10509	ppb	19:50:00
1	Sr 421.552†	64963.6	65961.2	485.92	ug/L	485.92	ppb	19:50:00
1	Sc 361.383	884301.1	884301.1	101.25	%			19:51:19
1	Y 371.029	749330.9	749330.9	100.00	%			19:51:19
1	Ag 328.068†	117165.4	115222.5	503.95	ug/L	503.95	ppb	19:51:19
1	As 188.979†	1437.7	1451.4	513.48	ug/L	513.48	ppb	19:51:39
1	B 249.677†	23726.1	24197.5	500.07	ug/L	500.07	ppb	19:51:19
1	Ba 233.527†	69507.6	68627.7	506.54	ug/L	506.54	ppb	19:51:19
1	Be 313.107†	1519837.8	1505383.4	508.33	ug/L	508.33	ppb	19:51:19
1	Cd 226.502†	53795.6	53381.9	508.29	ug/L	508.29	ppb	19:51:19
1	Co 228.616†	26876.0	26642.1	503.90	ug/L	503.90	ppb	19:51:39
1	Cr 267.716†	50144.9	49433.3	502.76	ug/L	502.76	ppb	19:51:19
1	Cu 324.752†	179548.2	169219.5	504.91	ug/L	504.91	ppb	19:51:19
1	Mn 257.610†	487302.0	479956.8	505.71	ug/L	505.71	ppb	19:51:19
1	Mo 202.031†	8051.0	7924.5	501.85	ug/L	501.85	ppb	19:51:39
1	Ni 231.604†	23140.3	22737.4	503.53	ug/L	503.53	ppb	19:51:39
1	P 214.914†	5501.8	5181.0	2460.5	ug/L	2460.5	ppb	19:51:39
1	Pb 220.353†	4840.0	4881.3	509.35	ug/L	509.35	ppb	19:51:39
1	S 181.975 Axial†	952.5	883.0	998.03	ug/L	998.03	ppb	19:51:39
1	Sb 206.836†	1728.1	1660.5	508.88	ug/L	508.88	ppb	19:51:39
1	Se 196.026†	978.7	1005.3	529.81	ug/L	529.81	ppb	19:51:39
1	Si 251.611†	88696.5	86967.3	2504.1	ug/L	2504.1	ppb	19:51:19
1	Sn 189.927†	3392.8	3346.0	500.31	ug/L	500.31	ppb	19:51:39
1	Ti 334.940†	319493.3	317287.5	508.11	ug/L	508.11	ppb	19:51:19
1	Tl 190.801†	1820.6	1843.7	509.61	ug/L	509.61	ppb	19:51:39
1	U 409.014†	13800.4	16538.0	491.19	ug/L	491.19	ppb	19:51:19
1	V 292.402†	78448.9	79283.1	509.65	ug/L	509.65	ppb	19:51:19
1	Zn 213.857†	63097.8	61462.8	504.51	ug/L	504.51	ppb	19:51:19
1	SiO2†	88925.0	87174.3	5357.8	ug/L	5357.8	ppb	19:52:40
2	Sc Radial	4561.7	4561.7	98.6	%			19:50:25
2	Y RADIAL	4824.2	4824.2	98.56	%			19:50:25
2	Al 396.153Radial†	5643.6	5746.4	4923.2	ug/L	4923.2	ppb	19:50:25
2	Ca 317.933Radial†	2938.7	2967.4	5124.7	ug/L	5124.7	ppb	19:50:45
2	Fe 238.204 Radial†	541.2	536.3	5159.5	ug/L	5159.5	ppb	19:50:45
2	K 766.490 Radial†	27707.9	24881.0	5030.8	ug/L	5030.8	ppb	19:50:25
2	Mg 279.077 IEC†	156.9	157.6	5377.4	ug/L	5377.4	ppb	19:50:45
2	Na 589.592 Radial†	28819.4	31007.9	10587	ug/L	10587	ppb	19:50:25
2	Sr 421.552†	65344.0	66281.6	488.28	ug/L	488.28	ppb	19:50:25
2	Sc 361.383	877349.3	877349.3	100.46	%			19:51:47
2	Y 371.029	743525.0	743525.0	99.226	%			19:51:47
2	Ag 328.068†	115781.0	114761.3	501.91	ug/L	501.91	ppb	19:51:47
2	As 188.979†	1424.1	1449.0	512.63	ug/L	512.63	ppb	19:52:07
2	B 249.677†	23387.1	24045.8	496.93	ug/L	496.93	ppb	19:51:47
2	Ba 233.527†	68689.9	68357.6	504.55	ug/L	504.55	ppb	19:51:47
2	Be 313.107†	1504894.3	1502401.5	507.32	ug/L	507.32	ppb	19:51:47
2	Cd 226.502†	53180.7	53190.8	506.48	ug/L	506.48	ppb	19:51:47
2	Co 228.616†	26884.3	26860.7	508.05	ug/L	508.05	ppb	19:52:07
2	Cr 267.716†	49717.9	49400.6	502.43	ug/L	502.43	ppb	19:51:47
2	Cu 324.752†	177314.3	168400.8	502.46	ug/L	502.46	ppb	19:51:47
2	Mn 257.610†	482091.3	478583.2	504.25	ug/L	504.25	ppb	19:51:47
2	Mo 202.031†	8100.5	8036.8	508.94	ug/L	508.94	ppb	19:52:07
2	Ni 231.604†	23232.3	23010.0	509.56	ug/L	509.56	ppb	19:52:07

2	P 214.914†	5524.5	5246.6	2493.1 ug/L	2493.1 ppb	19:52:07
2	Pb 220.353†	4858.7	4937.8	515.26 ug/L	515.26 ppb	19:52:07
2	S 181.975 Axial†	957.5	895.4	1012.1 ug/L	1012.1 ppb	19:52:07
2	Sb 206.836†	1726.0	1671.9	512.58 ug/L	512.58 ppb	19:52:07
2	Se 196.026†	978.0	1012.3	533.06 ug/L	533.06 ppb	19:52:07
2	Si 251.611†	87642.1	86611.8	2493.7 ug/L	2493.7 ppb	19:51:47
2	Sn 189.927†	3400.1	3379.9	505.36 ug/L	505.36 ppb	19:52:07
2	Ti 334.940†	316355.9	316664.5	507.11 ug/L	507.11 ppb	19:51:47
2	Tl 190.801†	1804.3	1841.8	509.03 ug/L	509.03 ppb	19:52:07
2	U 409.014†	13463.0	16310.1	484.42 ug/L	484.42 ppb	19:51:47
2	V 292.402†	77704.0	79155.5	508.95 ug/L	508.95 ppb	19:51:47
2	Zn 213.857†	62325.2	61187.5	502.21 ug/L	502.21 ppb	19:51:47
2	SiO2†	88289.3	87237.4	5361.4 ug/L	5361.4 ppb	19:52:45
3	Sc Radial	4535.3	4535.3	98.0 %		19:50:50
3	Y RADIAL	4758.5	4758.5	97.21 %		19:50:50
3	Al 396.153Radial†	5627.8	5763.6	4938.5 ug/L	4938.5 ppb	19:50:50
3	Ca 317.933Radial†	2955.7	3002.1	5184.6 ug/L	5184.6 ppb	19:51:10
3	Fe 238.204 Radial†	552.7	551.3	5302.7 ug/L	5302.7 ppb	19:51:10
3	K 766.490 Radial†	27631.4	24966.6	5048.1 ug/L	5048.1 ppb	19:50:50
3	Mg 279.077 IEC†	159.4	161.2	5497.0 ug/L	5497.0 ppb	19:51:10
3	Na 589.592 Radial†	28567.9	30921.6	10557 ug/L	10557 ppb	19:50:50
3	Sr 421.552†	65005.2	66322.1	488.58 ug/L	488.58 ppb	19:50:50
3	Sc 361.383	890675.0	890675.0	101.98 %		19:52:14
3	Y 371.029	754782.9	754782.9	100.73 %		19:52:14
3	Ag 328.068†	117590.6	114811.3	502.17 ug/L	502.17 ppb	19:52:14
3	As 188.979†	1425.1	1428.8	505.58 ug/L	505.58 ppb	19:52:34
3	B 249.677†	23826.3	24128.2	498.64 ug/L	498.64 ppb	19:52:14
3	Ba 233.527†	69757.0	68380.9	504.72 ug/L	504.72 ppb	19:52:14
3	Be 313.107†	1528343.0	1502981.5	507.52 ug/L	507.52 ppb	19:52:14
3	Cd 226.502†	53946.8	53150.0	506.08 ug/L	506.08 ppb	19:52:14
3	Co 228.616†	26796.8	26374.6	498.83 ug/L	498.83 ppb	19:52:34
3	Cr 267.716†	50399.8	49328.7	501.70 ug/L	501.70 ppb	19:52:14
3	Cu 324.752†	180555.6	168938.4	504.07 ug/L	504.07 ppb	19:52:14
3	Mn 257.610†	489791.0	478953.3	504.66 ug/L	504.66 ppb	19:52:14
3	Mo 202.031†	8057.6	7874.1	498.66 ug/L	498.66 ppb	19:52:34
3	Ni 231.604†	23122.5	22556.4	499.52 ug/L	499.52 ppb	19:52:34
3	P 214.914†	5494.3	5134.7	2437.9 ug/L	2437.9 ppb	19:52:34
3	Pb 220.353†	4850.4	4857.3	506.85 ug/L	506.85 ppb	19:52:34
3	S 181.975 Axial†	953.3	877.0	991.25 ug/L	991.25 ppb	19:52:34
3	Sb 206.836†	1717.3	1637.7	501.85 ug/L	501.85 ppb	19:52:34
3	Se 196.026†	982.3	1001.9	528.19 ug/L	528.19 ppb	19:52:34
3	Si 251.611†	89031.3	86668.7	2495.5 ug/L	2495.5 ppb	19:52:14
3	Sn 189.927†	3389.8	3319.1	496.29 ug/L	496.29 ppb	19:52:34
3	Ti 334.940†	321547.4	317043.6	507.72 ug/L	507.72 ppb	19:52:14
3	Tl 190.801†	1813.3	1823.7	504.13 ug/L	504.13 ppb	19:52:34
3	U 409.014†	13777.1	16417.6	487.60 ug/L	487.60 ppb	19:52:14
3	V 292.402†	78708.2	78982.9	507.69 ug/L	507.69 ppb	19:52:14
3	Zn 213.857†	63289.8	61205.1	502.41 ug/L	502.41 ppb	19:52:14
3	SiO2†	88567.9	86195.7	5297.5 ug/L	5297.5 ppb	19:52:50

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	884108.5	101.23	%	0.763				0.75%
Sc Radial	4551.4	98.3	%	0.31				0.31%
Y 371.029	749212.9	99.985	%	0.7513				0.75%
Y RADIAL	4798.0	98.02	%	0.711				0.73%
Ag 328.068†	114931.7	502.68	ug/L	1.109	502.68	ppb	1.109	0.22%
QC value within limits for Ag 328.068 Recovery = 100.54%								
Al 396.153Radial†	5747.7	4924.6	ug/L	13.28	4924.6	ppb	13.28	0.27%
QC value within limits for Al 396.153Radial Recovery = 98.49%								
As 188.979†	1443.1	510.57	ug/L	4.339	510.57	ppb	4.339	0.85%
QC value within limits for As 188.979 Recovery = 102.11%								
B 249.677†	24123.8	498.55	ug/L	1.575	498.55	ppb	1.575	0.32%
QC value within limits for B 249.677 Recovery = 99.71%								
Ba 233.527†	68455.4	505.27	ug/L	1.104	505.27	ppb	1.104	0.22%
QC value within limits for Ba 233.527 Recovery = 101.05%								
Be 313.107†	1503588.8	507.72	ug/L	0.534	507.72	ppb	0.534	0.11%
QC value within limits for Be 313.107 Recovery = 101.54%								
Ca 317.933Radial†	2986.8	5158.1	ug/L	30.56	5158.1	ppb	30.56	0.59%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.16%
Cd 226.502†          53240.9      506.95 ug/L         1.179      506.95 ppb          1.179   0.23%
   QC value within limits for Cd 226.502  Recovery = 101.39%
Co 228.616†          26625.8      503.59 ug/L         4.618      503.59 ppb          4.618   0.92%
   QC value within limits for Co 228.616  Recovery = 100.72%
Cr 267.716†          49387.5      502.30 ug/L         0.544      502.30 ppb          0.544   0.11%
   QC value within limits for Cr 267.716  Recovery = 100.46%
Cu 324.752†         168852.9      503.81 ug/L         1.244      503.81 ppb          1.244   0.25%
   QC value within limits for Cu 324.752  Recovery = 100.76%
Fe 238.204 Radial†     544.9      5242.0 ug/L         74.04      5242.0 ppb          74.04   1.41%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.84%
K 766.490 Radial†    24885.8      5031.8 ug/L         15.89      5031.8 ppb          15.89   0.32%
   QC value within limits for K 766.490 Radial  Recovery = 100.64%
Mg 279.077 IEC†        159.9      5455.2 ug/L         67.42      5455.2 ppb          67.42   1.24%
   QC value within limits for Mg 279.077 IEC  Recovery = 109.10%
Mn 257.610†         479164.4      504.87 ug/L         0.751      504.87 ppb          0.751   0.15%
   QC value within limits for Mn 257.610  Recovery = 100.97%
Mo 202.031†          7945.1      503.15 ug/L         5.262      503.15 ppb          5.262   1.05%
   QC value within limits for Mo 202.031  Recovery = 100.63%
Na 589.592 Radial†   30903.1       10551 ug/L          39.3       10551 ppb           39.3   0.37%
   QC value within limits for Na 589.592 Radial  Recovery = 105.51%
Ni 231.604†          22768.0      504.20 ug/L         5.058      504.20 ppb          5.058   1.00%
   QC value within limits for Ni 231.604  Recovery = 100.84%
P 214.914†           5187.5      2463.8 ug/L         27.80      2463.8 ppb          27.80   1.13%
   QC value within limits for P 214.914  Recovery = 98.55%
Pb 220.353†          4892.2      510.49 ug/L         4.321      510.49 ppb          4.321   0.85%
   QC value within limits for Pb 220.353  Recovery = 102.10%
S 181.975 Axial†      885.2      1000.5 ug/L         10.63      1000.5 ppb          10.63   1.06%
   QC value within limits for S 181.975 Axial  Recovery = 100.05%
Sb 206.836†          1656.7      507.77 ug/L         5.447      507.77 ppb          5.447   1.07%
   QC value within limits for Sb 206.836  Recovery = 101.55%
Se 196.026†          1006.5      530.35 ug/L         2.481      530.35 ppb          2.481   0.47%
   QC value within limits for Se 196.026  Recovery = 106.07%
Si 251.611†          86749.3      2497.7 ug/L          5.56      2497.7 ppb           5.56   0.22%
   QC value within limits for Si 251.611  Recovery = 99.91%
Sn 189.927†          3348.3      500.66 ug/L         4.544      500.66 ppb          4.544   0.91%
   QC value within limits for Sn 189.927  Recovery = 100.13%
Sr 421.552†          66188.3      487.60 ug/L         1.457      487.60 ppb          1.457   0.30%
   QC value within limits for Sr 421.552  Recovery = 97.52%
Ti 334.940†         316998.5      507.65 ug/L         0.503      507.65 ppb          0.503   0.10%
   QC value within limits for Ti 334.940  Recovery = 101.53%
Tl 190.801†          1836.4      507.59 ug/L         3.013      507.59 ppb          3.013   0.59%
   QC value within limits for Tl 190.801  Recovery = 101.52%
U 409.014†           16421.9      487.74 ug/L         3.391      487.74 ppb          3.391   0.70%
   QC value within limits for U 409.014  Recovery = 97.55%
V 292.402†           79140.5      508.76 ug/L         0.994      508.76 ppb          0.994   0.20%
   QC value within limits for V 292.402  Recovery = 101.75%
Zn 213.857†          61285.1      503.04 ug/L         1.278      503.04 ppb          1.278   0.25%
   QC value within limits for Zn 213.857  Recovery = 100.61%
SiO2†                86869.1      5338.9 ug/L         35.90      5338.9 ppb          35.90   0.67%
   QC value within limits for SiO2  Recovery = 99.84%
All analyte(s) passed QC.
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Sequence No.: 44
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 1/7/2010 19:54:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4555.9	4555.9	98.4	%			19:56:51
1	Y RADIAL	4812.7	4812.7	98.32	%			19:56:51
1	Al 396.153Radial†	23.2	44.5	38.239	ug/L	38.239	ppb	19:56:51
1	Ca 317.933Radial†	14.1	0.3	0.5789	ug/L	0.5789	ppb	19:57:11
1	Fe 238.204 Radial†	10.1	-2.5	-23.702	ug/L	-23.702	ppb	19:57:11
1	K 766.490 Radial†	3203.9	25.3	5.0816	ug/L	5.0816	ppb	19:56:51
1	Mg 279.077 IEC†	3.0	1.5	51.925	ug/L	51.925	ppb	19:57:11
1	Na 589.592 Radial†	-1387.5	360.6	123.11	ug/L	123.11	ppb	19:56:51
1	Sr 421.552†	-22.2	-33.8	-0.2490	ug/L	-0.2490	ppb	19:56:51
1	Sc 361.383	892151.6	892151.6	102.15	%			19:58:08
1	Y 371.029	761981.7	761981.7	101.69	%			19:58:08
1	Ag 328.068†	497.0	-4.4	-0.0367	ug/L	-0.0367	ppb	19:58:13
1	As 188.979†	-32.0	0.2	0.0605	ug/L	0.0605	ppb	19:58:33
1	B 249.677†	-633.7	145.1	3.0136	ug/L	3.0136	ppb	19:58:13
1	Ba 233.527†	-4.5	-22.9	-0.1677	ug/L	-0.1677	ppb	19:58:33
1	Be 313.107†	-4407.4	65.6	0.0224	ug/L	0.0224	ppb	19:58:13
1	Cd 226.502†	-252.6	5.7	0.0565	ug/L	0.0565	ppb	19:58:33
1	Co 228.616†	-99.2	2.1	0.0406	ug/L	0.0406	ppb	19:58:33
1	Cr 267.716†	84.3	-7.7	-0.0821	ug/L	-0.0821	ppb	19:58:13
1	Cu 324.752†	8182.2	-94.0	-0.2814	ug/L	-0.2814	ppb	19:58:13
1	Mn 257.610†	808.4	-515.0	-0.5455	ug/L	-0.5455	ppb	19:58:13
1	Mo 202.031†	32.6	5.3	0.3303	ug/L	0.3303	ppb	19:58:33
1	Ni 231.604†	92.5	-25.6	-0.5664	ug/L	-0.5664	ppb	19:58:33
1	P 214.914†	262.1	4.0	2.0346	ug/L	2.0346	ppb	19:58:33
1	Pb 220.353†	-83.6	19.4	2.0338	ug/L	2.0338	ppb	19:58:33
1	S 181.975 Axial†	58.8	-0.1	-0.1536	ug/L	-0.1536	ppb	19:58:33
1	Sb 206.836†	58.6	11.1	3.3944	ug/L	3.3944	ppb	19:58:33
1	Se 196.026†	-44.9	-5.2	-2.7175	ug/L	-2.7175	ppb	19:58:33
1	Si 251.611†	627.1	-16.1	-0.4778	ug/L	-0.4778	ppb	19:58:33
1	Sn 189.927†	11.9	6.9	1.0360	ug/L	1.0360	ppb	19:58:33
1	Ti 334.940†	-1701.7	87.6	0.1339	ug/L	0.1339	ppb	19:58:13
1	Tl 190.801†	-39.5	7.0	1.9103	ug/L	1.9103	ppb	19:58:33
1	U 409.014†	-2469.2	491.5	14.648	ug/L	14.648	ppb	19:58:08
1	V 292.402†	-1719.4	123.2	0.8195	ug/L	0.8195	ppb	19:58:13
1	Zn 213.857†	823.6	-46.8	-0.3844	ug/L	-0.3844	ppb	19:58:33
1	SiO2†	671.4	8.5	0.5003	ug/L	0.5003	ppb	19:59:39
2	Sc Radial	4481.7	4481.7	96.8	%			19:57:16
2	Y RADIAL	4754.0	4754.0	97.12	%			19:57:16
2	Al 396.153Radial†	-0.7	20.1	17.327	ug/L	17.327	ppb	19:57:16
2	Ca 317.933Radial†	12.0	-1.6	-2.7712	ug/L	-2.7712	ppb	19:57:36
2	Fe 238.204 Radial†	10.9	-1.5	-14.321	ug/L	-14.321	ppb	19:57:36
2	K 766.490 Radial†	3122.2	-5.2	-1.0939	ug/L	-1.0939	ppb	19:57:16
2	Mg 279.077 IEC†	7.7	6.4	219.65	ug/L	219.65	ppb	19:57:36
2	Na 589.592 Radial†	-1441.8	281.2	95.995	ug/L	95.995	ppb	19:57:16
2	Sr 421.552†	-19.7	-31.6	-0.2331	ug/L	-0.2331	ppb	19:57:16
2	Sc 361.383	885306.8	885306.8	101.37	%			19:58:38
2	Y 371.029	757445.6	757445.6	101.08	%			19:58:38
2	Ag 328.068†	460.0	-37.2	-0.1759	ug/L	-0.1759	ppb	19:58:43
2	As 188.979†	-34.8	-2.9	-1.0024	ug/L	-1.0024	ppb	19:59:03
2	B 249.677†	-681.7	93.0	1.9309	ug/L	1.9309	ppb	19:58:43
2	Ba 233.527†	4.3	-14.3	-0.1044	ug/L	-0.1044	ppb	19:59:03
2	Be 313.107†	-4305.0	133.3	0.0451	ug/L	0.0451	ppb	19:58:43
2	Cd 226.502†	-255.8	0.6	0.0070	ug/L	0.0070	ppb	19:59:03
2	Co 228.616†	-103.4	-2.8	-0.0534	ug/L	-0.0534	ppb	19:59:03
2	Cr 267.716†	99.3	7.7	0.0741	ug/L	0.0741	ppb	19:58:43
2	Cu 324.752†	8109.8	-103.5	-0.3093	ug/L	-0.3093	ppb	19:58:43
2	Mn 257.610†	843.6	-474.2	-0.5047	ug/L	-0.5047	ppb	19:58:43
2	Mo 202.031†	24.6	-2.5	-0.1573	ug/L	-0.1573	ppb	19:59:03
2	Ni 231.604†	113.2	-4.4	-0.0983	ug/L	-0.0983	ppb	19:59:03

2	P 214.914†	262.1	5.9	2.9683 ug/L	2.9683 ppb	19:59:03
2	Pb 220.353†	-105.2	-2.4	-0.2486 ug/L	-0.2486 ppb	19:59:03
2	S 181.975 Axial†	61.0	2.5	2.8558 ug/L	2.8558 ppb	19:59:03
2	Sb 206.836†	47.8	1.0	0.3254 ug/L	0.3254 ppb	19:59:03
2	Se 196.026†	-34.9	4.3	2.1638 ug/L	2.1638 ppb	19:59:03
2	Si 251.611†	633.2	-5.4	-0.1573 ug/L	-0.1573 ppb	19:59:03
2	Sn 189.927†	15.6	10.6	1.5868 ug/L	1.5868 ppb	19:59:03
2	Ti 334.940†	-1727.0	49.8	0.0736 ug/L	0.0736 ppb	19:58:43
2	Tl 190.801†	-49.0	-2.6	-0.7289 ug/L	-0.7289 ppb	19:59:03
2	U 409.014†	-2483.3	458.9	13.676 ug/L	13.676 ppb	19:58:38
2	V 292.402†	-1744.5	85.4	0.5733 ug/L	0.5733 ppb	19:58:43
2	Zn 213.857†	811.1	-53.0	-0.4443 ug/L	-0.4443 ppb	19:59:03
2	SiO2†	621.2	-35.9	-2.2219 ug/L	-2.2219 ppb	19:59:44
3	Sc Radial	4459.4	4459.4	96.4 %		19:57:41
3	Y RADIAL	4720.2	4720.2	96.43 %		19:57:41
3	Al 396.153Radial†	-4.0	16.8	14.408 ug/L	14.408 ppb	19:57:41
3	Ca 317.933Radial†	12.0	-1.6	-2.7231 ug/L	-2.7231 ppb	19:58:01
3	Fe 238.204 Radial†	13.4	1.1	11.024 ug/L	11.024 ppb	19:58:01
3	K 766.490 Radial†	3224.7	117.3	23.733 ug/L	23.733 ppb	19:57:41
3	Mg 279.077 IEC†	3.4	2.0	69.239 ug/L	69.239 ppb	19:58:01
3	Na 589.592 Radial†	-1446.1	269.3	91.945 ug/L	91.945 ppb	19:57:41
3	Sr 421.552†	18.1	7.5	0.0553 ug/L	0.0553 ppb	19:57:41
3	Sc 361.383	888469.9	888469.9	101.73 %		19:59:08
3	Y 371.029	759553.9	759553.9	101.36 %		19:59:08
3	Ag 328.068†	440.0	-58.4	-0.2559 ug/L	-0.2559 ppb	19:59:13
3	As 188.979†	-31.3	0.7	0.2441 ug/L	0.2441 ppb	19:59:34
3	B 249.677†	-719.3	58.5	1.2117 ug/L	1.2117 ppb	19:59:13
3	Ba 233.527†	-3.4	-21.9	-0.1605 ug/L	-0.1605 ppb	19:59:34
3	Be 313.107†	-4350.9	103.3	0.0350 ug/L	0.0350 ppb	19:59:13
3	Cd 226.502†	-263.9	-6.5	-0.0624 ug/L	-0.0624 ppb	19:59:34
3	Co 228.616†	-105.2	-4.2	-0.0789 ug/L	-0.0789 ppb	19:59:34
3	Cr 267.716†	73.2	-18.3	-0.1874 ug/L	-0.1874 ppb	19:59:13
3	Cu 324.752†	8196.7	-46.5	-0.1382 ug/L	-0.1382 ppb	19:59:13
3	Mn 257.610†	824.8	-495.5	-0.5219 ug/L	-0.5219 ppb	19:59:13
3	Mo 202.031†	32.4	5.1	0.3266 ug/L	0.3266 ppb	19:59:34
3	Ni 231.604†	132.3	13.9	0.3076 ug/L	0.3076 ppb	19:59:34
3	P 214.914†	265.0	7.9	3.8746 ug/L	3.8746 ppb	19:59:34
3	Pb 220.353†	-91.0	11.8	1.2359 ug/L	1.2359 ppb	19:59:34
3	S 181.975 Axial†	50.2	-8.3	-9.4281 ug/L	-9.4281 ppb	19:59:34
3	Sb 206.836†	52.1	5.0	1.5143 ug/L	1.5143 ppb	19:59:34
3	Se 196.026†	-37.6	1.8	0.9513 ug/L	0.9513 ppb	19:59:34
3	Si 251.611†	624.3	-16.4	-0.4855 ug/L	-0.4855 ppb	19:59:34
3	Sn 189.927†	1.0	-3.7	-0.5544 ug/L	-0.5544 ppb	19:59:34
3	Ti 334.940†	-1713.2	69.4	0.1077 ug/L	0.1077 ppb	19:59:13
3	Tl 190.801†	-49.2	-2.7	-0.7405 ug/L	-0.7405 ppb	19:59:34
3	U 409.014†	-2687.9	266.4	7.9377 ug/L	7.9377 ppb	19:59:08
3	V 292.402†	-1801.8	35.3	0.2437 ug/L	0.2437 ppb	19:59:13
3	Zn 213.857†	805.3	-61.5	-0.5134 ug/L	-0.5134 ppb	19:59:34
3	SiO2†	621.7	-37.6	-2.3474 ug/L	-2.3474 ppb	19:59:49

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	888642.8	101.75	%	0.392				0.39%
Sc Radial	4499.0	97.2	%	1.09				1.12%
Y 371.029	759660.4	101.38	%	0.303				0.30%
Y RADIAL	4762.3	97.29	%	0.957				0.98%
Ag 328.068†	-33.3	-0.1561	ug/L	0.11093	-0.1561	ppb	0.11093	71.04%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	27.1	23.325	ug/L	12.9985	23.325	ppb	12.9985	55.73%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.7	-0.2326	ug/L	0.67297	-0.2326	ppb	0.67297	289.29%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	98.8	2.0521	ug/L	0.90703	2.0521	ppb	0.90703	44.20%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-19.7	-0.1442	ug/L	0.03465	-0.1442	ppb	0.03465	24.03%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	100.8	0.0342	ug/L	0.01137	0.0342	ppb	0.01137	33.27%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-0.9	-1.6384	ug/L	1.92044	-1.6384	ppb	1.92044	117.21%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              -0.1      0.0003 ug/L       0.05971      0.0003 ppb       0.05971 >999.9%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -1.6     -0.0306 ug/L       0.06294     -0.0306 ppb       0.06294 205.70%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -6.1     -0.0651 ug/L       0.13159     -0.0651 ppb       0.13159 202.02%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -81.3     -0.2430 ug/L       0.09179     -0.2430 ppb       0.09179  37.78%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -0.9     -8.9997 ug/L      17.96425     -8.9997 ppb      17.96425 199.61%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        45.8      9.2403 ug/L      12.92546      9.2403 ppb      12.92546 139.88%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           3.3      113.61 ug/L        92.247      113.61 ppb        92.247  81.20%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†            -494.9     -0.5240 ug/L       0.02048     -0.5240 ppb       0.02048   3.91%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               2.6      0.1665 ug/L       0.28045      0.1665 ppb       0.28045 168.44%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      303.7      103.68 ug/L        16.946      103.68 ppb        16.946  16.34%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -5.4     -0.1191 ug/L       0.43736     -0.1191 ppb       0.43736 367.32%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                5.9      2.9591 ug/L       0.92003      2.9591 ppb       0.92003  31.09%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               9.6      1.0070 ug/L       1.15826      1.0070 ppb       1.15826 115.02%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -2.0     -2.2420 ug/L       6.40270     -2.2420 ppb       6.40270 285.58%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               5.7      1.7447 ug/L       1.54746      1.7447 ppb       1.54746  88.70%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               0.3      0.1325 ug/L       2.54154      0.1325 ppb       2.54154 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             -12.6     -0.3735 ug/L       0.18731     -0.3735 ppb       0.18731  50.14%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               4.6      0.6895 ug/L       1.11189      0.6895 ppb       1.11189 161.26%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -19.3     -0.1423 ug/L       0.17126     -0.1423 ppb       0.17126 120.36%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              68.9      0.1050 ug/L       0.03024      0.1050 ppb       0.03024  28.79%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               0.5      0.1470 ug/L       1.52715      0.1470 ppb       1.52715 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              405.6      12.087 ug/L        3.6263      12.087 ppb        3.6263  30.00%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               81.3      0.5455 ug/L       0.28888      0.5455 ppb       0.28888  52.96%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -53.8     -0.4474 ug/L       0.06458     -0.4474 ppb       0.06458  14.43%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   -21.7     -1.3563 ug/L       1.60912     -1.3563 ppb       1.60912 118.64%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

ICPMS#3 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Tuesday, December 22, 2009 18:13:18
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\default\Sample.5254
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	347.0	347.004	14.934	4.3
	Mg	24.0	2236.8	2236.775	12.014	0.5
	Co	58.9	12680.8	12680.826	71.574	0.6
	Rh	102.9	34833.0	34833.017	270.281	0.8
	In	114.9	47522.9	47522.925	645.248	1.4
	Pb	208.0	37452.4	37452.434	409.042	1.1
⌈>	Ba	137.9	42149.1	42149.109	517.583	1.2
⌊	Ba++	69.0	693.8	0.016	0.001	3.7
⌈>	Ce	139.9	52177.5	52177.515	250.879	0.5
⌊	CeO	155.9	821.5	0.016	0.000	3.1
	Bkgd	220.0	5.4	5.400	1.636	30.3

Current Optimization File Data

Current Value	Description
0.99	Nebulizer Gas Flow
7.50	Lens Voltage
1450.00	ICP RF Power
-1812.00	Analog Stage Voltage
950.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-7.00	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	17	6.8	303.0
Co	59	17	7.8	11968.7
In	115	17	8.8	57502.8

ICPMS#3 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	578	2030	0.688
Be	9.0	9.1	2080	2010	0.736
Mg	24.0	23.9	5708	2090	0.686
Mg	25.0	25.0	5901	2010	0.706
Mg	26.0	26.0	6222	2110	0.667
Co	58.9	58.9	14204	2100	0.676
Rh	102.9	102.9	24912	2150	0.682
In	114.9	114.9	27822	2160	0.690
Ce	139.9	139.9	33913	2200	0.646
Pb	206.0	206.0	50004	2270	0.664
Pb	207.0	207.0	50270	2310	0.647
Pb	208.0	208.0	50486	2290	0.620
U	238.1	238.1	57843	2330	0.658

ICPMS#3 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, December 22, 2009 22:43:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\Blank.476

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		8	
	Be	9		ug/L		5	
	B	11		ug/L		54	
	Na	23		ug/L		2667	
	Mg	24		ug/L		0	
	Al	27		ug/L		0	
	P	31		ug/L		832	
	K	39		ug/L		126899	
	Ca	43		ug/L		62	
>	Sc	45		ug/L		59109	
	Ti	47		ug/L		54	
	V	51		ug/L		1822	
	Cr	52		ug/L		1055	
	Cr	53		ug/L		30978	
	Mn	55		ug/L		247	
	Fe	57		ug/L		1960	
	Co	59		ug/L		137	
	Ni	60		ug/L		131	
	Cu	63		ug/L		149	
	Cu	65		ug/L		119	
	Zn	66		ug/L		40	
	Zn	67		ug/L		1307	
	Zn	68		ug/L		223	
>	Ge	74		ug/L		78915	
	As	75		ug/L		640	
	Se	77		ug/L		1824	
	Se	82		ug/L		4	
	Kr	83		ug/L		27	
	Sr	88		ug/L		40	
	Y	89		ug/L		13	
	Zr	90		ug/L		220	
	Mo	98		ug/L		24	
	Ag	107		ug/L		12	
	Cd	111		ug/L		3	
	Cd	114		ug/L		10	
>	In	115		ug/L		58814	
	Sn	120		ug/L		93	
	Sb	121		ug/L		147	
	Sb	123		ug/L		135	
	Ba	135		ug/L		10	
	Ba	137		ug/L		17	
	Ho	165		ug/L		12	
>	Lu	175		ug/L		117585	
	Tl	205		ug/L		504	
	Pb	208		ug/L		122	
	Th	232		ug/L		339	
	U	238		ug/L		70	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9998
Be	9	Linear Thru Zero	0.9998
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	0.9998
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	0.9999
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	0.9999
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9999
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175					
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Tuesday, December 22, 2009 22:49:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\Standard 1.477

