Thursday, December 24, 2009

REQUEST NUMBER: 10-1103

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:10-1103

Per Agreement Number:126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 12/28/2009

TURNAROUND/REPORT DUE: 1/27/2010

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	RE12-10-7663	R	12/22/2009	
		1	RE12-10-7664	R	12/22/2009	
		1	RE12-10-7665	R	12/22/2009	
		1	RE12-10-7666	R	12/22/2009	
		1	RE12-10-7667	R	12/22/2009	
		1	RE12-10-7668	R	12/22/2009	
		1	RE12-10-7669	R	12/22/2009	
		1	RE12-10-7670	R	12/22/2009	
		1	RE12-10-7671	R	12/22/2009	

Thursday, December 24, 2009

REQUEST NUMBER: 10-1103

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE12-10-7672	R	12/22/2009	
		1	RE12-10-7675	R	12/22/2009	
		1	RE12-10-7677	W	12/22/2009	
	SW-846:6850	1	RE12-10-7663	R	12/22/2009	
		1	RE12-10-7664	R	12/22/2009	
		1	RE12-10-7665	R	12/22/2009	
		1	RE12-10-7666	R	12/22/2009	
		1	RE12-10-7667	R	12/22/2009	
		1	RE12-10-7668	R	12/22/2009	
		1	RE12-10-7669	R	12/22/2009	
		1	RE12-10-7670	R	12/22/2009	
		1	RE12-10-7671	R	12/22/2009	
		1	RE12-10-7672	R	12/22/2009	
		1	RE12-10-7675	R	12/22/2009	
		1	RE12-10-7677	W	12/22/2009	
	SW-846:7470A	1	RE12-10-7677	W	12/22/2009	
	SW-846:7471A	1	RE12-10-7663	R	12/22/2009	
		1	RE12-10-7664	R	12/22/2009	
		1	RE12-10-7665	R	12/22/2009	
		1	RE12-10-7666	R	12/22/2009	
		1	RE12-10-7667	R	12/22/2009	
		1	RE12-10-7668	R	12/22/2009	
		1	RE12-10-7669	R	12/22/2009	
		1	RE12-10-7670	R	12/22/2009	
		1	RE12-10-7671	R	12/22/2009	
		1	RE12-10-7672	R	12/22/2009	
		1	RE12-10-7675	R	12/22/2009	
	SW-846:9012A	1	RE12-10-7663	R	12/22/2009	

Thursday, December 24, 2009

REQUEST NUMBER: 10-1103

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9012A	1	RE12-10-7664	R	12/22/2009	
		1	RE12-10-7665	R	12/22/2009	
		1	RE12-10-7666	R	12/22/2009	
		1	RE12-10-7667	R	12/22/2009	
		1	RE12-10-7668	R	12/22/2009	
		1	RE12-10-7669	R	12/22/2009	
		1	RE12-10-7670	R	12/22/2009	
		1	RE12-10-7671	R	12/22/2009	
		1	RE12-10-7672	R	12/22/2009	
		1	RE12-10-7675	R	12/22/2009	
		1	RE12-10-7677	W	12/22/2009	

Final Page of REQUEST NUMBER 10-1103

Thursday, December 24, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1103C

REQUEST NUMBER: 10-1103

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 1/27/2010

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE12-10-7675	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7663	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7664	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7672	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7667	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7666	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7665	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7670	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7668	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7671	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7669	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7677	1	POLY	METALS+U-GEL	Nitric Acid	W
RE12-10-7677	1	POLY	SW-846:6850	Ice	W
RE12-10-7677	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:		**Date**	**Time**	**Received By:**		**Date**	**Time**
		12/28/09	3:00				
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Received for DISPOSAL By:		**Date**	**Time**	**Remarks:**
Printed Name	Signature			

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2491 **EVENT NAME:** 4th Qtr. FY09 - AOC C-12-005 of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7671 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		12/22/2009	MEDIA:	QBT3	All h
TIME COLLECTED (HH:MM)		1038	SUB-MEDIA:	TUFF 1	NA
PRS ID:	C-12-005	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610660	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0.6	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	S	EXCAVATED: YES / NO / NA		

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

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

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY 72m 12/22/09	None	Y	
1	↓	Met+U+CLO4+C N	~~1 GAL~~ POLY 1 L	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 clayey sand, some silt, few rocks

SAMPLE COMMENTS: NA

LOCATION DESC: la-31, center of AOC

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 27 dpm
BY ≤ 1769 dpm
PID ambient reading 0.0 / 0.0 ppm
HE negative

COLLECTED BY (PRINT) TLMcFarland **REVIEWED BY (PRINT)** Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland (Signature) Tracy Zi[illegible]	12/22/09 1607	(Printed Name) (Signature) [illegible]	12/22/09 1607
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2491 **EVENT NAME:** 4th Qtr. FY09 - AOC C-12-005 of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7670 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		12/22/2009	MEDIA:	QBT3	Alt
TIME COLLECTED (HH:MM)		1035	SUB-MEDIA:	TUFF 1	N/A
PRS ID:	C-12-005	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	12-610659	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	2.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	3.0	SCREEN/PORT DESC:	N/A	
FIELD MATRIX:	R	S	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: N/A **COMPOSITE TIME INTERVAL:** N/A **WATER FLOWING:** YES / NO / NA

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** N/A **BOREHOLE DIRECTION:** N/A

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISOPU+ISOU	1 LITER POLY	None	Y	
1	↓	Met+U+CLO4+CN	1 ~~GAL~~ POLY 1 L WSW 12/22/09	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:

Medium Brown dirt, little rock, no root
FR RE12-10-7677

SAMPLE COMMENTS:

N/A

LOCATION DESC:

Ia-30 west side AOC

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 99
BY ≤ 1449 DPM

PID ambiant reading 0.0 / 1.9 PPM

COLLECTED BY (PRINT) Kelly Henderson

REVIEWED BY (PRINT) Larry A. Lopez

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TL McFarland	12/22/09 1607	(Printed Name)	12/22/09 1607
(Signature) Tracy McFarland		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2491 **EVENT NAME:** 4th Qtr. FY09 - AOC C-12-005 of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7665 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		KJH 12/22/09 ~~12/22/09~~ 12/22/2009	MEDIA:	QBT3	Alluv
TIME COLLECTED (HH:MM)		0926	SUB-MEDIA:	TUFF 1	N/A
PRS ID:	C-12-005	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	12-610657	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0.5	SCREEN/PORT DESC:	N/A	
FIELD MATRIX:	R	S	EXCAVATED: YES / (NO) / NA		

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

BOREHOLE: YES / (NO) / NA **BOREHOLE DECLINATION:** N/A **BOREHOLE DIRECTION:** N/A

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISOPU+ISOU	1 LITER POLY	None	Y	
1	↓	Met+U+CLO4+CN	1 ~~GAL~~ 1L POLY KJH 12/22/09	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, numerous roots and rocks
silty
sand

SAMPLE COMMENTS:
N/A

LOCATION DESC: 1a-29
South of AOC

FIELD SCREENING/MEASUREMENT RESULTS:
α ≤ 60 DPM
β γ ≤ 1949
HE Negative
PID ambient reading 0.0 / 0.0 PPM

COLLECTED BY (PRINT) Kelly Henderson **REVIEWED BY (PRINT)** TLMcFarland

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland (Signature) Tracy McFarland	12/22/09 1607	(Printed Name) (Signature)	12/22/09 1607
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2491 **EVENT NAME:** 4th Qtr. FY09 - AOC C-12-005 of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7666 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		KDH 12/22/09 ~~12/22/09~~ 12/22/2009	MEDIA:	QBT3	All H
TIME COLLECTED (HH:MM)		0945	SUB-MEDIA:	TUFF 1	N/A
PRS ID:	C-12-005	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	12-610657	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	2.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	3.6	SCREEN/PORT DESC:	N/A	
FIELD MATRIX:	R	S	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: N/A COMPOSITE TIME INTERVAL: N/A WATER FLOWING: YES / NO / NA

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

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1	↓	Met+U+CLO4+C N	~~1 GAL POLY~~ 1 L KDH 12/22/09	Ice	Y	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

light Brown sandy silt, Few ~~tow~~ root, few rock

FD RE12-10-7675 KDH 12/22/09

SAMPLE COMMENTS:

N/A

LOCATION DESC:

1A-29 south side of AOC

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq$ 49

$B\gamma \leq$ 2050 DPM

PID ambient 0.0 / reading 0.0 PPM

HE Negative

COLLECTED BY (PRINT) Kelly Henderson **REVIEWED BY (PRINT)** TLMcFarland

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	12/22/09 1607	(Printed Name)	12/22/09 1607
(Signature) [signature]		(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: 2491 **EVENT NAME:** 4th Qtr. FY09 - AOC C-12-005 of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7664 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		12/22/2009	MEDIA:	OBT3	All h
TIME COLLECTED (HH:MM)		0940	SUB-MEDIA:	TUFF I	NA
PRS ID:	C-12-005	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610656	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	2.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2.9	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	S	EXCAVATED: YES / (NO) / NA		

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

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

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISOPU+ISOU	1 LITER POLY TLM 12/22/09	None	Y	
1	↓	Met+U+CLO4+CN	1 ~~GAL~~ 1 L POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown silty sand, slightly moist

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-27

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 11 dpm PID ambient reading 0.0 / 0.0 ppm

BY ≤ 2280 dpm

COLLECTED BY (PRINT) TLM cFarland **REVIEWED BY (PRINT)** Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLM cFarland	12/22/09 1607	(Printed Name)	12/22/09 1607
(Signature) Tracy L McFarland		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2491 **EVENT NAME:** 4th Qtr. FY09 - AOC C-12-005 of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7668 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		12/22/2009	MEDIA:	QBT3	All h
TIME COLLECTED (HH:MM)		1010	SUB-MEDIA:	TUFF 1	NA
PRS ID:	C-12-005	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610658	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	2.5	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2.9	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	S	EXCAVATED: YES / NO / NA		

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

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

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISOPU+ISOU	1 LITER POLY 12m 12/22/09	None	Y	
1	↓	Met+U+CLO4+CN	1 ~~GAL~~ POLY 1 L	Ice	Y	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Light brown sandy silt, slightly moist

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-28

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 44 dpm

βγ ≤ 2260 dpm

PID ambient reading 0.0 / 2.0 ppm

DB 12/22/2009

COLLECTED BY (PRINT) Th McFarland **REVIEWED BY (PRINT)** Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Th McFarland	12/22/09	(Printed Name)	12/22/09
(Signature) Tracy McFarland	1607	(Signature)	1607
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2491 **EVENT NAME:** 4th Qtr. FY09 - AOC C-12-005 of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7672 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		12/22/2009	MEDIA:	OBT3	
TIME COLLECTED (HH:MM)		1050	SUB-MEDIA:	TUFF 1	
PRS ID:	C-12-005	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610660	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	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: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISOPU+ISOU	1 LITER POLY	None	Y	
1	↓	Met+U+CLO4+CN	1 GAL POLY	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 sandy silt, few rocks

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-31, center of AOC

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq 38$ dpm

$\beta\gamma \leq 2190$ dpm

PID $\frac{\text{ambient}}{\text{reading}}$ $\frac{0.0}{0.2}$ ppm

COLLECTED BY (PRINT) TLMcFarland

REVIEWED BY (PRINT) Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	12/22/09 1607	(Printed Name)	12/22/09 1607
(Signature) Tracy Zant		(Signature) Jay Wy	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2491 **EVENT NAME:** 4th Qtr. FY09 - AOC C-12-005 of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7669 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		12/22/2009	MEDIA:	OBT3	All H
TIME COLLECTED (HH:MM)		1017	SUB-MEDIA:	TUFF 1	N/A
PRS ID:	C-12-005	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	12-610659	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	0.4	SCREEN/PORT DESC:	N/A	
FIELD MATRIX:	R	S	EXCAVATED: YES / (NO) / NA		

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

BOREHOLE: YES / (NO) NA **BOREHOLE DECLINATION:** N/A **BOREHOLE DIRECTION:** N/A

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISOPU+ISOU	1 LITER POLY	None	Y	
1	↓	Met+U+CLO4+CN	~~1 GAL~~ 1L POLY 12/22/09	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 clumpy, clay, few rocks, minimal root

SAMPLE COMMENTS:

N/A

LOCATION DESC:

la-30 west side AOC

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 49

β γ ≤ 1872 DPM

PID ambient 0.0 / leading 0.0 ppm

HE Negative

COLLECTED BY (PRINT) Kelly Henderson

REVIEWED BY (PRINT) TL McFarland

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TL McFarland	12/22/09	(Printed Name)	12/22/09
(Signature) [signature]	1607	(Signature) [signature]	1608
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2491 **EVENT NAME:** 4th Qtr. FY09 - AOC C-12-005 of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7667 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		12/22/2009	MEDIA:	QBT3	Alluv
TIME COLLECTED (HH:MM)		0958	SUB-MEDIA:	TUFF 1	NA
PRS ID:	C-12-005	o/c	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610658	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0.5	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	S	EXCAVATED: YES / (NO) / NA		

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

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

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISOPU+ISOU	1 LITER POLY TLM 12/22/09	None	Y	
1	↓	Met+U+CLO4+CN	1 ~~GAL~~ 1L POLY	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 clay, moist, few rocks

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-28, east side of AOC

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 16 dpm

βγ 2040 dpm

PID ambient reading 0.0 / 1.6 ppm

HE negative

COLLECTED BY (PRINT) TLMcFarland

REVIEWED BY (PRINT) Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland (Signature) Tracy McFarland	12/22/09 1607	(Printed Name) (Signature)	12/22/09 1607
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2491 **EVENT NAME:** 4th Qtr. FY09 - AOC C-12-005 of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7663 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		12/22/2009	MEDIA:	QBT3	AIH
TIME COLLECTED (HH:MM)		0920	SUB-MEDIA:	TUFF 1	N/A
PRS ID:	C-12-005	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610656	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0.5	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	S	EXCAVATED: YES / NO / NA		

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

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

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISOPU+ISOU	1 LITER POLY 72m 12/22/09	None	Y	
1	↓	Met+U+CLO4+CN	~~1 GAL~~ POLY 1 L	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown, Silty Sand, moist, numerous rocks, few roots and grass

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-27, north side of AOC

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 11 dpm PID ambient reading 0.0 / 0.0 ppm

BY ≤ 1935 dpm HE negative

COLLECTED BY (PRINT) TLMcFarland **REVIEWED BY (PRINT)** Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	12/22/09 1607	(Printed Name)	12/22/09 1607
(Signature) Tracy McFarland		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2491 **EVENT NAME:** 4th Qtr. FY09 - AOC C-12-005 of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7675 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		12/22/2009	MEDIA:	OBT3	Air
TIME COLLECTED (HH:MM)		0945	SUB-MEDIA:	TUFF 1	NA
PRS ID:	C-12-005	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	UNK	12-610657	FIELD QC TYPE:	FD	↓
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	NA	↓
TOP DEPTH:	0	2.0	SAMPLE USAGE:	QC	↓
BOTTOM DEPTH:	0	3.6	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	S	EXCAVATED: YES / NO / NA		

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

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

#	PRIORITY	ORDER 12m 12/22/09	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	None	Y	
1	↓	Met+U+CLO4+CN	1 GAL POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE12-10-7666

light brown sandy silt, few roots and rocks

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-29 south side of AOC

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 49 dpm

βγ ≤ 2050 dpm

PID ambient reading 0.0 / 0.0 PPM

COLLECTED BY (PRINT) TL McFarland **REVIEWED BY (PRINT)** Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TL McFarland	12/22/09 1607	(Printed Name)	12/22/09 1607
(Signature) Tracy McFarland		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2491 **EVENT NAME:** 4th Qtr. FY09 - AOC C-12-005 of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7677 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		12/22/2009	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		1041	SUB-MEDIA:	OTHER	
PRS ID:	C-12-005	OK	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	12-610659	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	N/A	
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

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

BOREHOLE: YES (NO) / NA **BOREHOLE DECLINATION:** N/A **BOREHOLE DIRECTION:** N/A

#	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
RE12-10-7670

SAMPLE COMMENTS:
Rinsate

LOCATION DESC:
1a-30 west side of AOC

FIELD SCREENING/MEASUREMENT RESULTS:
N/A

COLLECTED BY (PRINT) Kelly Henderson **REVIEWED BY (PRINT)** Larry A. Lopez

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TL McFarland	12/22/09	(Printed Name)	12/22/09
(Signature) Tracy McFarland	1607	(Signature)	1607
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

Section I.

REQUEST NUMBER: 10-1103 VALIDATION DATE: 02/09/10 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
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☒ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ 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. It should be noted that the water MS/MSD analyses were performed on a LANL sample from another RN, and the parent sample raw data were not included in the data package. No sample data were qualified.

Reviewed by: CLL Level: 1 Date: 2/11/10

VALIDATOR'S SIGNATURE: Kevin A Lambert DATE: 02/09/10

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 EST. 1943

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 EST 1943

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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7675

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628001

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.56	2.24	0.560	ug/kg	U	1	08-JAN-10 21:18	per0108041a
	Perchlorate Isotope Ratio						1	08-JAN-10 21:18	per0108041a
14797-73-0	Perchlorate-101	.56	2.24	0.560	ug/kg	U	1	08-JAN-10 21:18	per0108041a
	Perchlorate-O(18)			5.41	ug/kg		1	08-JAN-10 21:18	per0108041a

^ 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
02/09/10

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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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7663

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628002

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 75

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.666	2.67	0.666	ug/kg	U	1	08-JAN-10 21:40	per0108044a
	Perchlorate Isotope Ratio						1	08-JAN-10 21:40	per0108044a
14797-73-0	Perchlorate-101	.666	2.67	0.666	ug/kg	U	1	08-JAN-10 21:40	per0108044a
	Perchlorate-O(18)			6.64	ug/kg		1	08-JAN-10 21:40	per0108044a

^ 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
02/09/10

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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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7664

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628003

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.56	2.24	0.560	ug/kg	U	1	08-JAN-10 21:47	per0108045a
	Perchlorate Isotope Ratio						1	08-JAN-10 21:47	per0108045a
14797-73-0	Perchlorate-101	.56	2.24	0.560	ug/kg	U	1	08-JAN-10 21:47	per0108045a
	Perchlorate-O(18)			5.66	ug/kg		1	08-JAN-10 21:47	per0108045a

^ 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
02/09/10

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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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7672

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628004

Date Filtered: 08-JAN-10

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	.566	2.26	0.566	ug/kg	U	1	08-JAN-10 22:15	per0108049a
	Perchlorate Isotope Ratio						1	08-JAN-10 22:15	per0108049a
14797-73-0	Perchlorate-101	.566	2.26	0.566	ug/kg	U	1	08-JAN-10 22:15	per0108049a
	Perchlorate-O(18)			5.57	ug/kg		1	08-JAN-10 22:15	per0108049a

^ 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
02/09/10

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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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7667

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628005

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 83

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.604	2.41	0.604	ug/kg	U	1	08-JAN-10 22:23	per0108050a
	Perchlorate Isotope Ratio						1	08-JAN-10 22:23	per0108050a
14797-73-0	Perchlorate-101	.604	2.41	0.621	ug/kg	J	1	08-JAN-10 22:23	per0108050a
	Perchlorate-O(18)			6.17	ug/kg		1	08-JAN-10 22:23	per0108050a

^ 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
02/09/10

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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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7666

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628006

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.559	2.24	0.559	ug/kg	U	1	08-JAN-10 22:30	per0108051a
	Perchlorate Isotope Ratio						1	08-JAN-10 22:30	per0108051a
14797-73-0	Perchlorate-101	.559	2.24	0.559	ug/kg	U	1	08-JAN-10 22:30	per0108051a
	Perchlorate-O(18)			5.64	ug/kg		1	08-JAN-10 22:30	per0108051a

^ 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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7665

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628007

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.565	2.26	0.565	ug/kg	U	1	08-JAN-10 22:37	per0108052a
	Perchlorate Isotope Ratio						1	08-JAN-10 22:37	per0108052a
14797-73-0	Perchlorate-101	.565	2.26	0.565	ug/kg	U	1	08-JAN-10 22:37	per0108052a
	Perchlorate-O(18)			5.81	ug/kg		1	08-JAN-10 22:37	per0108052a

^ 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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7670

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628008

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.564	2.26	1.24	ug/kg	J	1	08-JAN-10 22:44	per0108053a
	Perchlorate Isotope Ratio			2.88			1	08-JAN-10 22:44	per0108053a
14797-73-0	Perchlorate-101	.564	2.26	1.36	ug/kg	J	1	08-JAN-10 22:44	per0108053a
	Perchlorate-O(18)			5.81	ug/kg		1	08-JAN-10 22:44	per0108053a

^ 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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7668

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628009

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 90.9

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.55	2.2	0.550	ug/kg	U	1	08-JAN-10 22:51	per0108054a
	Perchlorate Isotope Ratio						1	08-JAN-10 22:51	per0108054a
14797-73-0	Perchlorate-101	.55	2.2	0.550	ug/kg	U	1	08-JAN-10 22:51	per0108054a
	Perchlorate-O(18)			5.54	ug/kg		1	08-JAN-10 22:51	per0108054a

^ 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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7671

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628010

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 81

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.619	2.48	0.619	ug/kg	U	1	08-JAN-10 22:58	per0108055a
	Perchlorate Isotope Ratio						1	08-JAN-10 22:58	per0108055a
14797-73-0	Perchlorate-101	.619	2.48	0.619	ug/kg	U	1	08-JAN-10 22:58	per0108055a
	Perchlorate-O(18)			6.02	ug/kg		1	08-JAN-10 22:58	per0108055a

^ 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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7669

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628011

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 75

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.665	2.66	1.97	ug/kg	J	1	08-JAN-10 23:05	per0108056a
	Perchlorate Isotope Ratio			2.98			1	08-JAN-10 23:05	per0108056a
14797-73-0	Perchlorate-101	.665	2.66	2.09	ug/kg	J	1	08-JAN-10 23:05	per0108056a
	Perchlorate-O(18)			6.81	ug/kg		1	08-JAN-10 23:05	per0108056a

^ 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
02/09/10

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: 937887

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE12-10-7677

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103-1

GEL Sample ID: 243629001

Date Filtered: 05-JAN-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	06-JAN-10 17:16	per0106018a
	Perchlorate Isotope Ratio						1	06-JAN-10 17:16	per0106018a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	06-JAN-10 17:16	per0106018a
	Perchlorate-O(18)			0.472	ug/L		1	06-JAN-10 17:16	per0106018a

^ 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
02/09/10

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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: 10-1103 VALIDATION DATE: 02/10/10 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
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☒ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ 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, As and Se were detected. All associated sample results were NDs and, thus, were not qualified. In the soil MB, Fe was detected. All associated sample results were detects >50X the MB concentration and, based on professional judgment, were not qualified.
2. In the water ICB/CCB, Tl was detected. The associated sample result was a ND and, thus, was 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 Be and Ca were < the laboratory LAL but ≥10%, and the soil MS %Rs for Al, Ba, Fe, Mg, Mn, and K were > the laboratory UAL. However, the associated parent sample concentrations for Al, Ca, Fe, Mg, and Mn were >4X the spike concentrations. Thus, no sample data were qualified as result, based on professional judgment. The associated Be results were detects and, thus, were qualified J-,I6a. All associated Ba and K results were detects and, thus, were qualified J+,I6b
5. The soil duplicate RPD values for Co and Mn were >35%, and both the parent sample and duplicate results were ≥5X the PQL. All associated sample results were detects and, thus, were qualified J,I10a.
6. It should be noted that the parent samples for all water 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: CLL Level: 1 Date: 2/11/10

DATA VALIDATION COVER SHEET

5118-1 **Data Validation Cover Sheet**	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

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

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 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 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

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

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: 10-1103 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243628001 **BASIS:** Dry Weight **DATE COLLECTED** 22-DEC-09

CLIENT ID: RE12-10-7675 **LEVEL:** Low **DATE RECEIVED** 29-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	15700000	ug/Kg		7490	22000	22000	1	P	HSC	01/12/10 23:21	011210-1	937486
7440-36-0	Antimony	1100	ug/Kg	U	364	1100	1100	1	P	HSC	01/12/10 23:21	011210-1	937486
7440-38-2	Arsenic	2.09	mg/kg		0.217	1.09	1.09	2	MS	SKJ	01/12/10 23:30	100112-3	937510
7440-39-3	Barium J+,I6b	184000	ug/Kg	N	110	551	551	1	P	HSC	01/12/10 23:21	011210-1	937486
7440-41-7	Beryllium J-,I6a	1.02	mg/kg	N	0.0217	0.109	0.109	2	MS	SKJ	01/12/10 23:30	100112-3	937510
7440-43-9	Cadmium	551	ug/Kg	U	110	551	551	1	P	HSC	01/12/10 23:21	011210-1	937486
7440-70-2	Calcium	2960000	ug/Kg		8820	27600	27600	1	P	HSC	01/12/10 23:21	011210-1	937486
7440-47-3	Chromium	12800	ug/Kg		165	551	551	1	P	HSC	01/12/10 23:21	011210-1	937486
7440-48-4	Cobalt J,I10a	4380	ug/Kg	*	165	551	551	1	P	HSC	01/12/10 23:21	011210-1	937486
7440-50-8	Copper	7550	ug/Kg		331	1100	1100	1	P	HSC	01/12/10 23:21	011210-1	937486
7439-89-6	Iron	14500000	ug/Kg		8820	27600	27600	1	P	HSC	01/12/10 23:21	011210-1	937486
7439-92-1	Lead	11500	ug/Kg	*	276	1100	1100	1	P	HSC	01/12/10 23:21	011210-1	937486
7439-95-4	Magnesium	2700000	ug/Kg		9370	33100	33100	1	P	HSC	01/12/10 23:21	011210-1	937486
7439-96-5	Manganese J,I10a	291000	ug/Kg	*	220	1100	1100	1	P	HSC	01/12/10 23:21	011210-1	937486
7439-97-6	Mercury	9.2	ug/kg	J	4.48	13.2	13.2	1	AV	JXL1	01/13/10 10:30	011310S1-5	940329
7440-02-0	Nickel	7.69	mg/kg		0.109	0.435	0.435	2	MS	SKJ	01/12/10 23:30	100112-3	937510
7440-09-7	Potassium J+,I6b	2080000	ug/Kg	N	7050	27600	27600	1	P	HSC	01/12/10 23:21	011210-1	937486
7782-49-2	Selenium	1.09	mg/kg	U	0.544	1.09	1.09	2	MS	SKJ	01/12/10 23:30	100112-3	937510
7440-22-4	Silver	385	ug/Kg	J	110	551	551	1	P	HSC	01/12/10 23:21	011210-1	937486
7440-23-5	Sodium	82400	ug/Kg		7710	27600	27600	1	P	HSC	01/12/10 23:21	011210-1	937486
7440-28-0	Thallium	0.235	mg/kg		0.0652	0.217	0.217	2	MS	SKJ	01/12/10 23:30	100112-3	937510
7440-61-1	Uranium	0.933	mg/kg		0.0143	0.0435	0.0435	2	MS	SKJ	01/12/10 23:30	100112-3	937510
7440-62-2	Vanadium	24200	ug/Kg		110	551	551	1	P	HSC	01/12/10 23:21	011210-1	937486
7440-66-6	Zinc	28700	ug/Kg	E	364	1100	1100	1	P	HSC	01/12/10 23:21	011210-1	937486

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937486	937485	SW846 3050B	0.508	g	50	mL	12/30/09	BXA1
937510	937509	SW846 3050B	0.515	g	50	mL	12/30/09	BXA1
940329	940327	SW846 7471A Prep	0.51	g	30	mL	01/12/10	TXB3

KAL
02/10/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1103 CONTRACT: LANL01004 METHOD TYPE: SW846

SAMPLE ID: 243628002 BASIS: Dry Weight DATE COLLECTED 22-DEC-09

CLIENT ID: RE12-10-7663 LEVEL: Low DATE RECEIVED 29-DEC-09

MATRIX: SOIL %SOLIDS: 75

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7360000	ug/Kg		8650	25400	25400	1	P	HSC	01/12/10 23:56	011210-1	937486
7440-36-0	Antimony	3890	ug/Kg		420	1270	1270	1	P	HSC	01/12/10 23:56	011210-1	937486
7440-38-2	Arsenic	1.13	mg/kg	J	0.267	1.33	1.33	2	MS	SKJ	01/13/10 00:14	100112-3	937510
7440-39-3	Barium J+,I6b	121000	ug/Kg	N	127	636	636	1	P	HSC	01/12/10 23:56	011210-1	937486
7440-41-7	Beryllium J-,I6a	0.549	mg/kg	N	0.0267	0.133	0.133	2	MS	SKJ	01/13/10 00:14	100112-3	937510
7440-43-9	Cadmium	636	ug/Kg	U	127	636	636	1	P	HSC	01/12/10 23:56	011210-1	937486
7440-70-2	Calcium	2390000	ug/Kg		10200	31800	31800	1	P	HSC	01/12/10 23:56	011210-1	937486
7440-47-3	Chromium	196000	ug/Kg		191	636	636	1	P	HSC	01/12/10 23:56	011210-1	937486
7440-48-4	Cobalt J,I10a	5350	ug/Kg	*	191	636	636	1	P	HSC	01/12/10 23:56	011210-1	937486
7440-50-8	Copper	10600	ug/Kg		382	1270	1270	1	P	HSC	01/12/10 23:56	011210-1	937486
7439-89-6	Iron	11100000	ug/Kg		10200	31800	31800	1	P	HSC	01/12/10 23:56	011210-1	937486
7439-92-1	Lead	48200	ug/Kg	*	318	1270	1270	1	P	HSC	01/12/10 23:56	011210-1	937486
7439-95-4	Magnesium	1360000	ug/Kg		10800	38200	38200	1	P	HSC	01/12/10 23:56	011210-1	937486
7439-96-5	Manganese J,I10a	335000	ug/Kg	*	254	1270	1270	1	P	HSC	01/12/10 23:56	011210-1	937486
7439-97-6	Mercury	15.8	ug/kg	U	5.38	15.8	15.8	1	AV	JXL1	01/13/10 10:40	011310S1-5	940329
7440-02-0	Nickel	11.9	mg/kg		0.133	0.533	0.533	2	MS	SKJ	01/13/10 00:14	100112-3	937510
7440-09-7	Potassium J+,I6b	1020000	ug/Kg	N	8140	31800	31800	1	P	HSC	01/12/10 23:56	011210-1	937486
7782-49-2	Selenium	1.33	mg/kg	U	0.666	1.33	1.33	2	MS	SKJ	01/13/10 00:14	100112-3	937510
7440-22-4	Silver	430	ug/Kg	J	127	636	636	1	P	HSC	01/12/10 23:56	011210-1	937486
7440-23-5	Sodium	123000	ug/Kg		8900	31800	31800	1	P	HSC	01/12/10 23:56	011210-1	937486
7440-28-0	Thallium	0.108	mg/kg	J	0.08	0.267	0.267	2	MS	SKJ	01/13/10 00:14	100112-3	937510
7440-61-1	Uranium	1.62	mg/kg		0.0176	0.0533	0.0533	2	MS	SKJ	01/13/10 00:14	100112-3	937510
7440-62-2	Vanadium	22000	ug/Kg		127	636	636	1	P	HSC	01/12/10 23:56	011210-1	937486
7440-66-6	Zinc	31300	ug/Kg	E	420	1270	1270	1	P	HSC	01/12/10 23:56	011210-1	937486

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937486	937485	SW846 3050B	0.524	g	50	mL	12/30/09	BXA1
937510	937509	SW846 3050B	0.5	g	50	mL	12/30/09	BXA1
940329	940327	SW846 7471A Prep	0.505	g	30	mL	01/12/10	TXB3

KAL
02/10/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1103 CONTRACT: LANL01004 METHOD TYPE: SW846

SAMPLE ID: 243628003 **BASIS:** Dry Weight **DATE COLLECTED** 22-DEC-09

CLIENT ID: RE12-10-7664 LEVEL: Low DATE RECEIVED 29-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	10300000	ug/Kg		7430	21900	21900	1	P	HSC	01/13/10 00:03	011210-1	937486
7440-36-0	Antimony	1090	ug/Kg	U	361	1090	1090	1	P	HSC	01/13/10 00:03	011210-1	937486
7440-38-2	Arsenic	2.13	mg/kg		0.217	1.09	1.09	2	MS	SKJ	01/13/10 00:20	100112-3	937510
7440-39-3	Barium J+,I6b	144000	ug/Kg	N	109	546	546	1	P	HSC	01/13/10 00:03	011210-1	937486
7440-41-7	Beryllium J-,I6a	0.914	mg/kg	N	0.0217	0.109	0.109	2	MS	SKJ	01/13/10 00:20	100112-3	937510
7440-43-9	Cadmium	546	ug/Kg	U	109	546	546	1	P	HSC	01/13/10 00:03	011210-1	937486
7440-70-2	Calcium	1720000	ug/Kg		8740	27300	27300	1	P	HSC	01/13/10 00:03	011210-1	937486
7440-47-3	Chromium	8680	ug/Kg		164	546	546	1	P	HSC	01/13/10 00:03	011210-1	937486
7440-48-4	Cobalt J,I10a	6130	ug/Kg	*	164	546	546	1	P	HSC	01/13/10 00:03	011210-1	937486
7440-50-8	Copper	5590	ug/Kg		328	1090	1090	1	P	HSC	01/13/10 00:03	011210-1	937486
7439-89-6	Iron	10700000	ug/Kg		8740	27300	27300	1	P	HSC	01/13/10 00:03	011210-1	937486
7439-92-1	Lead	9540	ug/Kg	*	273	1090	1090	1	P	HSC	01/13/10 00:03	011210-1	937486
7439-95-4	Magnesium	1580000	ug/Kg		9290	32800	32800	1	P	HSC	01/13/10 00:03	011210-1	937486
7439-96-5	Manganese J,I10a	323000	ug/Kg	*	219	1090	1090	1	P	HSC	01/13/10 00:03	011210-1	937486
7439-97-6	Mercury	11.8	ug/kg	U	4	11.8	11.8	1	AV	JXL1	01/13/10 10:42	011310S1-5	940329
7440-02-0	Nickel	7.67	mg/kg		0.109	0.434	0.434	2	MS	SKJ	01/13/10 00:20	100112-3	937510
7440-09-7	Potassium J+,I6b	1410000	ug/Kg	N	6990	27300	27300	1	P	HSC	01/13/10 00:03	011210-1	937486
7782-49-2	Selenium	1.09	mg/kg	U	0.543	1.09	1.09	2	MS	SKJ	01/13/10 00:20	100112-3	937510
7440-22-4	Silver	446	ug/Kg	J	109	546	546	1	P	HSC	01/13/10 00:03	011210-1	937486
7440-23-5	Sodium	77200	ug/Kg		7650	27300	27300	1	P	HSC	01/13/10 00:03	011210-1	937486
7440-28-0	Thallium	0.20	mg/kg	J	0.0652	0.217	0.217	2	MS	SKJ	01/13/10 00:20	100112-3	937510
7440-61-1	Uranium	1.38	mg/kg		0.0143	0.0434	0.0434	2	MS	SKJ	01/13/10 00:20	100112-3	937510
7440-62-2	Vanadium	19800	ug/Kg		109	546	546	1	P	HSC	01/13/10 00:03	011210-1	937486
7440-66-6	Zinc	18800	ug/Kg	E	361	1090	1090	1	P	HSC	01/13/10 00:03	011210-1	937486

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937486	937485	SW846 3050B	0.513	g	50	mL	12/30/09	BXA1
937510	937509	SW846 3050B	0.516	g	50	mL	12/30/09	BXA1
940329	940327	SW846 7471A Prep	0.571	g	30	mL	01/12/10	TXB3

KAL
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1103 CONTRACT: LANL01004 METHOD TYPE: SW846

SAMPLE ID: 243628004 BASIS: Dry Weight DATE COLLECTED 22-DEC-09

CLIENT ID: RE12-10-7672 LEVEL: Low DATE RECEIVED 29-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	13300000	ug/Kg		7670	22500	22500	1	P	HSC	01/13/10 18:53	011310-2	937486
7440-36-0	Antimony	1130	ug/Kg	U	372	1130	1130	1	P	HSC	01/13/10 00:24	011210-1	937486
7440-38-2	Arsenic	2.14	mg/kg		0.222	1.11	1.11	2	MS	SKJ	01/13/10 00:27	100112-3	937510
7440-39-3	Barium J+,I6b	194000	ug/Kg	N	113	564	564	1	P	HSC	01/13/10 00:24	011210-1	937486
7440-41-7	Beryllium J-,I6a	0.903	mg/kg	N	0.0222	0.111	0.111	2	MS	SKJ	01/13/10 00:27	100112-3	937510
7440-43-9	Cadmium	564	ug/Kg	U	113	564	564	1	P	HSC	01/13/10 00:24	011210-1	937486
7440-70-2	Calcium	2270000	ug/Kg		9020	28200	28200	1	P	HSC	01/13/10 18:53	011310-2	937486
7440-47-3	Chromium	10500	ug/Kg		169	564	564	1	P	HSC	01/13/10 00:24	011210-1	937486
7440-48-4	Cobalt J,I10a	7120	ug/Kg	*	169	564	564	1	P	HSC	01/13/10 00:24	011210-1	937486
7440-50-8	Copper	8890	ug/Kg		338	1130	1130	1	P	HSC	01/13/10 00:24	011210-1	937486
7439-89-6	Iron	14300000	ug/Kg		9020	28200	28200	1	P	HSC	01/13/10 00:24	011210-1	937486
7439-92-1	Lead	12700	ug/Kg	*	282	1130	1130	1	P	HSC	01/13/10 00:24	011210-1	937486
7439-95-4	Magnesium	2160000	ug/Kg		9580	33800	33800	1	P	HSC	01/13/10 18:53	011310-2	937486
7439-96-5	Manganese J,I10a	445000	ug/Kg	*	225	1130	1130	1	P	HSC	01/13/10 00:24	011210-1	937486
7439-97-6	Mercury	8.28	ug/kg	J	4.21	12.4	12.4	1	AV	JXL1	01/13/10 10:44	011310S1-5	940329
7440-02-0	Nickel	7.2	mg/kg		0.111	0.444	0.444	2	MS	SKJ	01/13/10 00:27	100112-3	937510
7440-09-7	Potassium J+,I6b	1890000	ug/Kg	N	7220	28200	28200	1	P	HSC	01/13/10 00:24	011210-1	937486
7782-49-2	Selenium	1.11	mg/kg	U	0.555	1.11	1.11	2	MS	SKJ	01/13/10 00:27	100112-3	937510
7440-22-4	Silver	457	ug/Kg	J	113	564	564	1	P	HSC	01/13/10 00:24	011210-1	937486
7440-23-5	Sodium	89700	ug/Kg		7890	28200	28200	1	P	HSC	01/13/10 00:24	011210-1	937486
7440-28-0	Thallium	0.211	mg/kg	J	0.0666	0.222	0.222	2	MS	SKJ	01/13/10 00:27	100112-3	937510
7440-61-1	Uranium	0.828	mg/kg		0.0146	0.0444	0.0444	2	MS	SKJ	01/13/10 00:27	100112-3	937510
7440-62-2	Vanadium	26100	ug/Kg		113	564	564	1	P	HSC	01/13/10 00:24	011210-1	937486
7440-66-6	Zinc	27300	ug/Kg	E	372	1130	1130	1	P	HSC	01/13/10 00:24	011210-1	937486

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937486	937485	SW846 3050B	0.502	g	50	mL	12/30/09	BXA1
937510	937509	SW846 3050B	0.51	g	50	mL	12/30/09	BXA1
940329	940327	SW846 7471A Prep	0.549	g	30	mL	01/12/10	TXB3

KAL
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1103 CONTRACT: LANL01004 METHOD TYPE: SW846

SAMPLE ID: 243628005 **BASIS:** Dry Weight **DATE COLLECTED** 22-DEC-09

CLIENT ID: RE12-10-7667 LEVEL: Low DATE RECEIVED 29-DEC-09

MATRIX: SOIL %SOLIDS: 83

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11300000	ug/Kg		8180	24000	24000	1	P	HSC	01/13/10 19:00	011310-2	937486
7440-36-0	Antimony	1200	ug/Kg	U	397	1200	1200	1	P	HSC	01/13/10 00:32	011210-1	937486
7440-38-2	Arsenic	1.95	mg/kg		0.23	1.15	1.15	2	MS	SKJ	01/13/10 00:33	100112-3	937510
7440-39-3	Barium J+,I6b	195000	ug/Kg	N	120	601	601	1	P	HSC	01/13/10 00:32	011210-1	937486
7440-41-7	Beryllium J-,I6a	0.852	mg/kg	N	0.023	0.115	0.115	2	MS	SKJ	01/13/10 00:33	100112-3	937510
7440-43-9	Cadmium	502	ug/Kg	J	120	601	601	1	P	HSC	01/13/10 00:32	011210-1	937486
7440-70-2	Calcium	2200000	ug/Kg		9620	30100	30100	1	P	HSC	01/13/10 19:00	011310-2	937486
7440-47-3	Chromium	31000	ug/Kg		180	601	601	1	P	HSC	01/13/10 00:32	011210-1	937486
7440-48-4	Cobalt J,I10a	6080	ug/Kg	*	180	601	601	1	P	HSC	01/13/10 00:32	011210-1	937486
7440-50-8	Copper	8580	ug/Kg		361	1200	1200	1	P	HSC	01/13/10 00:32	011210-1	937486
7439-89-6	Iron	13100000	ug/Kg		9620	30100	30100	1	P	HSC	01/13/10 00:32	011210-1	937486
7439-92-1	Lead	18800	ug/Kg	*	301	1200	1200	1	P	HSC	01/13/10 00:32	011210-1	937486
7439-95-4	Magnesium	1990000	ug/Kg		10200	36100	36100	1	P	HSC	01/13/10 19:00	011310-2	937486
7439-96-5	Manganese J,I10a	431000	ug/Kg	*	240	1200	1200	1	P	HSC	01/13/10 00:32	011210-1	937486
7439-97-6	Mercury	5.27	ug/kg	J	4.58	13.5	13.5	1	AV	JXL1	01/13/10 10:46	011310S1-5	940329
7440-02-0	Nickel	8.03	mg/kg		0.115	0.46	0.46	2	MS	SKJ	01/13/10 00:33	100112-3	937510
7440-09-7	Potassium J+,I6b	1910000	ug/Kg	N	7690	30100	30100	1	P	HSC	01/13/10 00:32	011210-1	937486
7782-49-2	Selenium	1.15	mg/kg	U	0.575	1.15	1.15	2	MS	SKJ	01/13/10 00:33	100112-3	937510
7440-22-4	Silver	360	ug/Kg	J	120	601	601	1	P	HSC	01/13/10 00:32	011210-1	937486
7440-23-5	Sodium	72600	ug/Kg		8420	30100	30100	1	P	HSC	01/13/10 00:32	011210-1	937486
7440-28-0	Thallium	0.196	mg/kg	J	0.069	0.23	0.23	2	MS	SKJ	01/13/10 00:33	100112-3	937510
7440-61-1	Uranium	2.77	mg/kg		0.0152	0.046	0.046	2	MS	SKJ	01/13/10 00:33	100112-3	937510
7440-62-2	Vanadium	26500	ug/Kg		120	601	601	1	P	HSC	01/13/10 00:32	011210-1	937486
7440-66-6	Zinc	34000	ug/Kg	E	397	1200	1200	1	P	HSC	01/13/10 00:32	011210-1	937486

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937486	937485	SW846 3050B	0.502	g	50	mL	12/30/09	BXA1
937510	937509	SW846 3050B	0.525	g	50	mL	12/30/09	BXA1
940329	940327	SW846 7471A Prep	0.538	g	30	mL	01/12/10	TXB3

KAL
02/10/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1103 CONTRACT: LANL01004 METHOD TYPE: SW846

SAMPLE ID: 243628006 BASIS: Dry Weight DATE COLLECTED 22-DEC-09

CLIENT ID: RE12-10-7666 LEVEL: Low DATE RECEIVED 29-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		7360	21600	21600	1	P	HSC	01/13/10 19:07	011310-2	937486
7440-36-0	Antimony	1080	ug/Kg	U	357	1080	1080	1	P	HSC	01/13/10 00:39	011210-1	937486
7440-38-2	Arsenic	2.44	mg/kg		0.216	1.08	1.08	2	MS	SKJ	01/13/10 05:17	100112-4	937510
7440-39-3	Barium J+,I6b	220000	ug/Kg	N	108	541	541	1	P	HSC	01/13/10 00:39	011210-1	937486
7440-41-7	Beryllium J-,I6a	0.972	mg/kg	N	0.0216	0.108	0.108	2	MS	SKJ	01/13/10 00:52	100112-3	937510
7440-43-9	Cadmium	116	ug/Kg	J	108	541	541	1	P	HSC	01/13/10 00:39	011210-1	937486
7440-70-2	Calcium	2540000	ug/Kg		8660	27000	27000	1	P	HSC	01/13/10 19:07	011310-2	937486
7440-47-3	Chromium	13600	ug/Kg		162	541	541	1	P	HSC	01/13/10 00:39	011210-1	937486
7440-48-4	Cobalt J,I10a	6170	ug/Kg	*	162	541	541	1	P	HSC	01/13/10 00:39	011210-1	937486
7440-50-8	Copper	9180	ug/Kg		325	1080	1080	1	P	HSC	01/13/10 00:39	011210-1	937486
7439-89-6	Iron	15700000	ug/Kg		8660	27000	27000	1	P	HSC	01/13/10 00:39	011210-1	937486
7439-92-1	Lead	15200	ug/Kg	*	270	1080	1080	1	P	HSC	01/13/10 00:39	011210-1	937486
7439-95-4	Magnesium	2590000	ug/Kg		9200	32500	32500	1	P	HSC	01/13/10 19:07	011310-2	937486
7439-96-5	Manganese J,I10a	386000	ug/Kg	*	216	1080	1080	1	P	HSC	01/13/10 00:39	011210-1	937486
7439-97-6	Mercury	8.99	ug/kg	J	4.35	12.8	12.8	1	AV	JXL1	01/13/10 10:48	011310S1-5	940329
7440-02-0	Nickel	8.32	mg/kg		0.108	0.431	0.431	2	MS	SKJ	01/13/10 00:52	100112-3	937510
7440-09-7	Potassium J+,I6b	2210000	ug/Kg	N	6920	27000	27000	1	P	HSC	01/13/10 00:39	011210-1	937486
7782-49-2	Selenium	1.08	mg/kg	U	0.539	1.08	1.08	2	MS	SKJ	01/13/10 00:52	100112-3	937510
7440-22-4	Silver	142	ug/Kg	J	108	541	541	1	P	HSC	01/13/10 00:39	011210-1	937486
7440-23-5	Sodium	113000	ug/Kg		7570	27000	27000	1	P	HSC	01/13/10 00:39	011210-1	937486
7440-28-0	Thallium	0.252	mg/kg		0.0647	0.216	0.216	2	MS	SKJ	01/13/10 00:52	100112-3	937510
7440-61-1	Uranium	0.994	mg/kg		0.0142	0.0431	0.0431	2	MS	SKJ	01/13/10 00:52	100112-3	937510
7440-62-2	Vanadium	33100	ug/Kg		108	541	541	1	P	HSC	01/13/10 00:39	011210-1	937486
7440-66-6	Zinc	30600	ug/Kg	E	357	1080	1080	1	P	HSC	01/13/10 00:39	011210-1	937486

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937486	937485	SW846 3050B	0.517	g	50	mL	12/30/09	BXA1
937510	937509	SW846 3050B	0.519	g	50	mL	12/30/09	BXA1
940329	940327	SW846 7471A Prep	0.525	g	30	mL	01/12/10	TXB3

KAL
02/10/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1103 CONTRACT: LANL01004 METHOD TYPE: SW846

SAMPLE ID: 243628007 **BASIS:** Dry Weight **DATE COLLECTED** 22-DEC-09

CLIENT ID: RE12-10-7665 LEVEL: Low DATE RECEIVED 29-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	14000000	ug/Kg		7310	21500	21500	1	P	HSC	01/13/10 19:14	011310-2	937486
7440-36-0	Antimony	1080	ug/Kg	U	355	1080	1080	1	P	HSC	01/13/10 00:46	011210-1	937486
7440-38-2	Arsenic	2.49	mg/kg		0.219	1.1	1.1	2	MS	SKJ	01/13/10 05:21	100112-4	937510
7440-39-3	Barium J+,I6b	221000	ug/Kg	N	108	538	538	1	P	HSC	01/13/10 00:46	011210-1	937486
7440-41-7	Beryllium J-,I6a	0.847	mg/kg	N	0.0219	0.11	0.11	2	MS	SKJ	01/13/10 00:58	100112-3	937510
7440-43-9	Cadmium	122	ug/Kg	J	108	538	538	1	P	HSC	01/13/10 00:46	011210-1	937486
7440-70-2	Calcium	2510000	ug/Kg		8610	26900	26900	1	P	HSC	01/13/10 19:14	011310-2	937486
7440-47-3	Chromium	15100	ug/Kg		161	538	538	1	P	HSC	01/13/10 00:46	011210-1	937486
7440-48-4	Cobalt J,I10a	6600	ug/Kg	*	161	538	538	1	P	HSC	01/13/10 00:46	011210-1	937486
7440-50-8	Copper	8090	ug/Kg		323	1080	1080	1	P	HSC	01/13/10 00:46	011210-1	937486
7439-89-6	Iron	14000000	ug/Kg		8610	26900	26900	1	P	HSC	01/13/10 00:46	011210-1	937486
7439-92-1	Lead	15800	ug/Kg	*	269	1080	1080	1	P	HSC	01/13/10 00:46	011210-1	937486
7439-95-4	Magnesium	2160000	ug/Kg		9140	32300	32300	1	P	HSC	01/13/10 19:14	011310-2	937486
7439-96-5	Manganese J,I10a	484000	ug/Kg	*	215	1080	1080	1	P	HSC	01/13/10 00:46	011210-1	937486
7439-97-6	Mercury	4.97	ug/kg	J	4.38	12.9	12.9	1	AV	JXL1	01/13/10 10:54	011310S1-5	940329
7440-02-0	Nickel	7.42	mg/kg		0.11	0.439	0.439	2	MS	SKJ	01/13/10 00:58	100112-3	937510
7440-09-7	Potassium J+,I6b	2230000	ug/Kg	N	6880	26900	26900	1	P	HSC	01/13/10 00:46	011210-1	937486
7782-49-2	Selenium	1.1	mg/kg	U	0.548	1.1	1.1	2	MS	SKJ	01/13/10 00:58	100112-3	937510
7440-22-4	Silver	278	ug/Kg	J	108	538	538	1	P	HSC	01/13/10 00:46	011210-1	937486
7440-23-5	Sodium	64700	ug/Kg		7530	26900	26900	1	P	HSC	01/13/10 00:46	011210-1	937486
7440-28-0	Thallium	0.193	mg/kg	J	0.0658	0.219	0.219	2	MS	SKJ	01/13/10 00:58	100112-3	937510
7440-61-1	Uranium	1.6	mg/kg		0.0145	0.0439	0.0439	2	MS	SKJ	01/13/10 00:58	100112-3	937510
7440-62-2	Vanadium	28600	ug/Kg		108	538	538	1	P	HSC	01/13/10 00:46	011210-1	937486
7440-66-6	Zinc	27700	ug/Kg	E	355	1080	1080	1	P	HSC	01/13/10 00:46	011210-1	937486

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937486	937485	SW846 3050B	0.525	g	50	mL	12/30/09	BXA1
937510	937509	SW846 3050B	0.515	g	50	mL	12/30/09	BXA1
940329	940327	SW846 7471A Prep	0.526	g	30	mL	01/12/10	TXB3

KAL
02/10/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1103 CONTRACT: LANL01004 METHOD TYPE: SW846

SAMPLE ID: 243628008 BASIS: Dry Weight DATE COLLECTED 22-DEC-09

CLIENT ID: RE12-10-7670 LEVEL: Low DATE RECEIVED 29-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	18000000	ug/Kg		7510	22100	22100	1	P	HSC	01/13/10 19:21	011310-2	937486
7440-36-0	Antimony	1100	ug/Kg	U	365	1100	1100	1	P	HSC	01/13/10 00:53	011210-1	937486
7440-38-2	Arsenic	3.07	mg/kg		0.224	1.12	1.12	2	MS	SKJ	01/13/10 05:25	100112-4	937510
7440-39-3	Barium J+,I6b	223000	ug/Kg	N	110	552	552	1	P	HSC	01/13/10 00:53	011210-1	937486
7440-41-7	Beryllium J-,I6a	1.11	mg/kg	N	0.0224	0.112	0.112	2	MS	SKJ	01/13/10 01:04	100112-3	937510
7440-43-9	Cadmium	552	ug/Kg	U	110	552	552	1	P	HSC	01/13/10 00:53	011210-1	937486
7440-70-2	Calcium	2480000	ug/Kg		8840	27600	27600	1	P	HSC	01/13/10 19:21	011310-2	937486
7440-47-3	Chromium	11700	ug/Kg		166	552	552	1	P	HSC	01/13/10 00:53	011210-1	937486
7440-48-4	Cobalt J,I10a	6270	ug/Kg	*	166	552	552	1	P	HSC	01/13/10 00:53	011210-1	937486
7440-50-8	Copper	8390	ug/Kg		331	1100	1100	1	P	HSC	01/13/10 00:53	011210-1	937486
7439-89-6	Iron	15400000	ug/Kg		8840	27600	27600	1	P	HSC	01/13/10 00:53	011210-1	937486
7439-92-1	Lead	15800	ug/Kg	*	276	1100	1100	1	P	HSC	01/13/10 00:53	011210-1	937486
7439-95-4	Magnesium	2540000	ug/Kg		9390	33100	33100	1	P	HSC	01/13/10 19:21	011310-2	937486
7439-96-5	Manganese J,I10a	424000	ug/Kg	*	221	1100	1100	1	P	HSC	01/13/10 00:53	011210-1	937486
7439-97-6	Mercury	8.37	ug/kg	J	4.44	13.1	13.1	1	AV	JXL1	01/13/10 10:56	011310S1-5	940329
7440-02-0	Nickel	8.57	mg/kg		0.112	0.447	0.447	2	MS	SKJ	01/13/10 01:04	100112-3	937510
7440-09-7	Potassium J+,I6b	2280000	ug/Kg	N	7070	27600	27600	1	P	HSC	01/13/10 00:53	011210-1	937486
7782-49-2	Selenium	1.12	mg/kg	U	0.559	1.12	1.12	2	MS	SKJ	01/13/10 01:04	100112-3	937510
7440-22-4	Silver	385	ug/Kg	J	110	552	552	1	P	HSC	01/13/10 00:53	011210-1	937486
7440-23-5	Sodium	132000	ug/Kg		7730	27600	27600	1	P	HSC	01/13/10 00:53	011210-1	937486
7440-28-0	Thallium	0.227	mg/kg		0.0671	0.224	0.224	2	MS	SKJ	01/13/10 01:04	100112-3	937510
7440-61-1	Uranium	1.12	mg/kg		0.0148	0.0447	0.0447	2	MS	SKJ	01/13/10 01:04	100112-3	937510
7440-62-2	Vanadium	30500	ug/Kg		110	552	552	1	P	HSC	01/13/10 00:53	011210-1	937486
7440-66-6	Zinc	30100	ug/Kg	E	365	1100	1100	1	P	HSC	01/13/10 00:53	011210-1	937486

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937486	937485	SW846 3050B	0.511	g	50	mL	12/30/09	BXA1
937510	937509	SW846 3050B	0.505	g	50	mL	12/30/09	BXA1
940329	940327	SW846 7471A Prep	0.519	g	30	mL	01/12/10	TXB3

KAL
02/10/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1103 CONTRACT: LANL01004 METHOD TYPE: SW846

SAMPLE ID: 243628009 **BASIS:** Dry Weight **DATE COLLECTED** 22-DEC-09

CLIENT ID: RE12-10-7668 LEVEL: Low DATE RECEIVED 29-DEC-09

MATRIX: SOIL %SOLIDS: 90.9

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		7430	21900	21900	1	P	HSC	01/13/10 19:29	011310-2	937486
7440-36-0	Antimony	1090	ug/Kg	U	361	1090	1090	1	P	HSC	01/13/10 01:00	011210-1	937486
7440-38-2	Arsenic	2.53	mg/kg		0.213	1.07	1.07	2	MS	SKJ	01/13/10 05:29	100112-4	937510
7440-39-3	Barium J+,I6b	227000	ug/Kg	N	109	547	547	1	P	HSC	01/13/10 01:00	011210-1	937486
7440-41-7	Beryllium J-,I6a	1.07	mg/kg	N	0.0213	0.107	0.107	2	MS	SKJ	01/13/10 01:10	100112-3	937510
7440-43-9	Cadmium	547	ug/Kg	U	109	547	547	1	P	HSC	01/13/10 01:00	011210-1	937486
7440-70-2	Calcium	2410000	ug/Kg		8740	27300	27300	1	P	HSC	01/13/10 19:29	011310-2	937486
7440-47-3	Chromium	12000	ug/Kg		164	547	547	1	P	HSC	01/13/10 01:00	011210-1	937486
7440-48-4	Cobalt J,I10a	6630	ug/Kg	*	164	547	547	1	P	HSC	01/13/10 01:00	011210-1	937486
7440-50-8	Copper	8200	ug/Kg		328	1090	1090	1	P	HSC	01/13/10 01:00	011210-1	937486
7439-89-6	Iron	15200000	ug/Kg		8740	27300	27300	1	P	HSC	01/13/10 01:00	011210-1	937486
7439-92-1	Lead	14900	ug/Kg	*	273	1090	1090	1	P	HSC	01/13/10 01:00	011210-1	937486
7439-95-4	Magnesium	2480000	ug/Kg		9290	32800	32800	1	P	HSC	01/13/10 19:29	011310-2	937486
7439-96-5	Manganese J,I10a	421000	ug/Kg	*	219	1090	1090	1	P	HSC	01/13/10 01:00	011210-1	937486
7439-97-6	Mercury	6.32	ug/kg	J	3.85	11.3	11.3	1	AV	JXL1	01/13/10 10:58	011310S1-5	940329
7440-02-0	Nickel	8.15	mg/kg		0.107	0.426	0.426	2	MS	SKJ	01/13/10 01:10	100112-3	937510
7440-09-7	Potassium J+,I6b	2260000	ug/Kg	N	7000	27300	27300	1	P	HSC	01/13/10 01:00	011210-1	937486
7782-49-2	Selenium	1.07	mg/kg	U	0.533	1.07	1.07	2	MS	SKJ	01/13/10 01:10	100112-3	937510
7440-22-4	Silver	377	ug/Kg	J	109	547	547	1	P	HSC	01/13/10 01:00	011210-1	937486
7440-23-5	Sodium	132000	ug/Kg		7650	27300	27300	1	P	HSC	01/13/10 01:00	011210-1	937486
7440-28-0	Thallium	0.203	mg/kg	J	0.0639	0.213	0.213	2	MS	SKJ	01/13/10 01:10	100112-3	937510
7440-61-1	Uranium	1.02	mg/kg		0.0141	0.0426	0.0426	2	MS	SKJ	01/13/10 01:10	100112-3	937510
7440-62-2	Vanadium	29700	ug/Kg		109	547	547	1	P	HSC	01/13/10 01:00	011210-1	937486
7440-66-6	Zinc	28700	ug/Kg	E	361	1090	1090	1	P	HSC	01/13/10 01:00	011210-1	937486

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937486	937485	SW846 3050B	0.503	g	50	mL	12/30/09	BXA1
937510	937509	SW846 3050B	0.516	g	50	mL	12/30/09	BXA1
940329	940327	SW846 7471A Prep	0.582	g	30	mL	01/12/10	TXB3

KAL
02/10/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1103 CONTRACT: LANL01004 METHOD TYPE: SW846

SAMPLE ID: 243628010 BASIS: Dry Weight DATE COLLECTED 22-DEC-09

CLIENT ID: RE12-10-7671 LEVEL: Low DATE RECEIVED 29-DEC-09

MATRIX: SOIL %SOLIDS: 81

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	17500000	ug/Kg		8340	24500	24500	1	P	HSC	01/13/10 19:36	011310-2	937486
7440-36-0	Antimony	1230	ug/Kg	U	405	1230	1230	1	P	HSC	01/13/10 01:07	011210-1	937486
7440-38-2	Arsenic	2.67	mg/kg		0.239	1.2	1.2	2	MS	SKJ	01/13/10 05:34	100112-4	937510
7440-39-3	Barium J+,I6b	227000	ug/Kg	N	123	613	613	1	P	HSC	01/13/10 01:07	011210-1	937486
7440-41-7	Beryllium J-,I6a	1.11	mg/kg	N	0.0239	0.12	0.12	2	MS	SKJ	01/13/10 01:17	100112-3	937510
7440-43-9	Cadmium	613	ug/Kg	U	123	613	613	1	P	HSC	01/13/10 01:07	011210-1	937486
7440-70-2	Calcium	2370000	ug/Kg		9810	30600	30600	1	P	HSC	01/13/10 19:36	011310-2	937486
7440-47-3	Chromium	11800	ug/Kg		184	613	613	1	P	HSC	01/13/10 01:07	011210-1	937486
7440-48-4	Cobalt J,I10a	5850	ug/Kg	*	184	613	613	1	P	HSC	01/13/10 01:07	011210-1	937486
7440-50-8	Copper	8280	ug/Kg		368	1230	1230	1	P	HSC	01/13/10 01:07	011210-1	937486
7439-89-6	Iron	15800000	ug/Kg		9810	30600	30600	1	P	HSC	01/13/10 01:07	011210-1	937486
7439-92-1	Lead	15600	ug/Kg	*	306	1230	1230	1	P	HSC	01/13/10 01:07	011210-1	937486
7439-95-4	Magnesium	2530000	ug/Kg		10400	36800	36800	1	P	HSC	01/13/10 19:36	011310-2	937486
7439-96-5	Manganese J,I10a	392000	ug/Kg	*	245	1230	1230	1	P	HSC	01/13/10 01:07	011210-1	937486
7439-97-6	Mercury	5.78	ug/kg	J	4.71	13.9	13.9	1	AV	JXL1	01/13/10 11:00	011310S1-5	940329
7440-02-0	Nickel	8.62	mg/kg		0.12	0.478	0.478	2	MS	SKJ	01/13/10 01:17	100112-3	937510
7440-09-7	Potassium J+,I6b	2260000	ug/Kg	N	7850	30600	30600	1	P	HSC	01/13/10 01:07	011210-1	937486
7782-49-2	Selenium	1.2	mg/kg	U	0.598	1.2	1.2	2	MS	SKJ	01/13/10 01:17	100112-3	937510
7440-22-4	Silver	393	ug/Kg	J	123	613	613	1	P	HSC	01/13/10 01:07	011210-1	937486
7440-23-5	Sodium	128000	ug/Kg		8580	30600	30600	1	P	HSC	01/13/10 01:07	011210-1	937486
7440-28-0	Thallium	0.217	mg/kg	J	0.0717	0.239	0.239	2	MS	SKJ	01/13/10 01:17	100112-3	937510
7440-61-1	Uranium	1.15	mg/kg		0.0158	0.0478	0.0478	2	MS	SKJ	01/13/10 01:17	100112-3	937510
7440-62-2	Vanadium	31300	ug/Kg		123	613	613	1	P	HSC	01/13/10 01:07	011210-1	937486
7440-66-6	Zinc	29200	ug/Kg	E	405	1230	1230	1	P	HSC	01/13/10 01:07	011210-1	937486

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937486	937485	SW846 3050B	0.505	g	50	mL	12/30/09	BXA1
937510	937509	SW846 3050B	0.518	g	50	mL	12/30/09	BXA1
940329	940327	SW846 7471A Prep	0.536	g	30	mL	01/12/10	TXB3

KAL
02/10/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1103 CONTRACT: LANL01004 METHOD TYPE: SW846

SAMPLE ID: 243628011 **BASIS:** Dry Weight **DATE COLLECTED** 22-DEC-09

CLIENT ID: RE12-10-7669 LEVEL: Low DATE RECEIVED 29-DEC-09

MATRIX: SOIL %SOLIDS: 75

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12800000	ug/Kg		8990	26400	26400	1	P	HSC	01/13/10 19:43	011310-2	937486
7440-36-0	Antimony	1320	ug/Kg	U	436	1320	1320	1	P	HSC	01/13/10 01:14	011210-1	937486
7440-38-2	Arsenic	2.14	mg/kg		0.254	1.27	1.27	2	MS	SKJ	01/13/10 05:38	100112-4	937510
7440-39-3	Barium J+,I6b	207000	ug/Kg	N	132	661	661	1	P	HSC	01/13/10 01:14	011210-1	937486
7440-41-7	Beryllium J-,I6a	0.752	mg/kg	N	0.0254	0.127	0.127	2	MS	SKJ	01/13/10 01:23	100112-3	937510
7440-43-9	Cadmium	661	ug/Kg	U	132	661	661	1	P	HSC	01/13/10 01:14	011210-1	937486
7440-70-2	Calcium	2900000	ug/Kg		10600	33100	33100	1	P	HSC	01/13/10 19:43	011310-2	937486
7440-47-3	Chromium	39000	ug/Kg		198	661	661	1	P	HSC	01/13/10 01:14	011210-1	937486
7440-48-4	Cobalt J,I10a	6080	ug/Kg	*	198	661	661	1	P	HSC	01/13/10 01:14	011210-1	937486
7440-50-8	Copper	8080	ug/Kg		397	1320	1320	1	P	HSC	01/13/10 01:14	011210-1	937486
7439-89-6	Iron	13500000	ug/Kg		10600	33100	33100	1	P	HSC	01/13/10 01:14	011210-1	937486
7439-92-1	Lead	14800	ug/Kg	*	331	1320	1320	1	P	HSC	01/13/10 01:14	011210-1	937486
7439-95-4	Magnesium	2130000	ug/Kg		11200	39700	39700	1	P	HSC	01/13/10 19:43	011310-2	937486
7439-96-5	Manganese J,I10a	439000	ug/Kg	*	264	1320	1320	1	P	HSC	01/13/10 01:14	011210-1	937486
7439-97-6	Mercury	14.4	ug/kg	U	4.91	14.4	14.4	1	AV	JXL1	01/13/10 11:02	011310S1-5	940329
7440-02-0	Nickel	8.18	mg/kg		0.127	0.509	0.509	2	MS	SKJ	01/13/10 01:23	100112-3	937510
7440-09-7	Potassium J+,I6b	2580000	ug/Kg	N	8460	33100	33100	1	P	HSC	01/13/10 01:14	011210-1	937486
7782-49-2	Selenium	1.27	mg/kg	U	0.636	1.27	1.27	2	MS	SKJ	01/13/10 01:23	100112-3	937510
7440-22-4	Silver	398	ug/Kg	J	132	661	661	1	P	HSC	01/13/10 01:14	011210-1	937486
7440-23-5	Sodium	62800	ug/Kg		9260	33100	33100	1	P	HSC	01/13/10 01:14	011210-1	937486
7440-28-0	Thallium	0.156	mg/kg	J	0.0763	0.254	0.254	2	MS	SKJ	01/13/10 01:23	100112-3	937510
7440-61-1	Uranium	2.16	mg/kg		0.0168	0.0509	0.0509	2	MS	SKJ	01/13/10 01:23	100112-3	937510
7440-62-2	Vanadium	27300	ug/Kg		132	661	661	1	P	HSC	01/13/10 01:14	011210-1	937486
7440-66-6	Zinc	28200	ug/Kg	E	436	1320	1320	1	P	HSC	01/13/10 01:14	011210-1	937486

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937486	937485	SW846 3050B	0.503	g	50	mL	12/30/09	BXA1
937510	937509	SW846 3050B	0.523	g	50	mL	12/30/09	BXA1
940329	940327	SW846 7471A Prep	0.553	g	30	mL	01/12/10	TXB3

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METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1103-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243629001 **BASIS:** As Received **DATE COLLECTED** 22-DEC-09

CLIENT ID: RE12-10-7677 **LEVEL:** Low **DATE RECEIVED** 29-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	01/12/10 16:51	011210-1	937469
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	01/03/10 21:48	100103-2	937496
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	01/12/10 16:51	011210-1	937469
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	01/12/10 16:51	011210-1	937469
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	01/03/10 21:48	100103-2	937496
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	01/03/10 21:48	100103-2	937496
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	01/12/10 16:51	011210-1	937469
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	01/12/10 16:51	011210-1	937469
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	01/12/10 16:51	011210-1	937469
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	01/12/10 16:51	011210-1	937469
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	01/12/10 16:51	011210-1	937469
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	01/03/10 21:48	100103-2	937496
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	01/12/10 16:51	011210-1	937469
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	01/03/10 21:48	100103-2	937496
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	01/08/10 10:08	010810W1-6	937647
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	01/12/10 16:51	011210-1	937469
7440-09-7	Potassium	129	ug/L	J	50	150	150	1	P	HSC	01/12/10 16:51	011210-1	937469
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	01/12/10 16:51	011210-1	937469
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	01/12/10 16:51	011210-1	937469
7440-23-5	Sodium	117	ug/L	J	100	300	300	1	P	HSC	01/12/10 16:51	011210-1	937469
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	01/04/10 05:16	100103-4	937496
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	01/04/10 16:58	100104-5	937496
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	01/12/10 16:51	011210-1	937469
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	01/12/10 16:51	011210-1	937469

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937469	937468	SW846 3005A	50	mL	50	mL	12/31/09	BXA1
937496	937495	SW846 3005A	50	mL	50	mL	12/31/09	BXA1
937647	937646	SW846 7470A Prep	20	mL	20	mL	01/07/10	AXG2

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DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-1103 VALIDATION DATE: 02/09/10 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
- ☐ TPH-DRO
- ☒ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ 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 matrix QC analyses were LANL samples from another RN, and the parent sample raw data were not included in the data package. No sample data were qualified as a result.

Reviewed by: CLL Level: 1 Date: 2/11/10

VALIDATOR'S SIGNATURE: Kevin A Lambert DATE: 02/09/10

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
☐	☒	☐	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

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				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)

GEL LABORATORIES LLC

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Certificate of Analysis

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

Report Date: January 6, 2010

Client SDG: 10-1103

Client Sample ID:	RE12-10-7675	Project:	LANL01004
Sample ID:	243628001	Client ID:	LANL010
Matrix:	R		
Collect Date:	22-DEC-09 12:00		
Receive Date:	29-DEC-09		
Collector:	Client		
Moisture:	10.7%		

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	76.1	280	ug/kg	1	AXC2 01/05/10	1326	937572	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/05/10	1217	937571

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 6, 2010

Client SDG: 10-1103

Client Sample ID:	RE12-10-7663	Project:	LANL01004
Sample ID:	243628002	Client ID:	LANL010
Matrix:	R		
Collect Date:	22-DEC-09 12:00		
Receive Date:	29-DEC-09		
Collector:	Client		
Moisture:	25%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	J	239	80.9	297	ug/kg	1	AXC2 01/05/10	1329	937572	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/05/10	1217	937571

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 6, 2010

Client SDG: 10-1103

Client Sample ID:	RE12-10-7664	Project:	LANL01004
Sample ID:	243628003	Client ID:	LANL010
Matrix:	R		
Collect Date:	22-DEC-09 12:00		
Receive Date:	29-DEC-09		
Collector:	Client		
Moisture:	10.8%		

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	65.7	242	ug/kg	1	AXC2 01/05/10	1333	937572	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/05/10	1217	937571

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 6, 2010

Client SDG: 10-1103

Client Sample ID:	RE12-10-7672	Project:	LANL01004
Sample ID:	243628004	Client ID:	LANL010
Matrix:	R		
Collect Date:	22-DEC-09 12:00		
Receive Date:	29-DEC-09		
Collector:	Client		
Moisture:	11.7%		

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	74.0	272	ug/kg	1	AXC2 01/05/10	1334	937572	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/05/10	1217	937571

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 6, 2010

Client SDG: 10-1103

Client Sample ID:	RE12-10-7667	Project:	LANL01004
Sample ID:	243628005	Client ID:	LANL010
Matrix:	R		
Collect Date:	22-DEC-09 12:00		
Receive Date:	29-DEC-09		
Collector:	Client		
Moisture:	17.2%		

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	74.6	274	ug/kg	1	AXC2 01/05/10	1338	937572	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/05/10	1217	937571

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 6, 2010

Client SDG: 10-1103

Client Sample ID:	RE12-10-7666	Project:	LANL01004
Sample ID:	243628006	Client ID:	LANL010
Matrix:	R		
Collect Date:	22-DEC-09 12:00		
Receive Date:	29-DEC-09		
Collector:	Client		
Moisture:	10.6%		

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	76.1	280	ug/kg	1	AXC2 01/05/10	1339	937572	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/05/10	1217	937571

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 6, 2010

Client SDG: 10-1103

Client Sample ID:	RE12-10-7665	Project:	LANL01004
Sample ID:	243628007	Client ID:	LANL010
Matrix:	R		
Collect Date:	22-DEC-09 12:00		
Receive Date:	29-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	107	71.1	261	ug/kg	1	AXC2 01/05/10	1340	937572	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/05/10	1217	937571

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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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 6, 2010

Client SDG: 10-1103

Client Sample ID:	RE12-10-7670	Project:	LANL01004
Sample ID:	243628008	Client ID:	LANL010
Matrix:	R		
Collect Date:	22-DEC-09 12:00		
Receive Date:	29-DEC-09		
Collector:	Client		
Moisture:	11.4%		

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	75.3	277	ug/kg	1	AXC2 01/05/10	1341	937572	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/05/10	1217	937571

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

KAL
02/09/10

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 6, 2010

Client SDG: 10-1103

Client Sample ID:	RE12-10-7668	Project:	LANL01004
Sample ID:	243628009	Client ID:	LANL010
Matrix:	R		
Collect Date:	22-DEC-09 12:00		
Receive Date:	29-DEC-09		
Collector:	Client		
Moisture:	9.06%		

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	64.5	237	ug/kg	1	AXC2 01/05/10	1342	937572	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/05/10	1217	937571

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

KAL
02/09/10

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 6, 2010

Client SDG: 10-1103

Client Sample ID:	RE12-10-7671	Project:	LANL01004
Sample ID:	243628010	Client ID:	LANL010
Matrix:	R		
Collect Date:	22-DEC-09 12:00		
Receive Date:	29-DEC-09		
Collector:	Client		
Moisture:	19.2%		

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	84.2	310	ug/kg	1	AXC2 01/05/10	1343	937572	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/05/10	1217	937571

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

KAL
02/09/10

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 6, 2010

Client SDG: 10-1103

Client Sample ID:	RE12-10-7669	Project:	LANL01004
Sample ID:	243628011	Client ID:	LANL010
Matrix:	R		
Collect Date:	22-DEC-09 12:00		
Receive Date:	29-DEC-09		
Collector:	Client		
Moisture:	24.8%		

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	83.8	308	ug/kg	1	AXC2 01/05/10	1344	937572	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/05/10	1217	937571

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

KAL
02/09/10

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

Certificate of Analysis

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

Report Date: January 6, 2010

Client SDG: 10-1103-1

Client Sample ID: RE12-10-7677
Sample ID: 243629001
Matrix: W
Collect Date: 22-DEC-09 12:00
Receive Date: 29-DEC-09
Collector: Client

Project: LANL01004
Client ID: LANL010

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 01/04/10	1049	937245	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/31/09	1507	937244

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

KAL
02/09/10

Thursday, December 24, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1103C

REQUEST NUMBER: 10-1103

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 1/27/2010

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 243628%, 243629%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE12-10-7675	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7663	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7664	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7672	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7667	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7666	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7665	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7670	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7668	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7671	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7669	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7677	1	POLY	METALS+U-GEL	Nitric Acid	W
RE12-10-7677	1	POLY	SW-846:6850	Ice	W
RE12-10-7677	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:	Date	Time	Received By:	Date	Time
[signature]	12/28/09	3:00	Greg Tyler [signature]	12-29-09	0840
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 24, 2009

REQUEST NUMBER: 10-1103

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:10-1103

Per Agreement Number:126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 12/28/2009

TURNAROUND/REPORT DUE: 1/27/2010

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	RE12-10-7663	R	12/22/2009	
		1	RE12-10-7664	R	12/22/2009	
		1	RE12-10-7665	R	12/22/2009	
		1	RE12-10-7666	R	12/22/2009	
		1	RE12-10-7667	R	12/22/2009	
		1	RE12-10-7668	R	12/22/2009	
		1	RE12-10-7669	R	12/22/2009	
		1	RE12-10-7670	R	12/22/2009	
		1	RE12-10-7671	R	12/22/2009	

Thursday, December 24, 2009

REQUEST NUMBER: 10-1103

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE12-10-7672	R	12/22/2009	
		1	RE12-10-7675	R	12/22/2009	
		1	RE12-10-7677	W	12/22/2009	
	SW-846:6850	1	RE12-10-7663	R	12/22/2009	
		1	RE12-10-7664	R	12/22/2009	
		1	RE12-10-7665	R	12/22/2009	
		1	RE12-10-7666	R	12/22/2009	
		1	RE12-10-7667	R	12/22/2009	
		1	RE12-10-7668	R	12/22/2009	
		1	RE12-10-7669	R	12/22/2009	
		1	RE12-10-7670	R	12/22/2009	
		1	RE12-10-7671	R	12/22/2009	
		1	RE12-10-7672	R	12/22/2009	
		1	RE12-10-7675	R	12/22/2009	
		1	RE12-10-7677	W	12/22/2009	
	SW-846:7470A	1	RE12-10-7677	W	12/22/2009	
	SW-846:7471A	1	RE12-10-7663	R	12/22/2009	
		1	RE12-10-7664	R	12/22/2009	
		1	RE12-10-7665	R	12/22/2009	
		1	RE12-10-7666	R	12/22/2009	
		1	RE12-10-7667	R	12/22/2009	
		1	RE12-10-7668	R	12/22/2009	
		1	RE12-10-7669	R	12/22/2009	
		1	RE12-10-7670	R	12/22/2009	
		1	RE12-10-7671	R	12/22/2009	
		1	RE12-10-7672	R	12/22/2009	
		1	RE12-10-7675	R	12/22/2009	
	SW-846:9012A	1	RE12-10-7663	R	12/22/2009	

Thursday, December 24, 2009

REQUEST NUMBER: 10-1103

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9012A	1	RE12-10-7664	R	12/22/2009	
		1	RE12-10-7665	R	12/22/2009	
		1	RE12-10-7666	R	12/22/2009	
		1	RE12-10-7667	R	12/22/2009	
		1	RE12-10-7668	R	12/22/2009	
		1	RE12-10-7669	R	12/22/2009	
		1	RE12-10-7670	R	12/22/2009	
		1	RE12-10-7671	R	12/22/2009	
		1	RE12-10-7672	R	12/22/2009	
		1	RE12-10-7675	R	12/22/2009	
		1	RE12-10-7677	W	12/22/2009	

Final Page of REQUEST NUMBER 10-1103

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 06, 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: 243628 243629
SDG: 10-1103

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on December 29, 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 Francis

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-1103
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 243628 and 243629
SDG: 10-1103

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- Quality Control Summary 780
- Standards 819
- Raw Data 831
- Miscellaneous 1050

General Chemistry Analysis **1088**
- Case Narrative 1089
- Sample Data Summary 1094

Quality Control Summary 1107
Instrument QC Data Summary 1110
Cyanide, Total 1112

General Chemistry Analysis 1127
Case Narrative 1128
Sample Data Summary 1133
Quality Control Summary 1136
Instrument QC Data Summary 1139
Cyanide, Total 1141

Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 243628 and 243629
SDG # : 10-1103

January 06, 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 29, 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
243628001	RE12-10-7675
243628002	RE12-10-7663
243628003	RE12-10-7664
243628004	RE12-10-7672
243628005	RE12-10-7667
243628006	RE12-10-7666
243628007	RE12-10-7665
243628008	RE12-10-7670
243628009	RE12-10-7668
243628010	RE12-10-7671
243628011	RE12-10-7669
243629001	RE12-10-7677

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 06 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 24, 2009

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1103C

REQUEST NUMBER: 10-1103

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 1/27/2010

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 243628%, 243629%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE12-10-7675	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7663	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7664	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7672	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7667	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7666	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7665	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7670	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7668	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7671	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7669	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7677	1	POLY	METALS+U-GEL	Nitric Acid	W
RE12-10-7677	1	POLY	SW-846:6850	Ice	W
RE12-10-7677	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:	Date	Time	Received By:	Date	Time
[signature]	12/28/09	3:00	Greg Tyler [signature]	12-29-09	0840
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 24, 2009

REQUEST NUMBER: 10-1103

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:10-1103
Per Agreement Number:126310011
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 12/28/2009
TURNAROUND/REPORT DUE: 1/27/2010
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	RE12-10-7663	R	12/22/2009	
		1	RE12-10-7664	R	12/22/2009	
		1	RE12-10-7665	R	12/22/2009	
		1	RE12-10-7666	R	12/22/2009	
		1	RE12-10-7667	R	12/22/2009	
		1	RE12-10-7668	R	12/22/2009	
		1	RE12-10-7669	R	12/22/2009	
		1	RE12-10-7670	R	12/22/2009	
		1	RE12-10-7671	R	12/22/2009	

Thursday, December 24, 2009

REQUEST NUMBER: 10-1103

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE12-10-7672	R	12/22/2009	
		1	RE12-10-7675	R	12/22/2009	
		1	RE12-10-7677	W	12/22/2009	
	SW-846:6850	1	RE12-10-7663	R	12/22/2009	
		1	RE12-10-7664	R	12/22/2009	
		1	RE12-10-7665	R	12/22/2009	
		1	RE12-10-7666	R	12/22/2009	
		1	RE12-10-7667	R	12/22/2009	
		1	RE12-10-7668	R	12/22/2009	
		1	RE12-10-7669	R	12/22/2009	
		1	RE12-10-7670	R	12/22/2009	
		1	RE12-10-7671	R	12/22/2009	
		1	RE12-10-7672	R	12/22/2009	
		1	RE12-10-7675	R	12/22/2009	
		1	RE12-10-7677	W	12/22/2009	
	SW-846:7470A	1	RE12-10-7677	W	12/22/2009	
	SW-846:7471A	1	RE12-10-7663	R	12/22/2009	
		1	RE12-10-7664	R	12/22/2009	
		1	RE12-10-7665	R	12/22/2009	
		1	RE12-10-7666	R	12/22/2009	
		1	RE12-10-7667	R	12/22/2009	
		1	RE12-10-7668	R	12/22/2009	
		1	RE12-10-7669	R	12/22/2009	
		1	RE12-10-7670	R	12/22/2009	
		1	RE12-10-7671	R	12/22/2009	
		1	RE12-10-7672	R	12/22/2009	
		1	RE12-10-7675	R	12/22/2009	
	SW-846:9012A	1	RE12-10-7663	R	12/22/2009	

Thursday, December 24, 2009

REQUEST NUMBER: 10-1103

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9012A	1	RE12-10-7664	R	12/22/2009	
		1	RE12-10-7665	R	12/22/2009	
		1	RE12-10-7666	R	12/22/2009	
		1	RE12-10-7667	R	12/22/2009	
		1	RE12-10-7668	R	12/22/2009	
		1	RE12-10-7669	R	12/22/2009	
		1	RE12-10-7670	R	12/22/2009	
		1	RE12-10-7671	R	12/22/2009	
		1	RE12-10-7672	R	12/22/2009	
		1	RE12-10-7675	R	12/22/2009	
		1	RE12-10-7677	W	12/22/2009	

Final Page of REQUEST NUMBER 10-1103

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL	**SDG/ARCOC/Work Order: 10-1103**
Received By: Greg Tyler	**Date Received: 12/29/09**

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 **2,3,5,6 C** **9,12C**
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 3994 2C **7209 7849 3961 12C**
7209 7849 3950 2C **7209 7849 3983 12C**
7209 7849 3972 2C
7209 7849 3906 3C
7209 7849 3940 5C
7209 7849 3891 5C
7209 7849 3939 6C
7209 7849 3917 9C

PM (or PMA) review: Initials P. Neil. Date 12-30-09

IN ID: SAFA (505)665-9968
ENE VALDEZ
ALAMOS NATL LAB.
) BLDG 1237 DPU 03

ALAMOS, NM 87545
TED STATES US

SHIP DATE: 28DEC09
ACTWGT: 58.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

LERIE DAVIS
NERAL ENGINEERING LAB
40 SAVAGE RD

ARLESTON SC 29407
3)556-8171
F: 6B010AMR3A05529E00

2°

FedEx Express

C9012098212224

TUE - 29DEC A1
PRIORITY OVERNIGHT

K# 01 7209 7849 3994

29407
SC-US
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IGIN ID: SAFA (505)665-9968
OYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 28DEC09
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2434

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REF: 6B010AMR3A056AB800

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1 of 2
TRK# 0201 7209 7849 3950
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TUE - 29DEC A1
PRIORITY OVERNIGHT

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CHS

XX CHSA

Part # 156148-434 NRII V3 09-09

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

OS ALAMOS, NM 87545
NITED STATES US

SHIP DATE: 28DEC09
ACTWGT: 54.0 LB MAN
CAD: 0014176/CAFE2434

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TRK# 0201 7209 7849 3972
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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: 28DEC09
ACTWGT: 47.0 LB MAN
CAD: 0014176/CAFE2434

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TO VALERIE DAVIS
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(843)556-8171
REF: 6B010AMR2A054196D0

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MPS# 0263 7209 7849 3906
Mstr# 7209 7849 3891 0201

TUE - 29DEC A1
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RIGIN ID: SAFA (505)665-9968
OYLENE VALDEZ
OS ALAMOS NATL LAB.
A00 BLDG 1237 DPU 03

OS ALAMOS, NM 87545
NITED STATES US

SHIP DATE: 28DEC09
ACTWGT: 58.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

/ALERIE DAVIS
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CHARLESTON SC 29407
843)556-8171
REF: 6B010AMR3A056AB800

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PS# 0263 7209 7849 3940
str# 7209 7849 3928 0201

TUE - 29DEC A1
PRIORITY OVERNIGHT

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JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 47.0 LB MAN
CAD: 0014176/CAFE2434

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TO VALERIE DAVIS
GENERAL ENGINEERING LAB
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CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

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1 of 3
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PRIORITY OVERNIGHT

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Part # 156148-434 NRIT V3 09-09

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BLDG 1237 DPU 03

ALAMOS, NM 87545
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CAD: 0014176/CAFE2434

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NERAL ENGINEERING LAB
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7209 7849 3928 0201

TUE - 29DEC A1
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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: 28DEC09
ACTWGT: 56.0 LB MAN
CAD: 0014176/CAFE2434

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843)556-8171
REF: 6B010AMR2A054196D0

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3 of 3
MPS# 0263 7209 7849 3917
Mstr# 7209 7849 3891 0201

TUE - 29DEC A1
PRIORITY OVERNIGHT

XX CHSA

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CHS

ORIGIN ID: SAFA (505)665-9988
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 28DEC09
ACTWGT: 54.0 LB MAN
CAD: 0014176/CAFE2434

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2040 SAVAGE RD

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REF: 6B010AMR3A056AB800

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2 of 2
MPS# 0263 7209 7849 3961
Mstr# 7209 7849 3950 0201

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PRIORITY OVERNIGHT

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Part # 156148-434 NAM V3 09-09

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 48.0 LB MAN
CAD: 0014176/CAFE2434

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2 of 2
MPS# 0263 7209 7849 3983
Mstr# 7209 7849 3972 0201

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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 10-1103

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:	937885
Prep Batch Number:	937884

Sample Analysis

Sample ID	**Client ID**
243628001	RE12-10-7675
243628002	RE12-10-7663
243628003	RE12-10-7664
243628004	RE12-10-7672
243628005	RE12-10-7667
243628006	RE12-10-7666
243628007	RE12-10-7665
243628008	RE12-10-7670
243628009	RE12-10-7668
243628010	RE12-10-7671
243628011	RE12-10-7669
1202006988	Interference Check Sample (ICS)
1202006984	Method Blank (MB)
1202006985	Laboratory Control Sample (LCS)
1202006986	243628001(RE12-10-7675) Matrix Spike (MS)
1202006987	243628001(RE12-10-7675) 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 243628001 (RE12-10-7675) 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

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 reports (DER) was not generated for this SDG.

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

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

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

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

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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 N Maier **Date:** 01/15/10

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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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7675

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628001

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.56	2.24	0.560	ug/kg	U	1	08-JAN-10 21:18	per0108041a
	Perchlorate Isotope Ratio						1	08-JAN-10 21:18	per0108041a
14797-73-0	Perchlorate-101	.56	2.24	0.560	ug/kg	U	1	08-JAN-10 21:18	per0108041a
	Perchlorate-O(18)			5.41	ug/kg		1	08-JAN-10 21:18	per0108041a

^ 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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7663

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628002

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 75

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.666	2.67	0.666	ug/kg	U	1	08-JAN-10 21:40	per0108044a
	Perchlorate Isotope Ratio						1	08-JAN-10 21:40	per0108044a
14797-73-0	Perchlorate-101	.666	2.67	0.666	ug/kg	U	1	08-JAN-10 21:40	per0108044a
	Perchlorate-O(18)			6.64	ug/kg		1	08-JAN-10 21:40	per0108044a

^ 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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7664

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628003

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.56	2.24	0.560	ug/kg	U	1	08-JAN-10 21:47	per0108045a
	Perchlorate Isotope Ratio						1	08-JAN-10 21:47	per0108045a
14797-73-0	Perchlorate-101	.56	2.24	0.560	ug/kg	U	1	08-JAN-10 21:47	per0108045a
	Perchlorate-O(18)			5.66	ug/kg		1	08-JAN-10 21:47	per0108045a

^ 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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7672

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628004

Date Filtered: 08-JAN-10

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	.566	2.26	0.566	ug/kg	U	1	08-JAN-10 22:15	per0108049a
	Perchlorate Isotope Ratio						1	08-JAN-10 22:15	per0108049a
14797-73-0	Perchlorate-101	.566	2.26	0.566	ug/kg	U	1	08-JAN-10 22:15	per0108049a
	Perchlorate-O(18)			5.57	ug/kg		1	08-JAN-10 22:15	per0108049a

^ 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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7667

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628005

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 83

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.604	2.41	0.604	ug/kg	U	1	08-JAN-10 22:23	per0108050a
	Perchlorate Isotope Ratio						1	08-JAN-10 22:23	per0108050a
14797-73-0	Perchlorate-101	.604	2.41	0.621	ug/kg	J	1	08-JAN-10 22:23	per0108050a
	Perchlorate-O(18)			6.17	ug/kg		1	08-JAN-10 22:23	per0108050a

^ 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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7666

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628006

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.559	2.24	0.559	ug/kg	U	1	08-JAN-10 22:30	per0108051a
	Perchlorate Isotope Ratio						1	08-JAN-10 22:30	per0108051a
14797-73-0	Perchlorate-101	.559	2.24	0.559	ug/kg	U	1	08-JAN-10 22:30	per0108051a
	Perchlorate-O(18)			5.64	ug/kg		1	08-JAN-10 22:30	per0108051a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7665

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628007

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.565	2.26	0.565	ug/kg	U	1	08-JAN-10 22:37	per0108052a
	Perchlorate Isotope Ratio						1	08-JAN-10 22:37	per0108052a
14797-73-0	Perchlorate-101	.565	2.26	0.565	ug/kg	U	1	08-JAN-10 22:37	per0108052a
	Perchlorate-O(18)			5.81	ug/kg		1	08-JAN-10 22:37	per0108052a

^ 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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7670

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628008

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.564	2.26	1.24	ug/kg	J	1	08-JAN-10 22:44	per0108053a
	Perchlorate Isotope Ratio			2.88			1	08-JAN-10 22:44	per0108053a
14797-73-0	Perchlorate-101	.564	2.26	1.36	ug/kg	J	1	08-JAN-10 22:44	per0108053a
	Perchlorate-O(18)			5.81	ug/kg		1	08-JAN-10 22:44	per0108053a

^ 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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7668

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628009

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 90.9

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.55	2.2	0.550	ug/kg	U	1	08-JAN-10 22:51	per0108054a
	Perchlorate Isotope Ratio						1	08-JAN-10 22:51	per0108054a
14797-73-0	Perchlorate-101	.55	2.2	0.550	ug/kg	U	1	08-JAN-10 22:51	per0108054a
	Perchlorate-O(18)			5.54	ug/kg		1	08-JAN-10 22:51	per0108054a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7671

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628010

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 81

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.619	2.48	0.619	ug/kg	U	1	08-JAN-10 22:58	per0108055a
	Perchlorate Isotope Ratio						1	08-JAN-10 22:58	per0108055a
14797-73-0	Perchlorate-101	.619	2.48	0.619	ug/kg	U	1	08-JAN-10 22:58	per0108055a
	Perchlorate-O(18)			6.02	ug/kg		1	08-JAN-10 22:58	per0108055a

^ 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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7669

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628011

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 75

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.665	2.66	1.97	ug/kg	J	1	08-JAN-10 23:05	per0108056a
	Perchlorate Isotope Ratio			2.98			1	08-JAN-10 23:05	per0108056a
14797-73-0	Perchlorate-101	.665	2.66	2.09	ug/kg	J	1	08-JAN-10 23:05	per0108056a
	Perchlorate-O(18)			6.81	ug/kg		1	08-JAN-10 23:05	per0108056a

^ 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

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Form 5

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–1103

Extract Batch Code: 937884

Date Filtered: 08–JAN–10

Matrix: SOIL

Sample ID: 1202006985

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	1.93	ug/kg	96.7		70 – 130
Perchlorate Isotope Ratio		3.06				–
Perchlorate–101	2.00	2	ug/kg	99.9		70 – 130
Perchlorate–O(18)		4.89	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.

Form 5a

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–1103

Extract Batch Code: 937884

Date Filtered: 08–JAN–10

Matrix: SOIL

Sample ID: 1202006988

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	1.97	ug/kg	98.5		70 – 130
Perchlorate Isotope Ratio		3.05				
Perchlorate–101	2.00	2.04	ug/kg	102		70 – 130
Perchlorate–O(18)		4.94	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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he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

ast Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
rinted: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

ame: per0108040a
ate: 08-Jan-2010
ime: 21:11:11
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ial: 2:1,C

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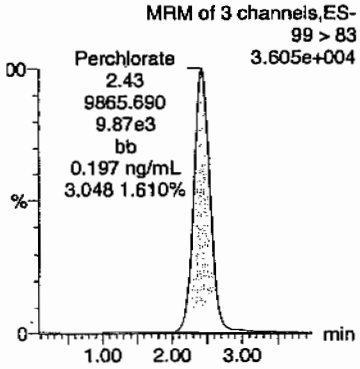
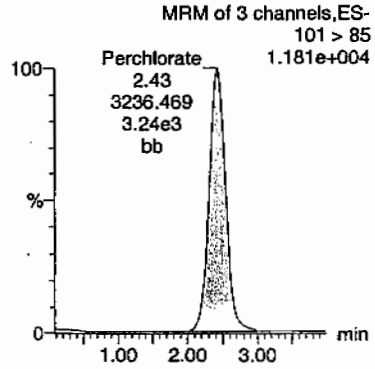
9-12-10

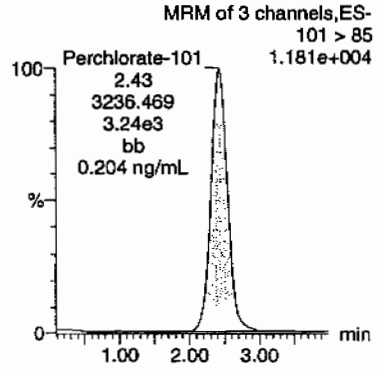
erchlorate



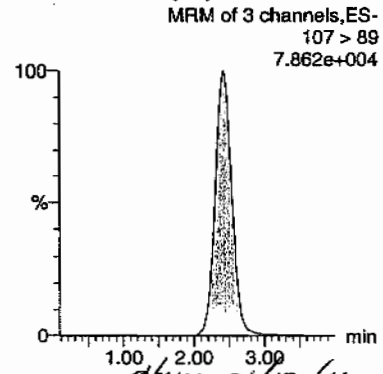
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 01/13/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202006988	Perchlorate	99 > 83	2.43	9865.690	9865.690	bb			0.1969	98.45	-1.55	5116.0...	3.05
202006988	Perchlorate-101	101 > 85	2.43	3236.469	3236.469	bb			0.2041	102.03	2.03	1699.6...	
202006988	Perchlorate-O(18)	107 > 89	2.41	21689.514	21689.514	bb			0.4937	98.74	-1.26	1094.7...	

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

Form 6

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10–1103

Extract Batch Code: 937884

Date Extracted: 08–JAN–10

GEL MS/PS ID: 1202006986

Client ID: RE12–10–7675

GEL MSD/PSD ID: 1202006987

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Recovery Limit
Perchlorate	2.24	0.378	ug/kg	2.54	96.3	2.53	96.3	.0676	30	75 – 125
Perchlorate Isotope Ratio	0	0.00		3.05		2.94		0		–
Perchlorate–101	2.24	0.362	ug/kg	2.63	101	2.72	105	3.58	30	75 – 125
Perchlorate–O(18)	0	5.41	ug/kg	5.70		5.47		4		–

^ 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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Form 4

Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1103

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	08-JAN-10	per0108001a	IPB001
Perchlorate-101	0.00	0	NA	08-JAN-10	per0108001a	IPB001
Perchlorate	0.00	0	NA	08-JAN-10	per0108002a	IPB001
Perchlorate-101	0.00	0	NA	08-JAN-10	per0108002a	IPB001

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

Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

Last Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per010810a.mdb 12 Jan 2010 09:13:13
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per010810a.cdb 12 Jan 2010 09:13:39

Name: per0108001a
Date: 08-Jan-2010
Time: 16:24:47
ID: IPB001
Vial: 1:1,A

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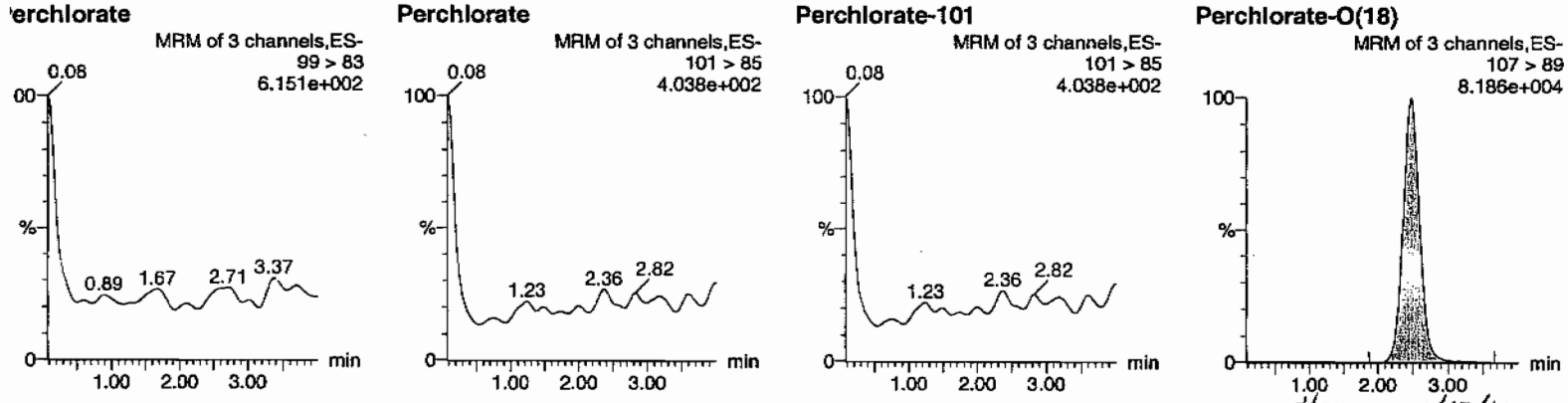
01-12-10



HMW 01/13/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	2.48	22579.689	22579.689	bb			0.5140	102.80	2.80	3296.2...	

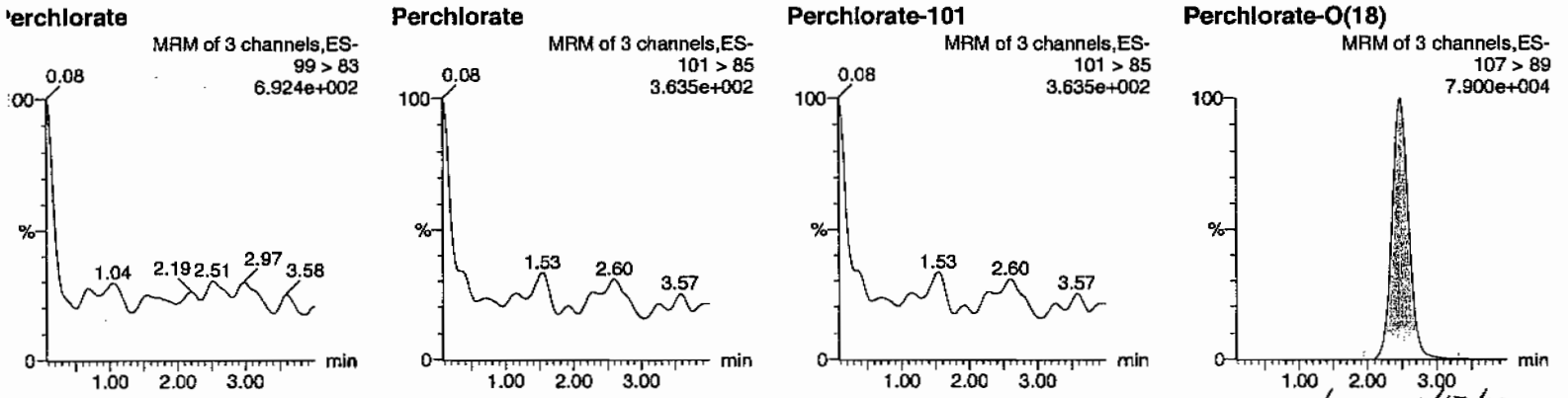
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

Last Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

Name: per0108002a
Date: 08-Jan-2010
Time: 16:31:49
ID: IPB001
Vial: 1:1,A

CWW 01-12-10



ghm 01/13/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	2.48	21901.832	21901.832	bb			0.4986	99.71	-0.29	20053....	

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Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–1103

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	08–JAN–10	per0108008a	IPB002
Perchlorate–101	0.00	0	NA	08–JAN–10	per0108008a	IPB002
Perchlorate	0.00	0	NA	08–JAN–10	per0108010a	IPB003
Perchlorate–101	0.00	0	NA	08–JAN–10	per0108010a	IPB003
Perchlorate	0.00	0	NA	08–JAN–10	per0108023a	IPB004
Perchlorate–101	0.00	0	NA	08–JAN–10	per0108023a	IPB004
Perchlorate	0.00	0	NA	08–JAN–10	per0108036a	IPB005
Perchlorate–101	0.00	0	NA	08–JAN–10	per0108036a	IPB005
Perchlorate	0.00	0	NA	08–JAN–10	per0108047a	IPB006
Perchlorate–101	0.00	0	NA	08–JAN–10	per0108047a	IPB006
Perchlorate	0.00	0	NA	08–JAN–10	per0108058a	IPB007
Perchlorate–101	0.00	0	NA	08–JAN–10	per0108058a	IPB007

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he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

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rinted: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

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ime: 17:13:57
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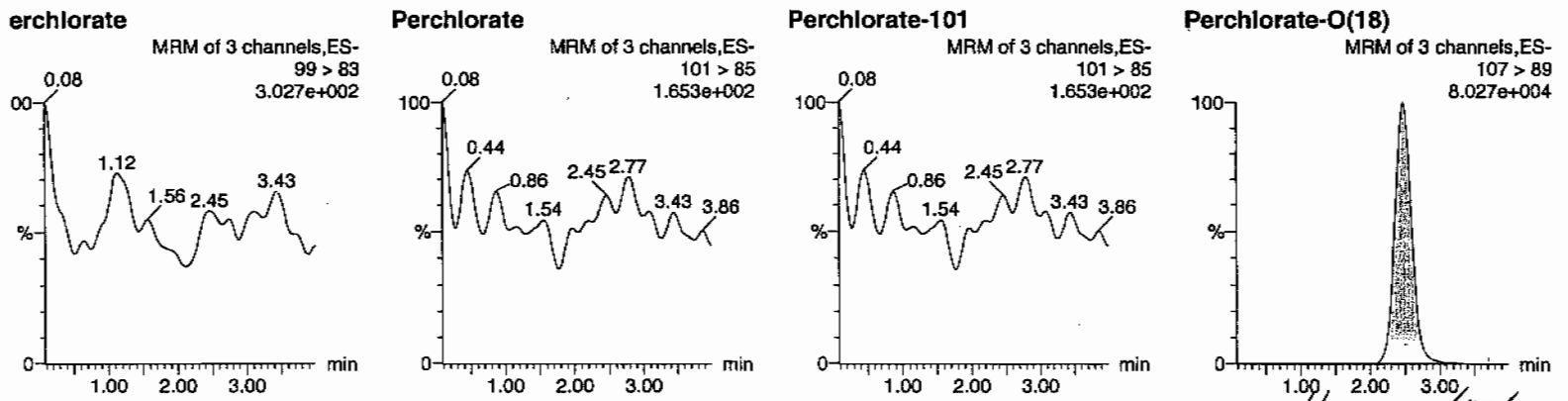
CWW
01-12-10



Hmm 01/13/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB002	Perchlorate	99 > 83											0.00
PB002	Perchlorate-101	101 > 85											
PB002	Perchlorate-O(18)	107 > 89	2.48	22307.771	22307.771	bb			0.5078	101.56	1.56	15083....	

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

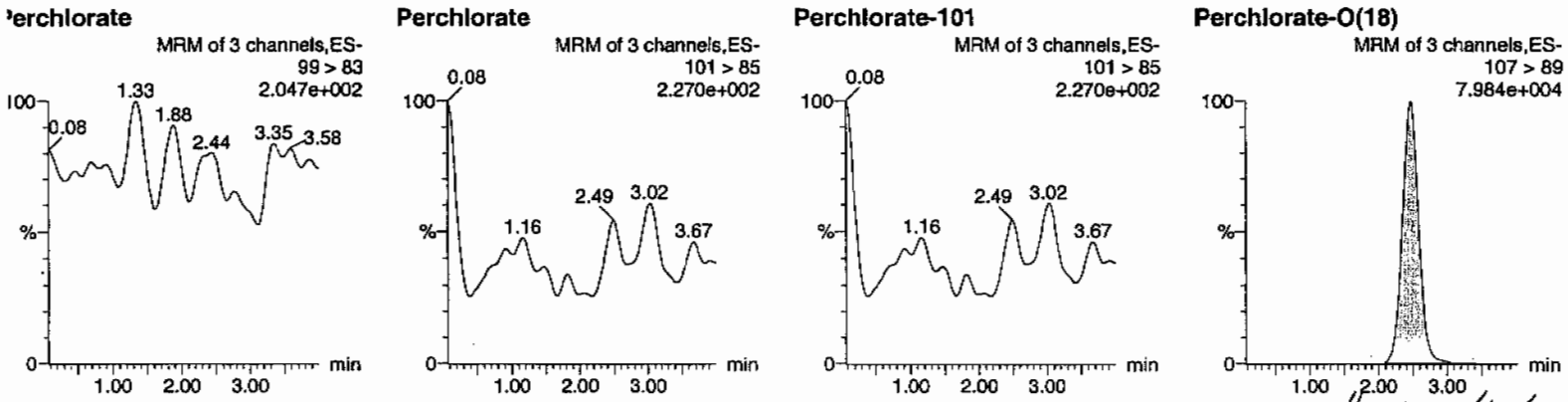
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

Last Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

Name: per0108010a
Date: 08-Jan-2010
Time: 17:28:02
ID: IPB003
Vial: 1:1,A

CWW 01-12-10



HAM 01/13/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB003	Perchlorate	99 > 83											0.00
PB003	Perchlorate-101	101 > 85											
PB003	Perchlorate-O(18)	107 > 89	2.46	22043.236	22043.236	bb			0.5018	100.36 ✓	0.36	7297.0...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

Last Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

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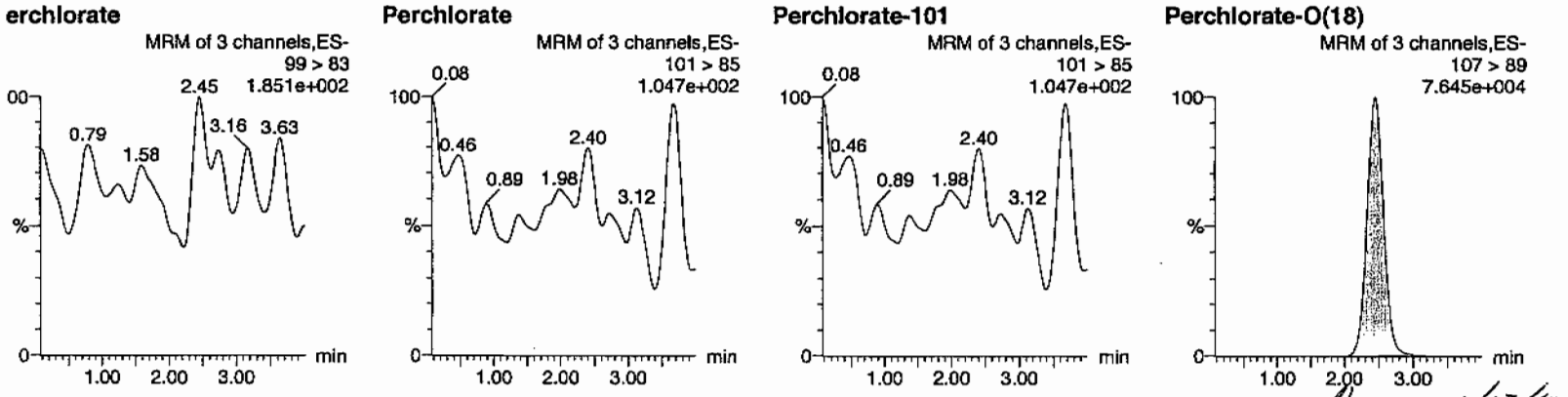
Date: 08-Jan-2010
Time: 19:01:22
ID: IPB004
Vial: 1:1,A

CWW
01-12-10



Amm 01/13/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB004	Perchlorate	99 > 83											0.00
IPB004	Perchlorate-101	101 > 85											
IPB004	Perchlorate-O(18)	107 > 89	2.45	21228.150	21228.150	bb			0.4832	96.64	-3.36	11757....	

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

ataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

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rinted: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

ame: per0108036a
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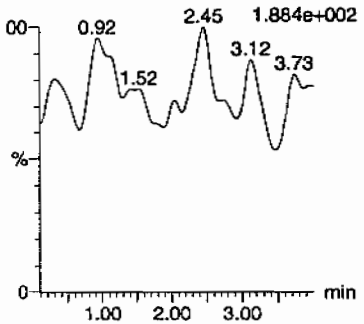
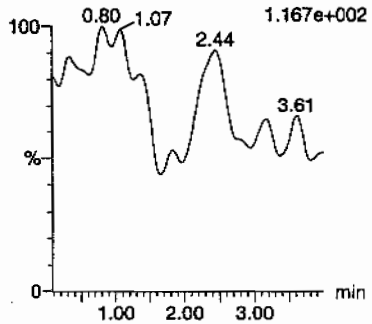
ime: 20:40:07
): IPB005
ial: 1:1,A

01-12-10

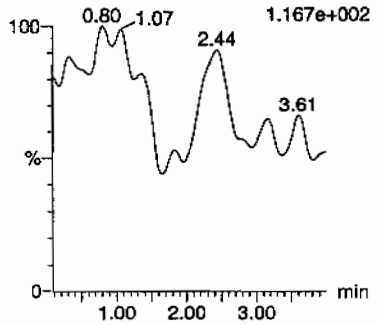
erchlorate



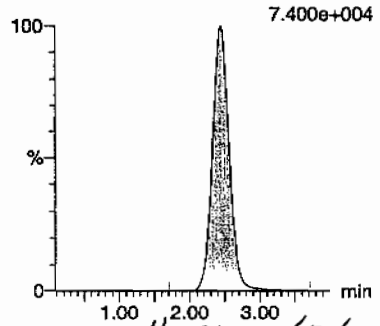
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 01/13/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'B005	Perchlorate	99 > 83											0.00
'B005	Perchlorate-101	101 > 85											
'B005	Perchlorate-O(18)	107 > 89	2.44	20447.766	20447.766	bb			0.4655	93.09	-6.91	19169....	

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

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

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

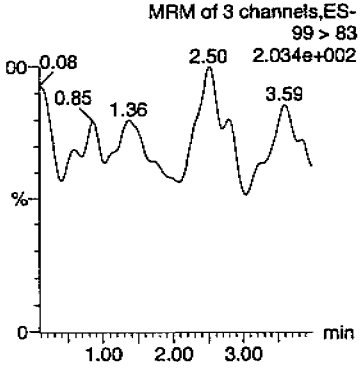
ataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

ast Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
rinted: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

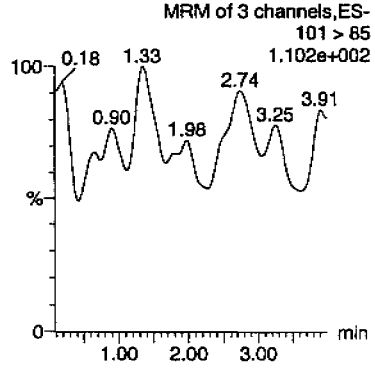
lame: per0108047a
ate: 08-Jan-2010
ime: 22:01:38
): IPB006
ial: 1:1,A

CWW 01-12-10

erchlorate



Perchlorate



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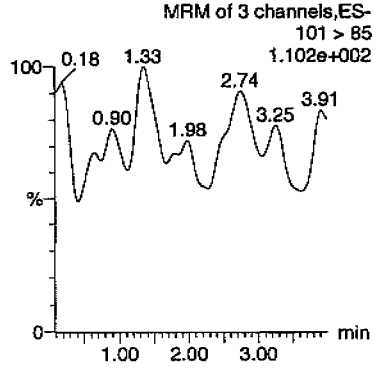
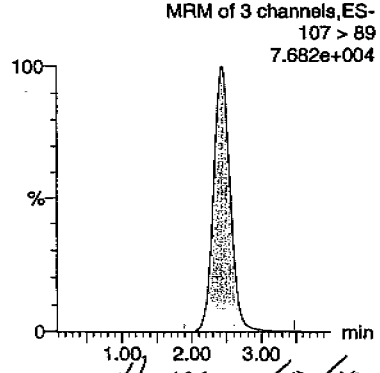


Perchlorate-O(18)



AMM 01/13/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB006	Perchlorate	99 > 83											0.00
PB006	Perchlorate-101	101 > 85											
PB006	Perchlorate-O(18)	107 > 89	2.43	21273.787	21273.787	bb			0.4843	96.85	-3.15	6930.3...	

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

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

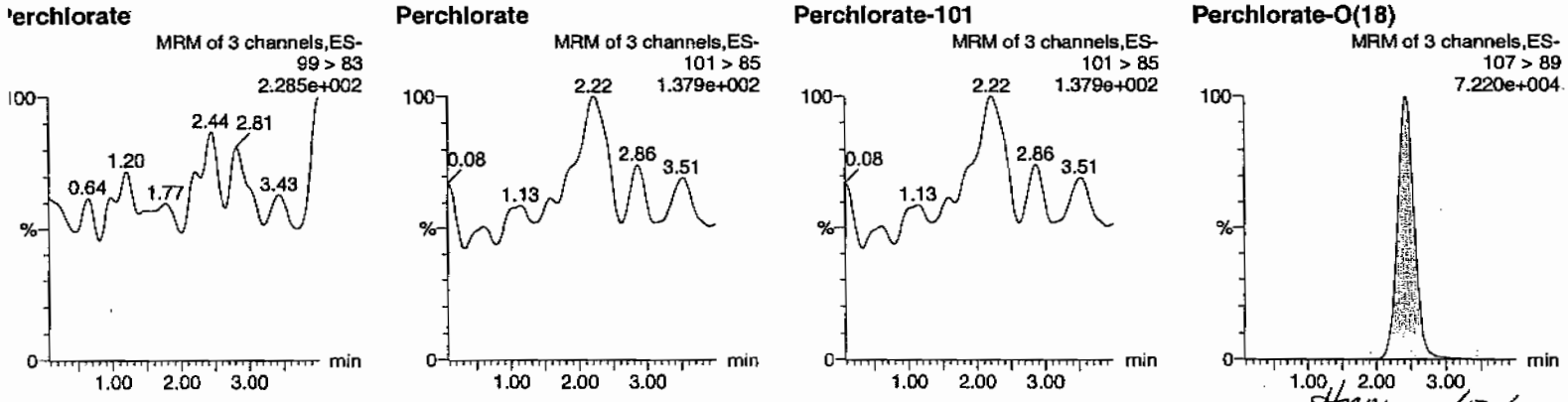
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

Last Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

Name: per0108058a
Date: 08-Jan-2010
Time: 23:19:41
ID: IPB007
Vial: 1:1,A

CWW
01-12-10



HMK 01/13/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB007	Perchlorate	99 > 83											0.00
IPB007	Perchlorate-101	101 > 85											
IPB007	Perchlorate-O(18)	107 > 89	2.43	20087.844	20087.844	bb			0.4573	91.45	-8.55	4166.2...	

EL 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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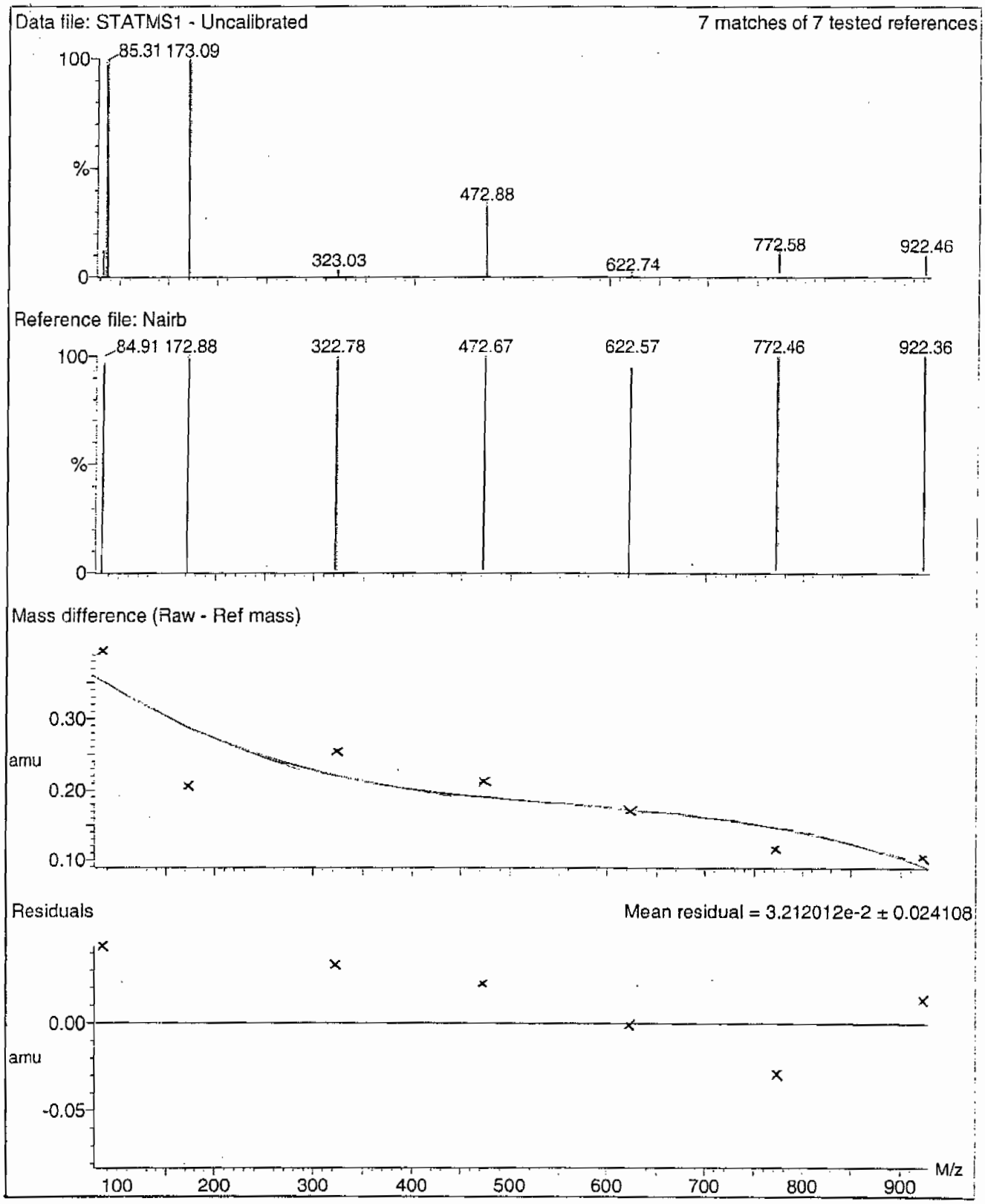
QUATTRO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

Printed: Tue Jan 08 12:19:12 2008

PEAKS HIGHLIGHTED BY CWW 01-07-08



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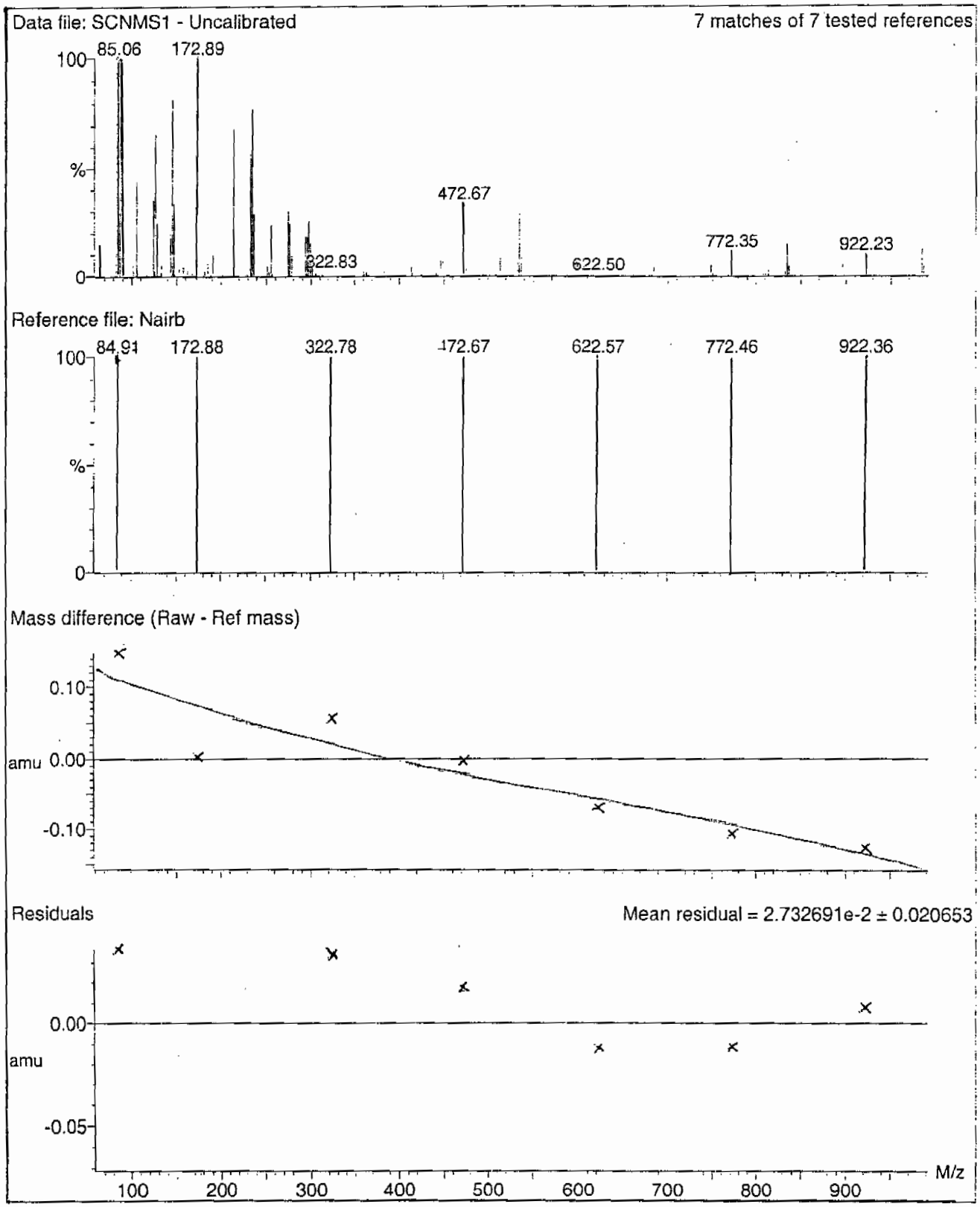
Calibration Report - MS1 Scanning

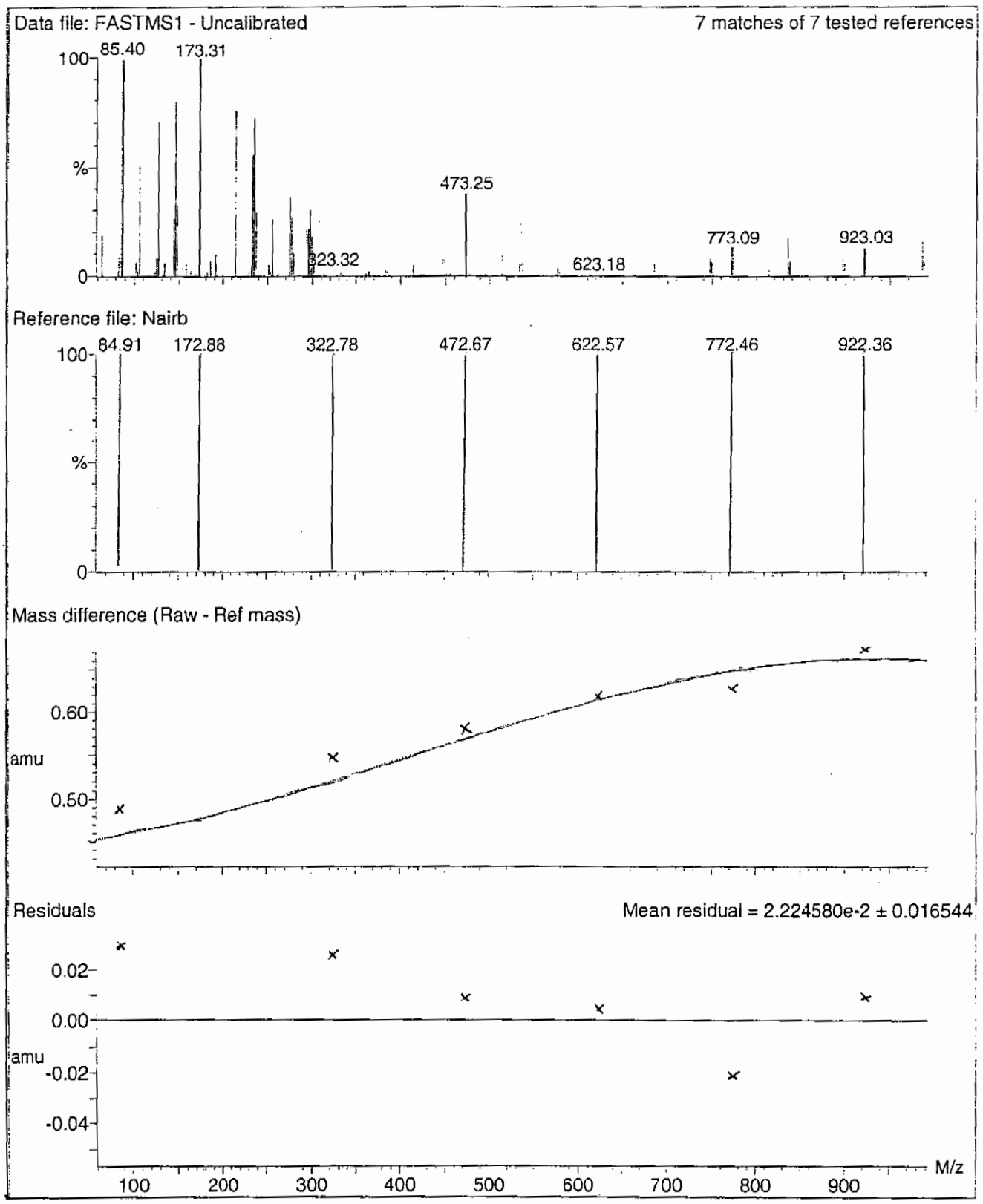
Printed: Tue Jan 08 12:20:09 2008



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

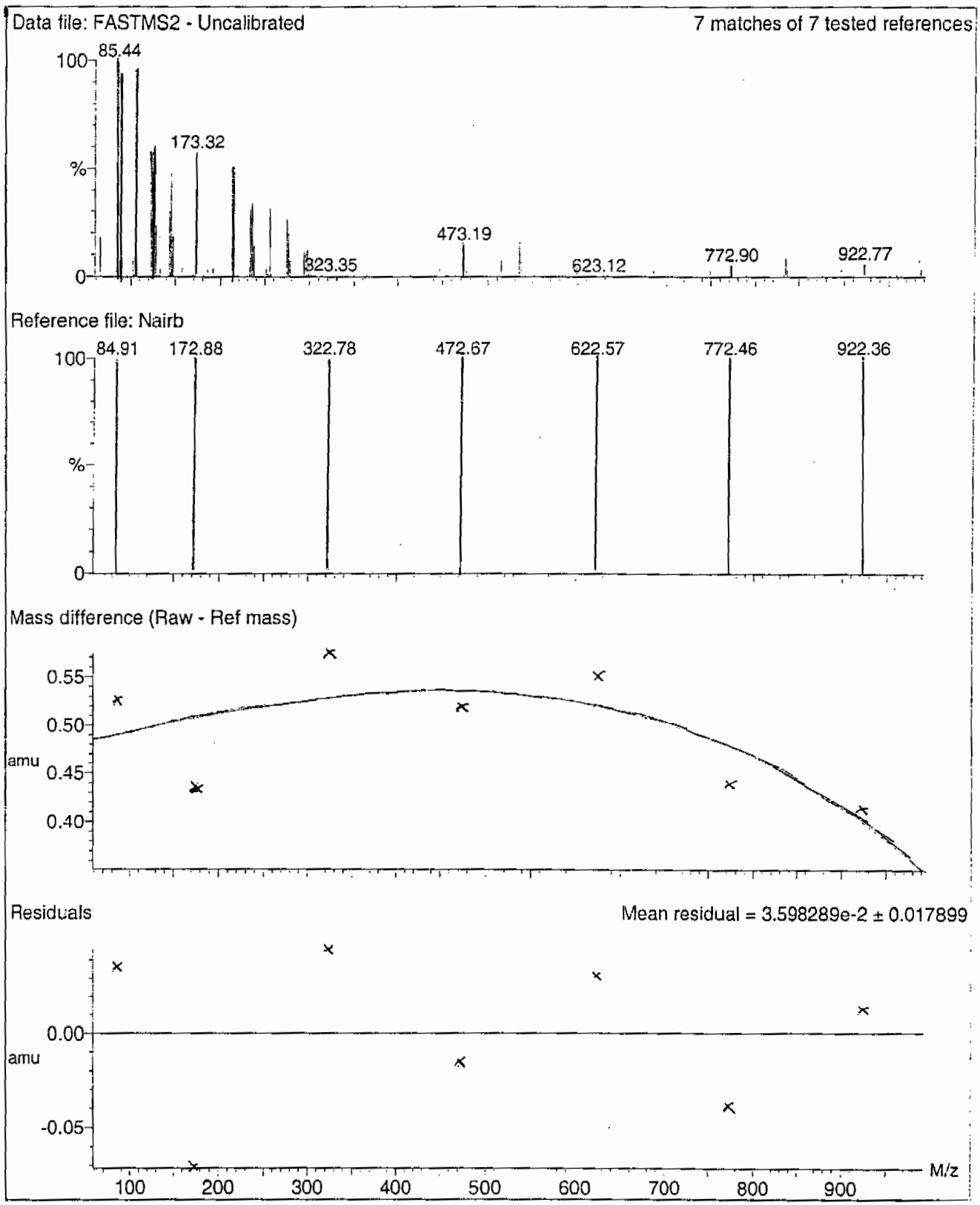
Calibration Report - MS1 Scan Speed Compensation

Printed: Tue Jan 08 12:21:04 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.

Calibration Report - MS2 Scanning

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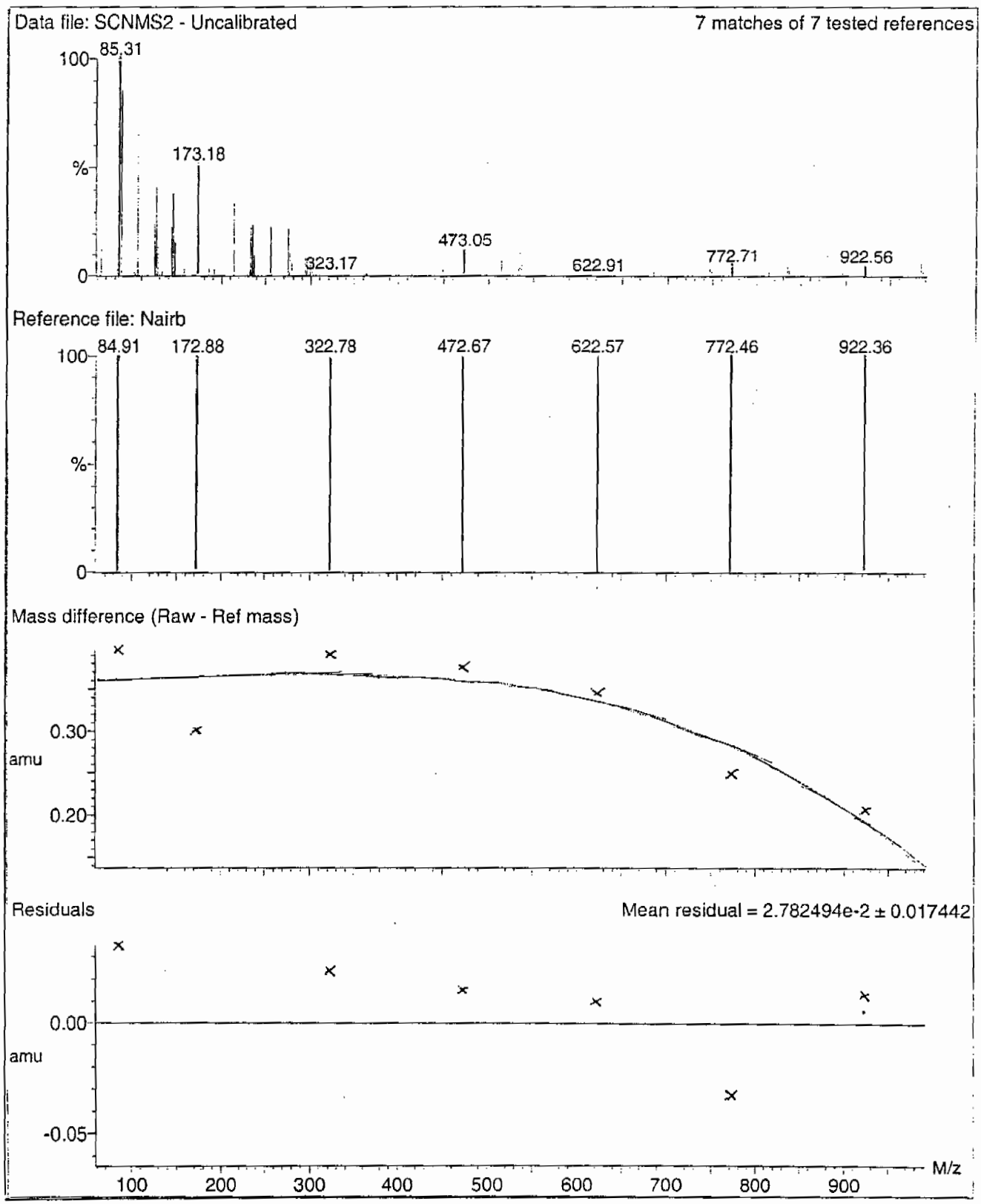

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Calibration Report - MS2 Static

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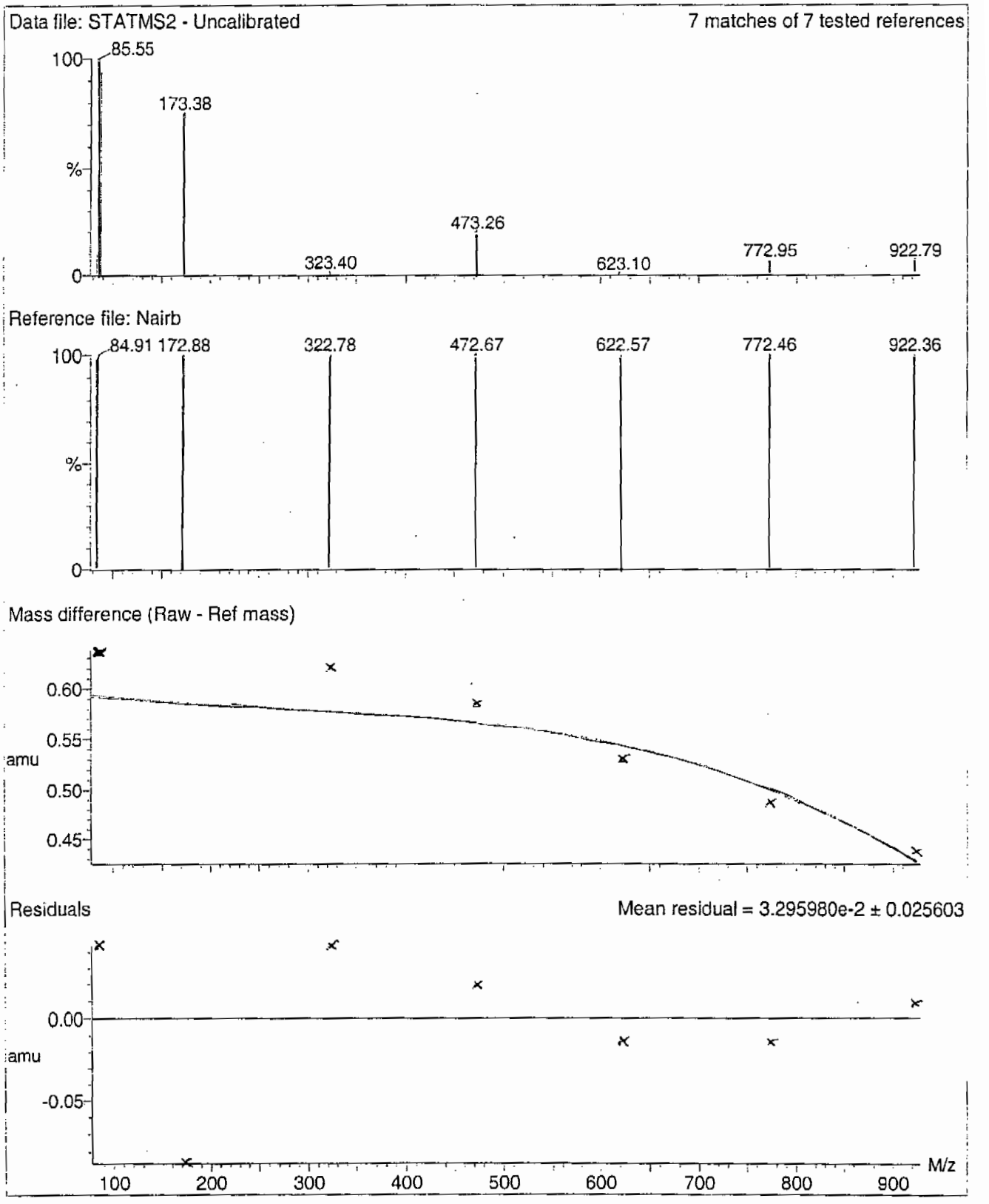
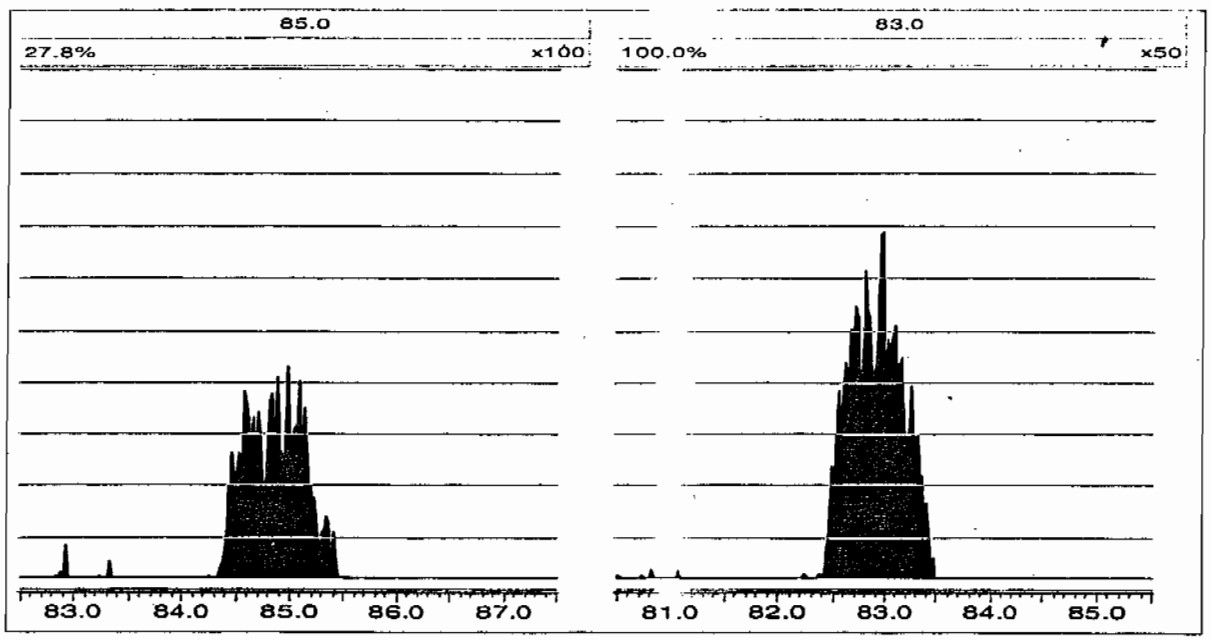


PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

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

Printed: Friday, January 08, 2010 13:02:22 Eastern Standard Time



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Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–1103

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	**per0108006a**	**08–JAN–10**	**22282.7**				
Lower Area Limit			**11141.35**				
Upper Area Limit			**44565.4**				
1202006984	per0108038a	08–JAN–10 20:55	19984.7	2.44	2.45173	1.005	
1202006985	per0108039a	08–JAN–10 21:03	21464.5	2.45	2.46425	1.006	
1202006988	per0108040a	08–JAN–10 21:11	21689.5	2.41	2.42693	1.007	
243628001	per0108041a	08–JAN–10 21:18	21223.4	2.44	2.46425	1.01	
1202006986	per0108042a	08–JAN–10 21:26	22354	2.44	2.45175	1.005	
1202006987	per0108043a	08–JAN–10 21:33	21476.5	2.44	2.45175	1.005	
243628002	per0108044a	08–JAN–10 21:40	21889.6	2.43	2.43928	1.004	
243628003	per0108045a	08–JAN–10 21:47	22166.6	2.44	2.45175	1.005	

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Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–1103

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	**per0108006a**	**08–JAN–10**	**22282.7**				
Lower Area Limit			**11141.35**				
Upper Area Limit			**44565.4**				
243628004	per0108049a	08–JAN–10 22:15	21625.1	2.43	2.43932	1.004	
243628005	per0108050a	08–JAN–10 22:23	22457.5	2.43	2.45178	1.009	
243628006	per0108051a	08–JAN–10 22:30	22162.7	2.44	2.45177	1.005	
243628007	per0108052a	08–JAN–10 22:37	22585.2	2.43	2.43933	1.004	
243628008	per0108053a	08–JAN–10 22:44	22591.1	2.43	2.43932	1.004	
243628009	per0108054a	08–JAN–10 22:51	22146.7	2.43	2.43928	1.004	
243628010	per0108055a	08–JAN–10 22:58	21352.7	2.43	2.43928	1.004	
243628011	per0108056a	08–JAN–10 23:05	22492.4	2.43	2.45177	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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7675

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628001

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.56	2.24	0.560	ug/kg	U	1	08-JAN-10 21:18	per0108041a
	Perchlorate Isotope Ratio						1	08-JAN-10 21:18	per0108041a
14797-73-0	Perchlorate-101	.56	2.24	0.560	ug/kg	U	1	08-JAN-10 21:18	per0108041a
	Perchlorate-O(18)			5.41	ug/kg		1	08-JAN-10 21:18	per0108041a

^ 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: Charlers W. Wilson

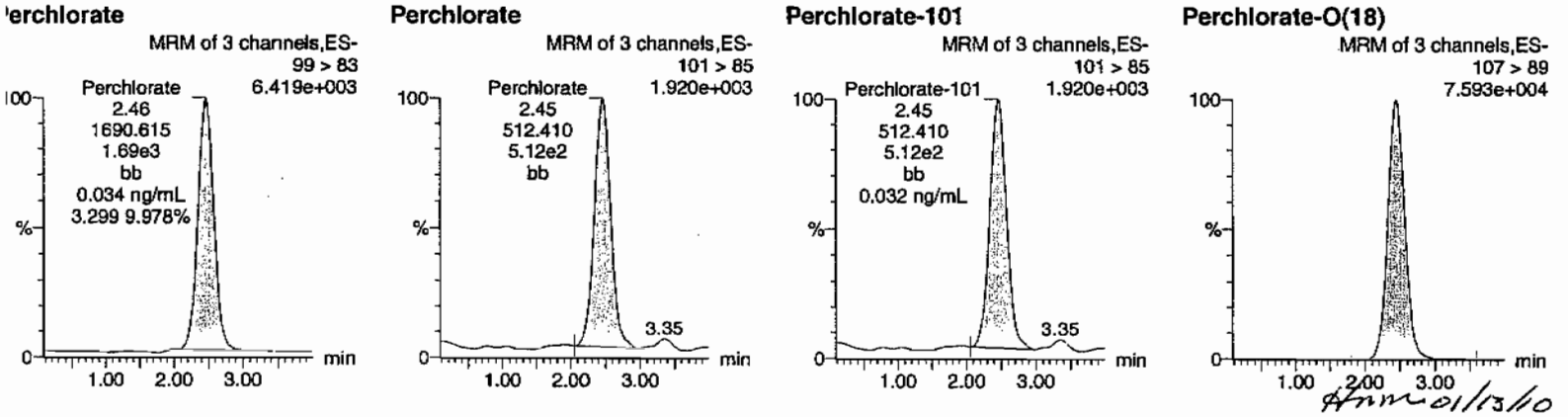
Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

Last Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

Name: per0108041a
Date: 08-Jan-2010
Time: 21:18:44
ID: 243628001
Vial: 2:1,D

|LANL|937885|SOLID|1|

GWD
01-12-10



Amm 01/13/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
43628001	Perchlorate	99 > 83	2.46	1690.615	1690.615	bb			0.0337			585.149	3.30
43628001	Perchlorate-101	101 > 85	2.45	512.410	512.410	bb			0.0323			229.505	
43628001	Perchlorate-O(18)	107 > 89	2.44	21223.385	21223.385	bb			0.4831	96.62	-3.38	9962.2...	

GEL 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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7663

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628002

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 75

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.666	2.67	0.666	ug/kg	U	1	08-JAN-10 21:40	per0108044a
	Perchlorate Isotope Ratio						1	08-JAN-10 21:40	per0108044a
14797-73-0	Perchlorate-101	.666	2.67	0.666	ug/kg	U	1	08-JAN-10 21:40	per0108044a
	Perchlorate-O(18)			6.64	ug/kg		1	08-JAN-10 21:40	per0108044a

^ 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: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

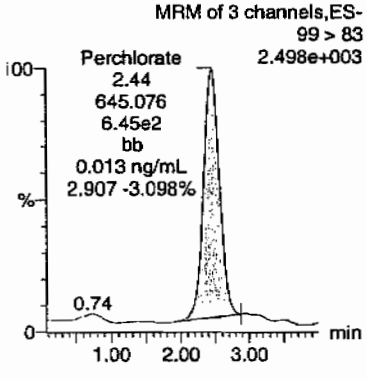
Last Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

Name: per0108044a
Date: 08-Jan-2010
Time: 21:40:16
ID: 243628002
Vial: 2:2,A

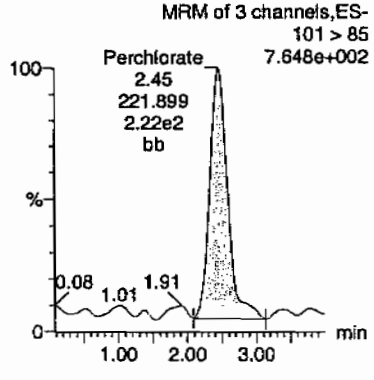
|LANL|937885| SOLID |1|

01-12-10

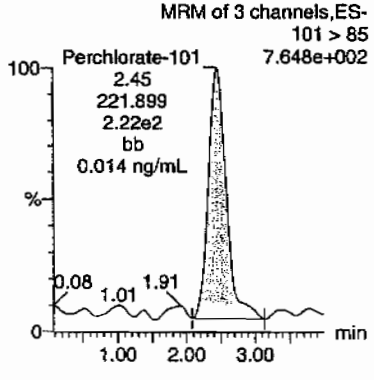
Perchlorate



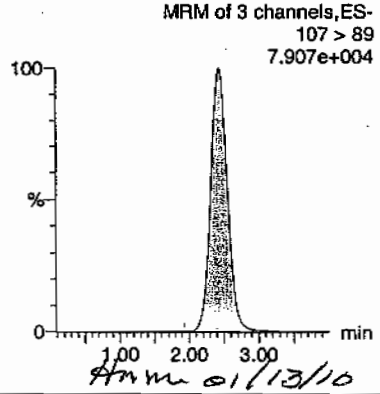
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 01/13/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
43628002	Perchlorate	99 > 83	2.44	645.076	645.076	bb			0.0129			82.643	2.91
43628002	Perchlorate-101	101 > 85	2.45	221.899	221.899	bb			0.0140			43.351	
43628002	Perchlorate-O(18)	107 > 89	2.43	21889.621	21889.621	bb			0.4983	99.66	-0.34	10306....	

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

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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-I0-7664

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628003

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.56	2.24	0.560	ug/kg	U	1	08-JAN-10 21:47	per0108045a
	Perchlorate Isotope Ratio						1	08-JAN-10 21:47	per0108045a
14797-73-0	Perchlorate-101	.56	2.24	0.560	ug/kg	U	1	08-JAN-10 21:47	per0108045a
	Perchlorate-O(18)			5.66	ug/kg		1	08-JAN-10 21:47	per0108045a

^ 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: Charlers W. Wilson

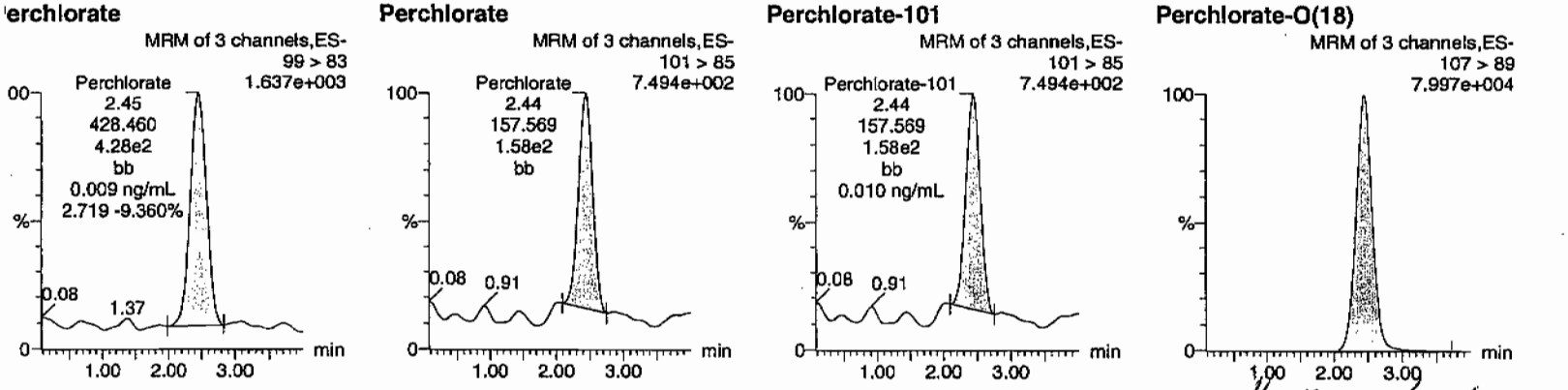
Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

Last Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

Name: per0108045a
Date: 08-Jan-2010
Time: 21:47:19
ID: 243628003
Vial: 2:2,B

|LANL|937835|50620|11|

CWW 01-12-10



HMM 01/13/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
43628003	Perchlorate	99 > 83	2.45	428.460	428.460	bb			0.0086			63.211	2.72
43628003	Perchlorate-101	101 > 85	2.44	157.569	157.569	bb			0.0099			51.718	
43628003	Perchlorate-O(18)	107 > 89	2.44	22166.594	22166.594	bb			0.5046	100.92	0.92	8910.3...	

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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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7672

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628004

Date Filtered: 08-JAN-10

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	.566	2.26	0.566	ug/kg	U	1	08-JAN-10 22:15	per0108049a
	Perchlorate Isotope Ratio						1	08-JAN-10 22:15	per0108049a
14797-73-0	Perchlorate-101	.566	2.26	0.566	ug/kg	U	1	08-JAN-10 22:15	per0108049a
	Perchlorate-O(18)			5.57	ug/kg		1	08-JAN-10 22:15	per0108049a

^ 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: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

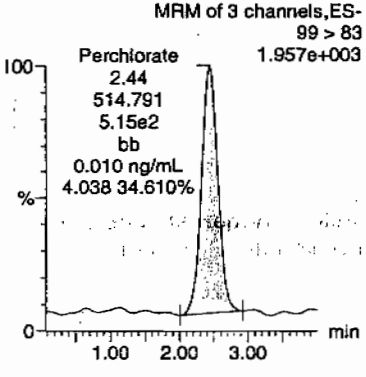
Last Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

Name: per0108049a
Date: 08-Jan-2010
Time: 22:15:42
ID: 243628004
Vial: 2:2,C

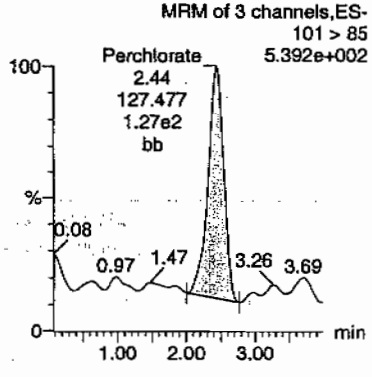
|LANL|937885|SOLID|1|

CWO
01-12-10

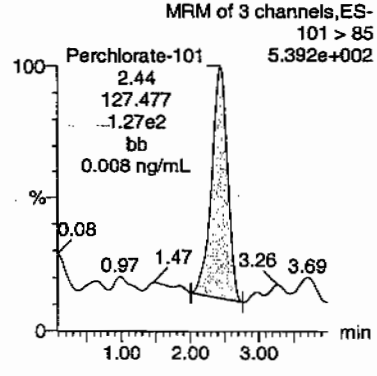
Perchlorate



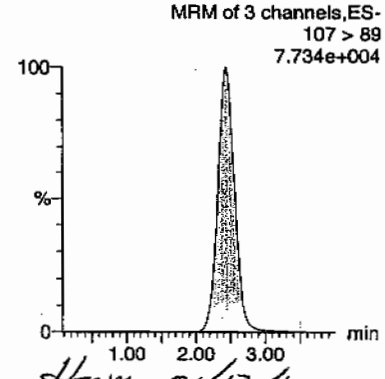
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hnm 01/13/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
43628004	Perchlorate	99 > 83	2.44	514.791	514.791	bb			0.0103			95.330	4.04
43628004	Perchlorate-101	101 > 85	2.44	127.477	127.477	bb			0.0080			45.635	
43628004	Perchlorate-O(18)	107 > 89	2.43	21625.123	21625.123	bb			0.4923	98.45	-1.55	3351.1...	

OKAY
<0.0500

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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7667

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628005

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 83

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.604	2.41	0.604	ug/kg	U	1	08-JAN-10 22:23	per0108050a
	Perchlorate Isotope Ratio						1	08-JAN-10 22:23	per0108050a
14797-73-0	Perchlorate-101	.604	2.41	0.621	ug/kg	J	1	08-JAN-10 22:23	per0108050a
	Perchlorate-O(18)			6.17	ug/kg		1	08-JAN-10 22:23	per0108050a

^ 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.

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

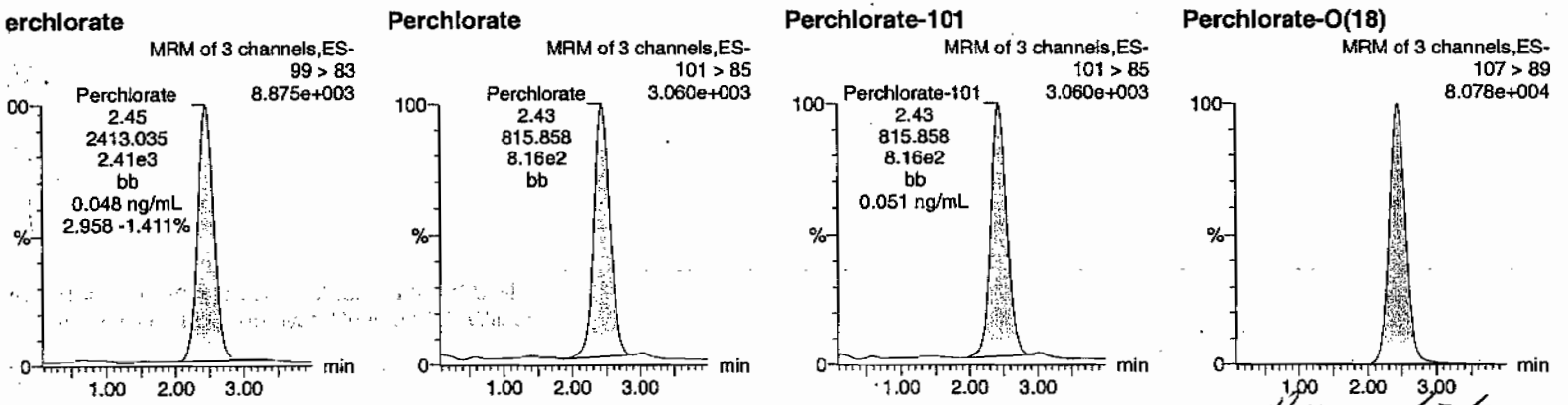
Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

Last Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

Name: per0108050a
Date: 08-Jan-2010
Time: 22:23:02
ID: 243628005
Vial: 2:2,D

|LANL|937885|SOLID|1|

GWD
01-12-10



Hmm 01/13/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
43628005	Perchlorate	99 > 83	2.45	2413.035	2413.035	bb			0.0482			218.218	2.96
43628005	Perchlorate-101	101 > 85	2.43	815.858	815.858	bb			0.0514			152.586	
43628005	Perchlorate-O(18)	107 > 89	2.43	22457.543	22457.543	bb			0.5112	102.24	2.24	2055.7...	

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

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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7666

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628006

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.559	2.24	0.559	ug/kg	U	1	08-JAN-10 22:30	per0108051a
	Perchlorate Isotope Ratio						1	08-JAN-10 22:30	per0108051a
14797-73-0	Perchlorate-101	.559	2.24	0.559	ug/kg	U	1	08-JAN-10 22:30	per0108051a
	Perchlorate-O(18)			5.64	ug/kg		1	08-JAN-10 22:30	per0108051a

^ 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: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

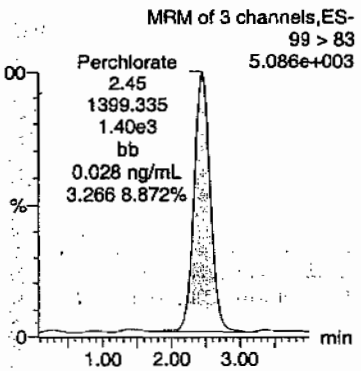
ast Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
rinted: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

ame: per0108051a
ate: 08-Jan-2010
ime: 22:30:04
): 243628006
ial: 2:2,E

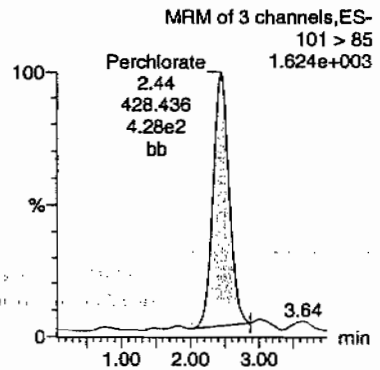
|LANL|937885|SOLID|1|

CWW
01-12-10

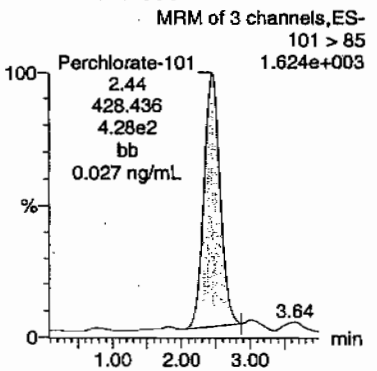
erchlorate



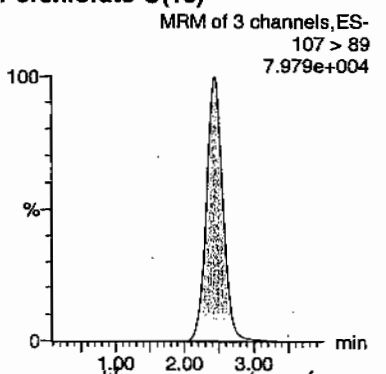
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 01/13/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
43628006	Perchlorate	99 > 83	2.45	1399.335	1399.335	bb			0.0279			395.534	3.27
43628006	Perchlorate-101	101 > 85	2.44	428.436	428.436	bb			0.0270			211.438	
43628006	Perchlorate-O(18)	107 > 89	2.44	22162.691	22162.691	bb			0.5045	100.90	0.90	8222.9...	

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

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

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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7665

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628007

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.565	2.26	0.565	ug/kg	U	1	08-JAN-10 22:37	per0108052a
	Perchlorate Isotope Ratio						1	08-JAN-10 22:37	per0108052a
14797-73-0	Perchlorate-101	.565	2.26	0.565	ug/kg	U	1	08-JAN-10 22:37	per0108052a
	Perchlorate-O(18)			5.81	ug/kg		1	08-JAN-10 22:37	per0108052a

^ 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.

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

)ataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

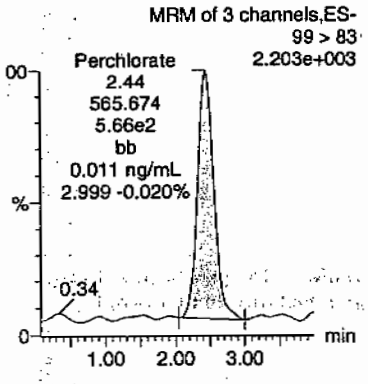
ast Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
'rinted: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

lame: per0108052a
late: 08-Jan-2010
'ime: 22:37:06
): 243628007
'ial: 2:2,F

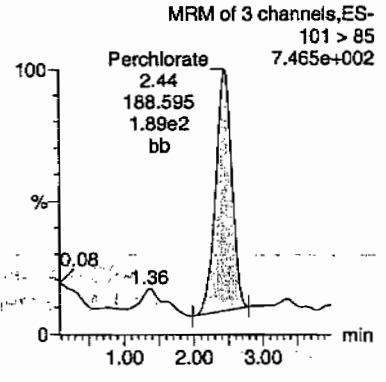
|LANL|937885|SOL20|1|

01-12-10

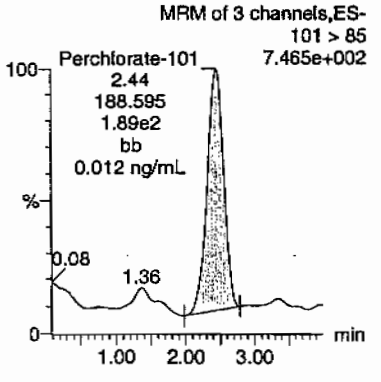
'erchlorate



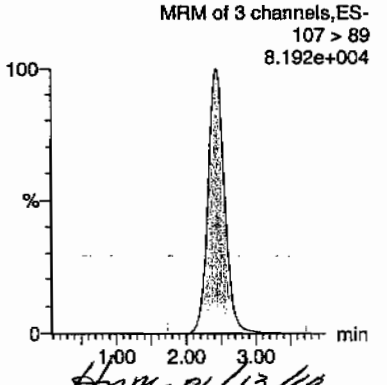
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 01/13/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
43628007	Perchlorate	99 > 83	2.44	565.674	565.674	bb			0.0113			83.792	3.00
43628007	Perchlorate-101	101 > 85	2.44	188.595	188.595	bb			0.0119			40.380	
43628007	Perchlorate-O(18)	107 > 89	2.43	22585.211	22585.211	bb			0.5141	102.82	2.82	5663.0...	

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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7670

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628008

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.564	2.26	1.24	ug/kg	J	1	08-JAN-10 22:44	per0108053a
	Perchlorate Isotope Ratio			2.88			1	08-JAN-10 22:44	per0108053a
14797-73-0	Perchlorate-101	.564	2.26	1.36	ug/kg	J	1	08-JAN-10 22:44	per0108053a
	Perchlorate-O(18)			5.81	ug/kg		1	08-JAN-10 22:44	per0108053a

^ 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.

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

Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

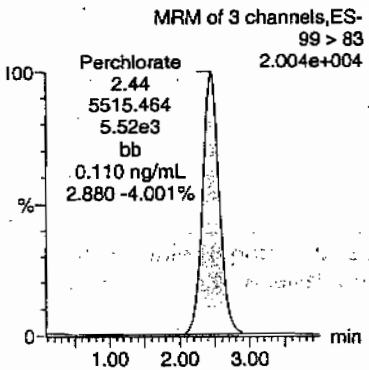
Last Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

Name: per0108053a
Date: 08-Jan-2010
Time: 22:44:07
ID: 243628008
Vial: 2:3,A

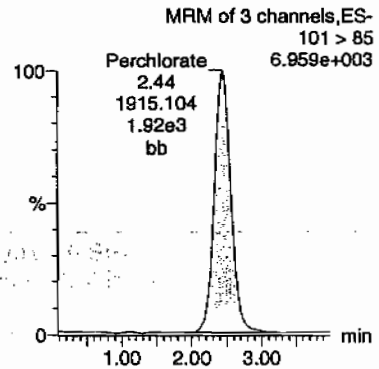
|LANL|937885|SOLID|1|

WW
01-12-10

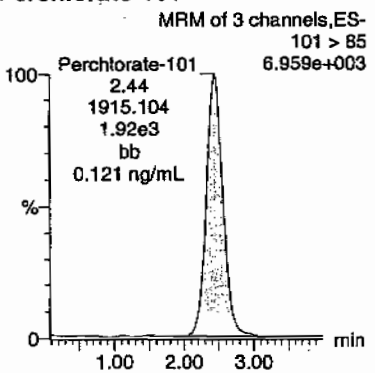
Perchlorate



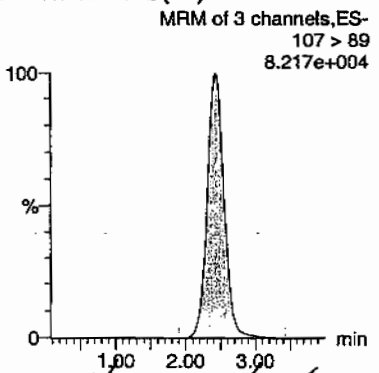
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 01/13/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
43628008	Perchlorate	99 > 83	2.44	5515.464	5515.464	bb			0.1101			895.974	2.88
43628008	Perchlorate-101	101 > 85	2.44	1915.104	1915.104	bb			0.1207			495.733	
43628008	Perchlorate-O(18)	107 > 89	2.43	22591.051	22591.051	bb			0.5142	102.85	2.85	5919.1...	

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

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

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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7668

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628009

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 90.9

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.55	2.2	0.550	ug/kg	U	1	08-JAN-10 22:51	per0108054a
	Perchlorate Isotope Ratio						1	08-JAN-10 22:51	per0108054a
14797-73-0	Perchlorate-101	.55	2.2	0.550	ug/kg	U	1	08-JAN-10 22:51	per0108054a
	Perchlorate-O(18)			5.54	ug/kg		1	08-JAN-10 22:51	per0108054a

^ 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.

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

Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

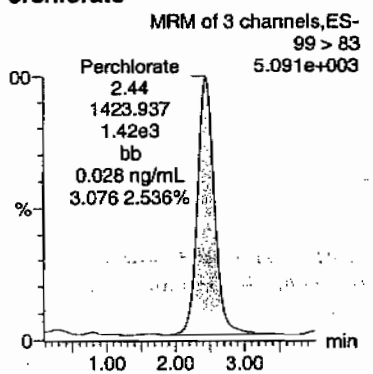
Last Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

Name: per0108054a
Date: 08-Jan-2010
Time: 22:51:10
ID: 243628009
Vial: 2:3,B

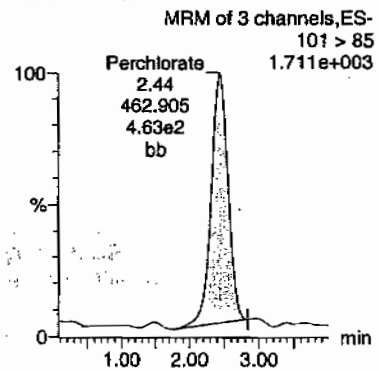
|LANL|937885|SOLID|1|

CWD
01-12-10

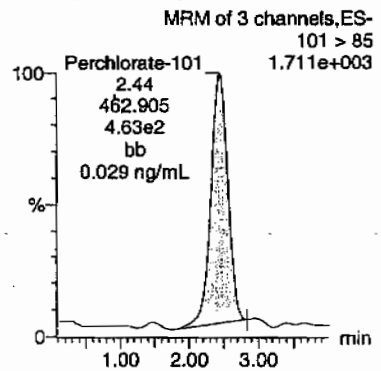
Perchlorate



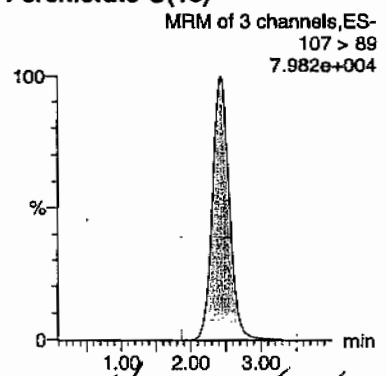
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 01/13/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
43628009	Perchlorate	99 > 83	2.44	1423.937	1423.937	bb			0.0284			317.989	3.08
43628009	Perchlorate-101	101 > 85	2.44	462.905	462.905	bb			0.0292			252.100	
43628009	Perchlorate-O(18)	107 > 89	2.43	22146.689	22146.689	bb			0.5041	100.83	0.83	5334.7...	

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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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7671

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628010

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 81

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.619	2.48	0.619	ug/kg	U	1	08-JAN-10 22:58	per0108055a
	Perchlorate Isotope Ratio						1	08-JAN-10 22:58	per0108055a
14797-73-0	Perchlorate-101	.619	2.48	0.619	ug/kg	U	1	08-JAN-10 22:58	per0108055a
	Perchlorate-O(18)			6.02	ug/kg		1	08-JAN-10 22:58	per0108055a

^ 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: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

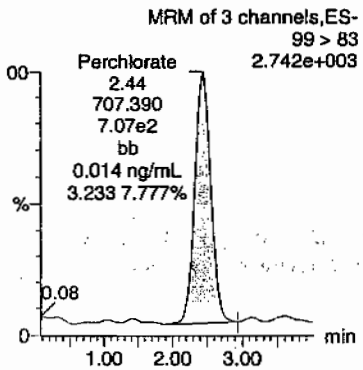
Last Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

Name: per0108055a
Date: 08-Jan-2010
Time: 22:58:12
ID: 243628010
Vial: 2:3,C

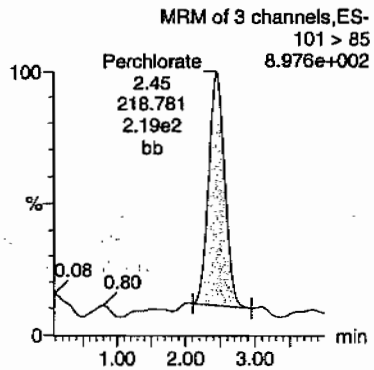
|LANL|937885|SOLID|1|

01-12-10

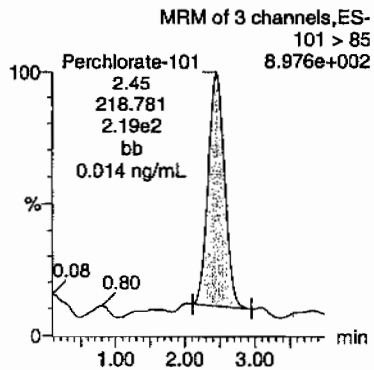
Perchlorate



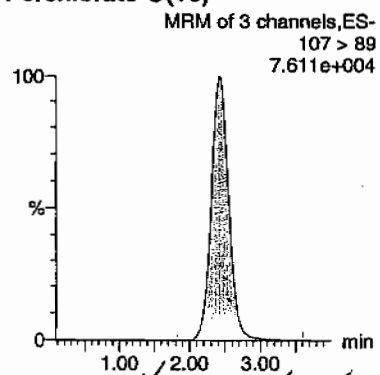
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 01/13/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
43628010	Perchlorate	99 > 83	2.44	707.390	707.390	bb			0.0141			418.545	3.23
43628010	Perchlorate-101	101 > 85	2.45	218.781	218.781	bb			0.0138			19.876	
43628010	Perchlorate-O(18)	107 > 89	2.43	21352.674	21352.674	bb			0.4861	97.21	-2.79	1270.0...	

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

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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7669

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 243628011

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 75

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.665	2.66	1.97	ug/kg	J	1	08-JAN-10 23:05	per0108056a
	Perchlorate Isotope Ratio			2.98			1	08-JAN-10 23:05	per0108056a
14797-73-0	Perchlorate-101	.665	2.66	2.09	ug/kg	J	1	08-JAN-10 23:05	per0108056a
	Perchlorate-O(18)			6.81	ug/kg		1	08-JAN-10 23:05	per0108056a

^ 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: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

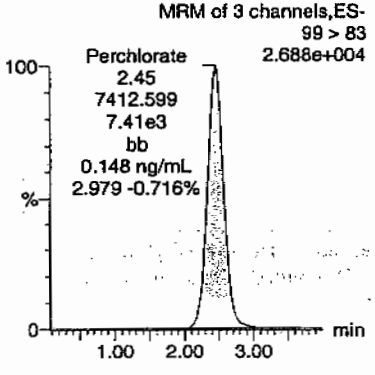
Last Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

Name: per0108056a
Date: 08-Jan-2010
Time: 23:05:15
ID: 243628011
Vial: 2:3,D

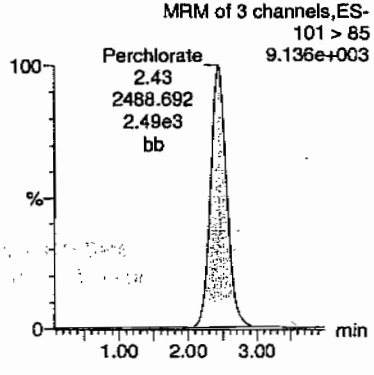
|LANL|937885|SOL20|11

CWD
9-12-10

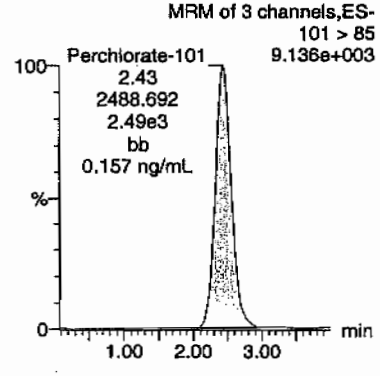
Perchlorate



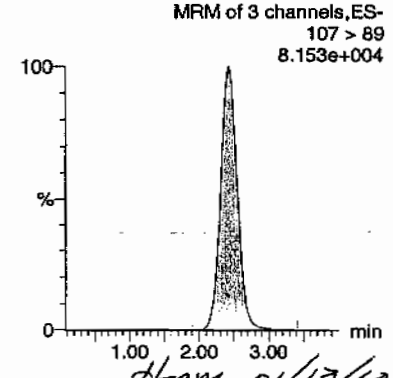
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hnm 01/13/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
243628011	Perchlorate	99 > 83	2.45	7412.599	7412.599	bb			0.1479			721.260	2.98
243628011	Perchlorate-101	101 > 85	2.43	2488.692	2488.692	bb			0.1569			762.405	
243628011	Perchlorate-O(18)	107 > 89	2.43	22492.439	22492.439	bb			0.5120	102.40	2.40	7456.6...	

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

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STANDARDS DATA

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–1103

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 08–JAN–10

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

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

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 50103.98

Response Type: External Standard

Curve Type: RF

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Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–1103

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 08–JAN–10

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

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

Parmname Perchlorate–101

Coefficient of Determination:

Calibration Curve: 15860.18

Response Type: External Standard

Curve Type: RF

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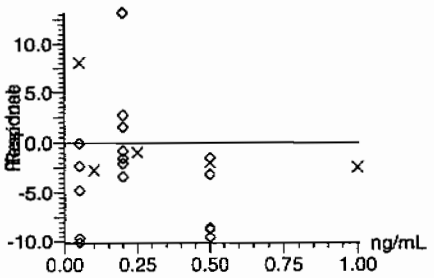
Quantify Calibration Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

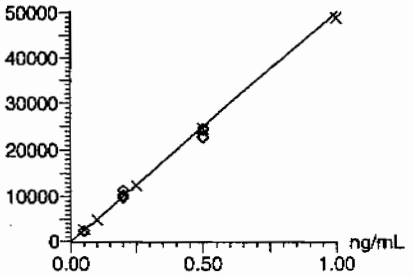
Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

Last Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per010810a.mdb 12 Jan 2010 09:13:13
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per010810a.cdb 12 Jan 2010 09:13:39

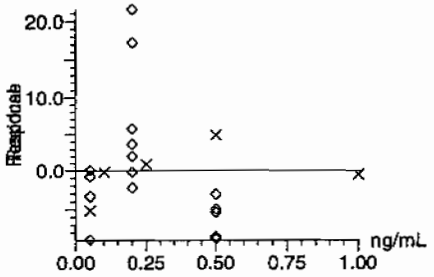
Compound name: Perchlorate
Response Factor: 50104
RF SD: 2281.85, % Relative SD: 4.55422
Response type: External Std, Area
Curve type: RF

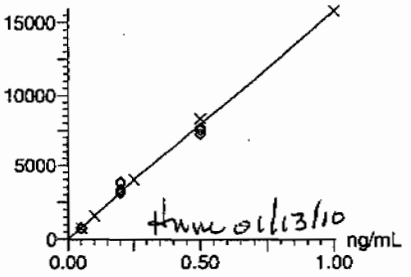




CWW
01-12-10

Compound name: Perchlorate-101
Response Factor: 15860.2
RF SD: 567.029, % Relative SD: 3.57517
Response type: External Std, Area
Curve type: RF





tmw 01/13/10

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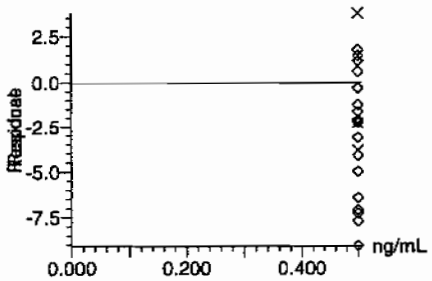
Quantify Calibration Report MassLynx 4.0 SP4

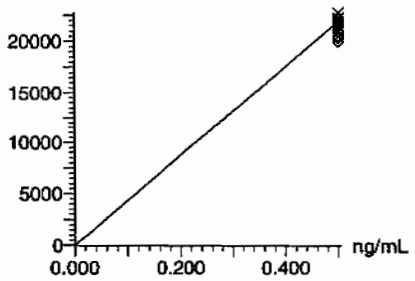
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

Last Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

Compound name: Perchlorate-O(18)
Response Factor: 43930.4
RF SD: 1337.78, % Relative SD: 3.04523
Response type: External Std, Area
Curve type: RF





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

Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1103

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.49	98.48	08-JAN-10 17:21	per0108009a
Perchlorate Isotope Ratio		3.21		08-JAN-10 17:21	per0108009a
Perchlorate-101	.5	.48	96.97	08-JAN-10 17:21	per0108009a

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

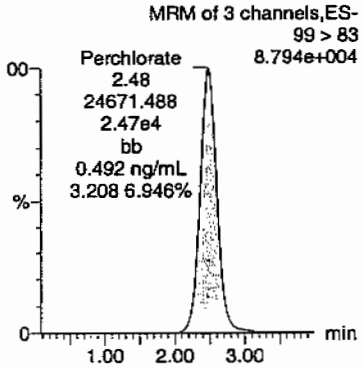
Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

Last Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

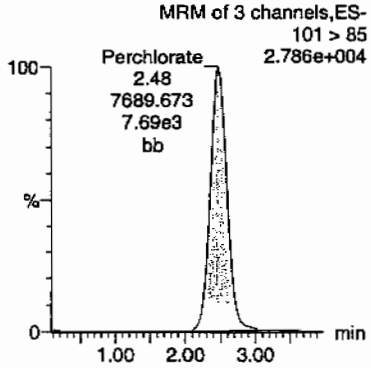
Name: per0108009a
Date: 08-Jan-2010
Time: 17:21:00
ID: WCL100104-06ICV
Vial: 1:2,A

CWW
01-12-10

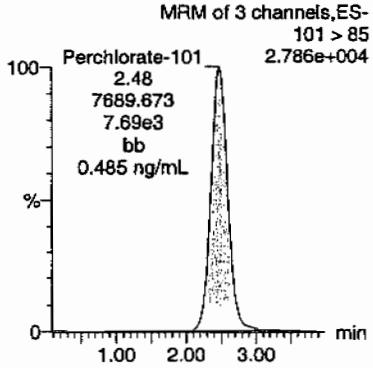
Perchlorate



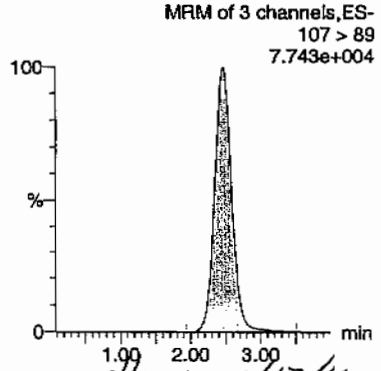
Perchlorate



Perchlorate-101



Perchlorate-O(18)



AMM 01/13/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100104-06ICV	Perchlorate	99 > 83	2.48	24671.488	24671.488	bb			0.4924	98.48	-1.52	2729.1...	3.21
WCL100104-06ICV	Perchlorate-101	101 > 85	2.48	7689.673	7689.673	bb			0.4848	96.97	-3.03	1396.1...	
WCL100104-06ICV	Perchlorate-O(18)	107 > 89	2.46	21605.637	21605.637	bb			0.4918	98.36	-1.64	16157....	

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

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Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–1103

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.48	96.89	08–JAN–10 18:53	per0108022a
Perchlorate Isotope Ratio		3.23		08–JAN–10 18:53	per0108022a
Perchlorate–101	.5	.47	94.68	08–JAN–10 18:53	per0108022a
Perchlorate	.5	.46	91.26	08–JAN–10 20:31	per0108035a
Perchlorate Isotope Ratio		3.15		08–JAN–10 20:31	per0108035a
Perchlorate–101	.5	.46	91.53	08–JAN–10 20:31	per0108035a
Perchlorate	.5	.46	91.46	08–JAN–10 21:54	per0108046a
Perchlorate Isotope Ratio		3.04		08–JAN–10 21:54	per0108046a
Perchlorate–101	.5	.48	95.09	08–JAN–10 21:54	per0108046a
Perchlorate	.5	.45	90.46	08–JAN–10 23:12	per0108057a
Perchlorate Isotope Ratio		3.13		08–JAN–10 23:12	per0108057a
Perchlorate–101	.5	.46	91.19	08–JAN–10 23:12	per0108057a

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

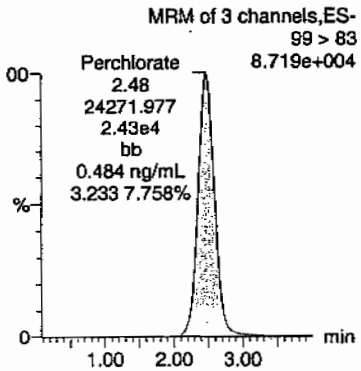
ataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

ast Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
'rinted: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

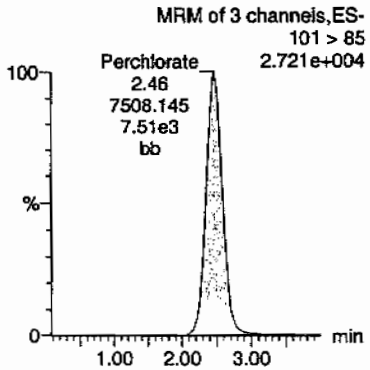
lame: per0108022a
ate: 08-Jan-2010
ime: 18:53:28
): WCL100104-06CCV
ial: 1:2,A

Pass
01-12-10

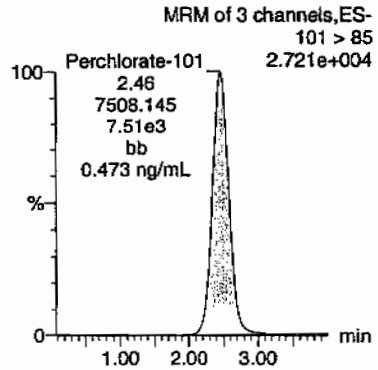
erchlorate



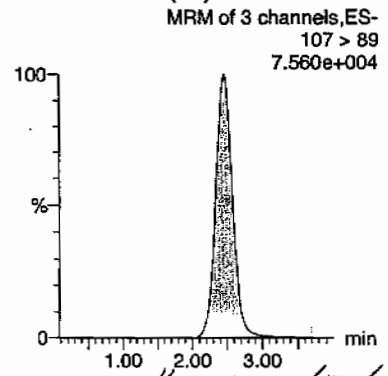
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HNM 01/13/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'CL100104-06CCV	Perchlorate	99 > 83	2.48	24271.977	24271.977	bb			0.4844	96.89	-3.11	1241.2...	3.23
'CL100104-06CCV	Perchlorate-101	101 > 85	2.46	7508.145	7508.145	bb			0.4734	94.68	-5.32	1505.0...	
'CL100104-06CCV	Perchlorate-O(18)	107 > 89	2.45	21062.768	21062.768	bb			0.4795	95.89	-4.11	5344.3...	

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

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

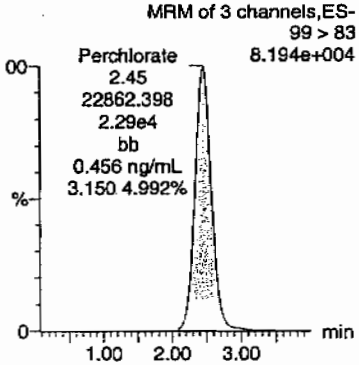
Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

Last Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

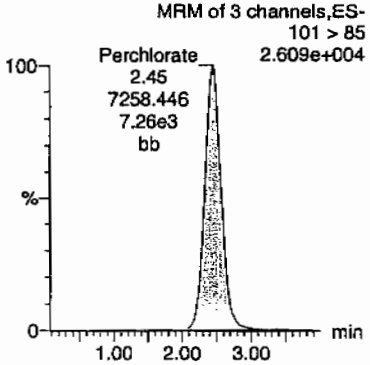
Name: per0108035a
Date: 08-Jan-2010
Time: 20:31:56
ID: WCL100104-06CCV
Vial: 1:2,A

Pass
CWW
01-12-10

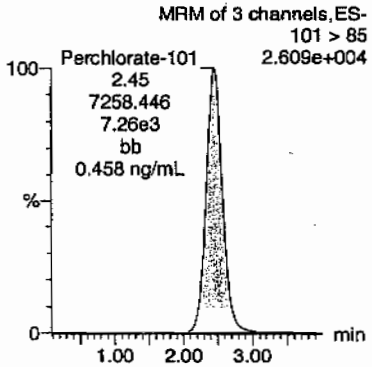
Perchlorate



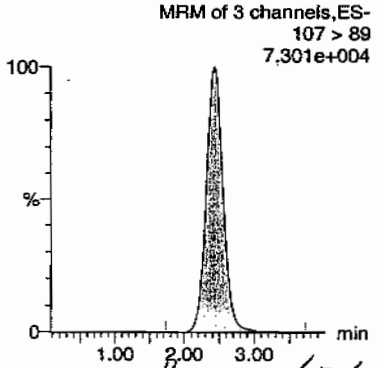
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 01/13/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100104-06CCV	Perchlorate	99 > 83	2.45	22862.398	22862.398	bb			0.4563	91.26	-8.74	5902.3...	3.15
CL100104-06CCV	Perchlorate-101	101 > 85	2.45	7258.446	7258.446	bb			0.4577	91.53	-8.47	3560.9...	
CL100104-06CCV	Perchlorate-O(18)	107 > 89	2.44	20271.133	20271.133	bb			0.4614	92.29	-7.71	1305.8...	

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

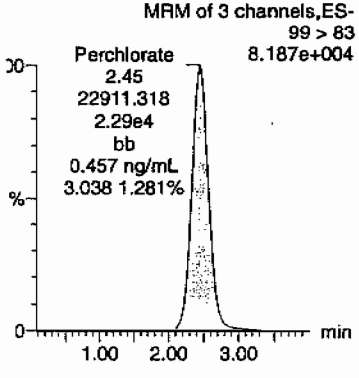
ataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

ıst Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
rinted: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

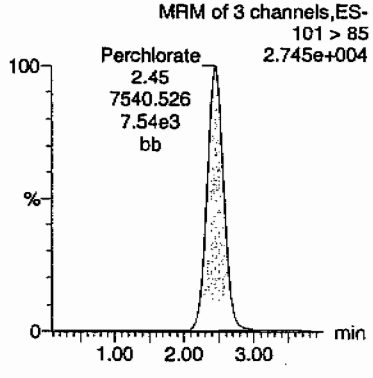
ame: per0108046a
ate: 08-Jan-2010
me: 21:54:21
: WCL100104-06CCV
ial: 1:2,A

Pass
and
01-12-10

erchlorate



Perchlorate



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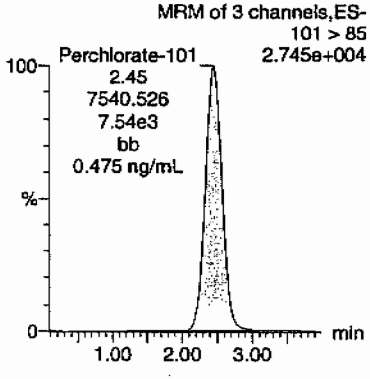
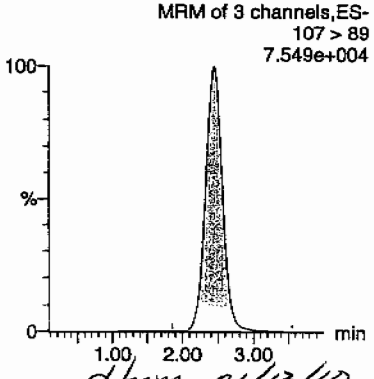


Perchlorate-O(18)



Hmm 01/13/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'CL100104-06CCV	Perchlorate	99 > 83	2.45	22911.318	22911.318	bb			0.4573	91.46	-8.54	3683.2...	3.04
'CL100104-06CCV	Perchlorate-101	101 > 85	2.45	7540.526	7540.526	bb			0.4754	95.09	-4.91	5727.7...	
'CL100104-06CCV	Perchlorate-O(18)	107 > 89	2.44	20868.721	20868.721	bb			0.4750	95.01	-4.99	8594.6...	

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

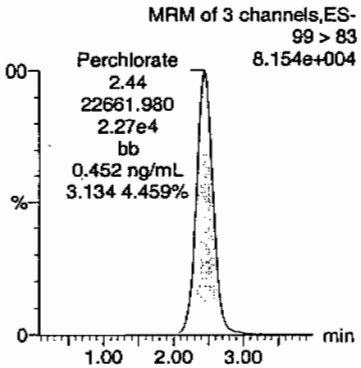
ataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

ast Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
rinted: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

ame: per0108057a
ate: 08-Jan-2010
ime: 23:12:16
): WCL100104-06CCV
ial: 1:2,A

Pass
aw
01-12-10

erchlorate



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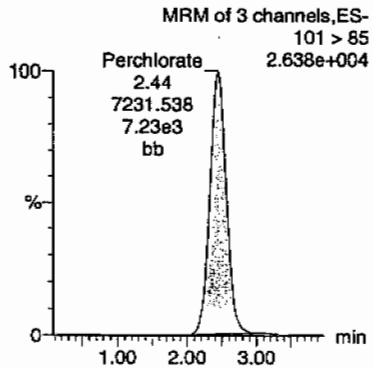
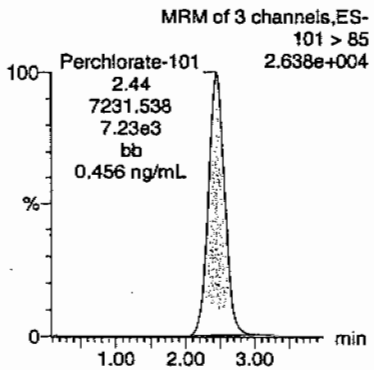
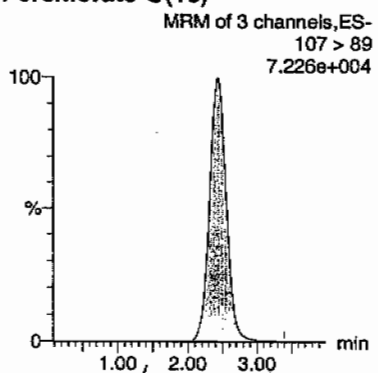


Perchlorate-101



Perchlorate-O(18)



HMK 01/13/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
/CL100104-06CCV	Perchlorate	99 > 83	2.44	22661.980	22661.980	bb			0.4523	90.46	-9.54	3485.7...	3.13
/CL100104-06CCV	Perchlorate-101	101 > 85	2.44	7231.538	7231.538	bb			0.4560	91.19	-8.81	1660.7...	
/CL100104-06CCV	Perchlorate-O(18)	107 > 89	2.43	19976.830	19976.830	bb			0.4547	90.95	-9.05	1214.2...	

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Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–1103

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	99.96	08–JAN–10 17:35	per0108011a
Perchlorate Isotope Ratio		3.27		08–JAN–10 17:35	per0108011a
Perchlorate–101	.05	.05	96.7	08–JAN–10 17:35	per0108011a
Perchlorate	.05	.05	95.25	08–JAN–10 19:09	per0108024a
Perchlorate Isotope Ratio		3.01		08–JAN–10 19:09	per0108024a
Perchlorate–101	.05	.05	100.08	08–JAN–10 19:09	per0108024a
Perchlorate	.05	.05	97.66	08–JAN–10 20:47	per0108037a
Perchlorate Isotope Ratio		3.39		08–JAN–10 20:47	per0108037a
Perchlorate–101	.05	.05	91.09	08–JAN–10 20:47	per0108037a
Perchlorate	.05	.05	90.36	08–JAN–10 22:08	per0108048a
Perchlorate Isotope Ratio		2.88		08–JAN–10 22:08	per0108048a

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–1103

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate–101	.05	.05	99.2	08–JAN–10 22:08	per0108048a
Perchlorate	.05	.04	89.89	08–JAN–10 23:26	per0108059a
Perchlorate Isotope Ratio		2.94		08–JAN–10 23:26	per0108059a
Perchlorate–101	.05	.05	96.68	08–JAN–10 23:26	per0108059a

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

Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

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Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

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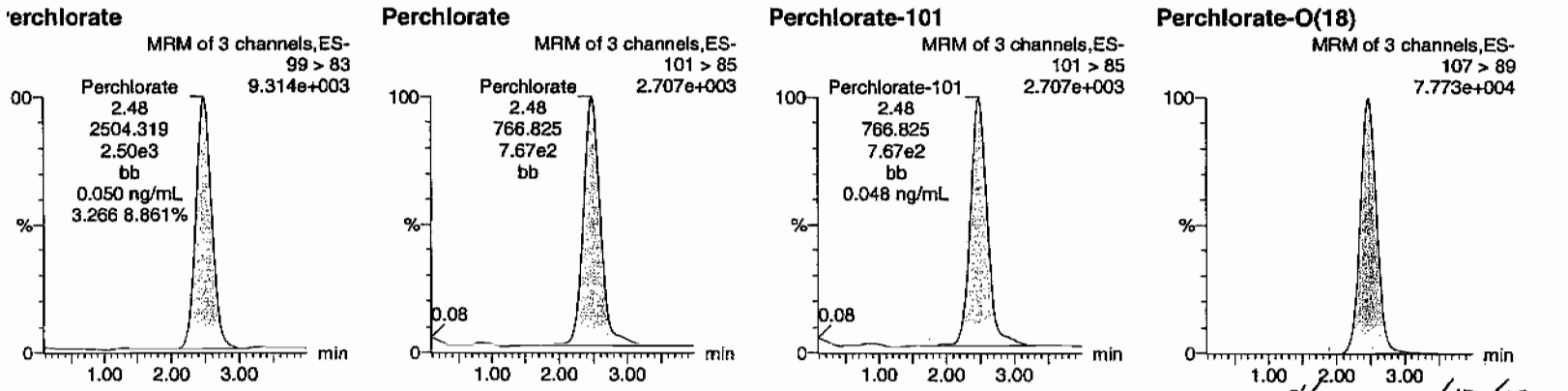
Date: 08-Jan-2010
Time: 17:35:05
ID: WCL100104-07CRI
Vial: 1:2,B

33
01-12-10



HMW 01/13/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
/CL100104-07CRI	Perchlorate	99 > 83	2.48	2504.319	2504.319	bb			0.0500	99.96	-0.04	471.955	3.27
/CL100104-07CRI	Perchlorate-101	101 > 85	2.48	766.825	766.825	bb			0.0483	96.70	-3.30	315.720	
/CL100104-07CRI	Perchlorate-O(18)	107 > 89	2.46	21497.350	21497.350	bb			0.4894	97.87	-2.13	4750.0...	

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

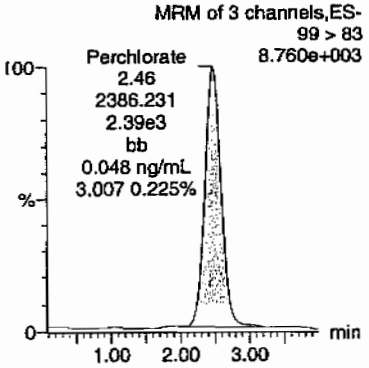
Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

Last Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

Name: per0108024a
Date: 08-Jan-2010
Time: 19:09:00
ID: WCL100104-07CRI
Vial: 1:2,B

Pass
aw
01-12-10

Perchlorate



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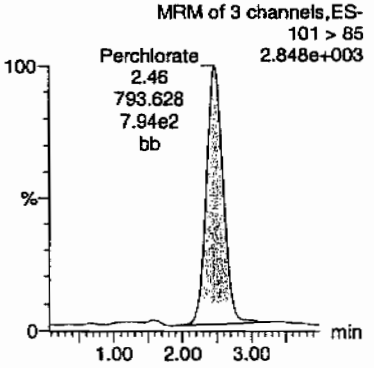

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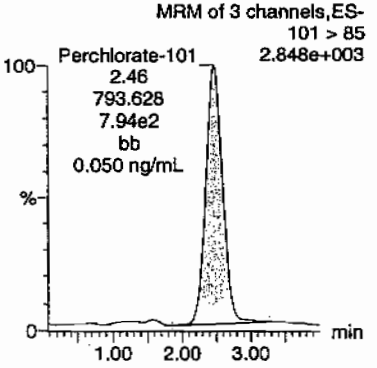
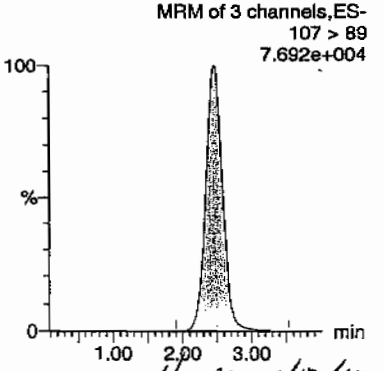


Perchlorate-O(18)



Hm 01/13/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
VCL100104-07CRI	Perchlorate	99 > 83	2.46	2386.231	2386.231	bb			0.0476	95.25	-4.75	186.570	3.01
VCL100104-07CRI	Perchlorate-101	101 > 85	2.46	793.628	793.628	bb			0.0500	100.08	0.08	376.505	
VCL100104-07CRI	Perchlorate-O(18)	107 > 89	2.45	21280.730	21280.730	bb			0.4844	96.88	-3.12	2306.3...	

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

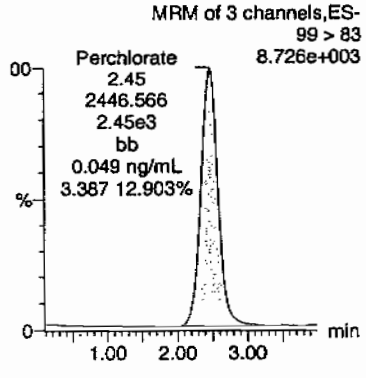
Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

Last Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

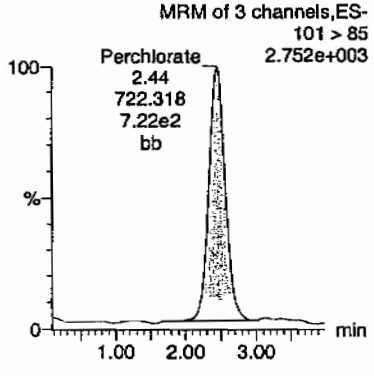
Name: per0108037a
Date: 08-Jan-2010
Time: 20:47:54
ID: WCL100104-07CRI
Vial: 1:2,B

Pass
01-12-10

Perchlorate



Perchlorate



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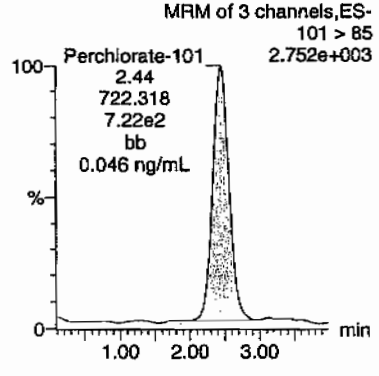
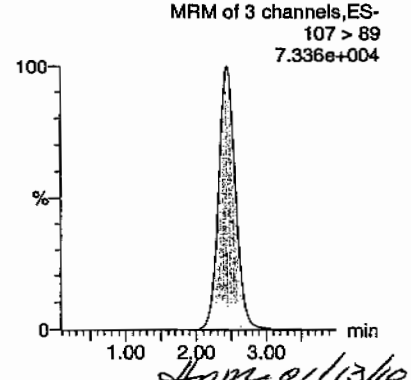


Perchlorate-O(18)



Hnm 01/13/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'CL100104-07CRI	Perchlorate	99 > 83	2.45	2446.566	2446.566	bb			0.0488	97.66	-2.34	612.478	3.39
'CL100104-07CRI	Perchlorate-101	101 > 85	2.44	722.318	722.318	bb			0.0455	91.09	-8.91	282.193	
'CL100104-07CRI	Perchlorate-O(18)	107 > 89	2.44	20553.346	20553.346	bb			0.4679	93.57	-6.43	18553....	

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

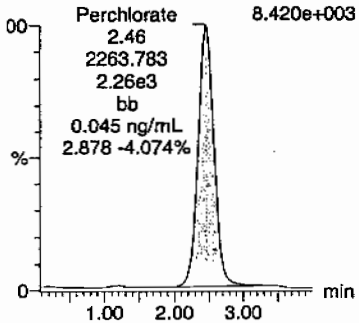
ataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

ast Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
rinted: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

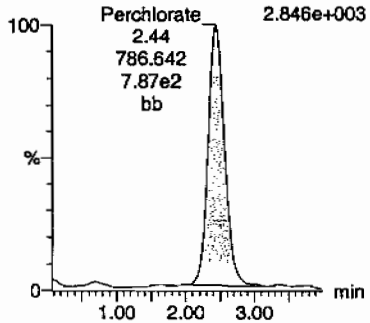
ame: per0108048a
ate: 08-Jan-2010
ime: 22:08:40
: WCL100104-07CRI
ial: 1:2,B

Pass
and
01-12-10

erchlorate



Perchlorate



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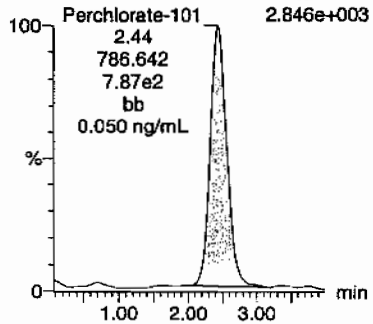
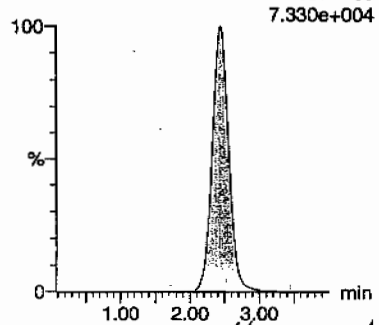


Perchlorate-O(18)



Hnm 01/13/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'CL100104-07CRI	Perchlorate	99 > 83	2.46	2263.783	2263.783	bb			0.0452	90.36	-9.64	862.972	2.88
'CL100104-07CRI	Perchlorate-101	101 > 85	2.44	786.642	786.642	bb			0.0496	99.20	-0.80	169.442	
'CL100104-07CRI	Perchlorate-O(18)	107 > 89	2.44	20406.518	20406.518	bb			0.4645	92.90	-7.10	2914.1...	

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

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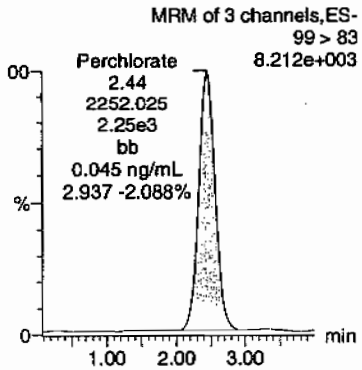
Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

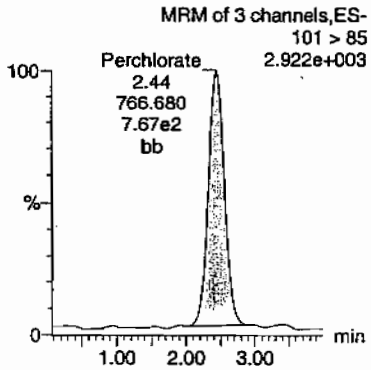
Name: per0108059a
Date: 08-Jan-2010
Time: 23:26:44
ID: WCL100104-07CRI
Vial: 1:2,B

Pass
aw
01-12-10

Perchlorate



Perchlorate



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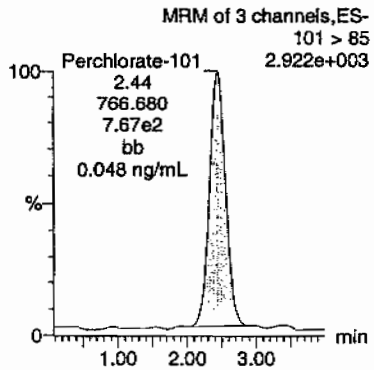
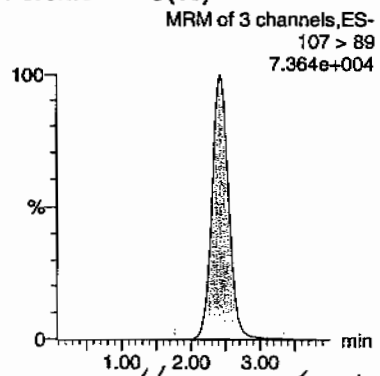


Perchlorate-O(18)



HMW 01/13/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
/CL100104-07CRI	Perchlorate	99 > 83	2.44	2252.025	2252.025	bb			0.0449	89.89	-10.11	838.962	2.94
/CL100104-07CRI	Perchlorate-101	101 > 85	2.44	766.680	766.680	bb			0.0483	96.68	-3.32	371.193	
/CL100104-07CRI	Perchlorate-O(18)	107 > 89	2.43	20367.400	20367.400	bb			0.4636	92.73	-7.27	5774.6...	