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	10.000	ug/L	7.720	341	0.006
|	Be	9	10.000	ug/L	2.457	333	0.006
|	B	11	20.000	ug/L	4.690	491	0.007
|	Na	23	1000.000	ug/L	16.493	293369	4.887
|	Mg	24	1000.000	ug/L	9.442	225441	3.792
|	Al	27	1000.000	ug/L	10.128	409492	6.886
|	P	31	1000.000	ug/L	2.947	33363	0.547
|	K	39	1000.000	ug/L	7.245	758670	10.612
|	Ca	43	1000.000	ug/L	2.770	1363	0.022
| >	Sc	45		ug/L		59462	59462.429
|	Ti	47	10.000	ug/L	3.799	750	0.012
|	V	51	10.000	ug/L	6.909	9481	0.129
|	Cr	52	10.000	ug/L	0.806	10482	0.158
|	Cr	53		ug/L		32218	0.018
|	Mn	55	10.000	ug/L	0.914	16253	0.269
|	Fe	57	1000.000	ug/L	1.289	31884	0.503
|	Co	59	10.000	ug/L	1.186	10178	0.169
|	Ni	60	10.000	ug/L	1.259	2183	0.034
|	Cu	63		ug/L		4727	0.077
⌊	Cu	65	10.000	ug/L	1.962	2274	0.036
⌈	Zn	66	10.000	ug/L	3.041	1579	0.019
|	Zn	67		ug/L		1557	0.002
|	Zn	68		ug/L		1537	0.016
| >	Ge	74		ug/L		81845	81845.275
|	As	75	10.000	ug/L	4.584	3208	0.031
|	Se	77		ug/L		2036	0.002
|	Se	82	10.000	ug/L	2.891	212	0.003
⌊	Kr	83		ug/L		25	-0.000
⌈	Sr	88	10.000	ug/L	1.746	25064	0.423
|	Y	89		ug/L		16	0.000
|	Zr	90	10.000	ug/L	6.151	15869	0.265
|	Mo	98	10.000	ug/L	1.735	6984	0.118
|	Ag	107	10.000	ug/L	1.539	11960	0.202
|	Cd	111	10.000	ug/L	4.459	2946	0.050
|	Cd	114		ug/L		7036	0.119
| >	In	115		ug/L		59210	59210.279
|	Sn	120	10.000	ug/L	1.817	12981	0.218
|	Sb	121	10.000	ug/L	1.419	12251	0.204
⌊	Sb	123		ug/L		9515	0.158
⌈	Ba	135		ug/L		3046	0.025
|	Ba	137	10.000	ug/L	2.163	5483	0.045
|	Ho	165		ug/L		10	-0.000
| >	Lu	175		ug/L		120938	120937.966
|	Tl	205	10.000	ug/L	2.703	54881	0.450
|	Pb	208	10.000	ug/L	0.671	63803	0.527
|	Th	232	10.000	ug/L	1.087	74813	0.616
⌊	U	238	10.000	ug/L	2.184	79205	0.654

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45					
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74					
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115					
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175					
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Tuesday, December 22, 2009 22:55:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\Standard 2.478

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**100.012**	**ug/L**	3.987	3466	0.057
	Be	9	**99.900**	**ug/L**	0.320	3058	0.050
	B	11	**199.911**	**ug/L**	0.336	4345	0.070
	Na	23	**9991.853**	**ug/L**	9.370	2755518	45.149
	Mg	24	**9976.569**	**ug/L**	6.348	1869601	30.651
	Al	27	**9996.284**	**ug/L**	9.704	4047797	66.368
	P	31	**9997.524**	**ug/L**	2.448	326533	5.336
	K	39	**10001.141**	**ug/L**	6.764	6685219	107.358
	Ca	43	**9998.590**	**ug/L**	0.836	13237	0.216
>	Sc	45		**ug/L**		61056	61055.514
	Ti	47	**99.961**	**ug/L**	1.657	6937	0.113
	V	51	**100.072**	**ug/L**	1.275	86527	1.387
	Cr	52	**99.990**	**ug/L**	1.425	96811	1.568
	Cr	53		**ug/L**		41752	0.160
	Mn	55	**99.976**	**ug/L**	0.630	160649	2.627
	Fe	57	**9999.801**	**ug/L**	1.375	308492	5.020
	Co	59	**100.005**	**ug/L**	3.122	103662	1.696
	Ni	60	**99.969**	**ug/L**	2.104	20548	0.334
	Cu	63		**ug/L**		45088	0.736
	Cu	65	**99.958**	**ug/L**	0.893	21346	0.348
	Zn	66	**99.976**	**ug/L**	1.998	15276	0.183
	Zn	67		**ug/L**		3736	0.028
	Zn	68		**ug/L**		12916	0.153
>	Ge	74		**ug/L**		83048	83047.538
	As	75	**99.968**	**ug/L**	2.308	25683	0.301
	Se	77		**ug/L**		3417	0.018
	Se	82	**99.947**	**ug/L**	1.634	2010	0.024
	Kr	83		**ug/L**		33	0.000
	Sr	88	**100.008**	**ug/L**	1.762	254291	4.263
	Y	89		**ug/L**		34	0.000
	Zr	90	**99.905**	**ug/L**	2.244	144172	2.414
	Mo	98	**100.007**	**ug/L**	1.713	70620	1.184
	Ag	107	**100.012**	**ug/L**	1.883	121798	2.043
	Cd	111	**100.018**	**ug/L**	1.772	30216	0.507
	Cd	114		**ug/L**		70996	1.190
>	In	115		**ug/L**		59634	59634.044
	Sn	120	**100.017**	**ug/L**	2.014	132243	2.216
	Sb	121	**100.033**	**ug/L**	2.876	126285	2.115
	Sb	123		**ug/L**		97352	1.630
	Ba	135		**ug/L**		31783	0.261
	Ba	137	**100.005**	**ug/L**	3.555	55253	0.454
	Ho	165		**ug/L**		16	0.000
>	Lu	175		**ug/L**		121605	121604.724
	Tl	205	**99.998**	**ug/L**	1.684	545939	4.485
	Pb	208	**99.994**	**ug/L**	1.705	636162	5.231
	Th	232	**100.013**	**ug/L**	1.359	758950	6.239
	U	238	**99.991**	**ug/L**	0.718	788845	6.487

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9997
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175					
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Tuesday, December 22, 2009 23:00:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\QC Std 1.479

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**47.253**	**ug/L**	15.071	1765	0.027
|	Be	9	**49.954**	**ug/L**	15.064	1648	0.025
|	B	11	**101.198**	**ug/L**	13.781	2398	0.036
|	Na	23	**4740.967**	**ug/L**	11.941	1413311	21.423
|	Mg	24	**4931.166**	**ug/L**	12.998	996238	15.150
|	Al	27	**4417.865**	**ug/L**	12.715	1929413	29.332
|	P	31	**4642.010**	**ug/L**	13.899	163719	2.478
|	K	39	**4212.099**	**ug/L**	14.570	3114047	45.215
|	Ca	43	**4705.968**	**ug/L**	14.373	6738	0.102
|>	Sc	45		**ug/L**		66655	66655.006
|	Ti	47	**46.455**	**ug/L**	13.372	3503	0.052
|	V	51	**47.036**	**ug/L**	13.585	44891	0.652
|	Cr	52	**47.843**	**ug/L**	15.400	50406	0.750
|	Cr	53		**ug/L**		36260	0.030
|	Mn	55	**48.448**	**ug/L**	14.670	83849	1.273
|	Fe	57	**4669.610**	**ug/L**	13.969	156231	2.344
|	Co	59	**46.648**	**ug/L**	14.766	52093	0.791
|	Ni	60	**48.874**	**ug/L**	14.739	10883	0.164
|	Cu	63		**ug/L**		23727	0.358
⌊	Cu	65	**47.885**	**ug/L**	14.948	11062	0.167
⌈	Zn	66	**52.604**	**ug/L**	2.520	8186	0.097
|	Zn	67		**ug/L**		2644	0.015
|	Zn	68		**ug/L**		7003	0.080
|>	Ge	74		**ug/L**		84365	84364.558
|	As	75	**47.634**	**ug/L**	1.502	12790	0.143
|	Se	77		**ug/L**		2588	0.008
|	Se	82	**49.588**	**ug/L**	3.467	1015	0.012
⌊	Kr	83		**ug/L**		26	-0.000
⌈	Sr	88	**51.958**	**ug/L**	1.013	133365	2.215
|	Y	89		**ug/L**		17	0.000
|	Zr	90	**43.697**	**ug/L**	6.770	63784	1.056
|	Mo	98	**50.416**	**ug/L**	1.832	35950	0.597
|	Ag	107	**50.415**	**ug/L**	1.230	61995	1.030
|	Cd	111	**51.889**	**ug/L**	1.280	15825	0.263
|	Cd	114		**ug/L**		36748	0.610
|>	In	115		**ug/L**		60202	60202.059
|	Sn	120	**50.781**	**ug/L**	1.293	67839	1.125
|	Sb	121	**50.191**	**ug/L**	4.437	64022	1.061
⌊	Sb	123		**ug/L**		49246	0.816
⌈	Ba	135		**ug/L**		16228	0.135
|	Ba	137	**52.215**	**ug/L**	1.433	28458	0.237
|	Ho	165		**ug/L**		18	0.000
|>	Lu	175		**ug/L**		119886	119885.828
|	Tl	205	**50.513**	**ug/L**	3.280	272120	2.266
|	Pb	208	**52.183**	**ug/L**	0.402	327417	2.730
|	Th	232	**53.032**	**ug/L**	1.150	396970	3.308
⌊	U	238	**54.476**	**ug/L**	3.723	423696	3.534

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9997
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7	94.506				
|	Be	9	99.908				
|	B	11	101.198				
|	Na	23	94.819				
|	Mg	24	98.623				
|	Al	27	87.482				
|	P	31	92.840				
|	K	39	84.242				
|	Ca	43	94.119				
|>	Sc	45			112.8		
|	Ti	47	92.911				
|	V	51	94.072				
|	Cr	52	95.687				
|	Cr	53					
|	Mn	55	96.897				
|	Fe	57	93.392				
|	Co	59	93.296				
|	Ni	60	97.747				
|	Cu	63					
⌊	Cu	65	95.770				
⌈	Zn	66	105.207				
|	Zn	67					
|	Zn	68					
|>	Ge	74			106.9		
|	As	75	95.269				
|	Se	77					
|	Se	82	99.177				
⌊	Kr	83					
⌈	Sr	88	103.916				
|	Y	89					
|	Zr	90	87.394				
|	Mo	98	100.832				
|	Ag	107	100.830				
|	Cd	111	103.778				
|	Cd	114					
|>	In	115			102.4		
|	Sn	120	101.563				
|	Sb	121	100.381				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	104.430				
|	Ho	165					
|>	Lu	175			102.0		
|	Tl	205	101.026				
|	Pb	208	104.366				
|	Th	232	106.063				
⌊	U	238	108.953				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Al	27	ICV is out of limits (+/- 10%)
QC Std 1	K	39	ICV is out of limits (+/- 10%)
QC Std 1	Zr	90	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Tuesday, December 22, 2009 23:06:25
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\QC Std 2.480

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.035	ug/L	94.325	7	-0.000
	Be	9	-0.016	ug/L	198.369	5	-0.000
	B	11	4.405	ug/L	29.835	149	0.002
	Na	23	1.026	ug/L	717.815	3000	0.005
	Mg	24	0.000	ug/L		0	0.000
	Al	27	2.526	ug/L	173.205	1000	0.017
	P	31	0.918	ug/L	216.962	882	0.000
	K	39	-13.238	ug/L	108.164	121517	-0.142
	Ca	43	0.815	ug/L	297.561	65	0.000
>	Sc	45		ug/L		60605	60604.913
	Ti	47	-0.014	ug/L	525.053	54	-0.000
	V	51	-0.235	ug/L	297.128	1670	-0.003
	Cr	52	-0.150	ug/L	15.092	939	-0.002
	Cr	53		ug/L		30055	-0.028
	Mn	55	-0.007	ug/L	47.082	242	-0.000
	Fe	57	-2.370	ug/L	119.936	1937	-0.001
	Co	59	0.005	ug/L	157.887	146	0.000
	Ni	60	-0.036	ug/L	51.894	127	-0.000
	Cu	63		ug/L		164	0.000
	Cu	65	-0.057	ug/L	38.792	110	-0.000
	Zn	66	-0.044	ug/L	93.047	34	-0.000
	Zn	67		ug/L		1291	-0.001
	Zn	68		ug/L		236	0.000
>	Ge	74		ug/L		81310	81310.218
	As	75	0.398	ug/L	16.026	757	0.001
	Se	77		ug/L		1775	-0.001
	Se	82	0.419	ug/L	39.003	12	0.000
	Kr	83		ug/L		25	-0.000
	Sr	88	0.004	ug/L	59.287	48	0.000
	Y	89		ug/L		11	-0.000
	Zr	90	0.160	ug/L	10.752	438	0.004
	Mo	98	0.078	ug/L	23.892	76	0.001
	Ag	107	0.001	ug/L	552.958	13	0.000
	Cd	111	0.004	ug/L	555.674	4	0.000
	Cd	114		ug/L		11	0.000
>	In	115		ug/L		57654	57654.027
	Sn	120	0.213	ug/L	24.520	362	0.005
	Sb	121	0.607	ug/L	11.985	883	0.013
	Sb	123		ug/L		693	0.010
	Ba	135		ug/L		10	-0.000
	Ba	137	-0.009	ug/L	6.952	13	-0.000
	Ho	165		ug/L		14	0.000
>	Lu	175		ug/L		118625	118624.561
	Tl	205	0.169	ug/L	25.530	1407	0.008
	Pb	208	0.004	ug/L	14.683	148	0.000
	Th	232	0.178	ug/L	11.928	1655	0.011
	U	238	0.009	ug/L	14.397	137	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9997
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.5			
	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		103.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.9			
	Tl	205					
	Pb	208					
	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#3 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, December 22, 2009 23:12:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\QC Std 3.481

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**11.336**	**ug/L**	0.926	396	0.006
	Be	9	**0.713**	**ug/L**	11.368	27	0.000
	B	11	**17.336**	**ug/L**	2.391	424	0.006
	Na	23	**277.791**	**ug/L**	2.081	78549	1.255
	Mg	24	**26.839**	**ug/L**	51.416	5001	0.082
	Al	27	**33.958**	**ug/L**	32.850	13674	0.225
	P	31	**53.852**	**ug/L**	0.903	2587	0.029
	K	39	**304.358**	**ug/L**	3.834	327035	3.267
	Ca	43	**208.712**	**ug/L**	5.424	335	0.005
>	Sc	45		**ug/L**		60421	60421.479
	Ti	47	**9.794**	**ug/L**	4.618	722	0.011
	V	51	**10.691**	**ug/L**	7.417	10821	0.148
	Cr	52	**10.548**	**ug/L**	1.839	11073	0.165
	Cr	53		**ug/L**		31369	-0.005
	Mn	55	**5.732**	**ug/L**	3.694	9349	0.151
	Fe	57	**104.638**	**ug/L**	2.134	5177	0.053
	Co	59	**1.039**	**ug/L**	0.664	1205	0.018
	Ni	60	**2.200**	**ug/L**	4.302	579	0.007
	Cu	63		**ug/L**		688	0.009
	Cu	65	**1.116**	**ug/L**	2.572	356	0.004
	Zn	66	**11.300**	**ug/L**	2.746	1730	0.021
	Zn	67		**ug/L**		1565	0.003
	Zn	68		**ug/L**		1649	0.017
>	Ge	74		**ug/L**		81444	81443.986
	As	75	**5.462**	**ug/L**	21.356	2001	0.016
	Se	77		**ug/L**		1801	-0.001
	Se	82	**5.178**	**ug/L**	20.000	106	0.001
	Kr	83		**ug/L**		25	-0.000
	Sr	88	**11.121**	**ug/L**	2.054	27578	0.474
	Y	89		**ug/L**		17	0.000
	Zr	90	**1.997**	**ug/L**	1.386	3021	0.048
	Mo	98	**0.574**	**ug/L**	2.272	418	0.007
	Ag	107	**1.046**	**ug/L**	5.163	1252	0.021
	Cd	111	**1.155**	**ug/L**	7.586	343	0.006
	Cd	114		**ug/L**		760	0.013
>	In	115		**ug/L**		58099	58098.661
	Sn	120	**5.378**	**ug/L**	1.519	7014	0.119
	Sb	121	**3.287**	**ug/L**	1.279	4183	0.069
	Sb	123		**ug/L**		3119	0.051
	Ba	135		**ug/L**		652	0.005
	Ba	137	**2.125**	**ug/L**	3.595	1163	0.010
	Ho	165		**ug/L**		10	-0.000
>	Lu	175		**ug/L**		118746	118746.283
	Tl	205	**1.059**	**ug/L**	3.354	6150	0.047
	Pb	208	**2.210**	**ug/L**	2.037	13847	0.116
	Th	232	**1.107**	**ug/L**	1.873	8546	0.069
	U	238	**0.228**	**ug/L**	2.031	1823	0.015

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9997
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	113.358				
	Be	9	142.694				
	B	11	115.574				
	Na	23	111.117				
	Mg	24	178.924				
	Al	27	113.195				
	P	31	107.705				
	K	39	101.453				
	Ca	43	104.356				
>	Sc	45			102.2		
	Ti	47	97.938				
	V	51	106.909				
	Cr	52	105.485				
	Cr	53					
	Mn	55	114.647				
	Fe	57	104.638				
	Co	59	103.860				
	Ni	60	110.016				
	Cu	63					
	Cu	65	111.571				
	Zn	66	112.997				
	Zn	67					
	Zn	68					
>	Ge	74			103.2		
	As	75	109.235				
	Se	77					
	Se	82	103.567				
	Kr	83					
	Sr	88	111.213				
	Y	89					
	Zr	90	99.867				
	Mo	98	114.780				
	Ag	107	104.566				
	Cd	111	115.490				
	Cd	114					
>	In	115			98.8		
	Sn	120	107.563				
	Sb	121	109.551				
	Sb	123					
	Ba	135					
	Ba	137	106.259				
	Ho	165					
>	Lu	175			101.0		
	Tl	205	105.883				
	Pb	208	110.498				
	Th	232	110.714				
	U	238	113.801				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 3	Be	9CRDL is out of limits
QC Std 3	Mg	24CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, December 22, 2009 23:17:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\QC Std 4.482

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.124**	**ug/L**	97.807	12	0.000
	Be	9	**0.137**	**ug/L**	110.938	9	0.000
	B	11	**1.965**	**ug/L**	20.643	91	0.001
	Na	23	**96105.450**	**ug/L**	1.857	24586243	434.263
	Mg	24	**100876.310**	**ug/L**	3.403	17538276	309.918
	Al	27	**100328.033**	**ug/L**	9.765	37745974	666.109
	P	31	**99915.879**	**ug/L**	1.751	3018836	53.327
	K	39	**98602.293**	**ug/L**	5.936	60064351	1058.451
	Ca	43	**97516.957**	**ug/L**	1.004	119167	2.104
>	Sc	45		**ug/L**		56605	56605.188
	Ti	47	**1484.805**	**ug/L**	1.961	94787	1.674
	V	51	**-1.615**	**ug/L**	29.848	477	-0.022
	Cr	52	**2.462**	**ug/L**	3.922	3194	0.039
	Cr	53		**ug/L**		26054	-0.063
	Mn	55	**5.986**	**ug/L**	1.824	9139	0.157
	Fe	57	**104068.121**	**ug/L**	2.796	2958231	52.248
	Co	59	**0.238**	**ug/L**	5.388	360	0.004
	Ni	60	**2.480**	**ug/L**	3.792	595	0.008
	Cu	63		**ug/L**		1064	0.016
	Cu	65	**2.795**	**ug/L**	7.104	664	0.010
	Zn	66	**2.746**	**ug/L**	7.469	434	0.005
	Zn	67		**ug/L**		1206	-0.001
	Zn	68		**ug/L**		322	0.001
>	Ge	74		**ug/L**		78254	78253.539
	As	75	**0.022**	**ug/L**	2371.223	641	0.000
	Se	77		**ug/L**		1805	-0.000
	Se	82	**-0.574**	**ug/L**	88.907	-7	-0.000
	Kr	83		**ug/L**		45	0.000
	Sr	88	**1.161**	**ug/L**	1.053	2749	0.049
	Y	89		**ug/L**		79	0.001
	Zr	90	**6.941**	**ug/L**	58.407	9393	0.168
	Mo	98	**2007.124**	**ug/L**	0.610	1302336	23.760
	Ag	107	**0.050**	**ug/L**	28.069	67	0.001
	Cd	111	**0.550**	**ug/L**	47.722	155	0.003
	Cd	114		**ug/L**		1207	0.022
>	In	115		**ug/L**		54810	54809.716
	Sn	120	**0.205**	**ug/L**	14.761	335	0.005
	Sb	121	**0.132**	**ug/L**	6.063	290	0.003
	Sb	123		**ug/L**		251	0.002
	Ba	135		**ug/L**		228	0.002
	Ba	137	**0.685**	**ug/L**	7.196	376	0.003
	Ho	165		**ug/L**		264	0.002
>	Lu	175		**ug/L**		115176	115175.672
	Tl	205	**0.017**	**ug/L**	33.787	582	0.001
	Pb	208	**0.177**	**ug/L**	4.118	1186	0.009
	Th	232	**0.177**	**ug/L**	28.341	1601	0.011
	U	238	**-0.004**	**ug/L**	11.407	36	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9997
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23	96.105				
|	Mg	24	100.876				
|	Al	27	100.328				
|	P	31	99.916				
|	K	39	98.602				
|	Ca	43	97.517				
|>	Sc	45			95.8		
|	Ti	47	74.240				
|	V	51					
|	Cr	52	66.530				
|	Cr	53					
|	Mn	55	103.210				
|	Fe	57	104.068				
|	Co	59	95.281				
|	Ni	60	91.857				
|	Cu	63					
⌊	Cu	65	96.377				
⌈	Zn	66	76.288				
|	Zn	67					
|	Zn	68					
|>	Ge	74			99.2		
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88	96.741				
|	Y	89					
|	Zr	90					
|	Mo	98	100.356				
|	Ag	107					
|	Cd	111	137.458				
|	Cd	114					
|>	In	115			93.2		
|	Sn	120					
|	Sb	121	131.525				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	102.222				
|	Ho	165					
|>	Lu	175			98.0		
|	Tl	205					
|	Pb	208	88.483				
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 4	Ti	47ICSA is out of limits
QC Std 4	Zr	90ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, December 22, 2009 23:23:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\QC Std 5.483

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**18.281**	**ug/L**	1.715	598	0.010
|	Be	9	**19.006**	**ug/L**	4.369	547	0.010
|	B	11	**19.846**	**ug/L**	5.537	450	0.007
|	Na	23	**100074.579**	**ug/L**	13.647	25800378	452.198
|	Mg	24	**100247.266**	**ug/L**	9.247	17538276	307.985
|	Al	27	**93752.747**	**ug/L**	5.666	35451386	622.454
|	P	31	**99499.797**	**ug/L**	2.018	3027373	53.105
|	K	39	**96095.525**	**ug/L**	5.886	58870229	1031.542
|	Ca	43	**97851.677**	**ug/L**	0.356	120427	2.112
|>	Sc	45		**ug/L**		57002	57002.442
|	Ti	47	**1473.106**	**ug/L**	1.531	94697	1.661
|	V	51	**18.386**	**ug/L**	7.848	16268	0.255
|	Cr	52	**21.925**	**ug/L**	2.427	20610	0.344
|	Cr	53		**ug/L**		27776	-0.036
|	Mn	55	**26.655**	**ug/L**	2.718	40145	0.700
|	Fe	57	**105924.453**	**ug/L**	3.054	3031807	53.180
|	Co	59	**20.631**	**ug/L**	1.494	20076	0.350
|	Ni	60	**22.451**	**ug/L**	2.162	4407	0.075
|	Cu	63		**ug/L**		9425	0.163
⌊	Cu	65	**22.505**	**ug/L**	0.163	4576	0.078
⌈	Zn	66	**22.064**	**ug/L**	1.705	3241	0.040
|	Zn	67		**ug/L**		1691	0.005
|	Zn	68		**ug/L**		2685	0.031
|>	Ge	74		**ug/L**		79079	79079.450
|	As	75	**19.788**	**ug/L**	5.642	5356	0.060
|	Se	77		**ug/L**		1996	0.002
|	Se	82	**20.136**	**ug/L**	1.590	389	0.005
⌊	Kr	83		**ug/L**		44	0.000
⌈	Sr	88	**22.727**	**ug/L**	1.429	53245	0.969
|	Y	89		**ug/L**		75	0.001
|	Zr	90	**21.985**	**ug/L**	1.668	29383	0.531
|	Mo	98	**2032.888**	**ug/L**	1.233	1321640	24.065
|	Ag	107	**20.552**	**ug/L**	3.302	23059	0.420
|	Cd	111	**21.080**	**ug/L**	2.532	5867	0.107
|	Cd	114		**ug/L**		14567	0.265
|>	In	115		**ug/L**		54922	54922.457
|	Sn	120	**21.115**	**ug/L**	0.527	25786	0.468
|	Sb	121	**21.814**	**ug/L**	1.551	25471	0.461
⌊	Sb	123		**ug/L**		19542	0.353
⌈	Ba	135		**ug/L**		6323	0.055
|	Ba	137	**20.972**	**ug/L**	2.106	10994	0.095
|	Ho	165		**ug/L**		256	0.002
|>	Lu	175		**ug/L**		115200	115200.468
|	Tl	205	**19.390**	**ug/L**	1.360	100696	0.870
|	Pb	208	**20.177**	**ug/L**	1.512	121724	1.056
|	Th	232	**21.271**	**ug/L**	0.838	153211	1.327
⌊	U	238	**22.037**	**ug/L**	1.090	164759	1.430

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9997
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	91.406				
	Be	9	95.031				
	B	11	99.230				
	Na	23	100.075				
	Mg	24	100.247				
	Al	27	93.753				
	P	31	99.500				
	K	39	96.096				
	Ca	43	97.852				
>	Sc	45			96.4		
	Ti	47	73.655				
	V	51	91.932				
	Cr	52	92.511				
	Cr	53					
	Mn	55	103.313				
	Fe	57	105.924				
	Co	59	101.884				
	Ni	60	98.904				
	Cu	63					
	Cu	65	98.276				
	Zn	66	93.493				
	Zn	67					
	Zn	68					
>	Ge	74			100.2		
	As	75	98.939				
	Se	77					
	Se	82	100.680				
	Kr	83					
	Sr	88	107.203				
	Y	89					
	Zr	90	109.927				
	Mo	98	101.644				
	Ag	107	102.762				
	Cd	111	103.335				
	Cd	114					
>	In	115			93.4		
	Sn	120	105.575				
	Sb	121	108.526				
	Sb	123					
	Ba	135					
	Ba	137	101.463				
	Ho	165					
>	Lu	175			98.0		
	Tl	205	96.949				
	Pb	208	99.885				
	Th	232	106.357				
	U	238	110.186				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 5	Ti	47ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 22, 2009 23:29:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\QC Std 6.484

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**51.984**	**ug/L**	1.192	1792	0.029
|	Be	9	**52.072**	**ug/L**	1.251	1585	0.026
|	B	11	**100.661**	**ug/L**	3.644	2200	0.035
|	Na	23	**4822.157**	**ug/L**	3.999	1323285	21.789
|	Mg	24	**5408.735**	**ug/L**	3.842	1007347	16.617
|	Al	27	**4911.081**	**ug/L**	8.126	1976860	32.606
|	P	31	**5085.536**	**ug/L**	0.374	165371	2.714
|	K	39	**5305.138**	**ug/L**	11.760	3582367	56.948
|	Ca	43	**5176.822**	**ug/L**	2.686	6835	0.112
|>	Sc	45		**ug/L**		60613	60613.257
|	Ti	47	**51.836**	**ug/L**	1.772	3597	0.058
|	V	51	**49.616**	**ug/L**	2.327	43534	0.687
|	Cr	52	**51.585**	**ug/L**	1.219	50115	0.809
|	Cr	53		**ug/L**		35327	0.059
|	Mn	55	**53.655**	**ug/L**	1.737	85701	1.410
|	Fe	57	**5116.815**	**ug/L**	2.701	157711	2.569
|	Co	59	**51.380**	**ug/L**	0.981	52965	0.872
|	Ni	60	**54.041**	**ug/L**	2.068	11093	0.181
|	Cu	63		**ug/L**		23701	0.389
⌊	Cu	65	**52.829**	**ug/L**	0.651	11257	0.184
⌈	Zn	66	**52.130**	**ug/L**	1.712	8105	0.096
|	Zn	67		**ug/L**		2558	0.014
|	Zn	68		**ug/L**		7037	0.081
|>	Ge	74		**ug/L**		84275	84275.387
|	As	75	**47.945**	**ug/L**	2.888	12853	0.144
|	Se	77		**ug/L**		2345	0.005
|	Se	82	**50.094**	**ug/L**	4.552	1024	0.012
⌊	Kr	83		**ug/L**		30	0.000
⌈	Sr	88	**51.696**	**ug/L**	1.139	134471	2.204
|	Y	89		**ug/L**		17	0.000
|	Zr	90	**38.180**	**ug/L**	10.667	56557	0.923
|	Mo	98	**49.908**	**ug/L**	1.058	36070	0.591
|	Ag	107	**50.777**	**ug/L**	1.048	63276	1.037
|	Cd	111	**51.598**	**ug/L**	1.822	15947	0.261
|	Cd	114		**ug/L**		37276	0.611
|>	In	115		**ug/L**		61011	61011.127
|	Sn	120	**50.988**	**ug/L**	1.403	69021	1.130
|	Sb	121	**49.311**	**ug/L**	3.361	63767	1.043
⌊	Sb	123		**ug/L**		48986	0.800
⌈	Ba	135		**ug/L**		16650	0.137
|	Ba	137	**52.973**	**ug/L**	1.649	29234	0.241
|	Ho	165		**ug/L**		19	0.000
|>	Lu	175		**ug/L**		121392	121392.161
|	Tl	205	**50.195**	**ug/L**	1.972	273817	2.252
|	Pb	208	**52.082**	**ug/L**	0.507	330878	2.725
|	Th	232	**53.104**	**ug/L**	1.611	402536	3.313
⌊	U	238	**54.449**	**ug/L**	2.108	428868	3.532

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9997
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	103.969				
	Be	9	104.144				
	B	11	100.661				
	Na	23	96.443				
	Mg	24	108.175				
	Al	27	97.249				
	P	31	101.711				
	K	39	106.103				
	Ca	43	103.536				
>	Sc	45			102.5		
	Ti	47	103.672				
	V	51	99.233				
	Cr	52	103.171				
	Cr	53					
	Mn	55	107.309				
	Fe	57	102.336				
	Co	59	102.760				
	Ni	60	108.083				
	Cu	63					
	Cu	65	105.658				
	Zn	66	104.260				
	Zn	67					
	Zn	68					
>	Ge	74			106.8		
	As	75	95.890				
	Se	77					
	Se	82	100.187				
	Kr	83					
	Sr	88	103.393				
	Y	89					
	Zr	90	76.360				
	Mo	98	99.816				
	Ag	107	101.553				
	Cd	111	103.195				
	Cd	114					
>	In	115			103.7		
	Sn	120	101.975				
	Sb	121	98.622				
	Sb	123					
	Ba	135					
	Ba	137	105.946				
	Ho	165					
>	Lu	175			103.2		
	Tl	205	100.391				
	Pb	208	104.165				
	Th	232	106.208				
	U	238	108.897				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Zr		90CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 22, 2009 23:35:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\QC Std 7.485

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.012**	**ug/L**	539.033	8	-0.000
	Be	9	**0.043**	**ug/L**	195.467	7	0.000
	B	11	**2.821**	**ug/L**	17.845	114	0.001
	Na	23	**-0.103**	**ug/L**	7467.739	2667	-0.000
	Mg	24	**0.000**	**ug/L**		0	0.000
	Al	27	**0.838**	**ug/L**	173.205	333	0.006
	P	31	**0.804**	**ug/L**	115.478	866	0.000
	K	39	**10.070**	**ug/L**	74.417	134632	0.108
	Ca	43	**-6.180**	**ug/L**	169.676	55	-0.000
>	Sc	45		**ug/L**		59701	59701.091
	Ti	47	**0.432**	**ug/L**	41.130	83	0.000
	V	51	**-0.048**	**ug/L**	654.521	1802	-0.001
	Cr	52	**-0.402**	**ug/L**	17.299	689	-0.006
	Cr	53		**ug/L**		29702	-0.026
	Mn	55	**-0.012**	**ug/L**	102.573	231	-0.000
	Fe	57	**-0.692**	**ug/L**	372.076	1959	-0.000
	Co	59	**0.012**	**ug/L**	30.100	151	0.000
	Ni	60	**-0.150**	**ug/L**	21.072	102	-0.001
	Cu	63		**ug/L**		149	-0.000
	Cu	65	**-0.102**	**ug/L**	31.616	99	-0.000
	Zn	66	**-0.026**	**ug/L**	128.811	37	-0.000
	Zn	67		**ug/L**		1227	-0.002
	Zn	68		**ug/L**		227	-0.000
>	Ge	74		**ug/L**		82052	82051.795
	As	75	**-0.106**	**ug/L**	433.101	639	-0.000
	Se	77		**ug/L**		1509	-0.005
	Se	82	**0.364**	**ug/L**	72.276	11	0.000
	Kr	83		**ug/L**		24	-0.000
	Sr	88	**0.001**	**ug/L**	588.849	43	0.000
	Y	89		**ug/L**		14	0.000
	Zr	90	**0.104**	**ug/L**	5.893	375	0.003
	Mo	98	**0.165**	**ug/L**	4.580	141	0.002
	Ag	107	**0.002**	**ug/L**	217.340	15	0.000
	Cd	111	**-0.003**	**ug/L**	63.659	2	-0.000
	Cd	114		**ug/L**		15	0.000
>	In	115		**ug/L**		59978	59978.214
	Sn	120	**0.161**	**ug/L**	25.954	309	0.004
	Sb	121	**0.400**	**ug/L**	14.390	658	0.008
	Sb	123		**ug/L**		537	0.007
	Ba	135		**ug/L**		12	0.000
	Ba	137	**-0.008**	**ug/L**	42.459	13	-0.000
	Ho	165		**ug/L**		12	-0.000
>	Lu	175		**ug/L**		119056	119056.275
	Tl	205	**0.138**	**ug/L**	25.113	1248	0.006
	Pb	208	**0.002**	**ug/L**	25.112	136	0.000
	Th	232	**0.222**	**ug/L**	12.216	1994	0.014
	U	238	**0.007**	**ug/L**	25.061	121	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9997
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			101.0		
	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			104.0		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			102.0		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			101.3		
	Tl	205					
	Pb	208					
	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#3 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Tuesday, December 22, 2009 23:40:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\QC Std 10.486