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

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QUALITY CONTROL

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

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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
MB

Date Received: 08–JAN–10

GEL Job No (SDG): 10–1103

GEL Sample ID: 1202006984

Date Filtered: 08–JAN–10

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797–73–0	Perchlorate	.5	2	0.500	ug/kg	U	1	08–JAN–10 20:55	per0108038a
	Perchlorate Isotope Ratio						1	08–JAN–10 20:55	per0108038a
14797–73–0	Perchlorate–101	.5	2	0.500	ug/kg	U	1	08–JAN–10 20:55	per0108038a
	Perchlorate–O(18)			4.55	ug/kg		1	08–JAN–10 20:55	per0108038a

^ 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: Charlers W. Wilson

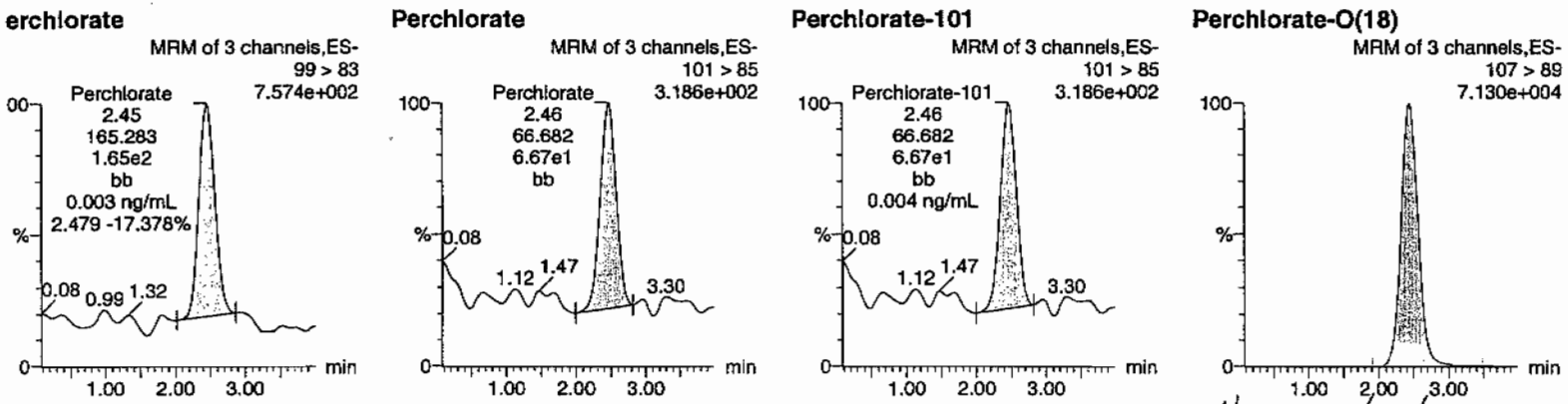
ataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

ast Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
rinted: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

ame: per0108038a
ate: 08-Jan-2010
ime: 20:55:19
): 1202006984
ial: 2:1,A

|LANL|937885|SOLID|11

01-12-10



Hmm 01/13/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202006984	Perchlorate	99 > 83	2.45	165.283	165.283	bb			0.0033			40.529	2.48
202006984	Perchlorate-101	101 > 85	2.46	66.682	66.682	bb			0.0042			66.466	
202006984	Perchlorate-O(18)	107 > 89	2.44	19984.670	19984.670	bb			0.4549	90.98	-9.02	2944.0...	

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

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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
LCS

Date Received: 08–JAN–10

GEL Job No (SDG): 10–1103

GEL Sample ID: 1202006985

Date Filtered: 08–JAN–10

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797–73–0	Perchlorate	.5	2	1.93	ug/kg	J	1	08–JAN–10 21:03	per0108039a
	Perchlorate Isotope Ratio			3.06			1	08–JAN–10 21:03	per0108039a
14797–73–0	Perchlorate–101	.5	2	2.00	ug/kg	J	1	08–JAN–10 21:03	per0108039a
	Perchlorate–O(18)			4.89	ug/kg		1	08–JAN–10 21:03	per0108039a

^ 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: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

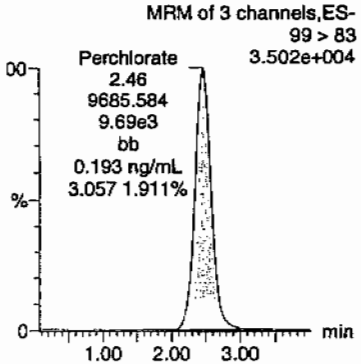
ast Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
rinted: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

ame: per0108039a
ate: 08-Jan-2010
ime: 21:03:26
): 1202006985
ial: 2:1,B

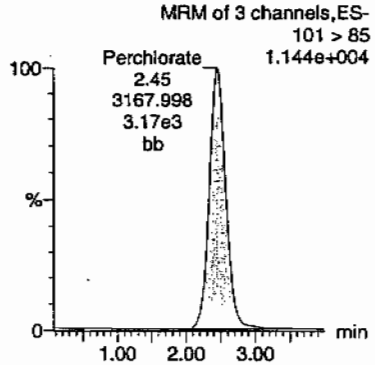
|LANL|937835|5020|LCS|1|

CWW
9-12-10

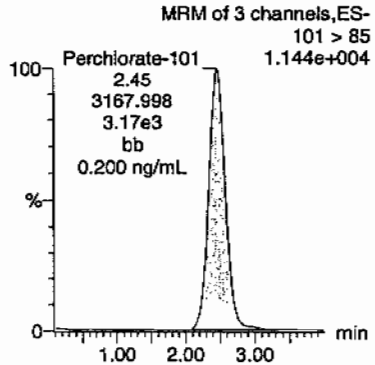
erchlorate



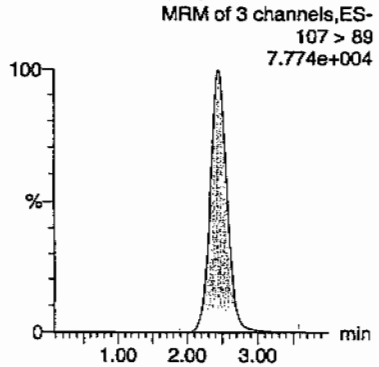
Perchlorate



Perchlorate-101



Perchlorate-O(18)



)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202006985	Perchlorate	99 > 83	2.46	9685.584	9685.584	bb			0.1933	96.65	-3.35	1545.2...	3.06
202006985	Perchlorate-101	101 > 85	2.45	3167.998	3167.998	bb			0.1997	99.87	-0.13	2586.3...	
202006985	Perchlorate-O(18)	107 > 89	2.45	21464.455	21464.455	bb			0.4886	97.72	-2.28	3494.0...	

$\frac{9685.584}{50104} = 0.1933$

HMW
01/13/10

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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7675MS

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 1202006986

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.56	2.24	2.54	ug/kg		1	08-JAN-10 21:26	per0108042a
	Perchlorate Isotope Ratio			3.05			1	08-JAN-10 21:26	per0108042a
14797-73-0	Perchlorate-101	.56	2.24	2.63	ug/kg		1	08-JAN-10 21:26	per0108042a
	Perchlorate-O(18)			5.70	ug/kg		1	08-JAN-10 21:26	per0108042a

^ 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: Charlers W. Wilson

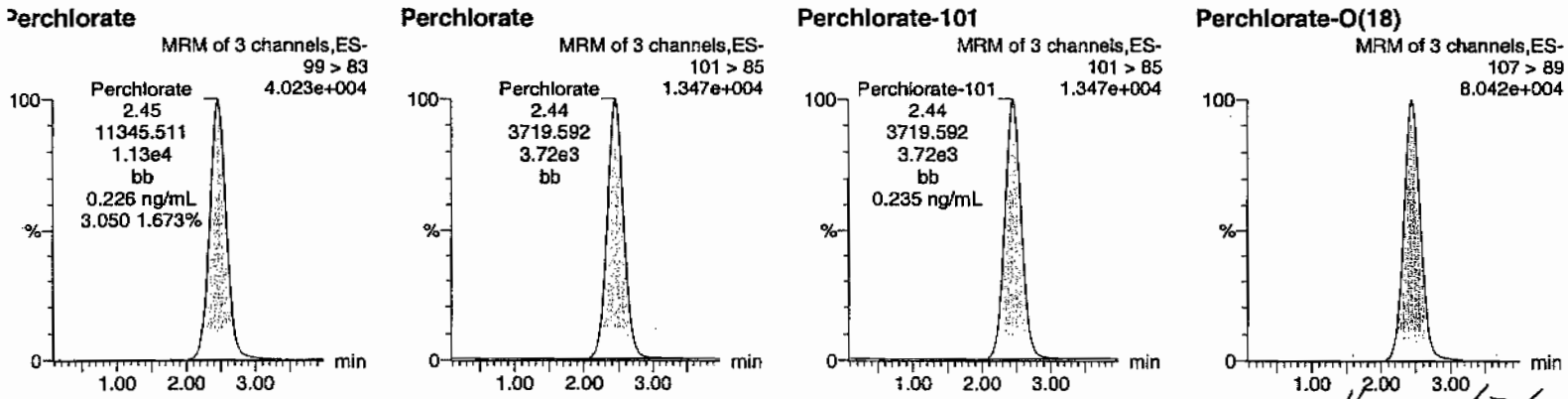
Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

Last Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

Name: per0108042a
Date: 08-Jan-2010
Time: 21:26:14
ID: 1202006986
Vial: 2:1,E

|LANL|937885|SOLZO|MS|1|

01-12-10



Hmm 01/13/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202006986	Perchlorate	99 > 83	2.45	11345.511	11345.511	bb			0.2264	113.22	13.22	3059.5...	3.05
202006986	Perchlorate-101	101 > 85	2.44	3719.592	3719.592	bb			0.2345	117.26	17.26	1740.0...	
202006986	Perchlorate-O(18)	107 > 89	2.44	22353.988	22353.988	bb			0.5089	101.77	1.77	3540.8...	

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

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

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: 937884

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7675MSD

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103

GEL Sample ID: 1202006987

Date Filtered: 08-JAN-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.56	2.24	2.53	ug/kg		1	08-JAN-10 21:33	per0108043a
	Perchlorate Isotope Ratio			2.94			1	08-JAN-10 21:33	per0108043a
14797-73-0	Perchlorate-101	.56	2.24	2.72	ug/kg		1	08-JAN-10 21:33	per0108043a
	Perchlorate-O(18)			5.47	ug/kg		1	08-JAN-10 21:33	per0108043a

^ 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: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per010810a.qld

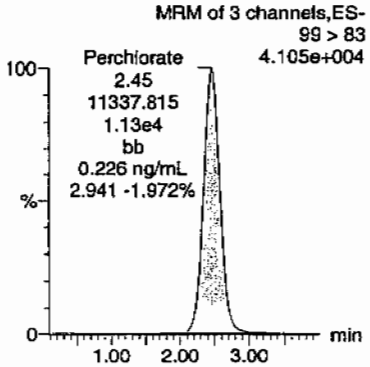
Last Altered: Tuesday, January 12, 2010 9:13:40 AM Eastern Standard Time
Printed: Tuesday, January 12, 2010 9:23:47 AM Eastern Standard Time

Name: per0108043a
Date: 08-Jan-2010
Time: 21:33:16
ID: 1202006987
Vial: 2:1,F

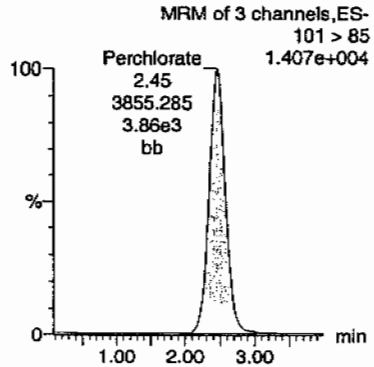
|LANL|937885|SOL2D|MSD|1|

GWD
01-12-10

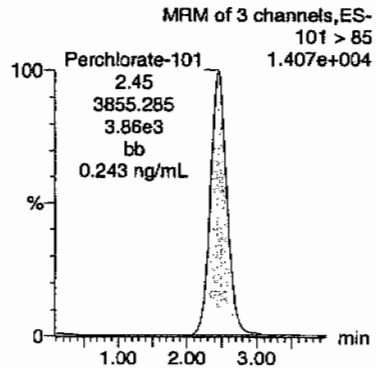
Perchlorate



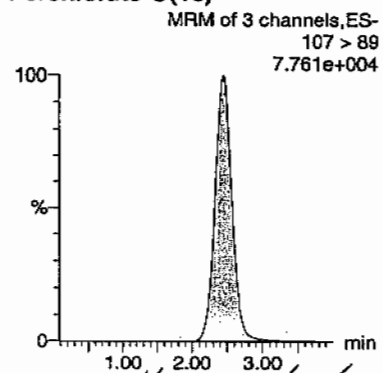
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hnm 01/13/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202006987	Perchlorate	99 > 83	2.45	11337.815	11337.815	bb			0.2263	113.14	13.14	2739.1...	2.94
202006987	Perchlorate-101	101 > 85	2.45	3855.285	3855.285	bb			0.2431	121.54	21.54	444.481	
202006987	Perchlorate-O(18)	107 > 89	2.44	21476.484	21476.484	bb			0.4889	97.78	-2.22	5944.2...	

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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: 937884 **Verified by:** _____

Analyst: Jareth Shirley **Lab SOP:** GL-OA-E-067 REV# 6

Method: SW846 6850 Modified **Instrument:** MicroMass Quatro Ultima

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202006984 MB	08-JAN-2010 13:21:27	2	20	10
1202006985 LCS	08-JAN-2010 13:21:27	2	20	10
243628001	08-JAN-2010 13:21:27	2	20	10
1202006986 MS (243628001)	08-JAN-2010 13:21:27	2	20	10
1202006987 MSD (243628001)	08-JAN-2010 13:21:27	2	20	10
243628002	08-JAN-2010 13:21:27	2	20	10
243628003	08-JAN-2010 13:21:27	2	20	10
243628004	08-JAN-2010 13:21:27	2	20	10
243628005	08-JAN-2010 13:21:27	2	20	10
243628006	08-JAN-2010 13:21:27	2	20	10
243628007	08-JAN-2010 13:21:27	2	20	10
243628008	08-JAN-2010 13:21:27	2	20	10
243628009	08-JAN-2010 13:21:27	2	20	10
243628010	08-JAN-2010 13:21:27	2	20	10
243628011	08-JAN-2010 13:21:27	2	20	10
1202006988 ICS	08-JAN-2010 13:21:27	2	20	10

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1202006988	10 ug/L ICV/CCV Second Source	UCL091201-01.2	.4	mL
LCS	1202006985	10 ug/L ICV/CCV Second Source	UCL091201-01.2	.4	mL
MS	1202006986	10 ug/L ICV/CCV Second Source	UCL091201-01.2	.4	mL
MSD	1202006987	10 ug/L ICV/CCV Second Source	UCL091201-01.2	.4	mL

Comments:

Desalting cartridges used: 090410-1-Ba & 091002-1-H

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GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 01/08/10
Extr. Injection Volume: 20uL
Sequence Number: per010810a
Initial Calibration Date: 01/08/10

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

Reviewed BY: [illegible]
Date: 01/13/10
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL100104-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0108001a	IPB001	CWW	1/8/2010 16:24			1		USE	B
per0108002a	IPB001	CWW	1/8/2010 16:31			1		USE	B
per0108003a	WCLICAL-01	CWW	1/8/2010 16:38			1		USE	I
per0108004a	WCLICAL-02	CWW	1/8/2010 16:45			1		USE	I
per0108005a	WCLICAL-03	CWW	1/8/2010 16:52			1		USE	I
per0108006a	WCLICAL-04	CWW	1/8/2010 16:59			1		USE	I
per0108007a	WCLICAL-05	CWW	1/8/2010 17:06			1		USE	I
per0108008a	IPB002	CWW	1/8/2010 17:13			1		USE	B
per0108009a	WCLICV	CWW	1/8/2010 17:21			1		USE	C
per0108010a	IPB003	CWW	1/8/2010 17:28			1		USE	B
per0108011a	WCLCRI	CWW	1/8/2010 17:35			1		USE	C
per0108012a	1202004376	CWW	1/8/2010 17:42	936784	10-1087	1	LANL	USE	S
per0108013a	1202004379	CWW	1/8/2010 17:49	936784	10-1087	1	LANL	USE	S
per0108014a	1202004380	CWW	1/8/2010 17:56	936784	10-1087	1	LANL	USE	S
per0108015a	243550001	CWW	1/8/2010 18:03	936784	10-1087	1	LANL	USE	S
per0108016a	1202004377	CWW	1/8/2010 18:10	936784	10-1087	1	LANL	USE	S
per0108017a	1202004378	CWW	1/8/2010 18:17	936784	10-1087	1	LANL	USE	S
per0108018a	243550002	CWW	1/8/2010 18:24	936784	10-1087	1	LANL	USE	S
per0108019a	243550003	CWW	1/8/2010 18:31	936784	10-1087	1	LANL	USE	S
per0108020a	243550004	CWW	1/8/2010 18:38	936784	10-1087	1	LANL	USE	S
per0108021a	243550005	CWW	1/8/2010 18:46	936784	10-1087	1	LANL	USE	S
per0108022a	WCLCCV	CWW	1/8/2010 18:53			1		USE	C
per0108023a	IPB004	CWW	1/8/2010 19:01			1		USE	B
per0108024a	WCLCRI	CWW	1/8/2010 19:09			1		USE	C
per0108025a	243550006	CWW	1/8/2010 19:16	936784	10-1087	1	LANL	USE	S
per0108026a	243550007	CWW	1/8/2010 19:23	936784	10-1087	1	LANL	USE	S
per0108027a	243550008	CWW	1/8/2010 19:30	936784	10-1087	1	LANL	USE	S
per0108028a	243550009	CWW	1/8/2010 19:38	936784	10-1087	1	LANL	USE	S
per0108029a	243550010	CWW	1/8/2010 19:46	936784	10-1087	1	LANL	USE	S

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per0108030a	243550011	CWW	1/8/2010 19:53	936784	10-1087	1	LANL	USE	S
per0108031a	243550012	CWW	1/8/2010 20:01	936784	10-1087	1	LANL	USE	S
per0108032a	243550013	CWW	1/8/2010 20:09	936784	10-1087	1	LANL	USE	S
per0108033a	243550014	CWW	1/8/2010 20:16	936784	10-1087	1	LANL	USE	S
per0108034a	243550015	CWW	1/8/2010 20:24	936784	10-1087	1	LANL	USE	S
per0108035a	WCLCCV	CWW	1/8/2010 20:31			1		USE	C
per0108036a	IPB005	CWW	1/8/2010 20:40			1		USE	B
per0108037a	WCLCRI	CWW	1/8/2010 20:47			1		USE	C
per0108038a	1202006984	CWW	1/8/2010 20:55	937885	10-1103	1	LANL	USE	S
per0108039a	1202006985	CWW	1/8/2010 21:03	937885	10-1103	1	LANL	USE	S
per0108040a	1202006988	CWW	1/8/2010 21:11	937885	10-1103	1	LANL	USE	S
per0108041a	243628001	CWW	1/8/2010 21:18	937885	10-1103	1	LANL	USE	S
per0108042a	1202006986	CWW	1/8/2010 21:26	937885	10-1103	1	LANL	USE	S
per0108043a	1202006987	CWW	1/8/2010 21:33	937885	10-1103	1	LANL	USE	S
per0108044a	243628002	CWW	1/8/2010 21:40	937885	10-1103	1	LANL	USE	S
per0108045a	243628003	CWW	1/8/2010 21:47	937885	10-1103	1	LANL	USE	S
per0108046a	WCLCCV	CWW	1/8/2010 21:54			1		USE	C
per0108047a	IPB006	CWW	1/8/2010 22:01			1		USE	B
per0108048a	WCLCRI	CWW	1/8/2010 22:08			1		USE	C
per0108049a	243628004	CWW	1/8/2010 22:15	937885	10-1103	1	LANL	USE	S
per0108050a	243628005	CWW	1/8/2010 22:23	937885	10-1103	1	LANL	USE	S
per0108051a	243628006	CWW	1/8/2010 22:30	937885	10-1103	1	LANL	USE	S
per0108052a	243628007	CWW	1/8/2010 22:37	937885	10-1103	1	LANL	USE	S
per0108053a	243628008	CWW	1/8/2010 22:44	937885	10-1103	1	LANL	USE	S
per0108054a	243628009	CWW	1/8/2010 22:51	937885	10-1103	1	LANL	USE	S
per0108055a	243628010	CWW	1/8/2010 22:58	937885	10-1103	1	LANL	USE	S
per0108056a	243628011	CWW	1/8/2010 23:05	937885	10-1103	1	LANL	USE	S
per0108057a	WCLCCV	CWW	1/8/2010 23:12			1		USE	C
per0108058a	IPB007	CWW	1/8/2010 23:19			1		USE	B
per0108059a	WCLCRI	CWW	1/8/2010 23:26			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 10-1103-1

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:	937888
Prep Batch Number:	937887

Sample Analysis

Sample ID	Client ID
243629001	RE12-10-7677
1202006993	Interference Check Sample (ICS)
1202006989	Method Blank (MB)
1202006990	Laboratory Control Sample (LCS)
1202006991	243632001(RE12-10-7610) Matrix Spike (MS)
1202006992	243632001(RE12-10-7610) 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
Client sample 243632001 (RE12-10-7610) from SDG 10-1105 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

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

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

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

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

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

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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

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 reports (DER) was not generated for this SDG.

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

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

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

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

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

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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 M. Mauer **Date:** 01/15/10

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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: WATER

Extraction Batch ID: 937887

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE12-10-7677

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103-1

GEL Sample ID: 243629001

Date Filtered: 05-JAN-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	06-JAN-10 17:16	per0106018a
	Perchlorate Isotope Ratio						1	06-JAN-10 17:16	per0106018a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	06-JAN-10 17:16	per0106018a
	Perchlorate-O(18)			0.472	ug/L		1	06-JAN-10 17:16	per0106018a

^ 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

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Form 5

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–1103–1

Extract Batch Code: 937887

Date Filtered: 05–JAN–10

Matrix: WATER

Sample ID: 1202006990

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.195	ug/L	97.6		85 – 115
Perchlorate Isotope Ratio		3.08				–
Perchlorate–101	0.200	.194	ug/L	96.9		85 – 115
Perchlorate–O(18)		.486	ug/L			–

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

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–1103–1

Extract Batch Code: 937887

Date Filtered: 05–JAN–10

Matrix: WATER

Sample ID: 1202006993

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.193	ug/L	96.3		70 – 130
Perchlorate Isotope Ratio		2.83				
Perchlorate–101	0.200	.208	ug/L	104		70 – 130
Perchlorate–O(18)		.505	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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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per010610a.qld

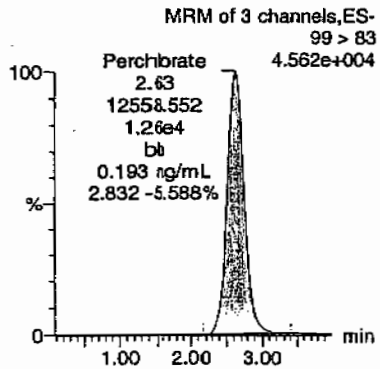
Last Altered: Thursday, January 07, 2010 8:49:32 AM Eastern Standard Time
Printed: Thursday, January 07, 2010 9:05:25 AM Eastern Standard Time

Name: per0106014a
Date: 06-Jan-2010
Time: 16:48:29
ID: 1202006993
Vial: 1:3,C

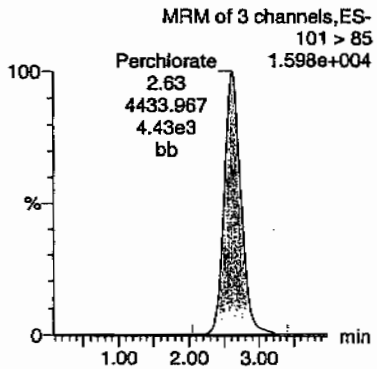
|LANL|937888|LZQ|ICS|1|

CWW
~~01-07-09~~ CWW
01-07-10

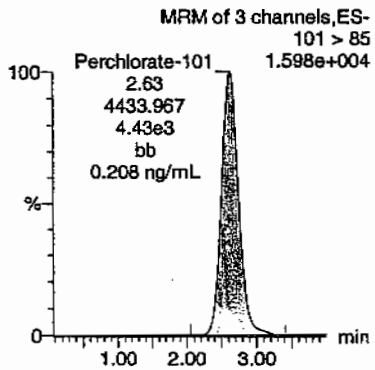
Perchlorate



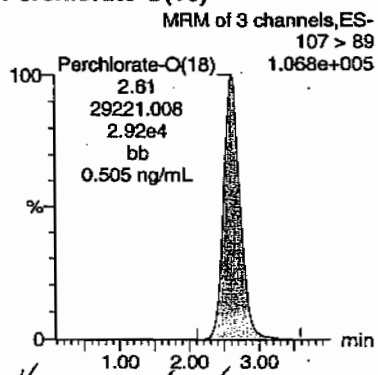
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 01/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202006993	Perchlorate	99 > 83	2.63	12558.552	12558.552	bb			0.1927	96.33	-3.67	1817.4...	2.83
1202006993	Perchlorate-101	101 > 85	2.63	4433.967	4433.967	bb			0.2082	104.09	4.09	1026.0...	
1202006993	Perchlorate-O(18)	107 > 89	2.61	29221.008	29221.008	bb			0.5054	101.08	1.08	13226....	

GEL 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): 10–1103–1

Extract Batch Code: 937887

Date Extracted: 05–JAN–10

GEL MS/PS ID: 1202006991

Client ID: RE12–10–7610

GEL MSD/PSD ID: 1202006992

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	0.00139	ug/L	0.196	97.3	.194	96.2	1.16	30	75 – 125
Perchlorate Isotope Ratio	0	0.00		3.08		2.92		0		–
Perchlorate–101	0.200	0.00	ug/L	0.195	97.4	.203	101	4.13	30	75 – 125
Perchlorate–O(18)	0	0.475	ug/L	0.475		.473		.302		–

^ 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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Form 4

Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–1103–1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	06–JAN–10	per0106001a	IPB001
Perchlorate–101	0.00	0	NA	06–JAN–10	per0106001a	IPB001
Perchlorate	0.00	0	NA	06–JAN–10	per0106002a	IPB001
Perchlorate–101	0.00	0	NA	06–JAN–10	per0106002a	IPB001

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

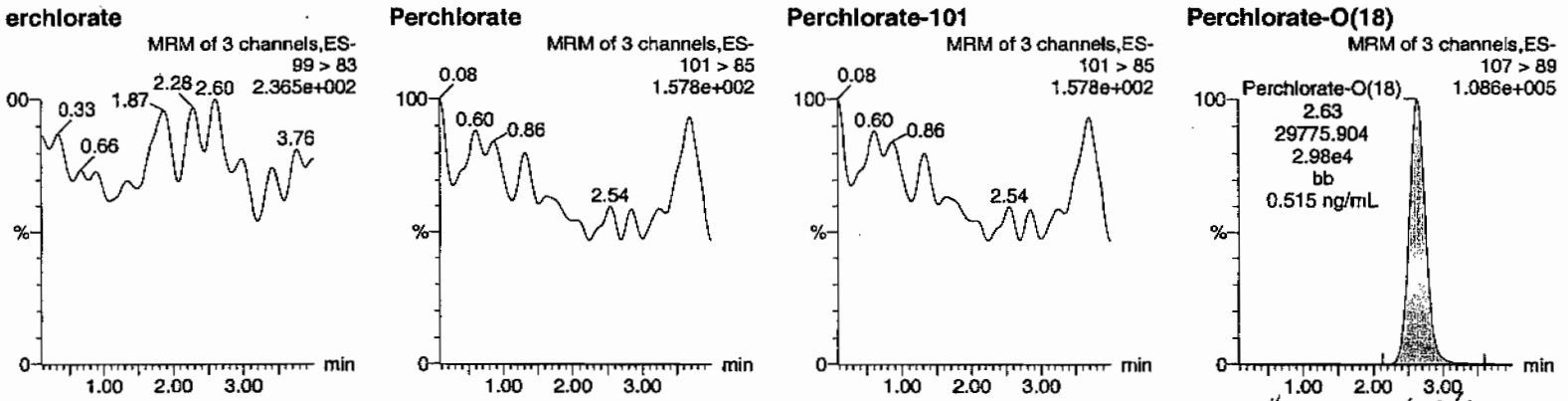
)ataset: C:\MassLynx\Perchlorate.PRO\per010610a.qld

ast Altered: Thursday, January 07, 2010 8:49:32 AM Eastern Standard Time
'rinted: Thursday, January 07, 2010 9:05:25 AM Eastern Standard Time

lethod: C:\MassLynx\Perchlorate.PRO\MethDB\per010610a.mdb 06 Jan 2010 15:03:34
:alibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per010610a.cdb 07 Jan 2010 08:49:31

cw)
01-07-10

'ame: per0106001a
ate: 06-Jan-2010
ime: 15:16:51
): IPB001
ial: 1:1,A



Hmc 01/08/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'B001	Perchlorate	99 > 83											0.00
'B001	Perchlorate-101	101 > 85											
'B001	Perchlorate-O(18)	107 > 89	2.63	29775.904	29775.904	bb			0.5150	103.00 ✓	3.00	13367....	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per010610a.qld

Last Altered: Thursday, January 07, 2010 8:49:32 AM Eastern Standard Time
Printed: Thursday, January 07, 2010 9:05:25 AM Eastern Standard Time

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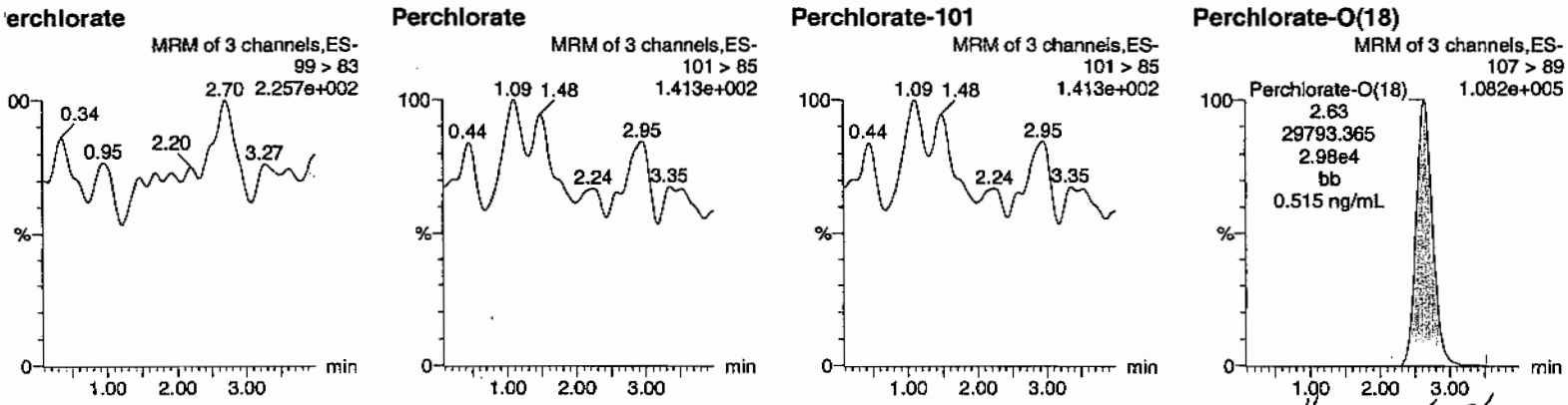
Date: 06-Jan-2010
Time: 15:23:53
ID: IPB001
Vial: 1:1,A

CWW
01-07-10



Hmw 01/08/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB001	Perchlorate	99 > 83											0.00
PB001	Perchlorate-101	101 > 85											
PB001	Perchlorate-O(18)	107 > 89	2.63	29793.365	29793.365	bb			0.5153	103.06	3.06	20286....	

Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–1103–1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	06–JAN–10	per0106008a	IPB002
Perchlorate–101	0.00	0	NA	06–JAN–10	per0106008a	IPB002
Perchlorate	0.00	0	NA	06–JAN–10	per0106010a	IPB003
Perchlorate–101	0.00	0	NA	06–JAN–10	per0106010a	IPB003
Perchlorate	0.00	0	NA	06–JAN–10	per0106021a	IPB004
Perchlorate–101	0.00	0	NA	06–JAN–10	per0106021a	IPB004

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

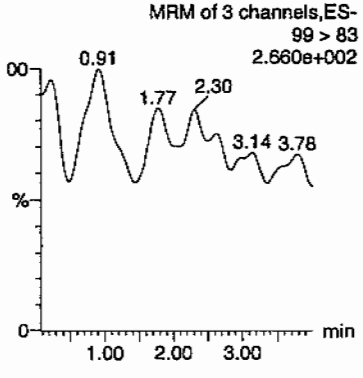
ataset: C:\MassLynx\Perchlorate.PRO\per010610a.qld

ast Altered: Thursday, January 07, 2010 8:49:32 AM Eastern Standard Time
rinted: Thursday, January 07, 2010 9:05:25 AM Eastern Standard Time

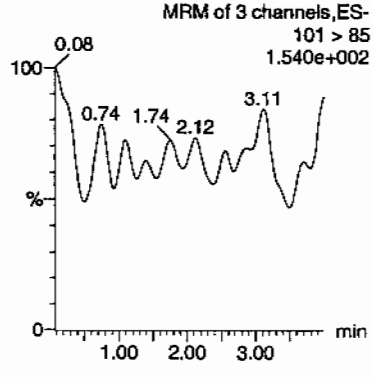
lame: per0106008a
ate: 06-Jan-2010
ime: 16:06:01
): IPB002
ial: 1:1,A

CW 01-07-10

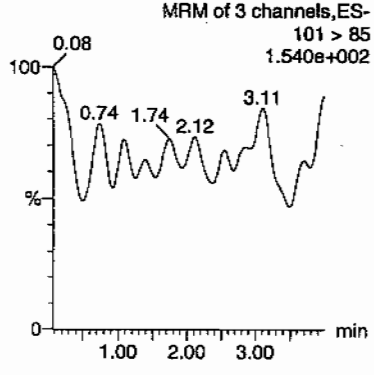
erchlorate



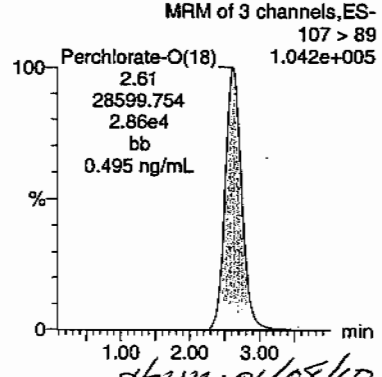
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 01/08/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB002	Perchlorate	99 > 83											0.00
PB002	Perchlorate-101	101 > 85											
PB002	Perchlorate-O(18)	107 > 89	2.61	28599.754	28599.754	bb			0.4947	98.93	-1.07	2817.8...	

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

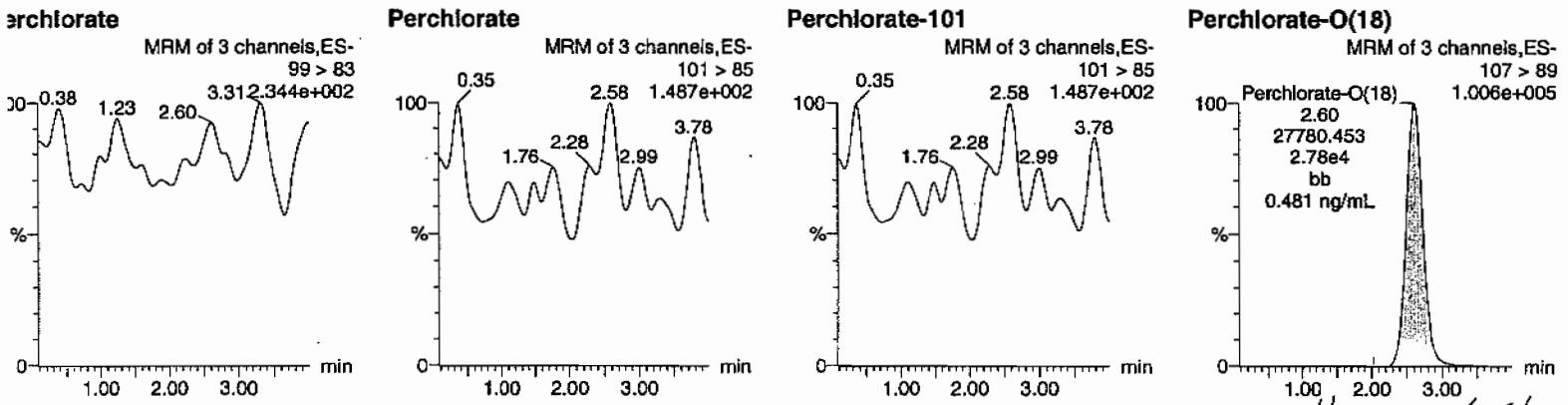
uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per010610a.qld

ıst Altered: Thursday, January 07, 2010 8:49:32 AM Eastern Standard Time
rinted: Thursday, January 07, 2010 9:05:25 AM Eastern Standard Time

ame: per0106010a
ate: 06-Jan-2010
me: 16:20:17
ı: IPB003
ial: 1:1,A

CWW
01-07-10



Hmm 01/08/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B003	Perchlorate	99 > 83											0.00
B003	Perchlorate-101	101 > 85											
B003	Perchlorate-O(18)	107 > 89	2.60	27780.453	27780.453	bb			0.4805	96.10	-3.90	9314.4...	

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

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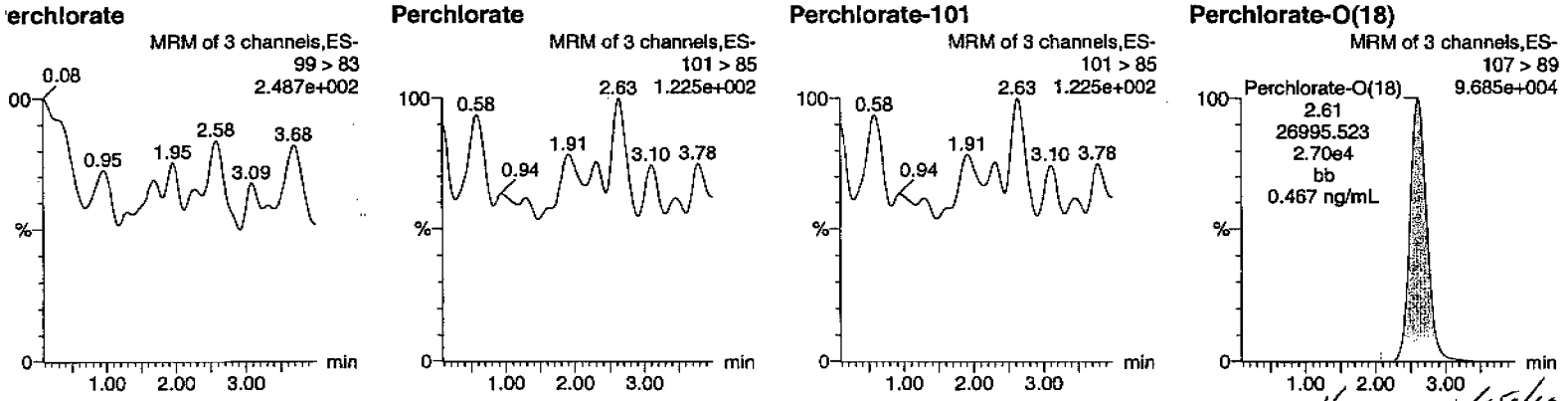
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per010610a.qld

Last Altered: Thursday, January 07, 2010 8:49:32 AM Eastern Standard Time
Printed: Thursday, January 07, 2010 9:05:25 AM Eastern Standard Time

Name: per0106021a
Date: 06-Jan-2010
Time: 17:37:43
ID: IPB004
Vial: 1:1,A

CWL
01-07-10



HMM 01/08/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB004	Perchlorate	99 > 83											0.00
PB004	Perchlorate-101	101 > 85											
PB004	Perchlorate-O(18)	107 > 89	2.61	26995.523	26995.523	bb			0.4669	93.38	-6.62	5820.6...	

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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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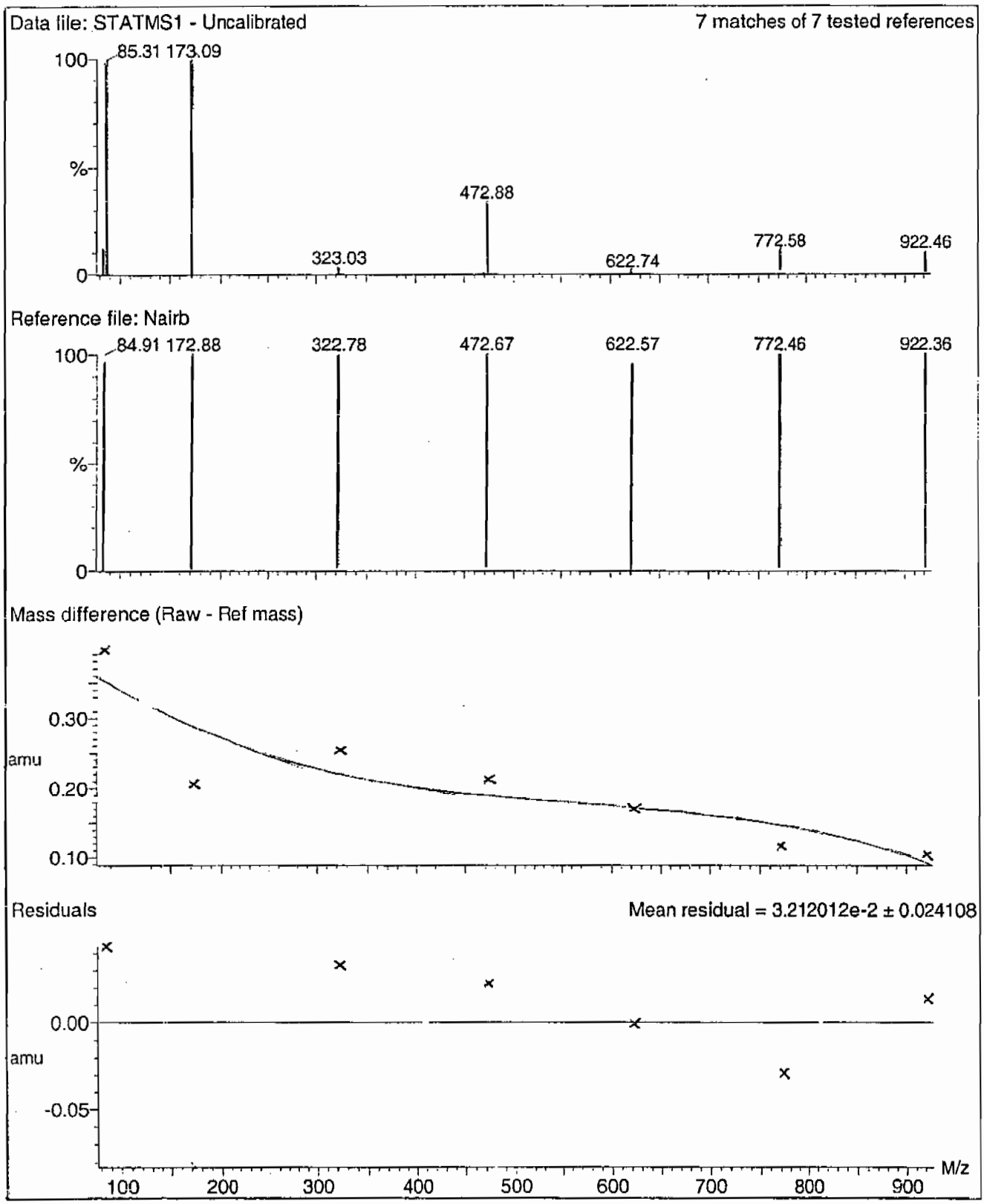
QUATTRO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

Printed: Tue Jan 08 12:19:12 2008

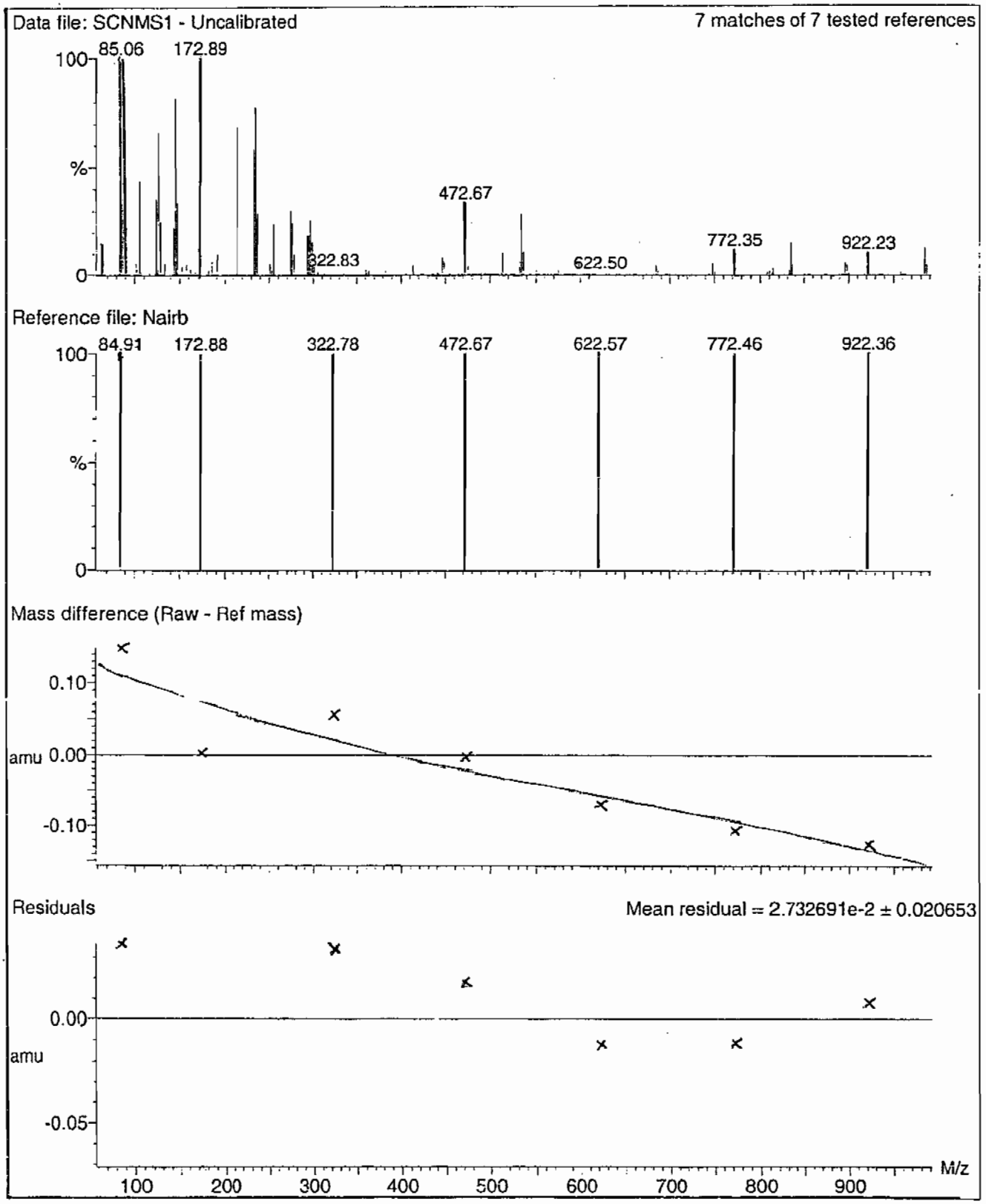
PARTS HIGHLIGHTED BY CWW 01-09-08



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

Calibration Report - MS1 Scanning

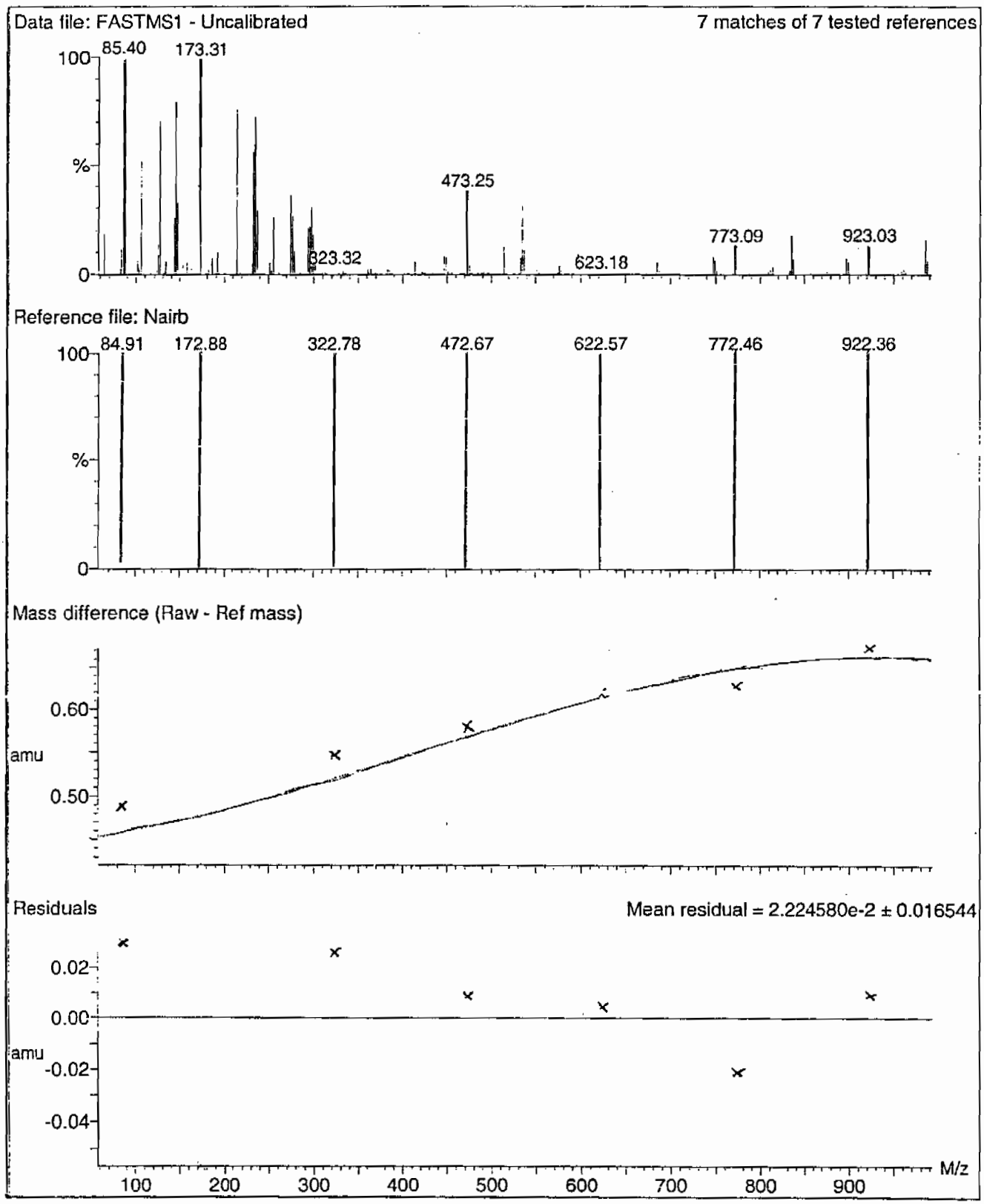
Printed: Tue Jan 08 12:20:09 2008



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

Calibration Report - MS1 Scan Speed Compensation

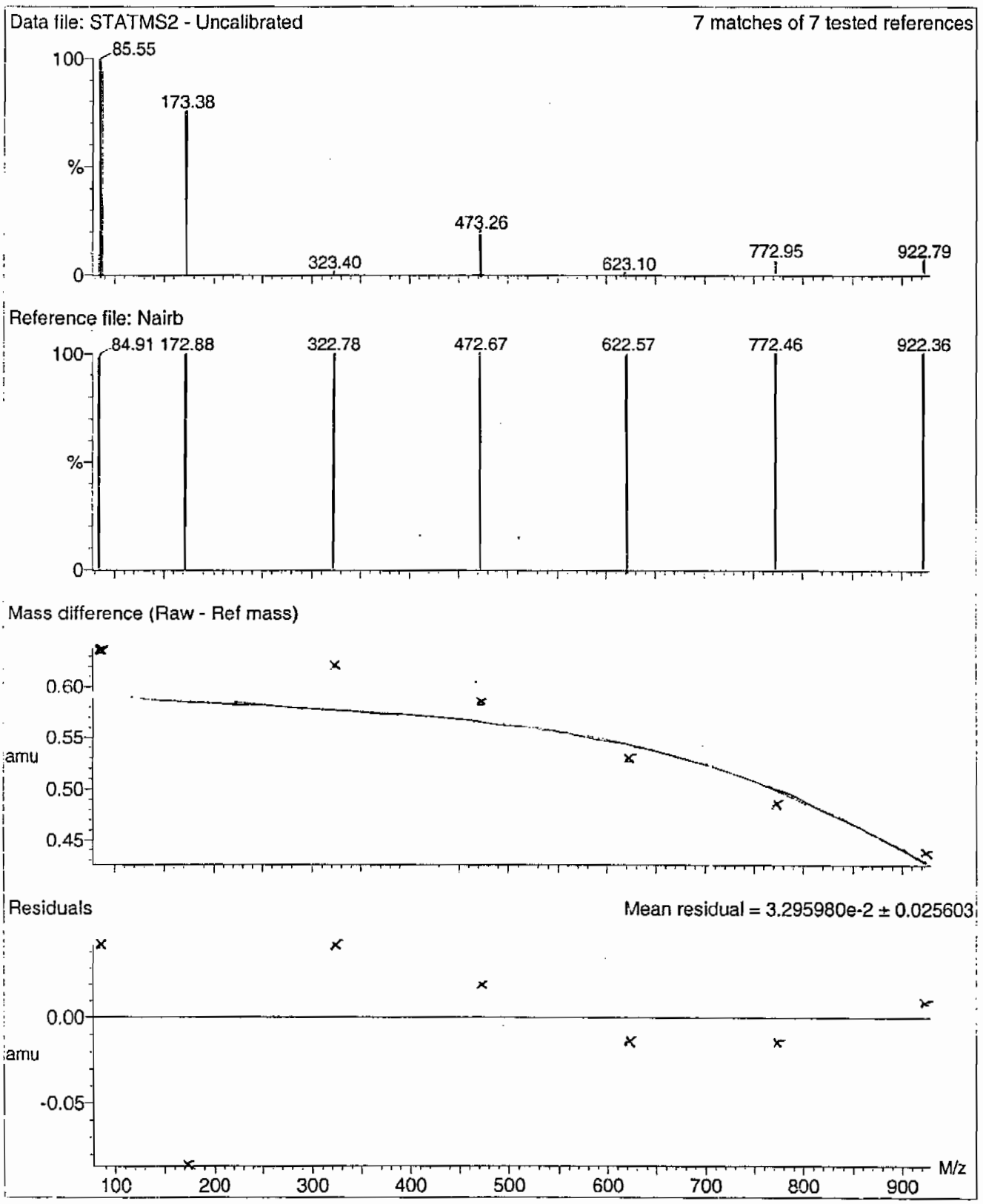
Printed: Tue Jan 08 12:21:04 2008



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

Calibration Report - MS2 Static

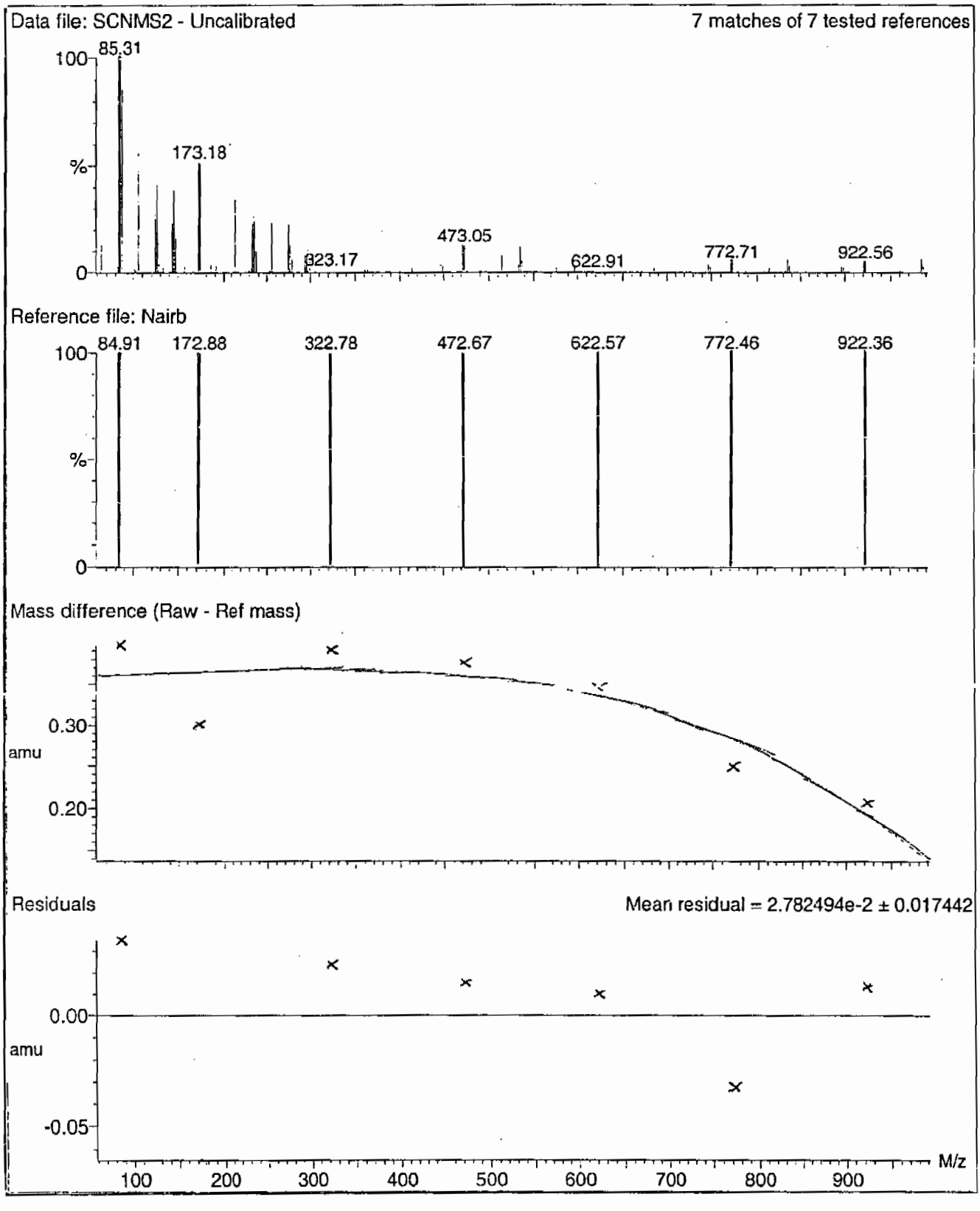
Printed: Tue Jan 08 12:21:59 2008



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

Calibration Report - MS2 Scanning

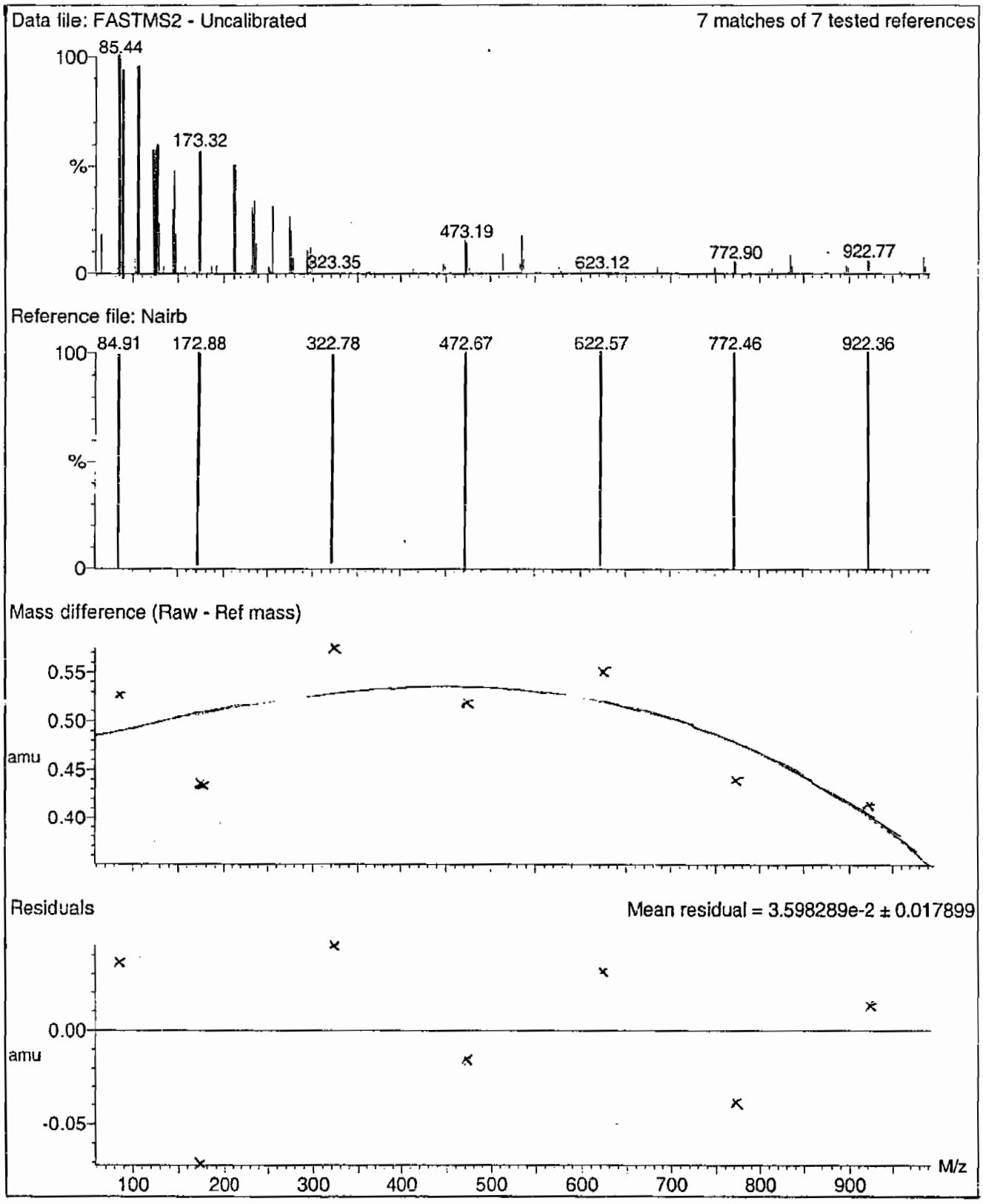
Printed: Tue Jan 08 12:22:56 2008



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

Calibration Report - MS2 Scan Speed Compensation

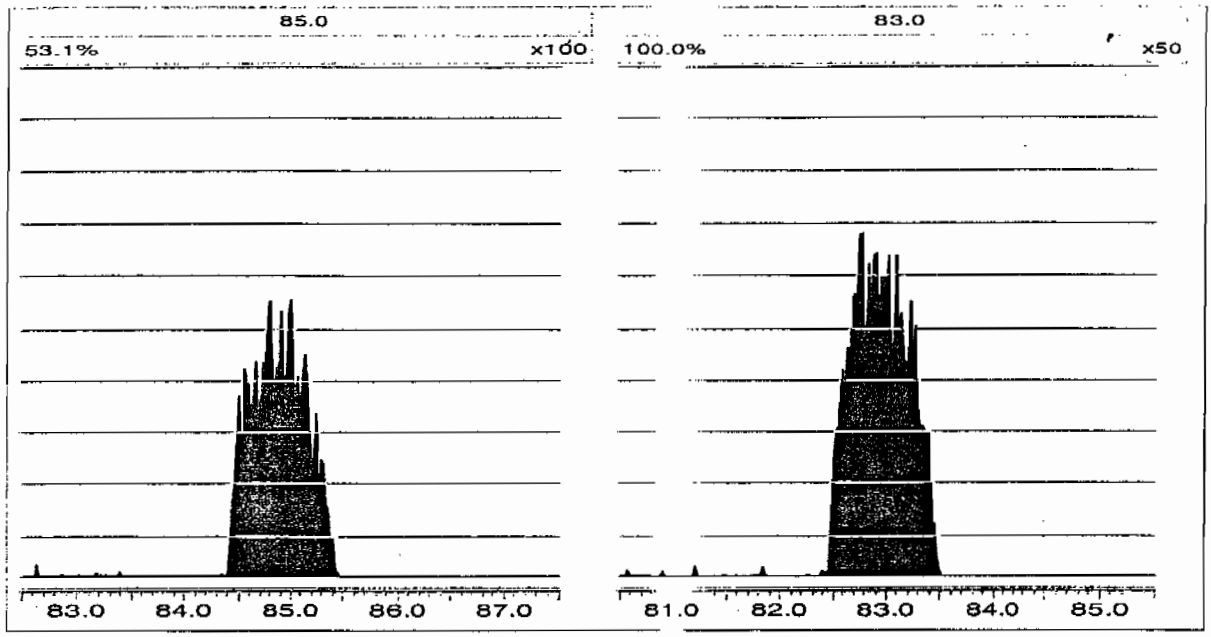
Printed: Tue Jan 08 12:23:51 2008



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

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

Printed: Wednesday, January 06, 2010 12:30:22 Eastern Standard Time



Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-1103-1

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	**per0106006a**	**06-JAN-10**	**29150.6**				
Lower Area Limit			**14575.3**				
Upper Area Limit			**58301.2**				
1202006989	per0106012a	06-JAN-10 16:34	27892.7	2.61	2.61333	1.001	
1202006990	per0106013a	06-JAN-10 16:41	28121.7	2.6	2.61328	1.005	
1202006993	per0106014a	06-JAN-10 16:48	29221	2.61	2.62568	1.006	
243629001	per0106018a	06-JAN-10 17:16	27292.4	2.61	2.62567	1.006	

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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: WATER

Extraction Batch ID: 937887

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE12-10-7677

Date Received: 29-DEC-09

GEL Job No (SDG): 10-1103-1

GEL Sample ID: 243629001

Date Filtered: 05-JAN-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	06-JAN-10 17:16	per0106018a
	Perchlorate Isotope Ratio						1	06-JAN-10 17:16	per0106018a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	06-JAN-10 17:16	per0106018a
	Perchlorate-O(18)			0.472	ug/L		1	06-JAN-10 17:16	per0106018a

^ 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: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per010610a.qld

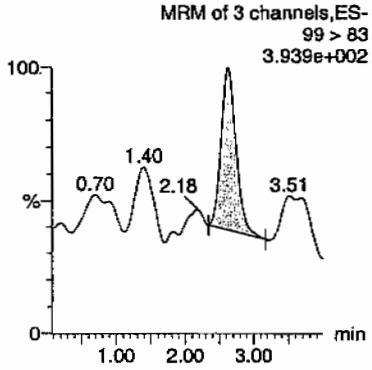
Last Altered: Thursday, January 07, 2010 8:49:32 AM Eastern Standard Time
Printed: Thursday, January 07, 2010 9:05:25 AM Eastern Standard Time

Name: per0106018a
Date: 06-Jan-2010
Time: 17:16:35
ID: 243629001
Vial: 1:4,A

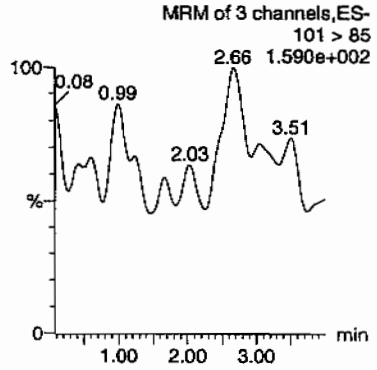
|LANL|937888|LIQ|11

cww
01-07-10

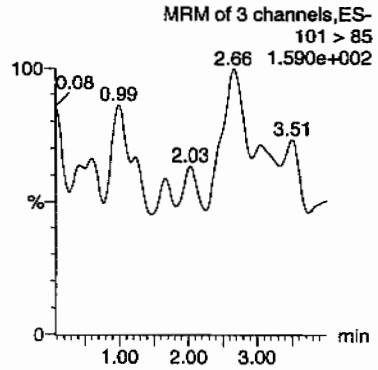
Perchlorate



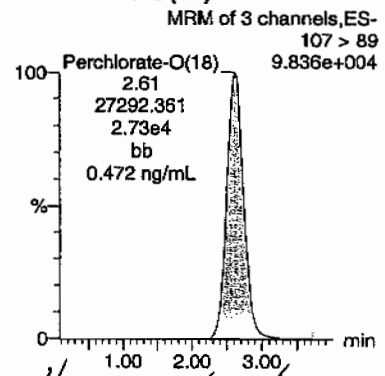
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 01/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
243629001	Perchlorate	99 > 83	2.63	61.957	61.957	bb			0.0010			10.604	0.00
243629001	Perchlorate-101	101 > 85											
243629001	Perchlorate-O(18)	107 > 89	2.61	27292.361	27292.361	bb			0.4721	94.41	-5.59	8101.5...	

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

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STANDARDS DATA

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Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–1103–1

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 06–JAN–10

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

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

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 65186.4

Response Type: External Standard

Curve Type: RF

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–1103–1

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 06–JAN–10

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

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

Parmname Perchlorate–101

Coefficient of Determination:

Calibration Curve: 21298.8

Response Type: External Standard

Curve Type: RF

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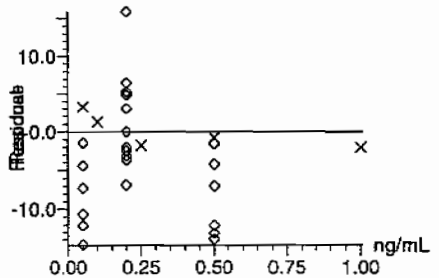
Quantify Calibration Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

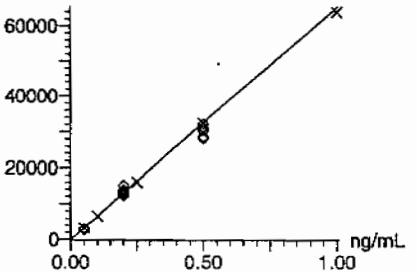
Dataset: C:\MassLynx\Perchlorate.PRO\per010610a.qld

Last Altered: Thursday, January 07, 2010 8:49:32 AM Eastern Standard Time
Printed: Thursday, January 07, 2010 9:05:25 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per010610a.mdb 06 Jan 2010 15:03:34
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per010610a.cdb 07 Jan 2010 08:49:31

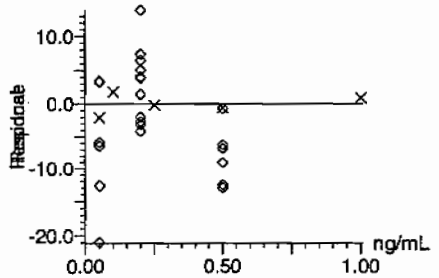
Compound name: Perchlorate
Response Factor: 65186.4
RF SD: 1462.55, % Relative SD: 2.24364
Response type: External Std, Area
Curve type: RF

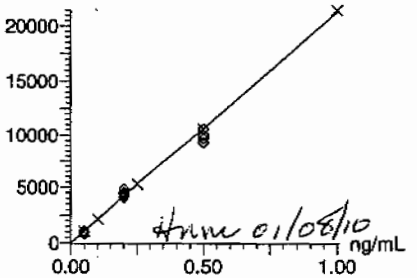




AW
01-07-10

Compound name: Perchlorate-101
Response Factor: 21298.8
RF SD: 311.518, % Relative SD: 1.46261
Response type: External Std, Area
Curve type: RF





AW 01/08/10

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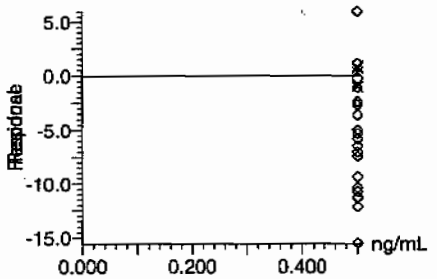
Quantify Calibration Report **MassLynx 4.0 SP4**

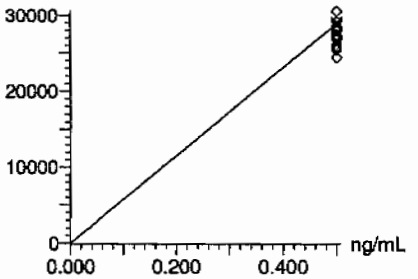
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per010610a.qld

Last Altered: Thursday, January 07, 2010 8:49:32 AM Eastern Standard Time
Printed: Thursday, January 07, 2010 9:05:25 AM Eastern Standard Time

Compound name: Perchlorate-O(18)
Response Factor: 57815.7
RRF SD: 487.147, % Relative SD: 0.842587
Response type: External Std, Area
Curve type: RF





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

Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1103-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.49	98.44	06-JAN-10 16:13	per0106009a
Perchlorate Isotope Ratio		3.03		06-JAN-10 16:13	per0106009a
Perchlorate-101	.5	.5	99.33	06-JAN-10 16:13	per0106009a

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

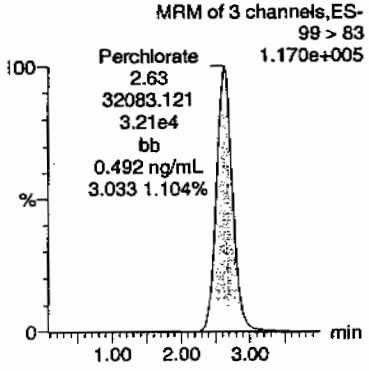
Dataset: C:\MassLynx\Perchlorate.PRO\per010610a.qld

Last Altered: Thursday, January 07, 2010 8:49:32 AM Eastern Standard Time
Printed: Thursday, January 07, 2010 9:05:25 AM Eastern Standard Time

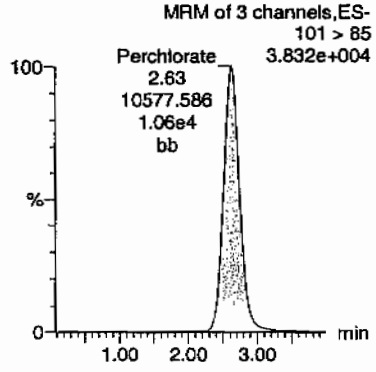
Name: per0106009a
Date: 06-Jan-2010
Time: 16:13:04
ID: WCL100104-06ICV
Vial: 1:2,A

Pass
01-07-10

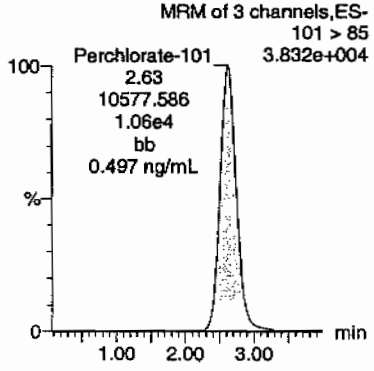
Perchlorate



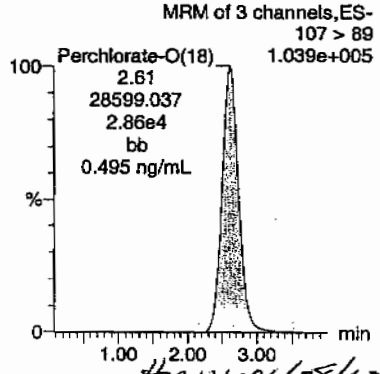
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HM 01/08/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100104-06ICV	Perchlorate	99 > 83	2.63	32083.121	32083.121	bb			0.4922	98.44	-1.56	5870.1...	3.03
WCL100104-06ICV	Perchlorate-101	101 > 85	2.63	10577.586	10577.586	bb			0.4966	99.33	-0.67	1002.3...	
WCL100104-06ICV	Perchlorate-O(18)	107 > 89	2.61	28599.037	28599.037	bb			0.4947	98.93	-1.07	5062.5...	

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Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1103-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.48	95.79	06-JAN-10 17:30	per0106020a
Perchlorate Isotope Ratio		3.13		06-JAN-10 17:30	per0106020a
Perchlorate-101	.5	.47	93.79	06-JAN-10 17:30	per0106020a

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

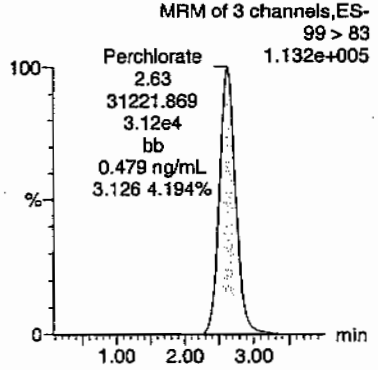
Dataset: C:\MassLynx\Perchlorate.PRO\per010610a.qld

Last Altered: Thursday, January 07, 2010 8:49:32 AM Eastern Standard Time
Printed: Thursday, January 07, 2010 9:05:25 AM Eastern Standard Time

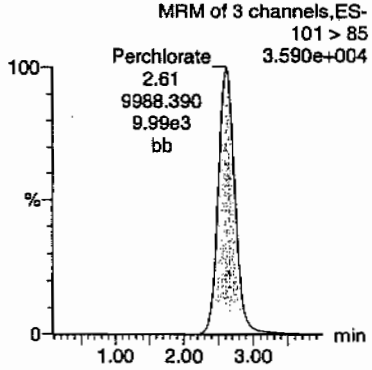
Name: per0106020a
Date: 06-Jan-2010
Time: 17:30:41
ID: WCL100104-06CCV
Vial: 1:2,A

CWW
~~01-07-01~~ CWW
01-07-10

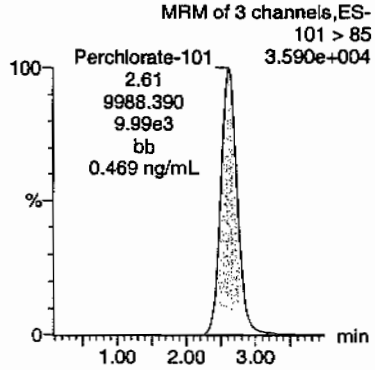
Perchlorate



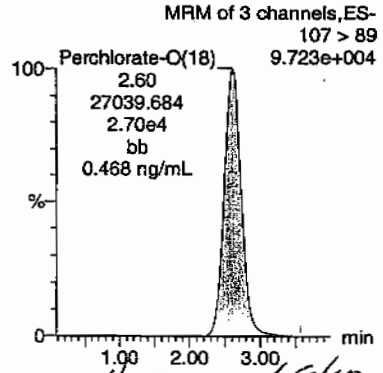
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 01/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100104-06CCV	Perchlorate	99 > 83	2.63	31221.869	31221.869	bb			0.4790	95.79	-4.21	13705....	3.13
WCL100104-06CCV	Perchlorate-101	101 > 85	2.61	9988.390	9988.390	bb			0.4690	93.79	-6.21	5150.1...	
WCL100104-06CCV	Perchlorate-O(18)	107 > 89	2.60	27039.684	27039.684	bb			0.4677	93.54	-6.46	3564.5...	

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

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–1103–1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	98.55	06–JAN–10 16:27	per0106011a
Perchlorate Isotope Ratio		2.92		06–JAN–10 16:27	per0106011a
Perchlorate–101	.05	.05	103.27	06–JAN–10 16:27	per0106011a
Perchlorate	.05	.05	95.61	06–JAN–10 17:44	per0106022a
Perchlorate Isotope Ratio		3.11		06–JAN–10 17:44	per0106022a
Perchlorate–101	.05	.05	94.14	06–JAN–10 17:44	per0106022a

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

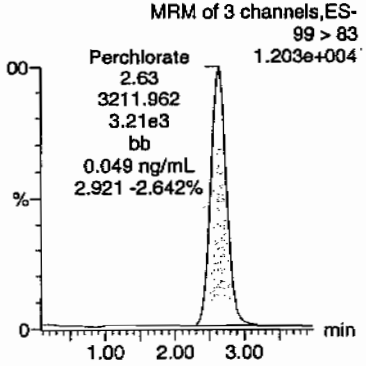
ataset: C:\MassLynx\Perchlorate.PRO\per010610a.qld

ast Altered: Thursday, January 07, 2010 8:49:32 AM Eastern Standard Time
rinted: Thursday, January 07, 2010 9:05:25 AM Eastern Standard Time

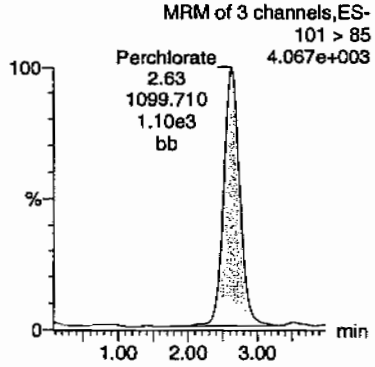
ame: per0106011a
ate: 06-Jan-2010
ime: 16:27:19
): WCL100104-07CRI
ial: 1:2,B

CW
01-07-10

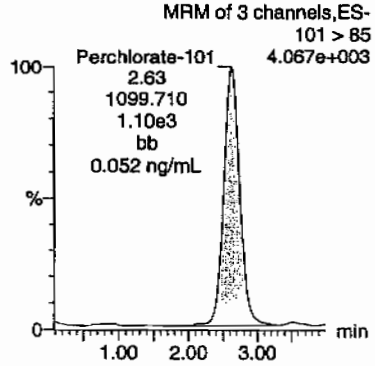
erchlorate



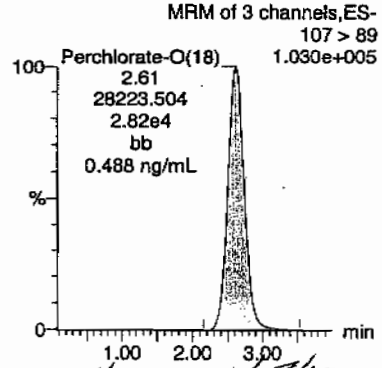
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMK 01/08/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'CL100104-07CRI	Perchlorate	99 > 83	2.63	3211.962	3211.962	bb			0.0493	98.55	-1.45	604.902	2.92
'CL100104-07CRI	Perchlorate-101	101 > 85	2.63	1099.710	1099.710	bb			0.0516	103.27	3.27	335.294	
'CL100104-07CRI	Perchlorate-O(18)	107 > 89	2.61	28223.504	28223.504	bb			0.4882	97.63	-2.37	4006.4...	

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

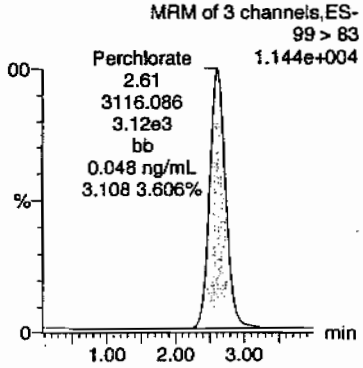
ataset: C:\MassLynx\Perchlorate.PRO\per010610a.qld

ast Altered: Thursday, January 07, 2010 8:49:32 AM Eastern Standard Time
rinted: Thursday, January 07, 2010 9:05:25 AM Eastern Standard Time

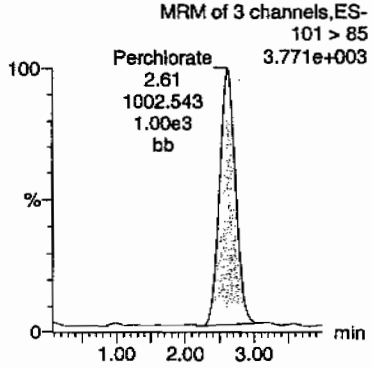
ame: per0106022a
ate: 06-Jan-2010
ime: 17:44:45
): WCL100104-07CRI
ial: 1:2,B

Pass
01-07-10

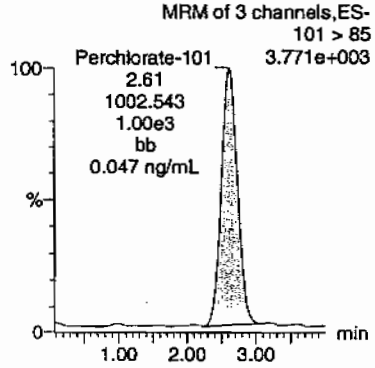
erchlorate



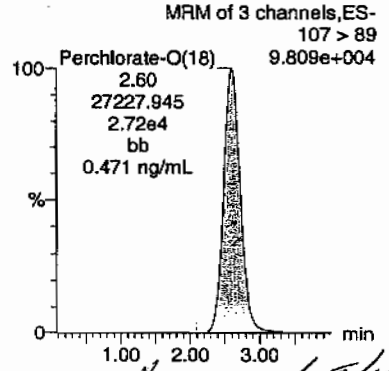
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 01/08/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
/CL100104-07CRI	Perchlorate	99 > 83	2.61	3116.086	3116.086	bb			0.0478	95.61	-4.39	252.584	3.11
/CL100104-07CRI	Perchlorate-101	101 > 85	2.61	1002.543	1002.543	bb			0.0471	94.14	-5.86	346.672	
/CL100104-07CRI	Perchlorate-O(18)	107 > 89	2.60	27227.945	27227.945	bb			0.4709	94.19	-5.81	6823.2...	

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: 937887

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
MB

Date Received: 05–JAN–10

GEL Job No (SDG): 10–1103–1

GEL Sample ID: 1202006989

Date Filtered: 05–JAN–10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797–73–0	Perchlorate	.05	.2	0.050	ug/L	U	1	06–JAN–10 16:34	per0106012a
	Perchlorate Isotope Ratio						1	06–JAN–10 16:34	per0106012a
14797–73–0	Perchlorate–101	.05	.2	0.050	ug/L	U	1	06–JAN–10 16:34	per0106012a
	Perchlorate–O(18)			0.482	ug/L		1	06–JAN–10 16:34	per0106012a

^ 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: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per010610a.qld

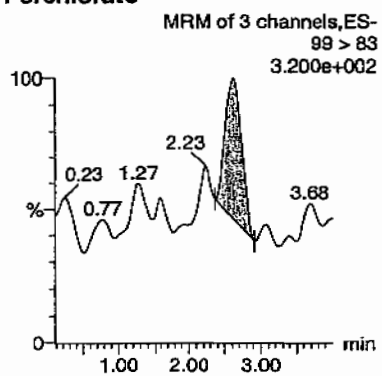
Last Altered: Thursday, January 07, 2010 8:49:32 AM Eastern Standard Time
Printed: Thursday, January 07, 2010 9:05:25 AM Eastern Standard Time

Name: per0106012a
Date: 06-Jan-2010
Time: 16:34:23
ID: 1202006989
Vial: 1:3,A

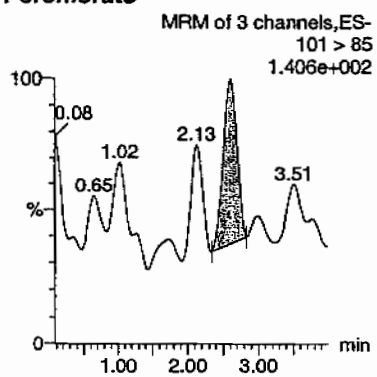
|LANL|937888|LZQ|MB|1|

01-07 10

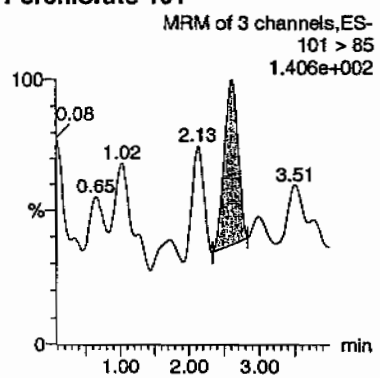
Perchlorate



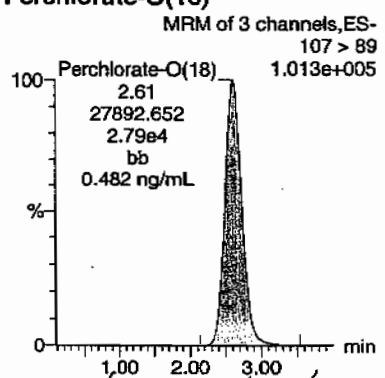
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 01/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio	
1202006989	Perchlorate	99 > 83	2.61	45.302	45.302	bb			0.0007			6.398	2.25	OKAY
1202006989	Perchlorate-101	101 > 85	2.61	20.169	20.169	bb			0.0009			4.494		<0.0500
1202006989	Perchlorate-O(18)	107 > 89	2.61	27892.652	27892.652	bb			0.4824	96.49	-3.51	1579.5...		

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: 937887

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
LCS

Date Received: 05–JAN–10

GEL Job No (SDG): 10–1103–1

GEL Sample ID: 1202006990

Date Filtered: 05–JAN–10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797–73–0	Perchlorate	.05	.2	0.195	ug/L	J	1	06–JAN–10 16:41	per0106013a
	Perchlorate Isotope Ratio			3.08			1	06–JAN–10 16:41	per0106013a
14797–73–0	Perchlorate–101	.05	.2	0.194	ug/L	J	1	06–JAN–10 16:41	per0106013a
	Perchlorate–O(18)			0.486	ug/L		1	06–JAN–10 16:41	per0106013a

^ 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: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per010610a.qld

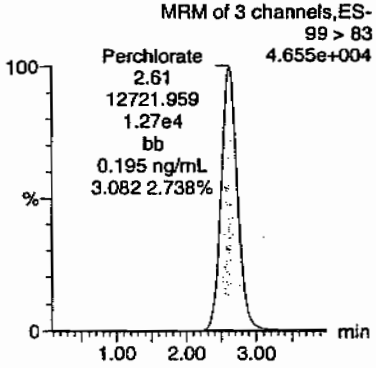
Last Altered: Thursday, January 07, 2010 8:49:32 AM Eastern Standard Time
Printed: Thursday, January 07, 2010 9:05:25 AM Eastern Standard Time

Name: per0106013a
Date: 06-Jan-2010
Time: 16:41:26
ID: 1202006990
Vial: 1:3,B

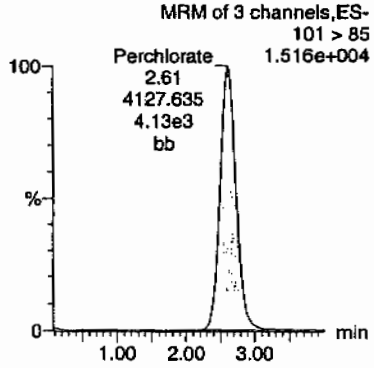
LANL | 937828 | LIQ | LCS | 1 |

CWW
01-07-10

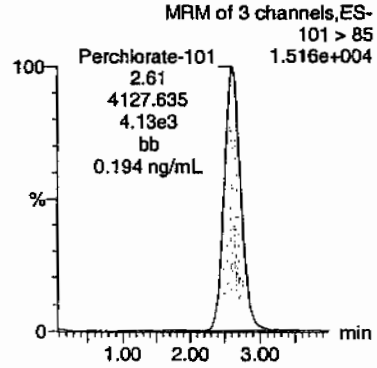
Perchlorate



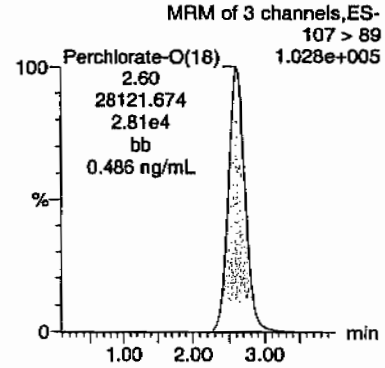
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202006990	Perchlorate	99 > 83	2.61	12721.959	12721.959	bb			0.1952	97.58	-2.42	1982.8...	3.08
1202006990	Perchlorate-101	101 > 85	2.61	4127.635	4127.635	bb			0.1938	96.90	-3.10	1379.3...	
1202006990	Perchlorate-O(18)	107 > 89	2.60	28121.674	28121.674	bb			0.4864	97.28	-2.72	3701.4...	

$\frac{12721.959}{65186.4} = 0.1952$

HWW
01/08/10

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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: 937887 Verified by: _____

Analyst: Jareth Shirley

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)
1202006989 MB	05-JAN-2010 13:14:57	10	10	1
1202006990 LCS	05-JAN-2010 13:14:57	10	10	1
243608001	05-JAN-2010 13:14:57	10	10	1
243621001	05-JAN-2010 13:14:57	10	10	1
243627001	05-JAN-2010 13:14:57	10	10	1
243629001	05-JAN-2010 13:14:57	10	10	1
243631001	05-JAN-2010 13:14:57	10	10	1
243632001	05-JAN-2010 13:14:57	10	10	1
1202006991 MS (243632001)	05-JAN-2010 13:14:57	10	10	1
1202006992 MSD (243632001)	05-JAN-2010 13:14:57	10	10	1
1202006993 ICS	05-JAN-2010 13:14:57	10	10	1

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1202006993	10 ug/L ICV/CCV Second Source	UCL091201-01.2	.2	mL
LCS	1202006990	10 ug/L ICV/CCV Second Source	UCL091201-01.2	.2	mL
MS	1202006991	10 ug/L ICV/CCV Second Source	UCL091201-01.2	.2	mL
MSD	1202006992	10 ug/L ICV/CCV Second Source	UCL091201-01.2	.2	mL
RGNT	All	O2SI HPLC Grade Water	1233976	10	mL
RGNT	All	500 ppm Carbonate, Bicarbonate, Chloride, Sulfate	1236492	10	mL

Comments:

Desalting cartridges used: 090403-1-Ba & 091029-1-H

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GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 01/06/10
Extr. Injection Volume: 20uL
Sequence Number: per010610a
Initial Calibration Date: 01/06/10

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

Reviewed BY: [illegible]
Date: 01/08/10
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL100104-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0106001a	IPB001	CWW	1/6/2010 15:16			1		USE	B
per0106002a	IPB001	CWW	1/6/2010 15:23			1		USE	B
per0106003a	WCLICAL-01	CWW	1/6/2010 15:30			1		USE	I
per0106004a	WCLICAL-02	CWW	1/6/2010 15:37			1		USE	I
per0106005a	WCLICAL-03	CWW	1/6/2010 15:44			1		USE	I
per0106006a	WCLICAL-04	CWW	1/6/2010 15:52			1		USE	I
per0106007a	WCLICAL-05	CWW	1/6/2010 15:59			1		USE	I
per0106008a	IPB002	CWW	1/6/2010 16:06			1		USE	B
per0106009a	WCLICV	CWW	1/6/2010 16:13			1		USE	C
per0106010a	IPB003	CWW	1/6/2010 16:20			1		USE	B
per0106011a	WCLCRI	CWW	1/6/2010 16:27			1		USE	C
per0106012a	1202006989	CWW	1/6/2010 16:34	937888	VARIOUS	1	LANL	USE	S
per0106013a	1202006990	CWW	1/6/2010 16:41	937888	VARIOUS	1	LANL	USE	S
per0106014a	1202006993	CWW	1/6/2010 16:48	937888	VARIOUS	1	LANL	USE	S
per0106015a	243608001	CWW	1/6/2010 16:55	937888	10-1094	1	LANL	USE	S
per0106016a	243621001	CWW	1/6/2010 17:02	937888	10-1099	1	LANL	USE	S
per0106017a	243627001	CWW	1/6/2010 17:09	937888	10-1101-1	1	LANL	USE	S
per0106018a	243629001	CWW	1/6/2010 17:16	937888	10-1103-1	1	LANL	USE	S
per0106019a	243631001	CWW	1/6/2010 17:23	937888	10-1104	1	LANL	USE	S
per0106020a	WCLCCV	CWW	1/6/2010 17:30			1		USE	C
per0106021a	IPB004	CWW	1/6/2010 17:37			1		USE	B
per0106022a	WCLCRI	CWW	1/6/2010 17:44			1		USE	C
per0106023a	243632001	CWW	1/6/2010 17:51	937888	10-1105	1	LANL	USE	S
per0106024a	1202006991	CWW	1/6/2010 17:58	937888	10-1105	1	LANL	USE	S
per0106025a	1202006992	CWW	1/6/2010 18:05	937888	10-1105	1	LANL	USE	S
per0106026a	IPB005	CWW	1/6/2010 18:12			1		USE	B
per0106027a	1202009604	CWW	1/6/2010 18:19	939084	10-1116	1	LANL	USE	S
per0106028a	1202009605	CWW	1/6/2010 18:27	939084	10-1116	1	LANL	USE	S
per0106029a	1202009608	CWW	1/6/2010 18:34	939084	10-1116	1	LANL	USE	S

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

per0106030a	243819001	CWW	1/6/2010 18:41	939084	10-1116	1	LANL	USE	S
per0106031a	1202009606	CWW	1/6/2010 18:48	939084	10-1116	1	LANL	USE	S
per0106032a	1202009607	CWW	1/6/2010 18:55	939084	10-1116	1	LANL	USE	S
per0106033a	WCLCCV	CWW	1/6/2010 19:02			1		USE	C
per0106034a	IPB006	CWW	1/6/2010 19:09			1		USE	B
per0106035a	WCLCRI	CWW	1/6/2010 19:16			1		USE	C
per0106036a	1202006979	CWW	1/6/2010 19:23	937882	VARIOUS	1	LANL	USE	S
per0106037a	1202006980	CWW	1/6/2010 19:30	937882	VARIOUS	1	LANL	USE	S
per0106038a	1202006983	CWW	1/6/2010 19:37	937882	VARIOUS	1	LANL	USE	S
per0106039a	243623001	CWW	1/6/2010 19:44	937882	10-1099-1	1	LANL	USE	S
per0106040a	243623002	CWW	1/6/2010 19:51	937882	10-1099-1	1	LANL	USE	S
per0106041a	243623003	CWW	1/6/2010 19:58	937882	10-1099-1	1	LANL	USE	S
per0106042a	243623004	CWW	1/6/2010 20:05	937882	10-1099-1	1	LANL	USE	S
per0106043a	243623005	CWW	1/6/2010 20:12	937882	10-1099-1	1	LANL	USE	S
per0106044a	243623006	CWW	1/6/2010 20:19	937882	10-1099-1	1	LANL	USE	S
per0106045a	WCLCCV	CWW	1/6/2010 20:26			1		USE	C
per0106046a	IPB007	CWW	1/6/2010 20:34			1		USE	B
per0106047a	WCLCRI	CWW	1/6/2010 20:41			1		USE	C
per0106048a	243623007	CWW	1/6/2010 20:48	937882	10-1099-1	1	LANL	USE	S
per0106049a	243623008	CWW	1/6/2010 20:55	937882	10-1099-1	1	LANL	USE	S
per0106050a	243623009	CWW	1/6/2010 21:02	937882	10-1099-1	1	LANL	USE	S
per0106051a	243626001	CWW	1/6/2010 21:09	937882	10-1101	1	LANL	USE	S
per0106052a	1202006981	CWW	1/6/2010 21:17	937882	10-1101	1	LANL	USE	S
per0106053a	1202006982	CWW	1/6/2010 21:24	937882	10-1101	1	LANL	USE	S
per0106054a	243626002	CWW	1/6/2010 21:31	937882	10-1101	1	LANL	USE	S
per0106055a	243626003	CWW	1/6/2010 21:38	937882	10-1101	1	LANL	USE	S
per0106056a	WCLCCV	CWW	1/6/2010 21:45			1		USE	C
per0106057a	IPB008	CWW	1/6/2010 21:53			1		USE	B
per0106058a	WCLCRI	CWW	1/6/2010 22:00			1		USE	C
per0106059a	243626004	CWW	1/6/2010 22:07	937882	10-1101	1	LANL	USE	S
per0106060a	243626005	CWW	1/6/2010 22:14	937882	10-1101	1	LANL	USE	S
per0106061a	243626006	CWW	1/6/2010 22:21	937882	10-1101	1	LANL	USE	S
per0106062a	243626007	CWW	1/6/2010 22:28	937882	10-1101	1	LANL	USE	S
per0106063a	243626008	CWW	1/6/2010 22:35	937882	10-1101	1	LANL	USE	S
per0106064a	243626009	CWW	1/6/2010 22:42	937882	10-1101	1	LANL	USE	S
per0106065a	243626010	CWW	1/6/2010 22:49	937882	10-1101	1	LANL	USE	S
per0106066a	243626011	CWW	1/6/2010 22:56	937882	10-1101	1	LANL	USE	S

per0106067a	WCLCCV	CWW	1/6/2010 23:03	1	USE	C
per0106068a	IPB009	CWW	1/6/2010 23:11	1	USE	B
per0106069a	WCLCRI	CWW	1/6/2010 23:18	1	USE	C

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

Dataset: C:\MassLynx\Perchlorate.PRO\per010610a.qld

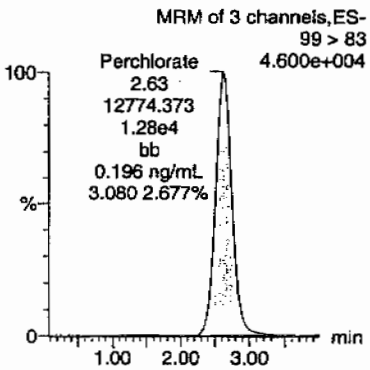
Last Altered: Thursday, January 07, 2010 8:49:32 AM Eastern Standard Time
Printed: Thursday, January 07, 2010 9:05:25 AM Eastern Standard Time

Name: per0106024a
Date: 06-Jan-2010
Time: 17:58:51
ID: 1202006991
Vial: 1:4,D

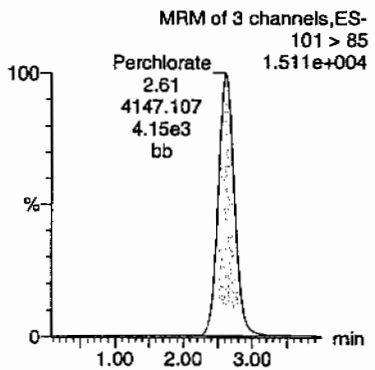
|LANL|937888|LZW|MS|1|

CWW
01-07-10

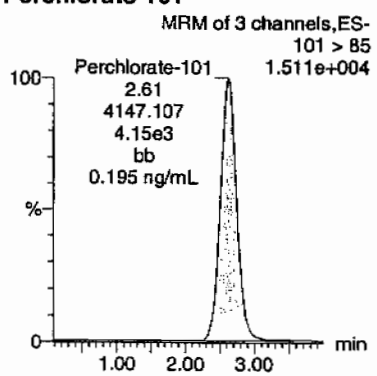
Perchlorate



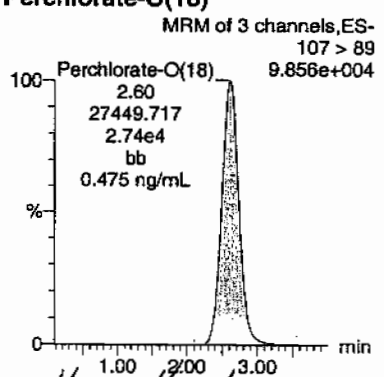
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hnm 1/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202006991	Perchlorate	99 > 83	2.63	12774.373	12774.373	bb			0.1960	97.98	-2.02	5401.3...	3.08
1202006991	Perchlorate-101	101 > 85	2.61	4147.107	4147.107	bb			0.1947	97.36	-2.64	496.291	
1202006991	Perchlorate-O(18)	107 > 89	2.60	27449.717	27449.717	bb			0.4748	94.96	-5.04	4255.4...	

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per010610a.qld

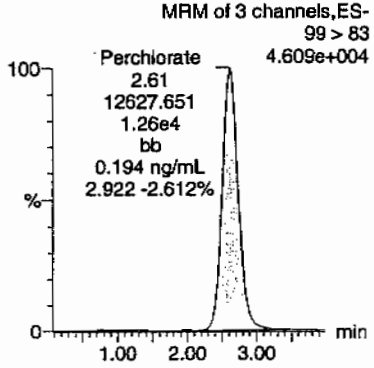
Last Altered: Thursday, January 07, 2010 8:49:32 AM Eastern Standard Time
Printed: Thursday, January 07, 2010 9:05:25 AM Eastern Standard Time

Name: per0106025a
Date: 06-Jan-2010
Time: 18:05:54
ID: 1202006992
Vial: 1:4,E

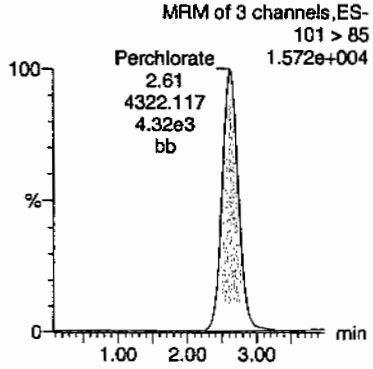
|LANL|937828|LZW|MSO|1|

CWW 01-07-10

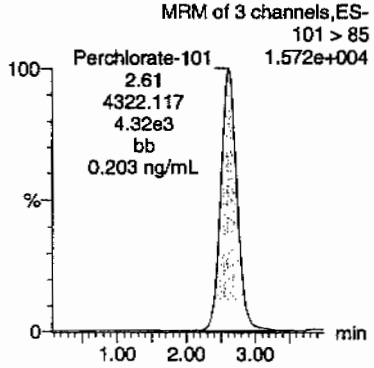
Perchlorate



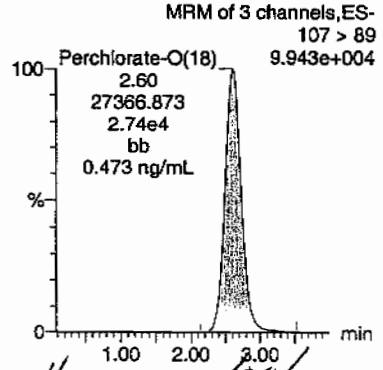
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 01/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202006992	Perchlorate	99 > 83	2.61	12627.651	12627.651	bb			0.1937	96.86	-3.14	1582.1...	2.92
1202006992	Perchlorate-101	101 > 85	2.61	4322.117	4322.117	bb			0.2029	101.46	1.46	2070.1...	
1202006992	Perchlorate-O(18)	107 > 89	2.60	27366.873	27366.873	bb			0.4733	94.67	-5.33	10938....	

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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.

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1103

Sample Analysis

Sample ID	Client ID
243628001	RE12-10-7675
243628002	RE12-10-7663
243628003	RE12-10-7664
243628004	RE12-10-7672
243628005	RE12-10-7667
243628006	RE12-10-7666
243628007	RE12-10-7665
243628008	RE12-10-7670
243628009	RE12-10-7668
243628010	RE12-10-7671
243628011	RE12-10-7669
1202006036	Method Blank (MB) **ICP**
1202006037	Laboratory Control Sample (LCS)
1202006040	243628001(RE12-10-7675L) Serial Dilution (SD)
1202006038	243628001(RE12-10-7675D) Sample Duplicate (DUP)
1202006039	243628001(RE12-10-7675S) Matrix Spike (MS)
1202006041	243628001(RE12-10-7675SD) Matrix Spike Duplicate (MSD)
1202006079	Method Blank (MB) **ICP-MS**
1202006080	Laboratory Control Sample (LCS)
1202006083	243628001(RE12-10-7675L) Serial Dilution (SD)
1202006081	243628001(RE12-10-7675D) Sample Duplicate (DUP)
1202006082	243628001(RE12-10-7675S) Matrix Spike (MS)
1202006084	243628001(RE12-10-7675SD) Matrix Spike Duplicate (MSD)
1202012342	Method Blank (MB) **CVAA**
1202012343	Laboratory Control Sample (LCS)
1202012346	243628001(RE12-10-7675L) Serial Dilution (SD)
1202012344	243628001(RE12-10-7675D) Sample Duplicate (DUP)
1202012345	243628001(RE12-10-7675S) Matrix Spike (MS)
1202012347	243628001(RE12-10-7675SD) Matrix Spike Duplicate (MSD)

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

Method/Analysis Information

Analytical Batch:	937486, 937510 and 940329
Prep Batch :	937485, 937509 and 940327
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 with the exception of mercury 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 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: 243628001 (RE12-10-7675)-ICP, ICP-MS and 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. The MS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of barium, potassium and beryllium as indicated by the "N" qualifiers.

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

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

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

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

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: DER ID 779864 and 780355. 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: Nik-Lee A. Elmore **Date:** 1·28·10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1103 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243628001 **BASIS:** Dry Weight **DATE COLLECTED** 22-DEC-09

CLIENT ID: RE12-10-7675 **LEVEL:** Low **DATE RECEIVED** 29-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	15700000	ug/Kg		7490	22000	22000	1	P	HSC	01/12/10 23:21	011210-1	937486
7440-36-0	Antimony	1100	ug/Kg	U	364	1100	1100	1	P	HSC	01/12/10 23:21	011210-1	937486
7440-38-2	Arsenic	2.09	mg/kg		0.217	1.09	1.09	2	MS	SKJ	01/12/10 23:30	100112-3	937510
7440-39-3	Barium	184000	ug/Kg	N	110	551	551	1	P	HSC	01/12/10 23:21	011210-1	937486
7440-41-7	Beryllium	1.02	mg/kg	N	0.0217	0.109	0.109	2	MS	SKJ	01/12/10 23:30	100112-3	937510
7440-43-9	Cadmium	551	ug/Kg	U	110	551	551	1	P	HSC	01/12/10 23:21	011210-1	937486
7440-70-2	Calcium	2960000	ug/Kg		8820	27600	27600	1	P	HSC	01/12/10 23:21	011210-1	937486
7440-47-3	Chromium	12800	ug/Kg		165	551	551	1	P	HSC	01/12/10 23:21	011210-1	937486
7440-48-4	Cobalt	4380	ug/Kg	*	165	551	551	1	P	HSC	01/12/10 23:21	011210-1	937486
7440-50-8	Copper	7550	ug/Kg		331	1100	1100	1	P	HSC	01/12/10 23:21	011210-1	937486
7439-89-6	Iron	14500000	ug/Kg		8820	27600	27600	1	P	HSC	01/12/10 23:21	011210-1	937486
7439-92-1	Lead	11500	ug/Kg	*	276	1100	1100	1	P	HSC	01/12/10 23:21	011210-1	937486
7439-95-4	Magnesium	2700000	ug/Kg		9370	33100	33100	1	P	HSC	01/12/10 23:21	011210-1	937486
7439-96-5	Manganese	291000	ug/Kg	*	220	1100	1100	1	P	HSC	01/12/10 23:21	011210-1	937486
7439-97-6	Mercury	9.2	ug/kg	J	4.48	13.2	13.2	1	AV	JXL1	01/13/10 10:30	011310S1-5	940329
7440-02-0	Nickel	7.69	mg/kg		0.109	0.435	0.435	2	MS	SKJ	01/12/10 23:30	100112-3	937510
7440-09-7	Potassium	2080000	ug/Kg	N	7050	27600	27600	1	P	HSC	01/12/10 23:21	011210-1	937486
7782-49-2	Selenium	1.09	mg/kg	U	0.544	1.09	1.09	2	MS	SKJ	01/12/10 23:30	100112-3	937510
7440-22-4	Silver	385	ug/Kg	J	110	551	551	1	P	HSC	01/12/10 23:21	011210-1	937486
7440-23-5	Sodium	82400	ug/Kg		7710	27600	27600	1	P	HSC	01/12/10 23:21	011210-1	937486
7440-28-0	Thallium	0.235	mg/kg		0.0652	0.217	0.217	2	MS	SKJ	01/12/10 23:30	100112-3	937510
7440-61-1	Uranium	0.933	mg/kg		0.0143	0.0435	0.0435	2	MS	SKJ	01/12/10 23:30	100112-3	937510
7440-62-2	Vanadium	24200	ug/Kg		110	551	551	1	P	HSC	01/12/10 23:21	011210-1	937486
7440-66-6	Zinc	28700	ug/Kg	E	364	1100	1100	1	P	HSC	01/12/10 23:21	011210-1	937486

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937486	937485	SW846 3050B	0.508	g	50	mL	12/30/09	BXA1
937510	937509	SW846 3050B	0.515	g	50	mL	12/30/09	BXA1
940329	940327	SW846 7471A Prep	0.51	g	30	mL	01/12/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1103 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243628002 **BASIS:** Dry Weight **DATE COLLECTED** 22-DEC-09

CLIENT ID: RE12-10-7663 **LEVEL:** Low **DATE RECEIVED** 29-DEC-09

MATRIX: SOIL **%SOLIDS:** 75

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7360000	ug/Kg		8650	25400	25400	1	P	HSC	01/12/10 23:56	011210-1	937486
7440-36-0	Antimony	3890	ug/Kg		420	1270	1270	1	P	HSC	01/12/10 23:56	011210-1	937486
7440-38-2	Arsenic	1.13	mg/kg	J	0.267	1.33	1.33	2	MS	SKJ	01/13/10 00:14	100112-3	937510
7440-39-3	Barium	121000	ug/Kg	N	127	636	636	1	P	HSC	01/12/10 23:56	011210-1	937486
7440-41-7	Beryllium	0.549	mg/kg	N	0.0267	0.133	0.133	2	MS	SKJ	01/13/10 00:14	100112-3	937510
7440-43-9	Cadmium	636	ug/Kg	U	127	636	636	1	P	HSC	01/12/10 23:56	011210-1	937486
7440-70-2	Calcium	2390000	ug/Kg		10200	31800	31800	1	P	HSC	01/12/10 23:56	011210-1	937486
7440-47-3	Chromium	196000	ug/Kg		191	636	636	1	P	HSC	01/12/10 23:56	011210-1	937486
7440-48-4	Cobalt	5350	ug/Kg	*	191	636	636	1	P	HSC	01/12/10 23:56	011210-1	937486
7440-50-8	Copper	10600	ug/Kg		382	1270	1270	1	P	HSC	01/12/10 23:56	011210-1	937486
7439-89-6	Iron	11100000	ug/Kg		10200	31800	31800	1	P	HSC	01/12/10 23:56	011210-1	937486
7439-92-1	Lead	48200	ug/Kg	*	318	1270	1270	1	P	HSC	01/12/10 23:56	011210-1	937486
7439-95-4	Magnesium	1360000	ug/Kg		10800	38200	38200	1	P	HSC	01/12/10 23:56	011210-1	937486
7439-96-5	Manganese	335000	ug/Kg	*	254	1270	1270	1	P	HSC	01/12/10 23:56	011210-1	937486
7439-97-6	Mercury	15.8	ug/kg	U	5.38	15.8	15.8	1	AV	JXL1	01/13/10 10:40	011310S1-5	940329
7440-02-0	Nickel	11.9	mg/kg		0.133	0.533	0.533	2	MS	SKJ	01/13/10 00:14	100112-3	937510
7440-09-7	Potassium	1020000	ug/Kg	N	8140	31800	31800	1	P	HSC	01/12/10 23:56	011210-1	937486
7782-49-2	Selenium	1.33	mg/kg	U	0.666	1.33	1.33	2	MS	SKJ	01/13/10 00:14	100112-3	937510
7440-22-4	Silver	430	ug/Kg	J	127	636	636	1	P	HSC	01/12/10 23:56	011210-1	937486
7440-23-5	Sodium	123000	ug/Kg		8900	31800	31800	1	P	HSC	01/12/10 23:56	011210-1	937486
7440-28-0	Thallium	0.108	mg/kg	J	0.08	0.267	0.267	2	MS	SKJ	01/13/10 00:14	100112-3	937510
7440-61-1	Uranium	1.62	mg/kg		0.0176	0.0533	0.0533	2	MS	SKJ	01/13/10 00:14	100112-3	937510
7440-62-2	Vanadium	22000	ug/Kg		127	636	636	1	P	HSC	01/12/10 23:56	011210-1	937486
7440-66-6	Zinc	31300	ug/Kg	E	420	1270	1270	1	P	HSC	01/12/10 23:56	011210-1	937486

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937486	937485	SW846 3050B	0.524	g	50	mL	12/30/09	BXA1
937510	937509	SW846 3050B	0.5	g	50	mL	12/30/09	BXA1
940329	940327	SW846 7471A Prep	0.505	g	30	mL	01/12/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1103 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243628003 **BASIS:** Dry Weight **DATE COLLECTED** 22-DEC-09

CLIENT ID: RE12-10-7664 **LEVEL:** Low **DATE RECEIVED** 29-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	10300000	ug/Kg		7430	21900	21900	1	P	HSC	01/13/10 00:03	011210-1	937486
7440-36-0	Antimony	1090	ug/Kg	U	361	1090	1090	1	P	HSC	01/13/10 00:03	011210-1	937486
7440-38-2	Arsenic	2.13	mg/kg		0.217	1.09	1.09	2	MS	SKJ	01/13/10 00:20	100112-3	937510
7440-39-3	Barium	144000	ug/Kg	N	109	546	546	1	P	HSC	01/13/10 00:03	011210-1	937486
7440-41-7	Beryllium	0.914	mg/kg	N	0.0217	0.109	0.109	2	MS	SKJ	01/13/10 00:20	100112-3	937510
7440-43-9	Cadmium	546	ug/Kg	U	109	546	546	1	P	HSC	01/13/10 00:03	011210-1	937486
7440-70-2	Calcium	1720000	ug/Kg		8740	27300	27300	1	P	HSC	01/13/10 00:03	011210-1	937486
7440-47-3	Chromium	8680	ug/Kg		164	546	546	1	P	HSC	01/13/10 00:03	011210-1	937486
7440-48-4	Cobalt	6130	ug/Kg	*	164	546	546	1	P	HSC	01/13/10 00:03	011210-1	937486
7440-50-8	Copper	5590	ug/Kg		328	1090	1090	1	P	HSC	01/13/10 00:03	011210-1	937486
7439-89-6	Iron	10700000	ug/Kg		8740	27300	27300	1	P	HSC	01/13/10 00:03	011210-1	937486
7439-92-1	Lead	9540	ug/Kg	*	273	1090	1090	1	P	HSC	01/13/10 00:03	011210-1	937486
7439-95-4	Magnesium	1580000	ug/Kg		9290	32800	32800	1	P	HSC	01/13/10 00:03	011210-1	937486
7439-96-5	Manganese	323000	ug/Kg	*	219	1090	1090	1	P	HSC	01/13/10 00:03	011210-1	937486
7439-97-6	Mercury	11.8	ug/kg	U	4	11.8	11.8	1	AV	JXL1	01/13/10 10:42	011310S1-5	940329
7440-02-0	Nickel	7.67	mg/kg		0.109	0.434	0.434	2	MS	SKJ	01/13/10 00:20	100112-3	937510
7440-09-7	Potassium	1410000	ug/Kg	N	6990	27300	27300	1	P	HSC	01/13/10 00:03	011210-1	937486
7782-49-2	Selenium	1.09	mg/kg	U	0.543	1.09	1.09	2	MS	SKJ	01/13/10 00:20	100112-3	937510
7440-22-4	Silver	446	ug/Kg	J	109	546	546	1	P	HSC	01/13/10 00:03	011210-1	937486
7440-23-5	Sodium	77200	ug/Kg		7650	27300	27300	1	P	HSC	01/13/10 00:03	011210-1	937486
7440-28-0	Thallium	0.20	mg/kg	J	0.0652	0.217	0.217	2	MS	SKJ	01/13/10 00:20	100112-3	937510
7440-61-1	Uranium	1.38	mg/kg		0.0143	0.0434	0.0434	2	MS	SKJ	01/13/10 00:20	100112-3	937510
7440-62-2	Vanadium	19800	ug/Kg		109	546	546	1	P	HSC	01/13/10 00:03	011210-1	937486
7440-66-6	Zinc	18800	ug/Kg	E	361	1090	1090	1	P	HSC	01/13/10 00:03	011210-1	937486

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937486	937485	SW846 3050B	0.513	g	50	mL	12/30/09	BXA1
937510	937509	SW846 3050B	0.516	g	50	mL	12/30/09	BXA1
940329	940327	SW846 7471A Prep	0.571	g	30	mL	01/12/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1103 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243628004 **BASIS:** Dry Weight **DATE COLLECTED** 22-DEC-09

CLIENT ID: RE12-10-7672 **LEVEL:** Low **DATE RECEIVED** 29-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	13300000	ug/Kg		7670	22500	22500	1	P	HSC	01/13/10 18:53	011310-2	937486
7440-36-0	Antimony	1130	ug/Kg	U	372	1130	1130	1	P	HSC	01/13/10 00:24	011210-1	937486
7440-38-2	Arsenic	2.14	mg/kg		0.222	1.11	1.11	2	MS	SKJ	01/13/10 00:27	100112-3	937510
7440-39-3	Barium	194000	ug/Kg	N	113	564	564	1	P	HSC	01/13/10 00:24	011210-1	937486
7440-41-7	Beryllium	0.903	mg/kg	N	0.0222	0.111	0.111	2	MS	SKJ	01/13/10 00:27	100112-3	937510
7440-43-9	Cadmium	564	ug/Kg	U	113	564	564	1	P	HSC	01/13/10 00:24	011210-1	937486
7440-70-2	Calcium	2270000	ug/Kg		9020	28200	28200	1	P	HSC	01/13/10 18:53	011310-2	937486
7440-47-3	Chromium	10500	ug/Kg		169	564	564	1	P	HSC	01/13/10 00:24	011210-1	937486
7440-48-4	Cobalt	7120	ug/Kg	*	169	564	564	1	P	HSC	01/13/10 00:24	011210-1	937486
7440-50-8	Copper	8890	ug/Kg		338	1130	1130	1	P	HSC	01/13/10 00:24	011210-1	937486
7439-89-6	Iron	14300000	ug/Kg		9020	28200	28200	1	P	HSC	01/13/10 00:24	011210-1	937486
7439-92-1	Lead	12700	ug/Kg	*	282	1130	1130	1	P	HSC	01/13/10 00:24	011210-1	937486
7439-95-4	Magnesium	2160000	ug/Kg		9580	33800	33800	1	P	HSC	01/13/10 18:53	011310-2	937486
7439-96-5	Manganese	445000	ug/Kg	*	225	1130	1130	1	P	HSC	01/13/10 00:24	011210-1	937486
7439-97-6	Mercury	8.28	ug/kg	J	4.21	12.4	12.4	1	AV	JXL1	01/13/10 10:44	011310S1-5	940329
7440-02-0	Nickel	7.2	mg/kg		0.111	0.444	0.444	2	MS	SKJ	01/13/10 00:27	100112-3	937510
7440-09-7	Potassium	1890000	ug/Kg	N	7220	28200	28200	1	P	HSC	01/13/10 00:24	011210-1	937486
7782-49-2	Selenium	1.11	mg/kg	U	0.555	1.11	1.11	2	MS	SKJ	01/13/10 00:27	100112-3	937510
7440-22-4	Silver	457	ug/Kg	J	113	564	564	1	P	HSC	01/13/10 00:24	011210-1	937486
7440-23-5	Sodium	89700	ug/Kg		7890	28200	28200	1	P	HSC	01/13/10 00:24	011210-1	937486
7440-28-0	Thallium	0.211	mg/kg	J	0.0666	0.222	0.222	2	MS	SKJ	01/13/10 00:27	100112-3	937510
7440-61-1	Uranium	0.828	mg/kg		0.0146	0.0444	0.0444	2	MS	SKJ	01/13/10 00:27	100112-3	937510
7440-62-2	Vanadium	26100	ug/Kg		113	564	564	1	P	HSC	01/13/10 00:24	011210-1	937486
7440-66-6	Zinc	27300	ug/Kg	E	372	1130	1130	1	P	HSC	01/13/10 00:24	011210-1	937486

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937486	937485	SW846 3050B	0.502	g	50	mL	12/30/09	BXA1
937510	937509	SW846 3050B	0.51	g	50	mL	12/30/09	BXA1
940329	940327	SW846 7471A Prep	0.549	g	30	mL	01/12/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1103 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243628005 **BASIS:** Dry Weight **DATE COLLECTED** 22-DEC-09

CLIENT ID: RE12-10-7667 **LEVEL:** Low **DATE RECEIVED** 29-DEC-09

MATRIX: SOIL **%SOLIDS:** 83

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11300000	ug/Kg		8180	24000	24000	1	P	HSC	01/13/10 19:00	011310-2	937486
7440-36-0	Antimony	1200	ug/Kg	U	397	1200	1200	1	P	HSC	01/13/10 00:32	011210-1	937486
7440-38-2	Arsenic	1.95	mg/kg		0.23	1.15	1.15	2	MS	SKJ	01/13/10 00:33	100112-3	937510
7440-39-3	Barium	195000	ug/Kg	N	120	601	601	1	P	HSC	01/13/10 00:32	011210-1	937486
7440-41-7	Beryllium	0.852	mg/kg	N	0.023	0.115	0.115	2	MS	SKJ	01/13/10 00:33	100112-3	937510
7440-43-9	Cadmium	502	ug/Kg	J	120	601	601	1	P	HSC	01/13/10 00:32	011210-1	937486
7440-70-2	Calcium	2200000	ug/Kg		9620	30100	30100	1	P	HSC	01/13/10 19:00	011310-2	937486
7440-47-3	Chromium	31000	ug/Kg		180	601	601	1	P	HSC	01/13/10 00:32	011210-1	937486
7440-48-4	Cobalt	6080	ug/Kg	*	180	601	601	1	P	HSC	01/13/10 00:32	011210-1	937486
7440-50-8	Copper	8580	ug/Kg		361	1200	1200	1	P	HSC	01/13/10 00:32	011210-1	937486
7439-89-6	Iron	13100000	ug/Kg		9620	30100	30100	1	P	HSC	01/13/10 00:32	011210-1	937486
7439-92-1	Lead	18800	ug/Kg	*	301	1200	1200	1	P	HSC	01/13/10 00:32	011210-1	937486
7439-95-4	Magnesium	1990000	ug/Kg		10200	36100	36100	1	P	HSC	01/13/10 19:00	011310-2	937486
7439-96-5	Manganese	431000	ug/Kg	*	240	1200	1200	1	P	HSC	01/13/10 00:32	011210-1	937486
7439-97-6	Mercury	-5.27	ug/kg	J	4.58	13.5	13.5	1	AV	JXL1	01/13/10 10:46	011310S1-5	940329
7440-02-0	Nickel	8.03	mg/kg		0.115	0.46	0.46	2	MS	SKJ	01/13/10 00:33	100112-3	937510
7440-09-7	Potassium	1910000	ug/Kg	N	7690	30100	30100	1	P	HSC	01/13/10 00:32	011210-1	937486
7782-49-2	Selenium	1.15	mg/kg	U	0.575	1.15	1.15	2	MS	SKJ	01/13/10 00:33	100112-3	937510
7440-22-4	Silver	360	ug/Kg	J	120	601	601	1	P	HSC	01/13/10 00:32	011210-1	937486
7440-23-5	Sodium	72600	ug/Kg		8420	30100	30100	1	P	HSC	01/13/10 00:32	011210-1	937486
7440-28-0	Thallium	0.196	mg/kg	J	0.069	0.23	0.23	2	MS	SKJ	01/13/10 00:33	100112-3	937510
7440-61-1	Uranium	2.77	mg/kg		0.0152	0.046	0.046	2	MS	SKJ	01/13/10 00:33	100112-3	937510
7440-62-2	Vanadium	26500	ug/Kg		120	601	601	1	P	HSC	01/13/10 00:32	011210-1	937486
7440-66-6	Zinc	34000	ug/Kg	E	397	1200	1200	1	P	HSC	01/13/10 00:32	011210-1	937486

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937486	937485	SW846 3050B	0.502	g	50	mL	12/30/09	BXA1
937510	937509	SW846 3050B	0.525	g	50	mL	12/30/09	BXA1
940329	940327	SW846 7471A Prep	0.538	g	30	mL	01/12/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1103 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243628006 **BASIS:** Dry Weight **DATE COLLECTED** 22-DEC-09

CLIENT ID: RE12-10-7666 **LEVEL:** Low **DATE RECEIVED** 29-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		7360	21600	21600	1	P	HSC	01/13/10 19:07	011310-2	937486
7440-36-0	Antimony	1080	ug/Kg	U	357	1080	1080	1	P	HSC	01/13/10 00:39	011210-1	937486
7440-38-2	Arsenic	2.44	mg/kg		0.216	1.08	1.08	2	MS	SKJ	01/13/10 05:17	100112-4	937510
7440-39-3	Barium	220000	ug/Kg	N	108	541	541	1	P	HSC	01/13/10 00:39	011210-1	937486
7440-41-7	Beryllium	0.972	mg/kg	N	0.0216	0.108	0.108	2	MS	SKJ	01/13/10 00:52	100112-3	937510
7440-43-9	Cadmium	116	ug/Kg	J	108	541	541	1	P	HSC	01/13/10 00:39	011210-1	937486
7440-70-2	Calcium	2540000	ug/Kg		8660	27000	27000	1	P	HSC	01/13/10 19:07	011310-2	937486
7440-47-3	Chromium	13600	ug/Kg		162	541	541	1	P	HSC	01/13/10 00:39	011210-1	937486
7440-48-4	Cobalt	6170	ug/Kg	*	162	541	541	1	P	HSC	01/13/10 00:39	011210-1	937486
7440-50-8	Copper	9180	ug/Kg		325	1080	1080	1	P	HSC	01/13/10 00:39	011210-1	937486
7439-89-6	Iron	15700000	ug/Kg		8660	27000	27000	1	P	HSC	01/13/10 00:39	011210-1	937486
7439-92-1	Lead	15200	ug/Kg	*	270	1080	1080	1	P	HSC	01/13/10 00:39	011210-1	937486
7439-95-4	Magnesium	2590000	ug/Kg		9200	32500	32500	1	P	HSC	01/13/10 19:07	011310-2	937486
7439-96-5	Manganese	386000	ug/Kg	*	216	1080	1080	1	P	HSC	01/13/10 00:39	011210-1	937486
7439-97-6	Mercury	8.99	ug/kg	J	4.35	12.8	12.8	1	AV	JXL1	01/13/10 10:48	011310S1-5	940329
7440-02-0	Nickel	8.32	mg/kg		0.108	0.431	0.431	2	MS	SKJ	01/13/10 00:52	100112-3	937510
7440-09-7	Potassium	2210000	ug/Kg	N	6920	27000	27000	1	P	HSC	01/13/10 00:39	011210-1	937486
7782-49-2	Selenium	1.08	mg/kg	U	0.539	1.08	1.08	2	MS	SKJ	01/13/10 00:52	100112-3	937510
7440-22-4	Silver	142	ug/Kg	J	108	541	541	1	P	HSC	01/13/10 00:39	011210-1	937486
7440-23-5	Sodium	113000	ug/Kg		7570	27000	27000	1	P	HSC	01/13/10 00:39	011210-1	937486
7440-28-0	Thallium	0.252	mg/kg		0.0647	0.216	0.216	2	MS	SKJ	01/13/10 00:52	100112-3	937510
7440-61-1	Uranium	0.994	mg/kg		0.0142	0.0431	0.0431	2	MS	SKJ	01/13/10 00:52	100112-3	937510
7440-62-2	Vanadium	33100	ug/Kg		108	541	541	1	P	HSC	01/13/10 00:39	011210-1	937486
7440-66-6	Zinc	30600	ug/Kg	E	357	1080	1080	1	P	HSC	01/13/10 00:39	011210-1	937486

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937486	937485	SW846 3050B	0.517	g	50	mL	12/30/09	BXA1
937510	937509	SW846 3050B	0.519	g	50	mL	12/30/09	BXA1
940329	940327	SW846 7471A Prep	0.525	g	30	mL	01/12/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1103 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243628007 **BASIS:** Dry Weight **DATE COLLECTED** 22-DEC-09

CLIENT ID: RE12-10-7665 **LEVEL:** Low **DATE RECEIVED** 29-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	14000000	ug/Kg		7310	21500	21500	1	P	HSC	01/13/10 19:14	011310-2	937486
7440-36-0	Antimony	1080	ug/Kg	U	355	1080	1080	1	P	HSC	01/13/10 00:46	011210-1	937486
7440-38-2	Arsenic	2.49	mg/kg		0.219	1.1	1.1	2	MS	SKJ	01/13/10 05:21	100112-4	937510
7440-39-3	Barium	221000	ug/Kg	N	108	538	538	1	P	HSC	01/13/10 00:46	011210-1	937486
7440-41-7	Beryllium	0.847	mg/kg	N	0.0219	0.11	0.11	2	MS	SKJ	01/13/10 00:58	100112-3	937510
7440-43-9	Cadmium	122	ug/Kg	J	108	538	538	1	P	HSC	01/13/10 00:46	011210-1	937486
7440-70-2	Calcium	2510000	ug/Kg		8610	26900	26900	1	P	HSC	01/13/10 19:14	011310-2	937486
7440-47-3	Chromium	15100	ug/Kg		161	538	538	1	P	HSC	01/13/10 00:46	011210-1	937486
7440-48-4	Cobalt	6600	ug/Kg	*	161	538	538	1	P	HSC	01/13/10 00:46	011210-1	937486
7440-50-8	Copper	8090	ug/Kg		323	1080	1080	1	P	HSC	01/13/10 00:46	011210-1	937486
7439-89-6	Iron	14000000	ug/Kg		8610	26900	26900	1	P	HSC	01/13/10 00:46	011210-1	937486
7439-92-1	Lead	15800	ug/Kg	*	269	1080	1080	1	P	HSC	01/13/10 00:46	011210-1	937486
7439-95-4	Magnesium	2160000	ug/Kg		9140	32300	32300	1	P	HSC	01/13/10 19:14	011310-2	937486
7439-96-5	Manganese	484000	ug/Kg	*	215	1080	1080	1	P	HSC	01/13/10 00:46	011210-1	937486
7439-97-6	Mercury	4.97	ug/kg	J	4.38	12.9	12.9	1	AV	JXL1	01/13/10 10:54	011310S1-5	940329
7440-02-0	Nickel	7.42	mg/kg		0.11	0.439	0.439	2	MS	SKJ	01/13/10 00:58	100112-3	937510
7440-09-7	Potassium	2230000	ug/Kg	N	6880	26900	26900	1	P	HSC	01/13/10 00:46	011210-1	937486
7782-49-2	Selenium	1.1	mg/kg	U	0.548	1.1	1.1	2	MS	SKJ	01/13/10 00:58	100112-3	937510
7440-22-4	Silver	278	ug/Kg	J	108	538	538	1	P	HSC	01/13/10 00:46	011210-1	937486
7440-23-5	Sodium	64700	ug/Kg		7530	26900	26900	1	P	HSC	01/13/10 00:46	011210-1	937486
7440-28-0	Thallium	0.193	mg/kg	J	0.0658	0.219	0.219	2	MS	SKJ	01/13/10 00:58	100112-3	937510
7440-61-1	Uranium	1.6	mg/kg		0.0145	0.0439	0.0439	2	MS	SKJ	01/13/10 00:58	100112-3	937510
7440-62-2	Vanadium	28600	ug/Kg		108	538	538	1	P	HSC	01/13/10 00:46	011210-1	937486
7440-66-6	Zinc	27700	ug/Kg	E	355	1080	1080	1	P	HSC	01/13/10 00:46	011210-1	937486

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937486	937485	SW846 3050B	0.525	g	50	mL	12/30/09	BXA1
937510	937509	SW846 3050B	0.515	g	50	mL	12/30/09	BXA1
940329	940327	SW846 7471A Prep	0.526	g	30	mL	01/12/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1103 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243628008 **BASIS:** Dry Weight **DATE COLLECTED** 22-DEC-09

CLIENT ID: RE12-10-7670 **LEVEL:** Low **DATE RECEIVED** 29-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	18000000	ug/Kg		7510	22100	22100	1	P	HSC	01/13/10 19:21	011310-2	937486
7440-36-0	Antimony	1100	ug/Kg	U	365	1100	1100	1	P	HSC	01/13/10 00:53	011210-1	937486
7440-38-2	Arsenic	3.07	mg/kg		0.224	1.12	1.12	2	MS	SKJ	01/13/10 05:25	100112-4	937510
7440-39-3	Barium	223000	ug/Kg	N	110	552	552	1	P	HSC	01/13/10 00:53	011210-1	937486
7440-41-7	Beryllium	1.11	mg/kg	N	0.0224	0.112	0.112	2	MS	SKJ	01/13/10 01:04	100112-3	937510
7440-43-9	Cadmium	552	ug/Kg	U	110	552	552	1	P	HSC	01/13/10 00:53	011210-1	937486
7440-70-2	Calcium	2480000	ug/Kg		8840	27600	27600	1	P	HSC	01/13/10 19:21	011310-2	937486
7440-47-3	Chromium	11700	ug/Kg		166	552	552	1	P	HSC	01/13/10 00:53	011210-1	937486
7440-48-4	Cobalt	6270	ug/Kg	*	166	552	552	1	P	HSC	01/13/10 00:53	011210-1	937486
7440-50-8	Copper	8390	ug/Kg		331	1100	1100	1	P	HSC	01/13/10 00:53	011210-1	937486
7439-89-6	Iron	15400000	ug/Kg		8840	27600	27600	1	P	HSC	01/13/10 00:53	011210-1	937486
7439-92-1	Lead	15800	ug/Kg	*	276	1100	1100	1	P	HSC	01/13/10 00:53	011210-1	937486
7439-95-4	Magnesium	2540000	ug/Kg		9390	33100	33100	1	P	HSC	01/13/10 19:21	011310-2	937486
7439-96-5	Manganese	424000	ug/Kg	*	221	1100	1100	1	P	HSC	01/13/10 00:53	011210-1	937486
7439-97-6	Mercury	8.37	ug/kg	J	4.44	13.1	13.1	1	AV	JXL1	01/13/10 10:56	011310S1-5	940329
7440-02-0	Nickel	8.57	mg/kg		0.112	0.447	0.447	2	MS	SKJ	01/13/10 01:04	100112-3	937510
7440-09-7	Potassium	2280000	ug/Kg	N	7070	27600	27600	1	P	HSC	01/13/10 00:53	011210-1	937486
7782-49-2	Selenium	1.12	mg/kg	U	0.559	1.12	1.12	2	MS	SKJ	01/13/10 01:04	100112-3	937510
7440-22-4	Silver	385	ug/Kg	J	110	552	552	1	P	HSC	01/13/10 00:53	011210-1	937486
7440-23-5	Sodium	132000	ug/Kg		7730	27600	27600	1	P	HSC	01/13/10 00:53	011210-1	937486
7440-28-0	Thallium	0.227	mg/kg		0.0671	0.224	0.224	2	MS	SKJ	01/13/10 01:04	100112-3	937510
7440-61-1	Uranium	1.12	mg/kg		0.0148	0.0447	0.0447	2	MS	SKJ	01/13/10 01:04	100112-3	937510
7440-62-2	Vanadium	30500	ug/Kg		110	552	552	1	P	HSC	01/13/10 00:53	011210-1	937486
7440-66-6	Zinc	30100	ug/Kg	E	365	1100	1100	1	P	HSC	01/13/10 00:53	011210-1	937486

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937486	937485	SW846 3050B	0.511	g	50	mL	12/30/09	BXA1
937510	937509	SW846 3050B	0.505	g	50	mL	12/30/09	BXA1
940329	940327	SW846 7471A Prep	0.519	g	30	mL	01/12/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1103 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243628009 **BASIS:** Dry Weight **DATE COLLECTED** 22-DEC-09

CLIENT ID: RE12-10-7668 **LEVEL:** Low **DATE RECEIVED** 29-DEC-09

MATRIX: SOIL **%SOLIDS:** 90.9

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		7430	21900	21900	1	P	HSC	01/13/10 19:29	011310-2	937486
7440-36-0	Antimony	1090	ug/Kg	U	361	1090	1090	1	P	HSC	01/13/10 01:00	011210-1	937486
7440-38-2	Arsenic	2.53	mg/kg		0.213	1.07	1.07	2	MS	SKJ	01/13/10 05:29	100112-4	937510
7440-39-3	Barium	227000	ug/Kg	N	109	547	547	1	P	HSC	01/13/10 01:00	011210-1	937486
7440-41-7	Beryllium	1.07	mg/kg	N	0.0213	0.107	0.107	2	MS	SKJ	01/13/10 01:10	100112-3	937510
7440-43-9	Cadmium	547	ug/Kg	U	109	547	547	1	P	HSC	01/13/10 01:00	011210-1	937486
7440-70-2	Calcium	2410000	ug/Kg		8740	27300	27300	1	P	HSC	01/13/10 19:29	011310-2	937486
7440-47-3	Chromium	12000	ug/Kg		164	547	547	1	P	HSC	01/13/10 01:00	011210-1	937486
7440-48-4	Cobalt	6630	ug/Kg	*	164	547	547	1	P	HSC	01/13/10 01:00	011210-1	937486
7440-50-8	Copper	8200	ug/Kg		328	1090	1090	1	P	HSC	01/13/10 01:00	011210-1	937486
7439-89-6	Iron	15200000	ug/Kg		8740	27300	27300	1	P	HSC	01/13/10 01:00	011210-1	937486
7439-92-1	Lead	14900	ug/Kg	*	273	1090	1090	1	P	HSC	01/13/10 01:00	011210-1	937486
7439-95-4	Magnesium	2480000	ug/Kg		9290	32800	32800	1	P	HSC	01/13/10 19:29	011310-2	937486
7439-96-5	Manganese	421000	ug/Kg	*	219	1090	1090	1	P	HSC	01/13/10 01:00	011210-1	937486
7439-97-6	Mercury	6.32	ug/kg	J	3.85	11.3	11.3	1	AV	JXL1	01/13/10 10:58	011310S1-5	940329
7440-02-0	Nickel	8.15	mg/kg		0.107	0.426	0.426	2	MS	SKJ	01/13/10 01:10	100112-3	937510
7440-09-7	Potassium	2260000	ug/Kg	N	7000	27300	27300	1	P	HSC	01/13/10 01:00	011210-1	937486
7782-49-2	Selenium	1.07	mg/kg	U	0.533	1.07	1.07	2	MS	SKJ	01/13/10 01:10	100112-3	937510
7440-22-4	Silver	377	ug/Kg	J	109	547	547	1	P	HSC	01/13/10 01:00	011210-1	937486
7440-23-5	Sodium	132000	ug/Kg		7650	27300	27300	1	P	HSC	01/13/10 01:00	011210-1	937486
7440-28-0	Thallium	0.203	mg/kg	J	0.0639	0.213	0.213	2	MS	SKJ	01/13/10 01:10	100112-3	937510
7440-61-1	Uranium	1.02	mg/kg		0.0141	0.0426	0.0426	2	MS	SKJ	01/13/10 01:10	100112-3	937510
7440-62-2	Vanadium	29700	ug/Kg		109	547	547	1	P	HSC	01/13/10 01:00	011210-1	937486
7440-66-6	Zinc	28700	ug/Kg	E	361	1090	1090	1	P	HSC	01/13/10 01:00	011210-1	937486

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937486	937485	SW846 3050B	0.503	g	50	mL	12/30/09	BXA1
937510	937509	SW846 3050B	0.516	g	50	mL	12/30/09	BXA1
940329	940327	SW846 7471A Prep	0.582	g	30	mL	01/12/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1103 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243628010 **BASIS:** Dry Weight **DATE COLLECTED** 22-DEC-09

CLIENT ID: RE12-10-7671 **LEVEL:** Low **DATE RECEIVED** 29-DEC-09

MATRIX: SOIL **%SOLIDS:** 81

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	17500000	ug/Kg		8340	24500	24500	1	P	HSC	01/13/10 19:36	011310-2	937486
7440-36-0	Antimony	1230	ug/Kg	U	405	1230	1230	1	P	HSC	01/13/10 01:07	011210-1	937486
7440-38-2	Arsenic	2.67	mg/kg		0.239	1.2	1.2	2	MS	SKJ	01/13/10 05:34	100112-4	937510
7440-39-3	Barium	227000	ug/Kg	N	123	613	613	1	P	HSC	01/13/10 01:07	011210-1	937486
7440-41-7	Beryllium	1.11	mg/kg	N	0.0239	0.12	0.12	2	MS	SKJ	01/13/10 01:17	100112-3	937510
7440-43-9	Cadmium	613	ug/Kg	U	123	613	613	1	P	HSC	01/13/10 01:07	011210-1	937486
7440-70-2	Calcium	2370000	ug/Kg		9810	30600	30600	1	P	HSC	01/13/10 19:36	011310-2	937486
7440-47-3	Chromium	11800	ug/Kg		184	613	613	1	P	HSC	01/13/10 01:07	011210-1	937486
7440-48-4	Cobalt	5850	ug/Kg	*	184	613	613	1	P	HSC	01/13/10 01:07	011210-1	937486
7440-50-8	Copper	8280	ug/Kg		368	1230	1230	1	P	HSC	01/13/10 01:07	011210-1	937486
7439-89-6	Iron	15800000	ug/Kg		9810	30600	30600	1	P	HSC	01/13/10 01:07	011210-1	937486
7439-92-1	Lead	15600	ug/Kg	*	306	1230	1230	1	P	HSC	01/13/10 01:07	011210-1	937486
7439-95-4	Magnesium	2530000	ug/Kg		10400	36800	36800	1	P	HSC	01/13/10 19:36	011310-2	937486
7439-96-5	Manganese	392000	ug/Kg	*	245	1230	1230	1	P	HSC	01/13/10 01:07	011210-1	937486
7439-97-6	Mercury	5.78	ug/kg	J	4.71	13.9	13.9	1	AV	JXL1	01/13/10 11:00	011310S1-5	940329
7440-02-0	Nickel	8.62	mg/kg		0.12	0.478	0.478	2	MS	SKJ	01/13/10 01:17	100112-3	937510
7440-09-7	Potassium	2260000	ug/Kg	N	7850	30600	30600	1	P	HSC	01/13/10 01:07	011210-1	937486
7782-49-2	Selenium	1.2	mg/kg	U	0.598	1.2	1.2	2	MS	SKJ	01/13/10 01:17	100112-3	937510
7440-22-4	Silver	393	ug/Kg	J	123	613	613	1	P	HSC	01/13/10 01:07	011210-1	937486
7440-23-5	Sodium	128000	ug/Kg		8580	30600	30600	1	P	HSC	01/13/10 01:07	011210-1	937486
7440-28-0	Thallium	0.217	mg/kg	J	0.0717	0.239	0.239	2	MS	SKJ	01/13/10 01:17	100112-3	937510
7440-61-1	Uranium	1.15	mg/kg		0.0158	0.0478	0.0478	2	MS	SKJ	01/13/10 01:17	100112-3	937510
7440-62-2	Vanadium	31300	ug/Kg		123	613	613	1	P	HSC	01/13/10 01:07	011210-1	937486
7440-66-6	Zinc	29200	ug/Kg	E	405	1230	1230	1	P	HSC	01/13/10 01:07	011210-1	937486

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937486	937485	SW846 3050B	0.505	g	50	mL	12/30/09	BXA1
937510	937509	SW846 3050B	0.518	g	50	mL	12/30/09	BXA1
940329	940327	SW846 7471A Prep	0.536	g	30	mL	01/12/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1103 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243628011 **BASIS:** Dry Weight **DATE COLLECTED** 22-DEC-09

CLIENT ID: RE12-10-7669 **LEVEL:** Low **DATE RECEIVED** 29-DEC-09

MATRIX: SOIL **%SOLIDS:** 75

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12800000	ug/Kg		8990	26400	26400	1	P	HSC	01/13/10 19:43	011310-2	937486
7440-36-0	Antimony	1320	ug/Kg	U	436	1320	1320	1	P	HSC	01/13/10 01:14	011210-1	937486
7440-38-2	Arsenic	2.14	mg/kg		0.254	1.27	1.27	2	MS	SKJ	01/13/10 05:38	100112-4	937510
7440-39-3	Barium	207000	ug/Kg	N	132	661	661	1	P	HSC	01/13/10 01:14	011210-1	937486
7440-41-7	Beryllium	0.752	mg/kg	N	0.0254	0.127	0.127	2	MS	SKJ	01/13/10 01:23	100112-3	937510
7440-43-9	Cadmium	661	ug/Kg	U	132	661	661	1	P	HSC	01/13/10 01:14	011210-1	937486
7440-70-2	Calcium	2900000	ug/Kg		10600	33100	33100	1	P	HSC	01/13/10 19:43	011310-2	937486
7440-47-3	Chromium	39000	ug/Kg		198	661	661	1	P	HSC	01/13/10 01:14	011210-1	937486
7440-48-4	Cobalt	6080	ug/Kg	*	198	661	661	1	P	HSC	01/13/10 01:14	011210-1	937486
7440-50-8	Copper	8080	ug/Kg		397	1320	1320	1	P	HSC	01/13/10 01:14	011210-1	937486
7439-89-6	Iron	13500000	ug/Kg		10600	33100	33100	1	P	HSC	01/13/10 01:14	011210-1	937486
7439-92-1	Lead	14800	ug/Kg	*	331	1320	1320	1	P	HSC	01/13/10 01:14	011210-1	937486
7439-95-4	Magnesium	2130000	ug/Kg		11200	39700	39700	1	P	HSC	01/13/10 19:43	011310-2	937486
7439-96-5	Manganese	439000	ug/Kg	*	264	1320	1320	1	P	HSC	01/13/10 01:14	011210-1	937486
7439-97-6	Mercury	14.4	ug/kg	U	4.91	14.4	14.4	1	AV	JXL1	01/13/10 11:02	011310S1-5	940329
7440-02-0	Nickel	8.18	mg/kg		0.127	0.509	0.509	2	MS	SKJ	01/13/10 01:23	100112-3	937510
7440-09-7	Potassium	2580000	ug/Kg	N	8460	33100	33100	1	P	HSC	01/13/10 01:14	011210-1	937486
7782-49-2	Selenium	1.27	mg/kg	U	0.636	1.27	1.27	2	MS	SKJ	01/13/10 01:23	100112-3	937510
7440-22-4	Silver	398	ug/Kg	J	132	661	661	1	P	HSC	01/13/10 01:14	011210-1	937486
7440-23-5	Sodium	62800	ug/Kg		9260	33100	33100	1	P	HSC	01/13/10 01:14	011210-1	937486
7440-28-0	Thallium	0.156	mg/kg	J	0.0763	0.254	0.254	2	MS	SKJ	01/13/10 01:23	100112-3	937510
7440-61-1	Uranium	2.16	mg/kg		0.0168	0.0509	0.0509	2	MS	SKJ	01/13/10 01:23	100112-3	937510
7440-62-2	Vanadium	27300	ug/Kg		132	661	661	1	P	HSC	01/13/10 01:14	011210-1	937486
7440-66-6	Zinc	28200	ug/Kg	E	436	1320	1320	1	P	HSC	01/13/10 01:14	011210-1	937486

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937486	937485	SW846 3050B	0.503	g	50	mL	12/30/09	BXA1
937510	937509	SW846 3050B	0.523	g	50	mL	12/30/09	BXA1
940329	940327	SW846 7471A Prep	0.553	g	30	mL	01/12/10	TXB3

Quality Control Summary

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–1103

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	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Antimony	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Barium	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Cadmium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Calcium	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Chromium	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Cobalt	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Copper	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Iron	5130	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Lead	495	ug/L	500	ug/L	99	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Magnesium	5260	ug/L	5000	ug/L	105.3	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Manganese	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Potassium	2450	ug/L	2500	ug/L	98	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Silver	259	ug/L	250	ug/L	103.6	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Sodium	2480	ug/L	2500	ug/L	99.1	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Vanadium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Zinc	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Arsenic	48.1	ug/L	50	ug/L	96.1	90.0 – 110.0	MS	12–JAN–10 19:52	100112–3
	Beryllium	50.2	ug/L	50	ug/L	100.5	90.0 – 110.0	MS	12–JAN–10 19:52	100112–3
	Nickel	51.2	ug/L	50	ug/L	102.3	90.0 – 110.0	MS	12–JAN–10 19:52	100112–3
	Selenium	49.9	ug/L	50	ug/L	99.8	90.0 – 110.0	MS	12–JAN–10 19:52	100112–3
	Thallium	49.2	ug/L	50	ug/L	98.5	90.0 – 110.0	MS	12–JAN–10 19:52	100112–3
	Uranium	53.4	ug/L	50	ug/L	106.9	90.0 – 110.0	MS	12–JAN–10 19:52	100112–3
	Arsenic	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	13–JAN–10 02:00	100112–4
	Mercury	5.12	ug/L	5	ug/L	102.4	90.0 – 110.0	AV	13–JAN–10 09:56	011310S1–5
	Aluminum	5100	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	13–JAN–10 12:15	011310–2
	Calcium	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	13–JAN–10 12:15	011310–2
	Magnesium	5430	ug/L	5000	ug/L	108.6	90.0 – 110.0	P	13–JAN–10 12:15	011310–2
CCV01										
	Aluminum	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	12–JAN–10 13:47	011210–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–1103

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	526	ug/L	500	ug/L	105.2	90.0 – 110.0	P	12–JAN–10 13:47	011210–1
	Barium	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	12–JAN–10 13:47	011210–1
	Cadmium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	12–JAN–10 13:47	011210–1
	Calcium	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	12–JAN–10 13:47	011210–1
	Chromium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	12–JAN–10 13:47	011210–1
	Cobalt	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	12–JAN–10 13:47	011210–1
	Copper	495	ug/L	500	ug/L	99	90.0 – 110.0	P	12–JAN–10 13:47	011210–1
	Iron	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	12–JAN–10 13:47	011210–1
	Lead	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	12–JAN–10 13:47	011210–1
	Magnesium	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	12–JAN–10 13:47	011210–1
	Manganese	500	ug/L	500	ug/L	100	90.0 – 110.0	P	12–JAN–10 13:47	011210–1
	Potassium	5330	ug/L	5000	ug/L	106.5	90.0 – 110.0	P	12–JAN–10 13:47	011210–1
	Silver	505	ug/L	500	ug/L	101	90.0 – 110.0	P	12–JAN–10 13:47	011210–1
	Sodium	9680	ug/L	10000	ug/L	96.8	90.0 – 110.0	P	12–JAN–10 13:47	011210–1
	Vanadium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	12–JAN–10 13:47	011210–1
	Zinc	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	12–JAN–10 13:47	011210–1
	Arsenic	48	ug/L	50	ug/L	96	90.0 – 110.0	MS	12–JAN–10 20:23	100112–3
	Beryllium	50.2	ug/L	50	ug/L	100.3	90.0 – 110.0	MS	12–JAN–10 20:23	100112–3
	Nickel	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	12–JAN–10 20:23	100112–3
	Selenium	48.9	ug/L	50	ug/L	97.8	90.0 – 110.0	MS	12–JAN–10 20:23	100112–3
	Thallium	48.6	ug/L	50	ug/L	97.1	90.0 – 110.0	MS	12–JAN–10 20:23	100112–3
	Uranium	52.3	ug/L	50	ug/L	104.6	90.0 – 110.0	MS	12–JAN–10 20:23	100112–3
	Arsenic	52.1	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	13–JAN–10 02:20	100112–4
	Mercury	5.06	ug/L	5	ug/L	101.2	80.0 – 120.0	AV	13–JAN–10 10:02	011310S1–5
	Aluminum	4900	ug/L	5000	ug/L	98	90.0 – 110.0	P	13–JAN–10 13:15	011310–2
	Calcium	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	13–JAN–10 13:15	011310–2
	Magnesium	5190	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	13–JAN–10 13:15	011310–2
CCV02										
	Aluminum	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	12–JAN–10 14:19	011210–1
	Antimony	518	ug/L	500	ug/L	103.6	90.0 – 110.0	P	12–JAN–10 14:19	011210–1

METALS
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Initial and Continuing Calibration Verification

SDG No: 10-1103

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	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	12-JAN-10 14:19	011210-1
	Cadmium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	12-JAN-10 14:19	011210-1
	Calcium	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	12-JAN-10 14:19	011210-1
	Chromium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	12-JAN-10 14:19	011210-1
	Cobalt	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	12-JAN-10 14:19	011210-1
	Copper	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	12-JAN-10 14:19	011210-1
	Iron	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	12-JAN-10 14:19	011210-1
	Lead	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	12-JAN-10 14:19	011210-1
	Magnesium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	12-JAN-10 14:19	011210-1
	Manganese	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	12-JAN-10 14:19	011210-1
	Potassium	4990	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	12-JAN-10 14:19	011210-1
	Silver	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	12-JAN-10 14:19	011210-1
	Sodium	9800	ug/L	10000	ug/L	98	90.0 – 110.0	P	12-JAN-10 14:19	011210-1
	Vanadium	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	12-JAN-10 14:19	011210-1
	Zinc	505	ug/L	500	ug/L	101	90.0 – 110.0	P	12-JAN-10 14:19	011210-1
	Arsenic	48.3	ug/L	50	ug/L	96.6	90.0 – 110.0	MS	12-JAN-10 20:42	100112-3
	Beryllium	50.6	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	12-JAN-10 20:42	100112-3
	Nickel	52.5	ug/L	50	ug/L	105.1	90.0 – 110.0	MS	12-JAN-10 20:42	100112-3
	Selenium	49.7	ug/L	50	ug/L	99.3	90.0 – 110.0	MS	12-JAN-10 20:42	100112-3
	Thallium	49.8	ug/L	50	ug/L	99.5	90.0 – 110.0	MS	12-JAN-10 20:42	100112-3
	Uranium	54.1	ug/L	50	ug/L	108.2	90.0 – 110.0	MS	12-JAN-10 20:42	100112-3
	Arsenic	51.3	ug/L	50	ug/L	102.7	90.0 – 110.0	MS	13-JAN-10 02:32	100112-4
	Mercury	4.98	ug/L	5	ug/L	99.5	80.0 – 120.0	AV	13-JAN-10 10:26	011310S1-5
	Aluminum	4910	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	13-JAN-10 13:36	011310-2
	Calcium	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	13-JAN-10 13:36	011310-2
	Magnesium	5110	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	13-JAN-10 13:36	011310-2
CCV03										
	Aluminum	5120	ug/L	5000	ug/L	102.4	90.0 – 110.0	P	12-JAN-10 15:14	011210-1
	Antimony	518	ug/L	500	ug/L	103.5	90.0 – 110.0	P	12-JAN-10 15:14	011210-1
	Barium	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	12-JAN-10 15:14	011210-1

METALS
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Initial and Continuing Calibration Verification

SDG No: 10–1103

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	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Calcium	5090	ug/L	5000	ug/L	101.9	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Chromium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Cobalt	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Copper	500	ug/L	500	ug/L	100	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Iron	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Lead	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Magnesium	5080	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Manganese	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Potassium	4970	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Silver	510	ug/L	500	ug/L	102	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Sodium	9310	ug/L	10000	ug/L	93.1	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Vanadium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Zinc	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Arsenic	47.7	ug/L	50	ug/L	95.4	90.0 – 110.0	MS	12–JAN–10 21:26	100112–3
	Beryllium	49.9	ug/L	50	ug/L	99.8	90.0 – 110.0	MS	12–JAN–10 21:26	100112–3
	Nickel	52.3	ug/L	50	ug/L	104.6	90.0 – 110.0	MS	12–JAN–10 21:26	100112–3
	Selenium	49.4	ug/L	50	ug/L	98.8	90.0 – 110.0	MS	12–JAN–10 21:26	100112–3
	Thallium	48.6	ug/L	50	ug/L	97.2	90.0 – 110.0	MS	12–JAN–10 21:26	100112–3
	Uranium	53	ug/L	50	ug/L	106	90.0 – 110.0	MS	12–JAN–10 21:26	100112–3
	Arsenic	53	ug/L	50	ug/L	105.9	90.0 – 110.0	MS	13–JAN–10 03:01	100112–4
	Mercury	5.22	ug/L	5	ug/L	104.4	80.0 – 120.0	AV	13–JAN–10 10:50	011310S1–5
	Aluminum	4930	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	13–JAN–10 14:37	011310–2
	Calcium	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	13–JAN–10 14:37	011310–2
	Magnesium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	13–JAN–10 14:37	011310–2
CCV04										
	Aluminum	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Antimony	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Barium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Cadmium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	12–JAN–10 16:37	011210–1

METALS
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Initial and Continuing Calibration Verification

SDG No: 10–1103

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
	Calcium	5130	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Chromium	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Cobalt	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Copper	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Iron	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Lead	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Magnesium	5250	ug/L	5000	ug/L	105	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Manganese	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Potassium	5010	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Silver	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Sodium	9530	ug/L	10000	ug/L	95.3	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Vanadium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Zinc	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Arsenic	47.9	ug/L	50	ug/L	95.8	90.0 – 110.0	MS	12–JAN–10 22:16	100112–3
	Beryllium	50	ug/L	50	ug/L	100	90.0 – 110.0	MS	12–JAN–10 22:16	100112–3
	Nickel	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	12–JAN–10 22:16	100112–3
	Selenium	47.8	ug/L	50	ug/L	95.5	90.0 – 110.0	MS	12–JAN–10 22:16	100112–3
	Thallium	48.6	ug/L	50	ug/L	97.1	90.0 – 110.0	MS	12–JAN–10 22:16	100112–3
	Uranium	53.3	ug/L	50	ug/L	106.7	90.0 – 110.0	MS	12–JAN–10 22:16	100112–3
	Arsenic	51	ug/L	50	ug/L	102.1	90.0 – 110.0	MS	13–JAN–10 03:34	100112–4
	Mercury	5.38	ug/L	5	ug/L	107.6	80.0 – 120.0	AV	13–JAN–10 11:14	011310S1–5
	Aluminum	4910	ug/L	5000	ug/L	98.2	90.0 – 110.0	P	13–JAN–10 15:05	011310–2
	Calcium	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	13–JAN–10 15:05	011310–2
	Magnesium	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	13–JAN–10 15:05	011310–2
CCV05										
	Aluminum	5180	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	12–JAN–10 17:33	011210–1
	Antimony	521	ug/L	500	ug/L	104.3	90.0 – 110.0	P	12–JAN–10 17:33	011210–1
	Barium	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	12–JAN–10 17:33	011210–1
	Cadmium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	12–JAN–10 17:33	011210–1
	Calcium	5220	ug/L	5000	ug/L	104.5	90.0 – 110.0	P	12–JAN–10 17:33	011210–1

METALS
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Initial and Continuing Calibration Verification

SDG No: 10–1103

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
	Chromium	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	12–JAN–10 17:33	011210–1
	Cobalt	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	12–JAN–10 17:33	011210–1
	Copper	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	12–JAN–10 17:33	011210–1
	Iron	5210	ug/L	5000	ug/L	104.2	90.0 – 110.0	P	12–JAN–10 17:33	011210–1
	Lead	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	12–JAN–10 17:33	011210–1
	Magnesium	5340	ug/L	5000	ug/L	106.7	90.0 – 110.0	P	12–JAN–10 17:33	011210–1
	Manganese	510	ug/L	500	ug/L	102	90.0 – 110.0	P	12–JAN–10 17:33	011210–1
	Potassium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	12–JAN–10 17:33	011210–1
	Silver	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	12–JAN–10 17:33	011210–1
	Sodium	9710	ug/L	10000	ug/L	97.1	90.0 – 110.0	P	12–JAN–10 17:33	011210–1
	Vanadium	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	12–JAN–10 17:33	011210–1
	Zinc	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	12–JAN–10 17:33	011210–1
	Arsenic	48.3	ug/L	50	ug/L	96.6	90.0 – 110.0	MS	12–JAN–10 23:05	100112–3
	Beryllium	49.2	ug/L	50	ug/L	98.5	90.0 – 110.0	MS	12–JAN–10 23:05	100112–3
	Nickel	52.8	ug/L	50	ug/L	105.7	90.0 – 110.0	MS	12–JAN–10 23:05	100112–3
	Selenium	47.8	ug/L	50	ug/L	95.6	90.0 – 110.0	MS	12–JAN–10 23:05	100112–3
	Thallium	48.4	ug/L	50	ug/L	96.8	90.0 – 110.0	MS	12–JAN–10 23:05	100112–3
	Uranium	53.3	ug/L	50	ug/L	106.7	90.0 – 110.0	MS	12–JAN–10 23:05	100112–3
	Arsenic	52.3	ug/L	50	ug/L	104.5	90.0 – 110.0	MS	13–JAN–10 04:07	100112–4
	Aluminum	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	13–JAN–10 16:00	011310–2
	Calcium	5010	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	13–JAN–10 16:00	011310–2
	Magnesium	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	13–JAN–10 16:00	011310–2
CCV06										
	Aluminum	5190	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	12–JAN–10 18:21	011210–1
	Antimony	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	12–JAN–10 18:21	011210–1
	Barium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	12–JAN–10 18:21	011210–1
	Cadmium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	12–JAN–10 18:21	011210–1
	Calcium	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	12–JAN–10 18:21	011210–1
	Chromium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	12–JAN–10 18:21	011210–1
	Cobalt	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	12–JAN–10 18:21	011210–1

METALS
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Initial and Continuing Calibration Verification

SDG No: 10–1103

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
	Copper	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	12–JAN–10 18:21	011210–1
	Iron	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	12–JAN–10 18:21	011210–1
	Lead	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	12–JAN–10 18:21	011210–1
	Magnesium	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	12–JAN–10 18:21	011210–1
	Manganese	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	12–JAN–10 18:21	011210–1
	Potassium	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	12–JAN–10 18:21	011210–1
	Silver	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	12–JAN–10 18:21	011210–1
	Sodium	9850	ug/L	10000	ug/L	98.5	90.0 – 110.0	P	12–JAN–10 18:21	011210–1
	Vanadium	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	12–JAN–10 18:21	011210–1
	Zinc	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	12–JAN–10 18:21	011210–1
	Arsenic	48.8	ug/L	50	ug/L	97.5	90.0 – 110.0	MS	12–JAN–10 23:49	100112–3
	Beryllium	48.3	ug/L	50	ug/L	96.5	90.0 – 110.0	MS	12–JAN–10 23:49	100112–3
	Nickel	53	ug/L	50	ug/L	106	90.0 – 110.0	MS	12–JAN–10 23:49	100112–3
	Selenium	48.1	ug/L	50	ug/L	96.3	90.0 – 110.0	MS	12–JAN–10 23:49	100112–3
	Thallium	48.5	ug/L	50	ug/L	97.1	90.0 – 110.0	MS	12–JAN–10 23:49	100112–3
	Uranium	53.5	ug/L	50	ug/L	106.9	90.0 – 110.0	MS	12–JAN–10 23:49	100112–3
	Arsenic	51.9	ug/L	50	ug/L	103.8	90.0 – 110.0	MS	13–JAN–10 04:36	100112–4
	Aluminum	5060	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	13–JAN–10 17:31	011310–2
	Calcium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	13–JAN–10 17:31	011310–2
	Magnesium	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	13–JAN–10 17:31	011310–2
CCV07										
	Aluminum	5080	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	12–JAN–10 19:17	011210–1
	Antimony	513	ug/L	500	ug/L	102.5	90.0 – 110.0	P	12–JAN–10 19:17	011210–1
	Barium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	12–JAN–10 19:17	011210–1
	Cadmium	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	12–JAN–10 19:17	011210–1
	Calcium	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	12–JAN–10 19:17	011210–1
	Chromium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	12–JAN–10 19:17	011210–1
	Cobalt	505	ug/L	500	ug/L	101	90.0 – 110.0	P	12–JAN–10 19:17	011210–1
	Copper	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	12–JAN–10 19:17	011210–1
	Iron	5100	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	12–JAN–10 19:17	011210–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–1103

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
	Lead	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	12–JAN–10 19:17	011210–1
	Magnesium	5230	ug/L	5000	ug/L	104.5	90.0 – 110.0	P	12–JAN–10 19:17	011210–1
	Manganese	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	12–JAN–10 19:17	011210–1
	Potassium	4860	ug/L	5000	ug/L	97.3	90.0 – 110.0	P	12–JAN–10 19:17	011210–1
	Silver	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	12–JAN–10 19:17	011210–1
	Sodium	9500	ug/L	10000	ug/L	95	90.0 – 110.0	P	12–JAN–10 19:17	011210–1
	Vanadium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	12–JAN–10 19:17	011210–1
	Zinc	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	12–JAN–10 19:17	011210–1
	Arsenic	48.5	ug/L	50	ug/L	96.9	90.0 – 110.0	MS	13–JAN–10 00:39	100112–3
	Beryllium	49.1	ug/L	50	ug/L	98.2	90.0 – 110.0	MS	13–JAN–10 00:39	100112–3
	Nickel	52.8	ug/L	50	ug/L	105.7	90.0 – 110.0	MS	13–JAN–10 00:39	100112–3
	Selenium	50.4	ug/L	50	ug/L	100.7	90.0 – 110.0	MS	13–JAN–10 00:39	100112–3
	Thallium	48.8	ug/L	50	ug/L	97.5	90.0 – 110.0	MS	13–JAN–10 00:39	100112–3
	Uranium	54.9	ug/L	50	ug/L	109.8	90.0 – 110.0	MS	13–JAN–10 00:39	100112–3
	Arsenic	52.7	ug/L	50	ug/L	105.4	90.0 – 110.0	MS	13–JAN–10 05:09	100112–4
	Aluminum	4990	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	13–JAN–10 18:32	011310–2
	Calcium	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	13–JAN–10 18:32	011310–2
	Magnesium	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	13–JAN–10 18:32	011310–2
CCV08										
	Aluminum	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	12–JAN–10 20:26	011210–1
	Antimony	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	12–JAN–10 20:26	011210–1
	Barium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	12–JAN–10 20:26	011210–1
	Cadmium	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	12–JAN–10 20:26	011210–1
	Calcium	5070	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	12–JAN–10 20:26	011210–1
	Chromium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	12–JAN–10 20:26	011210–1
	Cobalt	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	12–JAN–10 20:26	011210–1
	Copper	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	12–JAN–10 20:26	011210–1
	Iron	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	12–JAN–10 20:26	011210–1
	Lead	500	ug/L	500	ug/L	100	90.0 – 110.0	P	12–JAN–10 20:26	011210–1
	Magnesium	5170	ug/L	5000	ug/L	103.4	90.0 – 110.0	P	12–JAN–10 20:26	011210–1

METALS
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Initial and Continuing Calibration Verification

SDG No: 10–1103

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
	Manganese	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	12–JAN–10 20:26	011210–1
	Potassium	4790	ug/L	5000	ug/L	95.8	90.0 – 110.0	P	12–JAN–10 20:26	011210–1
	Silver	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	12–JAN–10 20:26	011210–1
	Sodium	9480	ug/L	10000	ug/L	94.9	90.0 – 110.0	P	12–JAN–10 20:26	011210–1
	Vanadium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	12–JAN–10 20:26	011210–1
	Zinc	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	12–JAN–10 20:26	011210–1
	Arsenic	44.3	ug/L	50	ug/L	88.6	90.0 – 110.0	MS	13–JAN–10 01:29	100112–3
	Beryllium	45.9	ug/L	50	ug/L	91.7	90.0 – 110.0	MS	13–JAN–10 01:29	100112–3
	Nickel	48.6	ug/L	50	ug/L	97.3	90.0 – 110.0	MS	13–JAN–10 01:29	100112–3
	Selenium	46.3	ug/L	50	ug/L	92.7	90.0 – 110.0	MS	13–JAN–10 01:29	100112–3
	Thallium	46.8	ug/L	50	ug/L	93.7	90.0 – 110.0	MS	13–JAN–10 01:29	100112–3
	Uranium	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	13–JAN–10 01:29	100112–3
	Arsenic	51.6	ug/L	50	ug/L	103.2	90.0 – 110.0	MS	13–JAN–10 05:42	100112–4
	Aluminum	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	13–JAN–10 19:50	011310–2
	Calcium	5110	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	13–JAN–10 19:50	011310–2
	Magnesium	5260	ug/L	5000	ug/L	105.2	90.0 – 110.0	P	13–JAN–10 19:50	011310–2
CCV09										
	Aluminum	5170	ug/L	5000	ug/L	103.3	90.0 – 110.0	P	12–JAN–10 21:43	011210–1
	Antimony	518	ug/L	500	ug/L	103.5	90.0 – 110.0	P	12–JAN–10 21:43	011210–1
	Barium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	12–JAN–10 21:43	011210–1
	Cadmium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	12–JAN–10 21:43	011210–1
	Calcium	5130	ug/L	5000	ug/L	102.5	90.0 – 110.0	P	12–JAN–10 21:43	011210–1
	Chromium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	12–JAN–10 21:43	011210–1
	Cobalt	505	ug/L	500	ug/L	101	90.0 – 110.0	P	12–JAN–10 21:43	011210–1
	Copper	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	12–JAN–10 21:43	011210–1
	Iron	5180	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	12–JAN–10 21:43	011210–1
	Lead	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	12–JAN–10 21:43	011210–1
	Magnesium	5270	ug/L	5000	ug/L	105.5	90.0 – 110.0	P	12–JAN–10 21:43	011210–1
	Manganese	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	12–JAN–10 21:43	011210–1
	Potassium	4930	ug/L	5000	ug/L	98.5	90.0 – 110.0	P	12–JAN–10 21:43	011210–1

METALS
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Initial and Continuing Calibration Verification

SDG No: 10–1103

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
	Silver	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	12–JAN–10 21:43	011210–1
	Sodium	9850	ug/L	10000	ug/L	98.5	90.0 – 110.0	P	12–JAN–10 21:43	011210–1
	Vanadium	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	12–JAN–10 21:43	011210–1
	Zinc	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	12–JAN–10 21:43	011210–1
CCV10										
	Aluminum	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	12–JAN–10 22:54	011210–1
	Antimony	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	12–JAN–10 22:54	011210–1
	Barium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	12–JAN–10 22:54	011210–1
	Cadmium	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	12–JAN–10 22:54	011210–1
	Calcium	5090	ug/L	5000	ug/L	101.9	90.0 – 110.0	P	12–JAN–10 22:54	011210–1
	Chromium	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	12–JAN–10 22:54	011210–1
	Cobalt	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	12–JAN–10 22:54	011210–1
	Copper	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	12–JAN–10 22:54	011210–1
	Iron	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	12–JAN–10 22:54	011210–1
	Lead	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	12–JAN–10 22:54	011210–1
	Magnesium	5210	ug/L	5000	ug/L	104.2	90.0 – 110.0	P	12–JAN–10 22:54	011210–1
	Manganese	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	12–JAN–10 22:54	011210–1
	Potassium	4920	ug/L	5000	ug/L	98.4	90.0 – 110.0	P	12–JAN–10 22:54	011210–1
	Silver	505	ug/L	500	ug/L	101	90.0 – 110.0	P	12–JAN–10 22:54	011210–1
	Sodium	9510	ug/L	10000	ug/L	95.1	90.0 – 110.0	P	12–JAN–10 22:54	011210–1
	Vanadium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	12–JAN–10 22:54	011210–1
	Zinc	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	12–JAN–10 22:54	011210–1
CCV11										
	Aluminum	5180	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	13–JAN–10 00:11	011210–1
	Antimony	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	13–JAN–10 00:11	011210–1
	Barium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	13–JAN–10 00:11	011210–1
	Cadmium	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	13–JAN–10 00:11	011210–1
	Calcium	5160	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	13–JAN–10 00:11	011210–1
	Chromium	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	13–JAN–10 00:11	011210–1
	Cobalt	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	13–JAN–10 00:11	011210–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–1103

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
	Copper	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	13–JAN–10 00:11	011210–1
	Iron	5100	ug/L	5000	ug/L	102	90.0 – 110.0	P	13–JAN–10 00:11	011210–1
	Lead	500	ug/L	500	ug/L	100	90.0 – 110.0	P	13–JAN–10 00:11	011210–1
	Magnesium	5300	ug/L	5000	ug/L	106.1	90.0 – 110.0	P	13–JAN–10 00:11	011210–1
	Manganese	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	13–JAN–10 00:11	011210–1
	Potassium	4910	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	13–JAN–10 00:11	011210–1
	Silver	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	13–JAN–10 00:11	011210–1
	Sodium	9430	ug/L	10000	ug/L	94.3	90.0 – 110.0	P	13–JAN–10 00:11	011210–1
	Vanadium	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	13–JAN–10 00:11	011210–1
	Zinc	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	13–JAN–10 00:11	011210–1
CCV12										
	Aluminum	5580	ug/L	5000	ug/L	111.7	90.0 – 110.0	P	13–JAN–10 01:21	011210–1
	Antimony	548	ug/L	500	ug/L	109.5	90.0 – 110.0	P	13–JAN–10 01:21	011210–1
	Barium	536	ug/L	500	ug/L	107.3	90.0 – 110.0	P	13–JAN–10 01:21	011210–1
	Cadmium	538	ug/L	500	ug/L	107.5	90.0 – 110.0	P	13–JAN–10 01:21	011210–1
	Calcium	5540	ug/L	5000	ug/L	110.8	90.0 – 110.0	P	13–JAN–10 01:21	011210–1
	Chromium	538	ug/L	500	ug/L	107.6	90.0 – 110.0	P	13–JAN–10 01:21	011210–1
	Cobalt	538	ug/L	500	ug/L	107.6	90.0 – 110.0	P	13–JAN–10 01:21	011210–1
	Copper	533	ug/L	500	ug/L	106.6	90.0 – 110.0	P	13–JAN–10 01:21	011210–1
	Iron	5510	ug/L	5000	ug/L	110.1	90.0 – 110.0	P	13–JAN–10 01:21	011210–1
	Lead	538	ug/L	500	ug/L	107.6	90.0 – 110.0	P	13–JAN–10 01:21	011210–1
	Magnesium	5680	ug/L	5000	ug/L	113.7	90.0 – 110.0	P	13–JAN–10 01:21	011210–1
	Manganese	540	ug/L	500	ug/L	108.1	90.0 – 110.0	P	13–JAN–10 01:21	011210–1
	Potassium	5290	ug/L	5000	ug/L	105.9	90.0 – 110.0	P	13–JAN–10 01:21	011210–1
	Silver	543	ug/L	500	ug/L	108.5	90.0 – 110.0	P	13–JAN–10 01:21	011210–1
	Sodium	10100	ug/L	10000	ug/L	101	90.0 – 110.0	P	13–JAN–10 01:21	011210–1
	Vanadium	545	ug/L	500	ug/L	108.9	90.0 – 110.0	P	13–JAN–10 01:21	011210–1
	Zinc	537	ug/L	500	ug/L	107.3	90.0 – 110.0	P	13–JAN–10 01:21	011210–1

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–1103

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	2.22	ug/L	2	ug/L	110.9	70.0 – 130.0	MS	12–JAN–10 20:05	100112–3
	Thallium	1.11	ug/L	1	ug/L	111.2	70.0 – 130.0	MS	12–JAN–10 20:05	100112–3
	Beryllium	.568	ug/L	.5	ug/L	113.6	70.0 – 130.0	MS	12–JAN–10 20:05	100112–3
	Arsenic	5.18	ug/L	5	ug/L	103.6	70.0 – 130.0	MS	12–JAN–10 20:05	100112–3
	Uranium	.228	ug/L	.2	ug/L	114	70.0 – 130.0	MS	12–JAN–10 20:05	100112–3
	Selenium	5.15	ug/L	5	ug/L	102.9	70.0 – 130.0	MS	12–JAN–10 20:05	100112–3
	Arsenic	5.79	ug/L	5	ug/L	115.8	70.0 – 130.0	MS	13–JAN–10 02:08	100112–4
	Mercury	.137	ug/L	.2	ug/L	68.4	70.0 – 130.0	AV	13–JAN–10 10:00	011310S1–5
PQL01										
	Aluminum	207	ug/L	200	ug/L	103.5	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Iron	92.8	ug/L	100	ug/L	92.8	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Lead	9.98	ug/L	10	ug/L	99.8	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Magnesium	267	ug/L	300	ug/L	89	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Manganese	10.4	ug/L	10	ug/L	103.6	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Potassium	150	ug/L	150	ug/L	99.8	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Silver	4.91	ug/L	5	ug/L	98.2	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Sodium	320	ug/L	300	ug/L	106.6	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Antimony	11.3	ug/L	10	ug/L	113.1	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Barium	4.95	ug/L	5	ug/L	99	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Cadmium	4.96	ug/L	5	ug/L	99.1	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Chromium	4.69	ug/L	5	ug/L	93.9	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Cobalt	4.88	ug/L	5	ug/L	97.6	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Copper	9.97	ug/L	10	ug/L	99.7	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Vanadium	5.26	ug/L	5	ug/L	105.2	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Zinc	10.5	ug/L	10	ug/L	105.2	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Calcium	204	ug/L	200	ug/L	102.2	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Aluminum	204	ug/L	200	ug/L	101.8	70.0 – 130.0	P	13–JAN–10 12:28	011310–2
	Magnesium	269	ug/L	300	ug/L	89.6	70.0 – 130.0	P	13–JAN–10 12:28	011310–2
	Calcium	196	ug/L	200	ug/L	98.1	70.0 – 130.0	P	13–JAN–10 12:28	011310–2

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–1103

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: ICPMS4,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
PQL02										
	Aluminum	199	ug/L	200	ug/L	99.4	70.0 – 130.0	P	13–JAN–10 16:07	011310–2
	Magnesium	304	ug/L	300	ug/L	101.4	70.0 – 130.0	P	13–JAN–10 16:07	011310–2
	Calcium	189	ug/L	200	ug/L	94.7	70.0 – 130.0	P	13–JAN–10 16:07	011310–2
PQL03										
	Magnesium	276	ug/L	300	ug/L	92	70.0 – 130.0	P	13–JAN–10 17:38	011310–2
	Calcium	202	ug/L	200	ug/L	100.9	70.0 – 130.0	P	13–JAN–10 17:38	011310–2
	Aluminum	208	ug/L	200	ug/L	104.2	70.0 – 130.0	P	13–JAN–10 17:38	011310–2
PQL04										
	Aluminum	208	ug/L	200	ug/L	103.8	70.0 – 130.0	P	13–JAN–10 18:39	011310–2
	Magnesium	253	ug/L	300	ug/L	84.3	70.0 – 130.0	P	13–JAN–10 18:39	011310–2
	Calcium	203	ug/L	200	ug/L	101.7	70.0 – 130.0	P	13–JAN–10 18:39	011310–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–1103

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	12–JAN–10 13:08	011210–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	12–JAN–10 13:08	011210–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 13:08	011210–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 13:08	011210–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	12–JAN–10 13:08	011210–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	12–JAN–10 13:08	011210–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	12–JAN–10 13:08	011210–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	12–JAN–10 13:08	011210–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	12–JAN–10 13:08	011210–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	12–JAN–10 13:08	011210–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	12–JAN–10 13:08	011210–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	12–JAN–10 13:08	011210–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	12–JAN–10 13:08	011210–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 13:08	011210–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	12–JAN–10 13:08	011210–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 13:08	011210–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	12–JAN–10 13:08	011210–1
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	12–JAN–10 19:59	100112–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	12–JAN–10 19:59	100112–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	12–JAN–10 19:59	100112–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	12–JAN–10 19:59	100112–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	12–JAN–10 19:59	100112–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	12–JAN–10 19:59	100112–3
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	13–JAN–10 02:04	100112–4
	Mercury	–0.105	+/–.2	J	0.068	0.2	SOL	AV	13–JAN–10 09:58	011310S1–5
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	13–JAN–10 12:22	011310–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	13–JAN–10 12:22	011310–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	13–JAN–10 12:22	011310–2
CCB01										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	12–JAN–10 13:54	011210–1
	Antimony	6.68	+/–10	J	3.3	10.0	SOL	P	12–JAN–10 13:54	011210–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1103

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	12-JAN-10 13:54	011210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	12-JAN-10 13:54	011210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	12-JAN-10 13:54	011210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	12-JAN-10 13:54	011210-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	12-JAN-10 13:54	011210-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	12-JAN-10 13:54	011210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	12-JAN-10 13:54	011210-1
	Lead	2.68	+/-10	J	2.5	10.0	SOL	P	12-JAN-10 13:54	011210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	12-JAN-10 13:54	011210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	12-JAN-10 13:54	011210-1
	Potassium	129.14	+/-250	J	64.0	250	SOL	P	12-JAN-10 13:54	011210-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	12-JAN-10 13:54	011210-1
	Sodium	88.64	+/-250	J	70.0	250	SOL	P	12-JAN-10 13:54	011210-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	12-JAN-10 13:54	011210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	12-JAN-10 13:54	011210-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	12-JAN-10 20:30	100112-3
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	12-JAN-10 20:30	100112-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	12-JAN-10 20:30	100112-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	12-JAN-10 20:30	100112-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	12-JAN-10 20:30	100112-3
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	12-JAN-10 20:30	100112-3
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	13-JAN-10 02:24	100112-4
	Mercury	-0.078	+/-.2	J	0.068	0.2	SOL	AV	13-JAN-10 10:04	011310S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	13-JAN-10 13:22	011310-2
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	13-JAN-10 13:22	011310-2
	Magnesium	-86.0	+/-300	J	85.0	300	SOL	P	13-JAN-10 13:22	011310-2
CCB02										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	12-JAN-10 14:26	011210-1
	Antimony	5.07	+/-10	J	3.3	10.0	SOL	P	12-JAN-10 14:26	011210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	12-JAN-10 14:26	011210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	12-JAN-10 14:26	011210-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–1103

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	12–JAN–10 14:26	011210–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	12–JAN–10 14:26	011210–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	12–JAN–10 14:26	011210–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	12–JAN–10 14:26	011210–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	12–JAN–10 14:26	011210–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	12–JAN–10 14:26	011210–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	12–JAN–10 14:26	011210–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	12–JAN–10 14:26	011210–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	12–JAN–10 14:26	011210–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 14:26	011210–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	12–JAN–10 14:26	011210–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 14:26	011210–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	12–JAN–10 14:26	011210–1
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	12–JAN–10 20:48	100112–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	12–JAN–10 20:48	100112–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	12–JAN–10 20:48	100112–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	12–JAN–10 20:48	100112–3
	Thallium	0.373	+/–1	J	0.3	1.0	SOL	MS	12–JAN–10 20:48	100112–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	12–JAN–10 20:48	100112–3
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	13–JAN–10 02:36	100112–4
	Mercury	–0.124	+/–.2	J	0.068	0.2	SOL	AV	13–JAN–10 10:28	011310S1–5
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	13–JAN–10 13:43	011310–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	13–JAN–10 13:43	011310–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	13–JAN–10 13:43	011310–2
CCB03										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	12–JAN–10 15:21	011210–1
	Antimony	4.09	+/–10	J	3.3	10.0	SOL	P	12–JAN–10 15:21	011210–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 15:21	011210–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 15:21	011210–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	12–JAN–10 15:21	011210–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	12–JAN–10 15:21	011210–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–1103

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	12–JAN–10 15:21	011210–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	12–JAN–10 15:21	011210–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	12–JAN–10 15:21	011210–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	12–JAN–10 15:21	011210–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	12–JAN–10 15:21	011210–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	12–JAN–10 15:21	011210–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	12–JAN–10 15:21	011210–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 15:21	011210–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	12–JAN–10 15:21	011210–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 15:21	011210–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	12–JAN–10 15:21	011210–1
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	12–JAN–10 21:32	100112–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	12–JAN–10 21:32	100112–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	12–JAN–10 21:32	100112–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	12–JAN–10 21:32	100112–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	12–JAN–10 21:32	100112–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	12–JAN–10 21:32	100112–3
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	13–JAN–10 03:05	100112–4
	Mercury	–0.163	+/–.2	J	0.068	0.2	SOL	AV	13–JAN–10 10:52	011310S1–5
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	13–JAN–10 14:44	011310–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	13–JAN–10 14:44	011310–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	13–JAN–10 14:44	011310–2
CCB04										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	12–JAN–10 16:44	011210–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	12–JAN–10 16:44	011210–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 16:44	011210–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 16:44	011210–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	12–JAN–10 16:44	011210–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	12–JAN–10 16:44	011210–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	12–JAN–10 16:44	011210–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	12–JAN–10 16:44	011210–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–1103

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	12–JAN–10 16:44	011210–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	12–JAN–10 16:44	011210–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	12–JAN–10 16:44	011210–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	12–JAN–10 16:44	011210–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	12–JAN–10 16:44	011210–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 16:44	011210–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	12–JAN–10 16:44	011210–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 16:44	011210–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	12–JAN–10 16:44	011210–1
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	12–JAN–10 22:22	100112–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	12–JAN–10 22:22	100112–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	12–JAN–10 22:22	100112–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	12–JAN–10 22:22	100112–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	12–JAN–10 22:22	100112–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	12–JAN–10 22:22	100112–3
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	13–JAN–10 03:38	100112–4
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	13–JAN–10 11:16	011310S1–5
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	13–JAN–10 15:12	011310–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	13–JAN–10 15:12	011310–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	13–JAN–10 15:12	011310–2
CCB05										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	12–JAN–10 17:40	011210–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	12–JAN–10 17:40	011210–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 17:40	011210–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 17:40	011210–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	12–JAN–10 17:40	011210–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	12–JAN–10 17:40	011210–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	12–JAN–10 17:40	011210–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	12–JAN–10 17:40	011210–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	12–JAN–10 17:40	011210–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	12–JAN–10 17:40	011210–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–1103

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	12–JAN–10 17:40	011210–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	12–JAN–10 17:40	011210–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	12–JAN–10 17:40	011210–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 17:40	011210–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	12–JAN–10 17:40	011210–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 17:40	011210–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	12–JAN–10 17:40	011210–1
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	12–JAN–10 23:12	100112–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	12–JAN–10 23:12	100112–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	12–JAN–10 23:12	100112–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	12–JAN–10 23:12	100112–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	12–JAN–10 23:12	100112–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	12–JAN–10 23:12	100112–3
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	13–JAN–10 04:11	100112–4
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	13–JAN–10 16:14	011310–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	13–JAN–10 16:14	011310–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	13–JAN–10 16:14	011310–2
CCB06										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	12–JAN–10 18:28	011210–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	12–JAN–10 18:28	011210–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 18:28	011210–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 18:28	011210–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	12–JAN–10 18:28	011210–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	12–JAN–10 18:28	011210–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	12–JAN–10 18:28	011210–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	12–JAN–10 18:28	011210–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	12–JAN–10 18:28	011210–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	12–JAN–10 18:28	011210–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	12–JAN–10 18:28	011210–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	12–JAN–10 18:28	011210–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	12–JAN–10 18:28	011210–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–1103

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	SOL	P	12–JAN–10 18:28	011210–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	12–JAN–10 18:28	011210–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 18:28	011210–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	12–JAN–10 18:28	011210–1
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	12–JAN–10 23:55	100112–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	12–JAN–10 23:55	100112–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	12–JAN–10 23:55	100112–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	12–JAN–10 23:55	100112–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	12–JAN–10 23:55	100112–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	12–JAN–10 23:55	100112–3
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	13–JAN–10 04:40	100112–4
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	13–JAN–10 17:45	011310–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	13–JAN–10 17:45	011310–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	13–JAN–10 17:45	011310–2
CCB07										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	12–JAN–10 19:24	011210–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	12–JAN–10 19:24	011210–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 19:24	011210–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 19:24	011210–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	12–JAN–10 19:24	011210–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	12–JAN–10 19:24	011210–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	12–JAN–10 19:24	011210–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	12–JAN–10 19:24	011210–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	12–JAN–10 19:24	011210–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	12–JAN–10 19:24	011210–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	12–JAN–10 19:24	011210–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	12–JAN–10 19:24	011210–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	12–JAN–10 19:24	011210–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 19:24	011210–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	12–JAN–10 19:24	011210–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 19:24	011210–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–1103

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	12–JAN–10 19:24	011210–1
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	13–JAN–10 00:45	100112–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	13–JAN–10 00:45	100112–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	13–JAN–10 00:45	100112–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	13–JAN–10 00:45	100112–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	13–JAN–10 00:45	100112–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	13–JAN–10 00:45	100112–3
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	13–JAN–10 05:13	100112–4
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	13–JAN–10 18:46	011310–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	13–JAN–10 18:46	011310–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	13–JAN–10 18:46	011310–2
CCB08										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	12–JAN–10 20:33	011210–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	12–JAN–10 20:33	011210–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 20:33	011210–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 20:33	011210–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	12–JAN–10 20:33	011210–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	12–JAN–10 20:33	011210–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	12–JAN–10 20:33	011210–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	12–JAN–10 20:33	011210–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	12–JAN–10 20:33	011210–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	12–JAN–10 20:33	011210–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	12–JAN–10 20:33	011210–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	12–JAN–10 20:33	011210–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	12–JAN–10 20:33	011210–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 20:33	011210–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	12–JAN–10 20:33	011210–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 20:33	011210–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	12–JAN–10 20:33	011210–1
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	13–JAN–10 01:35	100112–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	13–JAN–10 01:35	100112–3

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–1103

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	13–JAN–10 01:35	100112–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	13–JAN–10 01:35	100112–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	13–JAN–10 01:35	100112–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	13–JAN–10 01:35	100112–3
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	13–JAN–10 05:46	100112–4
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	13–JAN–10 19:57	011310–2
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	13–JAN–10 19:57	011310–2
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	13–JAN–10 19:57	011310–2
CCB09										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	12–JAN–10 21:50	011210–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	12–JAN–10 21:50	011210–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 21:50	011210–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 21:50	011210–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	12–JAN–10 21:50	011210–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	12–JAN–10 21:50	011210–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	12–JAN–10 21:50	011210–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	12–JAN–10 21:50	011210–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	12–JAN–10 21:50	011210–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	12–JAN–10 21:50	011210–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	12–JAN–10 21:50	011210–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	12–JAN–10 21:50	011210–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	12–JAN–10 21:50	011210–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 21:50	011210–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	12–JAN–10 21:50	011210–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 21:50	011210–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	12–JAN–10 21:50	011210–1
CCB10										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	12–JAN–10 23:01	011210–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	12–JAN–10 23:01	011210–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 23:01	011210–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	12–JAN–10 23:01	011210–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1103

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	12-JAN-10 23:01	011210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	12-JAN-10 23:01	011210-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	12-JAN-10 23:01	011210-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	12-JAN-10 23:01	011210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	12-JAN-10 23:01	011210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	12-JAN-10 23:01	011210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	12-JAN-10 23:01	011210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	12-JAN-10 23:01	011210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	12-JAN-10 23:01	011210-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	12-JAN-10 23:01	011210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	12-JAN-10 23:01	011210-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	12-JAN-10 23:01	011210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	12-JAN-10 23:01	011210-1
CCB11										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	13-JAN-10 00:18	011210-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	13-JAN-10 00:18	011210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	13-JAN-10 00:18	011210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	13-JAN-10 00:18	011210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	13-JAN-10 00:18	011210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	13-JAN-10 00:18	011210-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	13-JAN-10 00:18	011210-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	13-JAN-10 00:18	011210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	13-JAN-10 00:18	011210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	13-JAN-10 00:18	011210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	13-JAN-10 00:18	011210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	13-JAN-10 00:18	011210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	13-JAN-10 00:18	011210-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	13-JAN-10 00:18	011210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	13-JAN-10 00:18	011210-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	13-JAN-10 00:18	011210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	13-JAN-10 00:18	011210-1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–1103

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB12										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	13–JAN–10 01:28	011210–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	13–JAN–10 01:28	011210–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	13–JAN–10 01:28	011210–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	13–JAN–10 01:28	011210–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	13–JAN–10 01:28	011210–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	13–JAN–10 01:28	011210–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	13–JAN–10 01:28	011210–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	13–JAN–10 01:28	011210–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	13–JAN–10 01:28	011210–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	13–JAN–10 01:28	011210–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	13–JAN–10 01:28	011210–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	13–JAN–10 01:28	011210–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	13–JAN–10 01:28	011210–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	13–JAN–10 01:28	011210–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	13–JAN–10 01:28	011210–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	13–JAN–10 01:28	011210–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	13–JAN–10 01:28	011210–1

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-1103

Contract: LANL01004

Matrix: SOIL

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1202006036								
	Aluminum	6480	ug/Kg	+/-19000	U	P	6480	19000
	Antimony	314	ug/Kg	+/-952	U	P	314	952
	Barium	95.2	ug/Kg	+/-476	U	P	95.2	476
	Calcium	7620	ug/Kg	+/-23800	U	P	7620	23800
	Cobalt	143	ug/Kg	+/-476	U	P	143	476
	Iron	11700	ug/Kg	+/-23800	J	P	7620	23800
	Magnesium	8100	ug/Kg	+/-28600	U	P	8100	28600
	Potassium	6100	ug/Kg	+/-23800	U	P	6100	23800
	Sodium	6670	ug/Kg	+/-23800	U	P	6670	23800
	Zinc	314	ug/Kg	+/-952	U	P	314	952
	Vanadium	95.2	ug/Kg	+/-476	U	P	95.2	476
	Silver	95.2	ug/Kg	+/-476	U	P	95.2	476
	Manganese	190	ug/Kg	+/-952	U	P	190	952
	Lead	238	ug/Kg	+/-952	U	P	238	952
	Copper	286	ug/Kg	+/-952	U	P	286	952
	Chromium	143	ug/Kg	+/-476	U	P	143	476
	Cadmium	95.2	ug/Kg	+/-476	U	P	95.2	476
1202006079								
	Arsenic	0.197	mg/kg	+/-0.984	U	MS	0.197	0.984
	Nickel	0.0984	mg/kg	+/-0.394	U	MS	0.0984	0.394
	Selenium	0.492	mg/kg	+/-0.984	U	MS	0.492	0.984
	Uranium	0.013	mg/kg	+/-0.0394	U	MS	0.013	0.0394
	Thallium	0.0591	mg/kg	+/-0.197	U	MS	0.0591	0.197
	Beryllium	0.0197	mg/kg	+/-0.0984	U	MS	0.0197	0.0984
1202012342								
	Mercury	-9.25	ug/kg	+/-10	J	AV	3.4	10

METALS
–4–
Interference Check Sample

SDG No: 10–1103

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	12–JAN–10 13:22	011210–1
	Antimony	0.42	ug/L					12–JAN–10 13:22	011210–1
	Barium	1.73	ug/L					12–JAN–10 13:22	011210–1
	Cadmium	–0.075	ug/L					12–JAN–10 13:22	011210–1
	Calcium	468000	ug/L	500000	ug/L	93.7	80.0 – 120.0	12–JAN–10 13:22	011210–1
	Chromium	1.44	ug/L					12–JAN–10 13:22	011210–1
	Cobalt	–1.47	ug/L					12–JAN–10 13:22	011210–1
	Copper	4.79	ug/L					12–JAN–10 13:22	011210–1
	Iron	183000	ug/L	200000	ug/L	91.5	80.0 – 120.0	12–JAN–10 13:22	011210–1
	Lead	11.2	ug/L					12–JAN–10 13:22	011210–1
	Magnesium	479000	ug/L	500000	ug/L	95.7	80.0 – 120.0	12–JAN–10 13:22	011210–1
	Manganese	0.848	ug/L					12–JAN–10 13:22	011210–1
	Potassium	–151.0	ug/L					12–JAN–10 13:22	011210–1
	Silver	–1.92	ug/L					12–JAN–10 13:22	011210–1
	Sodium	47.0	ug/L					12–JAN–10 13:22	011210–1
	Vanadium	–0.846	ug/L					12–JAN–10 13:22	011210–1
	Zinc	8.33	ug/L					12–JAN–10 13:22	011210–1
ICSAB01									
	Aluminum	536000	ug/L	500000	ug/L	107	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Antimony	550	ug/L	500	ug/L	110	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Barium	506	ug/L	500	ug/L	101	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Cadmium	477	ug/L	500	ug/L	95.4	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Calcium	493000	ug/L	500000	ug/L	98.6	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Chromium	491	ug/L	500	ug/L	98.1	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Cobalt	455	ug/L	500	ug/L	91	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Copper	568	ug/L	500	ug/L	114	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Iron	189000	ug/L	200000	ug/L	94.7	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Lead	489	ug/L	500	ug/L	97.8	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Magnesium	498000	ug/L	500000	ug/L	99.6	80.0 – 120.0	12–JAN–10 13:28	011210–1

METALS
–4–
Interference Check Sample

SDG No: 10–1103

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Manganese	490	ug/L	500	ug/L	97.9	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Potassium	5430	ug/L	5000	ug/L	109	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Silver	278	ug/L	250	ug/L	111	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Sodium	5500	ug/L	5000	ug/L	110	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Vanadium	516	ug/L	500	ug/L	103	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Zinc	509	ug/L	500	ug/L	102	80.0 – 120.0	12–JAN–10 13:28	011210–1

METALS
–4–
Interference Check Sample

SDG No: 10–1103

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	509000	ug/L	500000	ug/L	102	80.0 – 120.0	13–JAN–10 12:35	011310–2
	Calcium	477000	ug/L	500000	ug/L	95.4	80.0 – 120.0	13–JAN–10 12:35	011310–2
	Magnesium	484000	ug/L	500000	ug/L	96.9	80.0 – 120.0	13–JAN–10 12:35	011310–2
ICSAB01									
	Aluminum	515000	ug/L	500000	ug/L	103	80.0 – 120.0	13–JAN–10 12:41	011310–2
	Calcium	480000	ug/L	500000	ug/L	96.1	80.0 – 120.0	13–JAN–10 12:41	011310–2
	Magnesium	494000	ug/L	500000	ug/L	98.8	80.0 – 120.0	13–JAN–10 12:41	011310–2

METALS
–4–
Interference Check Sample

SDG No: 10–1103

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	–0.78	ug/L					12–JAN–10 20:11	100112–3
	Beryllium	0.056	ug/L					12–JAN–10 20:11	100112–3
	Nickel	3.17	ug/L					12–JAN–10 20:11	100112–3
	Selenium	–0.345	ug/L					12–JAN–10 20:11	100112–3
	Thallium	0.001	ug/L					12–JAN–10 20:11	100112–3
	Uranium	–0.017	ug/L					12–JAN–10 20:11	100112–3
ICSAB01									
	Arsenic	20.3	ug/L	20	ug/L	102	80.0 – 120.0	12–JAN–10 20:17	100112–3
	Beryllium	19.5	ug/L	20	ug/L	97.5	80.0 – 120.0	12–JAN–10 20:17	100112–3
	Nickel	22.4	ug/L	22.7	ug/L	98.8	80.0 – 120.0	12–JAN–10 20:17	100112–3
	Selenium	21.9	ug/L	20	ug/L	110	80.0 – 120.0	12–JAN–10 20:17	100112–3
	Thallium	17.8	ug/L	20	ug/L	88.8	80.0 – 120.0	12–JAN–10 20:17	100112–3
	Uranium	20.5	ug/L	20	ug/L	102	80.0 – 120.0	12–JAN–10 20:17	100112–3

METALS
–4–
Interference Check Sample

SDG No: 10–1103

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	–0.03	ug/L					13–JAN–10 02:12	100112–4
ICSAB01									
	Arsenic	21.1	ug/L	20	ug/L	106	80.0 – 120.0	13–JAN–10 02:16	100112–4

METALS
–5a–
Matrix Spike Summary

SDG NO. 10–1103 **Client ID** RE12–10–7675S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 89

Sample ID: 243628001 **Spike ID:** 1202006039

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		25600000		15700000		553000	1790	N/A	P
Antimony	ug/Kg	75–125	42800		364	U	55300	77.4		P
Barium	ug/Kg	75–125	260000		184000		55300	136	N	P
Cadmium	ug/Kg	75–125	52400		110	U	55300	94.6		P
Calcium	ug/Kg		3140000		2960000		553000	32.8	N/A	P
Chromium	ug/Kg	75–125	68300		12800		55300	100		P
Cobalt	ug/Kg	75–125	56400		4380		55300	94		P
Copper	ug/Kg	75–125	66600		7550		55300	107		P
Iron	ug/Kg		17200000		14500000		553000	503	N/A	P
Lead	ug/Kg	75–125	65700		11500		55300	98.1		P
Magnesium	ug/Kg		3470000		2700000		553000	140	N/A	P
Manganese	ug/Kg		374000		291000		55300	150	N/A	P
Potassium	ug/Kg	75–125	3000000		2080000		553000	167	N	P
Silver	ug/Kg	75–125	56100		385	J	55300	101		P
Sodium	ug/Kg	75–125	643000		82400		553000	101		P
Vanadium	ug/Kg	75–125	85000		24200		55300	110		P
Zinc	ug/Kg	75–125	87200		28700		55300	106		P

METALS
–5a–
Matrix Spike Duplicate Summary

SDG NO. 10–1103 **Client ID** RE12–10–7675SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 89

Sample ID: 243628001 **Spike ID:** 1202006041

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		25500000		15700000		539000	1820	N/A	P
Antimony	ug/Kg	75–125	42400		364	U	53900	78.7		P
Barium	ug/Kg	75–125	277000		184000		53900	172	N	P
Cadmium	ug/Kg	75–125	51800		110	U	53900	95.9		P
Calcium	ug/Kg		3160000		2960000		539000	37.4	N/A	P
Chromium	ug/Kg	75–125	67200		12800		53900	101		P
Cobalt	ug/Kg	75–125	56900		4380		53900	97.3		P
Copper	ug/Kg	75–125	65400		7550		53900	107		P
Iron	ug/Kg		16400000		14500000		539000	355	N/A	P
Lead	ug/Kg	75–125	66100		11500		53900	101		P
Magnesium	ug/Kg		3340000		2700000		539000	120	N/A	P
Manganese	ug/Kg		517000		291000		53900	420	N/A	P
Potassium	ug/Kg	75–125	2920000		2080000		539000	156	N	P
Silver	ug/Kg	75–125	55200		385	J	53900	102		P
Sodium	ug/Kg	75–125	605000		82400		539000	96.9		P
Vanadium	ug/Kg	75–125	83300		24200		53900	110		P
Zinc	ug/Kg	75–125	84900		28700		53900	104		P

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-1103 **Client ID** RE12-10-7675S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 89

Sample ID: 243628001 **Spike ID:** 1202006082

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	10.3		2.09		8.85	93.1		MS
Beryllium	mg/kg	75-125	5.02		1.02		5.53	72.4	N	MS
Nickel	mg/kg	75-125	12.3		7.69		5.53	83.3		MS
Selenium	mg/kg	75-125	1.81		0.544	U	2.21	79.4		MS
Thallium	mg/kg	75-125	9.8		0.235		11.1	86.5		MS
Uranium	mg/kg	75-125	6.42		0.933		5.53	99.3		MS

METALS
--5a--
Matrix Spike Duplicate Summary

SDG NO. 10–1103 **Client ID** RE12–10–7675SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 89

Sample ID: 243628001 **Spike ID:** 1202006084

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75–125	10.5		2.09		8.61	97.8		MS
Beryllium	mg/kg	75–125	5.02		1.02		5.38	74.2	N	MS
Nickel	mg/kg	75–125	12.5		7.69		5.38	89.3		MS
Selenium	mg/kg	75–125	1.77		0.544	U	2.15	79.5		MS
Thallium	mg/kg	75–125	9.9		0.235		10.8	89.7		MS
Uranium	mg/kg	75–125	6.58		0.933		5.38	105		MS

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–1103 **Client ID** RE12–10–7675S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 89

Sample ID: 243628001 **Spike ID:** 1202012345

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	135		9.2	J	120	105		AV

METALS
-5a-
Matrix Spike Duplicate Summary

SDG NO. 10-1103 **Client ID** RE12-10-7675SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 89

Sample ID: 243628001 **Spike ID:** 1202012347

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	150		9.2	J	133	106		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1103

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE12–10–7675D

Sample ID: 243628001 **Duplicate ID:** 1202006038 **Percent Solids for Dup:** 89

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20%	15700000		16400000		4.31		P
Antimony	ug/Kg		364	U	359	U			P
Barium	ug/Kg	+/–20%	184000		216000		15.9		P
Cadmium	ug/Kg		110	U	109	U			P
Calcium	ug/Kg	+/–20%	2960000		2480000		17.9		P
Chromium	ug/Kg	+/–20%	12800		13800		7.74		P
Cobalt	ug/Kg	+/–20%	4380		8160		60.3	*	P
Copper	ug/Kg	+/–20%	7550		7760		2.77		P
Iron	ug/Kg	+/–20%	14500000		15000000		3.33		P
Lead	ug/Kg	+/–20%	11500		14900		26	*	P
Magnesium	ug/Kg	+/–20%	2700000		2410000		11.3		P
Manganese	ug/Kg	+/–20%	291000		567000		64.4	*	P
Potassium	ug/Kg	+/–20%	2080000		2040000		2.02		P
Silver	ug/Kg	+/–545	385	J	501	J	26.2		P
Sodium	ug/Kg	+/–27200	82400		87600		6.05		P
Vanadium	ug/Kg	+/–20%	24200		26700		9.73		P
Zinc	ug/Kg	+/–20%	28700		29800		3.72		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1103

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE12–10–7675SD

Sample ID: 1202006039 **Duplicate ID:** 1202006041 **Percent Solids for Dup:** 89

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20	25600000		25500000		.332		P
Antimony	ug/Kg	+/–20	42800		42400		.912		P
Barium	ug/Kg	+/–20	260000		277000		6.47		P
Cadmium	ug/Kg	+/–20	52400		51800		1.16		P
Calcium	ug/Kg	+/–20	3140000		3160000		.649		P
Chromium	ug/Kg	+/–20	68300		67200		1.65		P
Cobalt	ug/Kg	+/–20	56400		56900		.85		P
Copper	ug/Kg	+/–20	66600		65400		1.79		P
Iron	ug/Kg	+/–20	17200000		16400000		5.16		P
Lead	ug/Kg	+/–20	65700		66100		.482		P
Magnesium	ug/Kg	+/–20	3470000		3340000		3.79		P
Manganese	ug/Kg	+/–20	374000		517000		32.1	*	P
Potassium	ug/Kg	+/–20	3000000		2920000		2.84		P
Silver	ug/Kg	+/–20	56100		55200		1.58		P
Sodium	ug/Kg	+/–20	643000		605000		6.13		P
Vanadium	ug/Kg	+/–20	85000		83300		1.92		P
Zinc	ug/Kg	+/–20	87200		84900		2.65		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1103

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE12–10–7675D

Sample ID: 243628001 **Duplicate ID:** 1202006081 **Percent Solids for Dup:** 89

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–1.11	2.09		2.23		6.77		MS
Beryllium	mg/kg	+/–20%	1.02		1.01		.96		MS
Nickel	mg/kg	+/–20%	7.69		8.24		6.93		MS
Selenium	mg/kg		0.544	U	0.557	U			MS
Thallium	mg/kg	+/–.223	0.235		0.205	J	13.7		MS
Uranium	mg/kg	+/–20%	0.933		0.92		1.46		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1103

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE12–10–7675SD

Sample ID: 1202006082 **Duplicate ID:** 1202006084 **Percent Solids for Dup:** 89

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–20	10.3		10.5		1.72		MS
Beryllium	mg/kg	+/–20	5.02		5.02		.155		MS
Nickel	mg/kg	+/–20	12.3		12.5		1.63		MS
Selenium	mg/kg	+/–20	1.81		1.77		2.49		MS
Thallium	mg/kg	+/–20	9.8		9.9		.921		MS
Uranium	mg/kg	+/–20	6.42		6.58		2.39		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1103

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE12–10–7675D

Sample ID: 243628001 **Duplicate ID:** 1202012344 **Percent Solids for Dup:** 89

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–12.8	9.2	J	9.89	J	7.21		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1103

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE12–10–7675SD

Sample ID: 1202012345 **Duplicate ID:** 1202012347 **Percent Solids for Dup:** 89

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–20	135		150		10.4		AV

METALS
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Laboratory Control Sample Summary