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**981.352**	**ug/L**	0.805	32257	0.556
|	Be	9	**954.518**	**ug/L**	2.021	27715	0.478
|	B	11	**2.121**	**ug/L**	31.511	96	0.001
|	Na	23	**45671.741**	**ug/L**	11.041	11965874	206.373
|	Mg	24	**53212.447**	**ug/L**	2.171	9482311	163.482
|	Al	27	**49477.773**	**ug/L**	8.386	19045081	328.498
|	P	31	**24161.955**	**ug/L**	2.501	748756	12.896
|	K	39	**48252.919**	**ug/L**	5.590	30211294	517.973
|	Ca	43	**48990.073**	**ug/L**	3.720	61359	1.057
|>	Sc	45		**ug/L**		58025	58024.910
|	Ti	47	**35.150**	**ug/L**	3.267	2351	0.040
|	V	51	**963.712**	**ug/L**	2.370	776438	13.353
|	Cr	52	**961.403**	**ug/L**	3.265	875528	15.077
|	Cr	53		**ug/L**		135209	1.808
|	Mn	55	**987.675**	**ug/L**	2.110	1505626	25.951
|	Fe	57	**48935.394**	**ug/L**	3.196	1426735	24.568
|	Co	59	**961.751**	**ug/L**	2.925	946295	16.313
|	Ni	60	**1021.825**	**ug/L**	3.439	198369	3.418
|	Cu	63		**ug/L**		426355	7.348
⌊	Cu	65	**987.010**	**ug/L**	1.820	199207	3.432
⌈	Zn	66	**2339.447**	**ug/L**	0.568	352880	4.293
|	Zn	67		**ug/L**		58078	0.690
|	Zn	68		**ug/L**		285884	3.476
|>	Ge	74		**ug/L**		82188	82187.574
|	As	75	**920.826**	**ug/L**	1.240	228642	2.774
|	Se	77		**ug/L**		9172	0.088
|	Se	82	**490.205**	**ug/L**	2.005	9739	0.118
⌊	Kr	83		**ug/L**		44	0.000
⌈	Sr	88	**1032.654**	**ug/L**	1.196	2574896	44.018
|	Y	89		**ug/L**		84	0.001
|	Zr	90	**469.562**	**ug/L**	0.324	663980	11.348
|	Mo	98	**998.475**	**ug/L**	1.227	691370	11.820
|	Ag	107	**252.451**	**ug/L**	0.544	301594	5.156
|	Cd	111	**1017.148**	**ug/L**	1.298	301368	5.152
|	Cd	114		**ug/L**		691375	11.820
|>	In	115		**ug/L**		58494	58493.804
|	Sn	120	**973.933**	**ug/L**	0.758	1262452	21.582
|	Sb	121	**246.642**	**ug/L**	2.698	305234	5.215
⌊	Sb	123		**ug/L**		235130	4.017
⌈	Ba	135		**ug/L**		318835	2.603
|	Ba	137	**991.832**	**ug/L**	2.760	551910	4.507
|	Ho	165		**ug/L**		102	0.001
|>	Lu	175		**ug/L**		122487	122487.119
|	Tl	205	**500.568**	**ug/L**	0.971	2750634	22.453
|	Pb	208	**5200.648**	**ug/L**	0.399	33326206	272.078
|	Th	232	**2640.825**	**ug/L**	1.383	20180468	164.746
⌊	U	238	**5540.545**	**ug/L**	0.927	44028980	359.445

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9997
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7	98.135				
|	Be	9	95.452				
|	B	11					
|	Na	23	91.343				
|	Mg	24	106.425				
|	Al	27	98.956				
|	P	31	96.648				
|	K	39	96.506				
|	Ca	43	97.980				
|>	Sc	45			98.2		
|	Ti	47					
|	V	51	96.371				
|	Cr	52	96.140				
|	Cr	53					
|	Mn	55	98.767				
|	Fe	57	97.871				
|	Co	59	96.175				
|	Ni	60	102.182				
|	Cu	63					
⌊	Cu	65	98.701				
⌈	Zn	66	93.578				
|	Zn	67					
|	Zn	68					
|>	Ge	74			104.1		
|	As	75	92.083				
|	Se	77					
|	Se	82	98.041				
⌊	Kr	83					
⌈	Sr	88	103.265				
|	Y	89					
|	Zr	90	93.912				
|	Mo	98	99.847				
|	Ag	107	100.980				
|	Cd	111	101.715				
|	Cd	114					
|>	In	115			99.5		
|	Sn	120	97.393				
|	Sb	121	98.657				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	99.183				
|	Ho	165					
|>	Lu	175			104.2		
|	Tl	205	100.114				
|	Pb	208	104.013				
|	Th	232	105.633				
⌊	U	238	110.811				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 10	U	238LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Tuesday, December 22, 2009 23:46:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\QC Std 11.487

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.823**	**ug/L**	4.195	1794	0.029
	Be	9	**48.841**	**ug/L**	2.897	1523	0.024
	B	11	**98.012**	**ug/L**	4.639	2194	0.034
	Na	23	**4998.432**	**ug/L**	5.727	1403807	22.586
	Mg	24	**5479.404**	**ug/L**	4.731	1044924	16.834
	Al	27	**4600.603**	**ug/L**	6.225	1894639	30.545
	P	31	**4976.408**	**ug/L**	2.541	165691	2.656
	K	39	**5410.258**	**ug/L**	5.659	3735364	58.077
	Ca	43	**4805.320**	**ug/L**	3.109	6500	0.104
>	Sc	45		**ug/L**		62077	62076.916
	Ti	47	**49.873**	**ug/L**	2.275	3545	0.056
	V	51	**49.618**	**ug/L**	4.519	44562	0.687
	Cr	52	**50.485**	**ug/L**	4.275	50224	0.792
	Cr	53		**ug/L**		35425	0.046
	Mn	55	**52.793**	**ug/L**	4.900	86305	1.387
	Fe	57	**5066.404**	**ug/L**	3.220	159878	2.544
	Co	59	**50.326**	**ug/L**	3.847	53105	0.854
	Ni	60	**52.243**	**ug/L**	3.467	10981	0.175
	Cu	63		**ug/L**		23545	0.377
	Cu	65	**52.024**	**ug/L**	3.619	11349	0.181
	Zn	66	**51.728**	**ug/L**	1.205	8076	0.095
	Zn	67		**ug/L**		2611	0.014
	Zn	68		**ug/L**		6959	0.079
>	Ge	74		**ug/L**		84633	84633.146
	As	75	**48.665**	**ug/L**	2.828	13095	0.147
	Se	77		**ug/L**		2303	0.004
	Se	82	**49.123**	**ug/L**	2.964	1009	0.012
	Kr	83		**ug/L**		32	0.000
	Sr	88	**51.630**	**ug/L**	1.390	134388	2.201
	Y	89		**ug/L**		19	0.000
	Zr	90	**55.605**	**ug/L**	6.185	82219	1.344
	Mo	98	**50.757**	**ug/L**	0.741	36702	0.601
	Ag	107	**50.901**	**ug/L**	1.138	63468	1.040
	Cd	111	**51.453**	**ug/L**	2.374	15910	0.261
	Cd	114		**ug/L**		37553	0.615
>	In	115		**ug/L**		61044	61044.207
	Sn	120	**53.534**	**ug/L**	2.482	72510	1.186
	Sb	121	**51.757**	**ug/L**	1.130	66962	1.094
	Sb	123		**ug/L**		51762	0.846
	Ba	135		**ug/L**		16693	0.135
	Ba	137	**51.773**	**ug/L**	2.744	29033	0.235
	Ho	165		**ug/L**		16	0.000
>	Lu	175		**ug/L**		123358	123358.248
	Tl	205	**50.350**	**ug/L**	0.827	279138	2.258
	Pb	208	**51.377**	**ug/L**	1.127	331680	2.688
	Th	232	**53.276**	**ug/L**	1.015	410351	3.324
	U	238	**53.418**	**ug/L**	1.677	427558	3.466

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9997
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7	101.647				
|	Be	9	97.683				
|	B	11	98.012				
|	Na	23	99.969				
|	Mg	24	109.588				
|	Al	27	91.101				
|	P	31	99.528				
|	K	39	108.205				
|	Ca	43	96.106				
|>	Sc	45			105.0		
|	Ti	47	99.745				
|	V	51	99.235				
|	Cr	52	100.970				
|	Cr	53					
|	Mn	55	105.586				
|	Fe	57	101.328				
|	Co	59	100.653				
|	Ni	60	104.486				
|	Cu	63					
⌊	Cu	65	104.047				
⌈	Zn	66	103.456				
|	Zn	67					
|	Zn	68					
|>	Ge	74			107.2		
|	As	75	97.330				
|	Se	77					
|	Se	82	98.246				
⌊	Kr	83					
⌈	Sr	88	103.260				
|	Y	89					
|	Zr	90	111.211				
|	Mo	98	101.514				
|	Ag	107	101.803				
|	Cd	111	102.905				
|	Cd	114					
|>	In	115			103.8		
|	Sn	120	107.067				
|	Sb	121	103.514				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	103.546				
|	Ho	165					
|>	Lu	175			104.9		
|	Tl	205	100.700				
|	Pb	208	102.754				
|	Th	232	106.551				
⌊	U	238	106.836				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 11	Zr	90CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Tuesday, December 22, 2009 23:52:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\QC Std 12.488

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**-0.023**	**ug/L**	286.202	7	-0.000
|	Be	9	**-0.047**	**ug/L**	71.063	4	-0.000
|	B	11	**2.154**	**ug/L**	43.201	100	0.001
|	Na	23	**-2.543**	**ug/L**	151.510	2000	-0.011
|	Mg	24	**3.648**	**ug/L**	86.643	667	0.011
|	Al	27	**4.177**	**ug/L**	33.179	1667	0.028
|	P	31	**1.058**	**ug/L**	71.512	876	0.001
|	K	39	**19.261**	**ug/L**	122.988	141033	0.207
|	Ca	43	**5.670**	**ug/L**	323.413	70	0.000
|>	Sc	45		**ug/L**		59836	59836.349
|	Ti	47	**0.187**	**ug/L**	18.793	67	0.000
|	V	51	**-1.144**	**ug/L**	137.726	880	-0.016
|	Cr	52	**-0.365**	**ug/L**	5.352	726	-0.006
|	Cr	53		**ug/L**		29580	-0.030
|	Mn	55	**0.018**	**ug/L**	93.542	278	0.000
|	Fe	57	**0.095**	**ug/L**	3507.283	1986	0.000
|	Co	59	**0.063**	**ug/L**	43.818	204	0.001
|	Ni	60	**-0.140**	**ug/L**	13.104	105	-0.000
|	Cu	63		**ug/L**		188	0.001
⌊	Cu	65	**0.010**	**ug/L**	227.641	123	0.000
⌈	Zn	66	**-0.023**	**ug/L**	125.159	38	-0.000
|	Zn	67		**ug/L**		1220	-0.002
|	Zn	68		**ug/L**		231	-0.000
|>	Ge	74		**ug/L**		82564	82564.097
|	As	75	**0.032**	**ug/L**	952.330	678	0.000
|	Se	77		**ug/L**		1526	-0.005
|	Se	82	**-0.218**	**ug/L**	254.254	0	-0.000
⌊	Kr	83		**ug/L**		32	0.000
⌈	Sr	88	**0.007**	**ug/L**	49.324	58	0.000
|	Y	89		**ug/L**		10	-0.000
|	Zr	90	**0.249**	**ug/L**	10.571	584	0.006
|	Mo	98	**0.233**	**ug/L**	5.767	189	0.003
|	Ag	107	**0.005**	**ug/L**	70.325	19	0.000
|	Cd	111	**0.012**	**ug/L**	43.983	7	0.000
|	Cd	114		**ug/L**		9	-0.000
|>	In	115		**ug/L**		59950	59949.943
|	Sn	120	**0.976**	**ug/L**	9.020	1391	0.022
|	Sb	121	**1.019**	**ug/L**	6.568	1442	0.022
⌊	Sb	123		**ug/L**		1090	0.016
⌈	Ba	135		**ug/L**		10	-0.000
|	Ba	137	**0.007**	**ug/L**	78.423	22	0.000
|	Ho	165		**ug/L**		13	0.000
|>	Lu	175		**ug/L**		119411	119410.507
|	Tl	205	**0.293**	**ug/L**	13.351	2079	0.013
|	Pb	208	**0.030**	**ug/L**	32.862	313	0.002
|	Th	232	**0.318**	**ug/L**	9.193	2714	0.020
⌊	U	238	**0.067**	**ug/L**	11.461	591	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9997
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			101.2		
	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			104.6		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			101.9		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			101.6		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202001514
Sample Date/Time: Tuesday, December 22, 2009 23:58:06
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 935396|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\1202001514.489

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**0.114**	**ug/L**	54.149	12	0.000
|	Be	9	**0.070**	**ug/L**	196.338	8	0.000
|	B	11	**0.746**	**ug/L**	71.946	73	0.000
|	Na	23	**3.201**	**ug/L**	70.021	3667	0.014
|	Mg	24	**0.000**	**ug/L**		0	0.000
|	Al	27	**1.640**	**ug/L**	86.659	667	0.011
|	P	31	**1.545**	**ug/L**	54.476	918	0.001
|	K	39	**-1.974**	**ug/L**	577.887	130931	-0.021
|	Ca	43	**22.014**	**ug/L**	31.860	94	0.000
|>	Sc	45		**ug/L**		61649	61649.066
|	Ti	47	**0.374**	**ug/L**	49.852	82	0.000
|	V	51	**-3.185**	**ug/L**	63.960	-794	-0.044
|	Cr	52	**0.862**	**ug/L**	8.007	1932	0.014
|	Cr	53		**ug/L**		62301	0.486
|	Mn	55	**0.199**	**ug/L**	3.057	580	0.005
|	Fe	57	**10.424**	**ug/L**	17.044	2366	0.005
|	Co	59	**0.055**	**ug/L**	15.313	201	0.001
|	Ni	60	**0.068**	**ug/L**	15.701	151	0.000
|	Cu	63		**ug/L**		228	0.001
⌊	Cu	65	**0.153**	**ug/L**	28.862	157	0.001
⌈	Zn	66	**1.167**	**ug/L**	10.088	224	0.002
|	Zn	67		**ug/L**		3084	0.020
|	Zn	68		**ug/L**		546	0.004
|>	Ge	74		**ug/L**		84703	84702.904
|	As	75	**3.493**	**ug/L**	17.397	1578	0.011
|	Se	77		**ug/L**		4483	0.030
|	Se	82	**0.165**	**ug/L**	105.118	8	0.000
⌊	Kr	83		**ug/L**		28	-0.000
⌈	Sr	88	**0.031**	**ug/L**	14.592	120	0.001
|	Y	89		**ug/L**		15	0.000
|	Zr	90	**1.873**	**ug/L**	4.121	2913	0.045
|	Mo	98	**0.120**	**ug/L**	13.948	108	0.001
|	Ag	107	**0.006**	**ug/L**	19.464	19	0.000
|	Cd	111	**-0.004**	**ug/L**	884.352	2	-0.000
|	Cd	114		**ug/L**		6	-0.000
|>	In	115		**ug/L**		59443	59442.569
|	Sn	120	**2.091**	**ug/L**	30.861	2853	0.046
|	Sb	121	**0.641**	**ug/L**	9.617	955	0.014
⌊	Sb	123		**ug/L**		721	0.010
⌈	Ba	135		**ug/L**		32	0.000
|	Ba	137	**0.086**	**ug/L**	8.504	63	0.000
|	Ho	165		**ug/L**		16	0.000
|>	Lu	175		**ug/L**		117590	117589.829
|	Tl	205	**0.083**	**ug/L**	4.110	941	0.004
|	Pb	208	**0.012**	**ug/L**	32.060	194	0.001
|	Th	232	**0.310**	**ug/L**	14.192	2613	0.019
⌊	U	238	**0.021**	**ug/L**	7.456	232	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	0.9997
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45			104.3		
|	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			107.3		
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115			101.1		
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175			100.0		
|	Tl	205					
|	Pb	208					
|	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#3 - Summary Report

Sample ID: 1202001515
Sample Date/Time: Wednesday, December 23, 2009 00:03:52
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 935396|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\1202001515.490

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.157**	**ug/L**	3.097	1808	0.029
	Be	9	**53.580**	**ug/L**	3.635	1671	0.027
	B	11	**105.844**	**ug/L**	4.252	2368	0.037
	Na	23	**1874.570**	**ug/L**	8.958	529000	8.470
	Mg	24	**2429.634**	**ug/L**	13.566	463836	7.464
	Al	27	**1905.208**	**ug/L**	1.269	785695	12.649
	P	31	**2090.665**	**ug/L**	3.102	70182	1.116
	K	39	**1954.631**	**ug/L**	3.190	1436848	20.982
	Ca	43	**2036.528**	**ug/L**	2.194	2795	0.044
>	Sc	45		**ug/L**		62117	62117.046
	Ti	47	**46.410**	**ug/L**	2.390	3306	0.052
	V	51	**49.965**	**ug/L**	5.720	44910	0.692
	Cr	52	**53.231**	**ug/L**	3.359	52960	0.835
	Cr	53		**ug/L**		73047	0.652
	Mn	55	**54.039**	**ug/L**	1.265	88455	1.420
	Fe	57	**2095.679**	**ug/L**	1.898	67412	1.052
	Co	59	**52.159**	**ug/L**	3.081	55099	0.885
	Ni	60	**53.591**	**ug/L**	2.038	11275	0.179
	Cu	63		**ug/L**		24645	0.394
	Cu	65	**52.491**	**ug/L**	0.470	11463	0.183
	Zn	66	**50.234**	**ug/L**	2.121	8122	0.092
	Zn	67		**ug/L**		4777	0.038
	Zn	68		**ug/L**		7190	0.079
>	Ge	74		**ug/L**		87648	87647.979
	As	75	**53.399**	**ug/L**	1.014	14808	0.161
	Se	77		**ug/L**		5568	0.040
	Se	82	**50.832**	**ug/L**	2.132	1081	0.012
	Kr	83		**ug/L**		33	0.000
	Sr	88	**51.482**	**ug/L**	2.807	132105	2.194
	Y	89		**ug/L**		20	0.000
	Zr	90	**53.192**	**ug/L**	2.620	77592	1.285
	Mo	98	**50.771**	**ug/L**	2.038	36202	0.601
	Ag	107	**51.848**	**ug/L**	1.891	63746	1.059
	Cd	111	**51.030**	**ug/L**	1.955	15562	0.258
	Cd	114		**ug/L**		36554	0.607
>	In	115		**ug/L**		60203	60203.498
	Sn	120	**51.637**	**ug/L**	2.311	68970	1.144
	Sb	121	**52.658**	**ug/L**	1.265	67180	1.113
	Sb	123		**ug/L**		51036	0.846
	Ba	135		**ug/L**		16112	0.133
	Ba	137	**50.291**	**ug/L**	2.937	27740	0.229
	Ho	165		**ug/L**		19	0.000
>	Lu	175		**ug/L**		121365	121365.422
	Tl	205	**48.514**	**ug/L**	2.296	264533	2.176
	Pb	208	**51.530**	**ug/L**	1.823	327276	2.696
	Th	232	**51.769**	**ug/L**	2.130	392241	3.230
	U	238	**54.227**	**ug/L**	2.244	426886	3.518

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9997
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45			105.1		
|	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			111.1		
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115			102.4		
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175			103.2		
|	Tl	205					
|	Pb	208					
|	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#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, December 23, 2009 00:38:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\QC Std 6.496

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**50.514**	**ug/L**	2.022	1790	0.029
|	Be	9	**52.413**	**ug/L**	0.756	1639	0.026
|	B	11	**97.405**	**ug/L**	2.699	2190	0.034
|	Na	23	**5142.592**	**ug/L**	5.329	1448984	23.237
|	Mg	24	**5888.847**	**ug/L**	8.885	1125442	18.092
|	Al	27	**4421.793**	**ug/L**	1.822	1827914	29.358
|	P	31	**5002.152**	**ug/L**	1.682	167109	2.670
|	K	39	**4693.312**	**ug/L**	4.472	3270776	50.381
|	Ca	43	**4885.011**	**ug/L**	1.226	6630	0.105
|>	Sc	45		**ug/L**		62278	62278.111
|	Ti	47	**49.524**	**ug/L**	1.898	3533	0.056
|	V	51	**50.109**	**ug/L**	3.638	45152	0.694
|	Cr	52	**50.831**	**ug/L**	0.778	50753	0.797
|	Cr	53		**ug/L**		41767	0.147
|	Mn	55	**51.212**	**ug/L**	1.014	84059	1.346
|	Fe	57	**4812.000**	**ug/L**	0.733	152507	2.416
|	Co	59	**48.149**	**ug/L**	1.770	50997	0.817
|	Ni	60	**50.545**	**ug/L**	0.809	10669	0.169
|	Cu	63		**ug/L**		22886	0.365
⌊	Cu	65	**49.464**	**ug/L**	2.731	10834	0.172
⌈	Zn	66	**51.206**	**ug/L**	1.927	7932	0.094
|	Zn	67		**ug/L**		2940	0.018
|	Zn	68		**ug/L**		7039	0.081
|>	Ge	74		**ug/L**		83972	83971.606
|	As	75	**47.079**	**ug/L**	5.078	12589	0.142
|	Se	77		**ug/L**		2875	0.011
|	Se	82	**50.906**	**ug/L**	1.956	1037	0.012
⌊	Kr	83		**ug/L**		32	0.000
⌈	Sr	88	**51.651**	**ug/L**	0.640	131614	2.202
|	Y	89		**ug/L**		17	0.000
|	Zr	90	**42.612**	**ug/L**	7.932	61795	1.030
|	Mo	98	**50.471**	**ug/L**	1.614	35725	0.597
|	Ag	107	**49.870**	**ug/L**	1.877	60868	1.018
|	Cd	111	**51.356**	**ug/L**	2.608	15548	0.260
|	Cd	114		**ug/L**		36435	0.609
|>	In	115		**ug/L**		59759	59759.116
|	Sn	120	**50.556**	**ug/L**	2.564	67031	1.120
|	Sb	121	**48.412**	**ug/L**	3.383	61328	1.024
⌊	Sb	123		**ug/L**		47549	0.793
⌈	Ba	135		**ug/L**		16219	0.133
|	Ba	137	**50.958**	**ug/L**	2.519	28289	0.232
|	Ho	165		**ug/L**		24	0.000
|>	Lu	175		**ug/L**		122119	122119.395
|	Tl	205	**49.214**	**ug/L**	0.203	270107	2.208
|	Pb	208	**51.902**	**ug/L**	1.907	331670	2.715
|	Th	232	**53.447**	**ug/L**	1.015	407570	3.334
⌊	U	238	**54.404**	**ug/L**	0.829	431077	3.529

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9997
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7	101.028				
|	Be	9	104.825				
|	B	11	97.405				
|	Na	23	102.852				
|	Mg	24	117.777				
|	Al	27	87.560				
|	P	31	100.043				
|	K	39	93.866				
|	Ca	43	97.700				
|>	Sc	45			105.4		
|	Ti	47	99.048				
|	V	51	100.219				
|	Cr	52	101.663				
|	Cr	53					
|	Mn	55	102.424				
|	Fe	57	96.240				
|	Co	59	96.299				
|	Ni	60	101.090				
|	Cu	63					
⌊	Cu	65	98.927				
⌈	Zn	66	102.412				
|	Zn	67					
|	Zn	68					
|>	Ge	74			106.4		
|	As	75	94.158				
|	Se	77					
|	Se	82	101.812				
⌊	Kr	83					
⌈	Sr	88	103.302				
|	Y	89					
|	Zr	90	85.223				
|	Mo	98	100.943				
|	Ag	107	99.741				
|	Cd	111	102.712				
|	Cd	114					
|>	In	115			101.6		
|	Sn	120	101.113				
|	Sb	121	96.823				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	101.917				
|	Ho	165					
|>	Lu	175			103.9		
|	Tl	205	98.429				
|	Pb	208	103.804				
|	Th	232	106.894				
⌊	U	238	108.808				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Mg	24CCV is out of limits (+/- 10%)
QC Std 6	Al	27CCV is out of limits (+/- 10%)
QC Std 6	Zr	90CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, December 23, 2009 00:44:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\QC Std 7.497

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.025	ug/L	438.773	7	-0.000
	Be	9	0.082	ug/L	78.029	8	0.000
	B	11	2.676	ug/L	29.303	113	0.001
	Na	23	2.121	ug/L	259.634	3334	0.010
	Mg	24	1.765	ug/L	173.205	333	0.005
	Al	27	0.817	ug/L	173.205	333	0.005
	P	31	-1.077	ug/L	62.264	821	-0.001
	K	39	-20.224	ug/L	85.572	117485	-0.217
	Ca	43	-2.815	ug/L	459.676	60	-0.000
>	Sc	45		ug/L		60842	60842.239
	Ti	47	0.060	ug/L	170.094	59	0.000
	V	51	0.183	ug/L	346.217	2026	0.003
	Cr	52	0.061	ug/L	108.782	1145	0.001
	Cr	53		ug/L		32820	0.015
	Mn	55	0.004	ug/L	178.198	261	0.000
	Fe	57	-2.505	ug/L	120.133	1941	-0.001
	Co	59	0.011	ug/L	167.992	153	0.000
	Ni	60	-0.137	ug/L	11.040	107	-0.000
	Cu	63		ug/L		170	0.000
	Cu	65	-0.127	ug/L	11.916	96	-0.000
	Zn	66	0.049	ug/L	105.648	49	0.000
	Zn	67		ug/L		1379	0.000
	Zn	68		ug/L		233	0.000
>	Ge	74		ug/L		81951	81951.248
	As	75	0.004	ug/L	6742.396	665	0.000
	Se	77		ug/L		1892	-0.000
	Se	82	0.080	ug/L	616.646	6	0.000
	Kr	83		ug/L		26	-0.000
	Sr	88	0.005	ug/L	33.010	53	0.000
	Y	89		ug/L		14	0.000
	Zr	90	0.146	ug/L	14.337	425	0.004
	Mo	98	0.081	ug/L	24.865	80	0.001
	Ag	107	0.005	ug/L	62.642	18	0.000
	Cd	111	0.007	ug/L	301.192	5	0.000
	Cd	114		ug/L		9	-0.000
>	In	115		ug/L		58552	58552.477
	Sn	120	0.174	ug/L	15.086	318	0.004
	Sb	121	0.428	ug/L	10.019	676	0.009
	Sb	123		ug/L		525	0.007
	Ba	135		ug/L		6	-0.000
	Ba	137	-0.006	ug/L	96.802	14	-0.000
	Ho	165		ug/L		12	-0.000
>	Lu	175		ug/L		118171	118170.937
	Tl	205	0.118	ug/L	36.481	1130	0.005
	Pb	208	0.007	ug/L	24.352	168	0.000
	Th	232	0.165	ug/L	18.109	1555	0.010
	U	238	0.014	ug/L	27.747	174	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9997
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.9			
	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		103.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.5			
	Tl	205					
	Pb	208					
	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#3 - Summary Report

Sample ID: 243272001
Sample Date/Time: Wednesday, December 23, 2009 01:18:52
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 935396|1|ba|
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\243272001.503

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.195**	**ug/L**	68.753	15	0.000
	Be	9	**0.043**	**ug/L**	191.387	7	0.000
	B	11	**22.083**	**ug/L**	9.929	541	0.008
	Na	23	**165.312**	**ug/L**	7.032	49419	0.747
	Mg	24	**1.727**	**ug/L**	173.205	333	0.005
	Al	27	**8.012**	**ug/L**	44.701	3334	0.053
	P	31	**3.142**	**ug/L**	72.100	983	0.002
	K	39	**101.360**	**ug/L**	33.606	202100	1.088
	Ca	43	**44.516**	**ug/L**	21.392	125	0.001
>	Sc	45		**ug/L**		62431	62431.097
	Ti	47	**0.976**	**ug/L**	14.460	125	0.001
	V	51	**-0.959**	**ug/L**	266.331	1082	-0.013
	Cr	52	**2.287**	**ug/L**	3.389	3353	0.036
	Cr	53		**ug/L**		71652	0.623
	Mn	55	**0.310**	**ug/L**	2.349	770	0.008
	Fe	57	**12.794**	**ug/L**	19.072	2471	0.006
	Co	59	**0.016**	**ug/L**	81.220	162	0.000
	Ni	60	**0.199**	**ug/L**	59.018	180	0.001
	Cu	63		**ug/L**		579	0.007
	Cu	65	**0.852**	**ug/L**	4.868	311	0.003
	Zn	66	**1.734**	**ug/L**	6.892	307	0.003
	Zn	67		**ug/L**		3627	0.027
	Zn	68		**ug/L**		641	0.005
>	Ge	74		**ug/L**		83402	83401.588
	As	75	**5.348**	**ug/L**	20.877	2021	0.016
	Se	77		**ug/L**		5588	0.044
	Se	82	**0.151**	**ug/L**	184.771	7	0.000
	Kr	83		**ug/L**		31	0.000
	Sr	88	**0.293**	**ug/L**	4.014	756	0.012
	Y	89		**ug/L**		27	0.000
	Zr	90	**0.142**	**ug/L**	14.444	411	0.003
	Mo	98	**-0.001**	**ug/L**	426.401	23	-0.000
	Ag	107	**0.007**	**ug/L**	77.874	21	0.000
	Cd	111	**0.018**	**ug/L**	52.669	8	0.000
	Cd	114		**ug/L**		11	0.000
>	In	115		**ug/L**		57453	57452.523
	Sn	120	**0.128**	**ug/L**	6.988	253	0.003
	Sb	121	**-0.020**	**ug/L**	61.742	120	-0.000
	Sb	123		**ug/L**		106	-0.000
	Ba	135		**ug/L**		63	0.000
	Ba	137	**0.181**	**ug/L**	13.514	115	0.001
	Ho	165		**ug/L**		11	-0.000
>	Lu	175		**ug/L**		118659	118659.393
	Tl	205	**-0.060**	**ug/L**	7.600	187	-0.003
	Pb	208	**0.064**	**ug/L**	6.861	520	0.003
	Th	232	**-0.018**	**ug/L**	6.911	211	-0.001
	U	238	**-0.003**	**ug/L**	29.581	45	-0.000

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	0.9997
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			105.6		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			105.7		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			97.7		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			100.9		
	Tl	205					
	Pb	208					
	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#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, December 23, 2009 01:30:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\QC Std 6.505

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.287**	**ug/L**	4.381	1768	0.029
	Be	9	**52.859**	**ug/L**	4.579	1609	0.026
	B	11	**100.623**	**ug/L**	3.614	2199	0.035
	Na	23	**5009.459**	**ug/L**	12.148	1374671	22.636
	Mg	24	**5564.209**	**ug/L**	9.420	1035749	17.095
	Al	27	**4839.547**	**ug/L**	7.582	1948488	32.131
	P	31	**5032.624**	**ug/L**	1.540	163655	2.686
	K	39	**4823.967**	**ug/L**	2.716	3268910	51.783
	Ca	43	**4968.039**	**ug/L**	1.481	6560	0.107
>	Sc	45		**ug/L**		60606	60605.903
	Ti	47	**50.101**	**ug/L**	1.708	3478	0.056
	V	51	**51.030**	**ug/L**	0.796	44722	0.707
	Cr	52	**50.562**	**ug/L**	2.171	49138	0.793
	Cr	53		**ug/L**		42100	0.171
	Mn	55	**52.262**	**ug/L**	2.282	83470	1.373
	Fe	57	**5021.131**	**ug/L**	1.796	154799	2.521
	Co	59	**49.613**	**ug/L**	1.534	51149	0.842
	Ni	60	**51.245**	**ug/L**	0.645	10524	0.171
	Cu	63		**ug/L**		23172	0.380
	Cu	65	**50.745**	**ug/L**	3.851	10816	0.176
	Zn	66	**51.310**	**ug/L**	1.761	7902	0.094
	Zn	67		**ug/L**		2845	0.018
	Zn	68		**ug/L**		7071	0.082
>	Ge	74		**ug/L**		83472	83472.330
	As	75	**48.278**	**ug/L**	2.842	12816	0.145
	Se	77		**ug/L**		2812	0.011
	Se	82	**48.884**	**ug/L**	1.115	990	0.012
	Kr	83		**ug/L**		33	0.000
	Sr	88	**51.284**	**ug/L**	2.734	130172	2.186
	Y	89		**ug/L**		18	0.000
	Zr	90	**40.931**	**ug/L**	9.561	59143	0.989
	Mo	98	**50.239**	**ug/L**	2.213	35429	0.595
	Ag	107	**50.156**	**ug/L**	1.653	61012	1.024
	Cd	111	**51.170**	**ug/L**	2.078	15434	0.259
	Cd	114		**ug/L**		36482	0.613
>	In	115		**ug/L**		59544	59544.205
	Sn	120	**50.484**	**ug/L**	1.211	66700	1.119
	Sb	121	**49.433**	**ug/L**	1.596	62382	1.045
	Sb	123		**ug/L**		47782	0.800
	Ba	135		**ug/L**		15864	0.130
	Ba	137	**50.335**	**ug/L**	1.674	27875	0.229
	Ho	165		**ug/L**		21	0.000
>	Lu	175		**ug/L**		121830	121829.650
	Tl	205	**46.733**	**ug/L**	0.923	255924	2.096
	Pb	208	**52.075**	**ug/L**	1.421	331974	2.724
	Th	232	**52.754**	**ug/L**	1.279	401256	3.291
	U	238	**54.418**	**ug/L**	2.479	430050	3.530