SDG NO. 10-1103

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202006037								
	Aluminum	ug/Kg	10500000	9590000		91.3	56-144	P
	Antimony	ug/Kg	173000	142000		82.2	71-130	P
	Barium	ug/Kg	198000	188000		94.7	80-120	P
	Cadmium	ug/Kg	60700	53900		88.8	81-120	P
	Calcium	ug/Kg	9870000	9730000		98.6	83-117	P
	Chromium	ug/Kg	236000	219000		92.7	80-120	P
	Cobalt	ug/Kg	91200	83900		92	81-120	P
	Copper	ug/Kg	174000	175000		101	81-118	P
	Iron	ug/Kg	18000000	18100000		101	51-149	P
	Lead	ug/Kg	86000	78000		90.7	79-121	P
	Magnesium	ug/Kg	4000000	3830000		95.9	79-122	P
	Manganese	ug/Kg	558000	507000		90.8	81-119	P
	Potassium	ug/Kg	4300000	4040000		93.9	74-127	P
	Silver	ug/Kg	30100	29700		98.6	66-134	P
	Sodium	ug/Kg	1020000	951000		93.2	74-127	P
	Vanadium	ug/Kg	115000	116000		100	79-121	P
	Zinc	ug/Kg	594000	546000		91.9	80-121	P

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–1103

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202006080								
	Arsenic	mg/kg	104	105		101	83–120	MS
	Beryllium	mg/kg	77.6	72.2		93	81.2–126.8	MS
	Nickel	mg/kg	134	138		103	83.3–121.4	MS
	Selenium	mg/kg	286	276		96.5	80.2–125.9	MS
	Thallium	mg/kg	121	122		101	78–123.2	MS
	Uranium	mg/kg	2.13	1.84		86.2	61.9–130.7	MS

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–1103

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202012343								
	Mercury	ug/kg	5150	5590		109	71.6–128.3	AV

METALS
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Serial Dilution Sample Summary

SDG NO. 10–1103 **Client ID** RE12–10–7675L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 243628001 **Serial Dilution ID:** 1202006040

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	142000		143000		.704		10	P
Antimony	3.3	U	16.5	U				P
Barium	1670		1780		6.59		10	P
Cadmium	1	U	5	U				P
Calcium	26900		26900		.186		10	P
Chromium	116		125		7.33		10	P
Cobalt	39.8		43.1		8.29			P
Copper	68.5		69		.73			P
Iron	131000		134000		2.29		10	P
Lead	104		111		6.73			P
Magnesium	24500		25000		1.84		10	P
Manganese	2640		2840		7.58		10	P
Potassium	18800		19000		1.06		10	P
Silver	3.49	J	5	U	100			P
Sodium	748		620	J	17.1			P
Vanadium	220		230		4.55		10	P
Zinc	261		293		12.1	E	10	P

METALS
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Serial Dilution Sample Summary

SDG NO. 10-1103 **Client ID** RE12-10-7675L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 243628001 **Serial Dilution ID:** 1202006083

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	9.6		10.2	J	5.73			MS
Beryllium	4.69		5.75		22.6			MS
Nickel	35.4		44.6		25.8			MS
Selenium	2.5	U	12.5	U				MS
Thallium	1.08		1.5	U	100			MS
Uranium	4.29		4.39		2.33			MS

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 10–1103 **Client ID** RE12–10–7675L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 243628001 **Serial Dilution ID:** 1202012346

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.14	J	.34	U	100			AV

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-1103 **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	937485						
1202006036	MB for batch 937485	MB	S	30-DEC-09	.525g	50mL	
1202006037	LCS for batch 937485	LCS	S	30-DEC-09	.509g	50mL	
1202006039	RE12-10-7675S	MS	S	30-DEC-09	.506g	50mL	
1202006041	RE12-10-7675SD	MSD	S	30-DEC-09	.519g	50mL	
1202006038	RE12-10-7675D	DUP	S	30-DEC-09	.514g	50mL	
243628001	RE12-10-7675	SAMPLE	S	30-DEC-09	.508g	50mL	
243628002	RE12-10-7663	SAMPLE	S	30-DEC-09	.524g	50mL	
243628003	RE12-10-7664	SAMPLE	S	30-DEC-09	.513g	50mL	
243628004	RE12-10-7672	SAMPLE	S	30-DEC-09	.502g	50mL	
243628005	RE12-10-7667	SAMPLE	S	30-DEC-09	.502g	50mL	
243628006	RE12-10-7666	SAMPLE	S	30-DEC-09	.517g	50mL	
243628007	RE12-10-7665	SAMPLE	S	30-DEC-09	.525g	50mL	
243628008	RE12-10-7670	SAMPLE	S	30-DEC-09	.511g	50mL	
243628009	RE12-10-7668	SAMPLE	S	30-DEC-09	.503g	50mL	
243628010	RE12-10-7671	SAMPLE	S	30-DEC-09	.505g	50mL	
243628011	RE12-10-7669	SAMPLE	S	30-DEC-09	.503g	50mL	

METALS
–13–
SAMPLE PREPARATION SUMMARY

SDG No: 10–1103 **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	937509						
1202006079	MB for batch 937509	MB	S	30–DEC–09	.508g	50mL	
1202006080	LCS for batch 937509	LCS	S	30–DEC–09	.502g	50mL	
1202006082	RE12–10–7675S	MS	S	30–DEC–09	.506g	50mL	
1202006084	RE12–10–7675SD	MSD	S	30–DEC–09	.52g	50mL	
1202006081	RE12–10–7675D	DUP	S	30–DEC–09	.503g	50mL	
243628001	RE12–10–7675	SAMPLE	S	30–DEC–09	.515g	50mL	
243628002	RE12–10–7663	SAMPLE	S	30–DEC–09	.5g	50mL	
243628003	RE12–10–7664	SAMPLE	S	30–DEC–09	.516g	50mL	
243628004	RE12–10–7672	SAMPLE	S	30–DEC–09	.51g	50mL	
243628005	RE12–10–7667	SAMPLE	S	30–DEC–09	.525g	50mL	
243628006	RE12–10–7666	SAMPLE	S	30–DEC–09	.519g	50mL	
243628007	RE12–10–7665	SAMPLE	S	30–DEC–09	.515g	50mL	
243628008	RE12–10–7670	SAMPLE	S	30–DEC–09	.505g	50mL	
243628009	RE12–10–7668	SAMPLE	S	30–DEC–09	.516g	50mL	
243628010	RE12–10–7671	SAMPLE	S	30–DEC–09	.518g	50mL	
243628011	RE12–10–7669	SAMPLE	S	30–DEC–09	.523g	50mL	

METALS
–13–
SAMPLE PREPARATION SUMMARY

SDG No: 10–1103 **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 940327							
1202012342	MB for batch 940327	MB	S	12–JAN–10	.6g	30mL	
1202012343	LCS for batch 940327	LCS	S	12–JAN–10	.2g	30mL	
1202012345	RE12–10–7675S	MS	S	12–JAN–10	.56g	30mL	
1202012347	RE12–10–7675SD	MSD	S	12–JAN–10	.504g	30mL	
1202012344	RE12–10–7675D	DUP	S	12–JAN–10	.524g	30mL	
243628001	RE12–10–7675	SAMPLE	S	12–JAN–10	.51g	30mL	
243628002	RE12–10–7663	SAMPLE	S	12–JAN–10	.505g	30mL	
243628003	RE12–10–7664	SAMPLE	S	12–JAN–10	.571g	30mL	
243628004	RE12–10–7672	SAMPLE	S	12–JAN–10	.549g	30mL	
243628005	RE12–10–7667	SAMPLE	S	12–JAN–10	.538g	30mL	
243628006	RE12–10–7666	SAMPLE	S	12–JAN–10	.525g	30mL	
243628007	RE12–10–7665	SAMPLE	S	12–JAN–10	.526g	30mL	
243628008	RE12–10–7670	SAMPLE	S	12–JAN–10	.519g	30mL	
243628009	RE12–10–7668	SAMPLE	S	12–JAN–10	.582g	30mL	
243628010	RE12–10–7671	SAMPLE	S	12–JAN–10	.536g	30mL	
243628011	RE12–10–7669	SAMPLE	S	12–JAN–10	.553g	30mL	

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 12–JAN–10 **End Date:** 13–JAN–10

Client Sdg: 10–1103
Method P
Data File: 011210–1

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	12:29	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S0.1	1	12:36		X		X		X		X	X	X		X		X			X		X				X	X
S0.5	1	12:42	X	X		X		X	X	X	X	X		X	X	X			X		X				X	X
SCAL	1	12:49	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S10	1	12:56	X						X				X		X							X				
ICV01	1	13:01	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICB01	1	13:08	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
PQL01	1	13:15	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSA01	1	13:22	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSAB01	1	13:28	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR01	1	13:34	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR02	1	13:40	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV01	1	13:47	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB01	1	13:54	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR03	1	14:12	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV02	1	14:19	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB02	1	14:26	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	14:33																								
ZZZZZZ	1	14:40																								
ZZZZZZ	1	14:47																								
ZZZZZZ	1	14:54																								
ZZZZZZ	1	15:00																								
ZZZZZZ	1	15:07																								
CCV03	1	15:14	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB03	1	15:21	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	15:28																								
ZZZZZZ	1	15:35																								
ZZZZZZ	1	15:42																								
ZZZZZZ	1	15:49																								
ZZZZZZ	1	15:56																								
ZZZZZZ	5	16:02																								
ZZZZZZ	1	16:09																								
ZZZZZZ	1	16:16																								
ZZZZZZ	1	16:23																								
CCV04	1	16:37	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB04	1	16:44	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	16:51																								
ZZZZZZ	1	16:58																								
ZZZZZZ	1	17:05																								
ZZZZZZ	1	17:12																								

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time																							
ZZZZZZ	1	17:19																							
ZZZZZZ	5	17:26																							
CCV05	1	17:33	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB05	1	17:40	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	17:47																							
ZZZZZZ	1	17:54																							
ZZZZZZ	1	18:00																							
ZZZZZZ	1	18:07																							
ZZZZZZ	1	18:14																							
CCV06	1	18:21	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB06	1	18:28	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	18:35																							
ZZZZZZ	5	18:41																							
ZZZZZZ	1	18:49																							
ZZZZZZ	1	18:56																							
ZZZZZZ	1	19:03																							
ZZZZZZ	1	19:10																							
CCV07	1	19:17	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB07	1	19:24	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	19:31																							
ZZZZZZ	1	19:38																							
ZZZZZZ	1	19:45																							
ZZZZZZ	1	19:52																							
ZZZZZZ	1	19:59																							
ZZZZZZ	5	20:05																							
ZZZZZZ	1	20:12																							
ZZZZZZ	1	20:19																							
CCV08	1	20:26	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB08	1	20:33	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	20:40																							
ZZZZZZ	1	20:47																							
ZZZZZZ	1	20:53																							
ZZZZZZ	1	21:00																							
ZZZZZZ	1	21:08																							
ZZZZZZ	1	21:15																							
ZZZZZZ	5	21:22																							
ZZZZZZ	1	21:29																							
ZZZZZZ	1	21:36																							
CCV09	1	21:43	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB09	1	21:50	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
ZZZZZZ	1	21:57																								
ZZZZZZ	1	22:04																								
ZZZZZZ	1	22:11																								
ZZZZZZ	1	22:18																								
ZZZZZZ	1	22:26																								
ZZZZZZ	1	22:33																								
ZZZZZZ	1	22:40																								
ZZZZZZ	1	22:47																								
CCV10	1	22:54	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB10	1	23:01	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202006036	1	23:08	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202006037	1	23:15	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
243628001	1	23:21	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202006038	1	23:28	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202006039	1	23:35	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202006041	1	23:42	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202006040	5	23:50	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
243628002	1	23:56	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
243628003	1	00:03	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV11	1	00:11	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB11	1	00:18	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
243628004	1	00:24		X		X		X		X	X	X	X	X		X			X		X	X			X	X
243628005	1	00:32		X		X		X		X	X	X	X	X		X			X		X	X			X	X
243628006	1	00:39		X		X		X		X	X	X	X	X		X			X		X	X			X	X
243628007	1	00:46		X		X		X		X	X	X	X	X		X			X		X	X			X	X
243628008	1	00:53		X		X		X		X	X	X	X	X		X			X		X	X			X	X
243628009	1	01:00		X		X		X		X	X	X	X	X		X			X		X	X			X	X
243628010	1	01:07		X		X		X		X	X	X	X	X		X			X		X	X			X	X
243628011	1	01:14		X		X		X		X	X	X	X	X		X			X		X	X			X	X
CCV12	1	01:21	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB12	1	01:28	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: 13–JAN–10 **End Date:** 13–JAN–10

Client Sdg: 10–1103
Method P
Data File: 011310–2

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	11:42	X						X						X											
S0.1	1	11:49																								
S0.5	1	11:55	X						X						X											
SCAL	1	12:02	X						X						X											
S10	1	12:09	X						X						X											
ICV01	1	12:15	X						X						X											
ICB01	1	12:22	X						X						X											
PQL01	1	12:28	X						X						X											
ICSA01	1	12:35	X						X						X											
ICSAB01	1	12:41	X						X						X											
LR01	1	12:47	X						X						X											
LR02	1	12:53	X						X						X											
ZZZZZZ	1	13:00																								
ZZZZZZ	1	13:07																								
CCV01	1	13:15	X						X						X											
CCB01	1	13:22	X						X						X											
LR03	1	13:29	X						X						X											
CCV02	1	13:36	X						X						X											
CCB02	1	13:43	X						X						X											
ZZZZZZ	1	13:49																								
ZZZZZZ	1	13:56																								
ZZZZZZ	1	14:03																								
ZZZZZZ	1	14:10																								
ZZZZZZ	1	14:16																								
ZZZZZZ	1	14:23																								
ZZZZZZ	1	14:30																								
CCV03	1	14:37	X						X						X											
CCB03	1	14:44	X						X						X											
CCV04	1	15:05	X						X						X											
CCB04	1	15:12	X						X						X											
ZZZZZZ	1	15:19																								
ZZZZZZ	1	15:26																								
ZZZZZZ	1	15:32																								
ZZZZZZ	1	15:39																								
ZZZZZZ	1	15:46																								
ZZZZZZ	5	15:53																								
CCV05	1	16:00	X						X						X											
PQL02	1	16:07	X						X						X											
CCB05	1	16:14	X						X						X											
ZZZZZZ	1	16:20																								

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																							
ZZZZZZ	1	16:27																							
ZZZZZZ	1	16:34																							
ZZZZZZ	1	16:41																							
ZZZZZZ	1	16:48																							
ZZZZZZ	1	16:55																							
ZZZZZZ	1	17:03																							
ZZZZZZ	1	17:10																							
ZZZZZZ	1	17:17																							
ZZZZZZ	5	17:24																							
CCV06	1	17:31	X					X					X												
PQL03	1	17:38	X					X					X												
CCB06	1	17:45	X					X					X												
ZZZZZZ	20	17:51																							
ZZZZZZ	20	17:58																							
ZZZZZZ	20	18:05																							
ZZZZZZ	20	18:12																							
ZZZZZZ	20	18:18																							
ZZZZZZ	100	18:25																							
CCV07	1	18:32	X					X					X												
PQL04	1	18:39	X					X					X												
CCB07	1	18:46	X					X					X												
243628004	1	18:53	X					X					X												
243628005	1	19:00	X					X					X												
243628006	1	19:07	X					X					X												
243628007	1	19:14	X					X					X												
243628008	1	19:21	X					X					X												
243628009	1	19:29	X					X					X												
243628010	1	19:36	X					X					X												
243628011	1	19:43	X					X					X												
CCV08	1	19:50	X					X					X												
CCB08	1	19:57	X					X					X												

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: MER536
Start Date: 13–JAN–10 **End Date:** 13–JAN–10

Client Sdg: 10–1103
Method AV
Data File: 011310S1–5

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	09:44															X									
S0.2	1	09:46															X									
S0.5	1	09:48															X									
S2.0	1	09:50															X									
S5.0	1	09:52															X									
S10	1	09:54															X									
ICV01	1	09:56															X									
ICB01	1	09:58															X									
CRDL01	1	10:00															X									
CCV01	1	10:02															X									
CCB01	1	10:04															X									
ZZZZZZ	1	10:08																								
ZZZZZZ	1	10:10																								
ZZZZZZ	1	10:12																								
ZZZZZZ	1	10:14																								
ZZZZZZ	1	10:16																								
ZZZZZZ	1	10:18																								
ZZZZZZ	1	10:20																								
1202012342	1	10:22															X									
1202012343	10	10:24															X									
CCV02	1	10:26															X									
CCB02	1	10:28															X									
243628001	1	10:30															X									
1202012344	1	10:32															X									
1202012345	1	10:34															X									
1202012347	1	10:36															X									
1202012346	5	10:38															X									
243628002	1	10:40															X									
243628003	1	10:42															X									
243628004	1	10:44															X									
243628005	1	10:46															X									
243628006	1	10:48															X									
CCV03	1	10:50															X									
CCB03	1	10:52															X									
243628007	1	10:54															X									
243628008	1	10:56															X									
243628009	1	10:58															X									
243628010	1	11:00															X									
243628011	1	11:02															X									
ZZZZZZ	1	11:04																								

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																							
ZZZZZZ	10	11:06																							
ZZZZZZ	1	11:08																							
ZZZZZZ	1	11:10																							
ZZZZZZ	1	11:12																							
CCV04	1	11:14														X									
CCB04	1	11:16														X									

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS4
Start Date: 12–JAN–10 **End Date:** 13–JAN–10

Client Sdg: 10–1103
Method MS
Data File: 100112–3

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	19:34			X		X											X		X			X	X		
S10	1	19:40			X		X											X		X			X	X		
S100	1	19:46			X		X											X		X			X	X		
ICV01	1	19:52			X		X											X		X			X	X		
ICB01	1	19:59			X		X											X		X			X	X		
CRDL01	1	20:05			X		X											X		X			X	X		
ICSA01	1	20:11			X		X											X		X			X	X		
ICSAB01	1	20:17			X		X											X		X			X	X		
CCV01	1	20:23			X		X											X		X			X	X		
CCB01	1	20:30			X		X											X		X			X	X		
LR01	1	20:36			X		X											X		X			X	X		
CCV02	1	20:42			X		X											X		X			X	X		
CCB02	1	20:48			X		X											X		X			X	X		
ZZZZZZ	2	20:54																								
ZZZZZZ	40	21:01																								
ZZZZZZ	2	21:07																								
ZZZZZZ	2	21:13																								
ZZZZZZ	2	21:19																								
CCV03	1	21:26			X		X											X		X			X	X		
CCB03	1	21:32			X		X											X		X			X	X		
ZZZZZZ	2	21:38																								
ZZZZZZ	10	21:44																								
ZZZZZZ	2	21:51																								
ZZZZZZ	2	21:57																								
ZZZZZZ	2	22:03																								
ZZZZZZ	2	22:09																								
CCV04	1	22:16			X		X											X		X			X	X		
CCB04	1	22:22			X		X											X		X			X	X		
ZZZZZZ	2	22:28																								
ZZZZZZ	2	22:34																								
ZZZZZZ	2	22:40																								
ZZZZZZ	2	22:47																								
ZZZZZZ	2	22:53																								
ZZZZZZ	2	22:59																								
CCV05	1	23:05			X		X											X		X			X	X		
CCB05	1	23:12			X		X											X		X			X	X		
1202006079	2	23:18			X		X											X		X			X	X		
1202006080	40	23:24			X		X											X		X			X	X		
243628001	2	23:30			X		X											X		X			X	X		
1202006081	2	23:37			X		X											X		X			X	X		

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																								
1202006082	2	23:43			X		X											X		X			X	X		
CCV06	1	23:49			X		X											X		X			X	X		
CCB06	1	23:55			X		X											X		X			X	X		
1202006084	2	00:02			X		X											X		X			X	X		
1202006083	10	00:08			X		X											X		X			X	X		
243628002	2	00:14			X		X											X		X			X	X		
243628003	2	00:20			X		X											X		X			X	X		
243628004	2	00:27			X		X											X		X			X	X		
243628005	2	00:33			X		X											X		X			X	X		
CCV07	1	00:39			X		X											X		X			X	X		
CCB07	1	00:45			X		X											X		X			X	X		
243628006	2	00:52					X											X		X			X	X		
243628007	2	00:58					X											X		X			X	X		
243628008	2	01:04					X											X		X			X	X		
243628009	2	01:10					X											X		X			X	X		
243628010	2	01:17					X											X		X			X	X		
243628011	2	01:23					X											X		X			X	X		
CCV08	1	01:29			X		X											X		X			X	X		
CCB08	1	01:35			X		X											X		X			X	X		

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS4
Start Date: 12-JAN-10 **End Date:** 13-JAN-10

Client Sdg: 10-1103
Method MS
Data File: 100112-4

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	01:48			X																					
S10	1	01:52			X																					
S100	1	01:56			X																					
ICV01	1	02:00			X																					
ICB01	1	02:04			X																					
CRDL01	1	02:08			X																					
ICSA01	1	02:12			X																					
ICSAB01	1	02:16			X																					
CCV01	1	02:20			X																					
CCB01	1	02:24			X																					
LR01	1	02:28			X																					
CCV02	1	02:32			X																					
CCB02	1	02:36			X																					
ZZZZZZ	2	02:41																								
ZZZZZZ	40	02:45																								
ZZZZZZ	2	02:49																								
ZZZZZZ	2	02:53																								
ZZZZZZ	2	02:57																								
CCV03	1	03:01			X																					
CCB03	1	03:05			X																					
ZZZZZZ	2	03:09																								
ZZZZZZ	10	03:13																								
ZZZZZZ	2	03:17																								
ZZZZZZ	2	03:22																								
ZZZZZZ	2	03:26																								
ZZZZZZ	2	03:30																								
CCV04	1	03:34			X																					
CCB04	1	03:38			X																					
ZZZZZZ	2	03:42																								
ZZZZZZ	2	03:46																								
ZZZZZZ	2	03:50																								
ZZZZZZ	2	03:55																								
ZZZZZZ	2	03:59																								
ZZZZZZ	2	04:03																								
CCV05	1	04:07			X																					
CCB05	1	04:11			X																					
ZZZZZZ	2	04:15																								
ZZZZZZ	40	04:19																								
ZZZZZZ	2	04:23																								
ZZZZZZ	2	04:27																								

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																								
ZZZZZZ	2	04:32																								
CCV06	1	04:36			X																					
CCB06	1	04:40			X																					
ZZZZZZ	2	04:44																								
ZZZZZZ	10	04:48																								
ZZZZZZ	2	04:52																								
ZZZZZZ	2	04:56																								
ZZZZZZ	2	05:00																								
ZZZZZZ	2	05:05																								
CCV07	1	05:09			X																					
CCB07	1	05:13			X																					
243628006	2	05:17			X																					
243628007	2	05:21			X																					
243628008	2	05:25			X																					
243628009	2	05:29			X																					
243628010	2	05:34			X																					
243628011	2	05:38			X																					
CCV08	1	05:42			X																					
CCB08	1	05:46			X																					

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1103

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. 10–1103

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 15–JUN–09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Mercury		0.068	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1103

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
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1103
Effective Dates: 01-NOV-09

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
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1103
Effective Dates: 01-NOV-09

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
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1103
Effective Dates: 01-NOV-09

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
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1103
Effective Dates: 01-NOV-09

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
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1103
Effective Dates: 01-NOV-09

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
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1103
Effective Dates: 01-NOV-09

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. 10–1103

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. 10–1103

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS4

Analyte	Integration Time (msec)	LDR	Units	Effective Date
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
Aluminum	1	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

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Analysis Begun

Start Time: 1/12/2010 12:29:17 **Plasma On Time: 1/11/2010 06:15:31**
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\011210.sif
Batch ID:
Results Data Set: 011210
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 1/12/2010 12:29:19**
Analyst: **Data Type: Original**
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 Radial	5152.3	5152.3	101	%	12:31:11
1	Y RADIAL	5561.8	5561.8	101.0	%	12:31:11
1	Al 396.153Radial†	-17.4	-17.3	[0.00]	ug/L	12:31:11
1	Ca 317.933Radial†	15.9	15.8	[0.00]	ug/L	12:31:31
1	Fe 238.204 Radial†	13.1	13.0	[0.00]	ug/L	12:31:31
1	K 766.490 Radial†	2487.0	2471.8	[0.00]	ug/L	12:31:11
1	Mg 279.077 IEC†	3.5	3.5	[0.00]	ug/L	12:31:31
1	Na 589.592 Radial†	-1340.5	-1332.4	[0.00]	ug/L	12:31:11
1	Sr 421.552†	43.2	42.9	[0.00]	ug/L	12:31:11
1	Sc 361.383	853292.3	853292.3	99.443	%	12:32:28
1	Y 371.029	722139.2	722139.2	99.241	%	12:32:28
1	Ag 328.068†	372.1	374.2	[0.00]	ug/L	12:32:28
1	As 188.979†	-22.2	-22.4	[0.00]	ug/L	12:32:48
1	B 249.677†	-606.5	-609.9	[0.00]	ug/L	12:32:48
1	Ba 233.527†	-17.0	-17.1	[0.00]	ug/L	12:32:48
1	Be 313.107†	-4487.2	-4512.3	[0.00]	ug/L	12:32:28
1	Cd 226.502†	-210.7	-211.8	[0.00]	ug/L	12:32:48
1	Co 228.616†	-79.2	-79.6	[0.00]	ug/L	12:32:48
1	Cr 267.716†	79.2	79.7	[0.00]	ug/L	12:32:48
1	Cu 324.752†	6369.9	6405.6	[0.00]	ug/L	12:32:28
1	Mn 257.610†	444.3	446.8	[0.00]	ug/L	12:32:48
1	Mo 202.031†	23.5	23.7	[0.00]	ug/L	12:32:48
1	Ni 231.604†	61.4	61.7	[0.00]	ug/L	12:32:48
1	P 214.914†	223.8	225.0	[0.00]	ug/L	12:32:48
1	Pb 220.353†	-75.1	-75.6	[0.00]	ug/L	12:32:48
1	S 181.975 Axial†	44.9	45.2	[0.00]	ug/L	12:32:48
1	Sb 206.836†	32.0	32.2	[0.00]	ug/L	12:32:48
1	Se 196.026†	-41.9	-42.1	[0.00]	ug/L	12:32:48
1	Si 251.611†	467.0	469.6	[0.00]	ug/L	12:32:48
1	Sn 189.927†	5.0	5.0	[0.00]	ug/L	12:32:48
1	Ti 334.940†	-1279.5	-1286.7	[0.00]	ug/L	12:32:28
1	Tl 190.801†	-34.2	-34.4	[0.00]	ug/L	12:32:48
1	U 409.014†	-1915.4	-1926.1	[0.00]	ug/L	12:32:28
1	V 292.402†	-1335.8	-1343.3	[0.00]	ug/L	12:32:28
1	Zn 213.857†	614.5	618.0	[0.00]	ug/L	12:32:48
1	SiO2†	454.9	457.5	[0.00]	ug/L	12:33:44
2	Sc Radial	5085.0	5085.0	99.3	%	12:31:36
2	Y RADIAL	5464.8	5464.8	99.26	%	12:31:36
2	Al 396.153Radial†	-1.6	-1.6	[0.00]	ug/L	12:31:36
2	Ca 317.933Radial†	19.1	19.2	[0.00]	ug/L	12:31:56
2	Fe 238.204 Radial†	11.7	11.8	[0.00]	ug/L	12:31:56
2	K 766.490 Radial†	2621.8	2640.3	[0.00]	ug/L	12:31:36
2	Mg 279.077 IEC†	1.2	1.2	[0.00]	ug/L	12:31:56
2	Na 589.592 Radial†	-1287.3	-1296.4	[0.00]	ug/L	12:31:36
2	Sr 421.552†	-4.5	-4.5	[0.00]	ug/L	12:31:36
2	Sc 361.383	864012.3	864012.3	100.69	%	12:32:53
2	Y 371.029	733392.9	733392.9	100.79	%	12:32:53

2	Ag 328.068†	342.6	340.2	[0.00]	ug/L	12:32:53
2	As 188.979†	-24.3	-24.1	[0.00]	ug/L	12:33:13
2	B 249.677†	-619.9	-615.7	[0.00]	ug/L	12:33:13
2	Ba 233.527†	-8.0	-8.0	[0.00]	ug/L	12:33:13
2	Be 313.107†	-4468.0	-4437.2	[0.00]	ug/L	12:32:53
2	Cd 226.502†	-192.1	-190.8	[0.00]	ug/L	12:33:13
2	Co 228.616†	-76.4	-75.8	[0.00]	ug/L	12:33:13
2	Cr 267.716†	91.9	91.3	[0.00]	ug/L	12:33:13
2	Cu 324.752†	6472.0	6427.5	[0.00]	ug/L	12:32:53
2	Mn 257.610†	426.6	423.7	[0.00]	ug/L	12:33:13
2	Mo 202.031†	19.1	18.9	[0.00]	ug/L	12:33:13
2	Ni 231.604†	65.0	64.5	[0.00]	ug/L	12:33:13
2	P 214.914†	211.9	210.4	[0.00]	ug/L	12:33:13
2	Pb 220.353†	-49.4	-49.0	[0.00]	ug/L	12:33:13
2	S 181.975 Axial†	47.5	47.1	[0.00]	ug/L	12:33:13
2	Sb 206.836†	33.9	33.6	[0.00]	ug/L	12:33:13
2	Se 196.026†	-28.5	-28.3	[0.00]	ug/L	12:33:13
2	Si 251.611†	462.9	459.7	[0.00]	ug/L	12:33:13
2	Sn 189.927†	-2.3	-2.3	[0.00]	ug/L	12:33:13
2	Ti 334.940†	-1341.3	-1332.0	[0.00]	ug/L	12:32:53
2	Tl 190.801†	-36.4	-36.2	[0.00]	ug/L	12:33:13
2	U 409.014†	-1655.6	-1644.2	[0.00]	ug/L	12:32:53
2	V 292.402†	-1351.5	-1342.2	[0.00]	ug/L	12:32:53
2	Zn 213.857†	635.0	630.6	[0.00]	ug/L	12:33:13
2	SiO2†	442.7	439.7	[0.00]	ug/L	12:33:49
3	Sc Radial	5125.5	5125.5	100	%	12:32:01
3	Y RADIAL	5489.7	5489.7	99.71	%	12:32:01
3	Al 396.153Radial†	0.4	0.4	[0.00]	ug/L	12:32:01
3	Ca 317.933Radial†	22.6	22.6	[0.00]	ug/L	12:32:21
3	Fe 238.204 Radial†	9.9	9.9	[0.00]	ug/L	12:32:21
3	K 766.490 Radial†	2424.7	2422.5	[0.00]	ug/L	12:32:01
3	Mg 279.077 IEC†	4.5	4.5	[0.00]	ug/L	12:32:21
3	Na 589.592 Radial†	-1299.1	-1297.9	[0.00]	ug/L	12:32:01
3	Sr 421.552†	-9.2	-9.2	[0.00]	ug/L	12:32:01
3	Sc 361.383	856910.1	856910.1	99.865	%	12:33:19
3	Y 371.029	727459.0	727459.0	99.972	%	12:33:19
3	Ag 328.068†	356.3	356.8	[0.00]	ug/L	12:33:19
3	As 188.979†	-25.3	-25.4	[0.00]	ug/L	12:33:39
3	B 249.677†	-618.9	-619.8	[0.00]	ug/L	12:33:39
3	Ba 233.527†	-0.6	-0.6	[0.00]	ug/L	12:33:39
3	Be 313.107†	-4468.4	-4474.4	[0.00]	ug/L	12:33:19
3	Cd 226.502†	-202.0	-202.3	[0.00]	ug/L	12:33:39
3	Co 228.616†	-76.2	-76.3	[0.00]	ug/L	12:33:39
3	Cr 267.716†	65.8	65.9	[0.00]	ug/L	12:33:39
3	Cu 324.752†	6365.6	6374.2	[0.00]	ug/L	12:33:19
3	Mn 257.610†	418.4	418.9	[0.00]	ug/L	12:33:39
3	Mo 202.031†	22.3	22.3	[0.00]	ug/L	12:33:39
3	Ni 231.604†	74.7	74.8	[0.00]	ug/L	12:33:39
3	P 214.914†	225.2	225.5	[0.00]	ug/L	12:33:39
3	Pb 220.353†	-61.9	-62.0	[0.00]	ug/L	12:33:39
3	S 181.975 Axial†	39.2	39.3	[0.00]	ug/L	12:33:39
3	Sb 206.836†	34.4	34.5	[0.00]	ug/L	12:33:39
3	Se 196.026†	-25.7	-25.7	[0.00]	ug/L	12:33:39
3	Si 251.611†	452.0	452.6	[0.00]	ug/L	12:33:39
3	Sn 189.927†	2.3	2.3	[0.00]	ug/L	12:33:39
3	Ti 334.940†	-1381.8	-1383.7	[0.00]	ug/L	12:33:19
3	Tl 190.801†	-31.6	-31.7	[0.00]	ug/L	12:33:39
3	U 409.014†	-2018.6	-2021.4	[0.00]	ug/L	12:33:19
3	V 292.402†	-1391.8	-1393.7	[0.00]	ug/L	12:33:19
3	Zn 213.857†	624.5	625.4	[0.00]	ug/L	12:33:39
3	SiO2†	479.3	479.9	[0.00]	ug/L	12:33:54

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	858071.5	5453.55	0.64%	100.00	%
Sc Radial	5120.9	33.88	0.66%	100	%
Y 371.029	727663.7	5629.65	0.77%	100.00	%
Y RADIAL	5505.4	50.37	0.91%	100.0	%
Ag 328.068†	357.1	17.00	4.76%	[0.00]	ug/L

Al 396.153Radial†	-6.2	9.68	156.59%	[0.00]	ug/L
As 188.979†	-23.9	1.50	6.28%	[0.00]	ug/L
B 249.677†	-615.1	4.97	0.81%	[0.00]	ug/L
Ba 233.527†	-8.6	8.28	96.48%	[0.00]	ug/L
Be 313.107†	-4474.7	37.53	0.84%	[0.00]	ug/L
Ca 317.933Radial†	19.2	3.41	17.76%	[0.00]	ug/L
Cd 226.502†	-201.6	10.55	5.23%	[0.00]	ug/L
Co 228.616†	-77.2	2.06	2.67%	[0.00]	ug/L
Cr 267.716†	79.0	12.72	16.11%	[0.00]	ug/L
Cu 324.752†	6402.4	26.77	0.42%	[0.00]	ug/L
Fe 238.204 Radial†	11.6	1.59	13.77%	[0.00]	ug/L
K 766.490 Radial†	2511.5	114.19	4.55%	[0.00]	ug/L
Mg 279.077 IEC†	3.0	1.70	55.71%	[0.00]	ug/L
Mn 257.610†	429.8	14.89	3.47%	[0.00]	ug/L
Mo 202.031†	21.6	2.44	11.30%	[0.00]	ug/L
Na 589.592 Radial†	-1308.9	20.34	1.55%	[0.00]	ug/L
Ni 231.604†	67.0	6.91	10.31%	[0.00]	ug/L
P 214.914†	220.3	8.56	3.89%	[0.00]	ug/L
Pb 220.353†	-62.2	13.27	21.33%	[0.00]	ug/L
S 181.975 Axial†	43.9	4.08	9.30%	[0.00]	ug/L
Sb 206.836†	33.4	1.15	3.43%	[0.00]	ug/L
Se 196.026†	-32.0	8.83	27.55%	[0.00]	ug/L
Si 251.611†	460.7	8.52	1.85%	[0.00]	ug/L
Sn 189.927†	1.7	3.70	222.98%	[0.00]	ug/L
Sr 421.552†	9.7	28.80	295.48%	[0.00]	ug/L
Ti 334.940†	-1334.1	48.54	3.64%	[0.00]	ug/L
Tl 190.801†	-34.1	2.28	6.69%	[0.00]	ug/L
U 409.014†	-1863.9	196.15	10.52%	[0.00]	ug/L
V 292.402†	-1359.7	29.45	2.17%	[0.00]	ug/L
Zn 213.857†	624.7	6.34	1.01%	[0.00]	ug/L
SiO2†	459.0	20.15	4.39%	[0.00]	ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 1/12/2010 12:36:04
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	4965.9	4965.9	97.0	%	12:38:02
1	Y RADIAL	5335.2	5335.2	96.91	%	12:38:02
1	K 766.490 Radial†	7941.2	5677.6	[1000]	ug/L	12:37:57
1	Sr 421.552†	14775.2	15226.8	[100]	ug/L	12:38:02
1	Sc 361.383	830675.3	830675.3	96.807	%	12:38:29
1	Y 371.029	701666.3	701666.3	96.427	%	12:38:29
1	Ag 328.068†	21871.2	22235.5	[100]	ug/L	12:38:29
1	As 188.979†	203.3	233.9	[100]	ug/L	12:38:49
1	B 249.677†	3660.8	4396.6	[100]	ug/L	12:38:29
1	Ba 233.527†	12920.1	13354.8	[100]	ug/L	12:38:29
1	Be 313.107†	257874.4	270853.9	[100]	ug/L	12:38:29
1	Cd 226.502†	8881.5	9376.0	[100]	ug/L	12:38:29
1	Co 228.616†	4770.5	5005.1	[100]	ug/L	12:38:49
1	Cr 267.716†	9051.6	9271.1	[100]	ug/L	12:38:29
1	Cu 324.752†	39056.8	33942.5	[100]	ug/L	12:38:29
1	Mn 257.610†	92061.8	94668.3	[100]	ug/L	12:38:29
1	Mo 202.031†	1430.8	1456.4	[100]	ug/L	12:38:49
1	Ni 231.604†	4043.9	4110.2	[100]	ug/L	12:38:49
1	P 214.914†	1031.3	845.0	[500]	ug/L	12:38:49
1	Pb 220.353†	748.0	834.8	[100]	ug/L	12:38:49
1	S 181.975 Axial†	189.8	152.2	[200]	ug/L	12:38:49
1	Sb 206.836†	312.2	289.1	[100]	ug/L	12:38:49
1	Se 196.026†	137.0	173.6	[100]	ug/L	12:38:49
1	Si 251.611†	15797.3	15857.7	[500]	ug/L	12:38:29
1	Sn 189.927†	561.7	578.6	[100]	ug/L	12:38:49
1	Ti 334.940†	59873.1	63181.9	[100]	ug/L	12:38:29
1	Tl 190.801†	292.2	335.9	[100]	ug/L	12:38:49
1	U 409.014†	1586.9	3503.1	[100]	ug/L	12:38:29
1	V 292.402†	13179.8	14974.2	[100]	ug/L	12:38:29
1	Zn 213.857†	11228.2	10973.9	[100]	ug/L	12:38:29
1	SiO2†	16145.6	16219.0	[1069.5]	ug/L	12:39:45
2	Sc Radial	5017.1	5017.1	98.0	%	12:38:12
2	Y RADIAL	5393.8	5393.8	97.97	%	12:38:12
2	K 766.490 Radial†	7968.7	5621.9	[1000]	ug/L	12:38:07
2	Sr 421.552†	14907.3	15205.9	[100]	ug/L	12:38:12
2	Sc 361.383	847146.2	847146.2	98.727	%	12:38:54
2	Y 371.029	713989.1	713989.1	98.121	%	12:38:54
2	Ag 328.068†	22274.2	22204.4	[100]	ug/L	12:38:54
2	As 188.979†	207.4	234.0	[100]	ug/L	12:39:14
2	B 249.677†	3703.9	4366.8	[100]	ug/L	12:38:54
2	Ba 233.527†	13155.6	13333.9	[100]	ug/L	12:38:54
2	Be 313.107†	262797.3	270661.2	[100]	ug/L	12:38:54
2	Cd 226.502†	9031.6	9349.8	[100]	ug/L	12:38:54
2	Co 228.616†	4791.3	4930.3	[100]	ug/L	12:39:14
2	Cr 267.716†	9227.6	9267.6	[100]	ug/L	12:38:54
2	Cu 324.752†	40059.8	34174.0	[100]	ug/L	12:38:54
2	Mn 257.610†	94098.4	94882.2	[100]	ug/L	12:38:54
2	Mo 202.031†	1441.8	1438.8	[100]	ug/L	12:39:14
2	Ni 231.604†	4052.0	4037.2	[100]	ug/L	12:39:14
2	P 214.914†	1038.8	831.9	[500]	ug/L	12:39:14
2	Pb 220.353†	781.5	853.8	[100]	ug/L	12:39:14
2	S 181.975 Axial†	183.5	142.0	[200]	ug/L	12:39:14
2	Sb 206.836†	325.7	296.5	[100]	ug/L	12:39:14
2	Se 196.026†	121.5	155.1	[100]	ug/L	12:39:14
2	Si 251.611†	16155.0	15902.7	[500]	ug/L	12:38:54
2	Sn 189.927†	583.6	589.5	[100]	ug/L	12:39:14
2	Ti 334.940†	61190.2	63313.5	[100]	ug/L	12:38:54
2	Tl 190.801†	288.7	326.5	[100]	ug/L	12:39:14
2	U 409.014†	1747.5	3634.0	[100]	ug/L	12:38:54

2	V 292.402†	13335.0	14866.7	[100]	ug/L	12:38:54
2	Zn 213.857†	11395.6	10917.9	[100]	ug/L	12:38:54
2	SiO2†	16023.8	15771.4	[1069.5]	ug/L	12:39:50
3	Sc Radial	5038.6	5038.6	98.4	%	12:38:22
3	Y RADIAL	5396.6	5396.6	98.02	%	12:38:22
3	K 766.490 Radial†	7896.9	5514.4	[1000]	ug/L	12:38:17
3	Sr 421.552†	15115.8	15353.1	[100]	ug/L	12:38:22
3	Sc 361.383	839954.8	839954.8	97.889	%	12:39:20
3	Y 371.029	708260.3	708260.3	97.333	%	12:39:20
3	Ag 328.068†	22077.1	22196.2	[100]	ug/L	12:39:20
3	As 188.979†	210.6	239.1	[100]	ug/L	12:39:40
3	B 249.677†	3716.3	4411.6	[100]	ug/L	12:39:20
3	Ba 233.527†	13010.8	13300.0	[100]	ug/L	12:39:20
3	Be 313.107†	261053.3	271158.6	[100]	ug/L	12:39:20
3	Cd 226.502†	8913.5	9307.4	[100]	ug/L	12:39:20
3	Co 228.616†	4825.4	5006.7	[100]	ug/L	12:39:40
3	Cr 267.716†	9169.0	9287.8	[100]	ug/L	12:39:20
3	Cu 324.752†	39580.7	34032.0	[100]	ug/L	12:39:20
3	Mn 257.610†	93356.1	94939.9	[100]	ug/L	12:39:20
3	Mo 202.031†	1443.1	1452.6	[100]	ug/L	12:39:40
3	Ni 231.604†	4074.4	4095.2	[100]	ug/L	12:39:40
3	P 214.914†	1041.6	843.7	[500]	ug/L	12:39:40
3	Pb 220.353†	761.2	839.8	[100]	ug/L	12:39:40
3	S 181.975 Axial†	185.0	145.1	[200]	ug/L	12:39:40
3	Sb 206.836†	315.3	288.6	[100]	ug/L	12:39:40
3	Se 196.026†	132.1	167.0	[100]	ug/L	12:39:40
3	Si 251.611†	15986.8	15870.9	[500]	ug/L	12:39:20
3	Sn 189.927†	572.9	583.6	[100]	ug/L	12:39:40
3	Ti 334.940†	60890.5	63538.0	[100]	ug/L	12:39:20
3	Tl 190.801†	310.5	351.3	[100]	ug/L	12:39:40
3	U 409.014†	1639.2	3538.5	[100]	ug/L	12:39:20
3	V 292.402†	13215.0	14859.8	[100]	ug/L	12:39:20
3	Zn 213.857†	11325.5	10945.1	[100]	ug/L	12:39:20
3	SiO2†	16169.6	16059.3	[1069.5]	ug/L	12:39:55

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	839258.8	8257.45	0.98%	97.808	%
Sc Radial	5007.2	37.35	0.75%	97.8	%
Y 371.029	707971.9	6166.49	0.87%	97.294	%
Y RADIAL	5375.2	34.70	0.65%	97.63	%
Ag 328.068†	22212.0	20.72	0.09%	[100]	ug/L
As 188.979†	235.7	2.94	1.25%	[100]	ug/L
B 249.677†	4391.7	22.78	0.52%	[100]	ug/L
Ba 233.527†	13329.5	27.66	0.21%	[100]	ug/L
Be 313.107†	270891.2	250.78	0.09%	[100]	ug/L
Cd 226.502†	9344.4	34.62	0.37%	[100]	ug/L
Co 228.616†	4980.7	43.63	0.88%	[100]	ug/L
Cr 267.716†	9275.5	10.76	0.12%	[100]	ug/L
Cu 324.752†	34049.5	116.76	0.34%	[100]	ug/L
K 766.490 Radial†	5604.6	82.95	1.48%	[1000]	ug/L
Mn 257.610†	94830.1	143.09	0.15%	[100]	ug/L
Mo 202.031†	1449.3	9.25	0.64%	[100]	ug/L
Ni 231.604†	4080.9	38.55	0.94%	[100]	ug/L
P 214.914†	840.2	7.26	0.86%	[500]	ug/L
Pb 220.353†	842.8	9.82	1.17%	[100]	ug/L
S 181.975 Axial†	146.4	5.23	3.57%	[200]	ug/L
Sb 206.836†	291.4	4.42	1.52%	[100]	ug/L
Se 196.026†	165.2	9.35	5.66%	[100]	ug/L
Si 251.611†	15877.1	23.15	0.15%	[500]	ug/L
Sn 189.927†	583.9	5.45	0.93%	[100]	ug/L
Sr 421.552†	15261.9	79.65	0.52%	[100]	ug/L
Ti 334.940†	63344.5	180.05	0.28%	[100]	ug/L
Tl 190.801†	337.9	12.50	3.70%	[100]	ug/L
U 409.014†	3558.5	67.70	1.90%	[100]	ug/L
V 292.402†	14900.2	64.14	0.43%	[100]	ug/L
Zn 213.857†	10945.6	27.98	0.26%	[100]	ug/L
SiO2†	16016.6	226.85	1.42%	[1069.5]	ug/L

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

Autosampler Location: 3
Date Collected: 1/12/2010 12:42:06
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	5024.8	5024.8	98.1	%	12:43:59
1	Y RADIAL	5332.3	5332.3	96.86	%	12:43:59
1	Al 396.153Radial†	6152.3	6276.2	[5000]	ug/L	12:43:59
1	Ca 317.933Radial†	3102.1	3142.3	[5000]	ug/L	12:44:19
1	K 766.490 Radial†	28813.6	26853.5	[5000]	ug/L	12:43:59
1	Mg 279.077 IEC†	158.6	158.5	[5000]	ug/L	12:44:19
1	Sr 421.552†	76236.0	77685.3	[500]	ug/L	12:43:59
1	Sc 361.383	853673.3	853673.3	99.487	%	12:45:16
1	Y 371.029	710210.0	710210.0	97.601	%	12:45:16
1	Ag 328.068†	108724.9	108928.0	[500]	ug/L	12:45:22
1	As 188.979†	1129.2	1159.0	[500]	ug/L	12:45:42
1	B 249.677†	21160.4	21884.6	[500]	ug/L	12:45:22
1	Ba 233.527†	63662.4	63999.0	[500]	ug/L	12:45:22
1	Be 313.107†	1315242.2	1326493.2	[500]	ug/L	12:45:16
1	Cd 226.502†	44932.0	45365.1	[500]	ug/L	12:45:22
1	Co 228.616†	24426.6	24629.7	[500]	ug/L	12:45:22
1	Cr 267.716†	44685.5	44836.8	[500]	ug/L	12:45:22
1	Cu 324.752†	170470.9	164946.7	[500]	ug/L	12:45:22
1	Mn 257.610†	452541.6	454443.4	[500]	ug/L	12:45:16
1	Mo 202.031†	7083.6	7098.5	[500]	ug/L	12:45:42
1	Ni 231.604†	20166.3	20203.1	[500]	ug/L	12:45:22
1	P 214.914†	4311.5	4113.4	[2500]	ug/L	12:45:42
1	Pb 220.353†	4008.6	4091.4	[500]	ug/L	12:45:42
1	S 181.975 Axial†	757.4	717.5	[1000]	ug/L	12:45:42
1	Sb 206.836†	1460.8	1434.9	[500]	ug/L	12:45:42
1	Se 196.026†	766.5	802.5	[500]	ug/L	12:45:42
1	Si 251.611†	78914.3	78860.2	[2500]	ug/L	12:45:22
1	Sn 189.927†	2840.1	2853.0	[500]	ug/L	12:45:42
1	Ti 334.940†	302319.9	305211.7	[500]	ug/L	12:45:22
1	Tl 190.801†	1596.1	1638.4	[500]	ug/L	12:45:42
1	U 409.014†	15158.5	17100.5	[500]	ug/L	12:45:22
1	V 292.402†	71243.7	72970.5	[500]	ug/L	12:45:22
1	Zn 213.857†	53644.2	53295.9	[500]	ug/L	12:45:22
1	SiO2†	78940.1	78887.7	[5347.5]	ug/L	12:46:49
2	Sc Radial	4999.1	4999.1	97.6	%	12:44:24
2	Y RADIAL	5305.7	5305.7	96.37	%	12:44:24
2	Al 396.153Radial†	6184.4	6341.3	[5000]	ug/L	12:44:24
2	Ca 317.933Radial†	3089.4	3145.5	[5000]	ug/L	12:44:44
2	K 766.490 Radial†	29019.2	27215.0	[5000]	ug/L	12:44:24
2	Mg 279.077 IEC†	155.1	155.8	[5000]	ug/L	12:44:44
2	Sr 421.552†	75900.9	77741.2	[500]	ug/L	12:44:24
2	Sc 361.383	845314.1	845314.1	98.513	%	12:45:47
2	Y 371.029	703393.2	703393.2	96.665	%	12:45:47
2	Ag 328.068†	107544.0	108810.0	[500]	ug/L	12:45:53
2	As 188.979†	1121.1	1161.9	[500]	ug/L	12:46:13
2	B 249.677†	21048.5	21981.3	[500]	ug/L	12:45:53
2	Ba 233.527†	63044.2	64004.3	[500]	ug/L	12:45:53
2	Be 313.107†	1305519.1	1329696.6	[500]	ug/L	12:45:47
2	Cd 226.502†	44423.7	45295.8	[500]	ug/L	12:45:53
2	Co 228.616†	24109.7	24550.8	[500]	ug/L	12:45:53
2	Cr 267.716†	44079.0	44665.3	[500]	ug/L	12:45:53
2	Cu 324.752†	168419.2	164558.6	[500]	ug/L	12:45:53
2	Mn 257.610†	449113.4	455461.6	[500]	ug/L	12:45:47
2	Mo 202.031†	7038.5	7123.1	[500]	ug/L	12:46:13
2	Ni 231.604†	19903.8	20137.2	[500]	ug/L	12:45:53
2	P 214.914†	4276.6	4120.9	[2500]	ug/L	12:46:13
2	Pb 220.353†	4002.3	4124.8	[500]	ug/L	12:46:13
2	S 181.975 Axial†	748.5	715.9	[1000]	ug/L	12:46:13
2	Sb 206.836†	1460.0	1448.6	[500]	ug/L	12:46:13

2	Se 196.026†	758.0	801.5	[500]	ug/L	12:46:13
2	Si 251.611†	77838.3	78552.3	[2500]	ug/L	12:45:53
2	Sn 189.927†	2818.7	2859.6	[500]	ug/L	12:46:13
2	Ti 334.940†	299213.6	305063.5	[500]	ug/L	12:45:53
2	Tl 190.801†	1588.3	1646.4	[500]	ug/L	12:46:13
2	U 409.014†	15019.1	17109.6	[500]	ug/L	12:45:53
2	V 292.402†	70419.3	72841.8	[500]	ug/L	12:45:53
2	Zn 213.857†	53069.6	53245.9	[500]	ug/L	12:45:53
2	SiO2†	79601.2	80343.5	[5347.5]	ug/L	12:46:54
3	Sc Radial	4975.7	4975.7	97.2	%	12:44:49
3	Y RADIAL	5287.9	5287.9	96.05	%	12:44:49
3	Al 396.153Radial†	6153.4	6339.1	[5000]	ug/L	12:44:49
3	Ca 317.933Radial†	3107.8	3179.2	[5000]	ug/L	12:45:09
3	K 766.490 Radial†	28709.1	27035.4	[5000]	ug/L	12:44:49
3	Mg 279.077 IEC†	154.2	155.6	[5000]	ug/L	12:45:09
3	Sr 421.552†	75347.5	77536.6	[500]	ug/L	12:44:49
3	Sc 361.383	848277.4	848277.4	98.859	%	12:46:18
3	Y 371.029	706280.3	706280.3	97.061	%	12:46:18
3	Ag 328.068†	109062.4	109964.6	[500]	ug/L	12:46:24
3	As 188.979†	1115.6	1152.4	[500]	ug/L	12:46:44
3	B 249.677†	21335.7	22197.1	[500]	ug/L	12:46:24
3	Ba 233.527†	63826.1	64571.6	[500]	ug/L	12:46:24
3	Be 313.107†	1309469.9	1329063.7	[500]	ug/L	12:46:18
3	Cd 226.502†	44903.5	45623.5	[500]	ug/L	12:46:24
3	Co 228.616†	24436.7	24796.0	[500]	ug/L	12:46:24
3	Cr 267.716†	44771.0	45209.0	[500]	ug/L	12:46:24
3	Cu 324.752†	170788.8	166358.3	[500]	ug/L	12:46:24
3	Mn 257.610†	449789.1	454552.5	[500]	ug/L	12:46:18
3	Mo 202.031†	7050.2	7110.0	[500]	ug/L	12:46:44
3	Ni 231.604†	20173.9	20339.8	[500]	ug/L	12:46:24
3	P 214.914†	4273.1	4102.1	[2500]	ug/L	12:46:44
3	Pb 220.353†	3990.6	4098.9	[500]	ug/L	12:46:44
3	S 181.975 Axial†	756.0	720.8	[1000]	ug/L	12:46:44
3	Sb 206.836†	1465.4	1448.9	[500]	ug/L	12:46:44
3	Se 196.026†	748.4	789.1	[500]	ug/L	12:46:44
3	Si 251.611†	78816.4	79265.7	[2500]	ug/L	12:46:24
3	Sn 189.927†	2819.4	2850.2	[500]	ug/L	12:46:44
3	Ti 334.940†	303078.9	307912.4	[500]	ug/L	12:46:24
3	Tl 190.801†	1587.5	1640.0	[500]	ug/L	12:46:44
3	U 409.014†	15152.5	17191.3	[500]	ug/L	12:46:24
3	V 292.402†	71541.8	73727.6	[500]	ug/L	12:46:24
3	Zn 213.857†	53692.3	53687.6	[500]	ug/L	12:46:24
3	SiO2†	78726.8	79176.7	[5347.5]	ug/L	12:46:59

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	849088.2	4238.18	0.50%	98.953	%
Sc Radial	4999.8	24.53	0.49%	97.6	%
Y 371.029	706627.8	3421.65	0.48%	97.109	%
Y RADIAL	5308.6	22.32	0.42%	96.43	%
Ag 328.068†	109234.2	635.28	0.58%	[500]	ug/L
Al 396.153Radial†	6318.9	36.98	0.59%	[5000]	ug/L
As 188.979†	1157.8	4.87	0.42%	[500]	ug/L
B 249.677†	22021.0	160.03	0.73%	[500]	ug/L
Ba 233.527†	64191.6	329.11	0.51%	[500]	ug/L
Be 313.107†	1328417.8	1696.54	0.13%	[500]	ug/L
Ca 317.933Radial†	3155.7	20.48	0.65%	[5000]	ug/L
Cd 226.502†	45428.1	172.75	0.38%	[500]	ug/L
Co 228.616†	24658.8	125.20	0.51%	[500]	ug/L
Cr 267.716†	44903.7	277.97	0.62%	[500]	ug/L
Cu 324.752†	165287.9	947.11	0.57%	[500]	ug/L
K 766.490 Radial†	27034.6	180.76	0.67%	[5000]	ug/L
Mg 279.077 IEC†	156.7	1.63	1.04%	[5000]	ug/L
Mn 257.610†	454819.2	559.06	0.12%	[500]	ug/L
Mo 202.031†	7110.5	12.31	0.17%	[500]	ug/L
Ni 231.604†	20226.7	103.35	0.51%	[500]	ug/L
P 214.914†	4112.1	9.45	0.23%	[2500]	ug/L
Pb 220.353†	4105.1	17.55	0.43%	[500]	ug/L
S 181.975 Axial†	718.1	2.50	0.35%	[1000]	ug/L

Sb 206.836†	1444.1	7.97	0.55%	[500]	ug/L
Se 196.026†	797.7	7.45	0.93%	[500]	ug/L
Si 251.611†	78892.8	357.79	0.45%	[2500]	ug/L
Sn 189.927†	2854.3	4.81	0.17%	[500]	ug/L
Sr 421.552†	77654.4	105.75	0.14%	[500]	ug/L
Ti 334.940†	306062.5	1603.73	0.52%	[500]	ug/L
Tl 190.801†	1641.6	4.23	0.26%	[500]	ug/L
U 409.014†	17133.8	50.00	0.29%	[500]	ug/L
V 292.402†	73180.0	478.58	0.65%	[500]	ug/L
Zn 213.857†	53409.8	241.86	0.45%	[500]	ug/L
SiO2†	79469.3	770.71	0.97%	[5347.5]	ug/L

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

Autosampler Location: 4
Date Collected: 1/12/2010 12:49:10
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	5073.8	5073.8	99.1	%	12:51:03
1	Y RADIAL	5395.5	5395.5	98.00	%	12:51:03
1	Al 396.153Radial†	12636.1	12759.7	[10000]	ug/L	12:51:03
1	Ca 317.933Radial†	6355.5	6395.3	[10000]	ug/L	12:51:03
1	Fe 238.204 Radial†	1175.7	1175.1	[10000]	ug/L	12:51:23
1	K 766.490 Radial†	56644.9	54659.7	[10000]	ug/L	12:51:03
1	Mg 279.077 IEC†	312.7	312.6	[10000]	ug/L	12:51:23
1	Na 589.592 Radial†	33015.3	34630.9	[10000]	ug/L	12:51:03
1	Sr 421.552†	155081.2	156512.5	[1000]	ug/L	12:51:03
1	Sc 361.383	846221.3	846221.3	98.619	%	12:52:22
1	Y 371.029	702372.7	702372.7	96.524	%	12:52:22
1	Ag 328.068†	215472.0	218132.3	[1000]	ug/L	12:52:22
1	As 188.979†	2274.9	2330.7	[1000]	ug/L	12:52:42
1	B 249.677†	43506.0	44730.3	[1000]	ug/L	12:52:22
1	Ba 233.527†	127574.2	129369.3	[1000]	ug/L	12:52:22
1	Be 313.107†	2606013.2	2646981.7	[1000]	ug/L	12:52:22
1	Cd 226.502†	89753.5	91212.1	[1000]	ug/L	12:52:22
1	Co 228.616†	48698.0	49457.2	[1000]	ug/L	12:52:22
1	Cr 267.716†	89203.4	90373.6	[1000]	ug/L	12:52:22
1	Cu 324.752†	338573.0	336911.8	[1000]	ug/L	12:52:22
1	Mn 257.610†	901500.9	913695.5	[1000]	ug/L	12:52:22
1	Mo 202.031†	14055.5	14230.7	[1000]	ug/L	12:52:42
1	Ni 231.604†	39986.4	40479.3	[1000]	ug/L	12:52:22
1	P 214.914†	8392.1	8289.3	[5000]	ug/L	12:52:42
1	Pb 220.353†	8032.6	8207.3	[1000]	ug/L	12:52:42
1	S 181.975 Axial†	1448.9	1425.4	[2000]	ug/L	12:52:42
1	Sb 206.836†	2925.5	2933.1	[1000]	ug/L	12:52:42
1	Se 196.026†	1524.3	1577.7	[1000]	ug/L	12:52:42
1	Si 251.611†	156650.6	158383.7	[5000]	ug/L	12:52:22
1	Sn 189.927†	5628.5	5705.7	[1000]	ug/L	12:52:42
1	Ti 334.940†	618431.1	628425.6	[1000]	ug/L	12:52:22
1	Tl 190.801†	3215.6	3294.7	[1000]	ug/L	12:52:42
1	U 409.014†	31667.8	33975.2	[1000]	ug/L	12:52:22
1	V 292.402†	144570.6	147954.9	[1000]	ug/L	12:52:22
1	Zn 213.857†	105965.2	106824.5	[1000]	ug/L	12:52:22
1	SiO2†	155379.5	157096.4	[10695]	ug/L	12:53:43
2	Sc Radial	4988.0	4988.0	97.4	%	12:51:28
2	Y RADIAL	5295.4	5295.4	96.19	%	12:51:28
2	Al 396.153Radial†	12473.8	12812.4	[10000]	ug/L	12:51:28
2	Ca 317.933Radial†	6265.5	6413.2	[10000]	ug/L	12:51:28
2	Fe 238.204 Radial†	1167.7	1187.2	[10000]	ug/L	12:51:48
2	K 766.490 Radial†	56111.6	55095.4	[10000]	ug/L	12:51:28
2	Mg 279.077 IEC†	306.0	311.2	[10000]	ug/L	12:51:48
2	Na 589.592 Radial†	32315.6	34485.7	[10000]	ug/L	12:51:28
2	Sr 421.552†	152761.7	156823.2	[1000]	ug/L	12:51:28
2	Sc 361.383	829653.5	829653.5	96.688	%	12:52:50
2	Y 371.029	689200.7	689200.7	94.714	%	12:52:50
2	Ag 328.068†	210949.1	217817.7	[1000]	ug/L	12:52:50
2	As 188.979†	2263.1	2364.6	[1000]	ug/L	12:53:10
2	B 249.677†	42543.7	44616.1	[1000]	ug/L	12:52:50
2	Ba 233.527†	125027.3	129318.4	[1000]	ug/L	12:52:50
2	Be 313.107†	2548706.4	2640481.8	[1000]	ug/L	12:52:50
2	Cd 226.502†	87671.2	90875.9	[1000]	ug/L	12:52:50
2	Co 228.616†	47630.8	49339.6	[1000]	ug/L	12:52:50
2	Cr 267.716†	87278.9	90189.5	[1000]	ug/L	12:52:50
2	Cu 324.752†	330942.7	335876.0	[1000]	ug/L	12:52:50
2	Mn 257.610†	882482.0	912279.8	[1000]	ug/L	12:52:50
2	Mo 202.031†	14035.4	14494.5	[1000]	ug/L	12:53:10
2	Ni 231.604†	39104.5	40376.9	[1000]	ug/L	12:52:50

2	P 214.914†	8354.0	8419.9	[5000]	ug/L	12:53:10
2	Pb 220.353†	8001.6	8337.8	[1000]	ug/L	12:53:10
2	S 181.975 Axial†	1446.5	1452.2	[2000]	ug/L	12:53:10
2	Sb 206.836†	2922.6	2989.3	[1000]	ug/L	12:53:10
2	Se 196.026†	1513.1	1596.9	[1000]	ug/L	12:53:10
2	Si 251.611†	153175.1	157961.2	[5000]	ug/L	12:52:50
2	Sn 189.927†	5598.9	5789.0	[1000]	ug/L	12:53:10
2	Ti 334.940†	605255.5	627321.5	[1000]	ug/L	12:52:50
2	Tl 190.801†	3200.5	3344.2	[1000]	ug/L	12:53:10
2	U 409.014†	30971.9	33896.6	[1000]	ug/L	12:52:50
2	V 292.402†	141521.2	147728.4	[1000]	ug/L	12:52:50
2	Zn 213.857†	103413.8	106331.4	[1000]	ug/L	12:52:50
2	SiO2†	154297.4	159123.5	[10695]	ug/L	12:53:48
3	Sc Radial	4905.8	4905.8	95.8	%	12:51:53
3	Y RADIAL	5231.6	5231.6	95.03	%	12:51:53
3	Al 396.153Radial†	12396.0	12945.8	[10000]	ug/L	12:51:53
3	Ca 317.933Radial†	6210.7	6463.8	[10000]	ug/L	12:51:53
3	Fe 238.204 Radial†	1166.1	1205.7	[10000]	ug/L	12:52:13
3	K 766.490 Radial†	55653.3	55582.2	[10000]	ug/L	12:51:53
3	Mg 279.077 IEC†	307.5	318.0	[10000]	ug/L	12:52:13
3	Na 589.592 Radial†	32040.7	34754.5	[10000]	ug/L	12:51:53
3	Sr 421.552†	151046.8	157660.4	[1000]	ug/L	12:51:53
3	Sc 361.383	837776.7	837776.7	97.635	%	12:53:18
3	Y 371.029	696980.4	696980.4	95.783	%	12:53:18
3	Ag 328.068†	212955.6	217757.3	[1000]	ug/L	12:53:18
3	As 188.979†	2260.5	2339.2	[1000]	ug/L	12:53:38
3	B 249.677†	43056.4	44714.5	[1000]	ug/L	12:53:18
3	Ba 233.527†	125824.6	128881.3	[1000]	ug/L	12:53:18
3	Be 313.107†	2576418.8	2643306.4	[1000]	ug/L	12:53:18
3	Cd 226.502†	88246.5	90585.9	[1000]	ug/L	12:53:18
3	Co 228.616†	47773.6	49008.1	[1000]	ug/L	12:53:18
3	Cr 267.716†	87944.1	89995.6	[1000]	ug/L	12:53:18
3	Cu 324.752†	334486.9	336187.3	[1000]	ug/L	12:53:18
3	Mn 257.610†	889040.1	910147.0	[1000]	ug/L	12:53:18
3	Mo 202.031†	14029.4	14347.6	[1000]	ug/L	12:53:38
3	Ni 231.604†	39438.0	40326.3	[1000]	ug/L	12:53:18
3	P 214.914†	8369.8	8352.2	[5000]	ug/L	12:53:38
3	Pb 220.353†	8025.6	8282.2	[1000]	ug/L	12:53:38
3	S 181.975 Axial†	1442.7	1433.8	[2000]	ug/L	12:53:38
3	Sb 206.836†	2921.0	2958.4	[1000]	ug/L	12:53:38
3	Se 196.026†	1513.0	1581.7	[1000]	ug/L	12:53:38
3	Si 251.611†	154313.1	157590.6	[5000]	ug/L	12:53:18
3	Sn 189.927†	5613.7	5748.0	[1000]	ug/L	12:53:38
3	Ti 334.940†	610672.3	626799.7	[1000]	ug/L	12:53:18
3	Tl 190.801†	3206.3	3318.1	[1000]	ug/L	12:53:38
3	U 409.014†	31143.7	33762.0	[1000]	ug/L	12:53:18
3	V 292.402†	142883.2	147704.2	[1000]	ug/L	12:53:18
3	Zn 213.857†	104218.9	106118.9	[1000]	ug/L	12:53:18
3	SiO2†	155832.1	159148.0	[10695]	ug/L	12:53:54

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	837883.8	8284.44	0.99%	97.647	%
Sc Radial	4989.2	83.99	1.68%	97.4	%
Y 371.029	696184.6	6621.96	0.95%	95.674	%
Y RADIAL	5307.5	82.60	1.56%	96.41	%
Ag 328.068†	217902.4	201.37	0.09%	[1000]	ug/L
Al 396.153Radial†	12839.3	95.92	0.75%	[10000]	ug/L
As 188.979†	2344.8	17.64	0.75%	[1000]	ug/L
B 249.677†	44687.0	61.90	0.14%	[1000]	ug/L
Ba 233.527†	129189.7	268.30	0.21%	[1000]	ug/L
Be 313.107†	2643589.9	3259.21	0.12%	[1000]	ug/L
Ca 317.933Radial†	6424.1	35.53	0.55%	[10000]	ug/L
Cd 226.502†	90891.3	313.39	0.34%	[1000]	ug/L
Co 228.616†	49268.3	232.87	0.47%	[1000]	ug/L
Cr 267.716†	90186.2	189.05	0.21%	[1000]	ug/L
Cu 324.752†	336325.1	531.46	0.16%	[1000]	ug/L
Fe 238.204 Radial†	1189.3	15.40	1.30%	[10000]	ug/L
K 766.490 Radial†	55112.4	461.46	0.84%	[10000]	ug/L

Mg 279.077 IEC†	313.9	3.59	1.14%	[10000]	ug/L
Mn 257.610†	912040.8	1786.27	0.20%	[1000]	ug/L
Mo 202.031†	14357.6	132.17	0.92%	[1000]	ug/L
Na 589.592 Radial†	34623.7	134.56	0.39%	[10000]	ug/L
Ni 231.604†	40394.2	77.93	0.19%	[1000]	ug/L
P 214.914†	8353.8	65.29	0.78%	[5000]	ug/L
Pb 220.353†	8275.8	65.50	0.79%	[1000]	ug/L
S 181.975 Axial†	1437.1	13.73	0.96%	[2000]	ug/L
Sb 206.836†	2960.2	28.15	0.95%	[1000]	ug/L
Se 196.026†	1585.4	10.17	0.64%	[1000]	ug/L
Si 251.611†	157978.5	396.80	0.25%	[5000]	ug/L
Sn 189.927†	5747.6	41.66	0.72%	[1000]	ug/L
Sr 421.552†	156998.7	593.76	0.38%	[1000]	ug/L
Ti 334.940†	627515.6	830.15	0.13%	[1000]	ug/L
Tl 190.801†	3319.0	24.73	0.75%	[1000]	ug/L
U 409.014†	33877.9	107.82	0.32%	[1000]	ug/L
V 292.402†	147795.8	138.28	0.09%	[1000]	ug/L
Zn 213.857†	106424.9	361.96	0.34%	[1000]	ug/L
SiO2†	158456.0	1177.48	0.74%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 1/12/2010 12:56:05
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	4925.6	4925.6	96.2	%	12:58:18
1	Y RADIAL	5219.7	5219.7	94.81	%	12:58:18
1	Al 396.153Radial†	59396.7	61758.0	[50000]	ug/L	12:57:58
1	Ca 317.933Radial†	29411.7	30558.7	[50000]	ug/L	12:57:58
1	Fe 238.204 Radial†	2264.1	2342.3	[20000]	ug/L	12:58:18
1	Mg 279.077 IEC†	1441.9	1496.0	[50000]	ug/L	12:58:18
1	Na 589.592 Radial†	65409.6	69311.9	[20000]	ug/L	12:57:58
1	Sc 361.383	823484.9	823484.9	95.969	%	12:59:15
1	Y 371.029	680559.9	680559.9	93.527	%	12:59:15
2	Sc Radial	4927.3	4927.3	96.2	%	12:58:43
2	Y RADIAL	5225.0	5225.0	94.91	%	12:58:43
2	Al 396.153Radial†	60710.3	63102.4	[50000]	ug/L	12:58:23
2	Ca 317.933Radial†	30130.0	31294.9	[50000]	ug/L	12:58:23
2	Fe 238.204 Radial†	2264.9	2342.4	[20000]	ug/L	12:58:43
2	Mg 279.077 IEC†	1449.8	1503.8	[50000]	ug/L	12:58:43
2	Na 589.592 Radial†	66690.7	70620.6	[20000]	ug/L	12:58:23
2	Sc 361.383	822525.3	822525.3	95.857	%	12:59:21
2	Y 371.029	680709.4	680709.4	93.547	%	12:59:21
3	Sc Radial	4863.9	4863.9	95.0	%	12:59:08
3	Y RADIAL	5133.4	5133.4	93.24	%	12:59:08
3	Al 396.153Radial†	59330.4	62471.5	[50000]	ug/L	12:58:48
3	Ca 317.933Radial†	29380.1	30913.3	[50000]	ug/L	12:58:48
3	Fe 238.204 Radial†	2244.9	2351.9	[20000]	ug/L	12:59:08
3	Mg 279.077 IEC†	1435.0	1507.8	[50000]	ug/L	12:59:08
3	Na 589.592 Radial†	65029.3	69774.3	[20000]	ug/L	12:58:48
3	Sc 361.383	827553.8	827553.8	96.443	%	12:59:27
3	Y 371.029	683978.3	683978.3	93.996	%	12:59:27

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	824521.4	2669.63	0.32%	96.090	%
Sc Radial	4905.6	36.11	0.74%	95.8	%
Y 371.029	681749.2	1931.88	0.28%	93.690	%
Y RADIAL	5192.7	51.42	0.99%	94.32	%
Al 396.153Radial†	62444.0	672.63	1.08%	[50000]	ug/L
Ca 317.933Radial†	30922.3	368.21	1.19%	[50000]	ug/L
Fe 238.204 Radial†	2345.5	5.54	0.24%	[20000]	ug/L
Mg 279.077 IEC†	1502.5	5.98	0.40%	[50000]	ug/L
Na 589.592 Radial†	69902.3	663.67	0.95%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	218.0	0.00000	0.999998	
Al 396.153Radial	3	Lin Thru 0	0.0	1.250	0.00000	0.999985	
As 188.979	3	Lin Thru 0	0.0	2.339	0.00000	0.999987	
B 249.677	3	Lin Thru 0	0.0	44.55	0.00000	0.999983	
Ba 233.527	3	Lin Thru 0	0.0	129.1	0.00000	0.999993	
Be 313.107	3	Lin Thru 0	0.0	2647	0.00000	0.999996	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6195	0.00000	0.999971	
Cd 226.502	3	Lin Thru 0	0.0	90.90	0.00000	0.999997	
Co 228.616	3	Lin Thru 0	0.0	49.28	0.00000	0.999999	
Cr 267.716	3	Lin Thru 0	0.0	90.13	0.00000	0.999995	
Cu 324.752	3	Lin Thru 0	0.0	335.2	0.00000	0.999976	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1176	0.00000	0.999984	
K 766.490 Radial	3	Lin Thru 0	0.0	5.491	0.00000	0.999970	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0301	0.00000	0.999956
Mn 257.610	3	Lin Thru 0	0.0	911.9	0.00000	0.999993
Mo 202.031	3	Lin Thru 0	0.0	14.33	0.00000	0.999992
Na 589.592 Radia	2	Lin Thru 0	0.0	3.489	0.00000	0.999993
Ni 231.604	3	Lin Thru 0	0.0	40.41	0.00000	0.999999
P 214.914	3	Lin Thru 0	0.0	1.666	0.00000	0.999980
Pb 220.353	3	Lin Thru 0	0.0	8.264	0.00000	0.999993
S 181.975 Axial	3	Lin Thru 0	0.0	0.7186	0.00000	0.999999
Sb 206.836	3	Lin Thru 0	0.0	2.946	0.00000	0.999952
Se 196.026	3	Lin Thru 0	0.0	1.588	0.00000	0.999990
Si 251.611	3	Lin Thru 0	0.0	31.59	0.00000	1.000000
Sn 189.927	3	Lin Thru 0	0.0	5.741	0.00000	0.999995
Sr 421.552	3	Lin Thru 0	0.0	156.6	0.00000	0.999988
Ti 334.940	3	Lin Thru 0	0.0	624.5	0.00000	0.999951
Tl 190.801	3	Lin Thru 0	0.0	3.312	0.00000	0.999989
U 409.014	3	Lin Thru 0	0.0	33.97	0.00000	0.999981
V 292.402	3	Lin Thru 0	0.0	147.5	0.00000	0.999992
Zn 213.857	3	Lin Thru 0	0.0	106.5	0.00000	0.999996
SiO2	3	Lin Thru 0	0.0	14.83	0.00000	0.999999

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

Autosampler Location: 9
Date Collected: 1/12/2010 13:01:38
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	5010.0	5010.0	97.8	%			13:03:31
1	Y RADIAL	5302.4	5302.4	96.31	%			13:03:31
1	Al 396.153Radial†	6249.1	6393.7	5087.4	ug/L	5087.4	ppb	13:03:31
1	Ca 317.933Radial†	3090.1	3139.4	5067.8	ug/L	5067.8	ppb	13:03:51
1	Fe 238.204 Radial†	603.1	604.9	5158.4	ug/L	5158.4	ppb	13:03:51
1	K 766.490 Radial†	15625.6	13460.2	2447.7	ug/L	2447.7	ppb	13:03:31
1	Mg 279.077 IEC†	159.4	159.9	5309.0	ug/L	5309.0	ppb	13:03:51
1	Na 589.592 Radial†	7188.4	8656.5	2481.4	ug/L	2481.4	ppb	13:03:31
1	Sr 421.552†	79944.0	81704.9	521.61	ug/L	521.61	ppb	13:03:31
1	Sc 361.383	849869.6	849869.6	99.044	%			13:04:49
1	Y 371.029	711496.0	711496.0	97.778	%			13:04:49
1	Ag 328.068†	56675.3	56865.2	264.26	ug/L	264.26	ppb	13:04:49
1	As 188.979†	1071.5	1105.8	476.98	ug/L	476.98	ppb	13:05:09
1	B 249.677†	22366.5	23197.5	518.39	ug/L	518.39	ppb	13:04:49
1	Ba 233.527†	65677.2	66319.6	515.13	ug/L	515.13	ppb	13:04:49
1	Be 313.107†	679307.1	690337.6	261.96	ug/L	261.96	ppb	13:04:49
1	Cd 226.502†	45224.8	45862.9	504.40	ug/L	504.40	ppb	13:04:49
1	Co 228.616†	24639.9	24955.0	506.52	ug/L	506.52	ppb	13:05:09
1	Cr 267.716†	44068.9	44415.2	493.40	ug/L	493.40	ppb	13:04:49
1	Cu 324.752†	175664.4	170957.3	509.98	ug/L	509.98	ppb	13:04:49
1	Mn 257.610†	463792.9	467839.1	513.36	ug/L	513.36	ppb	13:04:49
1	Mo 202.031†	7661.7	7714.0	538.71	ug/L	538.71	ppb	13:05:09
1	Ni 231.604†	20007.9	20134.0	497.95	ug/L	497.95	ppb	13:05:09
1	P 214.914†	4370.8	4192.7	2397.8	ug/L	2397.8	ppb	13:05:09
1	Pb 220.353†	4040.5	4141.7	503.01	ug/L	503.01	ppb	13:05:09
1	S 181.975 Axial†	1809.3	1782.9	2480.3	ug/L	2480.3	ppb	13:05:09
1	Sb 206.836†	1486.2	1467.1	516.63	ug/L	516.63	ppb	13:05:09
1	Se 196.026†	3988.7	4059.3	2573.5	ug/L	2573.5	ppb	13:05:09
1	Si 251.611†	152179.8	153187.8	4842.7	ug/L	4842.7	ppb	13:04:49
1	Sn 189.927†	3059.7	3087.6	538.79	ug/L	538.79	ppb	13:05:09
1	Ti 334.940†	308948.9	313264.6	501.47	ug/L	501.47	ppb	13:04:49
1	Tl 190.801†	1676.3	1726.5	524.68	ug/L	524.68	ppb	13:05:09
1	U 409.014†	15115.1	17124.9	502.45	ug/L	502.45	ppb	13:04:49
1	V 292.402†	72741.6	74803.3	514.59	ug/L	514.59	ppb	13:04:49
1	Zn 213.857†	54741.7	54645.3	508.61	ug/L	508.61	ppb	13:04:49
1	SiO2†	151046.2	152044.9	10241	ug/L	10241	ppb	13:06:06
2	Sc Radial	4856.2	4856.2	94.8	%			13:03:56
2	Y RADIAL	5210.4	5210.4	94.64	%			13:03:56
2	Al 396.153Radial†	6393.7	6748.3	5371.2	ug/L	5371.2	ppb	13:03:56
2	Ca 317.933Radial†	3109.0	3259.3	5261.3	ug/L	5261.3	ppb	13:04:16
2	Fe 238.204 Radial†	609.3	631.0	5380.3	ug/L	5380.3	ppb	13:04:16
2	K 766.490 Radial†	16036.5	14399.0	2618.5	ug/L	2618.5	ppb	13:03:56
2	Mg 279.077 IEC†	159.6	165.2	5487.0	ug/L	5487.0	ppb	13:04:16
2	Na 589.592 Radial†	7358.5	9068.4	2599.5	ug/L	2599.5	ppb	13:03:56
2	Sr 421.552†	81707.1	86150.7	549.99	ug/L	549.99	ppb	13:03:56
2	Sc 361.383	857001.6	857001.6	99.875	%			13:05:15
2	Y 371.029	717341.1	717341.1	98.581	%			13:05:15
2	Ag 328.068†	56911.5	56625.5	263.23	ug/L	263.23	ppb	13:05:15
2	As 188.979†	1072.5	1097.7	473.60	ug/L	473.60	ppb	13:05:35
2	B 249.677†	22569.5	23212.7	518.71	ug/L	518.71	ppb	13:05:15
2	Ba 233.527†	66137.2	66228.4	514.43	ug/L	514.43	ppb	13:05:15
2	Be 313.107†	683745.0	689073.3	261.48	ug/L	261.48	ppb	13:05:15
2	Cd 226.502†	45542.1	45800.6	503.69	ug/L	503.69	ppb	13:05:15
2	Co 228.616†	24634.6	24742.6	502.20	ug/L	502.20	ppb	13:05:35
2	Cr 267.716†	44333.4	44309.8	492.23	ug/L	492.23	ppb	13:05:15
2	Cu 324.752†	176283.6	170101.3	507.44	ug/L	507.44	ppb	13:05:15
2	Mn 257.610†	466933.8	467087.0	512.55	ug/L	512.55	ppb	13:05:15
2	Mo 202.031†	7658.4	7646.4	534.01	ug/L	534.01	ppb	13:05:35
2	Ni 231.604†	20023.8	19981.8	494.18	ug/L	494.18	ppb	13:05:35

2	P 214.914†	4371.1	4156.3	2376.4 ug/L	2376.4 ppb	13:05:35
2	Pb 220.353†	4047.0	4114.2	499.73 ug/L	499.73 ppb	13:05:35
2	S 181.975 Axial†	1824.4	1782.8	2480.0 ug/L	2480.0 ppb	13:05:35
2	Sb 206.836†	1488.1	1456.5	512.87 ug/L	512.87 ppb	13:05:35
2	Se 196.026†	4016.9	4054.0	2570.9 ug/L	2570.9 ppb	13:05:35
2	Si 251.611†	153041.2	152771.6	4829.6 ug/L	4829.6 ppb	13:05:15
2	Sn 189.927†	3060.0	3062.1	534.39 ug/L	534.39 ppb	13:05:35
2	Ti 334.940†	310900.4	312622.7	500.46 ug/L	500.46 ppb	13:05:15
2	Tl 190.801†	1705.2	1741.4	529.17 ug/L	529.17 ppb	13:05:35
2	U 409.014†	15024.8	16907.4	496.02 ug/L	496.02 ppb	13:05:15
2	V 292.402†	73186.5	74637.6	513.36 ug/L	513.36 ppb	13:05:15
2	Zn 213.857†	55101.8	54546.0	507.68 ug/L	507.68 ppb	13:05:15
2	SiO2†	152226.2	151957.2	10235 ug/L	10235 ppb	13:06:12
3	Sc Radial	5354.1	5354.1	105 %		13:04:21
3	Y RADIAL	5682.9	5682.9	103.2 %		13:04:21
3	Al 396.153Radial†	6189.2	5925.8	4714.3 ug/L	4714.3 ppb	13:04:21
3	Ca 317.933Radial†	3090.8	2936.9	4741.0 ug/L	4741.0 ppb	13:04:41
3	Fe 238.204 Radial†	608.0	570.0	4860.8 ug/L	4860.8 ppb	13:04:41
3	K 766.490 Radial†	15736.8	12539.8	2280.3 ug/L	2280.3 ppb	13:04:21
3	Mg 279.077 IEC†	160.5	150.5	4997.9 ug/L	4997.9 ppb	13:04:41
3	Na 589.592 Radial†	7199.1	8194.4	2348.9 ug/L	2348.9 ppb	13:04:21
3	Sr 421.552†	79611.9	76134.7	486.05 ug/L	486.05 ppb	13:04:21
3	Sc 361.383	885353.8	885353.8	103.18 %		13:05:41
3	Y 371.029	740833.6	740833.6	101.81 %		13:05:41
3	Ag 328.068†	55805.0	53728.3	249.68 ug/L	249.68 ppb	13:05:41
3	As 188.979†	1075.8	1066.6	459.96 ug/L	459.96 ppb	13:06:01
3	B 249.677†	22064.4	21999.6	491.62 ug/L	491.62 ppb	13:05:41
3	Ba 233.527†	64638.2	62654.9	486.66 ug/L	486.66 ppb	13:05:41
3	Be 313.107†	666405.7	650344.9	246.79 ug/L	246.79 ppb	13:05:41
3	Cd 226.502†	44523.6	43353.3	476.80 ug/L	476.80 ppb	13:05:41
3	Co 228.616†	24528.8	23850.2	484.12 ug/L	484.12 ppb	13:06:01
3	Cr 267.716†	43335.4	41921.0	465.69 ug/L	465.69 ppb	13:05:41
3	Cu 324.752†	172464.7	160747.8	479.53 ug/L	479.53 ppb	13:05:41
3	Mn 257.610†	456774.6	442269.2	485.30 ug/L	485.30 ppb	13:05:41
3	Mo 202.031†	7633.0	7376.2	515.11 ug/L	515.11 ppb	13:06:01
3	Ni 231.604†	19894.6	19214.5	475.21 ug/L	475.21 ppb	13:06:01
3	P 214.914†	4356.1	4001.5	2290.2 ug/L	2290.2 ppb	13:06:01
3	Pb 220.353†	4037.4	3975.1	482.76 ug/L	482.76 ppb	13:06:01
3	S 181.975 Axial†	1806.7	1707.2	2374.9 ug/L	2374.9 ppb	13:06:01
3	Sb 206.836†	1486.6	1407.3	495.53 ug/L	495.53 ppb	13:06:01
3	Se 196.026†	3998.3	3907.2	2476.8 ug/L	2476.8 ppb	13:06:01
3	Si 251.611†	149921.2	144840.7	4578.8 ug/L	4578.8 ppb	13:05:41
3	Sn 189.927†	3048.2	2952.6	515.21 ug/L	515.21 ppb	13:06:01
3	Ti 334.940†	303449.3	295432.6	472.92 ug/L	472.92 ppb	13:05:41
3	Tl 190.801†	1688.1	1670.2	507.45 ug/L	507.45 ppb	13:06:01
3	U 409.014†	14649.8	16062.2	471.26 ug/L	471.26 ppb	13:05:41
3	V 292.402†	71433.0	70591.5	485.72 ug/L	485.72 ppb	13:05:41
3	Zn 213.857†	53890.4	51605.1	480.28 ug/L	480.28 ppb	13:05:41
3	SiO2†	152938.4	147766.5	9952.6 ug/L	9952.6 ppb	13:06:17

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	864075.0	100.70	%	2.187				2.17%
Sc Radial	5073.4	99.1	%	4.98				5.02%
Y 371.029	723223.6	99.390	%	2.1340				2.15%
Y RADIAL	5398.6	98.06	%	4.551				4.64%
Ag 328.068†	55739.7	259.06	ug/L	8.137	259.06	ppb	8.137	3.14%
QC value within limits for Ag 328.068 Recovery = 103.62%								
Al 396.153Radial†	6356.0	5057.7	ug/L	329.45	5057.7	ppb	329.45	6.51%
QC value within limits for Al 396.153Radial Recovery = 101.15%								
As 188.979†	1090.0	470.18	ug/L	9.010	470.18	ppb	9.010	1.92%
QC value within limits for As 188.979 Recovery = 94.04%								
B 249.677†	22803.3	509.57	ug/L	15.551	509.57	ppb	15.551	3.05%
QC value within limits for B 249.677 Recovery = 101.91%								
Ba 233.527†	65067.6	505.41	ug/L	16.236	505.41	ppb	16.236	3.21%
QC value within limits for Ba 233.527 Recovery = 101.08%								
Be 313.107†	676585.3	256.75	ug/L	8.626	256.75	ppb	8.626	3.36%
QC value within limits for Be 313.107 Recovery = 102.70%								
Ca 317.933Radial†	3111.9	5023.4	ug/L	263.00	5023.4	ppb	263.00	5.24%

QC value within limits for Ca 317.933Radial Recovery = 100.47%

Cd 226.502†	45005.6	494.96 ug/L	15.732	494.96 ppb	15.732	3.18%
QC value within limits for Cd 226.502 Recovery = 98.99%						
Co 228.616†	24515.9	497.61 ug/L	11.888	497.61 ppb	11.888	2.39%
QC value within limits for Co 228.616 Recovery = 99.52%						
Cr 267.716†	43548.7	483.78 ug/L	15.671	483.78 ppb	15.671	3.24%
QC value within limits for Cr 267.716 Recovery = 96.76%						
Cu 324.752†	167268.8	498.98 ug/L	16.898	498.98 ppb	16.898	3.39%
QC value within limits for Cu 324.752 Recovery = 99.80%						
Fe 238.204 Radial†	602.0	5133.2 ug/L	260.70	5133.2 ppb	260.70	5.08%
QC value within limits for Fe 238.204 Radial Recovery = 102.66%						
K 766.490 Radial†	13466.3	2448.8 ug/L	169.14	2448.8 ppb	169.14	6.91%
QC value within limits for K 766.490 Radial Recovery = 97.95%						
Mg 279.077 IEC†	158.5	5264.7 ug/L	247.56	5264.7 ppb	247.56	4.70%
QC value within limits for Mg 279.077 IEC Recovery = 105.29%						
Mn 257.610†	459065.1	503.73 ug/L	15.971	503.73 ppb	15.971	3.17%
QC value within limits for Mn 257.610 Recovery = 100.75%						
Mo 202.031†	7578.9	529.28 ug/L	12.491	529.28 ppb	12.491	2.36%
QC value within limits for Mo 202.031 Recovery = 105.86%						
Na 589.592 Radial†	8639.8	2476.6 ug/L	125.34	2476.6 ppb	125.34	5.06%
QC value within limits for Na 589.592 Radial Recovery = 99.06%						
Ni 231.604†	19776.8	489.11 ug/L	12.188	489.11 ppb	12.188	2.49%
QC value within limits for Ni 231.604 Recovery = 97.82%						
P 214.914†	4116.8	2354.8 ug/L	56.95	2354.8 ppb	56.95	2.42%
QC value within limits for P 214.914 Recovery = 94.19%						
Pb 220.353†	4077.0	495.17 ug/L	10.873	495.17 ppb	10.873	2.20%
QC value within limits for Pb 220.353 Recovery = 99.03%						
S 181.975 Axial†	1757.6	2445.1 ug/L	60.75	2445.1 ppb	60.75	2.48%
QC value within limits for S 181.975 Axial Recovery = 97.80%						
Sb 206.836†	1443.6	508.35 ug/L	11.254	508.35 ppb	11.254	2.21%
QC value within limits for Sb 206.836 Recovery = 101.67%						
Se 196.026†	4006.8	2540.4 ug/L	55.11	2540.4 ppb	55.11	2.17%
QC value within limits for Se 196.026 Recovery = 101.62%						
Si 251.611†	150266.7	4750.4 ug/L	148.75	4750.4 ppb	148.75	3.13%
QC value within limits for Si 251.611 Recovery = 95.01%						
Sn 189.927†	3034.1	529.47 ug/L	12.537	529.47 ppb	12.537	2.37%
QC value within limits for Sn 189.927 Recovery = 105.89%						
Sr 421.552†	81330.1	519.22 ug/L	32.039	519.22 ppb	32.039	6.17%
QC value within limits for Sr 421.552 Recovery = 103.84%						
Ti 334.940†	307106.7	491.62 ug/L	16.198	491.62 ppb	16.198	3.29%
QC value within limits for Ti 334.940 Recovery = 98.32%						
Tl 190.801†	1712.7	520.43 ug/L	11.464	520.43 ppb	11.464	2.20%
QC value within limits for Tl 190.801 Recovery = 104.09%						
U 409.014†	16698.2	489.91 ug/L	16.468	489.91 ppb	16.468	3.36%
QC value within limits for U 409.014 Recovery = 97.98%						
V 292.402†	73344.1	504.56 ug/L	16.328	504.56 ppb	16.328	3.24%
QC value within limits for V 292.402 Recovery = 100.91%						
Zn 213.857†	53598.8	498.86 ug/L	16.092	498.86 ppb	16.092	3.23%
QC value within limits for Zn 213.857 Recovery = 99.77%						
SiO2†	150589.6	10143 ug/L	164.6	10143 ppb	164.6	1.62%
QC value within limits for SiO2 Recovery = 94.84%						

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 1/12/2010 13:08:27
Data Type: Original
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 Radial	5132.5	5132.5	100	%			13:10:20
1	Y RADIAL	5490.0	5490.0	99.72	%			13:10:20
1	Al 396.153Radial†	-3.5	2.7	2.1297	ug/L	2.1297	ppb	13:10:20
1	Ca 317.933Radial†	10.8	-8.4	-13.622	ug/L	-13.622	ppb	13:10:40
1	Fe 238.204 Radial†	10.5	-1.0	-8.8942	ug/L	-8.8942	ppb	13:10:40
1	K 766.490 Radial†	2595.7	78.3	14.260	ug/L	14.260	ppb	13:10:20
1	Mg 279.077 IEC†	4.0	0.9	30.951	ug/L	30.951	ppb	13:10:40
1	Na 589.592 Radial†	-1229.1	82.6	23.676	ug/L	23.676	ppb	13:10:20
1	Sr 421.552†	35.1	25.3	0.1616	ug/L	0.1616	ppb	13:10:20
1	Sc 361.383	827959.4	827959.4	96.491	%			13:11:37
1	Y 371.029	702033.6	702033.6	96.478	%			13:11:37
1	Ag 328.068†	260.3	-87.3	-0.4028	ug/L	-0.4028	ppb	13:11:37
1	As 188.979†	-19.0	4.2	1.8003	ug/L	1.8003	ppb	13:11:57
1	B 249.677†	-343.4	259.2	5.8194	ug/L	5.8194	ppb	13:11:57
1	Ba 233.527†	-8.2	0.1	0.0009	ug/L	0.0009	ppb	13:11:57
1	Be 313.107†	-4481.6	-169.9	-0.0640	ug/L	-0.0640	ppb	13:11:37
1	Cd 226.502†	-186.7	8.2	0.0916	ug/L	0.0916	ppb	13:11:57
1	Co 228.616†	-83.1	-8.9	-0.1811	ug/L	-0.1811	ppb	13:11:57
1	Cr 267.716†	68.2	-8.3	-0.0919	ug/L	-0.0919	ppb	13:11:57
1	Cu 324.752†	6276.5	102.4	0.3044	ug/L	0.3044	ppb	13:11:37
1	Mn 257.610†	414.4	-0.3	-0.0025	ug/L	-0.0025	ppb	13:11:57
1	Mo 202.031†	21.3	0.4	0.0283	ug/L	0.0283	ppb	13:11:57
1	Ni 231.604†	86.0	22.1	0.5465	ug/L	0.5465	ppb	13:11:57
1	P 214.914†	217.7	5.3	3.1247	ug/L	3.1247	ppb	13:11:57
1	Pb 220.353†	-56.7	3.4	0.4131	ug/L	0.4131	ppb	13:11:57
1	S 181.975 Axial†	52.0	10.0	13.876	ug/L	13.876	ppb	13:11:57
1	Sb 206.836†	43.9	12.0	4.1234	ug/L	4.1234	ppb	13:11:57
1	Se 196.026†	-27.1	3.9	2.4547	ug/L	2.4547	ppb	13:11:57
1	Si 251.611†	493.4	50.7	1.6044	ug/L	1.6044	ppb	13:11:57
1	Sn 189.927†	14.1	13.0	2.2582	ug/L	2.2582	ppb	13:11:57
1	Ti 334.940†	-1235.0	54.2	0.0820	ug/L	0.0820	ppb	13:11:37
1	Tl 190.801†	-40.9	-8.3	-2.5110	ug/L	-2.5110	ppb	13:11:57
1	U 409.014†	-1763.7	36.0	1.0612	ug/L	1.0612	ppb	13:11:37
1	V 292.402†	-1282.3	30.7	0.2129	ug/L	0.2129	ppb	13:11:37
1	Zn 213.857†	628.7	26.9	0.2498	ug/L	0.2498	ppb	13:11:57
1	SiO2†	453.9	11.4	0.7697	ug/L	0.7697	ppb	13:12:53
2	Sc Radial	5004.1	5004.1	97.7	%			13:10:45
2	Y RADIAL	5395.8	5395.8	98.01	%			13:10:45
2	Al 396.153Radial†	-4.0	2.1	1.6928	ug/L	1.6928	ppb	13:10:45
2	Ca 317.933Radial†	14.7	-4.2	-6.7989	ug/L	-6.7989	ppb	13:11:05
2	Fe 238.204 Radial†	13.0	1.7	14.568	ug/L	14.568	ppb	13:11:05
2	K 766.490 Radial†	2582.5	131.3	23.898	ug/L	23.898	ppb	13:10:45
2	Mg 279.077 IEC†	3.9	0.9	30.582	ug/L	30.582	ppb	13:11:05
2	Na 589.592 Radial†	-1207.7	73.0	20.920	ug/L	20.920	ppb	13:10:45
2	Sr 421.552†	18.7	9.3	0.0597	ug/L	0.0597	ppb	13:10:45
2	Sc 361.383	837584.2	837584.2	97.612	%			13:12:02
2	Y 371.029	710200.8	710200.8	97.600	%			13:12:02
2	Ag 328.068†	283.3	-66.9	-0.2968	ug/L	-0.2968	ppb	13:12:02
2	As 188.979†	-26.9	-3.6	-1.5477	ug/L	-1.5477	ppb	13:12:22
2	B 249.677†	-347.9	258.7	5.8054	ug/L	5.8054	ppb	13:12:22
2	Ba 233.527†	-27.8	-19.9	-0.1535	ug/L	-0.1535	ppb	13:12:22
2	Be 313.107†	-4427.1	-60.7	-0.0230	ug/L	-0.0230	ppb	13:12:02
2	Cd 226.502†	-192.5	4.4	0.0456	ug/L	0.0456	ppb	13:12:22
2	Co 228.616†	-78.8	-3.5	-0.0734	ug/L	-0.0734	ppb	13:12:22
2	Cr 267.716†	62.0	-15.5	-0.1692	ug/L	-0.1692	ppb	13:12:22
2	Cu 324.752†	6241.4	-8.4	-0.0212	ug/L	-0.0212	ppb	13:12:02
2	Mn 257.610†	424.2	4.8	0.0054	ug/L	0.0054	ppb	13:12:22
2	Mo 202.031†	9.0	-12.4	-0.8649	ug/L	-0.8649	ppb	13:12:22
2	Ni 231.604†	47.2	-18.7	-0.4626	ug/L	-0.4626	ppb	13:12:22

2	P 214.914†	230.4	15.7	9.4149	ug/L	9.4149	ppb	13:12:22
2	Pb 220.353†	-61.9	-1.2	-0.1500	ug/L	-0.1500	ppb	13:12:22
2	S 181.975 Axial†	49.5	6.9	9.5401	ug/L	9.5401	ppb	13:12:22
2	Sb 206.836†	34.5	1.9	0.6349	ug/L	0.6349	ppb	13:12:22
2	Se 196.026†	-32.2	-1.0	-0.5626	ug/L	-0.5626	ppb	13:12:22
2	Si 251.611†	452.1	2.5	0.0909	ug/L	0.0909	ppb	13:12:22
2	Sn 189.927†	0.9	-0.7	-0.1311	ug/L	-0.1311	ppb	13:12:22
2	Ti 334.940†	-1310.7	-8.6	-0.0147	ug/L	-0.0147	ppb	13:12:02
2	Tl 190.801†	-29.6	3.8	1.1356	ug/L	1.1356	ppb	13:12:22
2	U 409.014†	-2003.2	-188.3	-5.5451	ug/L	-5.5451	ppb	13:12:02
2	V 292.402†	-1310.4	17.3	0.0921	ug/L	0.0921	ppb	13:12:02
2	Zn 213.857†	635.6	26.5	0.2507	ug/L	0.2507	ppb	13:12:22
2	SiO2†	503.0	56.3	3.8213	ug/L	3.8213	ppb	13:12:58
3	Sc Radial	4986.9	4986.9	97.4	%			13:11:10
3	Y RADIAL	5371.2	5371.2	97.56	%			13:11:10
3	Al 396.153Radial†	-13.1	-7.3	-5.8687	ug/L	-5.8687	ppb	13:11:10
3	Ca 317.933Radial†	14.0	-4.9	-7.8391	ug/L	-7.8391	ppb	13:11:30
3	Fe 238.204 Radial†	8.9	-2.4	-20.530	ug/L	-20.530	ppb	13:11:30
3	K 766.490 Radial†	2484.6	39.8	7.2541	ug/L	7.2541	ppb	13:11:10
3	Mg 279.077 IEC†	1.1	-1.9	-63.992	ug/L	-63.992	ppb	13:11:30
3	Na 589.592 Radial†	-1249.6	25.7	7.3714	ug/L	7.3714	ppb	13:11:10
3	Sr 421.552†	20.7	11.5	0.0733	ug/L	0.0733	ppb	13:11:10
3	Sc 361.383	838620.9	838620.9	97.733	%			13:12:28
3	Y 371.029	710266.2	710266.2	97.609	%			13:12:28
3	Ag 328.068†	248.9	-102.4	-0.4763	ug/L	-0.4763	ppb	13:12:28
3	As 188.979†	-17.2	6.3	2.6868	ug/L	2.6868	ppb	13:12:48
3	B 249.677†	-351.7	255.2	5.7327	ug/L	5.7327	ppb	13:12:48
3	Ba 233.527†	-12.0	-3.7	-0.0300	ug/L	-0.0300	ppb	13:12:48
3	Be 313.107†	-4461.9	-90.7	-0.0343	ug/L	-0.0343	ppb	13:12:28
3	Cd 226.502†	-186.4	10.9	0.1216	ug/L	0.1216	ppb	13:12:48
3	Co 228.616†	-83.1	-7.8	-0.1577	ug/L	-0.1577	ppb	13:12:48
3	Cr 267.716†	81.8	4.7	0.0520	ug/L	0.0520	ppb	13:12:48
3	Cu 324.752†	6300.0	43.7	0.1305	ug/L	0.1305	ppb	13:12:28
3	Mn 257.610†	421.6	1.6	0.0023	ug/L	0.0023	ppb	13:12:48
3	Mo 202.031†	27.4	6.4	0.4431	ug/L	0.4431	ppb	13:12:48
3	Ni 231.604†	72.5	7.2	0.1777	ug/L	0.1777	ppb	13:12:48
3	P 214.914†	219.0	3.7	2.2500	ug/L	2.2500	ppb	13:12:48
3	Pb 220.353†	-56.5	4.4	0.5349	ug/L	0.5349	ppb	13:12:48
3	S 181.975 Axial†	48.5	5.7	7.9861	ug/L	7.9861	ppb	13:12:48
3	Sb 206.836†	39.6	7.0	2.4467	ug/L	2.4467	ppb	13:12:48
3	Se 196.026†	-28.0	3.4	2.0664	ug/L	2.0664	ppb	13:12:48
3	Si 251.611†	475.1	25.4	0.7990	ug/L	0.7990	ppb	13:12:48
3	Sn 189.927†	19.4	18.2	3.1682	ug/L	3.1682	ppb	13:12:48
3	Ti 334.940†	-1314.6	-10.9	-0.0123	ug/L	-0.0123	ppb	13:12:28
3	Tl 190.801†	-37.2	-4.0	-1.2004	ug/L	-1.2004	ppb	13:12:48
3	U 409.014†	-1901.7	-81.9	-2.4097	ug/L	-2.4097	ppb	13:12:28
3	V 292.402†	-1398.1	-70.8	-0.4757	ug/L	-0.4757	ppb	13:12:28
3	Zn 213.857†	626.8	16.7	0.1571	ug/L	0.1571	ppb	13:12:48
3	SiO2†	489.0	41.3	2.7732	ug/L	2.7732	ppb	13:13:03

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	834721.5	97.279	%	0.6851				0.70%
Sc Radial	5041.2	98.4	%	1.55				1.58%
Y 371.029	707500.2	97.229	%	0.6506				0.67%
Y RADIAL	5419.0	98.43	%	1.139				1.16%
Ag 328.068†	-85.5	-0.3920	ug/L	0.09024	-0.3920	ppb	0.09024	23.02%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-0.9	-0.6821	ug/L	4.49703	-0.6821	ppb	4.49703	659.32%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.3	0.9798	ug/L	2.23329	0.9798	ppb	2.23329	227.94%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	257.7	5.7858	ug/L	0.04657	5.7858	ppb	0.04657	0.80%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-7.8	-0.0609	ug/L	0.08169	-0.0609	ppb	0.08169	134.22%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-107.1	-0.0404	ug/L	0.02118	-0.0404	ppb	0.02118	52.39%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-5.8	-9.4201	ug/L	3.67624	-9.4201	ppb	3.67624	39.03%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 7.8      0.0863 ug/L       0.03831      0.0863 ppb        0.03831  44.41%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -6.8     -0.1374 ug/L       0.05662     -0.1374 ppb        0.05662  41.21%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -6.3     -0.0697 ug/L       0.11226     -0.0697 ppb        0.11226 161.13%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                45.9      0.1379 ug/L       0.16295      0.1379 ppb        0.16295 118.17%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.6     -4.9520 ug/L      17.87815     -4.9520 ppb       17.87815 361.03%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          83.1      15.137 ug/L        8.3568      15.137 ppb        8.3568  55.21%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.0     -0.8197 ug/L      54.70932     -0.8197 ppb       54.70932 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 2.0      0.0018 ug/L       0.00401      0.0018 ppb        0.00401 227.92%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -1.9     -0.1312 ug/L       0.66844     -0.1312 ppb        0.66844 509.61%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         60.4      17.322 ug/L        8.7273      17.322 ppb        8.7273  50.38%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 3.5      0.0872 ug/L       0.51061      0.0872 ppb        0.51061 585.72%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  8.2      4.9299 ug/L       3.90870      4.9299 ppb        3.90870  79.29%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 2.2      0.2660 ug/L       0.36539      0.2660 ppb        0.36539 137.36%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            7.5      10.467 ug/L        3.0527      10.467 ppb        3.0527  29.16%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 7.0      2.4017 ug/L       1.74473      2.4017 ppb        1.74473  72.65%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 2.1      1.3195 ug/L       1.64149      1.3195 ppb        1.64149 124.40%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                26.2      0.8314 ug/L       0.75728      0.8314 ppb        0.75728  91.08%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.1      1.7651 ug/L       1.70403      1.7651 ppb        1.70403  96.54%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                15.4      0.0982 ug/L       0.05530      0.0982 ppb        0.05530  56.32%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                11.6      0.0183 ug/L       0.05515      0.0183 ppb        0.05515 300.73%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.8     -0.8586 ug/L       1.84716     -0.8586 ppb        1.84716 215.14%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -78.1     -2.2978 ug/L       3.30458     -2.2978 ppb        3.30458 143.81%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -7.6     -0.0569 ug/L       0.36767     -0.0569 ppb        0.36767 646.20%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                23.4      0.2192 ug/L       0.05379      0.2192 ppb        0.05379  24.54%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      36.3      2.4548 ug/L       1.55053      2.4548 ppb        1.55053  63.16%
   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: 1/12/2010 13:15:14
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	5072.5	5072.5	99.1	%			13:17:07
1	Y RADIAL	5458.5	5458.5	99.15	%			13:17:07
1	Al 396.153Radial†	261.2	269.9	215.41	ug/L	215.41	ppb	13:17:07
1	Ca 317.933Radial†	152.0	134.2	216.69	ug/L	216.69	ppb	13:17:27
1	Fe 238.204 Radial†	21.9	10.6	90.073	ug/L	90.073	ppb	13:17:27
1	K 766.490 Radial†	3378.5	899.2	163.53	ug/L	163.53	ppb	13:17:07
1	Mg 279.077 IEC†	9.7	6.7	223.91	ug/L	223.91	ppb	13:17:27
1	Na 589.592 Radial†	-206.1	1100.8	315.55	ug/L	315.55	ppb	13:17:07
1	Sr 421.552†	777.9	775.6	4.9502	ug/L	4.9502	ppb	13:17:07
1	Sc 361.383	867851.8	867851.8	101.14	%			13:18:24
1	Y 371.029	732628.4	732628.4	100.68	%			13:18:24
1	Ag 328.068†	1455.1	1081.6	4.9654	ug/L	4.9654	ppb	13:18:29
1	As 188.979†	45.4	68.8	29.453	ug/L	29.453	ppb	13:18:49
1	B 249.677†	1583.3	2180.6	48.915	ug/L	48.915	ppb	13:18:29
1	Ba 233.527†	642.5	643.9	5.0029	ug/L	5.0029	ppb	13:18:49
1	Be 313.107†	8400.4	12780.4	4.8398	ug/L	4.8398	ppb	13:18:29
1	Cd 226.502†	253.8	452.6	4.9829	ug/L	4.9829	ppb	13:18:49
1	Co 228.616†	158.0	233.5	4.7485	ug/L	4.7485	ppb	13:18:49
1	Cr 267.716†	509.0	424.3	4.6951	ug/L	4.6951	ppb	13:18:49
1	Cu 324.752†	9721.0	3209.0	9.5477	ug/L	9.5477	ppb	13:18:29
1	Mn 257.610†	9876.0	9334.9	10.237	ug/L	10.237	ppb	13:18:29
1	Mo 202.031†	159.9	136.5	9.5349	ug/L	9.5349	ppb	13:18:49
1	Ni 231.604†	265.7	195.7	4.8409	ug/L	4.8409	ppb	13:18:49
1	P 214.914†	464.5	238.9	141.23	ug/L	141.23	ppb	13:18:49
1	Pb 220.353†	9.7	71.8	8.7526	ug/L	8.7526	ppb	13:18:49
1	S 181.975 Axial†	122.9	77.6	108.00	ug/L	108.00	ppb	13:18:49
1	Sb 206.836†	63.0	28.8	10.119	ug/L	10.119	ppb	13:18:49
1	Se 196.026†	12.6	44.5	28.330	ug/L	28.330	ppb	13:18:49
1	Si 251.611†	3584.3	3083.3	97.488	ug/L	97.488	ppb	13:18:29
1	Sn 189.927†	58.7	56.4	9.8653	ug/L	9.8653	ppb	13:18:49
1	Ti 334.940†	1725.7	3040.4	4.8541	ug/L	4.8541	ppb	13:18:29
1	Tl 190.801†	39.4	73.1	22.120	ug/L	22.120	ppb	13:18:49
1	U 409.014†	-23.6	1840.5	54.161	ug/L	54.161	ppb	13:18:24
1	V 292.402†	-611.1	755.5	5.3493	ug/L	5.3493	ppb	13:18:29
1	Zn 213.857†	1755.3	1110.9	10.376	ug/L	10.376	ppb	13:18:49
1	SiO2†	3608.3	3108.7	209.41	ug/L	209.41	ppb	13:19:55
2	Sc Radial	5060.1	5060.1	98.8	%			13:17:32
2	Y RADIAL	5452.4	5452.4	99.04	%			13:17:32
2	Al 396.153Radial†	245.7	254.8	203.36	ug/L	203.36	ppb	13:17:32
2	Ca 317.933Radial†	144.1	126.6	204.32	ug/L	204.32	ppb	13:17:52
2	Fe 238.204 Radial†	22.7	11.4	97.409	ug/L	97.409	ppb	13:17:52
2	K 766.490 Radial†	3309.1	837.4	152.28	ug/L	152.28	ppb	13:17:32
2	Mg 279.077 IEC†	12.6	9.7	322.16	ug/L	322.16	ppb	13:17:52
2	Na 589.592 Radial†	-179.5	1127.3	323.13	ug/L	323.13	ppb	13:17:32
2	Sr 421.552†	766.3	765.8	4.8875	ug/L	4.8875	ppb	13:17:32
2	Sc 361.383	857551.6	857551.6	99.939	%			13:18:54
2	Y 371.029	725347.9	725347.9	99.682	%			13:18:54
2	Ag 328.068†	1468.5	1112.3	5.1069	ug/L	5.1069	ppb	13:18:59
2	As 188.979†	41.4	65.4	27.983	ug/L	27.983	ppb	13:19:20
2	B 249.677†	1646.3	2262.4	50.750	ug/L	50.750	ppb	13:18:59
2	Ba 233.527†	627.0	636.0	4.9413	ug/L	4.9413	ppb	13:19:20
2	Be 313.107†	8517.0	12996.9	4.9218	ug/L	4.9218	ppb	13:18:59
2	Cd 226.502†	246.5	448.3	4.9358	ug/L	4.9358	ppb	13:19:20
2	Co 228.616†	166.3	243.7	4.9545	ug/L	4.9545	ppb	13:19:20
2	Cr 267.716†	507.7	429.0	4.7470	ug/L	4.7470	ppb	13:19:20
2	Cu 324.752†	9880.2	3483.8	10.367	ug/L	10.367	ppb	13:18:59
2	Mn 257.610†	9864.5	9440.7	10.350	ug/L	10.350	ppb	13:18:59
2	Mo 202.031†	157.0	135.5	9.4648	ug/L	9.4648	ppb	13:19:20
2	Ni 231.604†	278.8	211.9	5.2417	ug/L	5.2417	ppb	13:19:20

2	P 214.914†	474.0	254.0	150.10	ug/L	150.10 ppb	13:19:20
2	Pb 220.353†	17.2	79.4	9.6676	ug/L	9.6676 ppb	13:19:20
2	S 181.975 Axial†	118.9	75.1	104.50	ug/L	104.50 ppb	13:19:20
2	Sb 206.836†	73.6	40.2	13.978	ug/L	13.978 ppb	13:19:20
2	Se 196.026†	11.2	43.2	27.549	ug/L	27.549 ppb	13:19:20
2	Si 251.611†	3602.3	3143.8	99.405	ug/L	99.405 ppb	13:18:59
2	Sn 189.927†	62.6	61.0	10.654	ug/L	10.654 ppb	13:19:20
2	Ti 334.940†	1773.8	3109.1	4.9540	ug/L	4.9540 ppb	13:18:59
2	Tl 190.801†	28.6	62.7	18.985	ug/L	18.985 ppb	13:19:20
2	U 409.014†	3.3	1867.2	54.945	ug/L	54.945 ppb	13:18:54
2	V 292.402†	-640.2	719.1	5.1041	ug/L	5.1041 ppb	13:18:59
2	Zn 213.857†	1761.7	1138.1	10.627	ug/L	10.627 ppb	13:19:20
2	SiO2†	3588.3	3131.5	210.96	ug/L	210.96 ppb	13:20:00
3	Sc Radial	5313.6	5313.6	104	%		13:17:57
3	Y RADIAL	5695.4	5695.4	103.5	%		13:17:57
3	Al 396.153Radial†	256.2	253.1	201.93	ug/L	201.93 ppb	13:17:57
3	Ca 317.933Radial†	143.5	119.1	192.24	ug/L	192.24 ppb	13:18:18
3	Fe 238.204 Radial†	23.1	10.7	90.971	ug/L	90.971 ppb	13:18:18
3	K 766.490 Radial†	3366.1	732.5	133.19	ug/L	133.19 ppb	13:17:57
3	Mg 279.077 IEC†	11.1	7.7	255.26	ug/L	255.26 ppb	13:18:18
3	Na 589.592 Radial†	-197.0	1119.0	320.76	ug/L	320.76 ppb	13:17:57
3	Sr 421.552†	762.9	725.5	4.6306	ug/L	4.6306 ppb	13:17:57
3	Sc 361.383	855818.5	855818.5	99.737	%		13:19:25
3	Y 371.029	723943.9	723943.9	99.489	%		13:19:25
3	Ag 328.068†	1367.5	1014.0	4.6585	ug/L	4.6585 ppb	13:19:30
3	As 188.979†	53.4	77.5	33.166	ug/L	33.166 ppb	13:19:50
3	B 249.677†	1602.2	2221.5	49.834	ug/L	49.834 ppb	13:19:30
3	Ba 233.527†	621.1	631.3	4.9054	ug/L	4.9054 ppb	13:19:50
3	Be 313.107†	8534.7	13031.8	4.9351	ug/L	4.9351 ppb	13:19:30
3	Cd 226.502†	247.1	449.4	4.9469	ug/L	4.9469 ppb	13:19:50
3	Co 228.616†	165.2	242.9	4.9398	ug/L	4.9398 ppb	13:19:50
3	Cr 267.716†	497.0	419.3	4.6413	ug/L	4.6413 ppb	13:19:50
3	Cu 324.752†	9737.0	3360.2	10.001	ug/L	10.001 ppb	13:19:30
3	Mn 257.610†	9958.5	9554.9	10.477	ug/L	10.477 ppb	13:19:30
3	Mo 202.031†	163.9	142.7	9.9685	ug/L	9.9685 ppb	13:19:50
3	Ni 231.604†	255.4	189.1	4.6763	ug/L	4.6763 ppb	13:19:50
3	P 214.914†	469.5	250.4	148.04	ug/L	148.04 ppb	13:19:50
3	Pb 220.353†	32.4	94.7	11.520	ug/L	11.520 ppb	13:19:50
3	S 181.975 Axial†	111.1	67.5	93.935	ug/L	93.935 ppb	13:19:50
3	Sb 206.836†	61.2	27.9	9.8257	ug/L	9.8257 ppb	13:19:50
3	Se 196.026†	18.7	50.7	32.271	ug/L	32.271 ppb	13:19:50
3	Si 251.611†	3583.7	3132.5	99.041	ug/L	99.041 ppb	13:19:30
3	Sn 189.927†	60.9	59.4	10.379	ug/L	10.379 ppb	13:19:50
3	Ti 334.940†	1792.6	3131.4	4.9954	ug/L	4.9954 ppb	13:19:30
3	Tl 190.801†	21.4	55.5	16.814	ug/L	16.814 ppb	13:19:50
3	U 409.014†	-127.5	1736.0	51.086	ug/L	51.086 ppb	13:19:25
3	V 292.402†	-605.6	752.5	5.3299	ug/L	5.3299 ppb	13:19:30
3	Zn 213.857†	1750.5	1130.4	10.559	ug/L	10.559 ppb	13:19:50
3	SiO2†	3596.2	3146.6	211.96	ug/L	211.96 ppb	13:20:05

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	860407.3	100.27	%	0.758				0.76%
Sc Radial	5148.7	101	%	2.8				2.78%
Y 371.029	727306.7	99.951	%	0.6407				0.64%
Y RADIAL	5535.4	100.5	%	2.52				2.50%
Ag 328.068†	1069.3	4.9103	ug/L	0.22926	4.9103	ppb	0.22926	4.67%
QC value within limits for Ag 328.068 Recovery = 98.21%								
Al 396.153Radial†	259.3	206.90	ug/L	7.402	206.90	ppb	7.402	3.58%
QC value within limits for Al 396.153Radial Recovery = 103.45%								
As 188.979†	70.5	30.201	ug/L	2.6710	30.201	ppb	2.6710	8.84%
QC value within limits for As 188.979 Recovery = 100.67%								
B 249.677†	2221.5	49.833	ug/L	0.9173	49.833	ppb	0.9173	1.84%
QC value within limits for B 249.677 Recovery = 99.67%								
Ba 233.527†	637.0	4.9499	ug/L	0.04930	4.9499	ppb	0.04930	1.00%
QC value within limits for Ba 233.527 Recovery = 99.00%								
Be 313.107†	12936.4	4.8989	ug/L	0.05163	4.8989	ppb	0.05163	1.05%
QC value within limits for Be 313.107 Recovery = 97.98%								
Ca 317.933Radial†	126.6	204.42	ug/L	12.226	204.42	ppb	12.226	5.98%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.21%
Cd 226.502†              450.1      4.9552 ug/L       0.02461      4.9552 ppb        0.02461   0.50%
   QC value within limits for Cd 226.502  Recovery = 99.10%
Co 228.616†              240.0      4.8809 ug/L       0.11492      4.8809 ppb        0.11492   2.35%
   QC value within limits for Co 228.616  Recovery = 97.62%
Cr 267.716†              424.2      4.6945 ug/L       0.05284      4.6945 ppb        0.05284   1.13%
   QC value within limits for Cr 267.716  Recovery = 93.89%
Cu 324.752†             3351.0      9.9718 ug/L       0.41050      9.9718 ppb        0.41050   4.12%
   QC value within limits for Cu 324.752  Recovery = 99.72%
Fe 238.204 Radial†        10.9      92.818 ug/L        4.0015      92.818 ppb         4.0015   4.31%
   QC value within limits for Fe 238.204 Radial  Recovery = 92.82%
K 766.490 Radial†        823.0      149.67 ug/L        15.339      149.67 ppb         15.339  10.25%
   QC value within limits for K 766.490 Radial  Recovery = 99.78%
Mg 279.077 IEC†            8.0      267.11 ug/L        50.184      267.11 ppb         50.184  18.79%
   QC value within limits for Mg 279.077 IEC  Recovery = 89.04%
Mn 257.610†             9443.5      10.355 ug/L        0.1201      10.355 ppb         0.1201   1.16%
   QC value within limits for Mn 257.610  Recovery = 103.55%
Mo 202.031†              138.2      9.6561 ug/L       0.27283      9.6561 ppb        0.27283   2.83%
   QC value within limits for Mo 202.031  Recovery = 96.56%
Na 589.592 Radial†      1115.7      319.81 ug/L         3.881      319.81 ppb          3.881   1.21%
   QC value within limits for Na 589.592 Radial  Recovery = 106.60%
Ni 231.604†              198.9      4.9196 ug/L       0.29084      4.9196 ppb        0.29084   5.91%
   QC value within limits for Ni 231.604  Recovery = 98.39%
P 214.914†               247.8      146.46 ug/L         4.638      146.46 ppb          4.638   3.17%
   QC value within limits for P 214.914  Recovery = 97.64%
Pb 220.353†               82.0      9.9802 ug/L       1.41008      9.9802 ppb        1.41008  14.13%
   QC value within limits for Pb 220.353  Recovery = 99.80%
S 181.975 Axial†          73.4      102.14 ug/L         7.322      102.14 ppb          7.322   7.17%
   QC value within limits for S 181.975 Axial  Recovery = 102.14%
Sb 206.836†               32.3      11.307 ug/L        2.3171      11.307 ppb         2.3171  20.49%
   QC value within limits for Sb 206.836  Recovery = 113.07%
Se 196.026†               46.2      29.383 ug/L        2.5306      29.383 ppb         2.5306   8.61%
   QC value within limits for Se 196.026  Recovery = 97.94%
Si 251.611†             3119.9      98.645 ug/L        1.0184      98.645 ppb         1.0184   1.03%
   QC value within limits for Si 251.611  Recovery = 98.64%
Sn 189.927†               58.9      10.299 ug/L        0.4003      10.299 ppb         0.4003   3.89%
   QC value within limits for Sn 189.927  Recovery = 102.99%
Sr 421.552†              755.6      4.8228 ug/L       0.16938      4.8228 ppb        0.16938   3.51%
   QC value within limits for Sr 421.552  Recovery = 96.46%
Ti 334.940†             3093.6      4.9345 ug/L       0.07263      4.9345 ppb        0.07263   1.47%
   QC value within limits for Ti 334.940  Recovery = 98.69%
Tl 190.801†               63.8      19.306 ug/L        2.6676      19.306 ppb         2.6676  13.82%
   QC value within limits for Tl 190.801  Recovery = 96.53%
U 409.014†              1814.6      53.398 ug/L        2.0395      53.398 ppb         2.0395   3.82%
   QC value within limits for U 409.014  Recovery = 106.80%
V 292.402†               742.4      5.2611 ug/L       0.13633      5.2611 ppb        0.13633   2.59%
   QC value within limits for V 292.402  Recovery = 105.22%
Zn 213.857†             1126.5      10.521 ug/L        0.1299      10.521 ppb         0.1299   1.23%
   QC value within limits for Zn 213.857  Recovery = 105.21%
SiO2†                   3128.9      210.78 ug/L         1.284      210.78 ppb          1.284   0.61%
   QC value within limits for SiO2  Recovery = 98.96%
All analyte(s) passed QC.
```

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

Autosampler Location: 13
Date Collected: 1/12/2010 13:22:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4817.3	4817.3	94.1	%			13:24:15
1	Y RADIAL	5136.5	5136.5	93.30	%			13:24:15
1	Al 396.153Radial†	573761.5	609935.9	487810	ug/L	487810	ppb	13:24:10
1	Ca 317.933Radial†	263181.8	279752.8	451590	ug/L	451590	ppb	13:24:10
1	Fe 238.204 Radial†	19492.7	20709.9	176090	ug/L	176090	ppb	13:24:15
1	K 766.490 Radial†	2332.2	-32.3	-156.94	ug/L	-156.94	ppb	13:24:15
1	Mg 279.077 IEC†	13027.3	13845.4	459580	ug/L	459580	ppb	13:24:15
1	Na 589.592 Radial†	-1051.6	191.0	54.759	ug/L	54.759	ppb	13:24:15
1	Sr 421.552†	558.9	584.4	0.3588	ug/L	0.3588	ppb	13:24:15
1	Sc 361.383	725568.7	725568.7	84.558	%			13:24:42
1	Y 371.029	596091.4	596091.4	81.919	%			13:24:42
1	Ag 328.068†	-9801.9	-11948.9	-3.8464	ug/L	-3.8464	ppb	13:24:42
1	As 188.979†	-98.7	-92.8	1.4302	ug/L	1.4302	ppb	13:25:02
1	B 249.677†	552.5	1268.5	-0.1280	ug/L	-0.1280	ppb	13:24:42
1	Ba 233.527†	-409.5	-475.7	1.7152	ug/L	1.7152	ppb	13:25:02
1	Be 313.107†	-4390.5	-717.6	-0.3234	ug/L	-0.3234	ppb	13:24:42
1	Cd 226.502†	1262.3	1694.5	0.4589	ug/L	0.4589	ppb	13:25:02
1	Co 228.616†	-7.2	68.7	-1.1464	ug/L	-1.1464	ppb	13:25:02
1	Cr 267.716†	-105.8	-204.0	1.1749	ug/L	1.1749	ppb	13:25:02
1	Cu 324.752†	4073.8	-1584.7	4.5768	ug/L	4.5768	ppb	13:24:42
1	Mn 257.610†	2225.8	2202.4	1.0087	ug/L	1.0087	ppb	13:24:42
1	Mo 202.031†	-210.2	-270.2	0.1861	ug/L	0.1861	ppb	13:25:02
1	Ni 231.604†	178.8	144.5	3.5745	ug/L	3.5745	ppb	13:25:02
1	P 214.914†	175.5	-12.7	-27.404	ug/L	-27.404	ppb	13:25:02
1	Pb 220.353†	-746.8	-821.0	5.8603	ug/L	5.8603	ppb	13:25:02
1	S 181.975 Axial†	88.7	61.0	-6.5613	ug/L	-6.5613	ppb	13:25:02
1	Sb 206.836†	52.2	28.3	-2.6917	ug/L	-2.6917	ppb	13:25:02
1	Se 196.026†	-801.7	-916.1	-28.770	ug/L	-28.770	ppb	13:25:02
1	Si 251.611†	536.8	174.1	5.7445	ug/L	5.7445	ppb	13:25:02
1	Sn 189.927†	-354.7	-421.2	5.4411	ug/L	5.4411	ppb	13:25:02
1	Ti 334.940†	-13276.1	-14366.5	0.7789	ug/L	0.7789	ppb	13:24:42
1	Tl 190.801†	-86.6	-68.3	-20.848	ug/L	-20.848	ppb	13:25:02
1	U 409.014†	-724.9	1006.6	9.5634	ug/L	9.5634	ppb	13:24:42
1	V 292.402†	1329.7	2932.2	-0.0103	ug/L	-0.0103	ppb	13:25:02
1	Zn 213.857†	2869.2	2768.5	8.8907	ug/L	8.8907	ppb	13:25:02
1	SiO2†	553.7	195.7	13.716	ug/L	13.716	ppb	13:25:58
2	Sc Radial	4532.2	4532.2	88.5	%			13:24:25
2	Y RADIAL	4831.5	4831.5	87.76	%			13:24:25
2	Al 396.153Radial†	569974.3	644014.7	515070	ug/L	515070	ppb	13:24:20
2	Ca 317.933Radial†	261076.2	294968.3	476160	ug/L	476160	ppb	13:24:20
2	Fe 238.204 Radial†	19365.5	21869.3	185950	ug/L	185950	ppb	13:24:25
2	K 766.490 Radial†	2347.6	141.0	-133.60	ug/L	-133.60	ppb	13:24:25
2	Mg 279.077 IEC†	13011.0	14698.0	487880	ug/L	487880	ppb	13:24:25
2	Na 589.592 Radial†	-1055.5	116.2	33.320	ug/L	33.320	ppb	13:24:25
2	Sr 421.552†	557.8	620.6	0.4065	ug/L	0.4065	ppb	13:24:25
2	Sc 361.383	725883.6	725883.6	84.595	%			13:25:07
2	Y 371.029	598473.2	598473.2	82.246	%			13:25:07
2	Ag 328.068†	-9770.6	-11907.0	-0.8017	ug/L	-0.8017	ppb	13:25:07
2	As 188.979†	-83.1	-74.3	11.621	ug/L	11.621	ppb	13:25:28
2	B 249.677†	446.6	1143.0	-4.5455	ug/L	-4.5455	ppb	13:25:07
2	Ba 233.527†	-430.3	-500.1	1.8255	ug/L	1.8255	ppb	13:25:28
2	Be 313.107†	-4402.1	-729.1	-0.3275	ug/L	-0.3275	ppb	13:25:07
2	Cd 226.502†	1261.3	1692.7	-0.5778	ug/L	-0.5778	ppb	13:25:28
2	Co 228.616†	-26.5	46.0	-1.7482	ug/L	-1.7482	ppb	13:25:28
2	Cr 267.716†	-106.6	-204.9	1.3539	ug/L	1.3539	ppb	13:25:28
2	Cu 324.752†	4055.2	-1608.8	5.0234	ug/L	5.0234	ppb	13:25:07
2	Mn 257.610†	2147.2	2108.4	0.7218	ug/L	0.7218	ppb	13:25:07
2	Mo 202.031†	-202.6	-261.1	1.8824	ug/L	1.8824	ppb	13:25:28
2	Ni 231.604†	186.3	153.3	3.7922	ug/L	3.7922	ppb	13:25:28

2	P 214.914†	163.3	-27.2	-37.227 ug/L	-37.227 ppb	13:25:28
2	Pb 220.353†	-734.6	-806.2	13.514 ug/L	13.514 ppb	13:25:28
2	S 181.975 Axial†	71.3	40.4	-40.277 ug/L	-40.277 ppb	13:25:28
2	Sb 206.836†	66.0	44.6	2.2667 ug/L	2.2667 ppb	13:25:28
2	Se 196.026†	-790.5	-902.4	10.571 ug/L	10.571 ppb	13:25:28
2	Si 251.611†	513.5	146.3	4.8566 ug/L	4.8566 ppb	13:25:28
2	Sn 189.927†	-345.0	-409.5	11.765 ug/L	11.765 ppb	13:25:28
2	Ti 334.940†	-13222.6	-14296.4	1.9126 ug/L	1.9126 ppb	13:25:07
2	Tl 190.801†	-73.8	-53.2	-16.283 ug/L	-16.283 ppb	13:25:28
2	U 409.014†	-548.8	1215.1	14.578 ug/L	14.578 ppb	13:25:07
2	V 292.402†	1292.1	2887.2	-1.3472 ug/L	-1.3472 ppb	13:25:28
2	Zn 213.857†	2899.3	2802.7	8.2535 ug/L	8.2535 ppb	13:25:28
2	SiO2†	485.3	114.7	8.2324 ug/L	8.2324 ppb	13:26:03
3	Sc Radial	4556.3	4556.3	89.0 %		13:24:35
3	Y RADIAL	4845.5	4845.5	88.01 %		13:24:35
3	Al 396.153Radial†	574684.7	645901.0	516570 ug/L	516570 ppb	13:24:30
3	Ca 317.933Radial†	263299.9	295906.7	477670 ug/L	477670 ppb	13:24:30
3	Fe 238.204 Radial†	19544.2	21954.3	186670 ug/L	186670 ppb	13:24:35
3	K 766.490 Radial†	2223.6	-12.4	-162.04 ug/L	-162.04 ppb	13:24:35
3	Mg 279.077 IEC†	13090.4	14709.4	488260 ug/L	488260 ppb	13:24:35
3	Na 589.592 Radial†	-1000.1	184.9	52.998 ug/L	52.998 ppb	13:24:35
3	Sr 421.552†	533.4	589.7	0.1984 ug/L	0.1984 ppb	13:24:35
3	Sc 361.383	732421.7	732421.7	85.357 %		13:25:33
3	Y 371.029	603682.2	603682.2	82.962 %		13:25:33
3	Ag 328.068†	-9954.9	-12019.7	-1.1058 ug/L	-1.1058 ppb	13:25:33
3	As 188.979†	-92.7	-84.6	7.3885 ug/L	7.3885 ppb	13:25:53
3	B 249.677†	464.1	1158.8	-4.3089 ug/L	-4.3089 ppb	13:25:33
3	Ba 233.527†	-457.7	-527.6	1.6354 ug/L	1.6354 ppb	13:25:53
3	Be 313.107†	-4441.3	-728.6	-0.3266 ug/L	-0.3266 ppb	13:25:33
3	Cd 226.502†	1315.0	1742.3	-0.1065 ug/L	-0.1065 ppb	13:25:53
3	Co 228.616†	-15.9	58.6	-1.5033 ug/L	-1.5033 ppb	13:25:53
3	Cr 267.716†	-75.5	-167.4	1.7832 ug/L	1.7832 ppb	13:25:53
3	Cu 324.752†	4010.8	-1703.6	4.7776 ug/L	4.7776 ppb	13:25:33
3	Mn 257.610†	2194.4	2141.0	0.8135 ug/L	0.8135 ppb	13:25:33
3	Mo 202.031†	-208.3	-265.7	1.6370 ug/L	1.6370 ppb	13:25:53
3	Ni 231.604†	186.8	151.8	3.7565 ug/L	3.7565 ppb	13:25:53
3	P 214.914†	171.5	-19.4	-32.722 ug/L	-32.722 ppb	13:25:53
3	Pb 220.353†	-737.7	-802.1	14.324 ug/L	14.324 ppb	13:25:53
3	S 181.975 Axial†	82.3	52.5	-23.694 ug/L	-23.694 ppb	13:25:53
3	Sb 206.836†	65.5	43.3	1.6863 ug/L	1.6863 ppb	13:25:53
3	Se 196.026†	-826.6	-936.3	-8.5818 ug/L	-8.5818 ppb	13:25:53
3	Si 251.611†	531.4	161.9	5.3548 ug/L	5.3548 ppb	13:25:53
3	Sn 189.927†	-380.4	-447.4	5.4380 ug/L	5.4380 ppb	13:25:53
3	Ti 334.940†	-13186.1	-14114.1	2.3783 ug/L	2.3783 ppb	13:25:33
3	Tl 190.801†	-86.9	-67.7	-20.655 ug/L	-20.655 ppb	13:25:53
3	U 409.014†	-487.0	1293.3	16.797 ug/L	16.797 ppb	13:25:33
3	V 292.402†	1338.7	2928.1	-1.1804 ug/L	-1.1804 ppb	13:25:53
3	Zn 213.857†	2895.0	2767.0	7.8493 ug/L	7.8493 ppb	13:25:53
3	SiO2†	561.9	199.3	13.947 ug/L	13.947 ppb	13:26:08

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	727958.0	84.837	%	0.4509				0.53%
Sc Radial	4635.3	90.5	%	3.09				3.41%
Y 371.029	599415.6	82.375	%	0.5335				0.65%
Y RADIAL	4937.9	89.69	%	3.128				3.49%
Ag 328.068†	-11958.6	-1.9180	ug/L	1.67700	-1.9180	ppb	1.67700	87.44%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	633283.9	506480	ug/L	16188.9	506480	ppb	16188.9	3.20%
QC value within limits for Al 396.153Radial Recovery = 101.30%								
As 188.979†	-83.9	6.8132	ug/L	5.11967	6.8132	ppb	5.11967	75.14%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1190.1	-2.9941	ug/L	2.48497	-2.9941	ppb	2.48497	83.00%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-501.2	1.7254	ug/L	0.09545	1.7254	ppb	0.09545	5.53%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-725.1	-0.3258	ug/L	0.00216	-0.3258	ppb	0.00216	0.66%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	290209.2	468470	ug/L	14637.6	468470	ppb	14637.6	3.12%

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   QC value within limits for Ca 317.933Radial  Recovery = 93.69%
Cd 226.502†            1709.8     -0.0751 ug/L       0.51910     -0.0751 ppb       0.51910 690.96%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              57.8     -1.4660 ug/L       0.30261     -1.4660 ppb       0.30261  20.64%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -192.1      1.4373 ug/L       0.31258      1.4373 ppb       0.31258  21.75%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -1632.3      4.7926 ug/L       0.22368      4.7926 ppb       0.22368   4.67%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    21511.2      182910 ug/L        5911.6      182910 ppb        5911.6   3.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 91.45%
K 766.490 Radial†        32.1     -150.86 ug/L        15.165     -150.86 ppb        15.165  10.05%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       14417.6      478580 ug/L       16449.3      478580 ppb       16449.3   3.44%
   QC value within limits for Mg 279.077 IEC  Recovery = 95.72%
Mn 257.610†            2150.6      0.8480 ug/L       0.14657      0.8480 ppb       0.14657  17.28%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -265.7      1.2352 ug/L       0.91677      1.2352 ppb       0.91677  74.22%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      164.1      47.026 ug/L       11.9018      47.026 ppb       11.9018  25.31%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             149.9      3.7077 ug/L       0.11676      3.7077 ppb       0.11676   3.15%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -19.8     -32.451 ug/L        4.9171     -32.451 ppb        4.9171  15.15%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -809.7      11.233 ug/L        4.6703      11.233 ppb        4.6703  41.58%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         51.3     -23.511 ug/L       16.8587     -23.511 ppb       16.8587  71.71%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              38.8      0.4204 ug/L       2.71073      0.4204 ppb       2.71073 644.73%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -918.3     -8.9269 ug/L      19.67264     -8.9269 ppb      19.67264 220.38%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             160.8      5.3186 ug/L       0.44505      5.3186 ppb       0.44505   8.37%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -426.0      7.5479 ug/L       3.65171      7.5479 ppb       3.65171  48.38%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             598.2      0.3212 ug/L       0.10905      0.3212 ppb       0.10905  33.95%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†          -14259.0      1.6899 ug/L       0.82264      1.6899 ppb       0.82264  48.68%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -63.1     -19.262 ug/L        2.5816     -19.262 ppb        2.5816  13.40%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             1171.7      13.646 ug/L        3.7058      13.646 ppb        3.7058  27.16%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             2915.8     -0.8460 ug/L       0.72849     -0.8460 ppb       0.72849  86.11%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            2779.4      8.3312 ug/L       0.52500      8.3312 ppb       0.52500   6.30%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   169.9      11.965 ug/L        3.2345      11.965 ppb        3.2345  27.03%
   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: 1/12/2010 13:28:20
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	4483.1	4483.1	87.5	%			13:30:18
1	Y RADIAL	4796.8	4796.8	87.13	%			13:30:18
1	Al 396.153Radial†	588773.8	672553.3	537870	ug/L	537870	ppb	13:30:13
1	Ca 317.933Radial†	267848.1	305939.5	493870	ug/L	493870	ppb	13:30:13
1	Fe 238.204 Radial†	19620.8	22400.9	190480	ug/L	190480	ppb	13:30:18
1	K 766.490 Radial†	29237.9	30886.4	5456.5	ug/L	5456.5	ppb	13:30:13
1	Mg 279.077 IEC†	13218.4	15096.1	501100	ug/L	501100	ppb	13:30:18
1	Na 589.592 Radial†	15704.0	19247.3	5517.2	ug/L	5517.2	ppb	13:30:18
1	Sr 421.552†	70989.9	81080.9	513.98	ug/L	513.98	ppb	13:30:13
1	Sc 361.383	728554.1	728554.1	84.906	%			13:30:46
1	Y 371.029	599175.1	599175.1	82.342	%			13:30:46
1	Ag 328.068†	41297.9	48282.5	278.34	ug/L	278.34	ppb	13:30:46
1	As 188.979†	961.9	1156.8	542.32	ug/L	542.32	ppb	13:31:06
1	B 249.677†	20152.8	24350.5	514.31	ug/L	514.31	ppb	13:30:46
1	Ba 233.527†	54514.4	64214.1	504.50	ug/L	504.50	ppb	13:30:46
1	Be 313.107†	554513.1	657565.3	249.58	ug/L	249.58	ppb	13:30:46
1	Cd 226.502†	38105.3	45081.0	476.64	ug/L	476.64	ppb	13:30:46
1	Co 228.616†	19201.7	22692.4	457.82	ug/L	457.82	ppb	13:31:06
1	Cr 267.716†	37235.8	43776.3	489.93	ug/L	489.93	ppb	13:30:46
1	Cu 324.752†	163863.6	186591.7	566.41	ug/L	566.41	ppb	13:30:46
1	Mn 257.610†	379976.1	447095.8	488.63	ug/L	488.63	ppb	13:30:46
1	Mo 202.031†	5939.3	6973.5	507.24	ug/L	507.24	ppb	13:31:06
1	Ni 231.604†	15803.9	18546.3	458.68	ug/L	458.68	ppb	13:31:06
1	P 214.914†	3851.6	4316.0	2443.3	ug/L	2443.3	ppb	13:31:06
1	Pb 220.353†	2580.7	3101.7	492.55	ug/L	492.55	ppb	13:31:06
1	S 181.975 Axial†	1760.3	2029.3	2723.3	ug/L	2723.3	ppb	13:31:06
1	Sb 206.836†	1398.3	1613.4	551.65	ug/L	551.65	ppb	13:31:06
1	Se 196.026†	2668.6	3175.0	2594.5	ug/L	2594.5	ppb	13:31:06
1	Si 251.611†	144426.4	169640.9	5364.2	ug/L	5364.2	ppb	13:30:46
1	Sn 189.927†	2102.0	2474.1	517.13	ug/L	517.13	ppb	13:31:06
1	Ti 334.940†	263115.4	311224.4	524.08	ug/L	524.08	ppb	13:30:46
1	Tl 190.801†	1244.6	1500.0	456.30	ug/L	456.30	ppb	13:31:06
1	U 409.014†	14047.4	18408.5	519.12	ug/L	519.12	ppb	13:30:46
1	V 292.402†	65105.1	78038.8	515.35	ug/L	515.35	ppb	13:30:46
1	Zn 213.857†	48504.3	56502.4	508.25	ug/L	508.25	ppb	13:30:46
1	SiO2†	145640.3	171072.3	11525	ug/L	11525	ppb	13:32:03
2	Sc Radial	4519.8	4519.8	88.3	%			13:30:28
2	Y RADIAL	4815.9	4815.9	87.47	%			13:30:28
2	Al 396.153Radial†	589213.6	667579.2	533890	ug/L	533890	ppb	13:30:23
2	Ca 317.933Radial†	268892.3	304633.1	491760	ug/L	491760	ppb	13:30:23
2	Fe 238.204 Radial†	19571.4	22162.6	188460	ug/L	188460	ppb	13:30:28
2	K 766.490 Radial†	29239.5	30616.6	5408.1	ug/L	5408.1	ppb	13:30:23
2	Mg 279.077 IEC†	13185.6	14936.1	495790	ug/L	495790	ppb	13:30:28
2	Na 589.592 Radial†	15810.6	19222.2	5510.0	ug/L	5510.0	ppb	13:30:28
2	Sr 421.552†	70914.1	80335.2	509.23	ug/L	509.23	ppb	13:30:23
2	Sc 361.383	733184.3	733184.3	85.446	%			13:31:12
2	Y 371.029	601639.4	601639.4	82.681	%			13:31:12
2	Ag 328.068†	41438.9	48140.3	277.06	ug/L	277.06	ppb	13:31:12
2	As 188.979†	949.7	1135.4	532.71	ug/L	532.71	ppb	13:31:32
2	B 249.677†	20470.6	24572.5	519.63	ug/L	519.63	ppb	13:31:12
2	Ba 233.527†	55046.5	64431.4	506.13	ug/L	506.13	ppb	13:31:12
2	Be 313.107†	558335.9	657914.9	249.71	ug/L	249.71	ppb	13:31:12
2	Cd 226.502†	38347.7	45081.4	476.85	ug/L	476.85	ppb	13:31:12
2	Co 228.616†	19231.3	22584.3	455.65	ug/L	455.65	ppb	13:31:32
2	Cr 267.716†	37544.6	43860.8	490.83	ug/L	490.83	ppb	13:31:12
2	Cu 324.752†	165234.9	186977.8	567.45	ug/L	567.45	ppb	13:31:12
2	Mn 257.610†	383214.3	448059.5	489.71	ug/L	489.71	ppb	13:31:12
2	Mo 202.031†	5957.7	6950.9	505.49	ug/L	505.49	ppb	13:31:32
2	Ni 231.604†	15844.2	18476.0	456.95	ug/L	456.95	ppb	13:31:32

2	P 214.914†	3892.3	4335.0	2455.1 ug/L	2455.1 ppb	13:31:32
2	Pb 220.353†	2577.9	3079.2	489.04 ug/L	489.04 ppb	13:31:32
2	S 181.975 Axial†	1767.4	2024.6	2717.5 ug/L	2717.5 ppb	13:31:32
2	Sb 206.836†	1403.1	1608.7	550.05 ug/L	550.05 ppb	13:31:32
2	Se 196.026†	2681.3	3170.1	2585.2 ug/L	2585.2 ppb	13:31:32
2	Si 251.611†	145779.9	170150.8	5380.4 ug/L	5380.4 ppb	13:31:12
2	Sn 189.927†	2100.2	2456.3	513.65 ug/L	513.65 ppb	13:31:32
2	Ti 334.940†	265327.2	311856.0	525.24 ug/L	525.24 ppb	13:31:12
2	Tl 190.801†	1266.0	1515.7	461.07 ug/L	461.07 ppb	13:31:32
2	U 409.014†	14171.0	18448.7	520.53 ug/L	520.53 ppb	13:31:12
2	V 292.402†	65611.5	78147.2	516.29 ug/L	516.29 ppb	13:31:12
2	Zn 213.857†	48899.9	56604.7	509.42 ug/L	509.42 ppb	13:31:12
2	SiO2†	145779.6	170152.0	11463 ug/L	11463 ppb	13:32:09
3	Sc Radial	4490.9	4490.9	87.7 %		13:30:38
3	Y RADIAL	4789.9	4789.9	87.00 %		13:30:38
3	Al 396.153Radial†	586923.1	669266.9	535240 ug/L	535240 ppb	13:30:33
3	Ca 317.933Radial†	267727.2	305266.7	492780 ug/L	492780 ppb	13:30:33
3	Fe 238.204 Radial†	19497.5	22221.1	188960 ug/L	188960 ppb	13:30:38
3	K 766.490 Radial†	29149.7	30727.5	5427.9 ug/L	5427.9 ppb	13:30:33
3	Mg 279.077 IEC†	13142.9	14983.6	497370 ug/L	497370 ppb	13:30:38
3	Na 589.592 Radial†	15586.7	19082.2	5469.9 ug/L	5469.9 ppb	13:30:38
3	Sr 421.552†	70636.8	80536.5	510.51 ug/L	510.51 ppb	13:30:33
3	Sc 361.383	734264.3	734264.3	85.571 %		13:31:38
3	Y 371.029	603129.9	603129.9	82.886 %		13:31:38
3	Ag 328.068†	41696.1	48369.6	278.27 ug/L	278.27 ppb	13:31:38
3	As 188.979†	955.2	1140.2	534.87 ug/L	534.87 ppb	13:31:58
3	B 249.677†	20625.3	24718.1	522.82 ug/L	522.82 ppb	13:31:38
3	Ba 233.527†	55192.3	64507.1	506.73 ug/L	506.73 ppb	13:31:38
3	Be 313.107†	560643.0	659649.8	250.37 ug/L	250.37 ppb	13:31:38
3	Cd 226.502†	38435.1	45117.4	477.19 ug/L	477.19 ppb	13:31:38
3	Co 228.616†	19090.4	22386.5	451.61 ug/L	451.61 ppb	13:31:58
3	Cr 267.716†	37631.0	43897.2	491.24 ug/L	491.24 ppb	13:31:38
3	Cu 324.752†	166044.4	187639.4	569.46 ug/L	569.46 ppb	13:31:38
3	Mn 257.610†	384387.6	448770.9	490.47 ug/L	490.47 ppb	13:31:38
3	Mo 202.031†	5901.3	6874.7	500.22 ug/L	500.22 ppb	13:31:58
3	Ni 231.604†	15681.5	18258.6	451.57 ug/L	451.57 ppb	13:31:58
3	P 214.914†	3816.0	4239.1	2396.9 ug/L	2396.9 ppb	13:31:58
3	Pb 220.353†	2552.5	3045.0	485.18 ug/L	485.18 ppb	13:31:58
3	S 181.975 Axial†	1730.8	1978.7	2653.4 ug/L	2653.4 ppb	13:31:58
3	Sb 206.836†	1402.5	1605.6	548.81 ug/L	548.81 ppb	13:31:58
3	Se 196.026†	2658.5	3138.9	2567.0 ug/L	2567.0 ppb	13:31:58
3	Si 251.611†	146215.5	170408.8	5388.6 ug/L	5388.6 ppb	13:31:38
3	Sn 189.927†	2091.6	2442.6	511.43 ug/L	511.43 ppb	13:31:58
3	Ti 334.940†	266337.0	312579.2	526.41 ug/L	526.41 ppb	13:31:38
3	Tl 190.801†	1227.9	1469.0	447.00 ug/L	447.00 ppb	13:31:58
3	U 409.014†	14160.0	18411.5	519.38 ug/L	519.38 ppb	13:31:38
3	V 292.402†	65764.9	78213.5	516.60 ug/L	516.60 ppb	13:31:38
3	Zn 213.857†	49091.7	56744.5	510.71 ug/L	510.71 ppb	13:31:38
3	SiO2†	146206.7	170400.2	11480 ug/L	11480 ppb	13:32:14

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	732000.9	85.308	%	0.3535				0.41%
Sc Radial	4497.9	87.8	%	0.38				0.43%
Y 371.029	601314.8	82.636	%	0.2745				0.33%
Y RADIAL	4800.9	87.20	%	0.244				0.28%
Ag 328.068†	48264.1	277.89	ug/L	0.717	277.89	ppb	0.717	0.26%
QC value within limits for Ag 328.068 Recovery = 111.16%								
Al 396.153Radial†	669799.8	535660	ug/L	2022.9	535660	ppb	2022.9	0.38%
QC value within limits for Al 396.153Radial Recovery = 107.13%								
As 188.979†	1144.1	536.63	ug/L	5.044	536.63	ppb	5.044	0.94%
QC value within limits for As 188.979 Recovery = 107.33%								
B 249.677†	24547.1	518.92	ug/L	4.302	518.92	ppb	4.302	0.83%
QC value within limits for B 249.677 Recovery = 103.78%								
Ba 233.527†	64384.2	505.79	ug/L	1.151	505.79	ppb	1.151	0.23%
QC value within limits for Ba 233.527 Recovery = 101.16%								
Be 313.107†	658376.7	249.88	ug/L	0.424	249.88	ppb	0.424	0.17%
QC value within limits for Be 313.107 Recovery = 99.95%								
Ca 317.933Radial†	305279.8	492800	ug/L	1054.6	492800	ppb	1054.6	0.21%

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   QC value within limits for Ca 317.933Radial  Recovery = 98.56%
Cd 226.502†            45093.2      476.89 ug/L         0.279      476.89 ppb          0.279   0.06%
   QC value within limits for Cd 226.502  Recovery = 95.38%
Co 228.616†            22554.4      455.03 ug/L         3.149      455.03 ppb          3.149   0.69%
   QC value within limits for Co 228.616  Recovery = 91.01%
Cr 267.716†            43844.8      490.67 ug/L         0.671      490.67 ppb          0.671   0.14%
   QC value within limits for Cr 267.716  Recovery = 98.13%
Cu 324.752†           187069.6      567.77 ug/L         1.547      567.77 ppb          1.547   0.27%
   QC value within limits for Cu 324.752  Recovery = 113.55%
Fe 238.204 Radial†     22261.6      189300 ug/L        1056.1      189300 ppb         1056.1   0.56%
   QC value within limits for Fe 238.204 Radial  Recovery = 94.65%
K 766.490 Radial†      30743.5      5430.8 ug/L         24.35      5430.8 ppb          24.35   0.45%
   QC value within limits for K 766.490 Radial  Recovery = 108.62%
Mg 279.077 IEC†        15005.3      498090 ug/L        2727.0      498090 ppb         2727.0   0.55%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.62%
Mn 257.610†           447975.4      489.60 ug/L         0.924      489.60 ppb          0.924   0.19%
   QC value within limits for Mn 257.610  Recovery = 97.92%
Mo 202.031†             6933.0      504.32 ug/L         3.653      504.32 ppb          3.653   0.72%
   QC value within limits for Mo 202.031  Recovery = 100.86%
Na 589.592 Radial†     19183.9      5499.1 ug/L         25.50      5499.1 ppb          25.50   0.46%
   QC value within limits for Na 589.592 Radial  Recovery = 109.98%
Ni 231.604†            18427.0      455.73 ug/L         3.711      455.73 ppb          3.711   0.81%
   QC value within limits for Ni 231.604  Recovery = 91.15%
P 214.914†              4296.7      2431.7 ug/L         30.76      2431.7 ppb          30.76   1.27%
   QC value within limits for P 214.914  Recovery = 97.27%
Pb 220.353†             3075.3      488.92 ug/L         3.684      488.92 ppb          3.684   0.75%
   QC value within limits for Pb 220.353  Recovery = 97.78%
S 181.975 Axial†        2010.9      2698.1 ug/L         38.79      2698.1 ppb          38.79   1.44%
   QC value within limits for S 181.975 Axial  Recovery = 107.92%
Sb 206.836†             1609.3      550.17 ug/L         1.425      550.17 ppb          1.425   0.26%
   QC value within limits for Sb 206.836  Recovery = 110.03%
Se 196.026†             3161.3      2582.2 ug/L         13.96      2582.2 ppb          13.96   0.54%
   QC value within limits for Se 196.026  Recovery = 103.29%
Si 251.611†           170066.8      5377.7 ug/L         12.41      5377.7 ppb          12.41   0.23%
   QC value within limits for Si 251.611  Recovery = 107.55%
Sn 189.927†             2457.7      514.07 ug/L         2.871      514.07 ppb          2.871   0.56%
   QC value within limits for Sn 189.927  Recovery = 102.81%
Sr 421.552†            80650.9      511.24 ug/L         2.456      511.24 ppb          2.456   0.48%
   QC value within limits for Sr 421.552  Recovery = 102.25%
Ti 334.940†           311886.5      525.24 ug/L         1.163      525.24 ppb          1.163   0.22%
   QC value within limits for Ti 334.940  Recovery = 105.05%
Tl 190.801†             1494.9      454.79 ug/L         7.156      454.79 ppb          7.156   1.57%
   QC value within limits for Tl 190.801  Recovery = 90.96%
U 409.014†             18422.9      519.68 ug/L         0.751      519.68 ppb          0.751   0.14%
   QC value within limits for U 409.014  Recovery = 103.94%
V 292.402†             78133.2      516.08 ug/L         0.653      516.08 ppb          0.653   0.13%
   QC value within limits for V 292.402  Recovery = 103.22%
Zn 213.857†            56617.2      509.46 ug/L         1.232      509.46 ppb          1.232   0.24%
   QC value within limits for Zn 213.857  Recovery = 101.89%
SiO2†                 170541.5       11490 ug/L          32.1       11490 ppb           32.1   0.28%
   QC value within limits for SiO2  Recovery = 107.43%
All analyte(s) passed QC.
```

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

Autosampler Location: 15
Date Collected: 1/12/2010 13:34:24
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	4464.7	4464.7	87.2	%			13:36:22
1	Y RADIAL	4798.4	4798.4	87.16	%			13:36:22
1	Al 396.153Radial†	556865.1	638718.0	510830	ug/L	510830	ppb	13:36:17
1	Ca 317.933Radial†	254440.1	291817.9	471070	ug/L	471070	ppb	13:36:17
1	Fe 238.204 Radial†	45321.3	51971.0	441900	ug/L	441900	ppb	13:36:22
1	K 766.490 Radial†	2855.7	763.9	-211.40	ug/L	-211.40	ppb	13:36:17
1	Mg 279.077 IEC†	12918.2	14813.8	491460	ug/L	491460	ppb	13:36:22
1	Na 589.592 Radial†	1503666.2	1725980.3	494750	ug/L	494750	ppb	13:36:17
1	Sr 421.552†	783.4	888.8	2.1573	ug/L	2.1573	ppb	13:36:22
1	Sc 361.383	711484.0	711484.0	82.917	%			13:36:50
1	Y 371.029	586561.8	586561.8	80.609	%			13:36:50
1	Ag 328.068†	-22744.9	-27788.2	-2.8534	ug/L	-2.8534	ppb	13:36:50
1	As 188.979†	-190.9	-206.3	15.228	ug/L	15.228	ppb	13:37:10
1	B 249.677†	1770.1	2749.9	-10.056	ug/L	-10.056	ppb	13:36:50
1	Ba 233.527†	-1228.4	-1472.9	2.1142	ug/L	2.1142	ppb	13:37:10
1	Be 313.107†	-11159.1	-8983.6	-3.4478	ug/L	-3.4478	ppb	13:36:50
1	Cd 226.502†	3288.9	4168.1	3.1407	ug/L	3.1407	ppb	13:37:10
1	Co 228.616†	178.2	292.1	-0.5092	ug/L	-0.5092	ppb	13:37:10
1	Cr 267.716†	-46.2	-134.7	1.1808	ug/L	1.1808	ppb	13:37:10
1	Cu 324.752†	1406.3	-4706.3	1.0193	ug/L	1.0193	ppb	13:36:50
1	Mn 257.610†	-17768.8	-21859.6	-0.4414	ug/L	-0.4414	ppb	13:36:50
1	Mo 202.031†	-483.9	-605.2	-2.3204	ug/L	-2.3204	ppb	13:37:10
1	Ni 231.604†	244.3	227.7	5.6305	ug/L	5.6305	ppb	13:37:10
1	P 214.914†	530.6	419.6	25.974	ug/L	25.974	ppb	13:37:10
1	Pb 220.353†	-535.1	-583.2	14.911	ug/L	14.911	ppb	13:37:10
1	S 181.975 Axial†	108.6	87.1	25.489	ug/L	25.489	ppb	13:37:10
1	Sb 206.836†	55.6	33.6	1.3220	ug/L	1.3220	ppb	13:37:10
1	Se 196.026†	-1843.4	-2191.2	-41.309	ug/L	-41.309	ppb	13:37:10
1	Si 251.611†	-324.8	-852.4	-26.465	ug/L	-26.465	ppb	13:37:10
1	Sn 189.927†	-371.7	-450.0	8.1703	ug/L	8.1703	ppb	13:37:10
1	Ti 334.940†	-13324.4	-14735.5	-6.3885	ug/L	-6.3885	ppb	13:36:50
1	Tl 190.801†	-103.1	-90.2	-27.648	ug/L	-27.648	ppb	13:37:10
1	U 409.014†	422307.1	511179.2	14998	ug/L	14998	ppb	13:36:50
1	V 292.402†	3420.1	5484.4	3.1854	ug/L	3.1854	ppb	13:37:10
1	Zn 213.857†	5572.3	6095.7	14.338	ug/L	14.338	ppb	13:37:10
1	SiO2†	-237.5	-745.4	-49.127	ug/L	-49.127	ppb	13:38:07
2	Sc Radial	4409.0	4409.0	86.1	%			13:36:32
2	Y RADIAL	4715.4	4715.4	85.65	%			13:36:32
2	Al 396.153Radial†	566394.5	657857.3	526140	ug/L	526140	ppb	13:36:27
2	Ca 317.933Radial†	258654.0	300400.0	484920	ug/L	484920	ppb	13:36:27
2	Fe 238.204 Radial†	44605.9	51796.9	440420	ug/L	440420	ppb	13:36:32
2	K 766.490 Radial†	2767.4	702.7	-232.49	ug/L	-232.49	ppb	13:36:27
2	Mg 279.077 IEC†	12686.9	14732.5	488760	ug/L	488760	ppb	13:36:32
2	Na 589.592 Radial†	1525827.1	1773513.9	508380	ug/L	508380	ppb	13:36:27
2	Sr 421.552†	730.7	839.0	1.7355	ug/L	1.7355	ppb	13:36:32
2	Sc 361.383	719543.3	719543.3	83.856	%			13:37:16
2	Y 371.029	593151.9	593151.9	81.515	%			13:37:16
2	Ag 328.068†	-23042.1	-27835.2	-3.7792	ug/L	-3.7792	ppb	13:37:16
2	As 188.979†	-183.0	-194.4	19.979	ug/L	19.979	ppb	13:37:36
2	B 249.677†	1835.7	2804.2	-8.5991	ug/L	-8.5991	ppb	13:37:16
2	Ba 233.527†	-1336.1	-1584.8	1.2023	ug/L	1.2023	ppb	13:37:36
2	Be 313.107†	-11191.8	-8871.9	-3.4040	ug/L	-3.4040	ppb	13:37:16
2	Cd 226.502†	3260.0	4089.3	2.4363	ug/L	2.4363	ppb	13:37:36
2	Co 228.616†	215.3	334.0	0.3626	ug/L	0.3626	ppb	13:37:36
2	Cr 267.716†	-117.7	-219.3	0.1922	ug/L	0.1922	ppb	13:37:36
2	Cu 324.752†	1283.4	-4871.9	0.4186	ug/L	0.4186	ppb	13:37:16
2	Mn 257.610†	-18335.1	-22294.9	-0.9546	ug/L	-0.9546	ppb	13:37:16
2	Mo 202.031†	-484.1	-599.0	-1.8333	ug/L	-1.8333	ppb	13:37:36
2	Ni 231.604†	249.5	230.5	5.6999	ug/L	5.6999	ppb	13:37:36

2	P 214.914†	555.8	442.5	44.828	ug/L	44.828 ppb	13:37:36
2	Pb 220.353†	-510.9	-547.1	23.241	ug/L	23.241 ppb	13:37:36
2	S 181.975 Axial†	91.5	65.3	-7.7785	ug/L	-7.7785 ppb	13:37:36
2	Sb 206.836†	58.2	36.0	1.6658	ug/L	1.6658 ppb	13:37:36
2	Se 196.026†	-1884.9	-2215.7	-60.376	ug/L	-60.376 ppb	13:37:36
2	Si 251.611†	-341.0	-867.3	-26.942	ug/L	-26.942 ppb	13:37:36
2	Sn 189.927†	-388.7	-465.2	7.8128	ug/L	7.8128 ppb	13:37:36
2	Ti 334.940†	-13119.9	-14311.7	-3.6294	ug/L	-3.6294 ppb	13:37:16
2	Tl 190.801†	-95.2	-79.5	-24.405	ug/L	-24.405 ppb	13:37:36
2	U 409.014†	428548.5	512917.6	15049	ug/L	15049 ppb	13:37:16
2	V 292.402†	3449.2	5472.9	3.3994	ug/L	3.3994 ppb	13:37:36
2	Zn 213.857†	5608.9	6064.0	14.185	ug/L	14.185 ppb	13:37:36
2	SiO2†	-365.3	-894.6	-59.204	ug/L	-59.204 ppb	13:38:12
3	Sc Radial	4450.5	4450.5	86.9	%		13:36:43
3	Y RADIAL	4751.9	4751.9	86.31	%		13:36:43
3	Al 396.153Radial†	571201.7	657256.8	525660	ug/L	525660 ppb	13:36:38
3	Ca 317.933Radial†	259752.4	298863.7	482440	ug/L	482440 ppb	13:36:38
3	Fe 238.204 Radial†	44822.5	51563.2	438430	ug/L	438430 ppb	13:36:43
3	K 766.490 Radial†	2810.0	721.7	-227.83	ug/L	-227.83 ppb	13:36:38
3	Mg 279.077 IEC†	12795.3	14719.9	488350	ug/L	488350 ppb	13:36:43
3	Na 589.592 Radial†	1537296.0	1770191.5	507430	ug/L	507430 ppb	13:36:38
3	Sr 421.552†	748.6	851.6	1.8346	ug/L	1.8346 ppb	13:36:43
3	Sc 361.383	715943.4	715943.4	83.436	%		13:37:41
3	Y 371.029	590304.5	590304.5	81.123	%		13:37:41
3	Ag 328.068†	-23205.4	-28169.2	-5.9238	ug/L	-5.9238 ppb	13:37:41
3	As 188.979†	-195.0	-209.8	12.899	ug/L	12.899 ppb	13:38:02
3	B 249.677†	1931.3	2929.8	-5.4572	ug/L	-5.4572 ppb	13:37:41
3	Ba 233.527†	-1316.3	-1569.1	1.2654	ug/L	1.2654 ppb	13:38:02
3	Be 313.107†	-11292.7	-9059.9	-3.4760	ug/L	-3.4760 ppb	13:37:41
3	Cd 226.502†	3298.2	4154.6	3.3612	ug/L	3.3612 ppb	13:38:02
3	Co 228.616†	206.7	325.0	0.2132	ug/L	0.2132 ppb	13:38:02
3	Cr 267.716†	-56.0	-146.1	0.9636	ug/L	0.9636 ppb	13:38:02
3	Cu 324.752†	1308.1	-4834.7	0.4197	ug/L	0.4197 ppb	13:37:41
3	Mn 257.610†	-18005.6	-22009.8	-0.8210	ug/L	-0.8210 ppb	13:37:41
3	Mo 202.031†	-460.9	-574.0	-0.2765	ug/L	-0.2765 ppb	13:38:02
3	Ni 231.604†	242.8	223.9	5.5378	ug/L	5.5378 ppb	13:38:02
3	P 214.914†	563.3	454.9	53.677	ug/L	53.677 ppb	13:38:02
3	Pb 220.353†	-503.3	-541.1	24.009	ug/L	24.009 ppb	13:38:02
3	S 181.975 Axial†	114.3	93.1	31.104	ug/L	31.104 ppb	13:38:02
3	Sb 206.836†	46.6	22.4	-2.9306	ug/L	-2.9306 ppb	13:38:02
3	Se 196.026†	-1872.1	-2211.8	-63.781	ug/L	-63.781 ppb	13:38:02
3	Si 251.611†	-302.7	-823.5	-25.576	ug/L	-25.576 ppb	13:38:02
3	Sn 189.927†	-390.8	-470.0	6.5217	ug/L	6.5217 ppb	13:38:02
3	Ti 334.940†	-13264.5	-14563.6	-4.3396	ug/L	-4.3396 ppb	13:37:41
3	Tl 190.801†	-122.8	-113.1	-34.545	ug/L	-34.545 ppb	13:38:02
3	U 409.014†	426654.0	513216.7	15058	ug/L	15058 ppb	13:37:41
3	V 292.402†	3536.6	5598.4	4.6073	ug/L	4.6073 ppb	13:38:02
3	Zn 213.857†	5622.9	6114.5	14.853	ug/L	14.853 ppb	13:38:02
3	SiO2†	-318.5	-840.7	-55.615	ug/L	-55.615 ppb	13:38:17

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	715656.9	83.403	%	0.4705				0.56%
Sc Radial	4441.4	86.7	%	0.57				0.65%
Y 371.029	590006.1	81.082	%	0.4542				0.56%
Y RADIAL	4755.2	86.37	%	0.756				0.88%
Ag 328.068†	-27930.9	-4.1855	ug/L	1.57501	-4.1855	ppb	1.57501	37.63%
Al 396.153Radial†	651277.4	520880	ug/L	8702.2	520880	ppb	8702.2	1.67%
QC value within limits for Al 396.153Radial Recovery = 104.18%								
As 188.979†	-203.5	16.036	ug/L	3.6084	16.036	ppb	3.6084	22.50%
B 249.677†	2828.0	-8.0375	ug/L	2.35037	-8.0375	ppb	2.35037	29.24%
Ba 233.527†	-1542.2	1.5273	ug/L	0.50926	1.5273	ppb	0.50926	33.34%
Be 313.107†	-8971.8	-3.4426	ug/L	0.03626	-3.4426	ppb	0.03626	1.05%
Ca 317.933Radial†	297027.2	479480	ug/L	7387.4	479480	ppb	7387.4	1.54%
QC value within limits for Ca 317.933Radial Recovery = 95.90%								
Cd 226.502†	4137.3	2.9794	ug/L	0.48309	2.9794	ppb	0.48309	16.21%
Co 228.616†	317.0	0.0222	ug/L	0.46625	0.0222	ppb	0.46625	>999.9%
Cr 267.716†	-166.7	0.7789	ug/L	0.51955	0.7789	ppb	0.51955	66.71%
Cu 324.752†	-4804.3	0.6192	ug/L	0.34648	0.6192	ppb	0.34648	55.95%

Fe 238.204 Radial†	51777.0	440250 ug/L	1739.6	440250 ppb	1739.6	0.40%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 88.05%						
K 766.490 Radial†	729.5	-223.91 ug/L	11.080	-223.91 ppb	11.080	4.95%
Mg 279.077 IEC†	14755.4	489520 ug/L	1692.1	489520 ppb	1692.1	0.35%
QC value within limits for Mg 279.077 IEC Recovery = 97.90%						
Mn 257.610†	-22054.8	-0.7390 ug/L	0.26623	-0.7390 ppb	0.26623	36.03%
Mo 202.031†	-592.7	-1.4768 ug/L	1.06758	-1.4768 ppb	1.06758	72.29%
Na 589.592 Radial†	1756561.9	503520 ug/L	7606.7	503520 ppb	7606.7	1.51%
QC value within limits for Na 589.592 Radial Recovery = 100.70%						
Ni 231.604†	227.4	5.6227 ug/L	0.08130	5.6227 ppb	0.08130	1.45%
P 214.914†	439.0	41.493 ug/L	14.1492	41.493 ppb	14.1492	34.10%
Pb 220.353†	-557.1	20.721 ug/L	5.0461	20.721 ppb	5.0461	24.35%
S 181.975 Axial†	81.8	16.271 ug/L	21.0162	16.271 ppb	21.0162	129.16%
Sb 206.836†	30.6	0.0191 ug/L	2.56025	0.0191 ppb	2.56025	>999.9%
Se 196.026†	-2206.2	-55.156 ug/L	12.1116	-55.156 ppb	12.1116	21.96%
Si 251.611†	-847.8	-26.328 ug/L	0.6934	-26.328 ppb	0.6934	2.63%
Sn 189.927†	-461.7	7.5016 ug/L	0.86723	7.5016 ppb	0.86723	11.56%
Sr 421.552†	859.8	1.9091 ug/L	0.22055	1.9091 ppb	0.22055	11.55%
Ti 334.940†	-14536.9	-4.7859 ug/L	1.43264	-4.7859 ppb	1.43264	29.93%
Tl 190.801†	-94.3	-28.866 ug/L	5.1786	-28.866 ppb	5.1786	17.94%
U 409.014†	512437.8	15035 ug/L	32.6	15035 ppb	32.6	0.22%
QC value within limits for U 409.014 Recovery = 100.24%						
V 292.402†	5518.6	3.7307 ug/L	0.76667	3.7307 ppb	0.76667	20.55%
Zn 213.857†	6091.4	14.459 ug/L	0.3497	14.459 ppb	0.3497	2.42%
SiO2†	-826.9	-54.649 ug/L	5.1080	-54.649 ppb	5.1080	9.35%

QC Failed. Continue with analysis.

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

Autosampler Location: 16
Date Collected: 1/12/2010 13:40:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5006.2	5006.2	97.8	%			13:42:24
1	Y RADIAL	5292.0	5292.0	96.12	%			13:42:24
1	Al 396.153Radial†	588.5	608.2	10.130	ug/L	10.130	ppb	13:42:24
1	Ca 317.933Radial†	27.5	8.9	14.403	ug/L	14.403	ppb	13:42:44
1	Fe 238.204 Radial†	-21.1	-33.2	10.434	ug/L	10.434	ppb	13:42:44
1	K 766.490 Radial†	1587709.7	1621579.2	295280	ug/L	295280	ppb	13:42:19
1	Mg 279.077 IEC†	-6.1	-9.3	-205.20	ug/L	-205.20	ppb	13:42:44
1	Na 589.592 Radial†	-76.6	1230.5	352.73	ug/L	352.73	ppb	13:42:24
1	Sr 421.552†	1478874.0	1512751.4	9658.2	ug/L	9658.2	ppb	13:42:19
1	Sc 361.383	833594.2	833594.2	97.147	%			13:44:02
1	Y 371.029	684561.0	684561.0	94.077	%			13:44:02
1	Ag 328.068†	-8495.5	-9102.0	3.5744	ug/L	3.5744	ppb	13:44:07
1	As 188.979†	22899.7	23596.0	10150	ug/L	10150	ppb	13:44:07
1	B 249.677†	218747.3	225785.6	5040.0	ug/L	5040.0	ppb	13:44:02
1	Ba 233.527†	1769898.7	1821877.9	14138	ug/L	14138	ppb	13:44:02
1	Be 313.107†	7464541.6	7688202.3	2927.3	ug/L	2927.3	ppb	13:43:55
1	Cd 226.502†	860248.9	885710.6	9749.6	ug/L	9749.6	ppb	13:44:02
1	Co 228.616†	467767.9	481580.5	9770.1	ug/L	9770.1	ppb	13:44:02
1	Cr 267.716†	2112081.6	2174021.0	24135	ug/L	24135	ppb	13:44:02
1	Cu 324.752†	6548134.3	6734009.0	20088	ug/L	20088	ppb	13:43:55
1	Mn 257.610†	8350987.4	8595772.9	9426.7	ug/L	9426.7	ppb	13:43:55
1	Mo 202.031†	136763.1	140757.4	9821.5	ug/L	9821.5	ppb	13:44:07
1	Ni 231.604†	386673.4	397960.5	9842.4	ug/L	9842.4	ppb	13:44:02
1	P 214.914†	31467.2	32170.9	14628	ug/L	14628	ppb	13:44:07
1	Pb 220.353†	194857.3	200641.2	24292	ug/L	24292	ppb	13:44:07
1	S 181.975 Axial†	36484.1	37511.5	52203	ug/L	52203	ppb	13:44:07
1	Sb 206.836†	30011.9	30859.7	10827	ug/L	10827	ppb	13:44:07
1	Se 196.026†	15639.3	16130.5	10188	ug/L	10188	ppb	13:44:07
1	Si 251.611†	1500256.3	1543848.6	48752	ug/L	48752	ppb	13:44:02
1	Sn 189.927†	58479.8	60195.3	10486	ug/L	10486	ppb	13:44:07
1	Ti 334.940†	6004470.7	6182118.0	9890.5	ug/L	9890.5	ppb	13:43:55
1	Tl 190.801†	31031.1	31976.4	9719.0	ug/L	9719.0	ppb	13:44:07
1	U 409.014†	-610.0	1236.0	-17.559	ug/L	-17.559	ppb	13:44:07
1	V 292.402†	1443166.5	1486902.8	10206	ug/L	10206	ppb	13:44:02
1	Zn 213.857†	1471504.9	1514089.0	14123	ug/L	14123	ppb	13:44:02
1	SiO2†	1521551.2	1565770.5	105340	ug/L	105340	ppb	13:44:54
2	Sc Radial	4972.9	4972.9	97.1	%			13:42:54
2	Y RADIAL	5231.2	5231.2	95.02	%			13:42:54
2	Al 396.153Radial†	568.3	591.4	-10.105	ug/L	-10.105	ppb	13:42:54
2	Ca 317.933Radial†	27.3	8.9	14.308	ug/L	14.308	ppb	13:43:14
2	Fe 238.204 Radial†	-22.6	-34.9	-3.0238	ug/L	-3.0238	ppb	13:43:14
2	K 766.490 Radial†	1583874.0	1628517.4	296550	ug/L	296550	ppb	13:42:49
2	Mg 279.077 IEC†	-5.9	-9.1	-196.57	ug/L	-196.57	ppb	13:43:14
2	Na 589.592 Radial†	-125.8	1179.3	338.06	ug/L	338.06	ppb	13:42:54
2	Sr 421.552†	1474713.4	1518608.6	9695.6	ug/L	9695.6	ppb	13:42:49
2	Sc 361.383	823486.6	823486.6	95.969	%			13:44:21
2	Y 371.029	676051.6	676051.6	92.907	%			13:44:21
2	Ag 328.068†	-8718.4	-9441.6	2.1097	ug/L	2.1097	ppb	13:44:27
2	As 188.979†	23013.1	24003.6	10325	ug/L	10325	ppb	13:44:27
2	B 249.677†	215907.9	225590.8	5035.5	ug/L	5035.5	ppb	13:44:21
2	Ba 233.527†	1757527.0	1831348.6	14212	ug/L	14212	ppb	13:44:21
2	Be 313.107†	7514387.8	7834453.6	2983.0	ug/L	2983.0	ppb	13:44:15
2	Cd 226.502†	854150.1	890224.5	9799.3	ug/L	9799.3	ppb	13:44:21
2	Co 228.616†	463831.9	483389.2	9806.7	ug/L	9806.7	ppb	13:44:21
2	Cr 267.716†	2095736.6	2183674.9	24242	ug/L	24242	ppb	13:44:21
2	Cu 324.752†	6596230.7	6866858.4	20485	ug/L	20485	ppb	13:44:15
2	Mn 257.610†	8410772.6	8763580.4	9610.7	ug/L	9610.7	ppb	13:44:15
2	Mo 202.031†	137039.0	142772.8	9962.1	ug/L	9962.1	ppb	13:44:27
2	Ni 231.604†	383734.9	399784.0	9887.5	ug/L	9887.5	ppb	13:44:21

2	P 214.914†	31725.4	32837.5	14936	ug/L	14936 ppb	13:44:27
2	Pb 220.353†	195069.0	203323.8	24617	ug/L	24617 ppb	13:44:27
2	S 181.975 Axial†	36587.1	38079.8	52994	ug/L	52994 ppb	13:44:27
2	Sb 206.836†	30179.3	31413.3	11020	ug/L	11020 ppb	13:44:27
2	Se 196.026†	15684.9	16375.7	10342	ug/L	10342 ppb	13:44:27
2	Si 251.611†	1482853.4	1544669.9	48776	ug/L	48776 ppb	13:44:21
2	Sn 189.927†	58669.8	61132.2	10649	ug/L	10649 ppb	13:44:27
2	Ti 334.940†	6049254.2	6304646.3	10087	ug/L	10087 ppb	13:44:15
2	Tl 190.801†	31134.0	32475.6	9872.1	ug/L	9872.1 ppb	13:44:27
2	U 409.014†	-515.5	1326.7	-15.126	ug/L	-15.126 ppb	13:44:27
2	V 292.402†	1428802.1	1490169.0	10230	ug/L	10230 ppb	13:44:21
2	Zn 213.857†	1460915.1	1521646.3	14193	ug/L	14193 ppb	13:44:21
2	SiO2†	1535905.2	1599951.5	107640	ug/L	107640 ppb	13:45:01
3	Sc Radial	4910.6	4910.6	95.9	%		13:43:25
3	Y RADIAL	5187.9	5187.9	94.23	%		13:43:25
3	Al 396.153Radial†	561.3	591.5	-7.2377	ug/L	-7.2377 ppb	13:43:25
3	Ca 317.933Radial†	23.2	5.0	8.0876	ug/L	8.0876 ppb	13:43:45
3	Fe 238.204 Radial†	-20.0	-32.4	17.627	ug/L	17.627 ppb	13:43:45
3	K 766.490 Radial†	1580271.0	1645440.6	299630	ug/L	299630 ppb	13:43:20
3	Mg 279.077 IEC†	-5.2	-8.4	-175.73	ug/L	-175.73 ppb	13:43:45
3	Na 589.592 Radial†	-142.1	1160.7	332.71	ug/L	332.71 ppb	13:43:25
3	Sr 421.552†	1472610.5	1535670.9	9804.5	ug/L	9804.5 ppb	13:43:20
3	Sc 361.383	835061.6	835061.6	97.318	%		13:44:41
3	Y 371.029	686100.8	686100.8	94.288	%		13:44:41
3	Ag 328.068†	-8790.5	-9389.8	2.3599	ug/L	2.3599 ppb	13:44:47
3	As 188.979†	23204.8	23868.1	10267	ug/L	10267 ppb	13:44:47
3	B 249.677†	220158.3	226839.9	5063.5	ug/L	5063.5 ppb	13:44:41
3	Ba 233.527†	1778069.6	1827072.5	14179	ug/L	14179 ppb	13:44:41
3	Be 313.107†	7580665.1	7794023.5	2967.6	ug/L	2967.6 ppb	13:44:35
3	Cd 226.502†	864042.9	888053.1	9775.4	ug/L	9775.4 ppb	13:44:41
3	Co 228.616†	469681.3	482700.5	9792.7	ug/L	9792.7 ppb	13:44:41
3	Cr 267.716†	2120105.2	2178445.3	24184	ug/L	24184 ppb	13:44:41
3	Cu 324.752†	6666298.4	6843584.5	20415	ug/L	20415 ppb	13:44:35
3	Mn 257.610†	8485289.8	8718670.5	9561.5	ug/L	9561.5 ppb	13:44:35
3	Mo 202.031†	138163.1	141948.5	9904.6	ug/L	9904.6 ppb	13:44:47
3	Ni 231.604†	388508.7	399146.9	9871.7	ug/L	9871.7 ppb	13:44:41
3	P 214.914†	32007.5	32669.1	14850	ug/L	14850 ppb	13:44:47
3	Pb 220.353†	196807.3	202292.5	24492	ug/L	24492 ppb	13:44:47
3	S 181.975 Axial†	36966.2	37941.0	52800	ug/L	52800 ppb	13:44:47
3	Sb 206.836†	30379.5	31183.1	10940	ug/L	10940 ppb	13:44:47
3	Se 196.026†	15797.8	16265.2	10273	ug/L	10273 ppb	13:44:47
3	Si 251.611†	1506806.7	1547865.8	48878	ug/L	48878 ppb	13:44:41
3	Sn 189.927†	59214.1	60844.1	10599	ug/L	10599 ppb	13:44:47
3	Ti 334.940†	6105556.4	6275127.9	10039	ug/L	10039 ppb	13:44:35
3	Tl 190.801†	31428.3	32328.4	9827.1	ug/L	9827.1 ppb	13:44:47
3	U 409.014†	-536.5	1312.6	-15.415	ug/L	-15.415 ppb	13:44:47
3	V 292.402†	1449052.6	1490340.6	10230	ug/L	10230 ppb	13:44:41
3	Zn 213.857†	1477927.9	1518027.3	14160	ug/L	14160 ppb	13:44:41
3	SiO2†	1526967.6	1568583.9	105530	ug/L	105530 ppb	13:45:09

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	830714.1	96.812	%	0.7344				0.76%
Sc Radial	4963.2	96.9	%	0.95				0.98%
Y 371.029	682237.8	93.757	%	0.7438				0.79%
Y RADIAL	5237.0	95.13	%	0.950				1.00%
Ag 328.068†	-9311.2	2.6813	ug/L	0.78349	2.6813	ppb	0.78349	29.22%
Al 396.153Radial†	597.0	-2.4041	ug/L	10.94916	-2.4041	ppb	10.94916	455.44%
As 188.979†	23822.6	10247	ug/L	89.5	10247	ppb	89.5	0.87%
QC value within limits for As 188.979 Recovery = 102.47%								
B 249.677†	226072.1	5046.3	ug/L	15.08	5046.3	ppb	15.08	0.30%
QC value within limits for B 249.677 Recovery = 100.93%								
Ba 233.527†	1826766.3	14176	ug/L	36.8	14176	ppb	36.8	0.26%
QC value within limits for Ba 233.527 Recovery = 94.51%								
Be 313.107†	7772226.5	2959.3	ug/L	28.77	2959.3	ppb	28.77	0.97%
QC value within limits for Be 313.107 Recovery = 98.64%								
Ca 317.933Radial†	7.6	12.266	ug/L	3.6192	12.266	ppb	3.6192	29.51%
Cd 226.502†	887996.1	9774.8	ug/L	24.85	9774.8	ppb	24.85	0.25%
QC value within limits for Cd 226.502 Recovery = 97.75%								

Co 228.616†	482556.8	9789.8 ug/L	18.47	9789.8 ppb	18.47	0.19%
QC value within limits for Co 228.616 Recovery = 97.90%						
Cr 267.716†	2178713.8	24187 ug/L	53.6	24187 ppb	53.6	0.22%
QC value within limits for Cr 267.716 Recovery = 96.75%						
Cu 324.752†	6814817.3	20330 ug/L	211.6	20330 ppb	211.6	1.04%
QC value within limits for Cu 324.752 Recovery = 101.65%						
Fe 238.204 Radial†	-33.5	8.3456 ug/L	10.48241	8.3456 ppb	10.48241	125.60%
K 766.490 Radial†	1631845.7	297150 ug/L	2235.1	297150 ppb	2235.1	0.75%
QC value within limits for K 766.490 Radial Recovery = 99.05%						
Mg 279.077 IEC†	-8.9	-192.50 ug/L	15.153	-192.50 ppb	15.153	7.87%
Mn 257.610†	8692674.6	9533.0 ug/L	95.27	9533.0 ppb	95.27	1.00%
QC value within limits for Mn 257.610 Recovery = 95.33%						
Mo 202.031†	141826.2	9896.0 ug/L	70.70	9896.0 ppb	70.70	0.71%
QC value within limits for Mo 202.031 Recovery = 98.96%						
Na 589.592 Radial†	1190.2	341.17 ug/L	10.369	341.17 ppb	10.369	3.04%
Ni 231.604†	398963.8	9867.2 ug/L	22.89	9867.2 ppb	22.89	0.23%
QC value within limits for Ni 231.604 Recovery = 98.67%						
P 214.914†	32559.2	14805 ug/L	158.7	14805 ppb	158.7	1.07%
QC value within limits for P 214.914 Recovery = 98.70%						
Pb 220.353†	202085.8	24467 ug/L	163.8	24467 ppb	163.8	0.67%
QC value within limits for Pb 220.353 Recovery = 97.87%						
S 181.975 Axial†	37844.1	52666 ug/L	412.3	52666 ppb	412.3	0.78%
QC value within limits for S 181.975 Axial Recovery = 105.33%						
Sb 206.836†	31152.1	10929 ug/L	96.8	10929 ppb	96.8	0.89%
QC value within limits for Sb 206.836 Recovery = 109.29%						
Se 196.026†	16257.1	10268 ug/L	77.5	10268 ppb	77.5	0.75%
QC value within limits for Se 196.026 Recovery = 102.68%						
Si 251.611†	1545461.4	48802 ug/L	66.9	48802 ppb	66.9	0.14%
QC value within limits for Si 251.611 Recovery = 97.60%						
Sn 189.927†	60723.9	10578 ug/L	83.6	10578 ppb	83.6	0.79%
QC value within limits for Sn 189.927 Recovery = 105.78%						
Sr 421.552†	1522343.6	9719.4 ug/L	76.02	9719.4 ppb	76.02	0.78%
QC value within limits for Sr 421.552 Recovery = 97.19%						
Ti 334.940†	6253964.1	10005 ug/L	102.4	10005 ppb	102.4	1.02%
QC value within limits for Ti 334.940 Recovery = 100.05%						
Tl 190.801†	32260.1	9806.1 ug/L	78.65	9806.1 ppb	78.65	0.80%
QC value within limits for Tl 190.801 Recovery = 98.06%						
U 409.014†	1291.8	-16.033 ug/L	1.3293	-16.033 ppb	1.3293	8.29%
V 292.402†	1489137.5	10222 ug/L	14.0	10222 ppb	14.0	0.14%
QC value within limits for V 292.402 Recovery = 102.22%						
Zn 213.857†	1517920.8	14159 ug/L	35.1	14159 ppb	35.1	0.25%
QC value within limits for Zn 213.857 Recovery = 94.39%						
SiO2†	1578101.9	106170 ug/L	1278.2	106170 ppb	1278.2	1.20%
QC value within limits for SiO2 Recovery = 99.23%						

All analyte(s) passed QC.

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

Autosampler Location: 7
Date Collected: 1/12/2010 13:47:18
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	5177.0	5177.0	101	%			13:49:10
1	Y RADIAL	5491.9	5491.9	99.75	%			13:49:10
1	Al 396.153Radial†	6429.9	6366.4	5067.5	ug/L	5067.5	ppb	13:49:10
1	Ca 317.933Radial†	3189.4	3135.7	5061.8	ug/L	5061.8	ppb	13:49:30
1	Fe 238.204 Radial†	612.7	594.5	5069.6	ug/L	5069.6	ppb	13:49:30
1	K 766.490 Radial†	32445.2	29582.2	5380.8	ug/L	5380.8	ppb	13:49:10
1	Mg 279.077 IEC†	160.4	155.6	5166.8	ug/L	5166.8	ppb	13:49:30
1	Na 589.592 Radial†	33017.2	33968.4	9737.1	ug/L	9737.1	ppb	13:49:10
1	Sr 421.552†	77720.7	76868.9	490.73	ug/L	490.73	ppb	13:49:10
1	Sc 361.383	868006.0	868006.0	101.16	%			13:50:28
1	Y 371.029	719503.4	719503.4	98.879	%			13:50:28
1	Ag 328.068†	110283.0	108663.7	501.73	ug/L	501.73	ppb	13:50:33
1	As 188.979†	1206.4	1216.6	524.31	ug/L	524.31	ppb	13:50:53
1	B 249.677†	22879.4	23232.6	519.21	ug/L	519.21	ppb	13:50:33
1	Ba 233.527†	64660.3	63928.8	496.57	ug/L	496.57	ppb	13:50:33
1	Be 313.107†	1334592.0	1323792.1	501.27	ug/L	501.27	ppb	13:50:28
1	Cd 226.502†	45743.9	45422.0	499.56	ug/L	499.56	ppb	13:50:33
1	Co 228.616†	24816.8	24610.0	499.45	ug/L	499.45	ppb	13:50:33
1	Cr 267.716†	45137.2	44541.7	494.78	ug/L	494.78	ppb	13:50:33
1	Cu 324.752†	173290.2	164904.5	491.92	ug/L	491.92	ppb	13:50:33
1	Mn 257.610†	461133.5	455425.9	499.74	ug/L	499.74	ppb	13:50:28
1	Mo 202.031†	7263.1	7158.3	499.93	ug/L	499.93	ppb	13:50:53
1	Ni 231.604†	20382.2	20081.9	496.66	ug/L	496.66	ppb	13:50:33
1	P 214.914†	4438.4	4167.2	2386.6	ug/L	2386.6	ppb	13:50:53
1	Pb 220.353†	4126.8	4141.7	502.94	ug/L	502.94	ppb	13:50:53
1	S 181.975 Axial†	790.6	737.7	1025.7	ug/L	1025.7	ppb	13:50:53
1	Sb 206.836†	1551.2	1500.0	526.51	ug/L	526.51	ppb	13:50:53
1	Se 196.026†	785.3	808.3	525.85	ug/L	525.85	ppb	13:50:53
1	Si 251.611†	80367.7	78987.2	2494.3	ug/L	2494.3	ppb	13:50:33
1	Sn 189.927†	2918.6	2883.5	503.24	ug/L	503.24	ppb	13:50:53
1	Ti 334.940†	307172.1	304990.6	488.24	ug/L	488.24	ppb	13:50:33
1	Tl 190.801†	1654.0	1669.2	507.24	ug/L	507.24	ppb	13:50:53
1	U 409.014†	15380.6	17068.5	500.79	ug/L	500.79	ppb	13:50:33
1	V 292.402†	72145.6	72679.6	499.64	ug/L	499.64	ppb	13:50:33
1	Zn 213.857†	54676.8	53426.3	497.21	ug/L	497.21	ppb	13:50:33
1	SiO2†	79766.5	78394.6	5274.0	ug/L	5274.0	ppb	13:52:00
2	Sc Radial	5246.9	5246.9	102	%			13:49:36
2	Y RADIAL	5550.3	5550.3	100.8	%			13:49:36
2	Al 396.153Radial†	6503.6	6353.7	5057.4	ug/L	5057.4	ppb	13:49:36
2	Ca 317.933Radial†	3182.1	3086.5	4982.4	ug/L	4982.4	ppb	13:49:56
2	Fe 238.204 Radial†	609.3	583.1	4972.9	ug/L	4972.9	ppb	13:49:56
2	K 766.490 Radial†	32524.2	29232.0	5317.1	ug/L	5317.1	ppb	13:49:36
2	Mg 279.077 IEC†	157.8	150.9	5012.1	ug/L	5012.1	ppb	13:49:56
2	Na 589.592 Radial†	33169.4	33682.2	9655.0	ug/L	9655.0	ppb	13:49:36
2	Sr 421.552†	78280.3	76391.7	487.69	ug/L	487.69	ppb	13:49:36
2	Sc 361.383	873768.5	873768.5	101.83	%			13:50:59
2	Y 371.029	726636.0	726636.0	99.859	%			13:50:59
2	Ag 328.068†	112260.1	109886.3	507.33	ug/L	507.33	ppb	13:51:04
2	As 188.979†	1204.6	1206.9	520.20	ug/L	520.20	ppb	13:51:24
2	B 249.677†	23422.9	23617.3	527.84	ug/L	527.84	ppb	13:51:04
2	Ba 233.527†	66029.4	64851.8	503.74	ug/L	503.74	ppb	13:51:04
2	Be 313.107†	1350630.0	1330841.1	503.95	ug/L	503.95	ppb	13:50:59
2	Cd 226.502†	46798.8	46159.7	507.69	ug/L	507.69	ppb	13:51:04
2	Co 228.616†	25366.3	24987.8	507.10	ug/L	507.10	ppb	13:51:04
2	Cr 267.716†	46167.2	45258.8	502.74	ug/L	502.74	ppb	13:51:04
2	Cu 324.752†	176530.6	166956.9	498.04	ug/L	498.04	ppb	13:51:04
2	Mn 257.610†	464653.6	455876.5	500.23	ug/L	500.23	ppb	13:50:59
2	Mo 202.031†	7288.2	7135.6	498.34	ug/L	498.34	ppb	13:51:24
2	Ni 231.604†	20903.5	20461.0	506.04	ug/L	506.04	ppb	13:51:04

2	P 214.914†	4454.2	4153.9	2377.1 ug/L	2377.1 ppb	13:51:24
2	Pb 220.353†	4149.5	4137.2	502.38 ug/L	502.38 ppb	13:51:24
2	S 181.975 Axial†	788.2	730.2	1015.2 ug/L	1015.2 ppb	13:51:24
2	Sb 206.836†	1572.0	1510.3	529.94 ug/L	529.94 ppb	13:51:24
2	Se 196.026†	782.6	800.6	520.67 ug/L	520.67 ppb	13:51:24
2	Si 251.611†	81994.6	80061.0	2528.3 ug/L	2528.3 ppb	13:51:04
2	Sn 189.927†	2924.6	2870.4	500.94 ug/L	500.94 ppb	13:51:24
2	Ti 334.940†	313457.4	309160.4	494.91 ug/L	494.91 ppb	13:51:04
2	Tl 190.801†	1659.7	1664.0	505.68 ug/L	505.68 ppb	13:51:24
2	U 409.014†	15766.7	17347.3	509.00 ug/L	509.00 ppb	13:51:04
2	V 292.402†	73683.6	73719.6	506.69 ug/L	506.69 ppb	13:51:04
2	Zn 213.857†	55806.5	54179.3	504.22 ug/L	504.22 ppb	13:51:04
2	SiO2†	80255.5	78354.8	5271.4 ug/L	5271.4 ppb	13:52:06
3	Sc Radial	5130.0	5130.0	100 %		13:50:01
3	Y RADIAL	5423.6	5423.6	98.51 %		13:50:01
3	Al 396.153Radial†	6390.8	6385.7	5083.1 ug/L	5083.1 ppb	13:50:01
3	Ca 317.933Radial†	3186.0	3161.1	5102.9 ug/L	5102.9 ppb	13:50:21
3	Fe 238.204 Radial†	607.0	594.4	5069.1 ug/L	5069.1 ppb	13:50:21
3	K 766.490 Radial†	31597.0	29029.5	5280.2 ug/L	5280.2 ppb	13:50:01
3	Mg 279.077 IEC†	160.9	157.6	5233.5 ug/L	5233.5 ppb	13:50:21
3	Na 589.592 Radial†	32421.8	33673.3	9652.5 ug/L	9652.5 ppb	13:50:01
3	Sr 421.552†	76645.0	76499.5	488.38 ug/L	488.38 ppb	13:50:01
3	Sc 361.383	868771.5	868771.5	101.25 %		13:51:30
3	Y 371.029	720865.1	720865.1	99.066 %		13:51:30
3	Ag 328.068†	111191.5	109465.0	505.41 ug/L	505.41 ppb	13:51:35
3	As 188.979†	1187.7	1197.0	515.99 ug/L	515.99 ppb	13:51:55
3	B 249.677†	23084.9	23415.7	523.31 ug/L	523.31 ppb	13:51:35
3	Ba 233.527†	65402.3	64605.4	501.82 ug/L	501.82 ppb	13:51:35
3	Be 313.107†	1336110.4	1324129.2	501.41 ug/L	501.41 ppb	13:51:30
3	Cd 226.502†	46413.6	46043.6	506.40 ug/L	506.40 ppb	13:51:35
3	Co 228.616†	25140.8	24908.4	505.49 ug/L	505.49 ppb	13:51:35
3	Cr 267.716†	45601.4	44960.8	499.43 ug/L	499.43 ppb	13:51:35
3	Cu 324.752†	174463.8	165912.6	494.93 ug/L	494.93 ppb	13:51:35
3	Mn 257.610†	462230.6	456107.9	500.48 ug/L	500.48 ppb	13:51:30
3	Mo 202.031†	7205.2	7094.8	495.50 ug/L	495.50 ppb	13:51:55
3	Ni 231.604†	20662.1	20340.6	503.06 ug/L	503.06 ppb	13:51:35
3	P 214.914†	4407.1	4132.5	2365.0 ug/L	2365.0 ppb	13:51:55
3	Pb 220.353†	4122.2	4133.6	501.94 ug/L	501.94 ppb	13:51:55
3	S 181.975 Axial†	779.2	725.7	1008.9 ug/L	1008.9 ppb	13:51:55
3	Sb 206.836†	1537.6	1485.2	521.36 ug/L	521.36 ppb	13:51:55
3	Se 196.026†	789.4	811.7	527.97 ug/L	527.97 ppb	13:51:55
3	Si 251.611†	81240.0	79778.8	2519.4 ug/L	2519.4 ppb	13:51:35
3	Sn 189.927†	2902.8	2865.4	500.09 ug/L	500.09 ppb	13:51:55
3	Ti 334.940†	309892.7	307410.1	492.10 ug/L	492.10 ppb	13:51:35
3	Tl 190.801†	1655.0	1668.7	507.09 ug/L	507.09 ppb	13:51:55
3	U 409.014†	15673.8	17344.6	508.91 ug/L	508.91 ppb	13:51:35
3	V 292.402†	72819.4	73282.2	503.67 ug/L	503.67 ppb	13:51:35
3	Zn 213.857†	55205.1	53900.5	501.61 ug/L	501.61 ppb	13:51:35
3	SiO2†	80144.5	78698.4	5294.6 ug/L	5294.6 ppb	13:52:11

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	870182.0	101.41	%	0.365				0.36%
Sc Radial	5184.6	101	%	1.1				1.13%
Y 371.029	722334.8	99.268	%	0.5204				0.52%
Y RADIAL	5488.6	99.69	%	1.152				1.16%
Ag 328.068†	109338.3	504.82	ug/L	2.847	504.82	ppb	2.847	0.56%
QC value within limits for Ag 328.068 Recovery = 100.96%								
Al 396.153Radial†	6368.6	5069.3	ug/L	12.97	5069.3	ppb	12.97	0.26%
QC value within limits for Al 396.153Radial Recovery = 101.39%								
As 188.979†	1206.8	520.17	ug/L	4.158	520.17	ppb	4.158	0.80%
QC value within limits for As 188.979 Recovery = 104.03%								
B 249.677†	23421.9	523.45	ug/L	4.316	523.45	ppb	4.316	0.82%
QC value within limits for B 249.677 Recovery = 104.69%								
Ba 233.527†	64462.0	500.71	ug/L	3.709	500.71	ppb	3.709	0.74%
QC value within limits for Ba 233.527 Recovery = 100.14%								
Be 313.107†	1326254.1	502.21	ug/L	1.509	502.21	ppb	1.509	0.30%
QC value within limits for Be 313.107 Recovery = 100.44%								
Ca 317.933Radial†	3127.8	5049.0	ug/L	61.26	5049.0	ppb	61.26	1.21%

QC value within limits for Ca 317.933Radial Recovery = 100.98%

Cd 226.502†	45875.1	504.55 ug/L	4.371	504.55 ppb	4.371	0.87%
QC value within limits for Cd 226.502 Recovery = 100.91%						
Co 228.616†	24835.4	504.02 ug/L	4.033	504.02 ppb	4.033	0.80%
QC value within limits for Co 228.616 Recovery = 100.80%						
Cr 267.716†	44920.4	498.99 ug/L	4.000	498.99 ppb	4.000	0.80%
QC value within limits for Cr 267.716 Recovery = 99.80%						
Cu 324.752†	165924.7	494.96 ug/L	3.057	494.96 ppb	3.057	0.62%
QC value within limits for Cu 324.752 Recovery = 98.99%						
Fe 238.204 Radial†	590.6	5037.2 ug/L	55.64	5037.2 ppb	55.64	1.10%
QC value within limits for Fe 238.204 Radial Recovery = 100.74%						
K 766.490 Radial†	29281.2	5326.1 ug/L	50.90	5326.1 ppb	50.90	0.96%
QC value within limits for K 766.490 Radial Recovery = 106.52%						
Mg 279.077 IEC†	154.7	5137.5 ug/L	113.61	5137.5 ppb	113.61	2.21%
QC value within limits for Mg 279.077 IEC Recovery = 102.75%						
Mn 257.610†	455803.4	500.15 ug/L	0.379	500.15 ppb	0.379	0.08%
QC value within limits for Mn 257.610 Recovery = 100.03%						
Mo 202.031†	7129.6	497.92 ug/L	2.244	497.92 ppb	2.244	0.45%
QC value within limits for Mo 202.031 Recovery = 99.58%						
Na 589.592 Radial†	33774.6	9681.5 ug/L	48.12	9681.5 ppb	48.12	0.50%
QC value within limits for Na 589.592 Radial Recovery = 96.82%						
Ni 231.604†	20294.5	501.92 ug/L	4.791	501.92 ppb	4.791	0.95%
QC value within limits for Ni 231.604 Recovery = 100.38%						
P 214.914†	4151.2	2376.2 ug/L	10.82	2376.2 ppb	10.82	0.46%
QC value within limits for P 214.914 Recovery = 95.05%						
Pb 220.353†	4137.5	502.42 ug/L	0.499	502.42 ppb	0.499	0.10%
QC value within limits for Pb 220.353 Recovery = 100.48%						
S 181.975 Axial†	731.2	1016.6 ug/L	8.47	1016.6 ppb	8.47	0.83%
QC value within limits for S 181.975 Axial Recovery = 101.66%						
Sb 206.836†	1498.5	525.94 ug/L	4.316	525.94 ppb	4.316	0.82%
QC value within limits for Sb 206.836 Recovery = 105.19%						
Se 196.026†	806.9	524.83 ug/L	3.758	524.83 ppb	3.758	0.72%
QC value within limits for Se 196.026 Recovery = 104.97%						
Si 251.611†	79609.0	2514.0 ug/L	17.64	2514.0 ppb	17.64	0.70%
QC value within limits for Si 251.611 Recovery = 100.56%						
Sn 189.927†	2873.1	501.42 ug/L	1.628	501.42 ppb	1.628	0.32%
QC value within limits for Sn 189.927 Recovery = 100.28%						
Sr 421.552†	76586.7	488.93 ug/L	1.597	488.93 ppb	1.597	0.33%
QC value within limits for Sr 421.552 Recovery = 97.79%						
Ti 334.940†	307187.1	491.75 ug/L	3.350	491.75 ppb	3.350	0.68%
QC value within limits for Ti 334.940 Recovery = 98.35%						
Tl 190.801†	1667.3	506.67 ug/L	0.861	506.67 ppb	0.861	0.17%
QC value within limits for Tl 190.801 Recovery = 101.33%						
U 409.014†	17253.5	506.23 ug/L	4.711	506.23 ppb	4.711	0.93%
QC value within limits for U 409.014 Recovery = 101.25%						
V 292.402†	73227.1	503.34 ug/L	3.535	503.34 ppb	3.535	0.70%
QC value within limits for V 292.402 Recovery = 100.67%						
Zn 213.857†	53835.4	501.01 ug/L	3.543	501.01 ppb	3.543	0.71%
QC value within limits for Zn 213.857 Recovery = 100.20%						
SiO2†	78482.6	5280.0 ug/L	12.73	5280.0 ppb	12.73	0.24%
QC value within limits for SiO2 Recovery = 98.74%						

All analyte(s) passed QC.