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9997
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	102.575				
	Be	9	105.718				
	B	11	100.623				
	Na	23	100.189				
	Mg	24	111.284				
	Al	27	95.833				
	P	31	100.652				
	K	39	96.479				
	Ca	43	99.361				
>	Sc	45			102.5		
	Ti	47	100.203				
	V	51	102.061				
	Cr	52	101.124				
	Cr	53					
	Mn	55	104.525				
	Fe	57	100.423				
	Co	59	99.226				
	Ni	60	102.490				
	Cu	63					
	Cu	65	101.491				
	Zn	66	102.620				
	Zn	67					
	Zn	68					
>	Ge	74			105.8		
	As	75	96.556				
	Se	77					
	Se	82	97.769				
	Kr	83					
	Sr	88	102.568				
	Y	89					
	Zr	90	81.863				
	Mo	98	100.478				
	Ag	107	100.313				
	Cd	111	102.340				
	Cd	114					
>	In	115			101.2		
	Sn	120	100.969				
	Sb	121	98.867				
	Sb	123					
	Ba	135					
	Ba	137	100.671				
	Ho	165					
>	Lu	175			103.6		
	Tl	205	93.467				
	Pb	208	104.150				
	Th	232	105.508				
	U	238	108.837				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Mg	24CCV is out of limits (+/- 10%)
QC Std 6	Zr	90CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, December 23, 2009 01:36:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\QC Std 7.506

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.051**	**ug/L**	68.469	6	-0.000
	Be	9	**0.021**	**ug/L**	158.988	6	0.000
	B	11	**1.821**	**ug/L**	42.532	93	0.001
	Na	23	**6.053**	**ug/L**	125.964	4334	0.027
	Mg	24	**0.000**	**ug/L**		0	0.000
	Al	27	**0.000**	**ug/L**		0	0.000
	P	31	**-0.524**	**ug/L**	140.644	823	-0.000
	K	39	**-11.876**	**ug/L**	136.104	120509	-0.127
	Ca	43	**10.986**	**ug/L**	105.018	77	0.000
>	Sc	45		**ug/L**		59663	59662.594
	Ti	47	**0.538**	**ug/L**	32.373	90	0.001
	V	51	**-0.080**	**ug/L**	198.538	1774	-0.001
	Cr	52	**0.022**	**ug/L**	174.229	1085	0.000
	Cr	53		**ug/L**		32543	0.021
	Mn	55	**0.009**	**ug/L**	138.907	264	0.000
	Fe	57	**-1.765**	**ug/L**	145.002	1925	-0.001
	Co	59	**-0.002**	**ug/L**	620.862	137	-0.000
	Ni	60	**0.001**	**ug/L**	12408.639	132	0.000
	Cu	63		**ug/L**		179	0.000
	Cu	65	**-0.090**	**ug/L**	20.228	101	-0.000
	Zn	66	**0.055**	**ug/L**	37.863	48	0.000
	Zn	67		**ug/L**		1384	0.001
	Zn	68		**ug/L**		240	0.000
>	Ge	74		**ug/L**		79978	79978.387
	As	75	**0.183**	**ug/L**	655.351	693	0.001
	Se	77		**ug/L**		1917	0.001
	Se	82	**0.223**	**ug/L**	275.493	8	0.000
	Kr	83		**ug/L**		25	-0.000
	Sr	88	**0.004**	**ug/L**	13.479	50	0.000
	Y	89		**ug/L**		14	0.000
	Zr	90	**0.138**	**ug/L**	4.878	409	0.003
	Mo	98	**0.066**	**ug/L**	33.113	69	0.001
	Ag	107	**0.004**	**ug/L**	70.943	17	0.000
	Cd	111	**0.013**	**ug/L**	75.127	7	0.000
	Cd	114		**ug/L**		6	-0.000
>	In	115		**ug/L**		57936	57936.266
	Sn	120	**0.138**	**ug/L**	11.688	269	0.003
	Sb	121	**0.394**	**ug/L**	12.009	628	0.008
	Sb	123		**ug/L**		490	0.006
	Ba	135		**ug/L**		10	-0.000
	Ba	137	**-0.001**	**ug/L**	620.805	17	-0.000
	Ho	165		**ug/L**		12	-0.000
>	Lu	175		**ug/L**		118637	118636.823
	Tl	205	**0.474**	**ug/L**	17.023	3030	0.021
	Pb	208	**0.010**	**ug/L**	19.178	186	0.001
	Th	232	**0.164**	**ug/L**	12.343	1559	0.010
	U	238	**0.012**	**ug/L**	20.200	161	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9997
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.9			
	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		101.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.9			
	Tl	205					
	Pb	208					
	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#3 - Summary Report

Sample ID: 1202001516
Sample Date/Time: Wednesday, December 23, 2009 01:59:19
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 935396|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\1202001516.510

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**2.310**	**ug/L**	18.054	93	0.001
|	Be	9	**0.090**	**ug/L**	107.388	9	0.000
|	B	11	**31.794**	**ug/L**	7.331	777	0.011
|	Na	23	**22816.844**	**ug/L**	8.158	6625575	103.100
|	Mg	24	**16818.298**	**ug/L**	3.203	3322469	51.670
|	Al	27	**5.450**	**ug/L**	22.565	2334	0.036
|	P	31	**89.002**	**ug/L**	4.830	3958	0.048
|	K	39	**8292.139**	**ug/L**	2.051	5860528	89.012
|	Ca	43	**65746.358**	**ug/L**	1.376	91281	1.419
|>	Sc	45		**ug/L**		64305	64305.099
|	Ti	47	**3.163**	**ug/L**	11.271	287	0.004
|	V	51	**2.962**	**ug/L**	60.442	4603	0.041
|	Cr	52	**1.451**	**ug/L**	12.749	2610	0.023
|	Cr	53		**ug/L**		65200	0.490
|	Mn	55	**12855.398**	**ug/L**	3.250	21710618	337.778
|	Fe	57	**19079.574**	**ug/L**	4.723	617723	9.579
|	Co	59	**24.814**	**ug/L**	3.238	27203	0.421
|	Ni	60	**10.639**	**ug/L**	2.906	2430	0.036
|	Cu	63		**ug/L**		435	0.004
⌊	Cu	65	**0.406**	**ug/L**	14.399	220	0.001
⌈	Zn	66	**3.570**	**ug/L**	2.666	571	0.007
|	Zn	67		**ug/L**		3738	0.030
|	Zn	68		**ug/L**		2081	0.023
|>	Ge	74		**ug/L**		80910	80910.305
|	As	75	**10.916**	**ug/L**	19.322	3315	0.033
|	Se	77		**ug/L**		5796	0.049
|	Se	82	**0.234**	**ug/L**	116.994	9	0.000
⌊	Kr	83		**ug/L**		29	0.000
⌈	Sr	88	**481.699**	**ug/L**	0.408	1166158	20.533
|	Y	89		**ug/L**		1504	0.026
|	Zr	90	**1.333**	**ug/L**	8.002	2043	0.032
|	Mo	98	**10.013**	**ug/L**	1.803	6754	0.119
|	Ag	107	**0.012**	**ug/L**	19.389	26	0.000
|	Cd	111	**0.024**	**ug/L**	227.605	10	0.000
|	Cd	114		**ug/L**		22	0.000
|>	In	115		**ug/L**		56793	56792.949
|	Sn	120	**0.109**	**ug/L**	12.288	227	0.002
|	Sb	121	**0.049**	**ug/L**	18.358	202	0.001
⌊	Sb	123		**ug/L**		195	0.001
⌈	Ba	135		**ug/L**		150887	1.264
|	Ba	137	**488.727**	**ug/L**	2.209	265064	2.221
|	Ho	165		**ug/L**		127	0.001
|>	Lu	175		**ug/L**		119375	119374.910
|	Tl	205	**0.480**	**ug/L**	7.400	3083	0.022
|	Pb	208	**0.016**	**ug/L**	8.767	225	0.001
|	Th	232	**-0.003**	**ug/L**	62.052	325	-0.000
⌊	U	238	**3.869**	**ug/L**	2.279	30041	0.251

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9997
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		108.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		102.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		101.5			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ca 43 Upper, S, EEI	Ca	43	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEI	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 1202001517
Sample Date/Time: Wednesday, December 23, 2009 02:05:05
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 935396|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\1202001517.511

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**46.810**	**ug/L**	5.076	1717	0.027
|	Be	9	**50.534**	**ug/L**	2.633	1635	0.025
|	B	11	**129.371**	**ug/L**	1.534	2989	0.045
|	Na	23	**23033.389**	**ug/L**	5.251	6707782	104.079
|	Mg	24	**19512.708**	**ug/L**	11.587	3865433	59.948
|	Al	27	**1762.262**	**ug/L**	8.698	753429	11.700
|	P	31	**2087.349**	**ug/L**	2.055	72676	1.114
|	K	39	**10214.864**	**ug/L**	8.268	7198318	109.652
|	Ca	43	**66742.197**	**ug/L**	1.412	92867	1.440
|>	Sc	45		**ug/L**		64434	64433.979
|	Ti	47	**46.290**	**ug/L**	2.020	3420	0.052
|	V	51	**50.847**	**ug/L**	8.600	47344	0.705
|	Cr	52	**48.603**	**ug/L**	2.157	50254	0.762
|	Cr	53		**ug/L**		69274	0.551
|	Mn	55	**12592.448**	**ug/L**	1.319	21316852	330.869
|	Fe	57	**20878.913**	**ug/L**	2.965	677365	10.482
|	Co	59	**70.290**	**ug/L**	3.065	76950	1.192
|	Ni	60	**56.253**	**ug/L**	3.588	12265	0.188
|	Cu	63		**ug/L**		22852	0.352
⌊	Cu	65	**46.879**	**ug/L**	1.161	10632	0.163
⌈	Zn	66	**52.498**	**ug/L**	2.445	7954	0.096
|	Zn	67		**ug/L**		4994	0.044
|	Zn	68		**ug/L**		8449	0.100
|>	Ge	74		**ug/L**		82144	82143.696
|	As	75	**87.438**	**ug/L**	3.359	22295	0.263
|	Se	77		**ug/L**		5827	0.048
|	Se	82	**20.176**	**ug/L**	2.067	405	0.005
⌊	Kr	83		**ug/L**		29	0.000
⌈	Sr	88	**527.926**	**ug/L**	0.607	1267448	22.503
|	Y	89		**ug/L**		1494	0.026
|	Zr	90	**53.821**	**ug/L**	1.994	73464	1.301
|	Mo	98	**61.483**	**ug/L**	1.624	41012	0.728
|	Ag	107	**50.481**	**ug/L**	2.206	58069	1.031
|	Cd	111	**10.481**	**ug/L**	3.990	2993	0.053
|	Cd	114		**ug/L**		6802	0.121
|>	In	115		**ug/L**		56324	56323.533
|	Sn	120	**52.075**	**ug/L**	3.650	65066	1.154
|	Sb	121	**214.968**	**ug/L**	2.438	256115	4.545
⌊	Sb	123		**ug/L**		195783	3.474
⌈	Ba	135		**ug/L**		165612	1.378
|	Ba	137	**528.449**	**ug/L**	1.849	288689	2.401
|	Ho	165		**ug/L**		186	0.001
|>	Lu	175		**ug/L**		120229	120229.402
|	Tl	205	**95.213**	**ug/L**	2.034	514060	4.271
|	Pb	208	**41.017**	**ug/L**	0.283	258122	2.146
|	Th	232	**53.156**	**ug/L**	0.164	399037	3.316
⌊	U	238	**58.899**	**ug/L**	0.238	459472	3.821

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9997
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		109.0			
|	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		104.1			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		95.8			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175		102.2			
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ca 43 Upper, S, EEI	Ca	43	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEI	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 1202001518
Sample Date/Time: Wednesday, December 23, 2009 02:10:52
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 935396|5|ba|
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\1202001518.512

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.629**	**ug/L**	27.762	30	0.000
	Be	9	**-0.030**	**ug/L**	516.644	5	-0.000
	B	11	**9.641**	**ug/L**	10.638	266	0.003
	Na	23	**4782.253**	**ug/L**	4.740	1336093	21.609
	Mg	24	**3483.018**	**ug/L**	10.784	659998	10.701
	Al	27	**0.812**	**ug/L**	173.205	333	0.005
	P	31	**19.338**	**ug/L**	3.393	1505	0.010
	K	39	**1682.749**	**ug/L**	4.044	1247215	18.064
	Ca	43	**14135.779**	**ug/L**	1.524	18887	0.305
>	Sc	45		**ug/L**		61709	61708.612
	Ti	47	**0.531**	**ug/L**	22.446	93	0.001
	V	51	**1.055**	**ug/L**	114.508	2801	0.015
	Cr	52	**0.115**	**ug/L**	107.506	1212	0.002
	Cr	53		**ug/L**		41111	0.142
	Mn	55	**2762.646**	**ug/L**	1.503	4479826	72.589
	Fe	57	**4160.167**	**ug/L**	1.136	130925	2.089
	Co	59	**5.285**	**ug/L**	2.260	5675	0.090
	Ni	60	**2.076**	**ug/L**	3.270	565	0.007
	Cu	63		**ug/L**		180	0.000
	Cu	65	**-0.042**	**ug/L**	60.181	115	-0.000
	Zn	66	**0.724**	**ug/L**	13.470	151	0.001
	Zn	67		**ug/L**		1885	0.006
	Zn	68		**ug/L**		640	0.005
>	Ge	74		**ug/L**		82364	82364.263
	As	75	**2.719**	**ug/L**	22.002	1342	0.008
	Se	77		**ug/L**		2650	0.009
	Se	82	**0.270**	**ug/L**	270.912	10	0.000
	Kr	83		**ug/L**		26	-0.000
	Sr	88	**103.355**	**ug/L**	0.598	257877	4.406
	Y	89		**ug/L**		327	0.005
	Zr	90	**0.061**	**ug/L**	14.145	306	0.001
	Mo	98	**2.059**	**ug/L**	3.941	1450	0.024
	Ag	107	**0.000**	**ug/L**	11959.866	12	0.000
	Cd	111	**0.022**	**ug/L**	85.951	10	0.000
	Cd	114		**ug/L**		12	0.000
>	In	115		**ug/L**		58523	58523.328
	Sn	120	**0.027**	**ug/L**	46.766	128	0.001
	Sb	121	**0.316**	**ug/L**	23.802	537	0.007
	Sb	123		**ug/L**		427	0.005
	Ba	135		**ug/L**		30901	0.259
	Ba	137	**101.238**	**ug/L**	2.723	54854	0.460
	Ho	165		**ug/L**		36	0.000
>	Lu	175		**ug/L**		119246	119245.599
	Tl	205	**0.892**	**ug/L**	13.735	5281	0.040
	Pb	208	**0.002**	**ug/L**	92.489	136	0.000
	Th	232	**0.063**	**ug/L**	23.278	814	0.004
	U	238	**0.767**	**ug/L**	0.156	6005	0.050

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9997
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			104.4		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			104.4		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			99.5		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			101.4		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEI	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, December 23, 2009 02:28:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\QC Std 6.515

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.737**	**ug/L**	2.329	1746	0.028
	Be	9	**54.032**	**ug/L**	3.643	1674	0.027
	B	11	**98.633**	**ug/L**	4.393	2195	0.035
	Na	23	**4957.840**	**ug/L**	6.091	1384781	22.403
	Mg	24	**5651.779**	**ug/L**	12.594	1071050	17.364
	Al	27	**4536.994**	**ug/L**	1.044	1858894	30.123
	P	31	**4983.296**	**ug/L**	0.568	165001	2.660
	K	39	**4853.321**	**ug/L**	7.410	3349140	52.098
	Ca	43	**4918.439**	**ug/L**	1.095	6615	0.106
>	Sc	45		**ug/L**		61713	61713.302
	Ti	47	**50.709**	**ug/L**	0.927	3584	0.057
	V	51	**51.863**	**ug/L**	3.760	46239	0.719
	Cr	52	**50.232**	**ug/L**	1.918	49714	0.788
	Cr	53		**ug/L**		40466	0.132
	Mn	55	**53.455**	**ug/L**	0.836	86937	1.405
	Fe	57	**4858.945**	**ug/L**	2.838	152577	2.439
	Co	59	**48.273**	**ug/L**	0.652	50674	0.819
	Ni	60	**51.024**	**ug/L**	0.310	10671	0.171
	Cu	63		**ug/L**		22936	0.369
	Cu	65	**50.069**	**ug/L**	0.846	10869	0.174
	Zn	66	**52.381**	**ug/L**	1.295	8103	0.096
	Zn	67		**ug/L**		2945	0.019
	Zn	68		**ug/L**		7309	0.084
>	Ge	74		**ug/L**		83855	83855.249
	As	75	**46.636**	**ug/L**	0.679	12460	0.140
	Se	77		**ug/L**		2726	0.009
	Se	82	**50.335**	**ug/L**	1.935	1024	0.012
	Kr	83		**ug/L**		26	-0.000
	Sr	88	**51.926**	**ug/L**	1.520	131865	2.213
	Y	89		**ug/L**		19	0.000
	Zr	90	**39.525**	**ug/L**	8.702	57163	0.955
	Mo	98	**49.759**	**ug/L**	2.489	35103	0.589
	Ag	107	**49.767**	**ug/L**	1.199	60550	1.016
	Cd	111	**50.813**	**ug/L**	2.466	15331	0.257
	Cd	114		**ug/L**		36344	0.610
>	In	115		**ug/L**		59571	59571.017
	Sn	120	**50.743**	**ug/L**	1.806	67061	1.124
	Sb	121	**48.623**	**ug/L**	3.418	61392	1.028
	Sb	123		**ug/L**		46886	0.785
	Ba	135		**ug/L**		15863	0.129
	Ba	137	**49.874**	**ug/L**	0.613	27919	0.227
	Ho	165		**ug/L**		16	0.000
>	Lu	175		**ug/L**		123121	123120.522
	Tl	205	**48.866**	**ug/L**	3.403	270404	2.192
	Pb	208	**51.492**	**ug/L**	1.584	331771	2.694
	Th	232	**52.766**	**ug/L**	3.074	405614	3.292
	U	238	**54.808**	**ug/L**	1.372	437849	3.556

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9997
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	99.475				
	Be	9	108.064				
	B	11	98.633				
	Na	23	99.157				
	Mg	24	113.036				
	Al	27	89.841				
	P	31	99.666				
	K	39	97.066				
	Ca	43	98.369				
>	Sc	45			104.4		
	Ti	47	101.418				
	V	51	103.726				
	Cr	52	100.465				
	Cr	53					
	Mn	55	106.910				
	Fe	57	97.179				
	Co	59	96.546				
	Ni	60	102.048				
	Cu	63					
	Cu	65	100.138				
	Zn	66	104.761				
	Zn	67					
	Zn	68					
>	Ge	74			106.3		
	As	75	93.272				
	Se	77					
	Se	82	100.669				
	Kr	83					
	Sr	88	103.852				
	Y	89					
	Zr	90	79.051				
	Mo	98	99.518				
	Ag	107	99.534				
	Cd	111	101.626				
	Cd	114					
>	In	115			101.3		
	Sn	120	101.487				
	Sb	121	97.246				
	Sb	123					
	Ba	135					
	Ba	137	99.749				
	Ho	165					
>	Lu	175			104.7		
	Tl	205	97.732				
	Pb	208	102.983				
	Th	232	105.532				
	U	238	109.615				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Mg	24CCV is out of limits (+/- 10%)
QC Std 6	Al	27CCV is out of limits (+/- 10%)
QC Std 6	Zr	90CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, December 23, 2009 02:33:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\091220\QC Std 7.516

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.017**	**ug/L**	439.522	8	-0.000
	Be	9	**-0.050**	**ug/L**	168.328	4	-0.000
	B	11	**2.896**	**ug/L**	7.096	118	0.001
	Na	23	**-2.647**	**ug/L**	480.171	2000	-0.012
	Mg	24	**0.000**	**ug/L**		0	0.000
	Al	27	**1.665**	**ug/L**	173.205	667	0.011
	P	31	**0.863**	**ug/L**	219.138	887	0.000
	K	39	**-17.298**	**ug/L**	85.345	119836	-0.186
	Ca	43	**-3.126**	**ug/L**	111.499	60	-0.000
>	Sc	45		**ug/L**		61097	61096.662
	Ti	47	**-0.142**	**ug/L**	6.266	46	-0.000
	V	51	**0.709**	**ug/L**	152.985	2476	0.010
	Cr	52	**-0.190**	**ug/L**	37.073	908	-0.003
	Cr	53		**ug/L**		32024	0.000
	Mn	55	**1.392**	**ug/L**	6.540	2490	0.037
	Fe	57	**-3.586**	**ug/L**	75.058	1915	-0.002
	Co	59	**0.008**	**ug/L**	165.303	150	0.000
	Ni	60	**-0.242**	**ug/L**	16.687	86	-0.001
	Cu	63		**ug/L**		124	-0.000
	Cu	65	**-0.087**	**ug/L**	37.324	105	-0.000
	Zn	66	**-0.017**	**ug/L**	218.266	39	-0.000
	Zn	67		**ug/L**		1355	-0.000
	Zn	68		**ug/L**		235	0.000
>	Ge	74		**ug/L**		82185	82184.951
	As	75	**0.049**	**ug/L**	1548.000	680	0.000
	Se	77		**ug/L**		1883	-0.000
	Se	82	**0.281**	**ug/L**	224.216	10	0.000
	Kr	83		**ug/L**		25	-0.000
	Sr	88	**0.006**	**ug/L**	64.622	55	0.000
	Y	89		**ug/L**		15	0.000
	Zr	90	**0.127**	**ug/L**	14.114	401	0.003
	Mo	98	**0.062**	**ug/L**	16.571	67	0.001
	Ag	107	**0.007**	**ug/L**	31.743	21	0.000
	Cd	111	**0.004**	**ug/L**	369.555	4	0.000
	Cd	114		**ug/L**		12	0.000
>	In	115		**ug/L**		58903	58903.114
	Sn	120	**0.140**	**ug/L**	5.137	276	0.003
	Sb	121	**0.412**	**ug/L**	10.870	661	0.009
	Sb	123		**ug/L**		513	0.006
	Ba	135		**ug/L**		12	0.000
	Ba	137	**-0.003**	**ug/L**	542.161	16	-0.000
	Ho	165		**ug/L**		13	0.000
>	Lu	175		**ug/L**		118479	118478.798
	Tl	205	**0.290**	**ug/L**	13.534	2051	0.013
	Pb	208	**0.006**	**ug/L**	18.053	163	0.000
	Th	232	**0.181**	**ug/L**	13.328	1681	0.011
	U	238	**0.011**	**ug/L**	2.079	156	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9997
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			103.4		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			104.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			100.2		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			100.8		
	Tl	205					
	Pb	208					
	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 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Wednesday, December 23, 2009 12:26:02
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1589
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	5349.4	5349.402	135.539	2.5
	Mg	24.0	52926.7	52926.672	590.570	1.1
	Co	58.9	124214.1	124214.107	932.643	0.8
	Rh	102.9	223598.5	223598.525	1242.440	0.6
	In	114.9	288884.4	288884.362	1949.196	0.7
	Pb	208.0	333111.0	333111.027	3223.695	1.0
⌈>	Ba	137.9	283219.6	283219.638	2581.305	0.9
⌊	Ba++	69.0	6219.6	0.022	0.000	1.6
⌈>	Ce	139.9	348697.6	348697.637	5080.698	1.5
⌊	CeO	155.9	7860.7	0.023	0.001	2.7
	Bkgd	220.0	23.9	23.900	1.673	7.0

Current Optimization File Data

Current Value	Description
0.88	Nebulizer Gas Flow
8.25	Lens Voltage
1450.00	ICP RF Power
-1687.50	Analog Stage Voltage
1200.00	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	21	7.5	7193.5
Co	59	21	8.3	136217.7
In	115	21	9.5	317836.8

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	597	2065	0.571
Be	9.0	9.0	2043	2070	0.622
Mg	24.0	24.0	5693	2070	0.645
Mg	25.0	25.0	5945	2070	0.634
Mg	26.0	26.0	6175	2070	0.639
Co	58.9	58.9	14186	2105	0.621
Rh	102.9	102.9	24877	2165	0.598
In	114.9	114.9	27791	2185	0.613
Ce	139.9	139.9	33863	2200	0.621
Pb	206.0	206.0	49936	2270	0.623
Pb	207.0	207.0	50183	2235	0.675
Pb	208.0	208.0	50427	2260	0.705
U	238.1	238.1	57730	2275	0.712

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Thursday, December 24, 2009 08:32:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\Blank.401

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7		ug/L		205	
|	Be	9		ug/L		21	
⌞>	Sc	45		ug/L		580214	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	
Be	9	Linear Thru Zero	
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌜	Li	7					
|	Be	9					
⌞>	Sc	45					

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, December 24, 2009 08:33:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\Standard 1.402

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**10.000**	**ug/L**	1.211	20596	0.035
|	Be	9	**10.000**	**ug/L**	0.913	4570	0.008
⌞>	Sc	45		**ug/L**		585309	585308.583

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌜	Li	7					
|	Be	9					
⌞>	Sc	45					

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, December 24, 2009 08:35:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\Standard 2.403

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**100.020**	**ug/L**	2.482	206817	0.356
|	Be	9	**100.017**	**ug/L**	0.084	45949	0.079
⌞>	Sc	45		**ug/L**		581185	581184.697

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌜	Li	7					
|	Be	9					
⌞>	Sc	45					

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, December 24, 2009 08:37:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\QC Std 1.404

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**49.965**	**ug/L**	2.044	104976	0.178
|	Be	9	**51.068**	**ug/L**	0.724	23824	0.040
⌞>	Sc	45		**ug/L**		589936	589936.448

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌜	Li	7	99.930				
|	Be	9	102.136				
⌞>	Sc	45		101.7			

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, December 24, 2009 08:38:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\QC Std 2.405

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	-0.022	ug/L	15.532	159	-0.000
|	Be	9	0.007	ug/L	41.160	25	0.000
⌞>	Sc	45		ug/L		581133	581133.392

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference	Duplicate Rel. % Difference
⌜	Li	7					
|	Be	9					
⌞>	Sc	45		100.2			

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, December 24, 2009 08:40:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\QC Std 3.406

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**10.867**	**ug/L**	0.853	22667	0.039
|	Be	9	**0.516**	**ug/L**	7.240	259	0.000
⌞>	Sc	45		**ug/L**		581484	581484.091

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌜	Li	7	108.666				
|	Be	9	103.280				
⌞>	Sc	45		100.2			

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, December 24, 2009 08:42:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\QC Std 4.407

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**0.047**	**ug/L**	17.722	297	0.000
|	Be	9	**0.062**	**ug/L**	27.808	49	0.000
⌞>	Sc	45		**ug/L**		572431	572430.719

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌜	Li	7					
|	Be	9					
⌞>	Sc	45		98.7			

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, December 24, 2009 08:44:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\QC Std 5.408

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**18.349**	**ug/L**	2.022	37458	0.065
|	Be	9	**17.557**	**ug/L**	0.918	7945	0.014
⌞>	Sc	45		**ug/L**		571289	571288.986

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovr	Dilution % Dif	Duplicate Rel. % Difference
⌜	Li	7	91.747				
|	Be	9	87.785				
⌞>	Sc	45		98.5			

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, December 24, 2009 08:45:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\QC Std 6.409

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**49.434**	**ug/L**	2.751	100733	0.176
|	Be	9	**49.747**	**ug/L**	2.093	22509	0.039
⌞>	Sc	45		**ug/L**		572203	572203.302

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌜	Li	7	98.867				
|	Be	9	99.494				
⌞>	Sc	45		98.6			

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, December 24, 2009 08:47:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\QC Std 7.410

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	-0.036	ug/L	15.975	129	-0.000
|	Be	9	0.021	ug/L	40.616	31	0.000
⌞>	Sc	45		ug/L		572599	572599.457

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌜	Li	7					
|	Be	9					
⌞>	Sc	45		98.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Thursday, December 24, 2009 08:49:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\QC Std 10.411

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**940.719**	**ug/L**	0.930	1777322	3.344
|	Be	9	**960.687**	**ug/L**	0.609	403424	0.759
⌊>	Sc	45		**ug/L**		531467	531466.742

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7	94.072				
|	Be	9	96.069				
⌊>	Sc	45		91.6			

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 11
Sample Date/Time: Thursday, December 24, 2009 08:50:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\QC Std 11.412

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**50.955**	**ug/L**	2.714	103564	0.181
|	Be	9	**50.208**	**ug/L**	1.652	22661	0.040
⌞>	Sc	45		**ug/L**		570817	570816.524

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovd	Dilution % Dif	Duplicate Rel. % Difference
⌜	Li	7	101.911				
|	Be	9	100.416				
⌞>	Sc	45		98.4			

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 12
Sample Date/Time: Thursday, December 24, 2009 08:52:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\QC Std 12.413

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**0.017**	**ug/L**	41.453	239	0.000
|	Be	9	**0.027**	**ug/L**	40.078	34	0.000
⌊>	Sc	45		**ug/L**		578400	578399.675

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovd	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
⌊>	Sc	45		99.7			

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, December 24, 2009 09:05:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\QC Std 8.420

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**51.147**	**ug/L**	0.714	110371	0.182
|	Be	9	**49.429**	**ug/L**	1.099	23684	0.039
⌞>	Sc	45		**ug/L**		605880	605880.340

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌜	Li	7	102.294				
|	Be	9	98.857				
⌞>	Sc	45		104.4			

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: Thursday, December 24, 2009 09:07:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\QC Std 9.421

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**0.008**	**ug/L**	59.065	228	0.000
|	Be	9	**0.027**	**ug/L**	3.630	35	0.000
⌞>	Sc	45		**ug/L**		599717	599716.508

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌜	Li	7					
|	Be	9					
⌞>	Sc	45		103.4			

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, December 24, 2009 09:17:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\QC Std 8.427

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**48.870**	**ug/L**	2.713	103805	0.174
|	Be	9	**48.385**	**ug/L**	2.225	22821	0.038
⌊>	Sc	45		**ug/L**		596538	596538.214

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7	97.740				
|	Be	9	96.770				
⌊>	Sc	45		102.8			

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: Thursday, December 24, 2009 09:19:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\QC Std 9.428

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	-0.010	ug/L	52.994	191	-0.000
|	Be	9	0.014	ug/L	61.120	29	0.000
⌞>	Sc	45		ug/L		601944	601943.939

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌜	Li	7					
|	Be	9					
⌞>	Sc	45		103.7			

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, December 24, 2009 09:27:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\QC Std 6.433

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**50.479**	**ug/L**	2.422	103010	0.179
|	Be	9	**49.894**	**ug/L**	1.298	22609	0.039
⌊>	Sc	45		**ug/L**		573054	573053.852

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference	Duplicate Rel. % Difference
⌈	Li	7	100.957				
|	Be	9	99.787				
⌊>	Sc	45		98.8			

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, December 24, 2009 09:29:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\QC Std 7.434

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**-0.013**	**ug/L**	40.162	176	-0.000
|	Be	9	**0.027**	**ug/L**	50.814	33	0.000
⌞>	Sc	45		**ug/L**		573387	573387.093

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovi	Dilution % Dif	Duplicate Rel. % Difference
⌜	Li	7					
|	Be	9					
⌞>	Sc	45		98.8			

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, December 24, 2009 09:33:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\QC Std 6.436

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**49.849**	**ug/L**	1.403	101730	0.177
|	Be	9	**49.200**	**ug/L**	0.240	22294	0.039
⌞>	Sc	45		**ug/L**		572958	572958.262

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌜	Li	7	99.699				
|	Be	9	98.400				
⌞>	Sc	45		98.7			

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, December 24, 2009 09:34:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\QC Std 7.437

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**-0.017**	**ug/L**	40.307	166	-0.000
|	Be	9	**0.016**	**ug/L**	24.909	28	0.000
⌞>	Sc	45		**ug/L**		569882	569881.724

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌜	Li	7					
|	Be	9					
⌞>	Sc	45		98.2			

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: 1202001514
Sample Date/Time: Thursday, December 24, 2009 09:37:40
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 935396|1|baj
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\1202001514.438

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**-0.024**	**ug/L**	6.555	159	-0.000
|	Be	9	**-0.011**	**ug/L**	59.971	17	-0.000
⌊>	Sc	45		**ug/L**		592036	592036.169

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
⌊>	Sc	45		102.0			

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: 1202001515
Sample Date/Time: Thursday, December 24, 2009 09:39:26
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 935396|1|baj
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\1202001515.439

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**48.488**	**ug/L**	0.162	104493	0.172
|	Be	9	**49.126**	**ug/L**	0.846	23507	0.039
⌊>	Sc	45		**ug/L**		605014	605014.330

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
⌊>	Sc	45		104.3			

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: 243272001
Sample Date/Time: Thursday, December 24, 2009 09:41:12
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 935396|1|baj
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\243272001.440

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**0.059**	**ug/L**	6.720	345	0.000
|	Be	9	**-0.011**	**ug/L**	81.584	17	-0.000
⌞>	Sc	45		**ug/L**		611432	611431.860

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌜	Li	7					
|	Be	9					
⌞>	Sc	45		105.4			

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: 1202001516
Sample Date/Time: Thursday, December 24, 2009 09:44:46
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 935396|1|baj
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\1202001516.442

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**2.398**	**ug/L**	1.872	5547	0.009
|	Be	9	**0.024**	**ug/L**	29.877	35	0.000
⌞>	Sc	45		**ug/L**		624717	624717.189

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌜	Li	7					
|	Be	9					
⌞>	Sc	45		107.7			

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: 1202001517
Sample Date/Time: Thursday, December 24, 2009 09:46:31
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 935396|1|baj
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\1202001517.443

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**47.093**	**ug/L**	0.942	101441	0.167
|	Be	9	**44.579**	**ug/L**	1.595	21320	0.035
⌞>	Sc	45		**ug/L**		604735	604735.241

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌜	Li	7					
|	Be	9					
⌞>	Sc	45		104.2			

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: 1202001518
Sample Date/Time: Thursday, December 24, 2009 09:48:18
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 935396|5|baj
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\1202001518.444

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**0.489**	**ug/L**	3.693	1230	0.002
|	Be	9	**0.012**	**ug/L**	79.370	27	0.000
⌞>	Sc	45		**ug/L**		587586	587585.874

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌜	Li	7					
|	Be	9					
⌞>	Sc	45		101.3			

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, December 24, 2009 09:50:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\QC Std 6.445

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**48.680**	**ug/L**	1.592	101070	0.173
|	Be	9	**48.796**	**ug/L**	1.256	22490	0.039
⌊>	Sc	45		**ug/L**		582815	582814.920

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7	97.360				
|	Be	9	97.593				
⌊>	Sc	45		100.4			

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, December 24, 2009 09:51:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\li and be.mth
Dataset File: c:\elandata\Dataset\091223\QC Std 7.446

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	-0.039	ug/L	33.319	124	-0.000
|	Be	9	0.019	ug/L	67.944	30	0.000
⌊>	Sc	45		ug/L		582669	582669.297

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
⌊>	Sc	45		100.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out 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\123109W1.SIF
Batch ID:
Results Data Set: 123109W1
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: 12/31/2009 08:57:54**
Analyst: **Data Type: Original**

Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0001	0.0001	0.0001	08:58:57	Yes
2		[0.00]	0.0001	-0.0003	0.0001	08:59:32	Yes
Mean:		[0.00]	0.0001				
SD:		0.00	0.0000				
%RSD:		0.00	0.67				

Auto-zero performed.

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S0.2 **Date Collected: 12/31/2009 08:59:50**
Analyst: **Data Type: Original**

Replicate Data: S0.2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0019	0.0090	0.0020	09:00:51	Yes
2		[0.2]	0.0020	0.0091	0.0021	09:01:26	Yes
Mean:		[0.2]	0.0020				
SD:		0.0	0.0000				
%RSD:		0.0	0.50				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00975 Intercept: 0.00000

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S0.5 **Date Collected: 12/31/2009 09:01:45**
Analyst: **Data Type: Original**

Replicate Data: S0.5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0048	0.0217	0.0049	09:02:46	Yes
2		[0.5]	0.0048	0.0216	0.0049	09:03:21	Yes
Mean:		[0.5]	0.0048				
SD:		0.0	0.0000				
%RSD:		0.0	0.65				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999976 Slope: 0.00960 Intercept: 0.00001

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S2.0 **Date Collected: 12/31/2009 09:03:41**
Analyst: **Data Type: Original**

Replicate Data: S2.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0194	0.0894	0.0195	09:04:42	Yes
2		[2.0]	0.0192	0.0883	0.0193	09:05:17	Yes
Mean:		[2.0]	0.0193				
SD:		0.0	0.0002				
%RSD:		0.0	0.99				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999998 Slope: 0.00964 Intercept: 0.00000

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 12/31/2009 09:05:37**
Analyst: **Data Type: Original**

Replicate Data: S5.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0477	0.2206	0.0479	09:06:39	Yes
2		[5.0]	0.0467	0.2158	0.0468	09:07:13	Yes
Mean:		[5.0]	0.0472				
SD:		0.0	0.0007				
%RSD:		0.0	1.57				

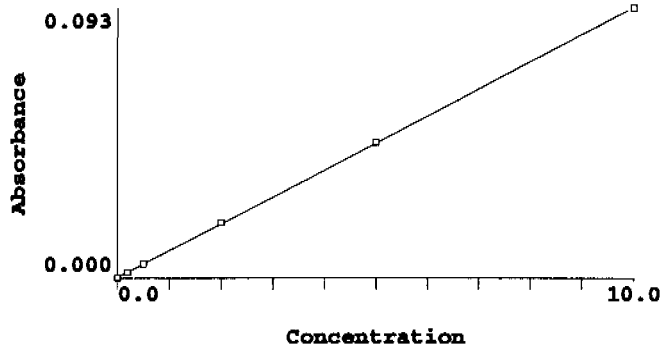
Standard number 4 applied. [5.0]
Correlation Coef.: 0.999964 Slope: 0.00945 Intercept: 0.00011

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 12/31/2009 09:07:34**
Analyst: **Data Type: Original**

Replicate Data: S10.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.0941	0.4336	0.0942	09:08:34	Yes
2		[10.0]	0.0926	0.4278	0.0927	09:09:09	Yes
Mean:		[10.0]	0.0933				
SD:		0.0	0.0011				
%RSD:		0.0	1.15				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999971 Slope: 0.00933 Intercept: 0.00023



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	-0.025	0.00	0.7
S0.2	0.0020	0.2	0.184	0.00	0.5
S0.5	0.0048	0.5	0.490	0.00	0.7
S2.0	0.0193	2.0	2.042	0.00	1.0

S5.0	0.0472	5.0	5.035	0.00	1.6
S10.0	0.0933	10.0	9.975	0.00	1.2

Correlation Coef.: 0.999971 Slope: 0.00933 Intercept: 0.00023

Sequence No.: 7 **Autosampler Location: 9**
Sample ID: ICV **Date Collected: 12/31/2009 09:09:28**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.143	5.143	0.0482	0.2248	0.0483	09:10:29	Yes
2	5.090	5.090	0.0477	0.2212	0.0478	09:11:04	Yes
Mean:	5.116	5.116	0.0480				
SD:	0.037	0.037	0.0003				
%RSD:	0.731	0.731	0.73				

QC value within limits for Hg 253.7 Recovery = 102.32%
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 10**
Sample ID: ICB **Date Collected: 12/31/2009 09:11:24**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.022	-0.022	0.0000	-0.0004	0.0001	09:12:25	Yes
2	-0.027	-0.027	-0.0000	-0.0008	0.0001	09:13:00	Yes
Mean:	-0.025	-0.025	0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	14.58	14.58	>999.9%				

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: 12/31/2009 09:13:20**
Analyst: **Data Type: Original**

Replicate Data: CRDL

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.181	0.181	0.0019	0.0085	0.0020	09:14:21	Yes
2	0.180	0.180	0.0019	0.0087	0.0020	09:14:56	Yes
Mean:	0.181	0.181	0.0019				
SD:	0.001	0.001	0.0000				
%RSD:	0.432	0.432	0.38				

QC value within limits for Hg 253.7 Recovery = 90.39%
All analyte(s) passed QC.

Sequence No.: 10 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/31/2009 09:15:16**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.075	5.075	0.0476	0.2207	0.0477	09:16:17	Yes
2	5.065	5.065	0.0475	0.2189	0.0476	09:16:52	Yes
Mean:	5.070	5.070	0.0476				
SD:	0.007	0.007	0.0001				
%RSD:	0.132	0.132	0.13				

QC value within limits for Hg 253.7 Recovery = 101.40%
All analyte(s) passed QC.

Sequence No.: 11 Autosampler Location: 8
Sample ID: CCB Date Collected: 12/31/2009 09:17:11
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.029	-0.029	-0.0000	-0.0007	0.0001	09:18:12	Yes
2	-0.028	-0.028	-0.0000	-0.0007	0.0001	09:18:47	Yes
Mean:	-0.028	-0.028	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	2.257	2.257	20.62				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12 Autosampler Location: 12
Sample ID: 1202005802|937363|1 Date Collected: 12/31/2009 09:19:06
Analyst: JXL Data Type: Original

Replicate Data: 1202005802|937363|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.029	-0.029	-0.0000	-0.0009	0.0001	09:20:08	Yes
2	-0.031	-0.031	-0.0001	-0.0011	0.0001	09:20:43	Yes
Mean:	-0.030	-0.030	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	5.054	5.054	32.46				

Sequence No.: 13 Autosampler Location: 13
Sample ID: 1202005803|937363|1 Date Collected: 12/31/2009 09:21:03
Analyst: JXL Data Type: Original

Replicate Data: 1202005803|937363|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.058	2.058	0.0194	0.0894	0.0195	09:22:05	Yes
2	2.054	2.054	0.0194	0.0889	0.0195	09:22:40	Yes
Mean:	2.056	2.056	0.0194				
SD:	0.002	0.002	0.0000				
%RSD:	0.120	0.120	0.12				

Sequence No.: 14 Autosampler Location: 14
Sample ID: 243469007|937363|1 Date Collected: 12/31/2009 09:23:00
Analyst: JXL Data Type: Original

Replicate Data: 243469007|937363|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.032	-0.032	-0.0001	-0.0013	0.0000	09:24:00	Yes
2	-0.023	-0.023	0.0000	-0.0003	0.0001	09:24:35	Yes
Mean:	-0.027	-0.027	-0.0000				
SD:	0.006	0.006	0.0001				
%RSD:	21.62	21.62	238.80				

Sequence No.: 15 Autosampler Location: 15
Sample ID: 1202005804|937363|1 Date Collected: 12/31/2009 09:24:54
Analyst: JXL Data Type: Original

Replicate Data: 1202005804|937363|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

Replicate Data: 242934001|934915|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.017	-0.017	0.0001	-0.0007	0.0002	09:35:27	Yes
2	-0.013	-0.013	0.0001	0.0001	0.0002	09:36:02	Yes
Mean:	-0.015	-0.015	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	15.43	15.43	22.98				

Sequence No.: 21 **Autosampler Location: 21**
Sample ID: 242934002|934915|1 **Date Collected: 12/31/2009 09:36:21**
Analyst: JXL **Data Type: Original**

Replicate Data: 242934002|934915|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.015	-0.015	0.0001	-0.0000	0.0002	09:37:22	Yes
2	-0.020	-0.020	0.0000	0.0001	0.0001	09:37:57	Yes
Mean:	-0.017	-0.017	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	21.16	21.16	48.57				

Sequence No.: 22 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/31/2009 09:38:17**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.158	5.158	0.0484	0.2251	0.0485	09:39:17	Yes
2	5.147	5.147	0.0483	0.2240	0.0484	09:39:52	Yes
Mean:	5.152	5.152	0.0483				
SD:	0.008	0.008	0.0001				
%RSD:	0.148	0.148	0.15				

QC value within limits for Hg 253.7 Recovery = 103.04%
All analyte(s) passed QC.

Sequence No.: 23 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/31/2009 09:40:11**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.019	-0.019	0.0001	0.0003	0.0002	09:41:11	Yes
2	-0.022	-0.022	0.0000	0.0001	0.0001	09:41:46	Yes
Mean:	-0.020	-0.020	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	10.09	10.09	43.84				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 24 **Autosampler Location: 22**
Sample ID: 243009001|934915|1 **Date Collected: 12/31/2009 09:42:05**
Analyst: JXL **Data Type: Original**

Replicate Data: 243009001|934915|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.014	0.014	0.0004	0.0015	0.0005	09:43:07	Yes
2	0.018	0.018	0.0004	0.0021	0.0005	09:43:42	Yes

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.027	-0.027	-0.0000	-0.0001	0.0001	09:52:47	Yes
2	-0.028	-0.028	-0.0000	0.0000	0.0001	09:53:22	Yes
Mean:	-0.027	-0.027	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	1.969	1.969	24.82				

Sequence No.: 30 **Autosampler Location: 28**
Sample ID: 243104001|934915|1 **Date Collected: 12/31/2009 09:53:41**
Analyst: JXL **Data Type: Original**

Replicate Data: 243104001|934915|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.025	-0.025	-0.0000	-0.0000	0.0001	09:54:41	Yes
2	-0.025	-0.025	0.0000	0.0002	0.0001	09:55:16	Yes
Mean:	-0.025	-0.025	-0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	1.688	1.688	331.31				

Sequence No.: 31 **Autosampler Location: 29**
Sample ID: 1202000260|934915|1 **Date Collected: 12/31/2009 09:55:35**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202000260|934915|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.024	-0.024	0.0000	0.0003	0.0001	09:56:36	Yes
2	-0.023	-0.023	0.0000	0.0003	0.0001	09:57:11	Yes
Mean:	-0.024	-0.024	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	4.413	4.413	74.07				

Sequence No.: 32 **Autosampler Location: 30**
Sample ID: 1202000261|934915|1 **Date Collected: 12/31/2009 09:57:30**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202000261|934915|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.052	2.052	0.0194	0.0905	0.0195	09:58:31	Yes
2	2.043	2.043	0.0193	0.0908	0.0194	09:59:05	Yes
Mean:	2.047	2.047	0.0193				
SD:	0.006	0.006	0.0001				
%RSD:	0.310	0.310	0.31				

Sequence No.: 33 **Autosampler Location: 31**
Sample ID: 1202000262|934915|5 **Date Collected: 12/31/2009 09:59:25**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202000262|934915|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.019	-0.019	0.0001	0.0009	0.0002	10:00:25	Yes
2	-0.031	-0.031	-0.0001	-0.0001	0.0001	10:01:00	Yes
Mean:	-0.025	-0.025	0.0000				
SD:	0.008	0.008	0.0001				
%RSD:	33.87	33.87	>999.9%				

Sequence No.: 34 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/31/2009 10:01:19**

Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.143	5.143	0.0482	0.2265	0.0483	10:02:20	Yes
2	5.125	5.125	0.0481	0.2251	0.0482	10:02:55	Yes
Mean:	5.134	5.134	0.0482				
SD:	0.013	0.013	0.0001				
%RSD:	0.256	0.256	0.25				

QC value within limits for Hg 253.7 Recovery = 102.68%
All analyte(s) passed QC.

Sequence No.: 35 Autosampler Location: 8
Sample ID: CCB Date Collected: 12/31/2009 10:03:14
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.016	-0.016	0.0001	0.0010	0.0002	10:04:14	Yes
2	-0.014	-0.014	0.0001	0.0013	0.0002	10:04:49	Yes
Mean:	-0.015	-0.015	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	10.11	10.11	14.20				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36 Autosampler Location: 32
Sample ID: 243104002|934915|1 Date Collected: 12/31/2009 10:05:08
Analyst: JXL Data Type: Original

Replicate Data: 243104002|934915|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.018	0.018	0.0004	0.0040	0.0005	10:06:09	Yes
2	-0.001	-0.001	0.0002	0.0030	0.0003	10:06:44	Yes
Mean:	0.008	0.008	0.0003				
SD:	0.013	0.013	0.0001				
%RSD:	161.1	161.1	39.93				

Sequence No.: 37 Autosampler Location: 33
Sample ID: 1202002074|935676|1 Date Collected: 12/31/2009 10:07:03
Analyst: JXL Data Type: Original

Replicate Data: 1202002074|935676|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.009	0.009	0.0003	0.0034	0.0004	10:08:05	Yes
2	0.002	0.002	0.0003	0.0031	0.0004	10:08:40	Yes
Mean:	0.006	0.006	0.0003				
SD:	0.005	0.005	0.0000				
%RSD:	89.07	89.07	16.11				

Sequence No.: 38 Autosampler Location: 34
Sample ID: 1202002075|935676|1 Date Collected: 12/31/2009 10:08:59
Analyst: JXL Data Type: Original

Replicate Data: 1202002075|935676|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.116	2.116	0.0200	0.0935	0.0201	10:10:01	Yes

Replicate Data: 243255005|935676|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.018	-0.018	0.0001	0.0010	0.0002	10:19:43	Yes
2	-0.019	-0.019	0.0001	0.0008	0.0002	10:20:18	Yes
Mean:	-0.018	-0.018	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	4.617	4.617	12.41				

Sequence No.: 44 **Autosampler Location: 40**
Sample ID: 243255006|935676|1 **Date Collected: 12/31/2009 10:20:37**
Analyst: JXL **Data Type: Original**

Replicate Data: 243255006|935676|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.013	-0.013	0.0001	0.0012	0.0002	10:21:38	Yes
2	-0.014	-0.014	0.0001	0.0012	0.0002	10:22:13	Yes
Mean:	-0.013	-0.013	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	4.781	4.781	5.42				

Sequence No.: 45 **Autosampler Location: 41**
Sample ID: 243257001|935676|1 **Date Collected: 12/31/2009 10:22:32**
Analyst: JXL **Data Type: Original**

Replicate Data: 243257001|935676|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.013	-0.013	0.0001	0.0009	0.0002	10:23:34	Yes
2	-0.013	-0.013	0.0001	0.0008	0.0002	10:24:09	Yes
Mean:	-0.013	-0.013	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	2.420	2.420	2.64				

Sequence No.: 46 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/31/2009 10:24:28**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.150	5.150	0.0483	0.2275	0.0484	10:25:29	Yes
2	5.121	5.121	0.0480	0.2272	0.0481	10:26:03	Yes
Mean:	5.136	5.136	0.0482				
SD:	0.021	0.021	0.0002				
%RSD:	0.400	0.400	0.40				

QC value within limits for Hg 253.7 Recovery = 102.72%
All analyte(s) passed QC.

Sequence No.: 47 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/31/2009 10:26:22**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.003	-0.003	0.0002	0.0019	0.0003	10:27:23	Yes
2	-0.009	-0.009	0.0001	0.0014	0.0002	10:27:58	Yes
Mean:	-0.006	-0.006	0.0002				
SD:	0.004	0.004	0.0000				
%RSD:	65.87	65.87	22.78				

QC value within limits for Hg 253.7 Recovery = Not calculated

Replicate Data: 1202006399|937621|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.009	-0.009	0.0001	0.0008	0.0003	10:46:42	Yes
2	-0.006	-0.006	0.0002	0.0007	0.0003	10:47:17	Yes
Mean:	-0.008	-0.008	0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	24.71	24.71	11.00				

Sequence No.: 58 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/31/2009 10:47:37**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.143	5.143	0.0482	0.2284	0.0483	10:48:37	Yes
2	5.123	5.123	0.0480	0.2273	0.0482	10:49:12	Yes
Mean:	5.133	5.133	0.0481				
SD:	0.014	0.014	0.0001				
%RSD:	0.276	0.276	0.27				

QC value within limits for Hg 253.7 Recovery = 102.66%
All analyte(s) passed QC.

Sequence No.: 59 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/31/2009 10:49:31**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	0.0001	0.0005	0.0002	10:50:32	Yes
2	-0.006	-0.006	0.0002	0.0008	0.0003	10:51:07	Yes
Mean:	-0.009	-0.009	0.0002				
SD:	0.004	0.004	0.0000				
%RSD:	44.88	44.88	23.39				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 60 **Autosampler Location: 52**
Sample ID: 1202006401|937621|1 **Date Collected: 12/31/2009 10:51:26**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202006401|937621|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.077	2.077	0.0196	0.0946	0.0197	10:52:27	Yes
2	2.082	2.082	0.0197	0.0948	0.0198	10:53:02	Yes
Mean:	2.080	2.080	0.0196				
SD:	0.004	0.004	0.0000				
%RSD:	0.176	0.176	0.17				

Sequence No.: 61 **Autosampler Location: 53**
Sample ID: 1202006722|937621|5 **Date Collected: 12/31/2009 10:53:22**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202006722|937621|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.002	-0.002	0.0002	0.0019	0.0003	10:54:23	Yes
2	-0.013	-0.013	0.0001	0.0005	0.0002	10:54:58	Yes
Mean:	-0.007	-0.007	0.0002				

#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.008	-0.008	0.0002	0.0007	0.0003	11:04:02	Yes
2	-0.007	-0.007	0.0002	0.0014	0.0003	11:04:37	Yes
Mean:	-0.008	-0.008	0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	11.23	11.23	5.11				

Sequence No.: 67 **Autosampler Location: 59**
Sample ID: 243534007|937621|1 **Date Collected: 12/31/2009 11:04:57**
Analyst: JXL **Data Type: Original**

Replicate Data: 243534007|937621|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.016	-0.016	0.0001	0.0011	0.0002	11:05:58	Yes
2	-0.018	-0.018	0.0001	0.0006	0.0002	11:06:33	Yes
Mean:	-0.017	-0.017	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	8.640	8.640	17.92				

Sequence No.: 68 **Autosampler Location: 60**
Sample ID: 243534008|937621|1 **Date Collected: 12/31/2009 11:06:53**
Analyst: JXL **Data Type: Original**

Replicate Data: 243534008|937621|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.015	-0.015	0.0001	0.0008	0.0002	11:07:55	Yes
2	-0.015	-0.015	0.0001	0.0012	0.0002	11:08:30	Yes
Mean:	-0.015	-0.015	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.444	0.444	0.70				

Sequence No.: 69 **Autosampler Location: 61**
Sample ID: 1202002069|935673|1 **Date Collected: 12/31/2009 11:08:50**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202002069|935673|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.018	-0.018	0.0001	0.0006	0.0002	11:09:52	Yes
2	-0.024	-0.024	0.0000	0.0002	0.0001	11:10:27	Yes
Mean:	-0.021	-0.021	0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	19.19	19.19	102.54				

Sequence No.: 70 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/31/2009 11:10:47**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.193	5.193	0.0487	0.2292	0.0488	11:11:48	Yes
2	5.176	5.176	0.0485	0.2282	0.0486	11:12:23	Yes
Mean:	5.184	5.184	0.0486				
SD:	0.012	0.012	0.0001				
%RSD:	0.233	0.233	0.23				

QC value within limits for Hg 253.7 Recovery = 103.69%
All analyte(s) passed QC.

Sequence No.: 71 **Autosampler Location: 8**

Sample ID: CCB
Analyst:
Date Collected: 12/31/2009 11:12:42
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.013	-0.013	0.0001	0.0006	0.0002	11:13:43	Yes
2	-0.016	-0.016	0.0001	0.0005	0.0002	11:14:17	Yes
Mean:	-0.015	-0.015	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	13.01	13.01	19.03				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 72
Sample ID: 1202002070|935673|1
Analyst: JXL
Autosampler Location: 62
Date Collected: 12/31/2009 11:14:37
Data Type: Original

Replicate Data: 1202002070|935673|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.109	2.109	0.0199	0.0938	0.0200	11:15:38	Yes
2	2.095	2.095	0.0198	0.0933	0.0199	11:16:13	Yes
Mean:	2.102	2.102	0.0199				
SD:	0.010	0.010	0.0001				
%RSD:	0.492	0.492	0.49				

Sequence No.: 73
Sample ID: 243272001|935673|1
Analyst: JXL
Autosampler Location: 63
Date Collected: 12/31/2009 11:16:33
Data Type: Original

Replicate Data: 243272001|935673|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.019	-0.019	0.0001	0.0003	0.0002	11:17:34	Yes
2	-0.016	-0.016	0.0001	0.0007	0.0002	11:18:09	Yes
Mean:	-0.018	-0.018	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	9.140	9.140	21.50				

Sequence No.: 74
Sample ID: 1202002071|935673|1
Analyst: JXL
Autosampler Location: 64
Date Collected: 12/31/2009 11:18:29
Data Type: Original

Replicate Data: 1202002071|935673|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.016	-0.016	0.0001	0.0010	0.0002	11:19:30	Yes
2	-0.023	-0.023	0.0000	0.0003	0.0001	11:20:05	Yes
Mean:	-0.020	-0.020	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	22.19	22.19	78.99				

Sequence No.: 75
Sample ID: 1202002072|935673|1
Analyst: JXL
Autosampler Location: 65
Date Collected: 12/31/2009 11:20:25
Data Type: Original

Replicate Data: 1202002072|935673|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.094	2.094	0.0198	0.0935	0.0199	11:21:26	Yes
2	2.088	2.088	0.0197	0.0937	0.0198	11:22:01	Yes

Mean:	2.091	2.091	0.0197
SD:	0.005	0.005	0.0000
%RSD:	0.231	0.231	0.23

Sequence No.: 76 **Autosampler Location: 66**
Sample ID: 1202002073|935673|5 **Date Collected: 12/31/2009 11:22:21**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202002073|935673|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.023	-0.023	0.0000	0.0001	0.0001	11:23:22	Yes
2	-0.019	-0.019	0.0001	0.0004	0.0002	11:23:58	Yes
Mean:	-0.021	-0.021	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	12.65	12.65	68.37				

Sequence No.: 77 **Autosampler Location: 67**
Sample ID: 1202005490|937624|1 **Date Collected: 12/31/2009 11:24:17**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202005490|937624|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.020	-0.020	0.0000	0.0003	0.0001	11:25:19	Yes
2	-0.018	-0.018	0.0001	0.0006	0.0002	11:25:54	Yes
Mean:	-0.019	-0.019	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	7.959	7.959	25.48				

Sequence No.: 78 **Autosampler Location: 68**
Sample ID: 1202006409|937624|1 **Date Collected: 12/31/2009 11:26:14**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202006409|937624|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.017	-0.017	0.0001	0.0005	0.0002	11:27:15	Yes
2	-0.018	-0.018	0.0001	0.0006	0.0002	11:27:50	Yes
Mean:	-0.018	-0.018	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	2.512	2.512	6.19				

Sequence No.: 79 **Autosampler Location: 69**
Sample ID: 1202006410|937624|1 **Date Collected: 12/31/2009 11:28:10**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202006410|937624|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.125	2.125	0.0201	0.0956	0.0202	11:29:11	Yes
2	2.113	2.113	0.0200	0.0938	0.0201	11:29:46	Yes
Mean:	2.119	2.119	0.0200				
SD:	0.008	0.008	0.0001				
%RSD:	0.385	0.385	0.38				

Sequence No.: 80 **Autosampler Location: 70**
Sample ID: 243359001|937624|1 **Date Collected: 12/31/2009 11:30:05**
Analyst: JXL **Data Type: Original**

Replicate Data: 243359001|937624|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.527	1.527	0.0145	0.0695	0.0146	11:31:07	Yes
2	1.514	1.514	0.0144	0.0691	0.0145	11:31:42	Yes
Mean:	1.520	1.520	0.0144				
SD:	0.009	0.009	0.0001				
%RSD:	0.601	0.601	0.59				

Sequence No.: 81 **Autosampler Location: 71**
Sample ID: 1202006411|937624|1 **Date Collected: 12/31/2009 11:32:01**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202006411|937624|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.678	1.678	0.0159	0.0760	0.0160	11:33:03	Yes
2	1.669	1.669	0.0158	0.0756	0.0159	11:33:38	Yes
Mean:	1.673	1.673	0.0159				
SD:	0.007	0.007	0.0001				
%RSD:	0.397	0.397	0.39				

Sequence No.: 82 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/31/2009 11:33:58**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.133	5.133	0.0481	0.2272	0.0482	11:34:58	Yes
2	5.106	5.106	0.0479	0.2262	0.0480	11:35:33	Yes
Mean:	5.120	5.120	0.0480				
SD:	0.019	0.019	0.0002				
%RSD:	0.374	0.374	0.37				

QC value within limits for Hg 253.7 Recovery = 102.39%
All analyte(s) passed QC.

Sequence No.: 83 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/31/2009 11:35:52**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.021	-0.021	0.0000	0.0004	0.0001	11:36:53	Yes
2	-0.020	-0.020	0.0000	0.0002	0.0001	11:37:28	Yes
Mean:	-0.020	-0.020	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	1.437	1.437	6.28				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 84 **Autosampler Location: 72**
Sample ID: 1202006412|937624|1 **Date Collected: 12/31/2009 11:37:47**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202006412|937624|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.707	3.707	0.0348	0.1665	0.0349	11:38:49	Yes
2	3.664	3.664	0.0344	0.1648	0.0345	11:39:23	Yes
Mean:	3.686	3.686	0.0346				
SD:	0.030	0.030	0.0003				
%RSD:	0.813	0.813	0.81				

Miscellaneous

Prep LogBook

Analyst: AXG2 Verified by:_____

Batch: 935386

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202001501	UI091124-01	.25	mL
LCS	1202001501	UI091124-06	.25	mL
MS	1202001503	UI091124-01	.25	mL
MS	1202001503	UI091124-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202001500		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
LCS	1202001501		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243255001		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243255002		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243255003		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243255004		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243255005		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243255006		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243257001		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243257003		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243257005		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243257006		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243272001		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	WATER
SAMPLE	243285001		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243285002		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243286001		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
DUP	1202001502	243286001	SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
MS	1202001503	243286001	SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SDILT	1202001504	243286001	SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243286002		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243286003		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243286004		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER

Reagent/Solvent Lot ID	Amount	Description
1244970	2.5 mL	HYDROCHLORIC ACID
1234886	1 mL	Nitric Acid CONC.

Comments:

Prep LogBook

Analyst: AXG2 Verified by:_____

Batch: 935394

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202001515	UI091124-A00	.5	mL
LCS	1202001515	UI091124-B	.5	mL
MS	1202001517	UI090828-A	.5	mL
MS	1202001517	UI090828-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202001514		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
LCS	1202001515		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243255001		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243255002		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243255003		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243255004		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243255005		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243255006		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243257001		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243257003		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243257005		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243257006		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243272001		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	WATER
SAMPLE	243285001		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243285002		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243286001		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243286002		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
DUP	1202001516	243286002	SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
MS	1202001517	243286002	SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SDILT	1202001518	243286002	SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243286003		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	243286004		SW846 3005A	22-DEC-2009 07:15	<2	50 mL	50 mL	1	GROUND WATER

Reagent/Solvent Lot ID	Amount	Description
1244970	2.5 mL	HYDROCHLORIC ACID
1234886	1 mL	Nitric Acid CONC.

Comments

Prep LogBook

Analyst: BCD1 Verified by:_____

Batch: 935672

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202002070	WHG1248583-13	.2	mL
MS	1202002072	WHG1248583-13	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202002069		SW846 7470A Prep	30-DEC-2009 15:14	<2	20 mL	20 mL	1	WATER
LCS	1202002070		SW846 7470A Prep	30-DEC-2009 15:14	<2	20 mL	20 mL	1	WATER
SAMPLE	243272001		SW846 7470A Prep	30-DEC-2009 15:14	<2	20 mL	20 mL	1	WATER
DUP	1202002071	243272001	SW846 7470A Prep	30-DEC-2009 15:14	<2	20 mL	20 mL	1	WATER
MS	1202002072	243272001	SW846 7470A Prep	30-DEC-2009 15:14	<2	20 mL	20 mL	1	WATER
SDILT	1202002073	243272001	SW846 7470A Prep	30-DEC-2009 15:14	<2	20 mL	20 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1176183	1 mL	Sulfuric Acid, Concentrated
1240182-1	.5 mL	NITRIC ACID
1234385-C	1.5 mL	5% Potassium Persulfate
1244904-C	3 mL	5% KMnO4 solution
1206350-C	1 mL	Hg reducing agent
WHG1248587-06	500 uL	Mercury Working 2nd Source 5.0/ICV
WHG1248589-01	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG1248591-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG1248593-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG1248595-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG1248597-04	500 uL	Mercury Working 1st Source CAL 5.0/CCV

Comments:

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: 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%IN5%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 S **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: 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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
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
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

Analyte	Concentration	Analyte	Concentration
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: UI090828-A **Opened:** 28-AUG-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 27-AUG-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 28-AUG-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: UI090828-B **Opened:** 28-AUG-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 27-AUG-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 28-AUG-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: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L

Analyte	Concentration	Analyte	Concentration
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration

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 :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS
Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091124-01 **Opened:** 24-NOV-09 **Lot Number :** 1017642
Name: METALSPIKE-1 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091124-06 **Opened:** 24-NOV-09 **Lot Number :** 1017643
Name: METALSPIKE-2 **Received:** 24-NOV-09
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL

Analyte	Concentration	Analyte	Concentration
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091124-A00 **Opened:** 24-NOV-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 24-NOV-09 **Lot Number :** 1017644
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: O2si
Description: ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI091124-B **Opened:** 24-NOV-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 24-NOV-09 **Lot Number :** 1017644
Type: Source Material **Expires:** 24-NOV-10
Employee: Francena Armstrong
Supplier: O2si
Description: MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Standard Logbook

Serial ID: UI091212-11 **Opened:** 12-DEC-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 12-DEC-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 12-DEC-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: O2SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091212-60 **Opened:** 12-DEC-09 **Amount :** .5 mL
Name: ICPMS High Range Standar **Received:** 12-DEC-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 12-DEC-10 **Lot Number :** 1018064
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: UI091212-61 **Opened:** 12-DEC-09 **Amount :** .5 mL
Name: ICPMS High Range Standar **Received:** 12-DEC-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 12-DEC-10 **Lot Number :** 1018064
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: UI091215-48 **Opened:** 04-JAN-10 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 18-DEC-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 04-JAN-11 **Lot Number :** 1018219
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: UI091217-06 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 17-DEC-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018209
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI091217-07 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 17-DEC-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018210
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L

Analyte	Concentration	Analyte	Concentration
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: UI091228-40 **Opened:** 28-DEC-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 21-DEC-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 28-DEC-10 **Lot Number :** 1018160
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: UI091228-41 **Opened:** 28-DEC-09 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 21-DEC-09 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 28-DEC-10 **Lot Number :** 1018160
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

Analyte	Concentration	Analyte	Concentration
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/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
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: WHG1248583-13 **Opened:** 30-DEC-09 **Pipet Id :** Hg1289245
Name: MHGLIQLCSMSSPIKE **Received:** 30-DEC-09 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 31-DEC-09
Employee: Bryan Davis **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury working intermediate standard for LCS/MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG1248587-06 **Opened:** 30-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORK5.0ICV **Received:** 30-DEC-09 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 31-DEC-09
Employee: Bryan Davis
Supplier: GEL
Description: Mercury Working 2nd Source 5.0/ICV
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	5 ug/L		

Serial ID: WHG1248589-01 **Opened:** 30-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 30-DEC-09 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 31-DEC-09
Employee: Bryan Davis
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.2/CRA
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	.2 ug/L		

Serial ID: WHG1248591-02 **Opened:** 30-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 30-DEC-09 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 31-DEC-09
Employee: Bryan Davis
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.5
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Mercury	.5 ug/L		

Serial ID: WHG1248593-05 **Opened:** 30-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **Received:** 30-DEC-09 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 31-DEC-09
Employee: Bryan Davis **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 10.0
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	10 ug/L		

Serial ID: WHG1248595-03 **Opened:** 30-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 30-DEC-09 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 31-DEC-09
Employee: Bryan Davis **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 2.0
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	2 ug/L		

Serial ID: WHG1248597-04 **Opened:** 30-DEC-09 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **Received:** 30-DEC-09 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 31-DEC-09
Employee: Bryan Davis **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 5.0/CCV
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	5 ug/L		

Serial ID: WI100106-42 **Opened:** 06-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 07-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1249941
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100106-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100106-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100106-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100106-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100106-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100106-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100106-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100106-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100106-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100106-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100106-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100106-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100106-43 **Opened:** 06-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 07-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1249941
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Serial ID: WI100106-44 **Opened:** 06-JAN-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 07-JAN-10 **Solvent :** 3%HCL and 1 %HNO3-1249941
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Serial ID: WI100106-45 **Opened:** 06-JAN-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 07-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1249941
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

Standard Logbook

Serial ID: WI100106-46 **Opened:** 06-JAN-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 07-JAN-10 **Solvent :** 3%HCL AND 1%HNO3-1249941
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
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

Standard Logbook

Serial ID: WI100106-47 **Opened:** 06-JAN-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 07-JAN-10 **Solvent :** 3%HCL &1%HNO3-1249941
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
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: WI100107-42 **Opened:** 07-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 08-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1249941
Employee: Helen Camello
Supplier: GEL

Standard Logbook

Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100107-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100107-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100107-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100107-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100107-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100107-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100107-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100107-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100107-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100107-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100107-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100107-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100107-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100107-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100107-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100107-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100107-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100107-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100107-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100107-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100107-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100107-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100107-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100107-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100107-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100107-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100107-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100107-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100107-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100107-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100107-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100107-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100107-43 **Opened:** 07-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 08-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1249941
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Serial ID: WI100107-44 **Opened:** 07-JAN-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 08-JAN-10 **Solvent :** 3%HCL and 1 %HNO3-1249941
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Serial ID: WI100107-45 **Opened:** 07-JAN-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 08-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1249941
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

Standard Logbook

Serial ID: WI100107-46 **Opened:** 07-JAN-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 08-JAN-10 **Solvent :** 3%HCL AND 1%HNO3-1249941
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
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

Standard Logbook

Serial ID: WI100107-47 **Opened:** 07-JAN-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 08-JAN-10 **Solvent :** 3%HCL &1%HNO3-1249941
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
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: WMS091222-04 **Opened:** 22-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 22-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 23-DEC-09 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl-1245333
Supplier: GEL

Standard Logbook

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
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: WMS091222-04A **Opened:** 22-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 22-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 23-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1245333
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091222-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091222-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091222-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091222-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091222-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091222-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091222-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091222-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091222-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091222-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091222-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091222-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091222-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091222-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091222-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091222-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091222-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091222-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091222-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091222-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091222-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091222-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091222-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091222-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091222-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091222-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091222-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091222-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091222-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091222-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091222-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091222-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091222-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS091222-05 **Opened:** 22-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 22-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 23-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1245333
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Serial ID: WMS091222-06 **Opened:** 22-DEC-09 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 22-DEC-09 **Pipet Id :** 3820544
Type: Working **Expires:** 23-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1245333
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Serial ID: WMS091222-07 **Opened:** 22-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 22-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 23-DEC-09 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl - 1245333
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091222-08 **Opened:** 22-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 22-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 23-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1245333
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Serial ID: WMS091222-70 **Opened:** 22-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 22-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 23-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1245333
Employee: Elizabeth Janssen
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091212-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS091223-04 **Opened:** 23-DEC-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 23-DEC-09 **Balance Id :** 4025216
Type: Working **Expires:** 24-DEC-09 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl-1245333
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
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

Standard Logbook

Serial ID: WMS091223-04A **Opened:** 23-DEC-09 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 23-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 24-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1245333
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS091223-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091223-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS091223-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS091223-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091223-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091223-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS091223-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091223-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091223-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091223-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS091223-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS091223-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091223-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS091223-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091223-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091223-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS091223-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS091223-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS091223-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091223-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091223-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091223-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS091223-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS091223-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091223-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091223-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091223-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS091223-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091223-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS091223-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091223-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS091223-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS091223-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Serial ID: WMS091223-05 **Opened:** 23-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 23-DEC-09 **Pipet Id :** 3541598
Type: Working **Expires:** 24-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1245333
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
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: WMS091223-06
Name: ICPMS CRDL
Type: Working
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Opened: 23-DEC-09
Received: 23-DEC-09
Expires: 24-DEC-09

Balance Id : 40245216
Pipet Id : 3820544
Solvent : 2%HNO3/1%HCl - 1245333

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: WMS091223-07 **Opened:** 23-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 23-DEC-09 **Lot Number :** 1010773
Type: Working **Expires:** 24-DEC-09 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl - 1245333
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS091223-08 **Opened:** 23-DEC-09 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 23-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 24-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1245333
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Serial ID: WMS091223-70 **Opened:** 23-DEC-09 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 23-DEC-09 **Pipet Id :** 1758088
Type: Working **Expires:** 24-DEC-09 **Solvent :** 2%HNO3/1%HCl - 1245333
Employee: Elizabeth Janssen
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091212-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
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: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1215906 **Opened:** 06-NOV-09 **Lot Number :** H44465
Name: B-K2S2O8S-MER **Received:** 06-NOV-09
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Tara Griffin
Supplier: J.T BAKER
Description: Potassium Persulfate Concentrate.
Comments: None

Serial ID: 1234385-C **Opened:** 25-NOV-09 **Balance Id :** BAL-002
Name: B-K2S2O8-MER **Received:** 25-NOV-09
Type: Reagent/Solvent **Expires:** 25-MAY-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: 1234886 **Opened:** 27-NOV-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 27-NOV-09
Type: Reagent/Solvent **Expires:** 27-NOV-10
Employee: Bryan Davis
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1238345 **Opened:** 04-DEC-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 04-DEC-09
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.