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

Autosampler Location: 8
Date Collected: 1/12/2010 13:54:20
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	5283.0	5283.0	103	%			13:56:13
1	Y RADIAL	5629.2	5629.2	102.2	%			13:56:13
1	Al 396.153Radial†	-0.8	5.4	4.3122	ug/L	4.3122	ppb	13:56:13
1	Ca 317.933Radial†	19.3	-0.5	-0.8525	ug/L	-0.8525	ppb	13:56:33
1	Fe 238.204 Radial†	10.3	-1.6	-13.552	ug/L	-13.552	ppb	13:56:33
1	K 766.490 Radial†	3375.3	760.2	138.41	ug/L	138.41	ppb	13:56:13
1	Mg 279.077 IEC†	3.5	0.3	10.291	ug/L	10.291	ppb	13:56:33
1	Na 589.592 Radial†	-1042.0	298.8	85.664	ug/L	85.664	ppb	13:56:13
1	Sr 421.552†	12.0	1.9	0.0120	ug/L	0.0120	ppb	13:56:13
1	Sc 361.383	878242.6	878242.6	102.35	%			13:57:30
1	Y 371.029	742332.4	742332.4	102.02	%			13:57:30
1	Ag 328.068†	249.8	-113.0	-0.5251	ug/L	-0.5251	ppb	13:57:35
1	As 188.979†	6.4	30.2	12.903	ug/L	12.903	ppb	13:57:55
1	B 249.677†	250.5	859.8	19.301	ug/L	19.301	ppb	13:57:55
1	Ba 233.527†	-33.5	-24.2	-0.1875	ug/L	-0.1875	ppb	13:57:55
1	Be 313.107†	-4604.1	-23.7	-0.0087	ug/L	-0.0087	ppb	13:57:35
1	Cd 226.502†	-126.3	78.2	0.8624	ug/L	0.8624	ppb	13:57:55
1	Co 228.616†	-73.4	5.5	0.1130	ug/L	0.1130	ppb	13:57:55
1	Cr 267.716†	105.7	24.3	0.2685	ug/L	0.2685	ppb	13:57:55
1	Cu 324.752†	6522.3	-29.9	-0.0918	ug/L	-0.0918	ppb	13:57:35
1	Mn 257.610†	444.3	4.3	0.0030	ug/L	0.0030	ppb	13:57:55
1	Mo 202.031†	29.2	6.9	0.4816	ug/L	0.4816	ppb	13:57:55
1	Ni 231.604†	49.0	-19.2	-0.4742	ug/L	-0.4742	ppb	13:57:55
1	P 214.914†	243.3	17.4	10.501	ug/L	10.501	ppb	13:57:55
1	Pb 220.353†	-42.3	20.9	2.5313	ug/L	2.5313	ppb	13:57:55
1	S 181.975 Axial†	53.2	8.1	11.227	ug/L	11.227	ppb	13:57:55
1	Sb 206.836†	52.2	17.5	6.0162	ug/L	6.0162	ppb	13:57:55
1	Se 196.026†	-32.5	0.3	0.1206	ug/L	0.1206	ppb	13:57:55
1	Si 251.611†	615.9	141.1	4.4605	ug/L	4.4605	ppb	13:57:55
1	Sn 189.927†	20.8	18.7	3.2497	ug/L	3.2497	ppb	13:57:55
1	Ti 334.940†	-1286.4	77.3	0.1214	ug/L	0.1214	ppb	13:57:35
1	Tl 190.801†	-29.2	5.5	1.6651	ug/L	1.6651	ppb	13:57:55
1	U 409.014†	-1797.5	107.7	3.1713	ug/L	3.1713	ppb	13:57:30
1	V 292.402†	-1381.9	9.5	0.0801	ug/L	0.0801	ppb	13:57:35
1	Zn 213.857†	774.8	132.3	1.2465	ug/L	1.2465	ppb	13:57:55
1	SiO2†	573.2	101.0	6.7985	ug/L	6.7985	ppb	13:59:01
2	Sc Radial	5251.1	5251.1	103	%			13:56:38
2	Y RADIAL	5580.4	5580.4	101.4	%			13:56:38
2	Al 396.153Radial†	-16.7	-10.1	-8.0961	ug/L	-8.0961	ppb	13:56:38
2	Ca 317.933Radial†	19.3	-0.4	-0.6202	ug/L	-0.6202	ppb	13:56:58
2	Fe 238.204 Radial†	8.8	-2.9	-24.849	ug/L	-24.849	ppb	13:56:58
2	K 766.490 Radial†	3309.8	716.2	130.39	ug/L	130.39	ppb	13:56:38
2	Mg 279.077 IEC†	4.8	1.7	54.846	ug/L	54.846	ppb	13:56:58
2	Na 589.592 Radial†	-1004.2	329.6	94.482	ug/L	94.482	ppb	13:56:38
2	Sr 421.552†	2.6	-7.2	-0.0459	ug/L	-0.0459	ppb	13:56:38
2	Sc 361.383	880232.0	880232.0	102.58	%			13:58:00
2	Y 371.029	742313.3	742313.3	102.01	%			13:58:00
2	Ag 328.068†	307.0	-57.8	-0.2741	ug/L	-0.2741	ppb	13:58:05
2	As 188.979†	3.5	27.3	11.683	ug/L	11.683	ppb	13:58:25
2	B 249.677†	224.8	834.2	18.729	ug/L	18.729	ppb	13:58:25
2	Ba 233.527†	-11.7	-2.8	-0.0221	ug/L	-0.0221	ppb	13:58:25
2	Be 313.107†	-4573.0	16.8	0.0066	ug/L	0.0066	ppb	13:58:05
2	Cd 226.502†	-153.0	52.5	0.5798	ug/L	0.5798	ppb	13:58:25
2	Co 228.616†	-79.5	-0.3	-0.0051	ug/L	-0.0051	ppb	13:58:25
2	Cr 267.716†	99.7	18.2	0.2008	ug/L	0.2008	ppb	13:58:25
2	Cu 324.752†	6327.1	-234.6	-0.7026	ug/L	-0.7026	ppb	13:58:05
2	Mn 257.610†	433.7	-7.0	-0.0124	ug/L	-0.0124	ppb	13:58:25
2	Mo 202.031†	24.0	1.8	0.1234	ug/L	0.1234	ppb	13:58:25
2	Ni 231.604†	48.1	-20.2	-0.4988	ug/L	-0.4988	ppb	13:58:25

2	P 214.914†	232.7	6.5	4.1244	ug/L	4.1244	ppb	13:58:25
2	Pb 220.353†	-37.8	25.4	3.0706	ug/L	3.0706	ppb	13:58:25
2	S 181.975 Axial†	55.0	9.8	13.600	ug/L	13.600	ppb	13:58:25
2	Sb 206.836†	53.8	19.0	6.4880	ug/L	6.4880	ppb	13:58:25
2	Se 196.026†	-28.1	4.7	2.8759	ug/L	2.8759	ppb	13:58:25
2	Si 251.611†	591.1	115.5	3.6560	ug/L	3.6560	ppb	13:58:25
2	Sn 189.927†	17.4	15.3	2.6675	ug/L	2.6675	ppb	13:58:25
2	Ti 334.940†	-1298.0	68.8	0.1043	ug/L	0.1043	ppb	13:58:05
2	Tl 190.801†	-19.4	15.2	4.5912	ug/L	4.5912	ppb	13:58:25
2	U 409.014†	-1818.5	91.1	2.6848	ug/L	2.6848	ppb	13:58:00
2	V 292.402†	-1358.4	35.5	0.2527	ug/L	0.2527	ppb	13:58:05
2	Zn 213.857†	776.8	132.6	1.2514	ug/L	1.2514	ppb	13:58:25
2	SiO2†	615.2	140.7	9.4841	ug/L	9.4841	ppb	13:59:06
3	Sc Radial	5285.5	5285.5	103	%			13:57:03
3	Y RADIAL	5655.6	5655.6	102.7	%			13:57:03
3	Al 396.153Radial†	-0.4	5.8	4.6244	ug/L	4.6244	ppb	13:57:03
3	Ca 317.933Radial†	17.1	-2.7	-4.2842	ug/L	-4.2842	ppb	13:57:23
3	Fe 238.204 Radial†	11.0	-0.9	-7.4570	ug/L	-7.4570	ppb	13:57:23
3	K 766.490 Radial†	3264.7	651.5	118.61	ug/L	118.61	ppb	13:57:03
3	Mg 279.077 IEC†	0.8	-2.2	-74.102	ug/L	-74.102	ppb	13:57:23
3	Na 589.592 Radial†	-1042.1	299.2	85.770	ug/L	85.770	ppb	13:57:03
3	Sr 421.552†	-0.5	-10.3	-0.0654	ug/L	-0.0654	ppb	13:57:03
3	Sc 361.383	878888.4	878888.4	102.43	%			13:58:30
3	Y 371.029	740439.6	740439.6	101.76	%			13:58:30
3	Ag 328.068†	243.5	-119.3	-0.5482	ug/L	-0.5482	ppb	13:58:35
3	As 188.979†	4.7	28.5	12.191	ug/L	12.191	ppb	13:58:55
3	B 249.677†	233.2	842.8	18.917	ug/L	18.917	ppb	13:58:55
3	Ba 233.527†	-22.6	-13.5	-0.1039	ug/L	-0.1039	ppb	13:58:55
3	Be 313.107†	-4601.2	-17.6	-0.0063	ug/L	-0.0063	ppb	13:58:35
3	Cd 226.502†	-131.2	73.5	0.8093	ug/L	0.8093	ppb	13:58:55
3	Co 228.616†	-75.2	3.8	0.0776	ug/L	0.0776	ppb	13:58:55
3	Cr 267.716†	98.8	17.5	0.1941	ug/L	0.1941	ppb	13:58:55
3	Cu 324.752†	6531.5	-25.6	-0.0770	ug/L	-0.0770	ppb	13:58:35
3	Mn 257.610†	426.8	-13.1	-0.0121	ug/L	-0.0121	ppb	13:58:55
3	Mo 202.031†	24.2	2.0	0.1384	ug/L	0.1384	ppb	13:58:55
3	Ni 231.604†	42.7	-25.3	-0.6259	ug/L	-0.6259	ppb	13:58:55
3	P 214.914†	232.2	6.4	3.8779	ug/L	3.8779	ppb	13:58:55
3	Pb 220.353†	-43.2	20.0	2.4241	ug/L	2.4241	ppb	13:58:55
3	S 181.975 Axial†	49.6	4.5	6.3006	ug/L	6.3006	ppb	13:58:55
3	Sb 206.836†	57.0	22.2	7.5469	ug/L	7.5469	ppb	13:58:55
3	Se 196.026†	-33.7	-0.9	-0.5866	ug/L	-0.5866	ppb	13:58:55
3	Si 251.611†	595.0	120.3	3.8053	ug/L	3.8053	ppb	13:58:55
3	Sn 189.927†	4.9	3.1	0.5458	ug/L	0.5458	ppb	13:58:55
3	Ti 334.940†	-1282.1	82.4	0.1372	ug/L	0.1372	ppb	13:58:35
3	Tl 190.801†	-35.0	-0.0	-0.0140	ug/L	-0.0140	ppb	13:58:55
3	U 409.014†	-1900.6	8.3	0.2443	ug/L	0.2443	ppb	13:58:30
3	V 292.402†	-1337.5	53.9	0.3673	ug/L	0.3673	ppb	13:58:35
3	Zn 213.857†	758.0	115.4	1.0877	ug/L	1.0877	ppb	13:58:55
3	SiO2†	608.6	135.1	9.1111	ug/L	9.1111	ppb	13:59:11

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	879121.0	102.45	%	0.118				0.12%
Sc Radial	5273.2	103	%	0.4				0.36%
Y 371.029	741695.1	101.93	%	0.149				0.15%
Y RADIAL	5621.7	102.1	%	0.69				0.68%
Ag 328.068†	-96.7	-0.4492	ug/L	0.15202	-0.4492	ppb	0.15202	33.85%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.4	0.2802	ug/L	7.25575	0.2802	ppb	7.25575	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	28.7	12.259	ug/L	0.6130	12.259	ppb	0.6130	5.00%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	845.6	18.982	ug/L	0.2918	18.982	ppb	0.2918	1.54%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-13.5	-0.1045	ug/L	0.08270	-0.1045	ppb	0.08270	79.12%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-8.2	-0.0028	ug/L	0.00822	-0.0028	ppb	0.00822	292.64%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.2	-1.9190	ug/L	2.05161	-1.9190	ppb	2.05161	106.91%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                68.1      0.7505 ug/L       0.15017      0.7505 ppb        0.15017  20.01%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.0      0.0618 ug/L       0.06064      0.0618 ppb        0.06064  98.06%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                20.0      0.2211 ug/L       0.04116      0.2211 ppb        0.04116  18.61%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -96.7     -0.2905 ug/L       0.35699     -0.2905 ppb        0.35699 122.90%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.8     -15.286 ug/L        8.8246     -15.286 ppb         8.8246  57.73%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         709.3      129.14 ug/L         9.961      129.14 ppb          9.961   7.71%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.1     -2.9882 ug/L      65.49156     -2.9882 ppb       65.49156 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                -5.3     -0.0072 ug/L       0.00878     -0.0072 ppb        0.00878 122.67%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.6      0.2478 ug/L       0.20261      0.2478 ppb        0.20261  81.75%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        309.2      88.638 ug/L        5.0607      88.638 ppb         5.0607   5.71%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -21.5     -0.5330 ug/L       0.08142     -0.5330 ppb        0.08142  15.28%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 10.1      6.1677 ug/L       3.75446      6.1677 ppb        3.75446  60.87%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                22.1      2.6754 ug/L       0.34648      2.6754 ppb        0.34648  12.95%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            7.5      10.376 ug/L        3.7236      10.376 ppb         3.7236  35.89%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                19.6      6.6837 ug/L       0.78389      6.6837 ppb        0.78389  11.73%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 1.3      0.8033 ug/L       1.82941      0.8033 ppb        1.82941 227.73%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               125.6      3.9739 ug/L       0.42791      3.9739 ppb        0.42791  10.77%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                12.4      2.1543 ug/L       1.42313      2.1543 ppb        1.42313  66.06%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -5.2     -0.0331 ug/L       0.04025     -0.0331 ppb        0.04025 121.54%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                76.2      0.1210 ug/L       0.01644      0.1210 ppb        0.01644  13.59%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 6.9      2.0808 ug/L       2.33055      2.0808 ppb        2.33055 112.00%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 69.0      2.0334 ug/L       1.56845      2.0334 ppb        1.56845  77.13%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 33.0      0.2334 ug/L       0.14458      0.2334 ppb        0.14458  61.95%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               126.8      1.1952 ug/L       0.09315      1.1952 ppb        0.09315   7.79%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     125.6      8.4646 ug/L       1.45487      8.4646 ppb        1.45487  17.19%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 1/12/2010 14:12:32 **Plasma On Time: 1/11/2010 06:15:31**
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\011210.sif
Batch ID:
Results Data Set: 011210
Results Library: C:\pe\Optima3\Results\Results.mdb

==========

Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 1/12/2010 12:24:47**
IEC File: 011110.iec **MSF File:**
Method Description:

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

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Sequence No.: 1 **Autosampler Location: 37**
Sample ID: LR1 **Date Collected: 1/12/2010 14:12:33**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5074.5	5074.5	99.1	%			14:14:26
1	Y RADIAL	5421.9	5421.9	98.48	%			14:14:26
1	Al 396.153Radial†	-7.4	-1.3	0.2854	ug/L	0.2854	ppb	14:14:26

1	Ca 317.933Radial†	-1.8	-21.0	-33.907 ug/L	-33.907 ppb	14:14:46
1	Fe 238.204 Radial†	43162.5	43546.1	370260 ug/L	370260 ppb	14:14:26
1	K 766.490 Radial†	2462.1	-26.9	-4.8692 ug/L	-4.8692 ppb	14:14:26
1	Mg 279.077 IEC†	13.5	10.6	-35.738 ug/L	-35.738 ppb	14:14:46
1	Na 589.592 Radial†	-1085.9	213.1	61.073 ug/L	61.073 ppb	14:14:26
1	Sr 421.552†	97.4	88.5	0.5655 ug/L	0.5655 ppb	14:14:26
1	Sc 361.383	854254.0	854254.0	99.555 %		14:15:44
1	Y 371.029	713373.9	713373.9	98.036 %		14:15:44
1	Ag 328.068†	-25544.9	-26016.2	0.8293 ug/L	0.8293 ppb	14:15:49
1	As 188.979†	-221.5	-198.5	1.9262 ug/L	1.9262 ppb	14:16:09
1	B 249.677†	2578.1	3204.8	11.788 ug/L	11.788 ppb	14:15:49
1	Ba 233.527†	-1448.6	-1446.5	0.1950 ug/L	0.1950 ppb	14:15:49
1	Be 313.107†	-4462.5	-7.8	-0.0030 ug/L	-0.0030 ppb	14:15:49
1	Cd 226.502†	3176.1	3391.9	-0.9192 ug/L	-0.9192 ppb	14:15:49
1	Co 228.616†	178.5	256.6	-0.2074 ug/L	-0.2074 ppb	14:16:09
1	Cr 267.716†	-519.1	-600.4	0.5994 ug/L	0.5994 ppb	14:15:49
1	Cu 324.752†	1222.0	-5175.0	4.1274 ug/L	4.1274 ppb	14:15:49
1	Mn 257.610†	-30129.3	-30693.7	2.8943 ug/L	2.8943 ppb	14:15:44
1	Mo 202.031†	-367.4	-390.6	1.4871 ug/L	1.4871 ppb	14:15:49
1	Ni 231.604†	157.6	91.3	2.2553 ug/L	2.2553 ppb	14:16:09
1	P 214.914†	676.4	459.1	-18.926 ug/L	-18.926 ppb	14:16:09
1	Pb 220.353†	222.3	285.5	-0.8845 ug/L	-0.8845 ppb	14:16:09
1	S 181.975 Axial†	75.1	31.6	43.983 ug/L	43.983 ppb	14:16:09
1	Sb 206.836†	16.1	-17.3	-1.6388 ug/L	-1.6388 ppb	14:16:09
1	Se 196.026†	-1580.6	-1555.6	119.76 ug/L	119.76 ppb	14:16:09
1	Si 251.611†	-557.3	-1020.4	-31.967 ug/L	-31.967 ppb	14:15:49
1	Sn 189.927†	-15.4	-17.1	3.2478 ug/L	3.2478 ppb	14:16:09
1	Ti 334.940†	-1330.4	-2.2	-0.0607 ug/L	-0.0607 ppb	14:15:49
1	Tl 190.801†	-50.1	-16.2	-5.1893 ug/L	-5.1893 ppb	14:16:09
1	U 409.014†	170.4	2035.0	17.713 ug/L	17.713 ppb	14:15:49
1	V 292.402†	7826.5	9221.2	2.1578 ug/L	2.1578 ppb	14:15:49
1	Zn 213.857†	4456.4	3851.7	0.2457 ug/L	0.2457 ppb	14:16:09
1	SiO2†	-599.1	-1060.8	-70.810 ug/L	-70.810 ppb	14:17:16
2	Sc Radial	5138.4	5138.4	100 %		14:14:52
2	Y RADIAL	5462.3	5462.3	99.22 %		14:14:52
2	Al 396.153Radial†	-24.7	-18.4	-13.356 ug/L	-13.356 ppb	14:14:52
2	Ca 317.933Radial†	4.9	-14.3	-23.082 ug/L	-23.082 ppb	14:15:12
2	Fe 238.204 Radial†	43610.8	43451.2	369460 ug/L	369460 ppb	14:14:52
2	K 766.490 Radial†	2573.8	53.6	9.7821 ug/L	9.7821 ppb	14:14:52
2	Mg 279.077 IEC†	12.8	9.7	-64.148 ug/L	-64.148 ppb	14:15:12
2	Na 589.592 Radial†	-1091.4	221.2	63.413 ug/L	63.413 ppb	14:14:52
2	Sr 421.552†	87.6	77.5	0.4951 ug/L	0.4951 ppb	14:14:52
2	Sc 361.383	846726.6	846726.6	98.678 %		14:16:14
2	Y 371.029	707416.3	707416.3	97.217 %		14:16:14
2	Ag 328.068†	-25218.0	-25913.0	1.0481 ug/L	1.0481 ppb	14:16:20
2	As 188.979†	-214.2	-193.2	4.0317 ug/L	4.0317 ppb	14:16:40
2	B 249.677†	2551.6	3200.9	11.833 ug/L	11.833 ppb	14:16:20
2	Ba 233.527†	-1597.3	-1610.1	-1.0961 ug/L	-1.0961 ppb	14:16:20
2	Be 313.107†	-4564.0	-150.5	-0.0571 ug/L	-0.0571 ppb	14:16:20
2	Cd 226.502†	3225.4	3470.3	0.0243 ug/L	0.0243 ppb	14:16:20
2	Co 228.616†	174.4	254.0	-0.2510 ug/L	-0.2510 ppb	14:16:40
2	Cr 267.716†	-558.5	-644.9	0.0925 ug/L	0.0925 ppb	14:16:20
2	Cu 324.752†	1226.5	-5159.5	4.1337 ug/L	4.1337 ppb	14:16:20
2	Mn 257.610†	-30006.5	-30838.3	2.6572 ug/L	2.6572 ppb	14:16:14
2	Mo 202.031†	-381.0	-407.8	0.2287 ug/L	0.2287 ppb	14:16:20
2	Ni 231.604†	114.0	48.5	1.1978 ug/L	1.1978 ppb	14:16:40
2	P 214.914†	655.5	444.0	-27.424 ug/L	-27.424 ppb	14:16:40
2	Pb 220.353†	214.4	279.4	-1.5520 ug/L	-1.5520 ppb	14:16:40
2	S 181.975 Axial†	73.7	30.9	42.955 ug/L	42.955 ppb	14:16:40
2	Sb 206.836†	27.7	-5.3	2.3549 ug/L	2.3549 ppb	14:16:40
2	Se 196.026†	-1563.9	-1552.8	119.15 ug/L	119.15 ppb	14:16:40
2	Si 251.611†	-562.6	-1030.8	-32.280 ug/L	-32.280 ppb	14:16:20
2	Sn 189.927†	-27.8	-29.8	1.0217 ug/L	1.0217 ppb	14:16:40
2	Ti 334.940†	-1374.2	-58.4	-0.1444 ug/L	-0.1444 ppb	14:16:20
2	Tl 190.801†	-57.8	-24.5	-7.6951 ug/L	-7.6951 ppb	14:16:40
2	U 409.014†	-13.9	1849.8	12.354 ug/L	12.354 ppb	14:16:20
2	V 292.402†	7838.6	9303.4	2.8174 ug/L	2.8174 ppb	14:16:20
2	Zn 213.857†	4486.9	3922.4	0.9945 ug/L	0.9945 ppb	14:16:40
2	SiO2†	-616.6	-1083.9	-72.332 ug/L	-72.332 ppb	14:17:21
3	Sc Radial	5205.1	5205.1	102 %		14:15:17
3	Y RADIAL	5566.3	5566.3	101.1 %		14:15:17

3	Al 396.153Radial†	-34.5	-27.7	-20.785 ug/L	-20.785 ppb	14:15:17
3	Ca 317.933Radial†	1.3	-17.9	-28.926 ug/L	-28.926 ppb	14:15:37
3	Fe 238.204 Radial†	44301.7	43574.0	370500 ug/L	370500 ppb	14:15:17
3	K 766.490 Radial†	2530.3	-22.2	-4.0066 ug/L	-4.0066 ppb	14:15:17
3	Mg 279.077 IEC†	8.9	5.7	-197.49 ug/L	-197.49 ppb	14:15:37
3	Na 589.592 Radial†	-1098.0	228.6	65.538 ug/L	65.538 ppb	14:15:17
3	Sr 421.552†	76.3	65.3	0.4170 ug/L	0.4170 ppb	14:15:17
3	Sc 361.383	851438.2	851438.2	99.227 %		14:16:45
3	Y 371.029	711617.7	711617.7	97.795 %		14:16:45
3	Ag 328.068†	-25779.9	-26337.8	-0.5610 ug/L	-0.5610 ppb	14:16:50
3	As 188.979†	-216.8	-194.5	3.7008 ug/L	3.7008 ppb	14:17:10
3	B 249.677†	2425.0	3059.0	8.4786 ug/L	8.4786 ppb	14:16:50
3	Ba 233.527†	-1514.5	-1517.7	-0.3466 ug/L	-0.3466 ppb	14:16:50
3	Be 313.107†	-4531.9	-92.5	-0.0348 ug/L	-0.0348 ppb	14:16:50
3	Cd 226.502†	3232.7	3459.5	-0.2017 ug/L	-0.2017 ppb	14:16:50
3	Co 228.616†	165.1	243.6	-0.4778 ug/L	-0.4778 ppb	14:17:10
3	Cr 267.716†	-471.7	-554.4	1.1176 ug/L	1.1176 ppb	14:16:50
3	Cu 324.752†	1362.1	-5029.7	4.5752 ug/L	4.5752 ppb	14:16:50
3	Mn 257.610†	-30208.1	-30873.3	2.7275 ug/L	2.7275 ppb	14:16:45
3	Mo 202.031†	-388.5	-413.1	-0.0632 ug/L	-0.0632 ppb	14:16:50
3	Ni 231.604†	124.4	58.3	1.4398 ug/L	1.4398 ppb	14:17:10
3	P 214.914†	675.6	460.6	-18.390 ug/L	-18.390 ppb	14:17:10
3	Pb 220.353†	240.5	304.6	1.3852 ug/L	1.3852 ppb	14:17:10
3	S 181.975 Axial†	72.0	28.7	39.984 ug/L	39.984 ppb	14:17:10
3	Sb 206.836†	21.9	-11.4	0.3161 ug/L	0.3161 ppb	14:17:10
3	Se 196.026†	-1567.7	-1547.9	125.34 ug/L	125.34 ppb	14:17:10
3	Si 251.611†	-632.9	-1098.5	-34.420 ug/L	-34.420 ppb	14:16:50
3	Sn 189.927†	-25.0	-26.8	1.5547 ug/L	1.5547 ppb	14:17:10
3	Ti 334.940†	-1285.8	38.4	0.0193 ug/L	0.0193 ppb	14:16:50
3	Tl 190.801†	-43.9	-10.2	-3.3811 ug/L	-3.3811 ppb	14:17:10
3	U 409.014†	57.6	1921.9	14.355 ug/L	14.355 ppb	14:16:50
3	V 292.402†	7971.9	9393.7	3.2556 ug/L	3.2556 ppb	14:16:50
3	Zn 213.857†	4489.8	3900.1	0.6823 ug/L	0.6823 ppb	14:17:10
3	SiO2†	-640.0	-1104.0	-73.676 ug/L	-73.676 ppb	14:17:26

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	850806.3	99.153	%	0.4432				0.45%
Sc Radial	5139.3	100	%	1.3				1.27%
Y 371.029	710802.6	97.683	%	0.4207				0.43%
Y RADIAL	5483.5	99.60	%	1.353				1.36%
Ag 328.068†	-26089.0	0.4388	ug/L	0.87277	0.4388	ppb	0.87277	198.90%
Al 396.153Radial†	-15.8	-11.285	ug/L	10.6869	-11.285	ppb	10.6869	94.70%
As 188.979†	-195.4	3.2196	ug/L	1.13219	3.2196	ppb	1.13219	35.17%
B 249.677†	3154.9	10.700	ug/L	1.9236	10.700	ppb	1.9236	17.98%
Ba 233.527†	-1524.8	-0.4159	ug/L	0.64837	-0.4159	ppb	0.64837	155.90%
Be 313.107†	-83.6	-0.0316	ug/L	0.02720	-0.0316	ppb	0.02720	86.01%
Ca 317.933Radial†	-17.7	-28.638	ug/L	5.4181	-28.638	ppb	5.4181	18.92%
Cd 226.502†	3440.6	-0.3655	ug/L	0.49262	-0.3655	ppb	0.49262	134.76%
Co 228.616†	251.4	-0.3121	ug/L	0.14514	-0.3121	ppb	0.14514	46.51%
Cr 267.716†	-599.9	0.6032	ug/L	0.51258	0.6032	ppb	0.51258	84.98%
Cu 324.752†	-5121.4	4.2787	ug/L	0.25673	4.2787	ppb	0.25673	6.00%
Fe 238.204 Radial†	43523.8	370070	ug/L	547.5	370070	ppb	547.5	0.15%
K 766.490 Radial†	1.5	0.3021	ug/L	8.22123	0.3021	ppb	8.22123	>999.9%
Mg 279.077 IEC†	8.7	-99.127	ug/L	86.3640	-99.127	ppb	86.3640	87.13%
Mn 257.610†	-30801.8	2.7597	ug/L	0.12178	2.7597	ppb	0.12178	4.41%
Mo 202.031†	-403.8	0.5509	ug/L	0.82384	0.5509	ppb	0.82384	149.55%
Na 589.592 Radial†	221.0	63.341	ug/L	2.2332	63.341	ppb	2.2332	3.53%
Ni 231.604†	66.0	1.6310	ug/L	0.55406	1.6310	ppb	0.55406	33.97%
P 214.914†	454.6	-21.580	ug/L	5.0680	-21.580	ppb	5.0680	23.48%
Pb 220.353†	289.8	-0.3504	ug/L	1.53974	-0.3504	ppb	1.53974	439.41%
S 181.975 Axial†	30.4	42.307	ug/L	2.0767	42.307	ppb	2.0767	4.91%
Sb 206.836†	-11.3	0.3441	ug/L	1.99699	0.3441	ppb	1.99699	580.43%
Se 196.026†	-1552.1	121.42	ug/L	3.411	121.42	ppb	3.411	2.81%
Si 251.611†	-1049.9	-32.889	ug/L	1.3350	-32.889	ppb	1.3350	4.06%
Sn 189.927†	-24.6	1.9414	ug/L	1.16232	1.9414	ppb	1.16232	59.87%
Sr 421.552†	77.1	0.4926	ug/L	0.07431	0.4926	ppb	0.07431	15.09%
Ti 334.940†	-7.4	-0.0619	ug/L	0.08186	-0.0619	ppb	0.08186	132.21%
Tl 190.801†	-17.0	-5.4218	ug/L	2.16637	-5.4218	ppb	2.16637	39.96%

U 409.014†	1935.6	14.807	ug/L	2.7081	14.807	ppb	2.7081	18.29%
V 292.402†	9306.1	2.7436	ug/L	0.55260	2.7436	ppb	0.55260	20.14%
Zn 213.857†	3891.4	0.6408	ug/L	0.37610	0.6408	ppb	0.37610	58.69%
SiO2†	-1082.9	-72.273	ug/L	1.4337	-72.273	ppb	1.4337	1.98%

Sequence No.: 2
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/12/2010 14:19:37
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	5165.4	5165.4	101	%			14:21:29
1	Y RADIAL	5478.9	5478.9	99.52	%			14:21:29
1	Al 396.153Radial†	6456.0	6406.7	5099.9	ug/L	5099.9	ppb	14:21:29
1	Ca 317.933Radial†	3227.6	3180.6	5134.3	ug/L	5134.3	ppb	14:21:49
1	Fe 238.204 Radial†	622.3	605.4	5162.8	ug/L	5162.8	ppb	14:21:49
1	K 766.490 Radial†	30275.6	27503.5	5002.2	ug/L	5002.2	ppb	14:21:29
1	Mg 279.077 IEC†	160.5	156.1	5184.0	ug/L	5184.0	ppb	14:21:49
1	Na 589.592 Radial†	33325.2	34347.2	9845.7	ug/L	9845.7	ppb	14:21:29
1	Sr 421.552†	78740.1	78052.7	498.29	ug/L	498.29	ppb	14:21:29
1	Sc 361.383	873197.0	873197.0	101.76	%			14:22:47
1	Y 371.029	724713.7	724713.7	99.595	%			14:22:47
1	Ag 328.068†	112194.1	109893.6	507.41	ug/L	507.41	ppb	14:22:52
1	As 188.979†	1158.8	1162.7	501.48	ug/L	501.48	ppb	14:23:12
1	B 249.677†	22232.7	22462.7	501.90	ug/L	501.90	ppb	14:22:52
1	Ba 233.527†	65881.7	64749.1	502.94	ug/L	502.94	ppb	14:22:52
1	Be 313.107†	1353056.5	1334093.6	505.20	ug/L	505.20	ppb	14:22:47
1	Cd 226.502†	46324.7	45724.0	502.88	ug/L	502.88	ppb	14:22:52
1	Co 228.616†	25275.2	24914.7	505.58	ug/L	505.58	ppb	14:22:52
1	Cr 267.716†	45862.6	44989.2	499.75	ug/L	499.75	ppb	14:22:52
1	Cu 324.752†	176966.9	167499.1	499.66	ug/L	499.66	ppb	14:22:52
1	Mn 257.610†	467219.8	458696.9	503.34	ug/L	503.34	ppb	14:22:47
1	Mo 202.031†	7236.7	7089.7	495.15	ug/L	495.15	ppb	14:23:12
1	Ni 231.604†	20743.8	20317.5	502.49	ug/L	502.49	ppb	14:22:52
1	P 214.914†	4417.3	4120.5	2356.5	ug/L	2356.5	ppb	14:23:12
1	Pb 220.353†	4087.9	4079.2	495.36	ug/L	495.36	ppb	14:23:12
1	S 181.975 Axial†	778.0	720.6	1001.9	ug/L	1001.9	ppb	14:23:12
1	Sb 206.836†	1517.6	1457.8	511.97	ug/L	511.97	ppb	14:23:12
1	Se 196.026†	773.5	792.1	515.93	ug/L	515.93	ppb	14:23:12
1	Si 251.611†	81655.9	79780.8	2519.5	ug/L	2519.5	ppb	14:22:52
1	Sn 189.927†	2903.1	2851.1	497.61	ug/L	497.61	ppb	14:23:12
1	Ti 334.940†	321063.2	316835.9	507.20	ug/L	507.20	ppb	14:22:47
1	Tl 190.801†	1634.0	1639.8	498.50	ug/L	498.50	ppb	14:23:12
1	U 409.014†	15852.9	17442.2	511.77	ug/L	511.77	ppb	14:22:52
1	V 292.402†	73503.8	73590.3	505.73	ug/L	505.73	ppb	14:22:52
1	Zn 213.857†	55427.3	53842.5	501.06	ug/L	501.06	ppb	14:22:52
1	SiO2†	81180.7	79315.4	5336.2	ug/L	5336.2	ppb	14:24:20
2	Sc Radial	5176.4	5176.4	101	%			14:21:54
2	Y RADIAL	5452.2	5452.2	99.03	%			14:21:54
2	Al 396.153Radial†	6456.1	6393.1	5088.7	ug/L	5088.7	ppb	14:21:54
2	Ca 317.933Radial†	3211.5	3157.8	5097.6	ug/L	5097.6	ppb	14:22:14
2	Fe 238.204 Radial†	618.6	600.4	5120.6	ug/L	5120.6	ppb	14:22:14
2	K 766.490 Radial†	30174.4	27339.2	4972.3	ug/L	4972.3	ppb	14:21:54
2	Mg 279.077 IEC†	159.7	155.0	5145.5	ug/L	5145.5	ppb	14:22:14
2	Na 589.592 Radial†	33142.9	34096.3	9773.7	ug/L	9773.7	ppb	14:21:54
2	Sr 421.552†	78439.6	77588.5	495.33	ug/L	495.33	ppb	14:21:54
2	Sc 361.383	867072.7	867072.7	101.05	%			14:23:18
2	Y 371.029	719981.4	719981.4	98.944	%			14:23:18
2	Ag 328.068†	111601.1	110085.4	508.28	ug/L	508.28	ppb	14:23:23
2	As 188.979†	1162.1	1174.0	506.28	ug/L	506.28	ppb	14:23:43
2	B 249.677†	22148.6	22533.8	503.50	ug/L	503.50	ppb	14:23:23
2	Ba 233.527†	65520.9	64849.4	503.72	ug/L	503.72	ppb	14:23:23
2	Be 313.107†	1344931.5	1335444.3	505.72	ug/L	505.72	ppb	14:23:18
2	Cd 226.502†	46147.6	45870.2	504.49	ug/L	504.49	ppb	14:23:23
2	Co 228.616†	25163.1	24979.1	506.91	ug/L	506.91	ppb	14:23:23
2	Cr 267.716†	45730.3	45176.6	501.83	ug/L	501.83	ppb	14:23:23
2	Cu 324.752†	175475.6	167251.6	498.92	ug/L	498.92	ppb	14:23:23
2	Mn 257.610†	465509.3	460247.0	505.03	ug/L	505.03	ppb	14:23:18
2	Mo 202.031†	7285.4	7188.1	502.02	ug/L	502.02	ppb	14:23:43
2	Ni 231.604†	20654.9	20373.4	503.87	ug/L	503.87	ppb	14:23:23

2	P 214.914†	4458.4	4191.8	2399.6	ug/L	2399.6 ppb	14:23:43
2	Pb 220.353†	4131.6	4150.9	504.04	ug/L	504.04 ppb	14:23:43
2	S 181.975 Axial†	783.6	731.6	1017.2	ug/L	1017.2 ppb	14:23:43
2	Sb 206.836†	1524.6	1475.3	518.18	ug/L	518.18 ppb	14:23:43
2	Se 196.026†	788.4	812.2	528.48	ug/L	528.48 ppb	14:23:43
2	Si 251.611†	81229.7	79925.8	2524.0	ug/L	2524.0 ppb	14:23:23
2	Sn 189.927†	2938.6	2906.4	507.24	ug/L	507.24 ppb	14:23:43
2	Ti 334.940†	319463.0	317480.8	508.23	ug/L	508.23 ppb	14:23:18
2	Tl 190.801†	1646.9	1663.9	505.81	ug/L	505.81 ppb	14:23:43
2	U 409.014†	15835.4	17534.9	514.50	ug/L	514.50 ppb	14:23:23
2	V 292.402†	73065.7	73666.9	506.36	ug/L	506.36 ppb	14:23:23
2	Zn 213.857†	55154.7	53957.5	502.13	ug/L	502.13 ppb	14:23:23
2	SiO2†	81481.7	80176.8	5394.1	ug/L	5394.1 ppb	14:24:25
3	Sc Radial	5144.3	5144.3	100	%		14:22:19
3	Y RADIAL	5481.7	5481.7	99.57	%		14:22:19
3	Al 396.153Radial†	6414.1	6391.2	5087.1	ug/L	5087.1 ppb	14:22:19
3	Ca 317.933Radial†	3193.9	3160.2	5101.4	ug/L	5101.4 ppb	14:22:39
3	Fe 238.204 Radial†	617.3	602.9	5142.1	ug/L	5142.1 ppb	14:22:39
3	K 766.490 Radial†	30188.8	27540.3	5009.0	ug/L	5009.0 ppb	14:22:19
3	Mg 279.077 IEC†	161.4	157.6	5234.9	ug/L	5234.9 ppb	14:22:39
3	Na 589.592 Radial†	32996.6	34155.8	9790.8	ug/L	9790.8 ppb	14:22:19
3	Sr 421.552†	78218.4	77853.9	497.02	ug/L	497.02 ppb	14:22:19
3	Sc 361.383	861996.1	861996.1	100.46	%		14:23:49
3	Y 371.029	715819.1	715819.1	98.372	%		14:23:49
3	Ag 328.068†	113080.8	112208.9	518.06	ug/L	518.06 ppb	14:23:54
3	As 188.979†	1160.3	1179.0	508.41	ug/L	508.41 ppb	14:24:14
3	B 249.677†	22511.2	23023.8	514.47	ug/L	514.47 ppb	14:23:54
3	Ba 233.527†	66297.4	66004.1	512.69	ug/L	512.69 ppb	14:23:54
3	Be 313.107†	1335323.4	1333718.5	505.06	ug/L	505.06 ppb	14:23:49
3	Cd 226.502†	46770.0	46758.7	514.27	ug/L	514.27 ppb	14:23:54
3	Co 228.616†	25469.5	25430.8	516.08	ug/L	516.08 ppb	14:23:54
3	Cr 267.716†	46078.3	45789.6	508.64	ug/L	508.64 ppb	14:23:54
3	Cu 324.752†	177871.1	170658.9	509.08	ug/L	509.08 ppb	14:23:54
3	Mn 257.610†	462603.6	460067.6	504.83	ug/L	504.83 ppb	14:23:49
3	Mo 202.031†	7271.2	7216.4	503.99	ug/L	503.99 ppb	14:24:14
3	Ni 231.604†	20978.9	20816.4	514.83	ug/L	514.83 ppb	14:23:54
3	P 214.914†	4432.9	4192.4	2397.5	ug/L	2397.5 ppb	14:24:14
3	Pb 220.353†	4121.4	4164.9	505.73	ug/L	505.73 ppb	14:24:14
3	S 181.975 Axial†	778.2	730.8	1016.1	ug/L	1016.1 ppb	14:24:14
3	Sb 206.836†	1531.7	1491.3	523.67	ug/L	523.67 ppb	14:24:14
3	Se 196.026†	776.2	804.7	523.81	ug/L	523.81 ppb	14:24:14
3	Si 251.611†	82138.0	81303.4	2567.6	ug/L	2567.6 ppb	14:23:54
3	Sn 189.927†	2916.9	2901.9	506.46	ug/L	506.46 ppb	14:24:14
3	Ti 334.940†	317265.8	317155.5	507.70	ug/L	507.70 ppb	14:23:49
3	Tl 190.801†	1629.8	1656.5	503.50	ug/L	503.50 ppb	14:24:14
3	U 409.014†	15980.1	17771.2	521.44	ug/L	521.44 ppb	14:23:54
3	V 292.402†	74033.3	75056.0	515.82	ug/L	515.82 ppb	14:23:54
3	Zn 213.857†	55830.3	54951.5	511.38	ug/L	511.38 ppb	14:23:54
3	SiO2†	82582.4	81747.4	5500.0	ug/L	5500.0 ppb	14:24:30

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	867421.9	101.09	%	0.654				0.65%
Sc Radial	5162.0	101	%	0.3				0.32%
Y 371.029	720171.4	98.970	%	0.6116				0.62%
Y RADIAL	5470.9	99.37	%	0.296				0.30%
Ag 328.068†	110729.3	511.25	ug/L	5.914	511.25	ppb	5.914	1.16%
QC value within limits for Ag 328.068 Recovery = 102.25%								
Al 396.153Radial†	6397.0	5091.9	ug/L	6.99	5091.9	ppb	6.99	0.14%
QC value within limits for Al 396.153Radial Recovery = 101.84%								
As 188.979†	1171.9	505.39	ug/L	3.553	505.39	ppb	3.553	0.70%
QC value within limits for As 188.979 Recovery = 101.08%								
B 249.677†	22673.4	506.62	ug/L	6.842	506.62	ppb	6.842	1.35%
QC value within limits for B 249.677 Recovery = 101.32%								
Ba 233.527†	65200.8	506.45	ug/L	5.416	506.45	ppb	5.416	1.07%
QC value within limits for Ba 233.527 Recovery = 101.29%								
Be 313.107†	1334418.8	505.33	ug/L	0.344	505.33	ppb	0.344	0.07%
QC value within limits for Be 313.107 Recovery = 101.07%								
Ca 317.933Radial†	3166.2	5111.1	ug/L	20.17	5111.1	ppb	20.17	0.39%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.22%
Cd 226.502†            46117.6      507.21 ug/L         6.166      507.21 ppb          6.166   1.22%
   QC value within limits for Cd 226.502  Recovery = 101.44%
Co 228.616†            25108.2      509.52 ug/L         5.716      509.52 ppb          5.716   1.12%
   QC value within limits for Co 228.616  Recovery = 101.90%
Cr 267.716†            45318.5      503.41 ug/L         4.650      503.41 ppb          4.650   0.92%
   QC value within limits for Cr 267.716  Recovery = 100.68%
Cu 324.752†           168469.9      502.55 ug/L         5.665      502.55 ppb          5.665   1.13%
   QC value within limits for Cu 324.752  Recovery = 100.51%
Fe 238.204 Radial†       602.9      5141.8 ug/L        21.12      5141.8 ppb          21.12   0.41%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.84%
K 766.490 Radial†      27461.0      4994.5 ug/L        19.50      4994.5 ppb          19.50   0.39%
   QC value within limits for K 766.490 Radial  Recovery = 99.89%
Mg 279.077 IEC†          156.2      5188.1 ug/L        44.84      5188.1 ppb          44.84   0.86%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.76%
Mn 257.610†           459670.5      504.40 ug/L         0.928      504.40 ppb          0.928   0.18%
   QC value within limits for Mn 257.610  Recovery = 100.88%
Mo 202.031†             7164.8      500.39 ug/L         4.640      500.39 ppb          4.640   0.93%
   QC value within limits for Mo 202.031  Recovery = 100.08%
Na 589.592 Radial†     34199.8      9803.4 ug/L        37.58      9803.4 ppb          37.58   0.38%
   QC value within limits for Na 589.592 Radial  Recovery = 98.03%
Ni 231.604†            20502.4      507.06 ug/L         6.761      507.06 ppb          6.761   1.33%
   QC value within limits for Ni 231.604  Recovery = 101.41%
P 214.914†              4168.2      2384.5 ug/L        24.31      2384.5 ppb          24.31   1.02%
   QC value within limits for P 214.914  Recovery = 95.38%
Pb 220.353†             4131.7      501.71 ug/L         5.568      501.71 ppb          5.568   1.11%
   QC value within limits for Pb 220.353  Recovery = 100.34%
S 181.975 Axial†         727.7      1011.7 ug/L         8.55      1011.7 ppb           8.55   0.84%
   QC value within limits for S 181.975 Axial  Recovery = 101.17%
Sb 206.836†             1474.8      517.94 ug/L         5.850      517.94 ppb          5.850   1.13%
   QC value within limits for Sb 206.836  Recovery = 103.59%
Se 196.026†              803.0      522.74 ug/L         6.344      522.74 ppb          6.344   1.21%
   QC value within limits for Se 196.026  Recovery = 104.55%
Si 251.611†            80336.7      2537.0 ug/L        26.56      2537.0 ppb          26.56   1.05%
   QC value within limits for Si 251.611  Recovery = 101.48%
Sn 189.927†             2886.5      503.77 ug/L         5.345      503.77 ppb          5.345   1.06%
   QC value within limits for Sn 189.927  Recovery = 100.75%
Sr 421.552†            77831.7      496.88 ug/L         1.487      496.88 ppb          1.487   0.30%
   QC value within limits for Sr 421.552  Recovery = 99.38%
Ti 334.940†           317157.4      507.71 ug/L         0.515      507.71 ppb          0.515   0.10%
   QC value within limits for Ti 334.940  Recovery = 101.54%
Tl 190.801†             1653.4      502.60 ug/L         3.736      502.60 ppb          3.736   0.74%
   QC value within limits for Tl 190.801  Recovery = 100.52%
U 409.014†             17582.8      515.91 ug/L         4.985      515.91 ppb          4.985   0.97%
   QC value within limits for U 409.014  Recovery = 103.18%
V 292.402†             74104.4      509.30 ug/L         5.650      509.30 ppb          5.650   1.11%
   QC value within limits for V 292.402  Recovery = 101.86%
Zn 213.857†            54250.5      504.85 ug/L         5.674      504.85 ppb          5.674   1.12%
   QC value within limits for Zn 213.857  Recovery = 100.97%
SiO2†                  80413.2      5410.1 ug/L        83.06      5410.1 ppb          83.06   1.54%
   QC value within limits for SiO2  Recovery = 101.17%
All analyte(s) passed QC.
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Sequence No.: 3
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/12/2010 14:26:39
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	5299.8	5299.8	103	%			14:28:32
1	Y RADIAL	5679.7	5679.7	103.2	%			14:28:32
1	Al 396.153Radial†	11.9	17.6	14.098	ug/L	14.098	ppb	14:28:32
1	Ca 317.933Radial†	21.5	1.6	2.5893	ug/L	2.5893	ppb	14:28:52
1	Fe 238.204 Radial†	10.3	-1.6	-13.893	ug/L	-13.893	ppb	14:28:52
1	K 766.490 Radial†	2753.6	149.1	27.129	ug/L	27.129	ppb	14:28:32
1	Mg 279.077 IEC†	2.9	-0.3	-8.9269	ug/L	-8.9269	ppb	14:28:52
1	Na 589.592 Radial†	-1156.5	191.4	54.864	ug/L	54.864	ppb	14:28:32
1	Sr 421.552†	-7.5	-17.0	-0.1085	ug/L	-0.1085	ppb	14:28:32
1	Sc 361.383	888071.5	888071.5	103.50	%			14:29:49
1	Y 371.029	748407.4	748407.4	102.85	%			14:29:49
1	Ag 328.068†	283.3	-83.3	-0.3822	ug/L	-0.3822	ppb	14:29:54
1	As 188.979†	-13.7	10.7	4.5805	ug/L	4.5805	ppb	14:30:14
1	B 249.677†	-271.8	352.5	7.9130	ug/L	7.9130	ppb	14:30:14
1	Ba 233.527†	-23.5	-14.2	-0.1079	ug/L	-0.1079	ppb	14:30:14
1	Be 313.107†	-4601.7	28.4	0.0111	ug/L	0.0111	ppb	14:29:54
1	Cd 226.502†	-175.9	31.7	0.3497	ug/L	0.3497	ppb	14:30:14
1	Co 228.616†	-65.3	14.2	0.2878	ug/L	0.2878	ppb	14:30:14
1	Cr 267.716†	87.2	5.3	0.0598	ug/L	0.0598	ppb	14:30:14
1	Cu 324.752†	6455.3	-165.2	-0.4938	ug/L	-0.4938	ppb	14:29:54
1	Mn 257.610†	426.6	-17.6	-0.0203	ug/L	-0.0203	ppb	14:30:14
1	Mo 202.031†	23.0	0.6	0.0397	ug/L	0.0397	ppb	14:30:14
1	Ni 231.604†	63.0	-6.1	-0.1515	ug/L	-0.1515	ppb	14:30:14
1	P 214.914†	242.3	13.8	8.4286	ug/L	8.4286	ppb	14:30:14
1	Pb 220.353†	-48.9	15.0	1.8164	ug/L	1.8164	ppb	14:30:14
1	S 181.975 Axial†	40.9	-4.3	-6.0330	ug/L	-6.0330	ppb	14:30:14
1	Sb 206.836†	54.2	19.0	6.4705	ug/L	6.4705	ppb	14:30:14
1	Se 196.026†	-25.2	7.7	4.8146	ug/L	4.8146	ppb	14:30:14
1	Si 251.611†	496.7	19.2	0.6084	ug/L	0.6084	ppb	14:30:14
1	Sn 189.927†	13.9	11.8	2.0503	ug/L	2.0503	ppb	14:30:14
1	Ti 334.940†	-1261.8	115.0	0.1850	ug/L	0.1850	ppb	14:29:54
1	Tl 190.801†	-37.6	-2.3	-0.6916	ug/L	-0.6916	ppb	14:30:14
1	U 409.014†	-1918.5	10.2	0.3024	ug/L	0.3024	ppb	14:29:49
1	V 292.402†	-1248.6	153.3	1.0425	ug/L	1.0425	ppb	14:29:54
1	Zn 213.857†	659.1	12.2	0.1171	ug/L	0.1171	ppb	14:30:14
1	SiO2†	516.6	40.2	2.7077	ug/L	2.7077	ppb	14:31:20
2	Sc Radial	4945.9	4945.9	96.6	%			14:28:57
2	Y RADIAL	5290.9	5290.9	96.10	%			14:28:57
2	Al 396.153Radial†	-35.8	-30.8	-24.671	ug/L	-24.671	ppb	14:28:57
2	Ca 317.933Radial†	15.9	-2.7	-4.3682	ug/L	-4.3682	ppb	14:29:17
2	Fe 238.204 Radial†	11.3	0.2	1.7015	ug/L	1.7015	ppb	14:29:17
2	K 766.490 Radial†	2731.1	316.2	57.575	ug/L	57.575	ppb	14:28:57
2	Mg 279.077 IEC†	-1.3	-4.4	-145.00	ug/L	-145.00	ppb	14:29:17
2	Na 589.592 Radial†	-1145.4	123.0	35.258	ug/L	35.258	ppb	14:28:57
2	Sr 421.552†	9.2	-0.2	-0.0011	ug/L	-0.0011	ppb	14:28:57
2	Sc 361.383	873629.9	873629.9	101.81	%			14:30:19
2	Y 371.029	737481.5	737481.5	101.35	%			14:30:19
2	Ag 328.068†	309.4	-53.2	-0.2409	ug/L	-0.2409	ppb	14:30:24
2	As 188.979†	-17.3	7.0	2.9863	ug/L	2.9863	ppb	14:30:44
2	B 249.677†	-280.2	339.9	7.6283	ug/L	7.6283	ppb	14:30:44
2	Ba 233.527†	-6.4	2.3	0.0197	ug/L	0.0197	ppb	14:30:44
2	Be 313.107†	-4742.9	-183.8	-0.0691	ug/L	-0.0691	ppb	14:30:24
2	Cd 226.502†	-165.9	38.7	0.4254	ug/L	0.4254	ppb	14:30:44
2	Co 228.616†	-67.1	11.4	0.2303	ug/L	0.2303	ppb	14:30:44
2	Cr 267.716†	101.9	21.1	0.2345	ug/L	0.2345	ppb	14:30:44
2	Cu 324.752†	6518.0	-0.5	-0.0021	ug/L	-0.0021	ppb	14:30:24
2	Mn 257.610†	382.2	-54.5	-0.0536	ug/L	-0.0536	ppb	14:30:44
2	Mo 202.031†	22.3	0.3	0.0219	ug/L	0.0219	ppb	14:30:44
2	Ni 231.604†	46.0	-21.9	-0.5412	ug/L	-0.5412	ppb	14:30:44

2	P 214.914†	233.7	9.2	5.5331 ug/L	5.5331 ppb	14:30:44
2	Pb 220.353†	-52.7	10.4	1.2581 ug/L	1.2581 ppb	14:30:44
2	S 181.975 Axial†	53.4	8.6	11.966 ug/L	11.966 ppb	14:30:44
2	Sb 206.836†	50.5	16.2	5.5171 ug/L	5.5171 ppb	14:30:44
2	Se 196.026†	-37.1	-4.4	-2.7470 ug/L	-2.7470 ppb	14:30:44
2	Si 251.611†	494.9	25.4	0.8047 ug/L	0.8047 ppb	14:30:44
2	Sn 189.927†	12.7	10.8	1.8755 ug/L	1.8755 ppb	14:30:44
2	Ti 334.940†	-1260.3	96.3	0.1648 ug/L	0.1648 ppb	14:30:24
2	Tl 190.801†	-42.0	-7.2	-2.1661 ug/L	-2.1661 ppb	14:30:44
2	U 409.014†	-1848.9	47.9	1.4087 ug/L	1.4087 ppb	14:30:19
2	V 292.402†	-1262.5	119.7	0.8110 ug/L	0.8110 ppb	14:30:24
2	Zn 213.857†	658.4	22.0	0.2100 ug/L	0.2100 ppb	14:30:44
2	SiO2†	528.1	59.6	4.0211 ug/L	4.0211 ppb	14:31:25
3	Sc Radial	5301.5	5301.5	104 %		14:29:22
3	Y RADIAL	5668.5	5668.5	103.0 %		14:29:22
3	Al 396.153Radial†	4.5	10.5	8.4290 ug/L	8.4290 ppb	14:29:22
3	Ca 317.933Radial†	18.3	-1.5	-2.4806 ug/L	-2.4806 ppb	14:29:42
3	Fe 238.204 Radial†	8.9	-3.0	-25.270 ug/L	-25.270 ppb	14:29:42
3	K 766.490 Radial†	2809.8	202.6	36.868 ug/L	36.868 ppb	14:29:22
3	Mg 279.077 IEC†	2.2	-0.9	-31.388 ug/L	-31.388 ppb	14:29:42
3	Na 589.592 Radial†	-1149.7	198.3	56.846 ug/L	56.846 ppb	14:29:22
3	Sr 421.552†	3.4	-6.5	-0.0414 ug/L	-0.0414 ppb	14:29:22
3	Sc 361.383	861442.9	861442.9	100.39 %		14:30:49
3	Y 371.029	727136.0	727136.0	99.927 %		14:30:49
3	Ag 328.068†	239.3	-118.7	-0.5519 ug/L	-0.5519 ppb	14:30:54
3	As 188.979†	-23.2	0.8	0.3533 ug/L	0.3533 ppb	14:31:14
3	B 249.677†	-300.6	315.7	7.0900 ug/L	7.0900 ppb	14:31:14
3	Ba 233.527†	-16.0	-7.3	-0.0565 ug/L	-0.0565 ppb	14:31:14
3	Be 313.107†	-4683.0	-190.0	-0.0716 ug/L	-0.0716 ppb	14:30:54
3	Cd 226.502†	-171.9	30.4	0.3374 ug/L	0.3374 ppb	14:31:14
3	Co 228.616†	-79.1	-1.5	-0.0317 ug/L	-0.0317 ppb	14:31:14
3	Cr 267.716†	75.5	-3.8	-0.0424 ug/L	-0.0424 ppb	14:31:14
3	Cu 324.752†	6394.5	-32.9	-0.1005 ug/L	-0.1005 ppb	14:30:54
3	Mn 257.610†	399.7	-31.6	-0.0359 ug/L	-0.0359 ppb	14:31:14
3	Mo 202.031†	15.0	-6.7	-0.4685 ug/L	-0.4685 ppb	14:31:14
3	Ni 231.604†	42.2	-25.0	-0.6176 ug/L	-0.6176 ppb	14:31:14
3	P 214.914†	224.6	3.5	2.1308 ug/L	2.1308 ppb	14:31:14
3	Pb 220.353†	-49.6	12.8	1.5557 ug/L	1.5557 ppb	14:31:14
3	S 181.975 Axial†	53.6	9.5	13.225 ug/L	13.225 ppb	14:31:14
3	Sb 206.836†	43.1	9.5	3.2170 ug/L	3.2170 ppb	14:31:14
3	Se 196.026†	-35.2	-3.0	-1.9765 ug/L	-1.9765 ppb	14:31:14
3	Si 251.611†	509.2	46.6	1.4796 ug/L	1.4796 ppb	14:31:14
3	Sn 189.927†	7.1	5.4	0.9433 ug/L	0.9433 ppb	14:31:14
3	Ti 334.940†	-1276.6	62.6	0.1017 ug/L	0.1017 ppb	14:30:54
3	Tl 190.801†	-39.9	-5.7	-1.7167 ug/L	-1.7167 ppb	14:31:14
3	U 409.014†	-1812.7	58.2	1.7173 ug/L	1.7173 ppb	14:30:49
3	V 292.402†	-1303.5	61.4	0.4158 ug/L	0.4158 ppb	14:30:54
3	Zn 213.857†	664.8	37.6	0.3592 ug/L	0.3592 ppb	14:31:14
3	SiO2†	531.3	70.2	4.7488 ug/L	4.7488 ppb	14:31:30

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	874381.4	101.90	%	1.554				1.52%
Sc Radial	5182.4	101	%	4.0				3.95%
Y 371.029	737674.9	101.38	%	1.462				1.44%
Y RADIAL	5546.4	100.7	%	4.02				3.99%
Ag 328.068†	-85.1	-0.3917	ug/L	0.15572	-0.3917	ppb	0.15572	39.75%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-0.9	-0.7148	ug/L	20.93968	-0.7148	ppb	20.93968	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.2	2.6400	ug/L	2.13479	2.6400	ppb	2.13479	80.86%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	336.0	7.5437	ug/L	0.41796	7.5437	ppb	0.41796	5.54%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-6.4	-0.0482	ug/L	0.06422	-0.0482	ppb	0.06422	133.16%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-115.1	-0.0432	ug/L	0.04705	-0.0432	ppb	0.04705	108.99%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-0.9	-1.4198	ug/L	3.59799	-1.4198	ppb	3.59799	253.41%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                33.6      0.3708 ug/L       0.04764      0.3708 ppb        0.04764  12.85%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 8.0      0.1621 ug/L       0.17032      0.1621 ppb        0.17032 105.06%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 7.5      0.0840 ug/L       0.14005      0.0840 ppb        0.14005 166.78%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -66.2     -0.1988 ug/L       0.26015     -0.1988 ppb        0.26015 130.86%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.5     -12.487 ug/L       13.5407     -12.487 ppb        13.5407 108.44%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         222.6      40.524 ug/L       15.5489      40.524 ppb        15.5489  38.37%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.9     -61.771 ug/L       72.9468     -61.771 ppb        72.9468 118.09%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -34.6     -0.0366 ug/L       0.01667     -0.0366 ppb        0.01667  45.54%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -1.9     -0.1356 ug/L       0.28845     -0.1356 ppb        0.28845 212.66%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        170.9      48.989 ug/L       11.9330      48.989 ppb        11.9330  24.36%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -17.6     -0.4368 ug/L       0.24997     -0.4368 ppb        0.24997  57.23%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  8.8      5.3642 ug/L       3.15228      5.3642 ppb        3.15228  58.77%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                12.7      1.5434 ug/L       0.27931      1.5434 ppb        0.27931  18.10%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            4.6      6.3861 ug/L      10.77363      6.3861 ppb       10.77363 168.71%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                14.9      5.0682 ug/L       1.67253      5.0682 ppb        1.67253  33.00%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 0.1      0.0303 ug/L       4.16112      0.0303 ppb        4.16112 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                30.4      0.9642 ug/L       0.45699      0.9642 ppb        0.45699  47.40%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 9.3      1.6230 ug/L       0.59509      1.6230 ppb        0.59509  36.67%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -7.9     -0.0503 ug/L       0.05425     -0.0503 ppb        0.05425 107.78%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                91.3      0.1505 ug/L       0.04345      0.1505 ppb        0.04345  28.87%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -5.0     -1.5248 ug/L       0.75574     -1.5248 ppb        0.75574  49.56%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 38.8      1.1428 ug/L       0.74398      1.1428 ppb        0.74398  65.10%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                111.5      0.7564 ug/L       0.31689      0.7564 ppb        0.31689  41.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                23.9      0.2288 ug/L       0.12214      0.2288 ppb        0.12214  53.40%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      56.7      3.8258 ug/L       1.03448      3.8258 ppb        1.03448  27.04%
   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: 1/12/2010 15:14:38
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	5193.4	5193.4	101	%			15:16:30
1	Y RADIAL	5506.6	5506.6	100.0	%			15:16:30
1	Al 396.153Radial†	6511.4	6426.7	5115.7	ug/L	5115.7	ppb	15:16:30
1	Ca 317.933Radial†	3214.2	3150.1	5085.1	ug/L	5085.1	ppb	15:16:50
1	Fe 238.204 Radial†	605.9	585.9	4997.2	ug/L	4997.2	ppb	15:16:50
1	K 766.490 Radial†	30155.5	27223.3	4951.4	ug/L	4951.4	ppb	15:16:30
1	Mg 279.077 IEC†	160.0	154.7	5137.8	ug/L	5137.8	ppb	15:16:50
1	Na 589.592 Radial†	31762.7	32628.4	9353.0	ug/L	9353.0	ppb	15:16:30
1	Sr 421.552†	77289.6	76201.5	486.47	ug/L	486.47	ppb	15:16:30
1	Sc 361.383	877787.4	877787.4	102.30	%			15:17:48
1	Y 371.029	728223.0	728223.0	100.08	%			15:17:48
1	Ag 328.068†	111870.4	109000.7	503.25	ug/L	503.25	ppb	15:17:53
1	As 188.979†	1179.5	1177.0	507.38	ug/L	507.38	ppb	15:18:13
1	B 249.677†	21861.0	21985.1	491.22	ug/L	491.22	ppb	15:17:53
1	Ba 233.527†	65659.7	64193.5	498.63	ug/L	498.63	ppb	15:17:53
1	Be 313.107†	1364615.8	1338440.0	506.81	ug/L	506.81	ppb	15:17:48
1	Cd 226.502†	46341.1	45501.8	500.45	ug/L	500.45	ppb	15:17:53
1	Co 228.616†	25289.1	24798.3	503.27	ug/L	503.27	ppb	15:17:53
1	Cr 267.716†	45819.2	44711.1	496.66	ug/L	496.66	ppb	15:17:53
1	Cu 324.752†	175354.6	165013.5	492.24	ug/L	492.24	ppb	15:17:53
1	Mn 257.610†	470655.3	459654.2	504.37	ug/L	504.37	ppb	15:17:48
1	Mo 202.031†	7329.4	7143.2	498.87	ug/L	498.87	ppb	15:18:13
1	Ni 231.604†	20712.3	20180.0	499.09	ug/L	499.09	ppb	15:17:53
1	P 214.914†	4470.6	4149.9	2376.1	ug/L	2376.1	ppb	15:18:13
1	Pb 220.353†	4133.2	4102.6	498.22	ug/L	498.22	ppb	15:18:13
1	S 181.975 Axial†	785.5	724.0	1006.6	ug/L	1006.6	ppb	15:18:13
1	Sb 206.836†	1532.7	1464.9	514.51	ug/L	514.51	ppb	15:18:13
1	Se 196.026†	776.9	791.4	515.01	ug/L	515.01	ppb	15:18:13
1	Si 251.611†	81234.7	78949.5	2493.1	ug/L	2493.1	ppb	15:17:53
1	Sn 189.927†	2930.4	2862.9	499.66	ug/L	499.66	ppb	15:18:13
1	Ti 334.940†	311732.9	306065.2	489.96	ug/L	489.96	ppb	15:17:53
1	Tl 190.801†	1650.6	1647.6	500.75	ug/L	500.75	ppb	15:18:13
1	U 409.014†	15768.5	17278.2	506.97	ug/L	506.97	ppb	15:17:53
1	V 292.402†	73366.6	73078.5	502.35	ug/L	502.35	ppb	15:17:53
1	Zn 213.857†	55345.3	53477.5	497.68	ug/L	497.68	ppb	15:17:53
1	SiO2†	82654.2	80338.7	5405.2	ug/L	5405.2	ppb	15:19:20
2	Sc Radial	5225.6	5225.6	102	%			15:16:55
2	Y RADIAL	5583.3	5583.3	101.4	%			15:16:55
2	Al 396.153Radial†	6554.1	6428.9	5117.3	ug/L	5117.3	ppb	15:16:55
2	Ca 317.933Radial†	3217.1	3133.4	5058.2	ug/L	5058.2	ppb	15:17:16
2	Fe 238.204 Radial†	603.0	579.3	4941.1	ug/L	4941.1	ppb	15:17:16
2	K 766.490 Radial†	30410.5	27289.5	4963.5	ug/L	4963.5	ppb	15:16:55
2	Mg 279.077 IEC†	157.2	151.0	5015.2	ug/L	5015.2	ppb	15:17:16
2	Na 589.592 Radial†	31839.1	32509.9	9319.0	ug/L	9319.0	ppb	15:16:55
2	Sr 421.552†	77672.3	76106.1	485.86	ug/L	485.86	ppb	15:16:55
2	Sc 361.383	866360.1	866360.1	100.97	%			15:18:19
2	Y 371.029	719535.7	719535.7	98.883	%			15:18:19
2	Ag 328.068†	112791.3	111355.1	514.07	ug/L	514.07	ppb	15:18:24
2	As 188.979†	1175.8	1188.5	512.38	ug/L	512.38	ppb	15:18:44
2	B 249.677†	22120.8	22524.2	503.30	ug/L	503.30	ppb	15:18:24
2	Ba 233.527†	65959.9	65337.5	507.51	ug/L	507.51	ppb	15:18:24
2	Be 313.107†	1346864.3	1338453.4	506.84	ug/L	506.84	ppb	15:18:19
2	Cd 226.502†	46341.8	46100.0	507.04	ug/L	507.04	ppb	15:18:24
2	Co 228.616†	25331.9	25166.8	510.73	ug/L	510.73	ppb	15:18:24
2	Cr 267.716†	45971.5	45452.7	504.90	ug/L	504.90	ppb	15:18:24
2	Cu 324.752†	177492.9	169392.4	505.29	ug/L	505.29	ppb	15:18:24
2	Mn 257.610†	463891.5	459023.5	503.68	ug/L	503.68	ppb	15:18:19
2	Mo 202.031†	7285.5	7194.2	502.43	ug/L	502.43	ppb	15:18:44
2	Ni 231.604†	20835.5	20569.1	508.71	ug/L	508.71	ppb	15:18:24

2	P 214.914†	4423.0	4160.4	2379.4 ug/L	2379.4 ppb	15:18:44
2	Pb 220.353†	4144.4	4167.0	506.02 ug/L	506.02 ppb	15:18:44
2	S 181.975 Axial†	793.0	741.5	1031.0 ug/L	1031.0 ppb	15:18:44
2	Sb 206.836†	1526.8	1478.7	519.34 ug/L	519.34 ppb	15:18:44
2	Se 196.026†	781.1	805.7	523.82 ug/L	523.82 ppb	15:18:44
2	Si 251.611†	81849.7	80606.0	2545.5 ug/L	2545.5 ppb	15:18:24
2	Sn 189.927†	2919.8	2890.2	504.40 ug/L	504.40 ppb	15:18:44
2	Ti 334.940†	314573.8	312898.4	500.90 ug/L	500.90 ppb	15:18:24
2	Tl 190.801†	1636.3	1654.7	502.93 ug/L	502.93 ppb	15:18:44
2	U 409.014†	16018.0	17728.6	520.22 ug/L	520.22 ppb	15:18:24
2	V 292.402†	73775.3	74429.2	511.58 ug/L	511.58 ppb	15:18:24
2	Zn 213.857†	55513.5	54357.8	505.87 ug/L	505.87 ppb	15:18:24
2	SiO2†	80893.1	79660.1	5359.3 ug/L	5359.3 ppb	15:19:26
3	Sc Radial	5118.3	5118.3	99.9 %		15:17:21
3	Y RADIAL	5448.8	5448.8	98.97 %		15:17:21
3	Al 396.153Radial†	6423.9	6433.4	5120.9 ug/L	5120.9 ppb	15:17:21
3	Ca 317.933Radial†	3198.7	3181.2	5135.3 ug/L	5135.3 ppb	15:17:41
3	Fe 238.204 Radial†	600.3	589.1	5024.0 ug/L	5024.0 ppb	15:17:41
3	K 766.490 Radial†	29894.3	27398.3	4983.3 ug/L	4983.3 ppb	15:17:21
3	Mg 279.077 IEC†	155.8	152.9	5076.2 ug/L	5076.2 ppb	15:17:41
3	Na 589.592 Radial†	31015.0	32340.0	9270.3 ug/L	9270.3 ppb	15:17:21
3	Sr 421.552†	76128.5	76158.3	486.20 ug/L	486.20 ppb	15:17:21
3	Sc 361.383	864224.7	864224.7	100.72 %		15:18:50
3	Y 371.029	719577.7	719577.7	98.889 %		15:18:50
3	Ag 328.068†	112050.0	110895.2	511.98 ug/L	511.98 ppb	15:18:55
3	As 188.979†	1161.9	1177.6	507.72 ug/L	507.72 ppb	15:19:15
3	B 249.677†	21944.1	22403.0	500.58 ug/L	500.58 ppb	15:18:55
3	Ba 233.527†	65436.9	64979.6	504.74 ug/L	504.74 ppb	15:18:55
3	Be 313.107†	1345836.3	1340728.7	507.69 ug/L	507.69 ppb	15:18:50
3	Cd 226.502†	46114.4	45987.7	505.79 ug/L	505.79 ppb	15:18:55
3	Co 228.616†	25109.0	25007.4	507.51 ug/L	507.51 ppb	15:18:55
3	Cr 267.716†	45792.0	45387.0	504.17 ug/L	504.17 ppb	15:18:55
3	Cu 324.752†	176227.0	168569.9	502.85 ug/L	502.85 ppb	15:18:55
3	Mn 257.610†	461897.1	458178.6	502.76 ug/L	502.76 ppb	15:18:50
3	Mo 202.031†	7278.1	7204.6	503.16 ug/L	503.16 ppb	15:19:15
3	Ni 231.604†	20690.0	20475.6	506.40 ug/L	506.40 ppb	15:18:55
3	P 214.914†	4418.4	4166.6	2383.6 ug/L	2383.6 ppb	15:19:15
3	Pb 220.353†	4126.1	4158.9	505.03 ug/L	505.03 ppb	15:19:15
3	S 181.975 Axial†	769.2	719.8	1000.8 ug/L	1000.8 ppb	15:19:15
3	Sb 206.836†	1521.6	1477.3	518.87 ug/L	518.87 ppb	15:19:15
3	Se 196.026†	786.8	813.2	528.81 ug/L	528.81 ppb	15:19:15
3	Si 251.611†	81077.3	80039.4	2527.6 ug/L	2527.6 ppb	15:18:55
3	Sn 189.927†	2903.6	2881.3	502.86 ug/L	502.86 ppb	15:19:15
3	Ti 334.940†	311984.9	311097.7	498.02 ug/L	498.02 ppb	15:18:55
3	Tl 190.801†	1634.0	1656.5	503.46 ug/L	503.46 ppb	15:19:15
3	U 409.014†	15699.9	17452.0	512.07 ug/L	512.07 ppb	15:18:55
3	V 292.402†	73424.9	74261.8	510.43 ug/L	510.43 ppb	15:18:55
3	Zn 213.857†	55210.1	54192.4	504.32 ug/L	504.32 ppb	15:18:55
3	SiO2†	81597.1	80557.1	5419.8 ug/L	5419.8 ppb	15:19:31