Comments: None

Serial ID: 1240182-1 **Opened:** 09-DEC-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 09-DEC-09 **Lot Number :** H34040
Type: Reagent/Solvent **Expires:** 09-DEC-10
Employee: Tara Griffin
Supplier: Mallinckrodt Chemicals
Description: NITRIC ACID
Comments: None

Serial ID: 1244904-C **Opened:** 18-DEC-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 18-DEC-09
Type: Reagent/Solvent **Expires:** 18-JUN-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1244970 **Opened:** 18-DEC-09 **Lot Number :** H41032
Name: I-HCL **Received:** 18-DEC-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 18-DEC-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1245333 **Opened:** 21-DEC-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 21-DEC-09
Type: Reagent/Solvent **Expires:** 28-DEC-09
Employee: Elizabeth Janssen
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1238345	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1244970	I-HCL	36.5-38.0	90 mL	9 l	N/A

Standard Logbook

Serial ID:	1249941	**Opened:**	04-JAN-10	**Amount :**	20 L
Name:	B-ICP-RINSE SOLN	**Received:**	15-DEC-10	**Lot Number :**	H04040+G34050
Type:	Reagent/Solvent	**Expires:**	10-JAN-10	**Solvent :**	3%HCL+1%HNO3
Employee:	Helen Camello				
Supplier:	GEL				
Description:	3%HCL+1%HNO3 RINSE SOLN.				
Comments:	None				

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-990

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	935219 and 935222	**Method:**	SW846 9012A
Prep Batch :	935217 and 935221	**Method:**	SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
243270001	RE12-10-7352
243270002	RE12-10-7360
243270003	RE12-10-7358
243270004	RE12-10-7357
243270005	RE12-10-7359
243270006	RE12-10-7356
243270007	RE12-10-7353
243270008	RE12-10-7354
243270009	RE12-10-7355
243270010	RE12-10-7364
1202000965	Method Blank (MB)
1202000966	243243019(RE16-10-324) Sample Duplicate (DUP)
1202000967	243249001(RE16-10-144) Sample Duplicate (DUP)
1202000968	243243019(RE16-10-324) Matrix Spike (MS)
1202000969	243249001(RE16-10-144) Matrix Spike (MS)
1202000970	243243019(RE16-10-324) Matrix Spike Duplicate (MSD)
1202000971	243249001(RE16-10-144) Matrix Spike Duplicate (MSD)
1202000972	Laboratory Control Sample (LCS)
1202000973	Method Blank (MB)
1202000974	243270010(RE12-10-7364) Sample Duplicate (DUP)
1202000975	243270010(RE12-10-7364) Matrix Spike (MS)
1202000976	243270010(RE12-10-7364) Matrix Spike Duplicate (MSD)
1202000977	Laboratory Control Sample (LCS)
1202003559	243393002(WST12-10-8879) Sample Duplicate (DUP)
1202003560	243393002(WST12-10-8879) Matrix Spike (MS)
1202003561	243393002(WST12-10-8879) Matrix Spike Duplicate (MSD)

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

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement

The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Designation

The following samples were selected for QC analysis: 243243019 (RE16-10-324), 243249001 (RE16-10-144)- Batch 935219, 243270010 (RE12-10-7364) and 243393002 (WST12-10-8879)- Batch 935222.

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. 1202000966 (RE16-10-324)- Batch 935219, 1202000974 (RE12-10-7364) and 1202003559 (WST12-10-8879)- Batch 935222.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The following samples in this sample group were diluted due to high concentration: 1202000972 (LCS)- Batch 935219 and 1202000977 (LCS)- Batch 935222.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR 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: Tom Lewis, Jr. **Date:** 14Jan10

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: 10-990 GEL Work Order: 243270

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

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

Certificate of Analysis

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

Report Date: January 5, 2010
Client SDG: 10-990

Client Sample ID:	RE12-10-7352	Project:	LANL01004
Sample ID:	243270001	Client ID:	LANL010
Matrix:	R		
Collect Date:	16-DEC-09 12:00		
Receive Date:	18-DEC-09		
Collector:	Client		
Moisture:	9.79%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	69.8	257	ug/kg	1	AXC2 12/29/09	1338	935219	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/29/09	1259	935217

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: January 5, 2010
Client SDG: 10-990

Client Sample ID:	RE12-10-7360	Project:	LANL01004
Sample ID:	243270002	Client ID:	LANL010
Matrix:	R		
Collect Date:	16-DEC-09 12:00		
Receive Date:	18-DEC-09		
Collector:	Client		
Moisture:	11.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	75.0	276	ug/kg	1	AXC2 12/29/09	1339	935219	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/29/09	1259	935217

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: January 5, 2010
Client SDG: 10-990

Client Sample ID:	RE12-10-7358	Project:	LANL01004
Sample ID:	243270003	Client ID:	LANL010
Matrix:	R		
Collect Date:	16-DEC-09 12:00		
Receive Date:	18-DEC-09		
Collector:	Client		
Moisture:	11%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	J	98.6	69.5	255	ug/kg	1	AXC2 12/29/09	1343	935219	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/29/09	1259	935217

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: January 5, 2010
Client SDG: 10-990

Client Sample ID:	RE12-10-7357	Project:	LANL01004
Sample ID:	243270004	Client ID:	LANL010
Matrix:	R		
Collect Date:	16-DEC-09 12:00		
Receive Date:	18-DEC-09		
Collector:	Client		
Moisture:	10.4%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	J	179	70.3	258	ug/kg	1	AXC2 12/29/09	1344	935219	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/29/09	1259	935217

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: January 5, 2010
Client SDG: 10-990

Client Sample ID:	RE12-10-7359	Project:	LANL01004
Sample ID:	243270005	Client ID:	LANL010
Matrix:	R		
Collect Date:	16-DEC-09 12:00		
Receive Date:	18-DEC-09		
Collector:	Client		
Moisture:	11.5%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	J	127	68.6	252	ug/kg	1	AXC2 12/29/09	1345	935219	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/29/09	1259	935217

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: January 5, 2010
Client SDG: 10-990

Client Sample ID:	RE12-10-7356	Project:	LANL01004
Sample ID:	243270006	Client ID:	LANL010
Matrix:	R		
Collect Date:	16-DEC-09 12:00		
Receive Date:	18-DEC-09		
Collector:	Client		
Moisture:	10.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	68.9	253	ug/kg	1	AXC2 12/29/09	1346	935219	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/29/09	1259	935217

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: January 5, 2010
Client SDG: 10-990

Client Sample ID:	RE12-10-7353	Proiect:	LANL01004
Sample ID:	243270007	Client ID:	LANL010
Matrix:	R		
Collect Date:	16-DEC-09 12:00		
Receive Date:	18-DEC-09		
Collector:	Client		
Moisture:	17.8%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	81.1	298	ug/kg	1	AXC2 12/29/09	1347	935219	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/29/09	1259	935217

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: January 5, 2010
Client SDG: 10-990

Client Sample ID:	RE12-10-7354	Project:	LANL01004
Sample ID:	243270008	Client ID:	LANL010
Matrix:	R		
Collect Date:	16-DEC-09 12:00		
Receive Date:	18-DEC-09		
Collector:	Client		
Moisture:	6.86%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	J	150	65.2	240	ug/kg	1	AXC2 12/29/09	1348	935219	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/29/09	1259	935217

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: January 5, 2010
Client SDG: 10-990

Client Sample ID:	RE12-10-7355	Project:	LANL01004
Sample ID:	243270009	Client ID:	LANL010
Matrix:	R		
Collect Date:	16-DEC-09 12:00		
Receive Date:	18-DEC-09		
Collector:	Client		
Moisture:	12.9%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	69.7	256	ug/kg	1	AXC2 12/29/09	1348	935219	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/29/09	1259	935217

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

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

Report Date: January 5, 2010
Client SDG: 10-990

Client Sample ID:	RE12-10-7364	Proiect:	LANL01004
Sample ID:	243270010	Client ID:	LANL010
Matrix:	R		
Collect Date:	16-DEC-09 12:00		
Receive Date:	18-DEC-09		
Collector:	Client		
Moisture:	12.2%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	U	ND	71.7	264	ug/kg	1	AXH3 12/24/09	1345	935222	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/24/09	1301	935221

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

QC Summary

Report Date: January 5, 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: 243270

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis										
Batch 935219										
QC1202000966 243243019 DUP										
Cyanide, Total		J	226	J	161	ug/kg	33.6 ^		(+/-266)	AXC2 12/29/09 13:22
QC1202000967 243249001 DUP										
Cyanide, Total			324		276	ug/kg	15.9 ^		(+/-246)	12/29/09 13:25
QC1202000972 LCS										
Cyanide, Total	67900				80000	ug/kg		118	(46%-145%)	12/29/09 13:19
QC1202000965 MB										
Cyanide, Total				U	250	ug/kg				12/29/09 13:18
QC1202000968 243243019 MS										
Cyanide, Total	5920	J	226		4950	ug/kg		79.7	(50%-130%)	12/29/09 13:23
QC1202000969 243249001 MS										
Cyanide, Total	5010		324		4810	ug/kg		89.6	(50%-130%)	12/29/09 13:26
QC1202000970 243243019 MSD										
Cyanide, Total	6160	J	226		5230	ug/kg	5.58	81.2	(0%-30%)	12/29/09 13:24
QC1202000971 243249001 MSD										
Cyanide, Total	5390		324		5230	ug/kg	8.34	91	(0%-30%)	12/29/09 13:31
Batch 935222										
QC1202000974 243270010 DUP										
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			AXH3 12/24/09 13:49
QC1202003559 243393002 DUP										
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			12/24/09 14:02
QC1202000977 LCS										
Cyanide, Total	34000				33100	ug/kg		97.6	(46%-145%)	12/24/09 13:30
QC1202000973 MB										
Cyanide, Total				U	250	ug/kg				12/24/09 13:30
QC1202000975 243270010 MS										
Cyanide, Total	5270	U	ND		4910	ug/kg		92.9	(50%-130%)	12/24/09 13:50
QC1202003560 243393002 MS										
Cyanide, Total	5470	U	ND		5750	ug/kg		105	(50%-130%)	12/24/09 14:03
QC1202000976 243270010 MSD										
Cyanide, Total	5170	U	ND		4870	ug/kg	0.767	93.9	(0%-30%)	12/24/09 13:51
QC1202003561 243393002 MSD										
Cyanide, Total	4990	U	ND		5040	ug/kg	13.0	101	(0%-30%)	12/24/09 14:04

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

QC Summary

Workorder: 243270

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

B	For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
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	Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
E	Organics--Concentration of the target analyte exceeds the instrument calibration range
F	Estimated Value
H	Analytical holding time was exceeded
J	Value is estimated
M	M if above MDC and less than LLD
M	Matrix Related Failure
N	Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 05-JAN-2010 12:06

GEL Laboratories LLC
Contract: LANL01004
SDG #: 10-990

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	**24-DEC-2009 13:19:16**	**OM_12-24-2009_13-08-41**	**149**	**150**	**99**	**(90%-110%)**	**Yes**
CCV	24-DEC-2009 13:33:34	OM_12-24-2009_13-08-41	105	100	105	(90%-110%)	Yes
CCV	24-DEC-2009 13:45:59	OM_12-24-2009_13-08-41	106	100	106	(90%-110%)	Yes
CCV	24-DEC-2009 13:58:23	OM_12-24-2009_13-08-41	106	100	106	(90%-110%)	Yes
CCV	24-DEC-2009 14:05:37	OM_12-24-2009_13-08-41	106	100	106	(90%-110%)	Yes
ICV	**29-DEC-2009 10:13:05**	**OM_12-29-2009_10-02-35**	**149**	**150**	**99**	**(90%-110%)**	**Yes**
CCV	29-DEC-2009 13:15:09	OM_12-29-2009_13-11-48	95.5	100	96	(90%-110%)	Yes
CCV	29-DEC-2009 13:27:36	OM_12-29-2009_13-11-48	102	100	102	(90%-110%)	Yes
CCV	29-DEC-2009 13:40:01	OM_12-29-2009_13-11-48	104	100	104	(90%-110%)	Yes
CCV	29-DEC-2009 13:50:41	OM_12-29-2009_13-11-48	105	100	105	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**24-DEC-2009 13:21:06**	**OM_12-24-2009_13-08-41**	**-1.74**	**5**	**Yes**
CCB	24-DEC-2009 13:35:24	OM_12-24-2009_13-08-41	-1.78	5	Yes
CCB	24-DEC-2009 13:47:50	OM_12-24-2009_13-08-41	-2.07	5	Yes
CCB	24-DEC-2009 14:00:13	OM_12-24-2009_13-08-41	-1.66	5	Yes
CCB	24-DEC-2009 14:07:27	OM_12-24-2009_13-08-41	-2.74	5	Yes
ICB	**29-DEC-2009 10:14:56**	**OM_12-29-2009_10-02-35**	**-1.83**	**5**	**Yes**
CCB	29-DEC-2009 13:16:59	OM_12-29-2009_13-11-48	-2.07	5	Yes
CCB	29-DEC-2009 13:29:26	OM_12-29-2009_13-11-48	-2.23	5	Yes
CCB	29-DEC-2009 13:41:52	OM_12-29-2009_13-11-48	-3.07	5	Yes
CCB	29-DEC-2009 13:52:31	OM_12-29-2009_13-11-48	-2.09	5	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 935221

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202000977	URF1200957-01	.25	g
MS	1202000975	URF1184831-02	.025	mL
MS	1202003560	URF1184831-02	.025	mL
MSD	1202000976	URF1184831-02	.025	mL
MSD	1202003561	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202000973		SW846 9010B Prep	24-DEC-2009 13:00	>12	0.5 g	25 mL	50	SOIL
LCS	1202000977		SW846 9010B Prep	24-DEC-2009 13:00	>12	0.25 g	25 mL	100	SOIL
SAMPLE	243092002		SW846 9010B Prep	24-DEC-2009 13:00	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	243092003		SW846 9010B Prep	24-DEC-2009 13:00	>12	0.5 g	25 mL	50	SOIL
SAMPLE	243262001		SW846 9010B Prep	24-DEC-2009 13:00	>12	0.58 g	25 mL	43.10345	MISC SOLID
SAMPLE	243262002		SW846 9010B Prep	24-DEC-2009 13:01	>12	0.509 g	25 mL	49.11591	MISC SOLID
SAMPLE	243265001		SW846 9010C Distillation	24-DEC-2009 13:01	>12	0.58 g	25 mL	43.10345	SOIL
SAMPLE	243265002		SW846 9010C Distillation	24-DEC-2009 13:01	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	243265003		SW846 9010C Distillation	24-DEC-2009 13:01	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	243265004		SW846 9010C Distillation	24-DEC-2009 13:01	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	243265005		SW846 9010C Distillation	24-DEC-2009 13:01	>12	0.5 g	25 mL	50	SOIL
SAMPLE	243265006		SW846 9010C Distillation	24-DEC-2009 13:01	>12	0.58 g	25 mL	43.10345	SOIL
SAMPLE	243265007		SW846 9010C Distillation	24-DEC-2009 13:01	>12	0.5 g	25 mL	50	SOIL
SAMPLE	243270010		SW846 9010B Prep	24-DEC-2009 13:01	>12	0.54 g	25 mL	46.2963	SOIL
DUP	1202000974	243270010	SW846 9010B Prep	24-DEC-2009 13:01	>12	0.52 g	25 mL	48.07692	SOIL
MS	1202000975	243270010	SW846 9010B Prep	24-DEC-2009 13:01	>12	0.54 g	25 mL	46.2963	SOIL
MSD	1202000976	243270010	SW846 9010B Prep	24-DEC-2009 13:01	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	243385001		SW846 9010B Prep	24-DEC-2009 13:01	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	243385002		SW846 9010B Prep	24-DEC-2009 13:01	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	243385003		SW846 9010B Prep	24-DEC-2009 13:01	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	243385004		SW846 9010B Prep	24-DEC-2009 13:01	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	243385005		SW846 9010B Prep	24-DEC-2009 13:01	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	243385006		SW846 9010B Prep	24-DEC-2009 13:01	>12	0.58 g	25 mL	43.10345	SOIL
SAMPLE	243385007		SW846 9010B Prep	24-DEC-2009 13:01	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	243393002		SW846 9010B Prep	24-DEC-2009 13:01	>12	0.51 g	25 mL	49.01961	SOIL
DUP	1202003559	243393002	SW846 9010B Prep	24-DEC-2009 13:01	>12	0.53 g	25 mL	47.16981	SOIL
MS	1202003560	243393002	SW846 9010B Prep	24-DEC-2009 13:01	>12	0.52 g	25 mL	48.07692	SOIL
MSD	1202003561	243393002	SW846 9010B Prep	24-DEC-2009 13:01	>12	0.57 g	25 mL	43.85965	SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
091211-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091224-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1238146-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1238142-C	1.25 mL	Bismuth Nitrate Solution

Comments:

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 935217

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202000972	URF1200957-01	.25	g
MS	1202000968	URF1184831-02	.025	mL
MS	1202000969	URF1184831-02	.025	mL
MSD	1202000970	URF1184831-02	.025	mL
MSD	1202000971	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202000965		SW846 9010B Prep	29-DEC-2009 12:59	>12	0.5 g	25 mL	50	SOIL
LCS	1202000972		SW846 9010B Prep	29-DEC-2009 12:59	>12	0.25 g	25 mL	100	SOIL
SAMPLE	243194001		SW846 9010C Distillation	29-DEC-2009 12:59	>12	0.58 g	25 mL	43.10345	SOLID
SAMPLE	243243019		SW846 9010B Prep	29-DEC-2009 12:59	>12	0.51 g	25 mL	49.01961	SOIL
DUP	1202000966	243243019	SW846 9010B Prep	29-DEC-2009 12:59	>12	0.58 g	25 mL	43.10345	SOIL
MS	1202000968	243243019	SW846 9010B Prep	29-DEC-2009 12:59	>12	0.52 g	25 mL	48.07692	SOIL
MSD	1202000970	243243019	SW846 9010B Prep	29-DEC-2009 12:59	>12	0.5 g	25 mL	50	SOIL
SAMPLE	243249001		SW846 9010B Prep	29-DEC-2009 12:59	>12	0.5 g	25 mL	50	SOIL
DUP	1202000967	243249001	SW846 9010B Prep	29-DEC-2009 12:59	>12	0.57 g	25 mL	43.85965	SOIL
MS	1202000969	243249001	SW846 9010B Prep	29-DEC-2009 12:59	>12	0.56 g	25 mL	44.64286	SOIL
MSD	1202000971	243249001	SW846 9010B Prep	29-DEC-2009 12:59	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	243249002		SW846 9010B Prep	29-DEC-2009 12:59	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	243249003		SW846 9010B Prep	29-DEC-2009 12:59	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	243249004		SW846 9010B Prep	29-DEC-2009 12:59	>12	0.5 g	25 mL	50	SOIL
SAMPLE	243249005		SW846 9010B Prep	29-DEC-2009 12:59	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	243256001		SW846 9010B Prep	29-DEC-2009 12:59	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	243256002		SW846 9010B Prep	29-DEC-2009 12:59	>12	0.58 g	25 mL	43.10345	SOIL
SAMPLE	243256003		SW846 9010B Prep	29-DEC-2009 12:59	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	243270001		SW846 9010B Prep	29-DEC-2009 12:59	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	243270002		SW846 9010B Prep	29-DEC-2009 12:59	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	243270003		SW846 9010B Prep	29-DEC-2009 12:59	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	243270004		SW846 9010B Prep	29-DEC-2009 12:59	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	243270005		SW846 9010B Prep	29-DEC-2009 12:59	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	243270006		SW846 9010B Prep	29-DEC-2009 12:59	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	243270007		SW846 9010B Prep	29-DEC-2009 12:59	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	243270008		SW846 9010B Prep	29-DEC-2009 12:59	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	243270009		SW846 9010B Prep	29-DEC-2009 12:59	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	243273001		SW846 9010B Prep	29-DEC-2009 12:59	>12	0.5 g	25 mL	50	SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
091211-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091229-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1238146-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1238142-C	1.25 mL	Bismuth Nitrate Solution

Comments:

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axh3	12/24/2009 13:12:06	OM_12-24-2009_13-08-41
150 ppb		1	axh3	12/24/2009 13:12:58	OM_12-24-2009_13-08-41
100 ppb		1	axh3	12/24/2009 13:13:51	OM_12-24-2009_13-08-41
50 ppb		1	axh3	12/24/2009 13:14:44	OM_12-24-2009_13-08-41
10 ppb		1	axh3	12/24/2009 13:15:37	OM_12-24-2009_13-08-41
CRDL 5.0 ppb		1	axh3	12/24/2009 13:16:31	OM_12-24-2009_13-08-41
ICAL-00		1	axh3	12/24/2009 13:17:25	OM_12-24-2009_13-08-41
ICV		1	axh3	12/24/2009 13:19:16	OM_12-24-2009_13-08-41
ICB		1	axh3	12/24/2009 13:21:06	OM_12-24-2009_13-08-41
CRDL		1	axh3	12/24/2009 13:22:56	OM_12-24-2009_13-08-41
1202001100	935267	1	axh3	12/24/2009 13:24:45	OM_12-24-2009_13-08-41
1202001102	935267	1	axh3	12/24/2009 13:25:39	OM_12-24-2009_13-08-41
243194001	935267	1	axh3	12/24/2009 13:26:32	OM_12-24-2009_13-08-41
1202001101	935267	1	axh3	12/24/2009 13:27:26	OM_12-24-2009_13-08-41
243262001	935267	1	axh3	12/24/2009 13:28:18	OM_12-24-2009_13-08-41
243262002	935267	1	axh3	12/24/2009 13:29:11	OM_12-24-2009_13-08-41
1202000973	935222	1	axh3	12/24/2009 13:30:04	OM_12-24-2009_13-08-41
1202000977	935222	25	axh3	12/24/2009 13:30:56	OM_12-24-2009_13-08-41
243092002	935222	1	axh3	12/24/2009 13:31:49	OM_12-24-2009_13-08-41
243092003	935222	1	axh3	12/24/2009 13:32:41	OM_12-24-2009_13-08-41
CCV		1	axh3	12/24/2009 13:33:34	OM_12-24-2009_13-08-41
CCB		1	axh3	12/24/2009 13:35:24	OM_12-24-2009_13-08-41
243262001	935222	1	axh3	12/24/2009 13:37:12	OM_12-24-2009_13-08-41
243262002	935222	1	axh3	12/24/2009 13:38:05	OM_12-24-2009_13-08-41
243265001	935222	1	axh3	12/24/2009 13:38:56	OM_12-24-2009_13-08-41
243265002	935222	1	axh3	12/24/2009 13:39:48	OM_12-24-2009_13-08-41
243265003	935222	1	axh3	12/24/2009 13:40:39	OM_12-24-2009_13-08-41
243265004	935222	1	axh3	12/24/2009 13:41:33	OM_12-24-2009_13-08-41
243265005	935222	1	axh3	12/24/2009 13:42:27	OM_12-24-2009_13-08-41
243265006	935222	1	axh3	12/24/2009 13:43:20	OM_12-24-2009_13-08-41
243265007	935222	1	axh3	12/24/2009 13:44:14	OM_12-24-2009_13-08-41
243270010	935222	1	axh3	12/24/2009 13:45:07	OM_12-24-2009_13-08-41
CCV		1	axh3	12/24/2009 13:45:59	OM_12-24-2009_13-08-41
CCB		1	axh3	12/24/2009 13:47:50	OM_12-24-2009_13-08-41
1202000974	935222	1	axh3	12/24/2009 13:49:39	OM_12-24-2009_13-08-41
1202000975	935222	1	axh3	12/24/2009 13:50:32	OM_12-24-2009_13-08-41
1202000976	935222	1	axh3	12/24/2009 13:51:25	OM_12-24-2009_13-08-41
243385001	935222	1	axh3	12/24/2009 13:52:17	OM_12-24-2009_13-08-41
243385002	935222	1	axh3	12/24/2009 13:53:10	OM_12-24-2009_13-08-41
243385003	935222	1	axh3	12/24/2009 13:54:02	OM_12-24-2009_13-08-41
243385004	935222	1	axh3	12/24/2009 13:54:54	OM_12-24-2009_13-08-41
243385005	935222	1	axh3	12/24/2009 13:55:47	OM_12-24-2009_13-08-41
243385006	935222	1	axh3	12/24/2009 13:56:38	OM_12-24-2009_13-08-41
243385007	935222	1	axh3	12/24/2009 13:57:31	OM_12-24-2009_13-08-41
CCV		1	axh3	12/24/2009 13:58:23	OM_12-24-2009_13-08-41
CCB		1	axh3	12/24/2009 14:00:13	OM_12-24-2009_13-08-41
243393002	935222	1	axh3	12/24/2009 14:02:03	OM_12-24-2009_13-08-41
1202003559	935222	1	axh3	12/24/2009 14:02:57	OM_12-24-2009_13-08-41
1202003560	935222	1	axh3	12/24/2009 14:03:51	OM_12-24-2009_13-08-41
1202003561	935222	1	axh3	12/24/2009 14:04:44	OM_12-24-2009_13-08-41
CCV		1	axh3	12/24/2009 14:05:37	OM_12-24-2009_13-08-41
CCB		1	axh3	12/24/2009 14:07:27	OM_12-24-2009_13-08-41

Author: axc2 Date : 12/24/2009

Original Run Filename: OM_12-24-2009_13-08-41.OMN created 12/24/2009 13:08:41
Original Run Author's Signature: [axc2]
Current Run Filename: OM_12-24-2009_13-08-41.OMN last modified 12/24/2009 14:08:32
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
WCN091224-01	1	S1	200	7.70	12/24/2009@13:12:06			200 ppb
WCN091224-02	1	S2	150	5.82	12/24/2009@13:12:58			150 ppb
WCN091224-03	1	S3	100	3.92	12/24/2009@13:13:51			100 ppb
WCN091224-04	1	S4	50.0	2.05	12/24/2009@13:14:44			50 ppb
WCN091224-05	1	S5	10.0	0.500	12/24/2009@13:15:37			10 ppb
WCN091224-06	1	S6	5.00	0.322	12/24/2009@13:16:31			CRDL 5.0 ppb
WCN091224-08	1	S7	0.00	0.0356	12/24/2009@13:17:25			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99993 > 0.99500					
Message			Pass					
Action			Continue					
WCN091224-07	1	S8	149	5.78	12/24/2009@13:19:16			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					
WCN091224-08	1	S7	-1.74	0.0392	12/24/2009@13:21:06			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.74 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.74 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN091224-06	1	S6	5.55	0.317	12/24/2009@13:22:56			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			5.55 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			5.55 > 2.50					
Message			Pass					
Action			None					
1202001100|935267|MB	1	1	-1.41	0.0520	12/24/2009@13:24:45			
1202001102||LCS	1	2	-1.37	0.0536	12/24/2009@13:25:39			
243194001	1	3	60.2	2.40	12/24/2009@13:26:32			
1202001101||DUP	1	4	57.8	2.30	12/24/2009@13:27:26			
243262001	1	5	-0.391	0.0907	12/24/2009@13:28:18			
243262002	1	6	20.9	0.900	12/24/2009@13:29:11			
1202000973|935222|MB	1	7	-2.01	0.0292	12/24/2009@13:30:04			
1202000977||LCS	1	8	26.5	1.11	12/24/2009@13:30:56		25.00	
243092002	1	9	-0.451	0.0884	12/24/2009@13:31:49			
243092003	1	10	5.11	0.300	12/24/2009@13:32:41			
WCN091224-03	1	S3	105	4.10	12/24/2009@13:33:34			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					
WCN091224-08	1	S7	-1.78	0.0380	12/24/2009@13:35:24			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					
243262001	1	11	-1.33	0.0551	12/24/2009@13:37:12			
243262002	1	12	2.77	0.211	12/24/2009@13:38:05			
243265001	1	13	0.854	0.138	12/24/2009@13:38:56			
243265002	1	14	-0.296	0.0943	12/24/2009@13:39:48			
243265003	1	15	2.44	0.198	12/24/2009@13:40:39			
243265004	1	16	0.999	0.144	12/24/2009@13:41:33			
243265005	1	17	6.05	0.336	12/24/2009@13:42:27			
243265006	1	18	1.19	0.151	12/24/2009@13:43:20			
243265007	1	19	0.939	0.141	12/24/2009@13:44:14			
243270010	1	20	0.159	0.112	12/24/2009@13:45:07			
WCN091224-03	1	S3	106	4.12	12/24/2009@13:45:59			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	5.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	5.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091224-08	1	S7	-2.07	0.0269	12/24/2009@13:47:50			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-2.07 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-2.07 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202000974||DUP	1	21	-0.201	0.0979	12/24/2009@13:49:39			
1202000975||MS	1	22	93.1	3.65	12/24/2009@13:50:32			
1202000976||MSD	1	23	94.1	3.69	12/24/2009@13:51:25			
243385001	1	24	1.81	0.174	12/24/2009@13:52:17			
243385002	1	25	0.109	0.110	12/24/2009@13:53:10			
243385003	1	26	-1.70	0.0410	12/24/2009@13:54:02			
243385004	1	27	-1.25	0.0581	12/24/2009@13:54:54			
243385005	1	28	-0.711	0.0785	12/24/2009@13:55:47			
243385006	1	29	-0.415	0.0898	12/24/2009@13:56:38			
243385007	1	30	-1.20	0.0600	12/24/2009@13:57:31			
WCN091224-03	1	S3	106	4.14	12/24/2009@13:58:23			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	6.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	6.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091224-08	1	S7	-1.66	0.0423	12/24/2009@14:00:13			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit								
Result:			-1.66 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.66 > -5.00					
Message			CCB Passed					
Action			Continue					
243393002	1	31	0.121	0.110	12/24/2009@14:02:03			
1202003559||DUP	1	32	-0.326	0.0932	12/24/2009@14:02:57			
1202003560||MS	1	33	105	4.09	12/24/2009@14:03:51			
1202003561||MSD	1	34	101	3.95	12/24/2009@14:04:44			
WCN091224-03	1	S3	106	4.13	12/24/2009@14:05:37			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					
WCN091224-08	1	S7	-2.74	0.00129	12/24/2009@14:07:27			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-2.74 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-2.74 > -5.00					
Message			CCB Passed					
Action			Continue					

Analyte Properties Table for OM_12-24-2009_13-08-41.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration 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

Author: axc2 Date : 12/24/2009

Channel 1: Current View

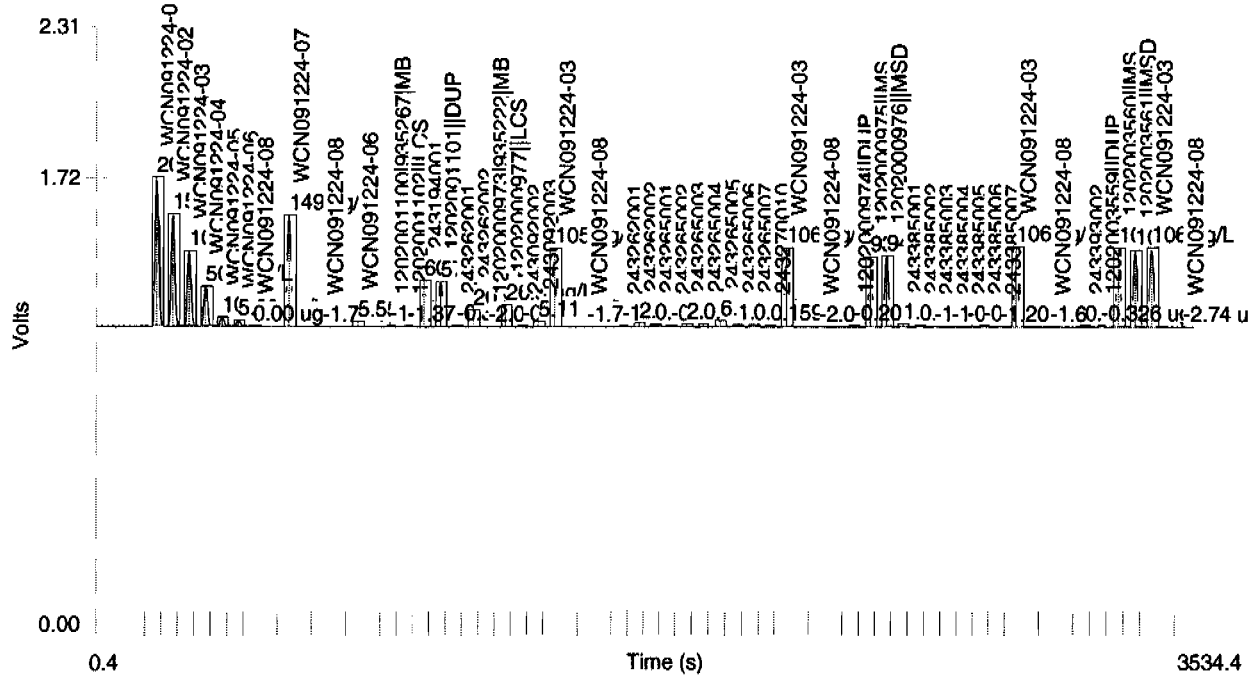
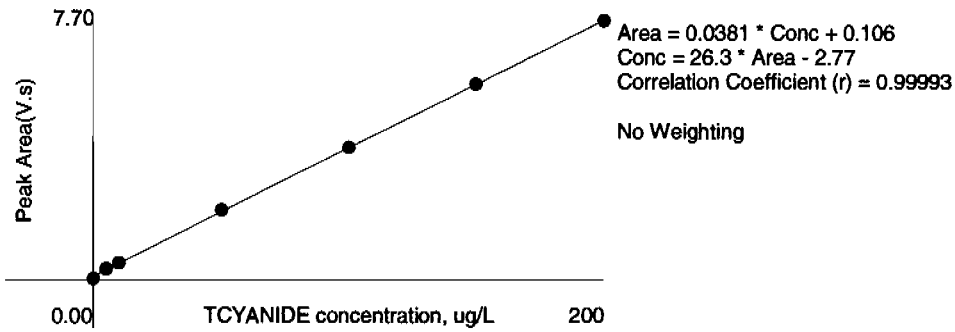


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.70	0.567	0.2	12/24/2009	13:13:09
2	150	1	5.82	0.428	-0.1	12/24/2009	13:14:01
3	100	1	3.92	0.287	-0.1	12/24/2009	13:14:54
4	50.0	1	2.05	0.152	-1.9	12/24/2009	13:15:47
5	10.0	1	0.500	0.0358	-2.7	12/24/2009	13:16:40
6	5.00	1	0.322	0.0246	-8.6	12/24/2009	13:17:34
7	0.00	1	0.0356	0.00146		12/24/2009	13:18:28

Figure 1: TCYANIDE



This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	12/29/2009 10:05:56	OM_12-29-2009_10-02-35
150 ppb		1	axc2	12/29/2009 10:06:48	OM_12-29-2009_10-02-35
100 ppb		1	axc2	12/29/2009 10:07:40	OM_12-29-2009_10-02-35
50 ppb		1	axc2	12/29/2009 10:08:33	OM_12-29-2009_10-02-35
10 ppb		1	axc2	12/29/2009 10:09:27	OM_12-29-2009_10-02-35
CRDL 5.0 ppb		1	axc2	12/29/2009 10:10:20	OM_12-29-2009_10-02-35
ICAL-00		1	axc2	12/29/2009 10:11:15	OM_12-29-2009_10-02-35
ICV		1	axc2	12/29/2009 10:13:05	OM_12-29-2009_10-02-35
ICB		1	axc2	12/29/2009 10:14:56	OM_12-29-2009_10-02-35
CRDL		1	axc2	12/29/2009 10:16:46	OM_12-29-2009_10-02-35
1202004489	936839	1	axc2	12/29/2009 10:18:35	OM_12-29-2009_10-02-35
1202004496	936839	25	axc2	12/29/2009 10:19:29	OM_12-29-2009_10-02-35
243501001	936839	1	axc2	12/29/2009 10:20:22	OM_12-29-2009_10-02-35
1202004490	936839	1	axc2	12/29/2009 10:21:15	OM_12-29-2009_10-02-35
1202004492	936839	1	axc2	12/29/2009 10:22:08	OM_12-29-2009_10-02-35
1202004494	936839	1	axc2	12/29/2009 10:23:01	OM_12-29-2009_10-02-35
243501002	936839	1	axc2	12/29/2009 10:23:53	OM_12-29-2009_10-02-35
1202004491	936839	1	axc2	12/29/2009 10:24:46	OM_12-29-2009_10-02-35
1202004493	936839	1	axc2	12/29/2009 10:25:38	OM_12-29-2009_10-02-35
1202004495	936839	1	axc2	12/29/2009 10:26:31	OM_12-29-2009_10-02-35
CCV		1	axc2	12/29/2009 10:27:23	OM_12-29-2009_10-02-35
CCB		1	axc2	12/29/2009 10:29:14	OM_12-29-2009_10-02-35
243501003	936839	1	axc2	12/29/2009 10:31:02	OM_12-29-2009_10-02-35
243505003	936839	1	axc2	12/29/2009 10:31:54	OM_12-29-2009_10-02-35
243505004	936839	1	axc2	12/29/2009 10:32:46	OM_12-29-2009_10-02-35
243505005	936839	1	axc2	12/29/2009 10:33:37	OM_12-29-2009_10-02-35
243505006	936839	1	axc2	12/29/2009 10:34:29	OM_12-29-2009_10-02-35
243505007	936839	1	axc2	12/29/2009 10:35:23	OM_12-29-2009_10-02-35
243505008	936839	1	axc2	12/29/2009 10:36:16	OM_12-29-2009_10-02-35
243509001	936839	1	axc2	12/29/2009 10:37:10	OM_12-29-2009_10-02-35
243509002	936839	1	axc2	12/29/2009 10:38:03	OM_12-29-2009_10-02-35
243509003	936839	1	axc2	12/29/2009 10:38:56	OM_12-29-2009_10-02-35
CCV		1	axc2	12/29/2009 10:39:49	OM_12-29-2009_10-02-35
CCB		1	axc2	12/29/2009 10:41:39	OM_12-29-2009_10-02-35
243517003	936839	1	axc2	12/29/2009 10:43:29	OM_12-29-2009_10-02-35
243517004	936839	1	axc2	12/29/2009 10:44:22	OM_12-29-2009_10-02-35
243517005	936839	1	axc2	12/29/2009 10:45:15	OM_12-29-2009_10-02-35
243517006	936839	1	axc2	12/29/2009 10:46:07	OM_12-29-2009_10-02-35
243517007	936839	1	axc2	12/29/2009 10:46:59	OM_12-29-2009_10-02-35
243543001	936839	1	axc2	12/29/2009 10:47:52	OM_12-29-2009_10-02-35
CCV		1	axc2	12/29/2009 10:48:44	OM_12-29-2009_10-02-35
CCB		1	axc2	12/29/2009 10:50:34	OM_12-29-2009_10-02-35

Author: axc2 Date : 12/30/2009

Original Run Filename: OM_12-29-2009_10-02-35.OMN created 12/29/2009 10:02:35
Original Run Author's Signature: [axc2]
Current Run Filename: OM_12-29-2009_10-02-35.OMN last modified 12/29/2009 10:51:39
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN091229-01	1	S1	200	7.42	12/29/2009@10:05:56			200 ppb
WCN091229-02	1	S2	150	5.62	12/29/2009@10:06:48			150 ppb
WCN091229-03	1	S3	100	3.70	12/29/2009@10:07:40			100 ppb
WCN091229-04	1	S4	50.0	2.07	12/29/2009@10:08:33			50 ppb
WCN091229-05	1	S5	10.0	0.457	12/29/2009@10:09:27			10 ppb
WCN091229-06	1	S6	5.00	0.281	12/29/2009@10:10:20			CRDL 5.0 ppb
WCN091229-08	1	S7	0.00	-0.00218	12/29/2009@10:11:15			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99966 > 0.99500					
Message			Pass					
Action			Continue					
WCN091229-07	1	S8	149	5.55	12/29/2009@10:13:05			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			-0.9 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-0.9 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN091229-08	1	S7	-1.83	0.0193	12/29/2009@10:14:56			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.83 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.83 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN091229-06	1	S6	5.37	0.284	12/29/2009@10:16:46			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			5.37 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			5.37 > 2.50					
Message			Pass					
Action			None					
1202004489|936839|MB	1	1	-2.36	-1.76e-4	12/29/2009@10:18:35			
1202004496|LCS	1	2	28.4	1.13	12/29/2009@10:19:29		25.00	
243501001	1	3	-1.09	0.0466	12/29/2009@10:20:22			
1202004490|DUP	1	4	-1.18	0.0433	12/29/2009@10:21:15			
1202004492|MS	1	5	85.0	3.21	12/29/2009@10:22:08			
1202004494|MSD	1	6	102	3.84	12/29/2009@10:23:01			
243501002	1	7	-1.09	0.0463	12/29/2009@10:23:53			
1202004491|DUP	1	8	-1.69	0.0243	12/29/2009@10:24:46			
1202004493|MS	1	9	103	3.87	12/29/2009@10:25:38			
1202004495|MSD	1	10	102	3.85	12/29/2009@10:26:31			
WCN091229-03	1	S3	104	3.92	12/29/2009@10:27:23			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					
WCN091229-08	1	S7	-1.84	0.0190	12/29/2009@10:29:14			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-1.84 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-1.84 > -5.00					
		Message	CCB Passed					
		Action	Continue					
243501003	1	11	-1.09	0.0465	12/29/2009@10:31:02			
243505003	1	12	-1.78	0.0212	12/29/2009@10:31:54			
243505004	1	13	-1.73	0.0229	12/29/2009@10:32:46			
243505005	1	14	0.958	0.122	12/29/2009@10:33:37			
243505006	1	15	2.37	0.174	12/29/2009@10:34:29			
243505007	1	16	-1.49	0.0317	12/29/2009@10:35:23			
243505008	1	17	-1.26	0.0402	12/29/2009@10:36:16			
243509001	1	18	0.238	0.0953	12/29/2009@10:37:10			
243509002	1	19	2.59	0.182	12/29/2009@10:38:03			
243509003	1	20	-1.40	0.0351	12/29/2009@10:38:56			
WCN091229-03	1	S3	105	3.94	12/29/2009@10:39:49			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					
WCN091229-08	1	S7	-2.37	-3.86e-4	12/29/2009@10:41:39			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-2.37 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-2.37 > -5.00					
		Message	CCB Passed					
		Action	Continue					
243517003	1	21	0.325	0.0986	12/29/2009@10:43:29			
243517004	1	22	-1.24	0.0409	12/29/2009@10:44:22			
243517005	1	23	-1.27	0.0399	12/29/2009@10:45:15			
243517006	1	24	-1.47	0.0326	12/29/2009@10:46:07			
243517007	1	25	-0.795	0.0574	12/29/2009@10:46:59			
243543001	1	26	12.2	0.535	12/29/2009@10:47:52			
WCN091229-03	1	S3	105	3.95	12/29/2009@10:48:44			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					
WCN091229-08	1	S7	-1.88	0.0176	12/29/2009@10:50:34			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-1.88 < 5.00					
		Message	CCB Passed					
		Action	Continue					

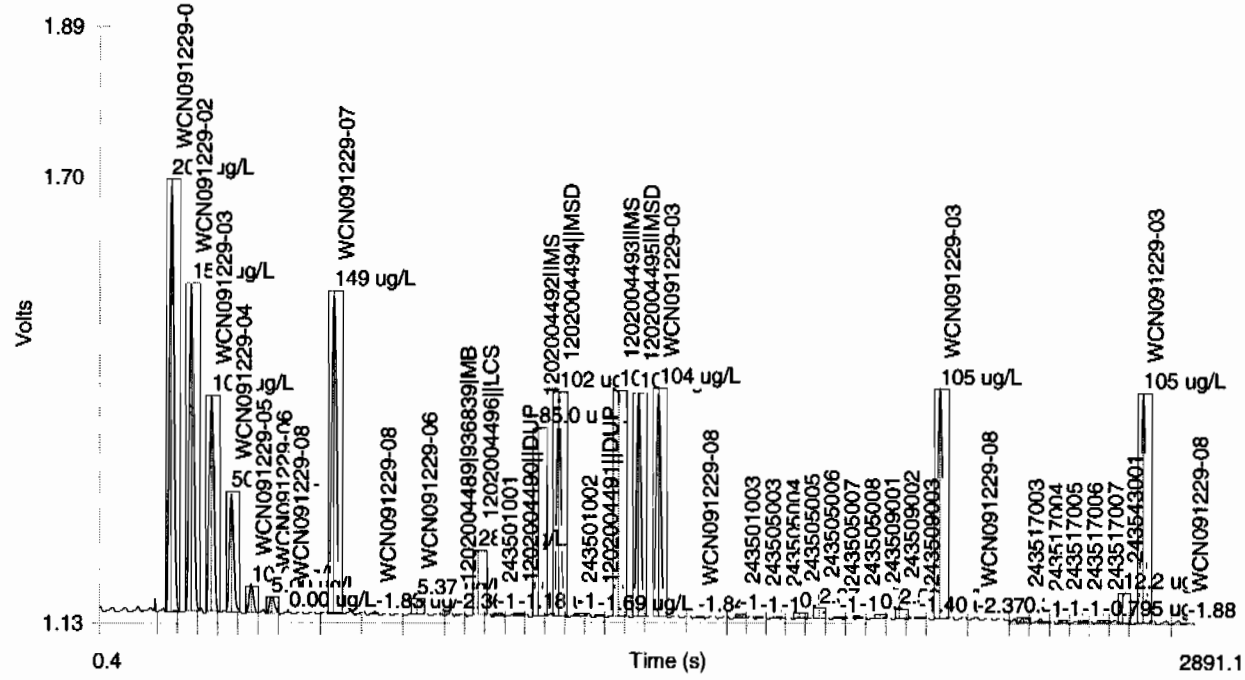
Author: axc2 Date : 12/30/2009

DQM Test: < - Concentration Limit						
Result:	-1.88 > -5.00					
Message	CCB Passed					
Action	Continue					

Analyte Properties Table for OM_12-29-2009_10-02-35.OMN

Property	Channel 1 TCYANIDE
Concentration Units	ug/L
Callibration 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

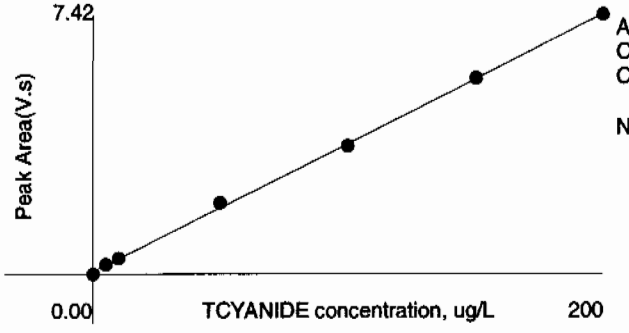


Author: axc2 Date : 12/30/2009

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.42	0.548	0.3	12/29/2009	10:06:59
2	150	1	5.62	0.415	-0.4	12/29/2009	10:07:51
3	100	1	3.70	0.272	1.7	12/29/2009	10:08:44
4	50.0	1	2.07	0.153	-7.4	12/29/2009	10:09:36
5	10.0	1	0.457	0.0333	-0.2	12/29/2009	10:10:30
6	5.00	1	0.281	0.0196	-3.4	12/29/2009	10:11:24
7	0.00	1	-0.00218	-8.80e-4		12/29/2009	10:12:18

Figure 1: TCYANIDE



Area = 0.0367 * Conc + 0.0884
Conc = 27.2 * Area - 2.35
Correlation Coefficient (r) = 0.99966

No Weighting

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	12/29/2009 13:15:09	OM_12-29-2009_13-11-48
CCB		1	axc2	12/29/2009 13:16:59	OM_12-29-2009_13-11-48
1202000965	935219	1	axc2	12/29/2009 13:18:48	OM_12-29-2009_13-11-48
1202000972	935219	25	axc2	12/29/2009 13:19:42	OM_12-29-2009_13-11-48
243194001	935219	1	axc2	12/29/2009 13:20:35	OM_12-29-2009_13-11-48
243243019	935219	1	axc2	12/29/2009 13:21:28	OM_12-29-2009_13-11-48
1202000966	935219	1	axc2	12/29/2009 13:22:21	OM_12-29-2009_13-11-48
1202000968	935219	1	axc2	12/29/2009 13:23:14	OM_12-29-2009_13-11-48
1202000970	935219	1	axc2	12/29/2009 13:24:06	OM_12-29-2009_13-11-48
243249001	935219	1	axc2	12/29/2009 13:24:59	OM_12-29-2009_13-11-48
1202000967	935219	1	axc2	12/29/2009 13:25:51	OM_12-29-2009_13-11-48
1202000969	935219	1	axc2	12/29/2009 13:26:43	OM_12-29-2009_13-11-48
CCV		1	axc2	12/29/2009 13:27:36	OM_12-29-2009_13-11-48
CCB		1	axc2	12/29/2009 13:29:26	OM_12-29-2009_13-11-48
1202000971	935219	1	axc2	12/29/2009 13:31:15	OM_12-29-2009_13-11-48
243249002	935219	1	axc2	12/29/2009 13:32:07	OM_12-29-2009_13-11-48
243249003	935219	1	axc2	12/29/2009 13:32:58	OM_12-29-2009_13-11-48
243249004	935219	1	axc2	12/29/2009 13:33:50	OM_12-29-2009_13-11-48
243249005	935219	1	axc2	12/29/2009 13:34:41	OM_12-29-2009_13-11-48
243256001	935219	1	axc2	12/29/2009 13:35:35	OM_12-29-2009_13-11-48
243256002	935219	1	axc2	12/29/2009 13:36:29	OM_12-29-2009_13-11-48
243256003	935219	1	axc2	12/29/2009 13:37:22	OM_12-29-2009_13-11-48
243270001	935219	1	axc2	12/29/2009 13:38:15	OM_12-29-2009_13-11-48
243270002	935219	1	axc2	12/29/2009 13:39:09	OM_12-29-2009_13-11-48
CCV		1	axc2	12/29/2009 13:40:01	OM_12-29-2009_13-11-48
CCB		1	axc2	12/29/2009 13:41:52	OM_12-29-2009_13-11-48
243270003	935219	1	axc2	12/29/2009 13:43:41	OM_12-29-2009_13-11-48
243270004	935219	1	axc2	12/29/2009 13:44:34	OM_12-29-2009_13-11-48
243270005	935219	1	axc2	12/29/2009 13:45:27	OM_12-29-2009_13-11-48
243270006	935219	1	axc2	12/29/2009 13:46:20	OM_12-29-2009_13-11-48
243270007	935219	1	axc2	12/29/2009 13:47:12	OM_12-29-2009_13-11-48
243270008	935219	1	axc2	12/29/2009 13:48:04	OM_12-29-2009_13-11-48
243270009	935219	1	axc2	12/29/2009 13:48:56	OM_12-29-2009_13-11-48
243273001	935219	1	axc2	12/29/2009 13:49:49	OM_12-29-2009_13-11-48
CCV		1	axc2	12/29/2009 13:50:41	OM_12-29-2009_13-11-48
CCB		1	axc2	12/29/2009 13:52:31	OM_12-29-2009_13-11-48

Author: axc2 Date : 12/29/2009

Original Run Filename: OM_12-29-2009_13-11-48.OMN created 12/29/2009 13:11:48
Original Run Author's Signature: [axc2]
Current Run Filename: OM_12-29-2009_13-11-48.OMN last modified 12/29/2009 13:53:36
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
WCN091229-03	1	S3	95.5	3.60	12/29/2009@13:15:09			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					
	Calibration:		Table/Fig. 1					
WCN091229-08	1	S7	-2.07	0.0103	12/29/2009@13:16:59			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-2.07 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-2.07 > -5.00					
	Message		CCB Passed					
	Action		Continue					
1202000965|935219|MB	1	1	-2.29	0.00254	12/29/2009@13:18:48			
1202000972||LCS	1	2	32.0	1.26	12/29/2009@13:19:42		25.00	
243194001	1	3	79.0	2.99	12/29/2009@13:20:35			
243243019	1	4	3.74	0.224	12/29/2009@13:21:28			
1202000966||DUP	1	5	3.03	0.198	12/29/2009@13:22:21			
1202000968||MS	1	6	83.5	3.16	12/29/2009@13:23:14			
1202000970||MSD	1	7	84.9	3.21	12/29/2009@13:24:06			
243249001	1	8	5.77	0.299	12/29/2009@13:24:59			
1202000967||DUP	1	9	5.61	0.293	12/29/2009@13:25:51			
1202000969||MS	1	10	96.1	3.62	12/29/2009@13:26:43			
WCN091229-03	1	S3	102	3.83	12/29/2009@13:27:36			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		1.7 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		1.7 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN091229-08	1	S7	-2.23	0.00475	12/29/2009@13:29:26			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-2.23 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-2.23 > -5.00					
	Message		CCB Passed					
	Action		Continue					
1202000971||MSD	1	11	97.0	3.65	12/29/2009@13:31:15			
243249002	1	12	2.67	0.185	12/29/2009@13:32:07			
243249003	1	13	-1.01	0.0495	12/29/2009@13:32:58			
243249004	1	14	1.68	0.148	12/29/2009@13:33:50			
243249005	1	15	2.54	0.180	12/29/2009@13:34:41			

243256001	1	16	2.33	0.172	12/29/2009@13:35:35			
243256002	1	17	1.81	0.153	12/29/2009@13:36:29			
243256003	1	18	-0.913	0.0530	12/29/2009@13:37:22			
243270001	1	19	-1.35	0.0370	12/29/2009@13:38:15			
243270002	1	20	-0.608	0.0642	12/29/2009@13:39:09			
WCN091229-03	1	S3	104	3.93	12/29/2009@13:40:01			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			4.4 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			4.4 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN091229-08	1	S7	-3.07	-0.0261	12/29/2009@13:41:52			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-3.07 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-3.07 > -5.00					
Message			CCB Passed					
Action			Continue					
243270003	1	21	1.93	0.158	12/29/2009@13:43:41			
243270004	1	22	3.47	0.214	12/29/2009@13:44:34			
243270005	1	23	2.51	0.179	12/29/2009@13:45:27			
243270006	1	24	-1.03	0.0488	12/29/2009@13:46:20			
243270007	1	25	-0.480	0.0689	12/29/2009@13:47:12			
243270008	1	26	3.13	0.202	12/29/2009@13:48:04			
243270009	1	27	-0.549	0.0664	12/29/2009@13:48:56			
243273001	1	28	-0.265	0.0768	12/29/2009@13:49:49			
WCN091229-03	1	S3	105	3.95	12/29/2009@13:50:41			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					
WCN091229-08	1	S7	-2.09	0.00983	12/29/2009@13:52:31			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-2.09 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-2.09 > -5.00					
Message			CCB Passed					
Action			Continue					

Analyte Properties Table for OM_12-29-2009_13-11-48.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration 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

Author: axc2

Date : 12/29/2009

Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

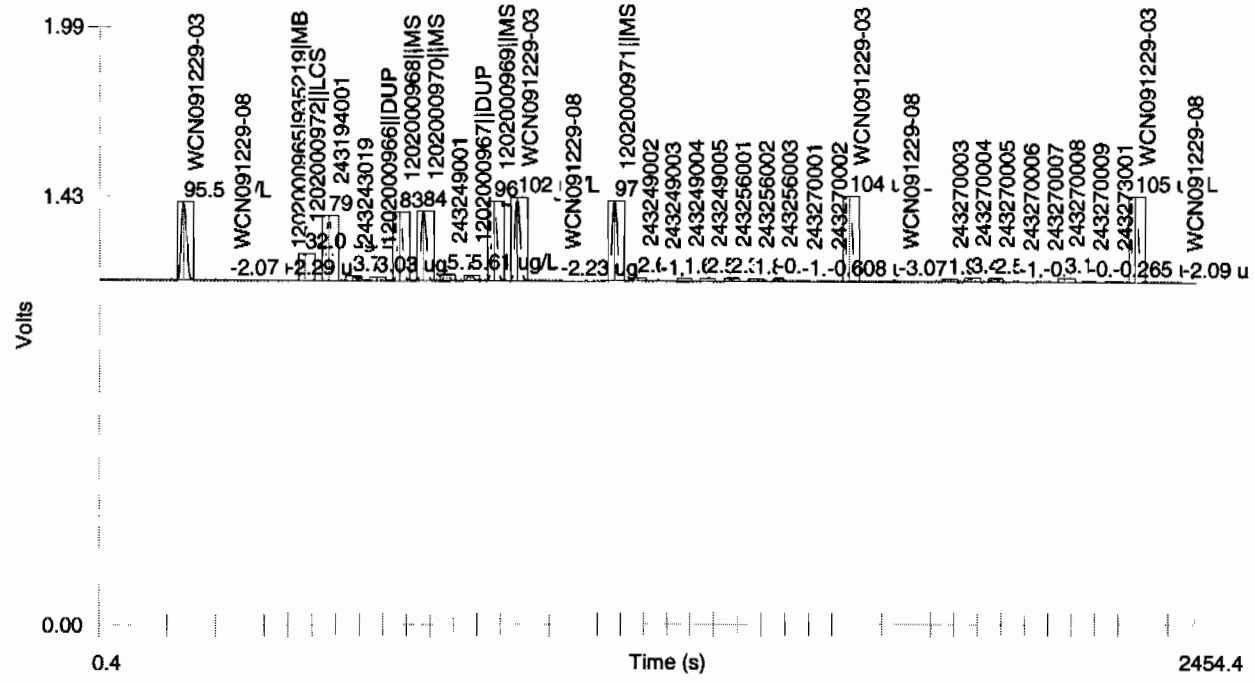
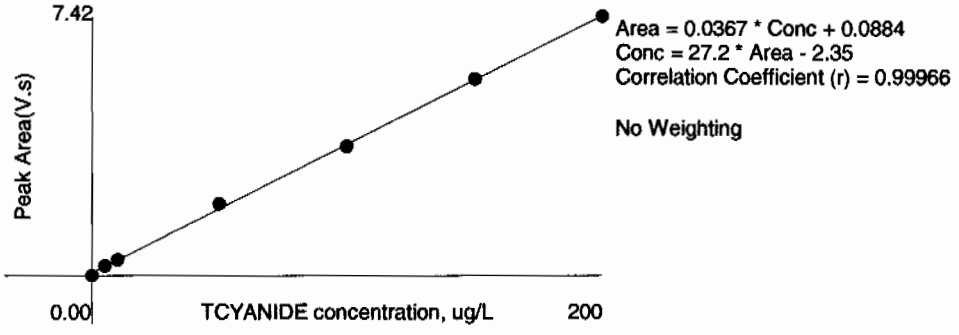


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.42	0.548	0.3	12/29/2009	10:06:59
2	150	1	5.62	0.415	-0.4	12/29/2009	10:07:51
3	100	1	3.70	0.272	1.7	12/29/2009	10:08:44
4	50.0	1	2.07	0.153	-7.4	12/29/2009	10:09:36
5	10.0	1	0.457	0.0333	-0.2	12/29/2009	10:10:30
6	5.00	1	0.281	0.0196	-3.4	12/29/2009	10:11:24
7	0.00	1	-0.00218	-8.80e-4		12/29/2009	10:12:18

Figure 1: TCYANIDE



General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-990-1

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	935209	**Method:**	SW846 9012A
Prep Batch :	935207	**Method:**	SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
243272001	RE12-10-7366
1202000926	Method Blank (MB)
1202000927	243108001(RE16-10-225) Sample Duplicate (DUP)
1202000928	243104002(CAPA-10-6818) Sample Duplicate (DUP)
1202000929	243252001(NPDES03A130-10-8672) Sample Duplicate (DUP)
1202000931	243108001(RE16-10-225) Matrix Spike (MS)
1202000932	243104002(CAPA-10-6818) Matrix Spike (MS)
1202000933	243252001(NPDES03A130-10-8672) Matrix Spike (MS)
1202000935	243108001(RE16-10-225) Matrix Spike Duplicate (MSD)
1202000936	243104002(CAPA-10-6818) Matrix Spike Duplicate (MSD)
1202000937	243252001(NPDES03A130-10-8672) Matrix Spike Duplicate (MSD)
1202000939	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: 243104002 (CAPA-10-6818), 243108001 (RE16-10-225) and 243252001 (NPDES03A130-10-8672).

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. 1202000928 (CAPA-10-6818) and 1202000929 (NPDES03A130-10-8672).

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

Nonconformance (NCR) Documentation
An NCR 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.

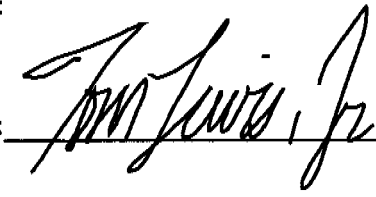
Certification Statement

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:** 14Jan10

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: 10-990-1 GEL Work Order: 243272

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

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

Certificate of Analysis

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

Report Date: December 28, 2009
Client SDG: 10-990-1

Client Sample ID:	RE12-10-7366	Project:	LANL01004
Sample ID:	243272001	Client ID:	LANL010
Matrix:	W		
Collect Date:	16-DEC-09 12:00		
Receive Date:	18-DEC-09		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 12/22/09	1656	935209	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/22/09	1414	935207

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

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

Workorder: **243272**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis										
Batch 935209										
QC1202000927 243108001 DUP										
Cyanide, Total	U	ND	U	ND	ug/L	N/A			AXC2	12/22/09 16:34
QC1202000928 243104002 DUP										
Cyanide, Total	U	ND	U	ND	ug/L	N/A				12/22/09 16:30
QC1202000929 243252001 DUP										
Cyanide, Total	U	ND	U	ND	ug/L	N/A				12/22/09 16:45
QC1202000939 LCS										
Cyanide, Total	50.0			49.9	ug/L		99.8	(90%-110%)		12/22/09 16:28
QC1202000926 MB										
Cyanide, Total			U	5.00	ug/L					12/22/09 16:27
QC1202000931 243108001 MS										
Cyanide, Total	100 U	ND		96.6	ug/L		96.6	(60%-127%)		12/22/09 16:34
QC1202000932 243104002 MS										
Cyanide, Total	100 U	ND		94.4	ug/L		94.4	(60%-127%)		12/22/09 16:31
QC1202000933 243252001 MS										
Cyanide, Total	100 U	ND		88.9	ug/L		88.2	(60%-127%)		12/22/09 16:46
QC1202000935 243108001 MSD										
Cyanide, Total	100 U	ND		102	ug/L	5.44	102	(0%-20%)		12/22/09 16:35
QC1202000936 243104002 MSD										
Cyanide, Total	100 U	ND		96.3	ug/L	1.99	96.3	(0%-20%)		12/22/09 16:32
QC1202000937 243252001 MSD										
Cyanide, Total	100 U	ND		91.5	ug/L	2.88	90.8	(0%-20%)		12/22/09 16:47

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 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

QC Summary

Workorder: 243272

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

M	Matrix Related Failure
N	Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 28-DEC-2009 14:43

GEL Laboratories LLC
Contract: LANL01004
SDG #: 10-990-1

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	**22-DEC-2009 15:07:41**	**OM_12-22-2009_14-59-47**	**144**	**150**	**96**	**(90%-110%)**	**Yes**
CCV	22-DEC-2009 16:24:11	OM_12-22-2009_14-59-47	96.3	100	96	(90%-110%)	Yes
CCV	22-DEC-2009 16:36:41	OM_12-22-2009_14-59-47	95.9	100	96	(90%-110%)	Yes
CCV	22-DEC-2009 16:49:08	OM_12-22-2009_14-59-47	95.7	100	96	(90%-110%)	Yes
CCV	22-DEC-2009 17:01:45	OM_12-22-2009_14-59-47	96	100	96	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**22-DEC-2009 15:09:31**	**OM_12-22-2009_14-59-47**	**-1.08**	**5**	**Yes**
CCB	22-DEC-2009 16:26:01	OM_12-22-2009_14-59-47	-1.39	5	Yes
CCB	22-DEC-2009 16:38:31	OM_12-22-2009_14-59-47	-0.314	5	Yes
CCB	22-DEC-2009 16:50:59	OM_12-22-2009_14-59-47	-0.589	5	Yes
CCB	22-DEC-2009 17:03:34	OM_12-22-2009_14-59-47	-0.817	5	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 935207

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202000939	URF1184831-02	.0125	mL
MS	1202000931	URF1184831-02	.025	mL
MS	1202000932	URF1184831-02	.025	mL
MS	1202000933	URF1184831-02	.025	mL
MS	1202000934	URF1184831-02	.025	mL
MSD	1202000935	URF1184831-02	.025	mL
MSD	1202000936	URF1184831-02	.025	mL
MSD	1202000937	URF1184831-02	.025	mL
MSD	1202000938	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202000926		SW846 9010B Prep	22-DEC-2009 14:14	>12	25 mL	25 mL	1	WATER
LCS	1202000939		SW846 9010B Prep	22-DEC-2009 14:14	>12	25 mL	25 mL	1	WATER
SAMPLE	243104002		EPA 335.4	22-DEC-2009 14:14	>12	25 mL	25 mL	1	GROUND WATER
DUP	1202000928	243104002	EPA 335.4	22-DEC-2009 14:14	>12	25 mL	25 mL	1	GROUND WATER
MS	1202000932	243104002	EPA 335.4	22-DEC-2009 14:14	>12	25 mL	25 mL	1	GROUND WATER
MSD	1202000936	243104002	EPA 335.4	22-DEC-2009 14:14	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	243108001		SW846 9010B Prep	22-DEC-2009 14:14	>12	25 mL	25 mL	1	WATER
DUP	1202000927	243108001	SW846 9010B Prep	22-DEC-2009 14:14	>12	25 mL	25 mL	1	WATER
MS	1202000931	243108001	SW846 9010B Prep	22-DEC-2009 14:14	>12	25 mL	25 mL	1	WATER
MSD	1202000935	243108001	SW846 9010B Prep	22-DEC-2009 14:14	>12	25 mL	25 mL	1	WATER
SAMPLE	243108002		SW846 9010B Prep	22-DEC-2009 14:14	>12	25 mL	25 mL	1	WATER
SAMPLE	243223014		EPA 335.4	22-DEC-2009 14:14	>12	25 mL	25 mL	1	WASTE WATER
SAMPLE	243242001		SW846 9010B Prep	22-DEC-2009 14:14	>12	25 mL	25 mL	1	WATER
SAMPLE	243242002		SW846 9010B Prep	22-DEC-2009 14:14	>12	25 mL	25 mL	1	WATER
SAMPLE	243251001		SW846 9010B Prep	22-DEC-2009 14:14	>12	25 mL	25 mL	1	WATER
SAMPLE	243252001		EPA 335.4	22-DEC-2009 14:14	>12	25 mL	25 mL	1	WASTE WATER
DUP	1202000929	243252001	EPA 335.4	22-DEC-2009 14:14	>12	25 mL	25 mL	1	WASTE WATER
MS	1202000933	243252001	EPA 335.4	22-DEC-2009 14:14	>12	25 mL	25 mL	1	WASTE WATER
MSD	1202000937	243252001	EPA 335.4	22-DEC-2009 14:14	>12	25 mL	25 mL	1	WASTE WATER
SAMPLE	243255001		EPA 335.4	22-DEC-2009 14:14	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	243255004		EPA 335.4	22-DEC-2009 14:14	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	243255006		EPA 335.4	22-DEC-2009 14:14	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	243257003		EPA 335.4	22-DEC-2009 14:14	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	243257005		EPA 335.4	22-DEC-2009 14:14	>12	25 mL	25 mL	1	GROUND WATER

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 935207

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202000939	URF1184831-02	.0125	mL
MS	1202000931	URF1184831-02	.025	mL
MS	1202000932	URF1184831-02	.025	mL
MS	1202000933	URF1184831-02	.025	mL
MS	1202000934	URF1184831-02	.025	mL
MSD	1202000935	URF1184831-02	.025	mL
MSD	1202000936	URF1184831-02	.025	mL
MSD	1202000937	URF1184831-02	.025	mL
MSD	1202000938	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
SAMPLE	243272001		SW846 9010B Prep	22-DEC-2009 14:14	>12	25 mL	25 mL	1	WATER
SAMPLE	243281002		SW846 9010B Prep	22-DEC-2009 14:14	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	243281003		SW846 9010B Prep	22-DEC-2009 14:14	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	243281004		SW846 9010B Prep	22-DEC-2009 14:14	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	243281005		SW846 9010B Prep	22-DEC-2009 14:14	>12	25 mL	25 mL	1	GROUND WATER
DUP	1202000930	243281005	SW846 9010B Prep	22-DEC-2009 14:14	>12	25 mL	25 mL	1	GROUND WATER
MS	1202000934	243281005	SW846 9010B Prep	22-DEC-2009 14:14	>12	25 mL	25 mL	1	GROUND WATER
MSD	1202000938	243281005	SW846 9010B Prep	22-DEC-2009 14:14	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	243281006		SW846 9010B Prep	22-DEC-2009 14:14	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	243285001		EPA 335.4	22-DEC-2009 14:14	>12	25 mL	25 mL	1	GROUND WATER

Reagent/Solvent Lot ID	Amount	Description
091211-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091222-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1238146-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1238142-C	1.25 mL	Bismuth Nitrate Solution

Comments

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	12/22/2009 15:00:33	OM_12-22-2009_14-59-47
150 ppb		1	axc2	12/22/2009 15:01:24	OM_12-22-2009_14-59-47
100 ppb		1	axc2	12/22/2009 15:02:17	OM_12-22-2009_14-59-47
50 ppb		1	axc2	12/22/2009 15:03:10	OM_12-22-2009_14-59-47
10 ppb		1	axc2	12/22/2009 15:04:03	OM_12-22-2009_14-59-47
CRDL 5.0 ppb		1	axc2	12/22/2009 15:04:57	OM_12-22-2009_14-59-47
ICAL-00		1	axc2	12/22/2009 15:05:51	OM_12-22-2009_14-59-47
ICV		1	axc2	12/22/2009 15:07:41	OM_12-22-2009_14-59-47
ICB		1	axc2	12/22/2009 15:09:31	OM_12-22-2009_14-59-47
CRDL		1	axc2	12/22/2009 15:11:21	OM_12-22-2009_14-59-47
1201998913	934285	1	axc2	12/22/2009 15:13:10	OM_12-22-2009_14-59-47
1201998920	934285	25	axc2	12/22/2009 15:14:04	OM_12-22-2009_14-59-47
243007002	934285	1	axc2	12/22/2009 15:14:57	OM_12-22-2009_14-59-47
243030001	934285	1	axc2	12/22/2009 15:15:50	OM_12-22-2009_14-59-47
1201998914	934285	1	axc2	12/22/2009 15:16:43	OM_12-22-2009_14-59-47
1201998916	934285	1	axc2	12/22/2009 15:17:36	OM_12-22-2009_14-59-47
1201998918	934285	1	axc2	12/22/2009 15:18:28	OM_12-22-2009_14-59-47
243030002*	934285	1	axc2	12/22/2009 15:19:20	OM_12-22-2009_14-59-47
1201998915	934285	1	axc2	12/22/2009 15:20:13	OM_12-22-2009_14-59-47
1201998917*	934285	1	axc2	12/22/2009 15:21:05	OM_12-22-2009_14-59-47
CCV		1	axc2	12/22/2009 15:21:57	OM_12-22-2009_14-59-47
CCB		1	axc2	12/22/2009 15:23:48	OM_12-22-2009_14-59-47
1201998919*	934285	1	axc2	12/22/2009 15:25:36	OM_12-22-2009_14-59-47
243030003	934285	1	axc2	12/22/2009 15:26:27	OM_12-22-2009_14-59-47
243030004	934285	1	axc2	12/22/2009 15:27:20	OM_12-22-2009_14-59-47
243030005	934285	1	axc2	12/22/2009 15:28:11	OM_12-22-2009_14-59-47
243030006	934285	1	axc2	12/22/2009 15:29:03	OM_12-22-2009_14-59-47
243030007	934285	1	axc2	12/22/2009 15:29:56	OM_12-22-2009_14-59-47
243030002	934285	1	axc2	12/22/2009 15:30:49	OM_12-22-2009_14-59-47
1201998919	934285	1	axc2	12/22/2009 15:31:41	OM_12-22-2009_14-59-47
1201998917	934285	1	axc2	12/22/2009 15:32:33	OM_12-22-2009_14-59-47
243030008	934285	1	axc2	12/22/2009 15:33:27	OM_12-22-2009_14-59-47
CCV		1	axc2	12/22/2009 15:34:19	OM_12-22-2009_14-59-47
CCB		1	axc2	12/22/2009 15:36:09	OM_12-22-2009_14-59-47
243030009	934285	1	axc2	12/22/2009 15:37:59	OM_12-22-2009_14-59-47
243030010	934285	1	axc2	12/22/2009 15:38:52	OM_12-22-2009_14-59-47
243030011	934285	1	axc2	12/22/2009 15:39:45	OM_12-22-2009_14-59-47
243030012	934285	1	axc2	12/22/2009 15:40:38	OM_12-22-2009_14-59-47
243030013	934285	1	axc2	12/22/2009 15:41:31	OM_12-22-2009_14-59-47
243030014	934285	1	axc2	12/22/2009 15:42:24	OM_12-22-2009_14-59-47
243030015	934285	1	axc2	12/22/2009 15:43:17	OM_12-22-2009_14-59-47
243030016	934285	1	axc2	12/22/2009 15:44:09	OM_12-22-2009_14-59-47
243030017*	934285	1	axc2	12/22/2009 15:45:01	OM_12-22-2009_14-59-47
243042008	934285	1	axc2	12/22/2009 15:45:54	OM_12-22-2009_14-59-47
CCV		1	axc2	12/22/2009 15:46:46	OM_12-22-2009_14-59-47
CCB		1	axc2	12/22/2009 15:48:36	OM_12-22-2009_14-59-47
243042009	934285	1	axc2	12/22/2009 15:50:24	OM_12-22-2009_14-59-47
1201997980	933837	1	axc2	12/22/2009 15:51:16	OM_12-22-2009_14-59-47
1201997984	933837	25	axc2	12/22/2009 15:52:08	OM_12-22-2009_14-59-47
243030016	934285	5	axc2	12/22/2009 15:53:00	OM_12-22-2009_14-59-47
243030017	934285	1	axc2	12/22/2009 15:53:52	OM_12-22-2009_14-59-47
242938001	933837	1	axc2	12/22/2009 15:54:48	OM_12-22-2009_14-59-47
1201997981	933837	1	axc2	12/22/2009 15:55:41	OM_12-22-2009_14-59-47
1201997982	933837	1	axc2	12/22/2009 15:56:35	OM_12-22-2009_14-59-47
1201997983	933837	1	axc2	12/22/2009 15:57:28	OM_12-22-2009_14-59-47
242938002	933837	1	axc2	12/22/2009 15:58:21	OM_12-22-2009_14-59-47
CCV		1	axc2	12/22/2009 15:59:14	OM_12-22-2009_14-59-47
CCB		1	axc2	12/22/2009 16:01:03	OM_12-22-2009_14-59-47

242938003	933837	1	axc2	12/22/2009 16:02:53	OM_12-22-2009_14-59-47
242938004	933837	1	axc2	12/22/2009 16:03:46	OM_12-22-2009_14-59-47
242938005	933837	1	axc2	12/22/2009 16:04:39	OM_12-22-2009_14-59-47
242938006	933837	1	axc2	12/22/2009 16:05:31	OM_12-22-2009_14-59-47
242938007	933837	1	axc2	12/22/2009 16:06:24	OM_12-22-2009_14-59-47
242938008	933837	1	axc2	12/22/2009 16:07:16	OM_12-22-2009_14-59-47
242938009	933837	1	axc2	12/22/2009 16:08:09	OM_12-22-2009_14-59-47
1201993024	931722	1	axc2	12/22/2009 16:09:01	OM_12-22-2009_14-59-47
1201993028	931722	1	axc2	12/22/2009 16:09:53	OM_12-22-2009_14-59-47
242691002	931722	1	axc2	12/22/2009 16:10:45	OM_12-22-2009_14-59-47
CCV		1	axc2	12/22/2009 16:11:37	OM_12-22-2009_14-59-47
CCB		1	axc2	12/22/2009 16:13:27	OM_12-22-2009_14-59-47
1201993025	931722	1	axc2	12/22/2009 16:15:19	OM_12-22-2009_14-59-47
1201993026	931722	1	axc2	12/22/2009 16:16:12	OM_12-22-2009_14-59-47
1201993027	931722	1	axc2	12/22/2009 16:17:06	OM_12-22-2009_14-59-47
1201998306	933989	1	axc2	12/22/2009 16:18:00	OM_12-22-2009_14-59-47
1201998310	933989	1	axc2	12/22/2009 16:18:53	OM_12-22-2009_14-59-47
242984001	933989	1	axc2	12/22/2009 16:19:47	OM_12-22-2009_14-59-47
1201998307	933989	1	axc2	12/22/2009 16:20:40	OM_12-22-2009_14-59-47
1202001846	933989	1	axc2	12/22/2009 16:21:33	OM_12-22-2009_14-59-47
1202001847	933989	1	axc2	12/22/2009 16:22:26	OM_12-22-2009_14-59-47
242984003	933989	1	axc2	12/22/2009 16:23:18	OM_12-22-2009_14-59-47
CCV		1	axc2	12/22/2009 16:24:11	OM_12-22-2009_14-59-47
CCB		1	axc2	12/22/2009 16:26:01	OM_12-22-2009_14-59-47
1202000926	935209	1	axc2	12/22/2009 16:27:50	OM_12-22-2009_14-59-47
1202000939	935209	1	axc2	12/22/2009 16:28:43	OM_12-22-2009_14-59-47
243104002	935209	1	axc2	12/22/2009 16:29:36	OM_12-22-2009_14-59-47
1202000928	935209	1	axc2	12/22/2009 16:30:28	OM_12-22-2009_14-59-47
1202000932	935209	1	axc2	12/22/2009 16:31:19	OM_12-22-2009_14-59-47
1202000936	935209	1	axc2	12/22/2009 16:32:13	OM_12-22-2009_14-59-47
243108001	935209	1	axc2	12/22/2009 16:33:08	OM_12-22-2009_14-59-47
1202000927	935209	1	axc2	12/22/2009 16:34:02	OM_12-22-2009_14-59-47
1202000931	935209	1	axc2	12/22/2009 16:34:55	OM_12-22-2009_14-59-47
1202000935	935209	1	axc2	12/22/2009 16:35:50	OM_12-22-2009_14-59-47
CCV		1	axc2	12/22/2009 16:36:41	OM_12-22-2009_14-59-47
CCB		1	axc2	12/22/2009 16:38:31	OM_12-22-2009_14-59-47
243108002	935209	1	axc2	12/22/2009 16:40:21	OM_12-22-2009_14-59-47
243223014	935209	1	axc2	12/22/2009 16:41:14	OM_12-22-2009_14-59-47
243242001	935209	1	axc2	12/22/2009 16:42:08	OM_12-22-2009_14-59-47
243242002	935209	1	axc2	12/22/2009 16:43:01	OM_12-22-2009_14-59-47
243251001	935209	1	axc2	12/22/2009 16:43:54	OM_12-22-2009_14-59-47
243252001	935209	1	axc2	12/22/2009 16:44:46	OM_12-22-2009_14-59-47
1202000929	935209	1	axc2	12/22/2009 16:45:40	OM_12-22-2009_14-59-47
1202000933	935209	1	axc2	12/22/2009 16:46:32	OM_12-22-2009_14-59-47
1202000937	935209	1	axc2	12/22/2009 16:47:24	OM_12-22-2009_14-59-47
243255001	935209	1	axc2	12/22/2009 16:48:16	OM_12-22-2009_14-59-47
CCV		1	axc2	12/22/2009 16:49:08	OM_12-22-2009_14-59-47
CCB		1	axc2	12/22/2009 16:50:59	OM_12-22-2009_14-59-47
243255004	935209	1	axc2	12/22/2009 16:52:49	OM_12-22-2009_14-59-47
243255006	935209	1	axc2	12/22/2009 16:53:43	OM_12-22-2009_14-59-47
243257003	935209	1	axc2	12/22/2009 16:54:37	OM_12-22-2009_14-59-47
243257005	935209	1	axc2	12/22/2009 16:55:32	OM_12-22-2009_14-59-47
243272001	935209	1	axc2	12/22/2009 16:56:25	OM_12-22-2009_14-59-47
243281002	935209	1	axc2	12/22/2009 16:57:19	OM_12-22-2009_14-59-47
243281003	935209	1	axc2	12/22/2009 16:58:13	OM_12-22-2009_14-59-47
243281004	935209	1	axc2	12/22/2009 16:59:06	OM_12-22-2009_14-59-47
243281005	935209	1	axc2	12/22/2009 16:59:59	OM_12-22-2009_14-59-47
1202000930	935209	1	axc2	12/22/2009 17:00:52	OM_12-22-2009_14-59-47
CCV		1	axc2	12/22/2009 17:01:45	OM_12-22-2009_14-59-47
CCB		1	axc2	12/22/2009 17:03:34	OM_12-22-2009_14-59-47

1202000934	935209	1	axc2	12/22/2009 17:05:24	OM_12-22-2009_14-59-47
1202000938	935209	1	axc2	12/22/2009 17:06:16	OM_12-22-2009_14-59-47
243281006	935209	1	axc2	12/22/2009 17:07:09	OM_12-22-2009_14-59-47
243285001	935209	1	axc2	12/22/2009 17:08:02	OM_12-22-2009_14-59-47
1202002259	935758	1	axc2	12/22/2009 17:08:54	OM_12-22-2009_14-59-47
1202002261	935758	250	axc2	12/22/2009 17:09:49	OM_12-22-2009_14-59-47
243330001	935758	1	axc2	12/22/2009 17:10:43	OM_12-22-2009_14-59-47
1202002260	935758	1	axc2	12/22/2009 17:11:37	OM_12-22-2009_14-59-47
CCV		1	axc2	12/22/2009 17:12:30	OM_12-22-2009_14-59-47
CCB		1	axc2	12/22/2009 17:14:20	OM_12-22-2009_14-59-47

Author: axc2 Date : 12/22/2009

Original Run Filename: OM_12-22-2009_14-59-47.OMN created 12/22/2009 14:59:47
Original Run Author's Signature: [axc2]
Current Run Filename: OM_12-22-2009_14-59-47.OMN last modified 12/22/2009 17:15:25
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
WCN091222-01	1	S1	200	8.25	12/22/2009@15:00:33			200 ppb
WCN091222-02	1	S2	150	6.18	12/22/2009@15:01:24			150 ppb
WCN091222-03	1	S3	100	3.90	12/22/2009@15:02:17			100 ppb
WCN091222-04	1	S4	50.0	2.21	12/22/2009@15:03:10			50 ppb
WCN091222-05	1	S5	10.0	0.487	12/22/2009@15:04:03			10 ppb
WCN091222-06	1	S6	5.00	0.293	12/22/2009@15:04:57			CRDL 5.0 ppb
WCN091222-08	1	S7	0.00	0.0149	12/22/2009@15:05:51			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99941 > 0.99500					
Message			Pass					
Action			Continue					
WCN091222-07	1	S8	144	5.91	12/22/2009@15:07:41			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			-4.1 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-4.1 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN091222-08	1	S7	-1.08	0.00902	12/22/2009@15:09:31			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.08 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.08 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN091222-06	1	S6	6.03	0.298	12/22/2009@15:11:21			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			6.03 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			6.03 > 2.50					
Message			Pass					
Action			None					
1201998913|934285|MB	1	1	-1.36	-0.00257	12/22/2009@15:13:10			
1201998920||LCS	1	2	26.3	1.12	12/22/2009@15:14:04		25.00	
243007002	1	3	2.45	0.152	12/22/2009@15:14:57			
243030001	1	4	18.0	0.785	12/22/2009@15:15:50			
1201998914||DUP	1	5	18.3	0.796	12/22/2009@15:16:43			
1201998916||MS	1	6	92.8	3.83	12/22/2009@15:17:36			
1201998918||MSD	1	7	113	4.67	12/22/2009@15:18:28			
243030002	1	8	102	4.21	12/22/2009@15:19:20			
1201998915||DUP	1	9	3.98	0.215	12/22/2009@15:20:13			
1201998917||MS	1	10	136	5.61	12/22/2009@15:21:05			
WCN091222-03	1	S3	95.1	3.93	12/22/2009@15:21:57			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					
WCN091222-08	1	S7	-1.51	-0.00852	12/22/2009@15:23:48			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-1.51 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-1.51 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201998919||MSD	1	11	66.5	2.76	12/22/2009@15:25:36			
243030003	1	12	9.08	0.422	12/22/2009@15:26:27			
243030004	1	13	0.915	0.0900	12/22/2009@15:27:20			
243030005	1	14	2.66	0.161	12/22/2009@15:28:11			
243030006	1	15	11.8	0.534	12/22/2009@15:29:03			
243030007	1	16	3.89	0.211	12/22/2009@15:29:56			
243030002	1	8	-1.87	-0.0232	12/22/2009@15:30:49			
1201998919||MSD	1	11	102	4.20	12/22/2009@15:31:41			
1201998917||MS	1	10	134	5.50	12/22/2009@15:32:33			
243030008	1	17	0.219	0.0617	12/22/2009@15:33:27			
WCN091222-03	1	S3	95.6	3.95	12/22/2009@15:34:19			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	-4.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	-4.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN091222-08	1	S7	-1.49	-0.00787	12/22/2009@15:36:09			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					
243030009	1	18	6.82	0.330	12/22/2009@15:37:59			
243030010	1	19	3.52	0.196	12/22/2009@15:38:52			
243030011	1	20	1.76	0.125	12/22/2009@15:39:45			
243030012	1	21	9.74	0.449	12/22/2009@15:40:38			
243030013	1	22	0.594	0.0770	12/22/2009@15:41:31			
243030014	1	23	2.05	0.136	12/22/2009@15:42:24			
243030015	1	24	9.27	0.430	12/22/2009@15:43:17			
243030016	1	25	271	11.1	12/22/2009@15:44:09			
243030017	1	26	10.7	0.487	12/22/2009@15:45:01			
243042008	1	27	1.24	0.103	12/22/2009@15:45:54			
WCN091222-03	1	S3	95.5	3.94	12/22/2009@15:46:46			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					
WCN091222-08	1	S7	-0.654	0.0262	12/22/2009@15:48:36			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit								
Result:			-0.654 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-0.654 > -5.00					
Message			CCB Passed					
Action			Continue					
243042009	1	28	-0.570	0.0296	12/22/2009@15:50:24			
1201997980|933837|MB	1	29	-0.506	0.0322	12/22/2009@15:51:16			
1201997984||LCS	1	30	26.2	1.12	12/22/2009@15:52:08		25.00	
243030016|934285|	1	25	56.2	2.34	12/22/2009@15:53:00		5.00	
243030017	1	26	10.6	0.484	12/22/2009@15:53:52			
242938001|933837|	1	31	0.942	0.0912	12/22/2009@15:54:48			
1201997981||DUP	1	32	1.57	0.117	12/22/2009@15:55:41			
1201997982||MS	1	33	83.1	3.44	12/22/2009@15:56:35			
1201997983||MSD	1	34	94.1	3.88	12/22/2009@15:57:28			
242938002	1	35	0.558	0.0755	12/22/2009@15:58:21			
WCN091222-03	1	S3	95.3	3.93	12/22/2009@15:59:14			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-4.7 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-4.7 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN091222-08	1	S7	-1.40	-0.00431	12/22/2009@16:01:03			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					
242938003	1	36	1.73	0.123	12/22/2009@16:02:53			
242938004	1	37	0.0245	0.0538	12/22/2009@16:03:46			
242938005	1	38	0.227	0.0621	12/22/2009@16:04:39			
242938006	1	39	0.527	0.0743	12/22/2009@16:05:31			
242938007	1	40	-0.310	0.0402	12/22/2009@16:06:24			
242938008	1	41	2.90	0.171	12/22/2009@16:07:16			
242938009	1	42	-0.658	0.0260	12/22/2009@16:08:09			
1201993024|931722|MB	1	43	0.178	0.0601	12/22/2009@16:09:01			
1201993028||LCS	1	44	46.2	1.93	12/22/2009@16:09:53			
242691002	1	45	-0.488	0.0330	12/22/2009@16:10:45			
WCN091222-03	1	S3	95.6	3.94	12/22/2009@16:11:37			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-4.4 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-4.4 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN091222-08	1	S7	-1.29	2.32e-4	12/22/2009@16:13:27			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.29 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.29 > -5.00					
Message			CCB Passed					
Action			Continue					

1201993025||DUP	1	46	-0.576	0.0293	12/22/2009@16:15:19			
1201993026||MS	1	47	97.7	4.03	12/22/2009@16:16:12			
1201993027||MSD	1	48	99.3	4.09	12/22/2009@16:17:06			
1201998306|933989|MB	1	49	-0.762	0.0218	12/22/2009@16:18:00			
1201998310||LCS	1	50	47.0	1.97	12/22/2009@16:18:53			
242984001	1	51	0.125	0.0579	12/22/2009@16:19:47			
1201998307||DUP	1	52	-0.380	0.0373	12/22/2009@16:20:40			
1202001846||MS	1	53	104	4.28	12/22/2009@16:21:33			
1202001847||MSD	1	54	104	4.31	12/22/2009@16:22:26			
242984003	1	55	0.219	0.0617	12/22/2009@16:23:18			
WCN091222-03	1	S3	96.3	3.97	12/22/2009@16:24:11			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-3.7 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-3.7 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN091222-08	1	S7	-1.39	-0.00392	12/22/2009@16:26:01			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.39 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.39 > -5.00					
Message			CCB Passed					
Action			Continue					
1202000926|935209|MB	1	56	-1.11	0.00754	12/22/2009@16:27:50			
1202000939||LCS	1	57	49.9	2.09	12/22/2009@16:28:43			
243104002	1	58	-0.813	0.0197	12/22/2009@16:29:36			
1202000928||DUP	1	59	-1.97	-0.0273	12/22/2009@16:30:28			
1202000932||MS	1	60	94.4	3.89	12/22/2009@16:31:19			
1202000936||MSD	1	61	96.3	3.97	12/22/2009@16:32:13			
243108001	1	62	-0.642	0.0267	12/22/2009@16:33:08			
1202000927||DUP	1	63	-0.764	0.0217	12/22/2009@16:34:02			
1202000931||MS	1	64	96.6	3.99	12/22/2009@16:34:55			
1202000935||MSD	1	65	102	4.20	12/22/2009@16:35:50			
WCN091222-03	1	S3	95.9	3.96	12/22/2009@16:36:41			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					
WCN091222-08	1	S7	-0.314	0.0400	12/22/2009@16:38:31			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-0.314 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-0.314 > -5.00					
Message			CCB Passed					
Action			Continue					
243108002	1	66	-1.08	0.00876	12/22/2009@16:40:21			
243223014	1	67	3.38	0.190	12/22/2009@16:41:14			
243242001	1	68	-0.593	0.0287	12/22/2009@16:42:08			
243242002	1	69	-1.31	-3.65e-4	12/22/2009@16:43:01			
243251001	1	70	-0.958	0.0138	12/22/2009@16:43:54			
243252001	1	71	0.738	0.0829	12/22/2009@16:44:46			
1202000929||DUP	1	72	0.460	0.0715	12/22/2009@16:45:40			
1202000933||MS	1	73	88.9	3.67	12/22/2009@16:46:32			

1202000937||MSD	1	74	91.5	3.78	12/22/2009@16:47:24			
243255001	1	75	-0.788	0.0207	12/22/2009@16:48:16			
WCN091222-03	1	S3	95.7	3.95	12/22/2009@16:49:08			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-4.3 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-4.3 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN091222-08	1	S7	-0.589	0.0288	12/22/2009@16:50:59			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-0.589 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-0.589 > -5.00					
Message			CCB Passed					
Action			Continue					
243255004	1	76	-0.456	0.0342	12/22/2009@16:52:49			
243255006	1	77	-1.35	-0.00197	12/22/2009@16:53:43			
243257003	1	78	-1.26	0.00140	12/22/2009@16:54:37			
243257005	1	79	-1.64	-0.0142	12/22/2009@16:55:32			
243272001	1	80	-0.653	0.0262	12/22/2009@16:56:25			
243281002	1	81	-1.10	0.00789	12/22/2009@16:57:19			
243281003	1	82	-1.28	5.33e-4	12/22/2009@16:58:13			
243281004	1	83	-0.514	0.0319	12/22/2009@16:59:06			
243281005	1	84	-0.685	0.0249	12/22/2009@16:59:59			
1202000930||DUP	1	85	-1.09	0.00856	12/22/2009@17:00:52			
WCN091222-03	1	S3	96.0	3.96	12/22/2009@17:01:45			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-4.0 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-4.0 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN091222-08	1	S7	-0.817	0.0195	12/22/2009@17:03:34			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-0.817 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-0.817 > -5.00					
Message			CCB Passed					
Action			Continue					
1202000934||MS	1	86	102	4.22	12/22/2009@17:05:24			
1202000938||MSD	1	87	99.3	4.10	12/22/2009@17:06:16			
243281006	1	88	-0.651	0.0263	12/22/2009@17:07:09			
243285001	1	89	-2.29	-0.0403	12/22/2009@17:08:02			
1202002259|935758|MB	1	90	-1.06	0.00979	12/22/2009@17:08:54			
1202002261||LCS	1	91	96.7	3.99	12/22/2009@17:09:49		250.00	
243330001	1	92	-0.968	0.0134	12/22/2009@17:10:43			
1202002260||DUP	1	93	5.00	0.257	12/22/2009@17:11:37			
WCN091222-03	1	S3	95.6	3.94	12/22/2009@17:12:30			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-4.4 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-4.4 < 10.0					

Author: axc2 Date : 12/22/2009

		Message	CCV Passed					
		Action	Continue					
WCN091222-08	1	S7	-1.20	0.00380	12/22/2009@17:14:20			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.20 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.20 > -5.00					
		Message	CCB Passed					
		Action	Continue					

Analyte Properties Table for OM_12-22-2009_14-59-47.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration 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

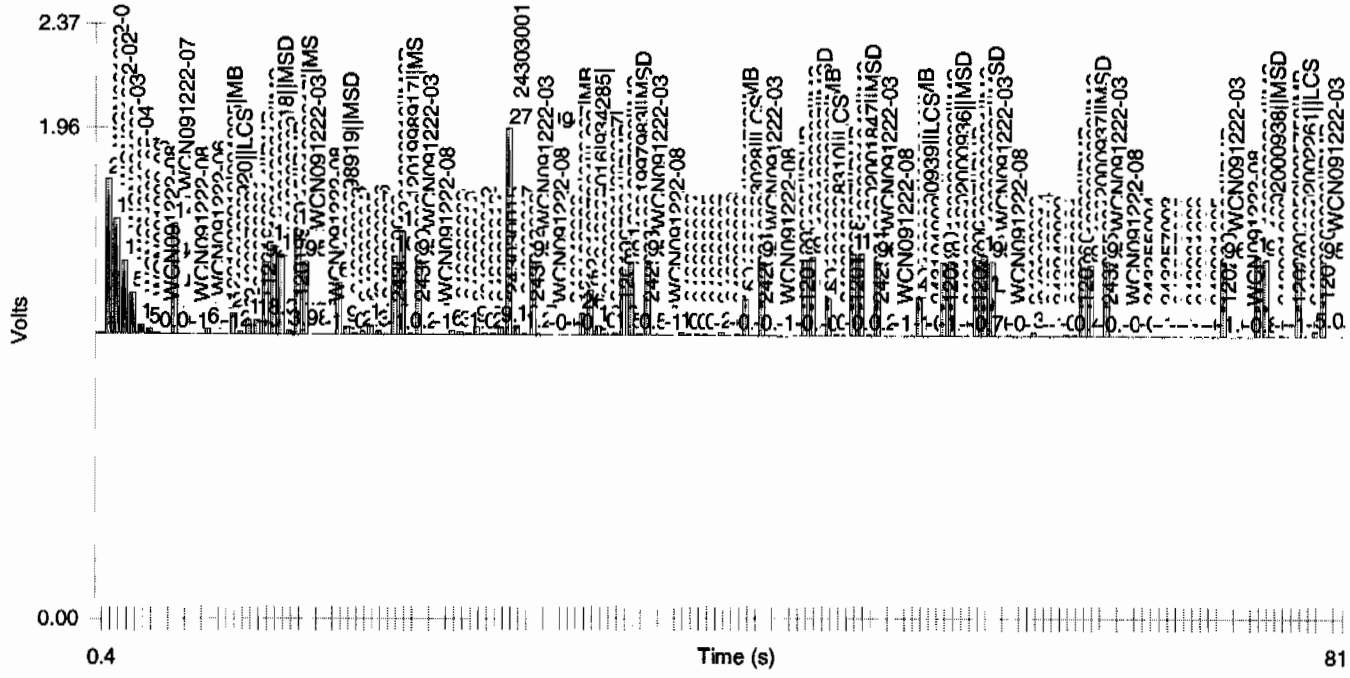


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	8.25	0.610	-0.7	12/22/2009	15:01:35
2	150	1	6.18	0.454	-0.4	12/22/2009	15:02:27
3	100	1	3.90	0.286	5.4	12/22/2009	15:03:20
4	50.0	1	2.21	0.162	-5.9	12/22/2009	15:04:12
5	10.0	1	0.487	0.0341	-5.1	12/22/2009	15:05:06
6	5.00	1	0.293	0.0212	-12.8	12/22/2009	15:05:59
7	0.00	1	0.0149	0.00280		12/22/2009	15:06:54

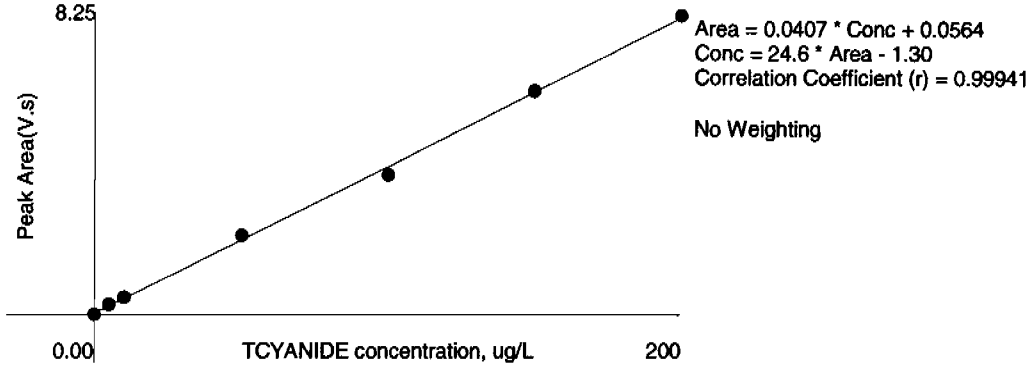



Figure 1: TCYANIDE