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	869457.4	101.33	%	0.850				0.84%
Sc Radial	5179.1	101	%	1.1				1.06%
Y 371.029	722445.5	99.283	%	0.6876				0.69%
Y RADIAL	5512.9	100.1	%	1.23				1.22%
Ag 328.068†	110417.0	509.77	ug/L	5.736	509.77	ppb	5.736	1.13%
QC value within limits for Ag 328.068 Recovery = 101.95%								
Al 396.153Radial†	6429.7	5118.0	ug/L	2.65	5118.0	ppb	2.65	0.05%
QC value within limits for Al 396.153Radial Recovery = 102.36%								
As 188.979†	1181.0	509.16	ug/L	2.794	509.16	ppb	2.794	0.55%
QC value within limits for As 188.979 Recovery = 101.83%								
B 249.677†	22304.1	498.37	ug/L	6.341	498.37	ppb	6.341	1.27%
QC value within limits for B 249.677 Recovery = 99.67%								
Ba 233.527†	64836.8	503.62	ug/L	4.544	503.62	ppb	4.544	0.90%
QC value within limits for Ba 233.527 Recovery = 100.72%								
Be 313.107†	1339207.4	507.11	ug/L	0.501	507.11	ppb	0.501	0.10%
QC value within limits for Be 313.107 Recovery = 101.42%								
Ca 317.933Radial†	3154.9	5092.9	ug/L	39.11	5092.9	ppb	39.11	0.77%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.86%
Cd 226.502†            45863.2      504.43 ug/L         3.504      504.43 ppb          3.504   0.69%
   QC value within limits for Cd 226.502  Recovery = 100.89%
Co 228.616†            24990.8      507.17 ug/L         3.744      507.17 ppb          3.744   0.74%
   QC value within limits for Co 228.616  Recovery = 101.43%
Cr 267.716†            45183.6      501.91 ug/L         4.559      501.91 ppb          4.559   0.91%
   QC value within limits for Cr 267.716  Recovery = 100.38%
Cu 324.752†           167658.6      500.13 ug/L         6.939      500.13 ppb          6.939   1.39%
   QC value within limits for Cu 324.752  Recovery = 100.03%
Fe 238.204 Radial†       584.8      4987.4 ug/L        42.32      4987.4 ppb          42.32   0.85%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.75%
K 766.490 Radial†      27303.7      4966.1 ug/L        16.09      4966.1 ppb          16.09   0.32%
   QC value within limits for K 766.490 Radial  Recovery = 99.32%
Mg 279.077 IEC†          152.9      5076.4 ug/L        61.32      5076.4 ppb          61.32   1.21%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.53%
Mn 257.610†           458952.1      503.60 ug/L         0.809      503.60 ppb          0.809   0.16%
   QC value within limits for Mn 257.610  Recovery = 100.72%
Mo 202.031†             7180.7      501.48 ug/L         2.295      501.48 ppb          2.295   0.46%
   QC value within limits for Mo 202.031  Recovery = 100.30%
Na 589.592 Radial†     32492.8      9314.1 ug/L        41.56      9314.1 ppb          41.56   0.45%
   QC value within limits for Na 589.592 Radial  Recovery = 93.14%
Ni 231.604†            20408.3      504.73 ug/L         5.024      504.73 ppb          5.024   1.00%
   QC value within limits for Ni 231.604  Recovery = 100.95%
P 214.914†              4159.0      2379.7 ug/L          3.77      2379.7 ppb           3.77   0.16%
   QC value within limits for P 214.914  Recovery = 95.19%
Pb 220.353†             4142.8      503.09 ug/L         4.248      503.09 ppb          4.248   0.84%
   QC value within limits for Pb 220.353  Recovery = 100.62%
S 181.975 Axial†         728.5      1012.8 ug/L        16.02      1012.8 ppb          16.02   1.58%
   QC value within limits for S 181.975 Axial  Recovery = 101.28%
Sb 206.836†             1473.6      517.57 ug/L         2.665      517.57 ppb          2.665   0.51%
   QC value within limits for Sb 206.836  Recovery = 103.51%
Se 196.026†              803.4      522.54 ug/L         6.987      522.54 ppb          6.987   1.34%
   QC value within limits for Se 196.026  Recovery = 104.51%
Si 251.611†            79864.9      2522.1 ug/L        26.63      2522.1 ppb          26.63   1.06%
   QC value within limits for Si 251.611  Recovery = 100.88%
Sn 189.927†             2878.1      502.31 ug/L         2.421      502.31 ppb          2.421   0.48%
   QC value within limits for Sn 189.927  Recovery = 100.46%
Sr 421.552†            76155.3      486.18 ug/L         0.305      486.18 ppb          0.305   0.06%
   QC value within limits for Sr 421.552  Recovery = 97.24%
Ti 334.940†           310020.4      496.29 ug/L         5.671      496.29 ppb          5.671   1.14%
   QC value within limits for Ti 334.940  Recovery = 99.26%
Tl 190.801†             1652.9      502.38 ug/L         1.434      502.38 ppb          1.434   0.29%
   QC value within limits for Tl 190.801  Recovery = 100.48%
U 409.014†             17486.3      513.09 ug/L         6.683      513.09 ppb          6.683   1.30%
   QC value within limits for U 409.014  Recovery = 102.62%
V 292.402†             73923.2      508.12 ug/L         5.028      508.12 ppb          5.028   0.99%
   QC value within limits for V 292.402  Recovery = 101.62%
Zn 213.857†            54009.2      502.62 ug/L         4.352      502.62 ppb          4.352   0.87%
   QC value within limits for Zn 213.857  Recovery = 100.52%
SiO2†                  80185.3      5394.7 ug/L        31.56      5394.7 ppb          31.56   0.58%
   QC value within limits for SiO2  Recovery = 100.88%
All analyte(s) passed QC.
```

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

Autosampler Location: 8
Date Collected: 1/12/2010 15:21:40
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	5225.1	5225.1	102	%			15:23:33
1	Y RADIAL	5612.5	5612.5	101.9	%			15:23:33
1	Al 396.153Radial†	-25.9	-19.2	-15.409	ug/L	-15.409	ppb	15:23:33
1	Ca 317.933Radial†	16.8	-2.8	-4.5010	ug/L	-4.5010	ppb	15:23:53
1	Fe 238.204 Radial†	9.1	-2.6	-22.389	ug/L	-22.389	ppb	15:23:53
1	K 766.490 Radial†	2708.5	143.0	26.029	ug/L	26.029	ppb	15:23:33
1	Mg 279.077 IEC†	2.0	-1.1	-35.396	ug/L	-35.396	ppb	15:23:53
1	Na 589.592 Radial†	-1201.7	131.2	37.603	ug/L	37.603	ppb	15:23:33
1	Sr 421.552†	4.3	-5.5	-0.0350	ug/L	-0.0350	ppb	15:23:33
1	Sc 361.383	865424.8	865424.8	100.86	%			15:24:50
1	Y 371.029	731274.2	731274.2	100.50	%			15:24:50
1	Ag 328.068†	328.4	-31.4	-0.1542	ug/L	-0.1542	ppb	15:24:50
1	As 188.979†	-19.4	4.7	2.0057	ug/L	2.0057	ppb	15:25:10
1	B 249.677†	-414.5	204.1	4.5852	ug/L	4.5852	ppb	15:25:10
1	Ba 233.527†	-21.1	-12.3	-0.0968	ug/L	-0.0968	ppb	15:25:10
1	Be 313.107†	-4537.2	-24.0	-0.0088	ug/L	-0.0088	ppb	15:24:50
1	Cd 226.502†	-195.1	8.2	0.0924	ug/L	0.0924	ppb	15:25:10
1	Co 228.616†	-80.4	-2.5	-0.0495	ug/L	-0.0495	ppb	15:25:10
1	Cr 267.716†	81.9	2.2	0.0228	ug/L	0.0228	ppb	15:25:10
1	Cu 324.752†	6375.2	-81.4	-0.2450	ug/L	-0.2450	ppb	15:24:50
1	Mn 257.610†	429.6	-3.9	-0.0050	ug/L	-0.0050	ppb	15:25:10
1	Mo 202.031†	27.5	5.7	0.3945	ug/L	0.3945	ppb	15:25:10
1	Ni 231.604†	41.8	-25.6	-0.6330	ug/L	-0.6330	ppb	15:25:10
1	P 214.914†	243.2	20.8	12.564	ug/L	12.564	ppb	15:25:10
1	Pb 220.353†	-55.2	7.4	0.8971	ug/L	0.8971	ppb	15:25:10
1	S 181.975 Axial†	46.8	2.6	3.5656	ug/L	3.5656	ppb	15:25:10
1	Sb 206.836†	48.7	14.9	5.0648	ug/L	5.0648	ppb	15:25:10
1	Se 196.026†	-31.3	1.0	0.5652	ug/L	0.5652	ppb	15:25:10
1	Si 251.611†	510.2	45.2	1.4269	ug/L	1.4269	ppb	15:25:10
1	Sn 189.927†	3.5	1.8	0.3058	ug/L	0.3058	ppb	15:25:10
1	Ti 334.940†	-1275.3	69.7	0.1130	ug/L	0.1130	ppb	15:24:50
1	Tl 190.801†	-37.6	-3.2	-0.9622	ug/L	-0.9622	ppb	15:25:10
1	U 409.014†	-1813.3	66.0	1.9458	ug/L	1.9458	ppb	15:24:50
1	V 292.402†	-1418.0	-46.2	-0.3009	ug/L	-0.3009	ppb	15:24:50
1	Zn 213.857†	654.6	24.4	0.2357	ug/L	0.2357	ppb	15:25:10
1	SiO2†	526.9	63.4	4.2625	ug/L	4.2625	ppb	15:26:06
2	Sc Radial	5271.6	5271.6	103	%			15:23:58
2	Y RADIAL	5661.6	5661.6	102.8	%			15:23:58
2	Al 396.153Radial†	-14.3	-7.7	-6.1236	ug/L	-6.1236	ppb	15:23:58
2	Ca 317.933Radial†	23.1	3.2	5.1629	ug/L	5.1629	ppb	15:24:18
2	Fe 238.204 Radial†	10.8	-1.0	-8.9072	ug/L	-8.9072	ppb	15:24:18
2	K 766.490 Radial†	2785.2	194.0	35.318	ug/L	35.318	ppb	15:23:58
2	Mg 279.077 IEC†	0.7	-2.4	-79.125	ug/L	-79.125	ppb	15:24:18
2	Na 589.592 Radial†	-1211.8	131.7	37.761	ug/L	37.761	ppb	15:23:58
2	Sr 421.552†	26.7	16.2	0.1034	ug/L	0.1034	ppb	15:23:58
2	Sc 361.383	855398.2	855398.2	99.688	%			15:25:15
2	Y 371.029	723767.5	723767.5	99.465	%			15:25:15
2	Ag 328.068†	277.6	-78.6	-0.3648	ug/L	-0.3648	ppb	15:25:15
2	As 188.979†	-17.8	6.0	2.5823	ug/L	2.5823	ppb	15:25:35
2	B 249.677†	-414.5	199.3	4.4755	ug/L	4.4755	ppb	15:25:35
2	Ba 233.527†	-12.1	-3.5	-0.0272	ug/L	-0.0272	ppb	15:25:35
2	Be 313.107†	-4541.2	-80.7	-0.0302	ug/L	-0.0302	ppb	15:25:15
2	Cd 226.502†	-201.4	-0.4	-0.0026	ug/L	-0.0026	ppb	15:25:35
2	Co 228.616†	-84.0	-7.0	-0.1424	ug/L	-0.1424	ppb	15:25:35
2	Cr 267.716†	76.8	-1.9	-0.0223	ug/L	-0.0223	ppb	15:25:35
2	Cu 324.752†	6442.1	59.8	0.1760	ug/L	0.1760	ppb	15:25:15
2	Mn 257.610†	434.3	5.9	0.0088	ug/L	0.0088	ppb	15:25:35
2	Mo 202.031†	19.7	-1.8	-0.1297	ug/L	-0.1297	ppb	15:25:35
2	Ni 231.604†	71.1	4.3	0.1058	ug/L	0.1058	ppb	15:25:35

2	P 214.914†	221.2	1.6	0.9527	ug/L	0.9527 ppb	15:25:35
2	Pb 220.353†	-55.9	6.1	0.7424	ug/L	0.7424 ppb	15:25:35
2	S 181.975 Axial†	53.0	9.3	12.889	ug/L	12.889 ppb	15:25:35
2	Sb 206.836†	42.5	9.2	3.1497	ug/L	3.1497 ppb	15:25:35
2	Se 196.026†	-34.7	-2.7	-1.7422	ug/L	-1.7422 ppb	15:25:35
2	Si 251.611†	503.9	44.8	1.4194	ug/L	1.4194 ppb	15:25:35
2	Sn 189.927†	10.2	8.6	1.5005	ug/L	1.5005 ppb	15:25:35
2	Ti 334.940†	-1254.2	76.0	0.1274	ug/L	0.1274 ppb	15:25:15
2	Tl 190.801†	-33.0	1.0	0.3115	ug/L	0.3115 ppb	15:25:35
2	U 409.014†	-1743.8	114.7	3.3769	ug/L	3.3769 ppb	15:25:15
2	V 292.402†	-1316.9	38.7	0.2666	ug/L	0.2666 ppb	15:25:15
2	Zn 213.857†	649.0	26.4	0.2477	ug/L	0.2477 ppb	15:25:35
2	SiO2†	518.6	61.2	4.1335	ug/L	4.1335 ppb	15:26:11
3	Sc Radial	5255.9	5255.9	103	%		15:24:23
3	Y RADIAL	5633.2	5633.2	102.3	%		15:24:23
3	Al 396.153Radial†	-2.5	3.7	2.9903	ug/L	2.9903 ppb	15:24:23
3	Ca 317.933Radial†	20.0	0.3	0.5165	ug/L	0.5165 ppb	15:24:43
3	Fe 238.204 Radial†	8.7	-3.1	-26.062	ug/L	-26.062 ppb	15:24:43
3	K 766.490 Radial†	2510.2	-65.8	-11.994	ug/L	-11.994 ppb	15:24:23
3	Mg 279.077 IEC†	2.6	-0.5	-17.894	ug/L	-17.894 ppb	15:24:43
3	Na 589.592 Radial†	-1219.7	120.5	34.536	ug/L	34.536 ppb	15:24:23
3	Sr 421.552†	-9.4	-18.9	-0.1206	ug/L	-0.1206 ppb	15:24:23
3	Sc 361.383	862318.6	862318.6	100.49	%		15:25:40
3	Y 371.029	729727.8	729727.8	100.28	%		15:25:40
3	Ag 328.068†	287.5	-71.0	-0.3321	ug/L	-0.3321 ppb	15:25:40
3	As 188.979†	-12.8	11.2	4.7880	ug/L	4.7880 ppb	15:26:00
3	B 249.677†	-412.2	204.9	4.6044	ug/L	4.6044 ppb	15:26:00
3	Ba 233.527†	-11.7	-3.1	-0.0241	ug/L	-0.0241 ppb	15:26:00
3	Be 313.107†	-4481.2	15.5	0.0062	ug/L	0.0062 ppb	15:25:40
3	Cd 226.502†	-176.4	26.1	0.2893	ug/L	0.2893 ppb	15:26:00
3	Co 228.616†	-97.3	-19.5	-0.3972	ug/L	-0.3972 ppb	15:26:00
3	Cr 267.716†	53.8	-25.4	-0.2820	ug/L	-0.2820 ppb	15:26:00
3	Cu 324.752†	6383.3	-50.5	-0.1516	ug/L	-0.1516 ppb	15:25:40
3	Mn 257.610†	375.9	-55.7	-0.0629	ug/L	-0.0629 ppb	15:26:00
3	Mo 202.031†	16.1	-5.6	-0.3907	ug/L	-0.3907 ppb	15:26:00
3	Ni 231.604†	64.9	-2.5	-0.0609	ug/L	-0.0609 ppb	15:26:00
3	P 214.914†	226.5	5.1	3.1275	ug/L	3.1275 ppb	15:26:00
3	Pb 220.353†	-92.1	-29.4	-3.5611	ug/L	-3.5611 ppb	15:26:00
3	S 181.975 Axial†	45.3	1.2	1.6618	ug/L	1.6618 ppb	15:26:00
3	Sb 206.836†	45.6	11.9	4.0527	ug/L	4.0527 ppb	15:26:00
3	Se 196.026†	-35.9	-3.7	-2.3981	ug/L	-2.3981 ppb	15:26:00
3	Si 251.611†	511.1	47.9	1.5203	ug/L	1.5203 ppb	15:26:00
3	Sn 189.927†	4.0	2.3	0.4073	ug/L	0.4073 ppb	15:26:00
3	Ti 334.940†	-1250.0	90.3	0.1467	ug/L	0.1467 ppb	15:25:40
3	Tl 190.801†	-34.4	-0.2	-0.0530	ug/L	-0.0530 ppb	15:26:00
3	U 409.014†	-1911.0	-37.7	-1.1054	ug/L	-1.1054 ppb	15:25:40
3	V 292.402†	-1331.2	35.1	0.2338	ug/L	0.2338 ppb	15:25:40
3	Zn 213.857†	645.5	17.7	0.1688	ug/L	0.1688 ppb	15:26:00
3	SiO2†	516.9	55.3	3.7420	ug/L	3.7420 ppb	15:26:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	861047.2	100.35	%	0.598				0.60%
Sc Radial	5250.9	103	%	0.5				0.45%
Y 371.029	728256.5	100.08	%	0.545				0.54%
Y RADIAL	5635.8	102.4	%	0.45				0.44%
Ag 328.068†	-60.3	-0.2837	ug/L	0.11332	-0.2837	ppb	0.11332	39.94%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-7.7	-6.1809	ug/L	9.19995	-6.1809	ppb	9.19995	148.84%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	7.3	3.1253	ug/L	1.46853	3.1253	ppb	1.46853	46.99%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	202.8	4.5550	ug/L	0.06955	4.5550	ppb	0.06955	1.53%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-6.3	-0.0494	ug/L	0.04113	-0.0494	ppb	0.04113	83.32%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-29.7	-0.0110	ug/L	0.01830	-0.0110	ppb	0.01830	167.06%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.2	0.3928	ug/L	4.83315	0.3928	ppb	4.83315	>999.9%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              11.3      0.1264 ug/L       0.14887      0.1264 ppb        0.14887 117.81%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -9.7     -0.1964 ug/L       0.17999     -0.1964 ppb        0.17999  91.66%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -8.4     -0.0938 ug/L       0.16455     -0.0938 ppb        0.16455 175.38%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -24.0     -0.0735 ug/L       0.22107     -0.0735 ppb        0.22107 300.67%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -2.2     -19.119 ug/L        9.0325     -19.119 ppb         9.0325  47.24%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        90.4      16.451 ug/L       25.0682      16.451 ppb        25.0682 152.38%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -1.3     -44.138 ug/L       31.5381     -44.138 ppb        31.5381  71.45%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             -17.9     -0.0197 ug/L       0.03805     -0.0197 ppb        0.03805 192.83%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -0.6     -0.0420 ug/L       0.39988     -0.0420 ppb        0.39988 953.22%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      127.8      36.633 ug/L        1.8180      36.633 ppb         1.8180   4.96%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -7.9     -0.1961 ug/L       0.38750     -0.1961 ppb        0.38750 197.64%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                9.2      5.5481 ug/L       6.17261      5.5481 ppb        6.17261 111.26%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -5.3     -0.6405 ug/L       2.53046     -0.6405 ppb        2.53046 395.07%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          4.3      6.0389 ug/L       6.00844      6.0389 ppb        6.00844  99.50%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              12.0      4.0890 ug/L       0.95804      4.0890 ppb        0.95804  23.43%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -1.8     -1.1917 ug/L       1.55646     -1.1917 ppb        1.55646 130.61%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              46.0      1.4556 ug/L       0.05624      1.4556 ppb        0.05624   3.86%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               4.2      0.7379 ug/L       0.66242      0.7379 ppb        0.66242  89.77%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -2.7     -0.0174 ug/L       0.11305     -0.0174 ppb        0.11305 649.89%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              78.7      0.1290 ug/L       0.01690      0.1290 ppb        0.01690  13.10%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -0.8     -0.2346 ug/L       0.65600     -0.2346 ppb        0.65600 279.68%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               47.7      1.4057 ug/L       2.28945      1.4057 ppb        2.28945 162.86%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                9.2      0.0665 ug/L       0.31862      0.0665 ppb        0.31862 479.13%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              22.8      0.2174 ug/L       0.04251      0.2174 ppb        0.04251  19.55%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    60.0      4.0460 ug/L       0.27106      4.0460 ppb        0.27106   6.70%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 21
Sample ID: 1202006013|937474|1
Analyst: HSC
Initial Sample Wt:
Dilution:
User canceled analysis.

Autosampler Location: 51
Date Collected: 1/12/2010 16:30:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Analysis Begun

Start Time: 1/12/2010 16:37:36
Logged In Analyst: Optima3
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Plasma On Time: 1/11/2010 06:15:31
Technique: ICP Continuous

Sample Information File: C:\pe\Optima3\Sample Information\011210.sif
Batch ID:
Results Data Set: 011210
Results Library: C:\pe\Optima3\Results\Results.mdb

Sequence No.: 10
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/12/2010 16:37:37
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	5168.0	5168.0	101	%			16:39:29
1	Y RADIAL	5450.0	5450.0	98.99	%			16:39:29
1	Al 396.153Radial†	6474.6	6421.8	5111.7	ug/L	5111.7	ppb	16:39:29
1	Ca 317.933Radial†	3212.3	3163.8	5107.2	ug/L	5107.2	ppb	16:39:49
1	Fe 238.204 Radial†	610.5	593.4	5060.9	ug/L	5060.9	ppb	16:39:49
1	K 766.490 Radial†	30267.6	27480.3	4998.1	ug/L	4998.1	ppb	16:39:29
1	Mg 279.077 IEC†	159.9	155.4	5161.3	ug/L	5161.3	ppb	16:39:49
1	Na 589.592 Radial†	32141.7	33157.8	9504.7	ug/L	9504.7	ppb	16:39:29
1	Sr 421.552†	77498.4	76782.6	490.18	ug/L	490.18	ppb	16:39:29
1	Sc 361.383	872998.3	872998.3	101.74	%			16:40:47
1	Y 371.029	726407.0	726407.0	99.827	%			16:40:47
1	Ag 328.068†	112133.1	109858.7	507.22	ug/L	507.22	ppb	16:40:52
1	As 188.979†	1167.9	1171.9	505.39	ug/L	505.39	ppb	16:41:12
1	B 249.677†	22264.1	22498.5	502.73	ug/L	502.73	ppb	16:40:52
1	Ba 233.527†	65709.8	64594.9	501.75	ug/L	501.75	ppb	16:40:52
1	Be 313.107†	1367645.3	1348735.5	510.74	ug/L	510.74	ppb	16:40:47
1	Cd 226.502†	46168.4	45580.6	501.31	ug/L	501.31	ppb	16:40:52
1	Co 228.616†	25187.1	24833.7	503.95	ug/L	503.95	ppb	16:40:52
1	Cr 267.716†	45790.1	44928.2	499.07	ug/L	499.07	ppb	16:40:52
1	Cu 324.752†	175771.3	166363.5	496.27	ug/L	496.27	ppb	16:40:52
1	Mn 257.610†	469179.2	460727.2	505.55	ug/L	505.55	ppb	16:40:47
1	Mo 202.031†	7323.7	7176.9	501.23	ug/L	501.23	ppb	16:41:12
1	Ni 231.604†	20712.5	20291.3	501.84	ug/L	501.84	ppb	16:40:52
1	P 214.914†	4456.6	4160.1	2381.2	ug/L	2381.2	ppb	16:41:12
1	Pb 220.353†	4138.1	4129.6	501.48	ug/L	501.48	ppb	16:41:12
1	S 181.975 Axial†	784.4	727.2	1011.0	ug/L	1011.0	ppb	16:41:12
1	Sb 206.836†	1526.7	1467.1	515.31	ug/L	515.31	ppb	16:41:12
1	Se 196.026†	780.5	799.2	520.06	ug/L	520.06	ppb	16:41:12
1	Si 251.611†	81272.2	79421.9	2508.0	ug/L	2508.0	ppb	16:40:52
1	Sn 189.927†	2928.4	2876.6	502.05	ug/L	502.05	ppb	16:41:12
1	Ti 334.940†	322696.1	318512.7	509.89	ug/L	509.89	ppb	16:40:47
1	Tl 190.801†	1655.4	1661.2	505.02	ug/L	505.02	ppb	16:41:12
1	U 409.014†	15811.9	17405.4	510.70	ug/L	510.70	ppb	16:40:52
1	V 292.402†	73510.4	73613.2	505.99	ug/L	505.99	ppb	16:40:52
1	Zn 213.857†	55306.7	53736.4	500.08	ug/L	500.08	ppb	16:40:52
1	SiO2†	81238.3	79390.2	5341.1	ug/L	5341.1	ppb	16:42:20
2	Sc Radial	5099.6	5099.6	99.6	%			16:39:54
2	Y RADIAL	5413.6	5413.6	98.33	%			16:39:54
2	Al 396.153Radial†	6527.8	6561.4	5223.2	ug/L	5223.2	ppb	16:39:54

2	Ca 317.933Radial†	3226.9	3221.2	5199.8 ug/L	5199.8 ppb	16:40:14
2	Fe 238.204 Radial†	613.7	604.7	5156.6 ug/L	5156.6 ppb	16:40:14
2	K 766.490 Radial†	30224.6	27839.7	5063.5 ug/L	5063.5 ppb	16:39:54
2	Mg 279.077 IEC†	165.2	162.8	5407.2 ug/L	5407.2 ppb	16:40:14
2	Na 589.592 Radial†	32021.2	33464.1	9592.5 ug/L	9592.5 ppb	16:39:54
2	Sr 421.552†	77501.0	77815.8	496.78 ug/L	496.78 ppb	16:39:54
2	Sc 361.383	870542.5	870542.5	101.45 %		16:41:18
2	Y 371.029	722660.3	722660.3	99.312 %		16:41:18
2	Ag 328.068†	113319.6	111339.2	514.07 ug/L	514.07 ppb	16:41:23
2	As 188.979†	1174.0	1181.1	509.37 ug/L	509.37 ppb	16:41:43
2	B 249.677†	22517.1	22809.6	509.68 ug/L	509.68 ppb	16:41:23
2	Ba 233.527†	66222.2	65282.1	507.09 ug/L	507.09 ppb	16:41:23
2	Be 313.107†	1364652.9	1349578.2	511.06 ug/L	511.06 ppb	16:41:18
2	Cd 226.502†	46746.7	46278.6	508.98 ug/L	508.98 ppb	16:41:23
2	Co 228.616†	25428.1	25141.1	510.19 ug/L	510.19 ppb	16:41:23
2	Cr 267.716†	46281.2	45539.2	505.86 ug/L	505.86 ppb	16:41:23
2	Cu 324.752†	178438.0	169479.3	505.57 ug/L	505.57 ppb	16:41:23
2	Mn 257.610†	470193.7	463028.1	508.08 ug/L	508.08 ppb	16:41:18
2	Mo 202.031†	7341.2	7214.4	503.85 ug/L	503.85 ppb	16:41:43
2	Ni 231.604†	20894.2	20527.8	507.69 ug/L	507.69 ppb	16:41:23
2	P 214.914†	4467.8	4183.5	2393.1 ug/L	2393.1 ppb	16:41:43
2	Pb 220.353†	4159.2	4161.8	505.39 ug/L	505.39 ppb	16:41:43
2	S 181.975 Axial†	788.7	733.6	1019.9 ug/L	1019.9 ppb	16:41:43
2	Sb 206.836†	1534.0	1478.6	519.30 ug/L	519.30 ppb	16:41:43
2	Se 196.026†	784.9	805.6	524.45 ug/L	524.45 ppb	16:41:43
2	Si 251.611†	82361.9	80721.4	2549.1 ug/L	2549.1 ppb	16:41:23
2	Sn 189.927†	2939.1	2895.4	505.33 ug/L	505.33 ppb	16:41:43
2	Ti 334.940†	322767.0	319477.4	511.42 ug/L	511.42 ppb	16:41:18
2	Tl 190.801†	1654.3	1664.7	506.05 ug/L	506.05 ppb	16:41:43
2	U 409.014†	15810.8	17448.1	511.94 ug/L	511.94 ppb	16:41:23
2	V 292.402†	74091.8	74390.1	511.28 ug/L	511.28 ppb	16:41:23
2	Zn 213.857†	55916.4	54490.7	507.10 ug/L	507.10 ppb	16:41:23
2	SiO2†	81830.2	80198.9	5395.6 ug/L	5395.6 ppb	16:42:25
3	Sc Radial	5210.0	5210.0	102 %		16:40:19
3	Y RADIAL	5503.0	5503.0	99.96 %		16:40:19
3	Al 396.153Radial†	6560.0	6454.0	5137.3 ug/L	5137.3 ppb	16:40:19
3	Ca 317.933Radial†	3229.1	3154.6	5092.4 ug/L	5092.4 ppb	16:40:39
3	Fe 238.204 Radial†	615.2	593.1	5058.5 ug/L	5058.5 ppb	16:40:39
3	K 766.490 Radial†	30428.4	27396.6	4982.9 ug/L	4982.9 ppb	16:40:19
3	Mg 279.077 IEC†	161.9	156.0	5181.9 ug/L	5181.9 ppb	16:40:39
3	Na 589.592 Radial†	32319.9	33076.1	9481.3 ug/L	9481.3 ppb	16:40:19
3	Sr 421.552†	78061.7	76717.2	489.77 ug/L	489.77 ppb	16:40:19
3	Sc 361.383	865526.3	865526.3	100.87 %		16:41:49
3	Y 371.029	718990.0	718990.0	98.808 %		16:41:49
3	Ag 328.068†	113313.9	111980.9	516.99 ug/L	516.99 ppb	16:41:54
3	As 188.979†	1163.7	1177.6	507.81 ug/L	507.81 ppb	16:42:14
3	B 249.677†	22726.4	23145.8	517.22 ug/L	517.22 ppb	16:41:54
3	Ba 233.527†	66387.7	65824.5	511.29 ug/L	511.29 ppb	16:41:54
3	Be 313.107†	1348141.4	1341004.7	507.82 ug/L	507.82 ppb	16:41:49
3	Cd 226.502†	46552.7	46353.3	509.82 ug/L	509.82 ppb	16:41:54
3	Co 228.616†	25490.7	25348.4	514.40 ug/L	514.40 ppb	16:41:54
3	Cr 267.716†	46239.9	45762.6	508.34 ug/L	508.34 ppb	16:41:54
3	Cu 324.752†	178657.0	170715.8	509.25 ug/L	509.25 ppb	16:41:54
3	Mn 257.610†	464741.8	460309.2	505.09 ug/L	505.09 ppb	16:41:49
3	Mo 202.031†	7289.6	7205.2	503.20 ug/L	503.20 ppb	16:42:14
3	Ni 231.604†	20940.9	20693.5	511.79 ug/L	511.79 ppb	16:41:54
3	P 214.914†	4416.2	4157.8	2376.8 ug/L	2376.8 ppb	16:42:14
3	Pb 220.353†	4103.8	4130.7	501.62 ug/L	501.62 ppb	16:42:14
3	S 181.975 Axial†	777.9	727.3	1011.2 ug/L	1011.2 ppb	16:42:14
3	Sb 206.836†	1508.0	1461.6	513.53 ug/L	513.53 ppb	16:42:14
3	Se 196.026†	777.2	802.6	522.21 ug/L	522.21 ppb	16:42:14
3	Si 251.611†	82448.4	81277.7	2566.8 ug/L	2566.8 ppb	16:41:54
3	Sn 189.927†	2920.1	2893.3	504.95 ug/L	504.95 ppb	16:42:14
3	Ti 334.940†	319319.0	317902.8	508.90 ug/L	508.90 ppb	16:41:49
3	Tl 190.801†	1643.7	1663.6	505.67 ug/L	505.67 ppb	16:42:14
3	U 409.014†	15896.3	17623.2	517.10 ug/L	517.10 ppb	16:41:54
3	V 292.402†	74237.0	74957.3	515.14 ug/L	515.14 ppb	16:41:54
3	Zn 213.857†	55837.9	54732.3	509.35 ug/L	509.35 ppb	16:41:54
3	SiO2†	81357.6	80197.9	5395.5 ug/L	5395.5 ppb	16:42:30

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	869689.0	101.35	%	0.444				0.44%
Sc Radial	5159.2	101	%	1.1				1.08%
Y 371.029	722685.8	99.316	%	0.5097				0.51%
Y RADIAL	5455.5	99.09	%	0.817				0.82%
Ag 328.068†	111059.6	512.76	ug/L	5.013	512.76	ppb	5.013	0.98%
QC value within limits for Ag 328.068 Recovery = 102.55%								
Al 396.153Radial†	6479.0	5157.4	ug/L	58.40	5157.4	ppb	58.40	1.13%
QC value within limits for Al 396.153Radial Recovery = 103.15%								
As 188.979†	1176.9	507.52	ug/L	2.005	507.52	ppb	2.005	0.39%
QC value within limits for As 188.979 Recovery = 101.50%								
B 249.677†	22818.0	509.88	ug/L	7.251	509.88	ppb	7.251	1.42%
QC value within limits for B 249.677 Recovery = 101.98%								
Ba 233.527†	65233.8	506.71	ug/L	4.785	506.71	ppb	4.785	0.94%
QC value within limits for Ba 233.527 Recovery = 101.34%								
Be 313.107†	1346439.4	509.88	ug/L	1.788	509.88	ppb	1.788	0.35%
QC value within limits for Be 313.107 Recovery = 101.98%								
Ca 317.933Radial†	3179.9	5133.1	ug/L	58.22	5133.1	ppb	58.22	1.13%
QC value within limits for Ca 317.933Radial Recovery = 102.66%								
Cd 226.502†	46070.9	506.70	ug/L	4.690	506.70	ppb	4.690	0.93%
QC value within limits for Cd 226.502 Recovery = 101.34%								
Co 228.616†	25107.7	509.51	ug/L	5.258	509.51	ppb	5.258	1.03%
QC value within limits for Co 228.616 Recovery = 101.90%								
Cr 267.716†	45410.0	504.43	ug/L	4.798	504.43	ppb	4.798	0.95%
QC value within limits for Cr 267.716 Recovery = 100.89%								
Cu 324.752†	168852.9	503.70	ug/L	6.689	503.70	ppb	6.689	1.33%
QC value within limits for Cu 324.752 Recovery = 100.74%								
Fe 238.204 Radial†	597.1	5092.0	ug/L	55.98	5092.0	ppb	55.98	1.10%
QC value within limits for Fe 238.204 Radial Recovery = 101.84%								
K 766.490 Radial†	27572.2	5014.9	ug/L	42.82	5014.9	ppb	42.82	0.85%
QC value within limits for K 766.490 Radial Recovery = 100.30%								
Mg 279.077 IEC†	158.1	5250.1	ug/L	136.40	5250.1	ppb	136.40	2.60%
QC value within limits for Mg 279.077 IEC Recovery = 105.00%								
Mn 257.610†	461354.9	506.24	ug/L	1.606	506.24	ppb	1.606	0.32%
QC value within limits for Mn 257.610 Recovery = 101.25%								
Mo 202.031†	7198.8	502.76	ug/L	1.367	502.76	ppb	1.367	0.27%
QC value within limits for Mo 202.031 Recovery = 100.55%								
Na 589.592 Radial†	33232.7	9526.2	ug/L	58.64	9526.2	ppb	58.64	0.62%
QC value within limits for Na 589.592 Radial Recovery = 95.26%								
Ni 231.604†	20504.2	507.11	ug/L	4.999	507.11	ppb	4.999	0.99%
QC value within limits for Ni 231.604 Recovery = 101.42%								
P 214.914†	4167.2	2383.7	ug/L	8.40	2383.7	ppb	8.40	0.35%
QC value within limits for P 214.914 Recovery = 95.35%								
Pb 220.353†	4140.7	502.83	ug/L	2.221	502.83	ppb	2.221	0.44%
QC value within limits for Pb 220.353 Recovery = 100.57%								
S 181.975 Axial†	729.3	1014.0	ug/L	5.09	1014.0	ppb	5.09	0.50%
QC value within limits for S 181.975 Axial Recovery = 101.40%								
Sb 206.836†	1469.1	516.05	ug/L	2.958	516.05	ppb	2.958	0.57%
QC value within limits for Sb 206.836 Recovery = 103.21%								
Se 196.026†	802.5	522.24	ug/L	2.191	522.24	ppb	2.191	0.42%
QC value within limits for Se 196.026 Recovery = 104.45%								
Si 251.611†	80473.7	2541.3	ug/L	30.13	2541.3	ppb	30.13	1.19%
QC value within limits for Si 251.611 Recovery = 101.65%								
Sn 189.927†	2888.4	504.11	ug/L	1.794	504.11	ppb	1.794	0.36%
QC value within limits for Sn 189.927 Recovery = 100.82%								
Sr 421.552†	77105.2	492.24	ug/L	3.934	492.24	ppb	3.934	0.80%
QC value within limits for Sr 421.552 Recovery = 98.45%								
Ti 334.940†	318631.0	510.07	ug/L	1.270	510.07	ppb	1.270	0.25%
QC value within limits for Ti 334.940 Recovery = 102.01%								
Tl 190.801†	1663.2	505.58	ug/L	0.524	505.58	ppb	0.524	0.10%
QC value within limits for Tl 190.801 Recovery = 101.12%								
U 409.014†	17492.3	513.25	ug/L	3.391	513.25	ppb	3.391	0.66%
QC value within limits for U 409.014 Recovery = 102.65%								
V 292.402†	74320.2	510.80	ug/L	4.594	510.80	ppb	4.594	0.90%
QC value within limits for V 292.402 Recovery = 102.16%								
Zn 213.857†	54319.8	505.51	ug/L	4.835	505.51	ppb	4.835	0.96%
QC value within limits for Zn 213.857 Recovery = 101.10%								
SiO2†	79929.0	5377.4	ug/L	31.43	5377.4	ppb	31.43	0.58%
QC value within limits for SiO2 Recovery = 100.56%								

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

Autosampler Location: 8
Date Collected: 1/12/2010 16:44:41
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	5218.4	5218.4	102	%			16:46:34
1	Y RADIAL	5573.5	5573.5	101.2	%			16:46:34
1	Al 396.153Radial†	-15.3	-8.9	-7.1141	ug/L	-7.1141	ppb	16:46:34
1	Ca 317.933Radial†	21.4	1.8	2.8711	ug/L	2.8711	ppb	16:46:54
1	Fe 238.204 Radial†	9.6	-2.1	-17.792	ug/L	-17.792	ppb	16:46:54
1	K 766.490 Radial†	2733.4	170.8	31.100	ug/L	31.100	ppb	16:46:34
1	Mg 279.077 IEC†	2.1	-1.0	-32.518	ug/L	-32.518	ppb	16:46:54
1	Na 589.592 Radial†	-1270.0	62.6	17.949	ug/L	17.949	ppb	16:46:34
1	Sr 421.552†	-23.6	-32.9	-0.2100	ug/L	-0.2100	ppb	16:46:34
1	Sc 361.383	860706.5	860706.5	100.31	%			16:47:50
1	Y 371.029	727524.4	727524.4	99.981	%			16:47:50
1	Ag 328.068†	336.5	-21.6	-0.1033	ug/L	-0.1033	ppb	16:47:55
1	As 188.979†	-14.4	9.6	4.1016	ug/L	4.1016	ppb	16:48:15
1	B 249.677†	-264.3	351.6	7.8955	ug/L	7.8955	ppb	16:48:15
1	Ba 233.527†	-3.7	4.9	0.0370	ug/L	0.0370	ppb	16:48:15
1	Be 313.107†	-4535.9	-47.4	-0.0179	ug/L	-0.0179	ppb	16:47:55
1	Cd 226.502†	-175.7	26.5	0.2924	ug/L	0.2924	ppb	16:48:15
1	Co 228.616†	-87.1	-9.6	-0.1930	ug/L	-0.1930	ppb	16:48:15
1	Cr 267.716†	86.1	6.9	0.0766	ug/L	0.0766	ppb	16:48:15
1	Cu 324.752†	6402.2	-19.8	-0.0590	ug/L	-0.0590	ppb	16:47:55
1	Mn 257.610†	423.5	-7.6	-0.0088	ug/L	-0.0088	ppb	16:48:15
1	Mo 202.031†	28.8	7.1	0.4933	ug/L	0.4933	ppb	16:48:15
1	Ni 231.604†	65.1	-2.1	-0.0524	ug/L	-0.0524	ppb	16:48:15
1	P 214.914†	218.7	-2.3	-1.3528	ug/L	-1.3528	ppb	16:48:15
1	Pb 220.353†	-63.0	-0.6	-0.0693	ug/L	-0.0693	ppb	16:48:15
1	S 181.975 Axial†	43.7	-0.3	-0.3568	ug/L	-0.3568	ppb	16:48:15
1	Sb 206.836†	36.8	3.2	1.1274	ug/L	1.1274	ppb	16:48:15
1	Se 196.026†	-27.7	4.4	2.7147	ug/L	2.7147	ppb	16:48:15
1	Si 251.611†	545.7	83.4	2.6337	ug/L	2.6337	ppb	16:48:15
1	Sn 189.927†	8.2	6.5	1.1376	ug/L	1.1376	ppb	16:48:15
1	Ti 334.940†	-1321.3	16.9	0.0310	ug/L	0.0310	ppb	16:47:55
1	Tl 190.801†	-34.9	-0.7	-0.2031	ug/L	-0.2031	ppb	16:48:15
1	U 409.014†	-1938.6	-68.8	-2.0243	ug/L	-2.0243	ppb	16:47:50
1	V 292.402†	-1371.8	-7.9	-0.0480	ug/L	-0.0480	ppb	16:47:55
1	Zn 213.857†	692.1	65.3	0.6154	ug/L	0.6154	ppb	16:48:15
1	SiO2†	586.6	125.8	8.4731	ug/L	8.4731	ppb	16:49:21
2	Sc Radial	5184.3	5184.3	101	%			16:46:59
2	Y RADIAL	5539.4	5539.4	100.6	%			16:46:59
2	Al 396.153Radial†	-7.0	-0.7	-0.5625	ug/L	-0.5625	ppb	16:46:59
2	Ca 317.933Radial†	17.5	-1.9	-3.0519	ug/L	-3.0519	ppb	16:47:19
2	Fe 238.204 Radial†	9.6	-2.1	-17.883	ug/L	-17.883	ppb	16:47:19
2	K 766.490 Radial†	2864.9	318.3	57.947	ug/L	57.947	ppb	16:46:59
2	Mg 279.077 IEC†	1.0	-2.1	-69.771	ug/L	-69.771	ppb	16:47:19
2	Na 589.592 Radial†	-1203.9	119.7	34.315	ug/L	34.315	ppb	16:46:59
2	Sr 421.552†	15.6	5.7	0.0363	ug/L	0.0363	ppb	16:46:59
2	Sc 361.383	873944.8	873944.8	101.85	%			16:48:21
2	Y 371.029	737504.9	737504.9	101.35	%			16:48:21
2	Ag 328.068†	387.1	23.0	0.1084	ug/L	0.1084	ppb	16:48:26
2	As 188.979†	-21.8	2.5	1.0686	ug/L	1.0686	ppb	16:48:46
2	B 249.677†	-292.5	328.0	7.3636	ug/L	7.3636	ppb	16:48:46
2	Ba 233.527†	-10.9	-2.1	-0.0149	ug/L	-0.0149	ppb	16:48:46
2	Be 313.107†	-4530.7	26.3	0.0101	ug/L	0.0101	ppb	16:48:26
2	Cd 226.502†	-178.8	26.1	0.2877	ug/L	0.2877	ppb	16:48:46
2	Co 228.616†	-72.2	6.3	0.1293	ug/L	0.1293	ppb	16:48:46
2	Cr 267.716†	96.6	15.9	0.1790	ug/L	0.1790	ppb	16:48:46
2	Cu 324.752†	6419.5	-99.5	-0.2944	ug/L	-0.2944	ppb	16:48:26
2	Mn 257.610†	437.4	-0.3	0.0007	ug/L	0.0007	ppb	16:48:46
2	Mo 202.031†	25.0	2.9	0.2022	ug/L	0.2022	ppb	16:48:46
2	Ni 231.604†	59.9	-8.2	-0.2020	ug/L	-0.2020	ppb	16:48:46

2	P 214.914†	220.0	-4.3	-2.4558 ug/L	-2.4558 ppb	16:48:46
2	Pb 220.353†	-36.2	26.6	3.2234 ug/L	3.2234 ppb	16:48:46
2	S 181.975 Axial†	47.9	3.2	4.4351 ug/L	4.4351 ppb	16:48:46
2	Sb 206.836†	40.5	6.4	2.1928 ug/L	2.1928 ppb	16:48:46
2	Se 196.026†	-33.1	-0.5	-0.3370 ug/L	-0.3370 ppb	16:48:46
2	Si 251.611†	519.7	49.6	1.5665 ug/L	1.5665 ppb	16:48:46
2	Sn 189.927†	12.1	10.2	1.7774 ug/L	1.7774 ppb	16:48:46
2	Ti 334.940†	-1310.7	47.2	0.0835 ug/L	0.0835 ppb	16:48:26
2	Tl 190.801†	-41.5	-6.7	-2.0239 ug/L	-2.0239 ppb	16:48:46
2	U 409.014†	-2110.9	-208.7	-6.1418 ug/L	-6.1418 ppb	16:48:21
2	V 292.402†	-1268.1	114.7	0.7701 ug/L	0.7701 ppb	16:48:26
2	Zn 213.857†	691.3	54.1	0.5116 ug/L	0.5116 ppb	16:48:46
2	SiO2†	540.0	71.2	4.7955 ug/L	4.7955 ppb	16:49:26
3	Sc Radial	5230.9	5230.9	102 %		16:47:24
3	Y RADIAL	5568.2	5568.2	101.1 %		16:47:24
3	Al 396.153Radial†	-0.3	5.9	4.7145 ug/L	4.7145 ppb	16:47:24
3	Ca 317.933Radial†	22.7	3.0	4.8329 ug/L	4.8329 ppb	16:47:44
3	Fe 238.204 Radial†	10.3	-1.5	-12.710 ug/L	-12.710 ppb	16:47:44
3	K 766.490 Radial†	2706.3	137.9	25.102 ug/L	25.102 ppb	16:47:24
3	Mg 279.077 IEC†	3.0	-0.1	-3.0016 ug/L	-3.0016 ppb	16:47:44
3	Na 589.592 Radial†	-1233.4	101.4	29.061 ug/L	29.061 ppb	16:47:24
3	Sr 421.552†	2.5	-7.3	-0.0467 ug/L	-0.0467 ppb	16:47:24
3	Sc 361.383	866602.9	866602.9	100.99 %		16:48:51
3	Y 371.029	731442.2	731442.2	100.52 %		16:48:51
3	Ag 328.068†	264.8	-94.9	-0.4343 ug/L	-0.4343 ppb	16:48:56
3	As 188.979†	-26.7	-2.5	-1.0819 ug/L	-1.0819 ppb	16:49:16
3	B 249.677†	-250.0	367.5	8.2513 ug/L	8.2513 ppb	16:49:16
3	Ba 233.527†	-17.0	-8.3	-0.0642 ug/L	-0.0642 ppb	16:49:16
3	Be 313.107†	-4528.8	-9.5	-0.0032 ug/L	-0.0032 ppb	16:48:56
3	Cd 226.502†	-193.5	10.0	0.1107 ug/L	0.1107 ppb	16:49:16
3	Co 228.616†	-76.0	1.9	0.0388 ug/L	0.0388 ppb	16:49:16
3	Cr 267.716†	77.4	-2.3	-0.0237 ug/L	-0.0237 ppb	16:49:16
3	Cu 324.752†	6433.2	-32.5	-0.0949 ug/L	-0.0949 ppb	16:48:56
3	Mn 257.610†	429.5	-4.5	-0.0061 ug/L	-0.0061 ppb	16:49:16
3	Mo 202.031†	19.2	-2.6	-0.1856 ug/L	-0.1856 ppb	16:49:16
3	Ni 231.604†	70.8	3.1	0.0768 ug/L	0.0768 ppb	16:49:16
3	P 214.914†	239.8	17.1	10.318 ug/L	10.318 ppb	16:49:16
3	Pb 220.353†	-73.2	-10.3	-1.2396 ug/L	-1.2396 ppb	16:49:16
3	S 181.975 Axial†	49.5	5.2	7.2009 ug/L	7.2009 ppb	16:49:16
3	Sb 206.836†	37.9	4.1	1.3937 ug/L	1.3937 ppb	16:49:16
3	Se 196.026†	-36.4	-4.0	-2.5865 ug/L	-2.5865 ppb	16:49:16
3	Si 251.611†	516.7	51.0	1.6162 ug/L	1.6162 ppb	16:49:16
3	Sn 189.927†	5.6	3.9	0.6846 ug/L	0.6846 ppb	16:49:16
3	Ti 334.940†	-1222.7	123.4	0.2008 ug/L	0.2008 ppb	16:48:56
3	Tl 190.801†	-39.1	-4.6	-1.3988 ug/L	-1.3988 ppb	16:49:16
3	U 409.014†	-2057.2	-173.0	-5.0926 ug/L	-5.0926 ppb	16:48:51
3	V 292.402†	-1343.6	29.4	0.1883 ug/L	0.1883 ppb	16:48:56
3	Zn 213.857†	695.1	63.6	0.5983 ug/L	0.5983 ppb	16:49:16
3	SiO2†	549.5	85.1	5.7435 ug/L	5.7435 ppb	16:49:31

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	867084.7	101.05	%	0.773				0.76%
Sc Radial	5211.2	102	%	0.5				0.46%
Y 371.029	732157.2	100.62	%	0.691				0.69%
Y RADIAL	5560.4	101.0	%	0.33				0.33%
Ag 328.068†	-31.1	-0.1431	ug/L	0.27350	-0.1431	ppb	0.27350	191.19%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-1.2	-0.9874	ug/L	5.92572	-0.9874	ppb	5.92572	600.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.2	1.3628	ug/L	2.60425	1.3628	ppb	2.60425	191.10%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	349.0	7.8368	ug/L	0.44675	7.8368	ppb	0.44675	5.70%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.8	-0.0140	ug/L	0.05056	-0.0140	ppb	0.05056	360.08%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-10.2	-0.0036	ug/L	0.01398	-0.0036	ppb	0.01398	384.53%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.0	1.5507	ug/L	4.10487	1.5507	ppb	4.10487	264.71%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              20.9      0.2303 ug/L       0.10358      0.2303 ppb        0.10358  44.98%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -0.4     -0.0083 ug/L       0.16623     -0.0083 ppb        0.16623 >999.9%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               6.8      0.0773 ug/L       0.10138      0.0773 ppb        0.10138 131.10%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -50.6     -0.1494 ug/L       0.12686     -0.1494 ppb        0.12686  84.90%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -1.9     -16.128 ug/L        2.9608     -16.128 ppb         2.9608  18.36%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       209.0      38.050 ug/L       17.4906      38.050 ppb        17.4906  45.97%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -1.1     -35.097 ug/L       33.4592     -35.097 ppb        33.4592  95.33%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              -4.2     -0.0047 ug/L       0.00488     -0.0047 ppb        0.00488 103.49%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               2.5      0.1700 ug/L       0.34062      0.1700 ppb        0.34062 200.38%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       94.6      27.109 ug/L        8.3558      27.109 ppb         8.3558  30.82%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -2.4     -0.0592 ug/L       0.13953     -0.0592 ppb        0.13953 235.56%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                3.5      2.1699 ug/L       7.07818      2.1699 ppb        7.07818 326.20%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               5.3      0.6382 ug/L       2.31407      0.6382 ppb        2.31407 362.62%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          2.7      3.7598 ug/L       3.82385      3.7598 ppb        3.82385 101.70%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               4.6      1.5713 ug/L       0.55445      1.5713 ppb        0.55445  35.29%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -0.0     -0.0696 ug/L       2.66068     -0.0696 ppb        2.66068 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              61.3      1.9388 ug/L       0.60229      1.9388 ppb        0.60229  31.07%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               6.9      1.1998 ug/L       0.54903      1.1998 ppb        0.54903  45.76%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -11.5     -0.0735 ug/L       0.12530     -0.0735 ppb        0.12530 170.57%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              62.5      0.1051 ug/L       0.08693      0.1051 ppb        0.08693  82.70%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -4.0     -1.2086 ug/L       0.92516     -1.2086 ppb        0.92516  76.55%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             -150.2     -4.4196 ug/L       2.13966     -4.4196 ppb        2.13966  48.41%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               45.4      0.3035 ug/L       0.42103      0.3035 ppb        0.42103 138.73%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              61.0      0.5751 ug/L       0.05569      0.5751 ppb        0.05569   9.68%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    94.0      6.3373 ug/L       1.90935      6.3373 ppb        1.90935  30.13%
   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: 1
Date Collected: 1/12/2010 17:33:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5136.5	5136.5	100	%			17:35:24
1	Y RADIAL	5441.1	5441.1	98.83	%			17:35:24
1	Al 396.153Radial†	6580.9	6567.2	5227.4	ug/L	5227.4	ppb	17:35:24
1	Ca 317.933Radial†	3252.5	3223.4	5203.4	ug/L	5203.4	ppb	17:35:44
1	Fe 238.204 Radial†	623.0	609.6	5198.6	ug/L	5198.6	ppb	17:35:44
1	K 766.490 Radial†	30109.1	27506.4	5002.7	ug/L	5002.7	ppb	17:35:24
1	Mg 279.077 IEC†	162.9	159.3	5290.9	ug/L	5290.9	ppb	17:35:44
1	Na 589.592 Radial†	32766.4	33976.0	9739.2	ug/L	9739.2	ppb	17:35:24
1	Sr 421.552†	78723.0	78474.9	500.99	ug/L	500.99	ppb	17:35:24
1	Sc 361.383	849021.6	849021.6	98.945	%			17:36:43
1	Y 371.029	704216.6	704216.6	96.778	%			17:36:43
1	Ag 328.068†	110165.7	110983.0	512.46	ug/L	512.46	ppb	17:36:43
1	As 188.979†	1159.7	1196.0	515.71	ug/L	515.71	ppb	17:37:03
1	B 249.677†	21531.6	22376.3	499.95	ug/L	499.95	ppb	17:36:43
1	Ba 233.527†	64856.8	65556.7	509.21	ug/L	509.21	ppb	17:36:43
1	Be 313.107†	1337219.6	1355948.0	513.47	ug/L	513.47	ppb	17:36:43
1	Cd 226.502†	45681.0	46369.5	509.97	ug/L	509.97	ppb	17:36:43
1	Co 228.616†	24685.2	25025.5	507.86	ug/L	507.86	ppb	17:37:03
1	Cr 267.716†	45243.7	45647.0	507.07	ug/L	507.07	ppb	17:36:43
1	Cu 324.752†	174798.3	170259.1	507.91	ug/L	507.91	ppb	17:36:43
1	Mn 257.610†	459753.1	464223.9	509.40	ug/L	509.40	ppb	17:36:43
1	Mo 202.031†	7291.7	7347.8	513.16	ug/L	513.16	ppb	17:37:03
1	Ni 231.604†	20374.0	20524.2	507.60	ug/L	507.60	ppb	17:37:03
1	P 214.914†	4416.5	4243.3	2428.4	ug/L	2428.4	ppb	17:37:03
1	Pb 220.353†	4126.5	4232.7	514.00	ug/L	514.00	ppb	17:37:03
1	S 181.975 Axial†	773.3	737.6	1025.5	ug/L	1025.5	ppb	17:37:03
1	Sb 206.836†	1493.2	1475.7	518.59	ug/L	518.59	ppb	17:37:03
1	Se 196.026†	776.4	816.7	531.54	ug/L	531.54	ppb	17:37:03
1	Si 251.611†	80363.4	80759.4	2550.2	ug/L	2550.2	ppb	17:36:43
1	Sn 189.927†	2895.4	2924.6	510.42	ug/L	510.42	ppb	17:37:03
1	Ti 334.940†	315537.6	320235.1	512.65	ug/L	512.65	ppb	17:36:43
1	Tl 190.801†	1602.7	1653.9	502.83	ug/L	502.83	ppb	17:37:03
1	U 409.014†	14822.3	16844.2	494.15	ug/L	494.15	ppb	17:36:43
1	V 292.402†	72212.9	74342.3	511.05	ug/L	511.05	ppb	17:36:43
1	Zn 213.857†	54595.4	54552.7	507.68	ug/L	507.68	ppb	17:36:43
1	SiO2†	81975.0	82389.8	5543.1	ug/L	5543.1	ppb	17:38:03
2	Sc Radial	5164.2	5164.2	101	%			17:35:49
2	Y RADIAL	5458.1	5458.1	99.14	%			17:35:49
2	Al 396.153Radial†	6512.3	6464.0	5144.9	ug/L	5144.9	ppb	17:35:49
2	Ca 317.933Radial†	3244.8	3198.4	5163.1	ug/L	5163.1	ppb	17:36:09
2	Fe 238.204 Radial†	621.8	605.0	5159.7	ug/L	5159.7	ppb	17:36:09
2	K 766.490 Radial†	29989.7	27227.0	4951.9	ug/L	4951.9	ppb	17:35:49
2	Mg 279.077 IEC†	165.5	161.1	5350.0	ug/L	5350.0	ppb	17:36:09
2	Na 589.592 Radial†	32721.9	33756.8	9676.4	ug/L	9676.4	ppb	17:35:49
2	Sr 421.552†	78306.2	77640.7	495.66	ug/L	495.66	ppb	17:35:49
2	Sc 361.383	855400.2	855400.2	99.689	%			17:37:10
2	Y 371.029	710715.4	710715.4	97.671	%			17:37:10
2	Ag 328.068†	111443.6	111434.6	514.53	ug/L	514.53	ppb	17:37:10
2	As 188.979†	1172.7	1200.3	517.59	ug/L	517.59	ppb	17:37:30
2	B 249.677†	21995.1	22678.9	506.75	ug/L	506.75	ppb	17:37:10
2	Ba 233.527†	65387.7	65600.5	509.56	ug/L	509.56	ppb	17:37:10
2	Be 313.107†	1358094.3	1366810.1	517.58	ug/L	517.58	ppb	17:37:10
2	Cd 226.502†	46136.3	46482.0	511.22	ug/L	511.22	ppb	17:37:10
2	Co 228.616†	24800.2	24954.9	506.43	ug/L	506.43	ppb	17:37:30
2	Cr 267.716†	45754.7	45818.6	508.97	ug/L	508.97	ppb	17:37:10
2	Cu 324.752†	177366.8	171518.3	511.65	ug/L	511.65	ppb	17:37:10
2	Mn 257.610†	464392.0	465412.5	510.69	ug/L	510.69	ppb	17:37:10
2	Mo 202.031†	7341.1	7342.4	512.78	ug/L	512.78	ppb	17:37:30
2	Ni 231.604†	20523.0	20520.0	507.50	ug/L	507.50	ppb	17:37:30

2	P 214.914†	4452.7	4246.3	2429.4 ug/L	2429.4 ppb	17:37:30
2	Pb 220.353†	4166.1	4241.3	515.02 ug/L	515.02 ppb	17:37:30
2	S 181.975 Axial†	774.0	732.6	1018.5 ug/L	1018.5 ppb	17:37:30
2	Sb 206.836†	1518.1	1489.4	523.27 ug/L	523.27 ppb	17:37:30
2	Se 196.026†	780.3	814.8	530.26 ug/L	530.26 ppb	17:37:30
2	Si 251.611†	81273.1	81066.2	2559.9 ug/L	2559.9 ppb	17:37:10
2	Sn 189.927†	2934.7	2942.2	513.48 ug/L	513.48 ppb	17:37:30
2	Ti 334.940†	319169.0	321499.9	514.66 ug/L	514.66 ppb	17:37:10
2	Tl 190.801†	1624.4	1663.6	505.76 ug/L	505.76 ppb	17:37:30
2	U 409.014†	15288.0	17199.6	504.61 ug/L	504.61 ppb	17:37:10
2	V 292.402†	73417.5	75006.5	515.57 ug/L	515.57 ppb	17:37:10
2	Zn 213.857†	55168.9	54716.5	509.21 ug/L	509.21 ppb	17:37:10
2	SiO2†	80928.5	80722.2	5430.6 ug/L	5430.6 ppb	17:38:08
3	Sc Radial	5027.3	5027.3	98.2 %		17:36:14
3	Y RADIAL	5322.0	5322.0	96.67 %		17:36:14
3	Al 396.153Radial†	6385.2	6510.3	5182.0 ug/L	5182.0 ppb	17:36:14
3	Ca 317.933Radial†	3244.1	3285.3	5303.3 ug/L	5303.3 ppb	17:36:34
3	Fe 238.204 Radial†	618.7	618.7	5275.6 ug/L	5275.6 ppb	17:36:34
3	K 766.490 Radial†	29499.0	27536.9	5008.3 ug/L	5008.3 ppb	17:36:14
3	Mg 279.077 IEC†	161.6	161.6	5366.6 ug/L	5366.6 ppb	17:36:34
3	Na 589.592 Radial†	31956.2	33860.2	9706.1 ug/L	9706.1 ppb	17:36:14
3	Sr 421.552†	76563.2	77979.4	497.82 ug/L	497.82 ppb	17:36:14
3	Sc 361.383	857948.8	857948.8	99.986 %		17:37:38
3	Y 371.029	712746.3	712746.3	97.950 %		17:37:38
3	Ag 328.068†	111500.6	111159.5	513.31 ug/L	513.31 ppb	17:37:38
3	As 188.979†	1171.9	1196.0	515.77 ug/L	515.77 ppb	17:37:58
3	B 249.677†	22056.6	22674.8	506.64 ug/L	506.64 ppb	17:37:38
3	Ba 233.527†	65584.7	65602.7	509.58 ug/L	509.58 ppb	17:37:38
3	Be 313.107†	1359041.9	1363711.0	516.41 ug/L	516.41 ppb	17:37:38
3	Cd 226.502†	46368.9	46577.2	512.25 ug/L	512.25 ppb	17:37:38
3	Co 228.616†	24850.7	24931.5	505.95 ug/L	505.95 ppb	17:37:58
3	Cr 267.716†	45890.5	45818.1	508.97 ug/L	508.97 ppb	17:37:38
3	Cu 324.752†	177085.8	170708.8	509.25 ug/L	509.25 ppb	17:37:38
3	Mn 257.610†	465154.5	464791.3	510.02 ug/L	510.02 ppb	17:37:38
3	Mo 202.031†	7323.2	7302.6	510.02 ug/L	510.02 ppb	17:37:58
3	Ni 231.604†	20566.9	20502.8	507.07 ug/L	507.07 ppb	17:37:58
3	P 214.914†	4470.2	4250.5	2432.3 ug/L	2432.3 ppb	17:37:58
3	Pb 220.353†	4163.3	4226.1	513.17 ug/L	513.17 ppb	17:37:58
3	S 181.975 Axial†	785.9	742.1	1031.8 ug/L	1031.8 ppb	17:37:58
3	Sb 206.836†	1520.7	1487.4	522.50 ug/L	522.50 ppb	17:37:58
3	Se 196.026†	787.5	819.7	533.65 ug/L	533.65 ppb	17:37:58
3	Si 251.611†	81250.6	80801.6	2551.6 ug/L	2551.6 ppb	17:37:38
3	Sn 189.927†	2924.5	2923.2	510.20 ug/L	510.20 ppb	17:37:58
3	Ti 334.940†	319649.4	321029.3	513.93 ug/L	513.93 ppb	17:37:38
3	Tl 190.801†	1630.8	1665.1	506.23 ug/L	506.23 ppb	17:37:58
3	U 409.014†	15057.9	16924.0	496.48 ug/L	496.48 ppb	17:37:38
3	V 292.402†	73542.0	74912.2	514.86 ug/L	514.86 ppb	17:37:38
3	Zn 213.857†	55329.5	54712.8	509.17 ug/L	509.17 ppb	17:37:38
3	SiO2†	81001.5	80554.1	5419.4 ug/L	5419.4 ppb	17:38:14

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	854123.5	99.540	%	0.5359				0.54%
Sc Radial	5109.3	99.8	%	1.41				1.42%
Y 371.029	709226.1	97.466	%	0.6123				0.63%
Y RADIAL	5407.1	98.21	%	1.347				1.37%
Ag 328.068†	111192.3	513.43	ug/L	1.041	513.43	ppb	1.041	0.20%
QC value within limits for Ag 328.068 Recovery = 102.69%								
Al 396.153Radial†	6513.8	5184.7	ug/L	41.33	5184.7	ppb	41.33	0.80%
QC value within limits for Al 396.153Radial Recovery = 103.69%								
As 188.979†	1197.4	516.35	ug/L	1.068	516.35	ppb	1.068	0.21%
QC value within limits for As 188.979 Recovery = 103.27%								
B 249.677†	22576.7	504.45	ug/L	3.897	504.45	ppb	3.897	0.77%
QC value within limits for B 249.677 Recovery = 100.89%								
Ba 233.527†	65586.6	509.45	ug/L	0.207	509.45	ppb	0.207	0.04%
QC value within limits for Ba 233.527 Recovery = 101.89%								
Be 313.107†	1362156.4	515.82	ug/L	2.116	515.82	ppb	2.116	0.41%
QC value within limits for Be 313.107 Recovery = 103.16%								
Ca 317.933Radial†	3235.7	5223.3	ug/L	72.20	5223.3	ppb	72.20	1.38%

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   QC value within limits for Ca 317.933Radial  Recovery = 104.47%
Cd 226.502†            46476.3      511.15 ug/L         1.140      511.15 ppb          1.140   0.22%
   QC value within limits for Cd 226.502  Recovery = 102.23%
Co 228.616†            24970.7      506.75 ug/L         0.999      506.75 ppb          0.999   0.20%
   QC value within limits for Co 228.616  Recovery = 101.35%
Cr 267.716†            45761.3      508.34 ug/L         1.100      508.34 ppb          1.100   0.22%
   QC value within limits for Cr 267.716  Recovery = 101.67%
Cu 324.752†           170828.7      509.60 ug/L         1.899      509.60 ppb          1.899   0.37%
   QC value within limits for Cu 324.752  Recovery = 101.92%
Fe 238.204 Radial†       611.1      5211.3 ug/L        58.99      5211.3 ppb          58.99   1.13%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.23%
K 766.490 Radial†      27423.4      4987.6 ug/L        31.08      4987.6 ppb          31.08   0.62%
   QC value within limits for K 766.490 Radial  Recovery = 99.75%
Mg 279.077 IEC†          160.7      5335.9 ug/L        39.82      5335.9 ppb          39.82   0.75%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.72%
Mn 257.610†           464809.2      510.04 ug/L         0.649      510.04 ppb          0.649   0.13%
   QC value within limits for Mn 257.610  Recovery = 102.01%
Mo 202.031†             7330.9      511.99 ug/L         1.716      511.99 ppb          1.716   0.34%
   QC value within limits for Mo 202.031  Recovery = 102.40%
Na 589.592 Radial†     33864.3      9707.2 ug/L        31.44      9707.2 ppb          31.44   0.32%
   QC value within limits for Na 589.592 Radial  Recovery = 97.07%
Ni 231.604†            20515.7      507.39 ug/L         0.280      507.39 ppb          0.280   0.06%
   QC value within limits for Ni 231.604  Recovery = 101.48%
P 214.914†              4246.7      2430.0 ug/L         2.05      2430.0 ppb           2.05   0.08%
   QC value within limits for P 214.914  Recovery = 97.20%
Pb 220.353†             4233.4      514.06 ug/L         0.928      514.06 ppb          0.928   0.18%
   QC value within limits for Pb 220.353  Recovery = 102.81%
S 181.975 Axial†         737.4      1025.3 ug/L         6.62      1025.3 ppb           6.62   0.65%
   QC value within limits for S 181.975 Axial  Recovery = 102.53%
Sb 206.836†             1484.2      521.46 ug/L         2.512      521.46 ppb          2.512   0.48%
   QC value within limits for Sb 206.836  Recovery = 104.29%
Se 196.026†              817.1      531.82 ug/L         1.712      531.82 ppb          1.712   0.32%
   QC value within limits for Se 196.026  Recovery = 106.36%
Si 251.611†            80875.7      2553.9 ug/L         5.26      2553.9 ppb           5.26   0.21%
   QC value within limits for Si 251.611  Recovery = 102.16%
Sn 189.927†             2930.0      511.37 ug/L         1.835      511.37 ppb          1.835   0.36%
   QC value within limits for Sn 189.927  Recovery = 102.27%
Sr 421.552†            78031.7      498.16 ug/L         2.678      498.16 ppb          2.678   0.54%
   QC value within limits for Sr 421.552  Recovery = 99.63%
Ti 334.940†           320921.4      513.75 ug/L         1.017      513.75 ppb          1.017   0.20%
   QC value within limits for Ti 334.940  Recovery = 102.75%
Tl 190.801†             1660.9      504.94 ug/L         1.845      504.94 ppb          1.845   0.37%
   QC value within limits for Tl 190.801  Recovery = 100.99%
U 409.014†             16989.3      498.41 ug/L         5.492      498.41 ppb          5.492   1.10%
   QC value within limits for U 409.014  Recovery = 99.68%
V 292.402†             74753.7      513.83 ug/L         2.431      513.83 ppb          2.431   0.47%
   QC value within limits for V 292.402  Recovery = 102.77%
Zn 213.857†            54660.7      508.69 ug/L         0.876      508.69 ppb          0.876   0.17%
   QC value within limits for Zn 213.857  Recovery = 101.74%
SiO2†                  81222.0      5464.4 ug/L        68.41      5464.4 ppb          68.41   1.25%
   QC value within limits for SiO2  Recovery = 102.19%
All analyte(s) passed QC.
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Sequence No.: 19
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 1/12/2010 17:40:23
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	5050.4	5050.4	98.6	%			17:42:15
1	Y RADIAL	5387.0	5387.0	97.85	%			17:42:15
1	Al 396.153Radial†	6.3	12.5	10.052	ug/L	10.052	ppb	17:42:15
1	Ca 317.933Radial†	14.5	-4.5	-7.2003	ug/L	-7.2003	ppb	17:42:35
1	Fe 238.204 Radial†	11.7	0.4	3.0254	ug/L	3.0254	ppb	17:42:35
1	K 766.490 Radial†	2689.2	215.3	39.205	ug/L	39.205	ppb	17:42:15
1	Mg 279.077 IEC†	3.9	0.9	30.276	ug/L	30.276	ppb	17:42:35
1	Na 589.592 Radial†	-1312.4	-21.9	-6.2708	ug/L	-6.2708	ppb	17:42:15
1	Sr 421.552†	7.6	-2.0	-0.0128	ug/L	-0.0128	ppb	17:42:15
1	Sc 361.383	904505.5	904505.5	105.41	%			17:43:32
1	Y 371.029	762654.1	762654.1	104.81	%			17:43:32
1	Ag 328.068†	381.5	4.9	0.0227	ug/L	0.0227	ppb	17:43:37
1	As 188.979†	-23.9	1.2	0.5297	ug/L	0.5297	ppb	17:43:57
1	B 249.677†	-387.4	247.6	5.5566	ug/L	5.5566	ppb	17:43:57
1	Ba 233.527†	-19.1	-9.6	-0.0725	ug/L	-0.0725	ppb	17:43:57
1	Be 313.107†	-4492.9	212.4	0.0805	ug/L	0.0805	ppb	17:43:37
1	Cd 226.502†	-182.1	28.9	0.3182	ug/L	0.3182	ppb	17:43:57
1	Co 228.616†	-73.5	7.5	0.1507	ug/L	0.1507	ppb	17:43:57
1	Cr 267.716†	70.9	-11.7	-0.1303	ug/L	-0.1303	ppb	17:43:57
1	Cu 324.752†	6453.8	-279.9	-0.8376	ug/L	-0.8376	ppb	17:43:37
1	Mn 257.610†	416.5	-34.7	-0.0390	ug/L	-0.0390	ppb	17:43:57
1	Mo 202.031†	17.5	-5.1	-0.3524	ug/L	-0.3524	ppb	17:43:57
1	Ni 231.604†	70.6	-0.0	-0.0009	ug/L	-0.0009	ppb	17:43:57
1	P 214.914†	231.8	-0.4	-0.0333	ug/L	-0.0333	ppb	17:43:57
1	Pb 220.353†	-58.1	7.1	0.8591	ug/L	0.8591	ppb	17:43:57
1	S 181.975 Axial†	58.2	11.4	15.802	ug/L	15.802	ppb	17:43:57
1	Sb 206.836†	37.1	1.8	0.6236	ug/L	0.6236	ppb	17:43:57
1	Se 196.026†	-30.8	2.9	1.8069	ug/L	1.8069	ppb	17:43:57
1	Si 251.611†	487.2	1.5	0.0525	ug/L	0.0525	ppb	17:43:57
1	Sn 189.927†	14.8	12.4	2.1503	ug/L	2.1503	ppb	17:43:57
1	Ti 334.940†	-1324.2	77.9	0.1192	ug/L	0.1192	ppb	17:43:37
1	Tl 190.801†	-29.4	6.2	1.8751	ug/L	1.8751	ppb	17:43:57
1	U 409.014†	-1789.8	166.0	4.8862	ug/L	4.8862	ppb	17:43:32
1	V 292.402†	-1317.8	109.6	0.7470	ug/L	0.7470	ppb	17:43:37
1	Zn 213.857†	644.9	-12.9	-0.1203	ug/L	-0.1203	ppb	17:43:57
1	SiO2†	487.3	3.2	0.2280	ug/L	0.2280	ppb	17:45:03
2	Sc Radial	4831.2	4831.2	94.3	%			17:42:40
2	Y RADIAL	5221.0	5221.0	94.83	%			17:42:40
2	Al 396.153Radial†	3.5	9.9	7.8761	ug/L	7.8761	ppb	17:42:40
2	Ca 317.933Radial†	13.2	-5.2	-8.3508	ug/L	-8.3508	ppb	17:43:00
2	Fe 238.204 Radial†	9.7	-1.3	-11.190	ug/L	-11.190	ppb	17:43:00
2	K 766.490 Radial†	2635.3	281.8	51.332	ug/L	51.332	ppb	17:42:40
2	Mg 279.077 IEC†	0.9	-2.1	-68.277	ug/L	-68.277	ppb	17:43:00
2	Na 589.592 Radial†	-1288.1	-56.5	-16.184	ug/L	-16.184	ppb	17:42:40
2	Sr 421.552†	31.9	24.0	0.1534	ug/L	0.1534	ppb	17:42:40
2	Sc 361.383	881522.3	881522.3	102.73	%			17:44:02
2	Y 371.029	746169.7	746169.7	102.54	%			17:44:02
2	Ag 328.068†	356.5	-10.1	-0.0483	ug/L	-0.0483	ppb	17:44:07
2	As 188.979†	-25.2	-0.6	-0.2438	ug/L	-0.2438	ppb	17:44:27
2	B 249.677†	-453.1	174.0	3.9068	ug/L	3.9068	ppb	17:44:27
2	Ba 233.527†	-23.8	-14.5	-0.1122	ug/L	-0.1122	ppb	17:44:27
2	Be 313.107†	-4462.2	131.1	0.0497	ug/L	0.0497	ppb	17:44:07
2	Cd 226.502†	-193.0	13.7	0.1524	ug/L	0.1524	ppb	17:44:27
2	Co 228.616†	-62.8	16.1	0.3278	ug/L	0.3278	ppb	17:44:27
2	Cr 267.716†	88.8	7.5	0.0833	ug/L	0.0833	ppb	17:44:27
2	Cu 324.752†	6361.8	-209.9	-0.6269	ug/L	-0.6269	ppb	17:44:07
2	Mn 257.610†	420.2	-20.8	-0.0211	ug/L	-0.0211	ppb	17:44:27
2	Mo 202.031†	26.6	4.2	0.2931	ug/L	0.2931	ppb	17:44:27
2	Ni 231.604†	70.2	1.3	0.0328	ug/L	0.0328	ppb	17:44:27

2	P 214.914†	223.8	-2.5	-1.3211 ug/L	-1.3211 ppb	17:44:27
2	Pb 220.353†	-55.6	8.1	0.9828 ug/L	0.9828 ppb	17:44:27
2	S 181.975 Axial†	45.7	0.6	0.8879 ug/L	0.8879 ppb	17:44:27
2	Sb 206.836†	40.4	5.9	2.0154 ug/L	2.0154 ppb	17:44:27
2	Se 196.026†	-24.2	8.5	5.3056 ug/L	5.3056 ppb	17:44:27
2	Si 251.611†	491.5	17.7	0.5582 ug/L	0.5582 ppb	17:44:27
2	Sn 189.927†	6.1	4.3	0.7396 ug/L	0.7396 ppb	17:44:27
2	Ti 334.940†	-1327.2	42.3	0.0719 ug/L	0.0719 ppb	17:44:07
2	Tl 190.801†	-19.8	14.8	4.4751 ug/L	4.4751 ppb	17:44:27
2	U 409.014†	-1899.3	15.1	0.4453 ug/L	0.4453 ppb	17:44:02
2	V 292.402†	-1337.9	57.4	0.3946 ug/L	0.3946 ppb	17:44:07
2	Zn 213.857†	637.6	-4.0	-0.0357 ug/L	-0.0357 ppb	17:44:27
2	SiO2†	542.4	68.9	4.6424 ug/L	4.6424 ppb	17:45:08
3	Sc Radial	5248.9	5248.9	102 %		17:43:05
3	Y RADIAL	5624.0	5624.0	102.2 %		17:43:05
3	Al 396.153Radial†	-3.8	2.5	2.0017 ug/L	2.0017 ppb	17:43:05
3	Ca 317.933Radial†	18.8	-0.8	-1.3525 ug/L	-1.3525 ppb	17:43:25
3	Fe 238.204 Radial†	10.0	-1.8	-15.108 ug/L	-15.108 ppb	17:43:25
3	K 766.490 Radial†	2706.3	128.8	23.451 ug/L	23.451 ppb	17:43:05
3	Mg 279.077 IEC†	1.5	-1.6	-51.823 ug/L	-51.823 ppb	17:43:25
3	Na 589.592 Radial†	-1276.1	63.9	18.308 ug/L	18.308 ppb	17:43:05
3	Sr 421.552†	6.4	-3.5	-0.0226 ug/L	-0.0226 ppb	17:43:05
3	Sc 361.383	887100.9	887100.9	103.38 %		17:44:32
3	Y 371.029	750211.5	750211.5	103.10 %		17:44:32
3	Ag 328.068†	345.2	-23.2	-0.1088 ug/L	-0.1088 ppb	17:44:37
3	As 188.979†	-21.4	3.3	1.3974 ug/L	1.3974 ppb	17:44:57
3	B 249.677†	-412.0	216.6	4.8645 ug/L	4.8645 ppb	17:44:57
3	Ba 233.527†	-20.9	-11.7	-0.0908 ug/L	-0.0908 ppb	17:44:57
3	Be 313.107†	-4514.0	108.4	0.0413 ug/L	0.0413 ppb	17:44:37
3	Cd 226.502†	-194.6	13.4	0.1480 ug/L	0.1480 ppb	17:44:57
3	Co 228.616†	-77.9	1.9	0.0380 ug/L	0.0380 ppb	17:44:57
3	Cr 267.716†	83.8	2.1	0.0245 ug/L	0.0245 ppb	17:44:57
3	Cu 324.752†	6467.6	-146.5	-0.4361 ug/L	-0.4361 ppb	17:44:37
3	Mn 257.610†	418.0	-25.5	-0.0273 ug/L	-0.0273 ppb	17:44:57
3	Mo 202.031†	17.1	-5.1	-0.3550 ug/L	-0.3550 ppb	17:44:57
3	Ni 231.604†	57.3	-11.6	-0.2871 ug/L	-0.2871 ppb	17:44:57
3	P 214.914†	231.8	3.9	2.4672 ug/L	2.4672 ppb	17:44:57
3	Pb 220.353†	-57.2	6.8	0.8276 ug/L	0.8276 ppb	17:44:57
3	S 181.975 Axial†	48.5	3.1	4.2674 ug/L	4.2674 ppb	17:44:57
3	Sb 206.836†	40.0	5.3	1.7777 ug/L	1.7777 ppb	17:44:57
3	Se 196.026†	-28.5	4.5	2.7927 ug/L	2.7927 ppb	17:44:57
3	Si 251.611†	481.3	4.9	0.1590 ug/L	0.1590 ppb	17:44:57
3	Sn 189.927†	1.7	-0.0	-0.0038 ug/L	-0.0038 ppb	17:44:57
3	Ti 334.940†	-1289.3	87.0	0.1447 ug/L	0.1447 ppb	17:44:37
3	Tl 190.801†	-19.4	15.3	4.6263 ug/L	4.6263 ppb	17:44:57
3	U 409.014†	-2034.3	-103.9	-3.0568 ug/L	-3.0568 ppb	17:44:32
3	V 292.402†	-1407.4	-1.6	-0.0205 ug/L	-0.0205 ppb	17:44:37
3	Zn 213.857†	637.9	-7.7	-0.0682 ug/L	-0.0682 ppb	17:44:57
3	SiO2†	509.5	33.8	2.2893 ug/L	2.2893 ppb	17:45:13

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	891042.9	103.84	%	1.397				1.35%
Sc Radial	5043.5	98.5	%	4.08				4.14%
Y 371.029	753011.8	103.48	%	1.181				1.14%
Y RADIAL	5410.7	98.28	%	3.679				3.74%
Ag 328.068†	-9.5	-0.0448	ug/L	0.06581	-0.0448	ppb	0.06581	146.98%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	8.3	6.6431	ug/L	4.16422	6.6431	ppb	4.16422	62.68%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.3	0.5611	ug/L	0.82104	0.5611	ppb	0.82104	146.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	212.7	4.7760	ug/L	0.82848	4.7760	ppb	0.82848	17.35%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-11.9	-0.0918	ug/L	0.01986	-0.0918	ppb	0.01986	21.63%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	150.7	0.0572	ug/L	0.02068	0.0572	ppb	0.02068	36.18%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-3.5	-5.6346	ug/L	3.75269	-5.6346	ppb	3.75269	66.60%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              18.7      0.2062 ug/L       0.09703      0.2062 ppb        0.09703  47.06%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               8.5      0.1722 ug/L       0.14611      0.1722 ppb        0.14611  84.86%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -0.7     -0.0075 ug/L       0.11031     -0.0075 ppb        0.11031 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -212.1     -0.6335 ug/L       0.20082     -0.6335 ppb        0.20082  31.70%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -0.9     -7.7575 ug/L       9.54148     -7.7575 ppb        9.54148 123.00%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       208.6      37.996 ug/L      13.9798      37.996 ppb        13.9798  36.79%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.9     -29.941 ug/L      52.7948     -29.941 ppb        52.7948 176.33%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             -27.0     -0.0291 ug/L       0.00906     -0.0291 ppb        0.00906  31.09%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -2.0     -0.1381 ug/L       0.37343     -0.1381 ppb        0.37343 270.40%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -4.8     -1.3822 ug/L      17.75775     -1.3822 ppb       17.75775 >999.9%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -3.4     -0.0851 ug/L       0.17577     -0.0851 ppb        0.17577 206.59%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                0.3      0.3709 ug/L       1.92623      0.3709 ppb        1.92623 519.28%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               7.3      0.8898 ug/L       0.08204      0.8898 ppb        0.08204   9.22%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          5.0      6.9857 ug/L       7.81975      6.9857 ppb        7.81975 111.94%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               4.3      1.4722 ug/L       0.74448      1.4722 ppb        0.74448  50.57%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               5.3      3.3017 ug/L       1.80405      3.3017 ppb        1.80405  54.64%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               8.1      0.2566 ug/L       0.26658      0.2566 ppb        0.26658 103.90%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               5.5      0.9620 ug/L       1.09412      0.9620 ppb        1.09412 113.73%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               6.2      0.0393 ug/L       0.09889      0.0393 ppb        0.09889 251.53%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              69.1      0.1119 ug/L       0.03694      0.1119 ppb        0.03694  33.00%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              12.1      3.6589 ug/L       1.54662      3.6589 ppb        1.54662  42.27%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               25.7      0.7582 ug/L       3.98074      0.7582 ppb        3.98074 524.99%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               55.1      0.3737 ug/L       0.38417      0.3737 ppb        0.38417 102.81%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -8.2     -0.0747 ug/L       0.04269     -0.0747 ppb        0.04269  57.11%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    35.3      2.3866 ug/L       2.20882      2.3866 ppb        2.20882  92.55%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 25
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 1/12/2010 18:21:18
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	4768.6	4768.6	93.1	%			18:23:10
1	Y RADIAL	5007.7	5007.7	90.96	%			18:23:10
1	Al 396.153Radial†	6729.3	7232.7	5760.5	ug/L	5760.5	ppb	18:23:10
1	Ca 317.933Radial†	3228.4	3447.7	5565.5	ug/L	5565.5	ppb	18:23:30
1	Fe 238.204 Radial†	621.6	655.9	5592.3	ug/L	5592.3	ppb	18:23:30
1	K 766.490 Radial†	30595.7	30344.9	5519.1	ug/L	5519.1	ppb	18:23:10
1	Mg 279.077 IEC†	160.8	169.7	5633.7	ug/L	5633.7	ppb	18:23:30
1	Na 589.592 Radial†	34080.2	37907.3	10866	ug/L	10866	ppb	18:23:10
1	Sr 421.552†	81045.8	87024.6	555.57	ug/L	555.57	ppb	18:23:10
1	Sc 361.383	882790.8	882790.8	102.88	%			18:24:27
1	Y 371.029	734185.3	734185.3	100.90	%			18:24:27
1	Ag 328.068†	111792.2	108304.8	500.25	ug/L	500.25	ppb	18:24:32
1	As 188.979†	1166.8	1158.1	499.43	ug/L	499.43	ppb	18:24:52
1	B 249.677†	22027.9	22026.2	492.06	ug/L	492.06	ppb	18:24:32
1	Ba 233.527†	65381.3	63559.1	493.73	ug/L	493.73	ppb	18:24:32
1	Be 313.107†	1373890.0	1339894.0	507.35	ug/L	507.35	ppb	18:24:27
1	Cd 226.502†	46078.3	44989.7	494.75	ug/L	494.75	ppb	18:24:32
1	Co 228.616†	25095.4	24469.9	496.60	ug/L	496.60	ppb	18:24:32
1	Cr 267.716†	45781.0	44420.1	493.44	ug/L	493.44	ppb	18:24:32
1	Cu 324.752†	175567.2	164248.7	490.00	ug/L	490.00	ppb	18:24:32
1	Mn 257.610†	469401.1	455827.5	500.21	ug/L	500.21	ppb	18:24:27
1	Mo 202.031†	7328.2	7101.4	496.01	ug/L	496.01	ppb	18:24:52
1	Ni 231.604†	20748.2	20100.2	497.12	ug/L	497.12	ppb	18:24:32
1	P 214.914†	4459.3	4114.1	2354.8	ug/L	2354.8	ppb	18:24:52
1	Pb 220.353†	4156.0	4101.8	498.22	ug/L	498.22	ppb	18:24:52
1	S 181.975 Axial†	783.1	717.3	997.09	ug/L	997.09	ppb	18:24:52
1	Sb 206.836†	1518.5	1442.6	506.82	ug/L	506.82	ppb	18:24:52
1	Se 196.026†	794.0	803.8	524.60	ug/L	524.60	ppb	18:24:52
1	Si 251.611†	81626.9	78880.6	2491.0	ug/L	2491.0	ppb	18:24:32
1	Sn 189.927†	2922.2	2838.7	495.53	ug/L	495.53	ppb	18:24:52
1	Ti 334.940†	310944.2	303571.5	486.00	ug/L	486.00	ppb	18:24:32
1	Tl 190.801†	1642.2	1630.3	495.51	ug/L	495.51	ppb	18:24:52
1	U 409.014†	15484.6	16914.9	496.22	ug/L	496.22	ppb	18:24:32
1	V 292.402†	73462.0	72764.7	500.08	ug/L	500.08	ppb	18:24:32
1	Zn 213.857†	55302.2	53129.0	494.36	ug/L	494.36	ppb	18:24:32
1	SiO2†	80532.9	77818.9	5235.3	ug/L	5235.3	ppb	18:26:00
2	Sc Radial	5542.6	5542.6	108	%			18:23:35
2	Y RADIAL	5868.6	5868.6	106.6	%			18:23:35
2	Al 396.153Radial†	6375.7	5896.8	4691.9	ug/L	4691.9	ppb	18:23:35
2	Ca 317.933Radial†	3185.4	2923.8	4719.8	ug/L	4719.8	ppb	18:23:55
2	Fe 238.204 Radial†	616.4	558.0	4759.3	ug/L	4759.3	ppb	18:23:55
2	K 766.490 Radial†	29373.9	24627.4	4479.0	ug/L	4479.0	ppb	18:23:35
2	Mg 279.077 IEC†	161.8	146.5	4864.0	ug/L	4864.0	ppb	18:23:55
2	Na 589.592 Radial†	32380.2	31225.4	8950.8	ug/L	8950.8	ppb	18:23:35
2	Sr 421.552†	77000.8	71132.4	454.11	ug/L	454.11	ppb	18:23:35
2	Sc 361.383	874196.3	874196.3	101.88	%			18:24:58
2	Y 371.029	728105.8	728105.8	100.06	%			18:24:58
2	Ag 328.068†	112427.9	109997.1	507.77	ug/L	507.77	ppb	18:25:03
2	As 188.979†	1168.1	1170.5	504.60	ug/L	504.60	ppb	18:25:23
2	B 249.677†	22171.0	22377.2	500.05	ug/L	500.05	ppb	18:25:03
2	Ba 233.527†	65728.8	64525.0	501.20	ug/L	501.20	ppb	18:25:03
2	Be 313.107†	1360144.6	1339531.1	507.23	ug/L	507.23	ppb	18:24:58
2	Cd 226.502†	46413.1	45758.6	503.30	ug/L	503.30	ppb	18:25:03
2	Co 228.616†	25211.0	24823.2	503.77	ug/L	503.77	ppb	18:25:03
2	Cr 267.716†	46096.2	45167.0	501.72	ug/L	501.72	ppb	18:25:03
2	Cu 324.752†	176546.1	166887.3	497.81	ug/L	497.81	ppb	18:25:03
2	Mn 257.610†	465073.5	456065.3	500.42	ug/L	500.42	ppb	18:24:58
2	Mo 202.031†	7299.6	7143.4	498.86	ug/L	498.86	ppb	18:25:23
2	Ni 231.604†	20824.2	20373.1	503.87	ug/L	503.87	ppb	18:25:03

2	P 214.914†	4425.0	4123.1	2358.7 ug/L	2358.7 ppb	18:25:23
2	Pb 220.353†	4112.4	4098.7	497.66 ug/L	497.66 ppb	18:25:23
2	S 181.975 Axial†	777.9	719.7	1000.7 ug/L	1000.7 ppb	18:25:23
2	Sb 206.836†	1507.7	1446.5	508.25 ug/L	508.25 ppb	18:25:23
2	Se 196.026†	779.4	797.0	517.80 ug/L	517.80 ppb	18:25:23
2	Si 251.611†	82054.3	80080.1	2528.9 ug/L	2528.9 ppb	18:25:03
2	Sn 189.927†	2907.2	2851.9	497.67 ug/L	497.67 ppb	18:25:23
2	Ti 334.940†	312695.9	308262.4	493.44 ug/L	493.44 ppb	18:25:03
2	Tl 190.801†	1640.7	1644.5	499.81 ug/L	499.81 ppb	18:25:23
2	U 409.014†	15887.9	17458.7	512.30 ug/L	512.30 ppb	18:25:03
2	V 292.402†	73950.8	73946.5	508.27 ug/L	508.27 ppb	18:25:03
2	Zn 213.857†	55566.1	53916.5	501.78 ug/L	501.78 ppb	18:25:03
2	SiO2†	79894.2	77961.5	5244.8 ug/L	5244.8 ppb	18:26:05
3	Sc Radial	5172.9	5172.9	101 %		18:24:00
3	Y RADIAL	5511.8	5511.8	100.1 %		18:24:00
3	Al 396.153Radial†	6475.8	6417.0	5108.0 ug/L	5108.0 ppb	18:24:00
3	Ca 317.933Radial†	3260.0	3208.1	5178.6 ug/L	5178.6 ppb	18:24:20
3	Fe 238.204 Radial†	619.7	602.0	5133.5 ug/L	5133.5 ppb	18:24:20
3	K 766.490 Radial†	29972.2	27159.6	4939.6 ug/L	4939.6 ppb	18:24:00
3	Mg 279.077 IEC†	162.1	157.4	5227.0 ug/L	5227.0 ppb	18:24:20
3	Na 589.592 Radial†	32929.9	33908.0	9719.8 ug/L	9719.8 ppb	18:24:00
3	Sr 421.552†	78112.8	77318.4	493.60 ug/L	493.60 ppb	18:24:00
3	Sc 361.383	870747.2	870747.2	101.48 %		18:25:29
3	Y 371.029	724417.0	724417.0	99.554 %		18:25:29
3	Ag 328.068†	112368.6	110375.7	509.64 ug/L	509.64 ppb	18:25:34
3	As 188.979†	1160.1	1167.2	503.28 ug/L	503.28 ppb	18:25:54
3	B 249.677†	22323.9	22614.1	505.30 ug/L	505.30 ppb	18:25:34
3	Ba 233.527†	65968.5	65016.8	505.03 ug/L	505.03 ppb	18:25:34
3	Be 313.107†	1354742.6	1339496.0	507.22 ug/L	507.22 ppb	18:25:29
3	Cd 226.502†	46596.3	46119.6	507.23 ug/L	507.23 ppb	18:25:34
3	Co 228.616†	25242.5	24952.2	506.38 ug/L	506.38 ppb	18:25:34
3	Cr 267.716†	46091.6	45341.7	503.67 ug/L	503.67 ppb	18:25:34
3	Cu 324.752†	176638.2	167664.4	500.16 ug/L	500.16 ppb	18:25:34
3	Mn 257.610†	463524.0	456346.6	500.75 ug/L	500.75 ppb	18:25:29
3	Mo 202.031†	7261.8	7134.5	498.27 ug/L	498.27 ppb	18:25:54
3	Ni 231.604†	20823.9	20453.7	505.86 ug/L	505.86 ppb	18:25:34
3	P 214.914†	4418.7	4134.1	2364.6 ug/L	2364.6 ppb	18:25:54
3	Pb 220.353†	4104.9	4107.4	498.77 ug/L	498.77 ppb	18:25:54
3	S 181.975 Axial†	774.6	719.4	1000.2 ug/L	1000.2 ppb	18:25:54
3	Sb 206.836†	1513.7	1458.2	512.25 ug/L	512.25 ppb	18:25:54
3	Se 196.026†	773.0	793.8	516.91 ug/L	516.91 ppb	18:25:54
3	Si 251.611†	82210.2	80552.8	2543.9 ug/L	2543.9 ppb	18:25:34
3	Sn 189.927†	2911.9	2867.8	500.53 ug/L	500.53 ppb	18:25:54
3	Ti 334.940†	313068.0	309844.8	496.01 ug/L	496.01 ppb	18:25:34
3	Tl 190.801†	1617.7	1628.2	494.91 ug/L	494.91 ppb	18:25:54
3	U 409.014†	15628.1	17264.5	506.54 ug/L	506.54 ppb	18:25:34
3	V 292.402†	73870.7	74155.1	509.61 ug/L	509.61 ppb	18:25:34
3	Zn 213.857†	55663.4	54228.5	504.66 ug/L	504.66 ppb	18:25:34
3	SiO2†	80329.8	78701.4	5294.7 ug/L	5294.7 ppb	18:26:10

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	875911.4	102.08	%	0.723				0.71%
Sc Radial	5161.4	101	%	7.6				7.50%
Y 371.029	728902.7	100.17	%	0.678				0.68%
Y RADIAL	5462.7	99.22	%	7.857				7.92%
Ag 328.068†	109559.2	505.89	ug/L	4.971	505.89	ppb	4.971	0.98%
QC value within limits for Ag 328.068 Recovery = 101.18%								
Al 396.153Radial†	6515.5	5186.8	ug/L	538.62	5186.8	ppb	538.62	10.38%
QC value within limits for Al 396.153Radial Recovery = 103.74%								
As 188.979†	1165.3	502.43	ug/L	2.689	502.43	ppb	2.689	0.54%
QC value within limits for As 188.979 Recovery = 100.49%								
B 249.677†	22339.1	499.14	ug/L	6.668	499.14	ppb	6.668	1.34%
QC value within limits for B 249.677 Recovery = 99.83%								
Ba 233.527†	64367.0	499.98	ug/L	5.748	499.98	ppb	5.748	1.15%
QC value within limits for Ba 233.527 Recovery = 100.00%								
Be 313.107†	1339640.4	507.26	ug/L	0.072	507.26	ppb	0.072	0.01%
QC value within limits for Be 313.107 Recovery = 101.45%								
Ca 317.933Radial†	3193.2	5154.6	ug/L	423.34	5154.6	ppb	423.34	8.21%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.09%
Cd 226.502†            45622.6      501.76 ug/L        6.383      501.76 ppb        6.383   1.27%
   QC value within limits for Cd 226.502  Recovery = 100.35%
Co 228.616†            24748.5      502.25 ug/L        5.064      502.25 ppb        5.064   1.01%
   QC value within limits for Co 228.616  Recovery = 100.45%
Cr 267.716†            44976.2      499.61 ug/L        5.429      499.61 ppb        5.429   1.09%
   QC value within limits for Cr 267.716  Recovery = 99.92%
Cu 324.752†           166266.8      495.99 ug/L        5.320      495.99 ppb        5.320   1.07%
   QC value within limits for Cu 324.752  Recovery = 99.20%
Fe 238.204 Radial†       605.3      5161.7 ug/L      417.21      5161.7 ppb      417.21   8.08%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.23%
K 766.490 Radial†      27377.3      4979.2 ug/L      521.22      4979.2 ppb      521.22  10.47%
   QC value within limits for K 766.490 Radial  Recovery = 99.58%
Mg 279.077 IEC†          157.9      5241.6 ug/L      385.07      5241.6 ppb      385.07   7.35%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.83%
Mn 257.610†           456079.8      500.46 ug/L        0.273      500.46 ppb        0.273   0.05%
   QC value within limits for Mn 257.610  Recovery = 100.09%
Mo 202.031†             7126.4      497.71 ug/L        1.507      497.71 ppb        1.507   0.30%
   QC value within limits for Mo 202.031  Recovery = 99.54%
Na 589.592 Radial†     34346.9      9845.6 ug/L      963.86      9845.6 ppb      963.86   9.79%
   QC value within limits for Na 589.592 Radial  Recovery = 98.46%
Ni 231.604†            20309.0      502.28 ug/L        4.582      502.28 ppb        4.582   0.91%
   QC value within limits for Ni 231.604  Recovery = 100.46%
P 214.914†              4123.8      2359.4 ug/L         4.94      2359.4 ppb         4.94   0.21%
   QC value within limits for P 214.914  Recovery = 94.38%
Pb 220.353†             4102.6      498.22 ug/L        0.556      498.22 ppb        0.556   0.11%
   QC value within limits for Pb 220.353  Recovery = 99.64%
S 181.975 Axial†         718.8      999.34 ug/L        1.960      999.34 ppb        1.960   0.20%
   QC value within limits for S 181.975 Axial  Recovery = 99.93%
Sb 206.836†             1449.1      509.11 ug/L        2.817      509.11 ppb        2.817   0.55%
   QC value within limits for Sb 206.836  Recovery = 101.82%
Se 196.026†              798.2      519.77 ug/L        4.204      519.77 ppb        4.204   0.81%
   QC value within limits for Se 196.026  Recovery = 103.95%
Si 251.611†            79837.8      2521.2 ug/L        27.27      2521.2 ppb        27.27   1.08%
   QC value within limits for Si 251.611  Recovery = 100.85%
Sn 189.927†             2852.8      497.91 ug/L        2.507      497.91 ppb        2.507   0.50%
   QC value within limits for Sn 189.927  Recovery = 99.58%
Sr 421.552†            78491.8      501.09 ug/L       51.142      501.09 ppb       51.142  10.21%
   QC value within limits for Sr 421.552  Recovery = 100.22%
Ti 334.940†           307226.2      491.82 ug/L        5.203      491.82 ppb        5.203   1.06%
   QC value within limits for Ti 334.940  Recovery = 98.36%
Tl 190.801†             1634.4      496.74 ug/L        2.672      496.74 ppb        2.672   0.54%
   QC value within limits for Tl 190.801  Recovery = 99.35%
U 409.014†             17212.7      505.02 ug/L        8.150      505.02 ppb        8.150   1.61%
   QC value within limits for U 409.014  Recovery = 101.00%
V 292.402†             73622.1      505.99 ug/L        5.160      505.99 ppb        5.160   1.02%
   QC value within limits for V 292.402  Recovery = 101.20%
Zn 213.857†            53758.0      500.27 ug/L        5.313      500.27 ppb        5.313   1.06%
   QC value within limits for Zn 213.857  Recovery = 100.05%
SiO2†                  78160.6      5258.3 ug/L        31.93      5258.3 ppb        31.93   0.61%
   QC value within limits for SiO2  Recovery = 98.33%
All analyte(s) passed QC.
```

Sequence No.: 26
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 1/12/2010 18:28:19
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	5618.4	5618.4	110	%			18:30:11
1	Y RADIAL	5990.5	5990.5	108.8	%			18:30:11
1	Al 396.153Radial†	-5.6	1.1	0.8872	ug/L	0.8872	ppb	18:30:11
1	Ca 317.933Radial†	25.8	4.3	6.8835	ug/L	6.8835	ppb	18:30:31
1	Fe 238.204 Radial†	11.4	-1.1	-9.6838	ug/L	-9.6838	ppb	18:30:31
1	K 766.490 Radial†	2756.8	1.2	0.1996	ug/L	0.1996	ppb	18:30:11
1	Mg 279.077 IEC†	2.7	-0.6	-18.487	ug/L	-18.487	ppb	18:30:31
1	Na 589.592 Radial†	-1350.5	77.9	22.342	ug/L	22.342	ppb	18:30:11
1	Sr 421.552†	0.4	-9.4	-0.0602	ug/L	-0.0602	ppb	18:30:11
1	Sc 361.383	863617.4	863617.4	100.65	%			18:31:28
1	Y 371.029	731839.5	731839.5	100.57	%			18:31:28
1	Ag 328.068†	304.5	-54.6	-0.2537	ug/L	-0.2537	ppb	18:31:28
1	As 188.979†	-23.9	0.2	0.0721	ug/L	0.0721	ppb	18:31:48
1	B 249.677†	-299.0	318.1	7.1401	ug/L	7.1401	ppb	18:31:48
1	Ba 233.527†	-8.2	0.4	0.0028	ug/L	0.0028	ppb	18:31:48
1	Be 313.107†	-4466.4	37.0	0.0139	ug/L	0.0139	ppb	18:31:28
1	Cd 226.502†	-180.2	22.6	0.2494	ug/L	0.2494	ppb	18:31:48
1	Co 228.616†	-69.7	8.0	0.1618	ug/L	0.1618	ppb	18:31:48
1	Cr 267.716†	88.3	8.8	0.0975	ug/L	0.0975	ppb	18:31:48
1	Cu 324.752†	6448.7	4.9	0.0143	ug/L	0.0143	ppb	18:31:28
1	Mn 257.610†	463.2	30.4	0.0332	ug/L	0.0332	ppb	18:31:48
1	Mo 202.031†	19.9	-1.8	-0.1274	ug/L	-0.1274	ppb	18:31:48
1	Ni 231.604†	64.3	-3.2	-0.0787	ug/L	-0.0787	ppb	18:31:48
1	P 214.914†	223.9	2.2	1.3354	ug/L	1.3354	ppb	18:31:48
1	Pb 220.353†	-59.5	3.1	0.3789	ug/L	0.3789	ppb	18:31:48
1	S 181.975 Axial†	50.3	6.1	8.5268	ug/L	8.5268	ppb	18:31:48
1	Sb 206.836†	38.0	4.3	1.5018	ug/L	1.5018	ppb	18:31:48
1	Se 196.026†	-32.8	-0.6	-0.3939	ug/L	-0.3939	ppb	18:31:48
1	Si 251.611†	760.9	295.4	9.3528	ug/L	9.3528	ppb	18:31:48
1	Sn 189.927†	13.1	11.3	1.9722	ug/L	1.9722	ppb	18:31:48
1	Ti 334.940†	-1348.2	-5.4	-0.0060	ug/L	-0.0060	ppb	18:31:28
1	Tl 190.801†	-27.1	7.2	2.1616	ug/L	2.1616	ppb	18:31:48
1	U 409.014†	-1888.8	-12.8	-0.3748	ug/L	-0.3748	ppb	18:31:28
1	V 292.402†	-1388.8	-20.2	-0.1384	ug/L	-0.1384	ppb	18:31:28
1	Zn 213.857†	662.2	33.3	0.3139	ug/L	0.3139	ppb	18:31:48
1	SiO2†	649.6	186.4	12.578	ug/L	12.578	ppb	18:32:44
2	Sc Radial	5113.3	5113.3	99.9	%			18:30:36
2	Y RADIAL	5452.1	5452.1	99.03	%			18:30:36
2	Al 396.153Radial†	-11.1	-4.9	-3.9088	ug/L	-3.9088	ppb	18:30:36
2	Ca 317.933Radial†	12.5	-6.7	-10.789	ug/L	-10.789	ppb	18:30:56
2	Fe 238.204 Radial†	10.1	-1.4	-12.233	ug/L	-12.233	ppb	18:30:56
2	K 766.490 Radial†	2809.7	302.4	55.071	ug/L	55.071	ppb	18:30:36
2	Mg 279.077 IEC†	0.3	-2.7	-90.891	ug/L	-90.891	ppb	18:30:56
2	Na 589.592 Radial†	-1325.3	-18.4	-5.2767	ug/L	-5.2767	ppb	18:30:36
2	Sr 421.552†	24.6	14.9	0.0950	ug/L	0.0950	ppb	18:30:36
2	Sc 361.383	854133.0	854133.0	99.541	%			18:31:53
2	Y 371.029	723900.7	723900.7	99.483	%			18:31:53
2	Ag 328.068†	249.2	-106.7	-0.4924	ug/L	-0.4924	ppb	18:31:53
2	As 188.979†	-30.2	-6.5	-2.7595	ug/L	-2.7595	ppb	18:32:13
2	B 249.677†	-363.8	249.7	5.6057	ug/L	5.6057	ppb	18:32:13
2	Ba 233.527†	-17.4	-8.9	-0.0698	ug/L	-0.0698	ppb	18:32:13
2	Be 313.107†	-4414.6	39.7	0.0152	ug/L	0.0152	ppb	18:31:53
2	Cd 226.502†	-174.7	26.2	0.2885	ug/L	0.2885	ppb	18:32:13
2	Co 228.616†	-69.4	7.5	0.1521	ug/L	0.1521	ppb	18:32:13
2	Cr 267.716†	68.4	-10.2	-0.1132	ug/L	-0.1132	ppb	18:32:13
2	Cu 324.752†	6490.6	118.1	0.3530	ug/L	0.3530	ppb	18:31:53
2	Mn 257.610†	453.0	25.2	0.0302	ug/L	0.0302	ppb	18:32:13
2	Mo 202.031†	18.2	-3.4	-0.2371	ug/L	-0.2371	ppb	18:32:13
2	Ni 231.604†	56.9	-9.9	-0.2448	ug/L	-0.2448	ppb	18:32:13

2	P 214.914†	226.2	7.0	4.1172 ug/L	4.1172 ppb	18:32:13
2	Pb 220.353†	-59.9	2.0	0.2401 ug/L	0.2401 ppb	18:32:13
2	S 181.975 Axial†	44.0	0.4	0.5045 ug/L	0.5045 ppb	18:32:13
2	Sb 206.836†	44.5	11.2	3.8188 ug/L	3.8188 ppb	18:32:13
2	Se 196.026†	-27.4	4.5	2.7777 ug/L	2.7777 ppb	18:32:13
2	Si 251.611†	683.5	226.0	7.1561 ug/L	7.1561 ppb	18:32:13
2	Sn 189.927†	3.9	2.3	0.3972 ug/L	0.3972 ppb	18:32:13
2	Ti 334.940†	-1265.2	63.1	0.1080 ug/L	0.1080 ppb	18:31:53
2	Tl 190.801†	-29.7	4.3	1.2914 ug/L	1.2914 ppb	18:32:13
2	U 409.014†	-1926.7	-71.7	-2.1093 ug/L	-2.1093 ppb	18:31:53
2	V 292.402†	-1385.4	-32.1	-0.2248 ug/L	-0.2248 ppb	18:31:53
2	Zn 213.857†	657.5	35.9	0.3389 ug/L	0.3389 ppb	18:32:13
2	SiO2†	679.1	223.2	15.060 ug/L	15.060 ppb	18:32:49
3	Sc Radial	4419.6	4419.6	86.3 %		18:31:01
3	Y RADIAL	4741.8	4741.8	86.13 %		18:31:01
3	Al 396.153Radial†	-15.9	-12.3	-9.8133 ug/L	-9.8133 ppb	18:31:01
3	Ca 317.933Radial†	21.7	5.9	9.5907 ug/L	9.5907 ppb	18:31:21
3	Fe 238.204 Radial†	10.5	0.7	5.6481 ug/L	5.6481 ppb	18:31:21
3	K 766.490 Radial†	2807.7	741.7	135.09 ug/L	135.09 ppb	18:31:01
3	Mg 279.077 IEC†	3.5	1.0	32.188 ug/L	32.188 ppb	18:31:21
3	Na 589.592 Radial†	-1317.8	-218.1	-62.505 ug/L	-62.505 ppb	18:31:01
3	Sr 421.552†	18.5	11.7	0.0743 ug/L	0.0743 ppb	18:31:01
3	Sc 361.383	867678.5	867678.5	101.12 %		18:32:18
3	Y 371.029	734200.3	734200.3	100.90 %		18:32:18
3	Ag 328.068†	383.9	22.5	0.1073 ug/L	0.1073 ppb	18:32:18
3	As 188.979†	-21.3	2.9	1.2442 ug/L	1.2442 ppb	18:32:39
3	B 249.677†	-369.2	250.0	5.6101 ug/L	5.6101 ppb	18:32:39
3	Ba 233.527†	-9.5	-0.8	-0.0064 ug/L	-0.0064 ppb	18:32:39
3	Be 313.107†	-4467.7	56.4	0.0213 ug/L	0.0213 ppb	18:32:18
3	Cd 226.502†	-177.4	26.2	0.2866 ug/L	0.2866 ppb	18:32:39
3	Co 228.616†	-78.4	-0.3	-0.0059 ug/L	-0.0059 ppb	18:32:39
3	Cr 267.716†	98.6	18.5	0.2071 ug/L	0.2071 ppb	18:32:39
3	Cu 324.752†	6442.2	-31.6	-0.0918 ug/L	-0.0918 ppb	18:32:18
3	Mn 257.610†	443.7	9.0	0.0091 ug/L	0.0091 ppb	18:32:39
3	Mo 202.031†	24.1	2.2	0.1563 ug/L	0.1563 ppb	18:32:39
3	Ni 231.604†	70.1	2.3	0.0574 ug/L	0.0574 ppb	18:32:39
3	P 214.914†	234.1	11.2	6.7716 ug/L	6.7716 ppb	18:32:39
3	Pb 220.353†	-55.6	7.2	0.8656 ug/L	0.8656 ppb	18:32:39
3	S 181.975 Axial†	38.7	-5.6	-7.8522 ug/L	-7.8522 ppb	18:32:39
3	Sb 206.836†	34.2	0.3	0.1269 ug/L	0.1269 ppb	18:32:39
3	Se 196.026†	-32.1	0.3	0.2078 ug/L	0.2078 ppb	18:32:39
3	Si 251.611†	641.3	173.5	5.4903 ug/L	5.4903 ppb	18:32:39
3	Sn 189.927†	4.8	3.1	0.5391 ug/L	0.5391 ppb	18:32:39
3	Ti 334.940†	-1343.2	5.8	0.0096 ug/L	0.0096 ppb	18:32:18
3	Tl 190.801†	-26.5	7.8	2.3677 ug/L	2.3677 ppb	18:32:39
3	U 409.014†	-2016.6	-130.4	-3.8395 ug/L	-3.8395 ppb	18:32:18
3	V 292.402†	-1404.2	-28.9	-0.2013 ug/L	-0.2013 ppb	18:32:18
3	Zn 213.857†	677.0	44.9	0.4203 ug/L	0.4203 ppb	18:32:39
3	SiO2†	688.9	222.3	14.987 ug/L	14.987 ppb	18:32:54

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	861809.6	100.44	%	0.810				0.81%
Sc Radial	5050.4	98.6	%	11.75				11.92%
Y 371.029	729980.2	100.32	%	0.742				0.74%
Y RADIAL	5394.8	97.99	%	11.376				11.61%
Ag 328.068†	-46.2	-0.2129	ug/L	0.30196	-0.2129	ppb	0.30196	141.81%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-5.4	-4.2783	ug/L	5.35980	-4.2783	ppb	5.35980	125.28%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.1	-0.4811	ug/L	2.05837	-0.4811	ppb	2.05837	427.88%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	272.6	6.1186	ug/L	0.88462	6.1186	ppb	0.88462	14.46%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-3.1	-0.0245	ug/L	0.03954	-0.0245	ppb	0.03954	161.70%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	44.4	0.0168	ug/L	0.00394	0.0168	ppb	0.00394	23.43%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.2	1.8951	ug/L	11.06788	1.8951	ppb	11.06788	584.04%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              25.0      0.2748 ug/L       0.02205      0.2748 ppb        0.02205   8.02%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               5.1      0.1027 ug/L       0.09415      0.1027 ppb        0.09415  91.69%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               5.7      0.0638 ug/L       0.16276      0.0638 ppb        0.16276 255.21%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              30.5      0.0918 ug/L       0.23229      0.0918 ppb        0.23229 252.97%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -0.6     -5.4229 ug/L       9.67210     -5.4229 ppb        9.67210 178.36%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       348.4      63.452 ug/L      67.8324      63.452 ppb        67.8324 106.90%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.8     -25.730 ug/L      61.8583     -25.730 ppb        61.8583 240.42%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              21.6      0.0242 ug/L       0.01311      0.0242 ppb        0.01311  54.25%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -1.0     -0.0694 ug/L       0.20301     -0.0694 ppb        0.20301 292.47%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -52.8     -15.147 ug/L      43.2764     -15.147 ppb        43.2764 285.72%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -3.6     -0.0887 ug/L       0.15138     -0.0887 ppb        0.15138 170.66%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                6.8      4.0747 ug/L       2.71838      4.0747 ppb        2.71838  66.71%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               4.1      0.4949 ug/L       0.32849      0.4949 ppb        0.32849  66.38%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          0.3      0.3930 ug/L       8.19010      0.3930 ppb        8.19010 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               5.3      1.8158 ug/L       1.86587      1.8158 ppb        1.86587 102.76%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               1.4      0.8639 ug/L       1.68453      0.8639 ppb        1.68453 195.00%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             231.6      7.3331 ug/L       1.93732      7.3331 ppb        1.93732  26.42%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               5.6      0.9695 ug/L       0.87128      0.9695 ppb        0.87128  89.87%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               5.7      0.0363 ug/L       0.08429      0.0363 ppb        0.08429 231.91%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              21.2      0.0372 ug/L       0.06183      0.0372 ppb        0.06183 166.21%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               6.4      1.9402 ug/L       0.57130      1.9402 ppb        0.57130  29.45%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -71.6     -2.1078 ug/L       1.73236     -2.1078 ppb        1.73236  82.19%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -27.1     -0.1881 ug/L       0.04467     -0.1881 ppb        0.04467  23.75%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              38.0      0.3577 ug/L       0.05564      0.3577 ppb        0.05564  15.55%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   210.6      14.208 ug/L        1.4125      14.208 ppb         1.4125   9.94%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 33
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 1/12/2010 19:17:29
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	5085.4	5085.4	99.3	%			19:19:21
1	Y RADIAL	5414.2	5414.2	98.34	%			19:19:21
1	Al 396.153Radial†	6314.5	6364.8	5066.3	ug/L	5066.3	ppb	19:19:21
1	Ca 317.933Radial†	3220.4	3223.7	5203.9	ug/L	5203.9	ppb	19:19:41
1	Fe 238.204 Radial†	611.6	604.4	5153.9	ug/L	5153.9	ppb	19:19:41
1	K 766.490 Radial†	29011.8	26702.9	4856.6	ug/L	4856.6	ppb	19:19:21
1	Mg 279.077 IEC†	160.2	158.2	5254.6	ug/L	5254.6	ppb	19:19:41
1	Na 589.592 Radial†	31467.3	32996.0	9458.3	ug/L	9458.3	ppb	19:19:21
1	Sr 421.552†	75413.0	75930.2	484.74	ug/L	484.74	ppb	19:19:21
1	Sc 361.383	877713.6	877713.6	102.29	%			19:20:38
1	Y 371.029	729955.5	729955.5	100.31	%			19:20:38
1	Ag 328.068†	112620.8	109743.5	506.73	ug/L	506.73	ppb	19:20:43
1	As 188.979†	1173.5	1171.2	504.98	ug/L	504.98	ppb	19:21:03
1	B 249.677†	22022.6	22144.9	494.78	ug/L	494.78	ppb	19:20:43
1	Ba 233.527†	66002.1	64533.6	501.28	ug/L	501.28	ppb	19:20:43
1	Be 313.107†	1374632.4	1348344.6	510.56	ug/L	510.56	ppb	19:20:38
1	Cd 226.502†	46617.3	45775.7	503.45	ug/L	503.45	ppb	19:20:43
1	Co 228.616†	25298.5	24809.6	503.48	ug/L	503.48	ppb	19:20:43
1	Cr 267.716†	46269.2	45154.8	501.59	ug/L	501.59	ppb	19:20:43
1	Cu 324.752†	177428.3	167055.3	498.34	ug/L	498.34	ppb	19:20:43
1	Mn 257.610†	469388.9	458454.9	503.07	ug/L	503.07	ppb	19:20:38
1	Mo 202.031†	7302.2	7117.1	497.07	ug/L	497.07	ppb	19:21:03
1	Ni 231.604†	20904.9	20370.1	503.79	ug/L	503.79	ppb	19:20:43
1	P 214.914†	4420.2	4101.0	2345.1	ug/L	2345.1	ppb	19:21:03
1	Pb 220.353†	4146.9	4116.3	499.84	ug/L	499.84	ppb	19:21:03
1	S 181.975 Axial†	778.9	717.6	997.64	ug/L	997.64	ppb	19:21:03
1	Sb 206.836†	1509.2	1442.0	506.71	ug/L	506.71	ppb	19:21:03
1	Se 196.026†	778.3	792.9	516.36	ug/L	516.36	ppb	19:21:03
1	Si 251.611†	82106.3	79808.2	2520.3	ug/L	2520.3	ppb	19:20:43
1	Sn 189.927†	2924.2	2857.1	498.66	ug/L	498.66	ppb	19:21:03
1	Ti 334.940†	314374.0	308672.9	494.14	ug/L	494.14	ppb	19:20:43
1	Tl 190.801†	1624.4	1622.1	493.07	ug/L	493.07	ppb	19:21:03
1	U 409.014†	15889.9	17398.2	510.48	ug/L	510.48	ppb	19:20:43
1	V 292.402†	74136.6	73837.2	507.45	ug/L	507.45	ppb	19:20:43
1	Zn 213.857†	55718.1	53846.5	501.09	ug/L	501.09	ppb	19:20:43
1	SiO2†	80913.2	78643.5	5290.9	ug/L	5290.9	ppb	19:22:11
2	Sc Radial	5141.0	5141.0	100	%			19:19:46
2	Y RADIAL	5461.7	5461.7	99.21	%			19:19:46
2	Al 396.153Radial†	6490.2	6471.0	5150.9	ug/L	5150.9	ppb	19:19:46
2	Ca 317.933Radial†	3222.0	3190.1	5149.7	ug/L	5149.7	ppb	19:20:06
2	Fe 238.204 Radial†	619.0	605.1	5159.9	ug/L	5159.9	ppb	19:20:06
2	K 766.490 Radial†	29703.3	27075.6	4924.4	ug/L	4924.4	ppb	19:19:46
2	Mg 279.077 IEC†	161.3	157.6	5232.8	ug/L	5232.8	ppb	19:20:06
2	Na 589.592 Radial†	32430.5	33612.5	9635.1	ug/L	9635.1	ppb	19:19:46
2	Sr 421.552†	77905.7	77591.1	495.34	ug/L	495.34	ppb	19:19:46
2	Sc 361.383	866864.9	866864.9	101.02	%			19:21:09
2	Y 371.029	721874.5	721874.5	99.204	%			19:21:09
2	Ag 328.068†	111604.9	110115.7	508.44	ug/L	508.44	ppb	19:21:14
2	As 188.979†	1175.2	1187.2	511.82	ug/L	511.82	ppb	19:21:34
2	B 249.677†	21888.2	22281.2	497.83	ug/L	497.83	ppb	19:21:14
2	Ba 233.527†	65369.2	64714.6	502.68	ug/L	502.68	ppb	19:21:14
2	Be 313.107†	1347097.0	1337906.8	506.62	ug/L	506.62	ppb	19:21:09
2	Cd 226.502†	46182.5	45915.7	504.99	ug/L	504.99	ppb	19:21:14
2	Co 228.616†	24986.1	24809.9	503.51	ug/L	503.51	ppb	19:21:14
2	Cr 267.716†	45815.6	45271.9	502.89	ug/L	502.89	ppb	19:21:14
2	Cu 324.752†	175420.2	167238.3	498.88	ug/L	498.88	ppb	19:21:14
2	Mn 257.610†	459568.5	454476.8	498.70	ug/L	498.70	ppb	19:21:09
2	Mo 202.031†	7317.8	7222.0	504.38	ug/L	504.38	ppb	19:21:34
2	Ni 231.604†	20749.3	20471.8	506.31	ug/L	506.31	ppb	19:21:14

2	P 214.914†	4437.8	4172.5	2388.0 ug/L	2388.0 ppb	19:21:34
2	Pb 220.353†	4151.5	4171.6	506.57 ug/L	506.57 ppb	19:21:34
2	S 181.975 Axial†	773.8	722.1	1003.9 ug/L	1003.9 ppb	19:21:34
2	Sb 206.836†	1517.9	1469.1	516.15 ug/L	516.15 ppb	19:21:34
2	Se 196.026†	786.9	811.0	527.81 ug/L	527.81 ppb	19:21:34
2	Si 251.611†	81099.7	79816.3	2520.5 ug/L	2520.5 ppb	19:21:14
2	Sn 189.927†	2930.5	2899.1	505.98 ug/L	505.98 ppb	19:21:34
2	Ti 334.940†	310576.9	308760.5	494.27 ug/L	494.27 ppb	19:21:14
2	Tl 190.801†	1632.9	1650.4	501.60 ug/L	501.60 ppb	19:21:34
2	U 409.014†	15712.9	17417.4	511.04 ug/L	511.04 ppb	19:21:14
2	V 292.402†	73223.2	73840.1	507.57 ug/L	507.57 ppb	19:21:14
2	Zn 213.857†	55183.1	53998.6	502.50 ug/L	502.50 ppb	19:21:14
2	SiO2†	81529.3	80243.2	5398.6 ug/L	5398.6 ppb	19:22:16
3	Sc Radial	5290.4	5290.4	103 %		19:20:11
3	Y RADIAL	5641.3	5641.3	102.5 %		19:20:11
3	Al 396.153Radial†	6532.2	6329.1	5037.3 ug/L	5037.3 ppb	19:20:11
3	Ca 317.933Radial†	3238.0	3115.0	5028.5 ug/L	5028.5 ppb	19:20:31
3	Fe 238.204 Radial†	617.3	586.0	4997.6 ug/L	4997.6 ppb	19:20:31
3	K 766.490 Radial†	29921.3	26451.3	4810.8 ug/L	4810.8 ppb	19:20:11
3	Mg 279.077 IEC†	164.6	156.3	5191.3 ug/L	5191.3 ppb	19:20:31
3	Na 589.592 Radial†	32513.0	32780.4	9396.5 ug/L	9396.5 ppb	19:20:11
3	Sr 421.552†	77801.6	75299.6	480.72 ug/L	480.72 ppb	19:20:11
3	Sc 361.383	868991.5	868991.5	101.27 %		19:21:40
3	Y 371.029	722250.1	722250.1	99.256 %		19:21:40
3	Ag 328.068†	112534.4	110763.2	511.38 ug/L	511.38 ppb	19:21:45
3	As 188.979†	1183.5	1192.5	514.07 ug/L	514.07 ppb	19:22:05
3	B 249.677†	22119.2	22456.4	501.78 ug/L	501.78 ppb	19:21:45
3	Ba 233.527†	66028.5	65207.4	506.50 ug/L	506.50 ppb	19:21:45
3	Be 313.107†	1369631.3	1356894.8	513.80 ug/L	513.80 ppb	19:21:40
3	Cd 226.502†	46580.2	46196.5	508.10 ug/L	508.10 ppb	19:21:45
3	Co 228.616†	25274.6	25034.2	508.06 ug/L	508.06 ppb	19:21:45
3	Cr 267.716†	46204.0	45544.4	505.92 ug/L	505.92 ppb	19:21:45
3	Cu 324.752†	176643.1	168020.9	501.21 ug/L	501.21 ppb	19:21:45
3	Mn 257.610†	467168.1	460867.8	505.70 ug/L	505.70 ppb	19:21:40
3	Mo 202.031†	7356.5	7242.4	505.79 ug/L	505.79 ppb	19:22:05
3	Ni 231.604†	20967.5	20637.0	510.39 ug/L	510.39 ppb	19:21:45
3	P 214.914†	4467.3	4190.9	2398.6 ug/L	2398.6 ppb	19:22:05
3	Pb 220.353†	4154.0	4164.0	505.64 ug/L	505.64 ppb	19:22:05
3	S 181.975 Axial†	779.9	726.2	1009.6 ug/L	1009.6 ppb	19:22:05
3	Sb 206.836†	1518.8	1466.3	515.23 ug/L	515.23 ppb	19:22:05
3	Se 196.026†	788.5	810.7	527.13 ug/L	527.13 ppb	19:22:05
3	Si 251.611†	81767.5	80279.3	2535.1 ug/L	2535.1 ppb	19:21:45
3	Sn 189.927†	2941.9	2903.2	506.67 ug/L	506.67 ppb	19:22:05
3	Ti 334.940†	313010.6	310411.4	496.90 ug/L	496.90 ppb	19:21:45
3	Tl 190.801†	1640.4	1653.9	502.67 ug/L	502.67 ppb	19:22:05
3	U 409.014†	15732.4	17398.6	510.50 ug/L	510.50 ppb	19:21:45
3	V 292.402†	74043.5	74472.8	511.90 ug/L	511.90 ppb	19:21:45
3	Zn 213.857†	55755.3	54430.0	506.53 ug/L	506.53 ppb	19:21:45
3	SiO2†	80564.7	79093.3	5321.0 ug/L	5321.0 ppb	19:22:21

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	871190.0	101.53	%	0.670				0.66%
Sc Radial	5172.3	101	%	2.1				2.05%
Y 371.029	724693.4	99.592	%	0.6268				0.63%
Y RADIAL	5505.7	100.0	%	2.18				2.17%
Ag 328.068†	110207.5	508.85	ug/L	2.351	508.85	ppb	2.351	0.46%
QC value within limits for Ag 328.068 Recovery = 101.77%								
Al 396.153Radial†	6388.3	5084.8	ug/L	58.99	5084.8	ppb	58.99	1.16%
QC value within limits for Al 396.153Radial Recovery = 101.70%								
As 188.979†	1183.6	510.29	ug/L	4.736	510.29	ppb	4.736	0.93%
QC value within limits for As 188.979 Recovery = 102.06%								
B 249.677†	22294.2	498.13	ug/L	3.511	498.13	ppb	3.511	0.70%
QC value within limits for B 249.677 Recovery = 99.63%								
Ba 233.527†	64818.5	503.49	ug/L	2.704	503.49	ppb	2.704	0.54%
QC value within limits for Ba 233.527 Recovery = 100.70%								
Be 313.107†	1347715.4	510.32	ug/L	3.596	510.32	ppb	3.596	0.70%
QC value within limits for Be 313.107 Recovery = 102.06%								
Ca 317.933Radial†	3176.3	5127.3	ug/L	89.81	5127.3	ppb	89.81	1.75%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.55%
Cd 226.502†            45962.6      505.51 ug/L         2.369      505.51 ppb          2.369   0.47%
   QC value within limits for Cd 226.502  Recovery = 101.10%
Co 228.616†            24884.6      505.02 ug/L         2.635      505.02 ppb          2.635   0.52%
   QC value within limits for Co 228.616  Recovery = 101.00%
Cr 267.716†            45323.7      503.47 ug/L         2.219      503.47 ppb          2.219   0.44%
   QC value within limits for Cr 267.716  Recovery = 100.69%
Cu 324.752†           167438.2      499.48 ug/L         1.525      499.48 ppb          1.525   0.31%
   QC value within limits for Cu 324.752  Recovery = 99.90%
Fe 238.204 Radial†       598.5      5103.8 ug/L        91.98      5103.8 ppb         91.98   1.80%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.08%
K 766.490 Radial†      26743.3      4863.9 ug/L        57.13      4863.9 ppb         57.13   1.17%
   QC value within limits for K 766.490 Radial  Recovery = 97.28%
Mg 279.077 IEC†          157.4      5226.2 ug/L        32.19      5226.2 ppb         32.19   0.62%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.52%
Mn 257.610†           457933.2      502.49 ug/L         3.533      502.49 ppb          3.533   0.70%
   QC value within limits for Mn 257.610  Recovery = 100.50%
Mo 202.031†             7193.8      502.41 ug/L         4.684      502.41 ppb          4.684   0.93%
   QC value within limits for Mo 202.031  Recovery = 100.48%
Na 589.592 Radial†     33129.6      9496.6 ug/L       123.79      9496.6 ppb        123.79   1.30%
   QC value within limits for Na 589.592 Radial  Recovery = 94.97%
Ni 231.604†            20493.0      506.83 ug/L         3.333      506.83 ppb          3.333   0.66%
   QC value within limits for Ni 231.604  Recovery = 101.37%
P 214.914†              4154.8      2377.3 ug/L        28.32      2377.3 ppb         28.32   1.19%
   QC value within limits for P 214.914  Recovery = 95.09%
Pb 220.353†             4150.6      504.01 ug/L         3.648      504.01 ppb          3.648   0.72%
   QC value within limits for Pb 220.353  Recovery = 100.80%
S 181.975 Axial†         721.9      1003.7 ug/L         6.01      1003.7 ppb          6.01   0.60%
   QC value within limits for S 181.975 Axial  Recovery = 100.37%
Sb 206.836†             1459.1      512.70 ug/L         5.203      512.70 ppb          5.203   1.01%
   QC value within limits for Sb 206.836  Recovery = 102.54%
Se 196.026†              804.8      523.77 ug/L         6.421      523.77 ppb          6.421   1.23%
   QC value within limits for Se 196.026  Recovery = 104.75%
Si 251.611†            79968.0      2525.3 ug/L         8.50      2525.3 ppb          8.50   0.34%
   QC value within limits for Si 251.611  Recovery = 101.01%
Sn 189.927†             2886.5      503.77 ug/L         4.438      503.77 ppb          4.438   0.88%
   QC value within limits for Sn 189.927  Recovery = 100.75%
Sr 421.552†            76273.7      486.93 ug/L         7.557      486.93 ppb          7.557   1.55%
   QC value within limits for Sr 421.552  Recovery = 97.39%
Ti 334.940†           309281.6      495.10 ug/L         1.558      495.10 ppb          1.558   0.31%
   QC value within limits for Ti 334.940  Recovery = 99.02%
Tl 190.801†             1642.1      499.11 ug/L         5.258      499.11 ppb          5.258   1.05%
   QC value within limits for Tl 190.801  Recovery = 99.82%
U 409.014†             17404.8      510.67 ug/L         0.318      510.67 ppb          0.318   0.06%
   QC value within limits for U 409.014  Recovery = 102.13%
V 292.402†             74050.0      508.97 ug/L         2.538      508.97 ppb          2.538   0.50%
   QC value within limits for V 292.402  Recovery = 101.79%
Zn 213.857†            54091.7      503.37 ug/L         2.827      503.37 ppb          2.827   0.56%
   QC value within limits for Zn 213.857  Recovery = 100.67%
SiO2†                  79326.7      5336.8 ug/L        55.57      5336.8 ppb         55.57   1.04%
   QC value within limits for SiO2  Recovery = 99.80%
All analyte(s) passed QC.
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Sequence No.: 34
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 1/12/2010 19:24:31
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	5288.2	5288.2	103	%			19:26:22
1	Y RADIAL	5685.1	5685.1	103.3	%			19:26:22
1	Al 396.153Radial†	21.7	27.2	21.697	ug/L	21.697	ppb	19:26:22
1	Ca 317.933Radial†	15.7	-4.0	-6.5005	ug/L	-6.5005	ppb	19:26:42
1	Fe 238.204 Radial†	10.7	-1.2	-10.484	ug/L	-10.484	ppb	19:26:42
1	K 766.490 Radial†	2755.5	156.8	28.555	ug/L	28.555	ppb	19:26:22
1	Mg 279.077 IEC†	3.4	0.2	7.6917	ug/L	7.6917	ppb	19:26:42
1	Na 589.592 Radial†	-1384.5	-31.8	-9.1085	ug/L	-9.1085	ppb	19:26:22
1	Sr 421.552†	9.4	-0.7	-0.0041	ug/L	-0.0041	ppb	19:26:22
1	Sc 361.383	876915.4	876915.4	102.20	%			19:27:39
1	Y 371.029	742101.2	742101.2	101.98	%			19:27:39
1	Ag 328.068†	393.4	27.9	0.1241	ug/L	0.1241	ppb	19:27:44
1	As 188.979†	-23.8	0.7	0.2834	ug/L	0.2834	ppb	19:28:04
1	B 249.677†	-439.1	185.5	4.1645	ug/L	4.1645	ppb	19:28:04
1	Ba 233.527†	-12.4	-3.6	-0.0291	ug/L	-0.0291	ppb	19:28:04
1	Be 313.107†	-4400.3	169.0	0.0641	ug/L	0.0641	ppb	19:27:44
1	Cd 226.502†	-181.9	23.6	0.2610	ug/L	0.2610	ppb	19:28:04
1	Co 228.616†	-84.3	-5.2	-0.1046	ug/L	-0.1046	ppb	19:28:04
1	Cr 267.716†	88.3	7.4	0.0821	ug/L	0.0821	ppb	19:28:04
1	Cu 324.752†	6506.1	-36.1	-0.1074	ug/L	-0.1074	ppb	19:27:44
1	Mn 257.610†	418.9	-19.9	-0.0231	ug/L	-0.0231	ppb	19:28:04
1	Mo 202.031†	31.4	9.1	0.6316	ug/L	0.6316	ppb	19:28:04
1	Ni 231.604†	85.5	16.6	0.4116	ug/L	0.4116	ppb	19:28:04
1	P 214.914†	231.1	5.9	3.5595	ug/L	3.5595	ppb	19:28:04
1	Pb 220.353†	-60.2	3.3	0.4022	ug/L	0.4022	ppb	19:28:04
1	S 181.975 Axial†	41.6	-3.1	-4.3835	ug/L	-4.3835	ppb	19:28:04
1	Sb 206.836†	38.5	4.3	1.4712	ug/L	1.4712	ppb	19:28:04
1	Se 196.026†	-31.1	1.6	0.9791	ug/L	0.9791	ppb	19:28:04
1	Si 251.611†	583.7	110.5	3.4906	ug/L	3.4906	ppb	19:28:04
1	Sn 189.927†	6.4	4.6	0.8009	ug/L	0.8009	ppb	19:28:04
1	Ti 334.940†	-1284.0	77.8	0.1237	ug/L	0.1237	ppb	19:27:44
1	Tl 190.801†	-33.1	1.7	0.5224	ug/L	0.5224	ppb	19:28:04
1	U 409.014†	-1962.2	-56.1	-1.6516	ug/L	-1.6516	ppb	19:27:39
1	V 292.402†	-1451.0	-60.1	-0.3995	ug/L	-0.3995	ppb	19:27:44
1	Zn 213.857†	651.1	12.5	0.1157	ug/L	0.1157	ppb	19:28:04
1	SiO2†	576.3	104.9	7.0573	ug/L	7.0573	ppb	19:29:10
2	Sc Radial	5430.5	5430.5	106	%			19:26:47
2	Y RADIAL	5853.9	5853.9	106.3	%			19:26:47
2	Al 396.153Radial†	-5.8	0.7	0.5667	ug/L	0.5667	ppb	19:26:47
2	Ca 317.933Radial†	21.0	0.6	0.9086	ug/L	0.9086	ppb	19:27:07
2	Fe 238.204 Radial†	9.1	-2.9	-24.936	ug/L	-24.936	ppb	19:27:07
2	K 766.490 Radial†	2624.4	-36.7	-6.6913	ug/L	-6.6913	ppb	19:26:47
2	Mg 279.077 IEC†	4.5	1.2	40.886	ug/L	40.886	ppb	19:27:07
2	Na 589.592 Radial†	-1385.5	2.4	0.6808	ug/L	0.6808	ppb	19:26:47
2	Sr 421.552†	32.7	21.1	0.1347	ug/L	0.1347	ppb	19:26:47
2	Sc 361.383	851960.2	851960.2	99.288	%			19:28:09
2	Y 371.029	720197.8	720197.8	98.974	%			19:28:09
2	Ag 328.068†	266.9	-88.2	-0.4078	ug/L	-0.4078	ppb	19:28:14
2	As 188.979†	-28.5	-4.7	-2.0343	ug/L	-2.0343	ppb	19:28:35
2	B 249.677†	-457.6	154.2	3.4654	ug/L	3.4654	ppb	19:28:35
2	Ba 233.527†	-1.6	7.0	0.0530	ug/L	0.0530	ppb	19:28:35
2	Be 313.107†	-4484.8	-42.3	-0.0160	ug/L	-0.0160	ppb	19:28:14
2	Cd 226.502†	-198.8	1.4	0.0170	ug/L	0.0170	ppb	19:28:35
2	Co 228.616†	-73.9	2.9	0.0583	ug/L	0.0583	ppb	19:28:35
2	Cr 267.716†	79.7	1.3	0.0167	ug/L	0.0167	ppb	19:28:35
2	Cu 324.752†	6345.5	-11.4	-0.0317	ug/L	-0.0317	ppb	19:28:14
2	Mn 257.610†	423.1	-3.7	-0.0082	ug/L	-0.0082	ppb	19:28:35
2	Mo 202.031†	21.9	0.5	0.0305	ug/L	0.0305	ppb	19:28:35
2	Ni 231.604†	83.7	17.3	0.4287	ug/L	0.4287	ppb	19:28:35

2	P 214.914†	230.4	11.7	7.0888	ug/L	7.0888 ppb	19:28:35
2	Pb 220.353†	-61.2	0.5	0.0683	ug/L	0.0683 ppb	19:28:35
2	S 181.975 Axial†	44.2	0.6	0.8677	ug/L	0.8677 ppb	19:28:35
2	Sb 206.836†	35.1	1.9	0.6590	ug/L	0.6590 ppb	19:28:35
2	Se 196.026†	-33.4	-1.6	-1.1102	ug/L	-1.1102 ppb	19:28:35
2	Si 251.611†	583.1	126.7	4.0092	ug/L	4.0092 ppb	19:28:35
2	Sn 189.927†	5.7	4.1	0.7137	ug/L	0.7137 ppb	19:28:35
2	Ti 334.940†	-1322.7	2.0	0.0028	ug/L	0.0028 ppb	19:28:14
2	Tl 190.801†	-24.3	9.6	2.9006	ug/L	2.9006 ppb	19:28:35
2	U 409.014†	-2069.4	-220.4	-6.4856	ug/L	-6.4856 ppb	19:28:09
2	V 292.402†	-1361.0	-11.0	-0.0816	ug/L	-0.0816 ppb	19:28:14
2	Zn 213.857†	663.9	44.0	0.4126	ug/L	0.4126 ppb	19:28:35
2	SiO2†	556.9	101.9	6.8727	ug/L	6.8727 ppb	19:29:15
3	Sc Radial	5233.0	5233.0	102	%		19:27:12
3	Y RADIAL	5586.1	5586.1	101.5	%		19:27:12
3	Al 396.153Radial†	-10.4	-4.0	-3.1371	ug/L	-3.1371 ppb	19:27:12
3	Ca 317.933Radial†	15.6	-3.9	-6.3607	ug/L	-6.3607 ppb	19:27:33
3	Fe 238.204 Radial†	10.3	-1.5	-12.746	ug/L	-12.746 ppb	19:27:33
3	K 766.490 Radial†	2730.6	160.6	29.252	ug/L	29.252 ppb	19:27:12
3	Mg 279.077 IEC†	2.7	-0.4	-14.042	ug/L	-14.042 ppb	19:27:33
3	Na 589.592 Radial†	-1321.2	16.0	4.5893	ug/L	4.5893 ppb	19:27:12
3	Sr 421.552†	11.8	1.8	0.0113	ug/L	0.0113 ppb	19:27:12
3	Sc 361.383	872586.7	872586.7	101.69	%		19:28:40
3	Y 371.029	737786.8	737786.8	101.39	%		19:28:40
3	Ag 328.068†	315.9	-46.5	-0.2155	ug/L	-0.2155 ppb	19:28:45
3	As 188.979†	-24.5	-0.1	-0.0564	ug/L	-0.0564 ppb	19:29:05
3	B 249.677†	-456.7	166.1	3.7292	ug/L	3.7292 ppb	19:29:05
3	Ba 233.527†	-10.5	-1.7	-0.0130	ug/L	-0.0130 ppb	19:29:05
3	Be 313.107†	-4540.9	9.3	0.0036	ug/L	0.0036 ppb	19:28:45
3	Cd 226.502†	-188.0	16.8	0.1864	ug/L	0.1864 ppb	19:29:05
3	Co 228.616†	-79.9	-1.3	-0.0278	ug/L	-0.0278 ppb	19:29:05
3	Cr 267.716†	88.9	8.4	0.0936	ug/L	0.0936 ppb	19:29:05
3	Cu 324.752†	6374.1	-134.4	-0.4017	ug/L	-0.4017 ppb	19:28:45
3	Mn 257.610†	428.7	-8.3	-0.0097	ug/L	-0.0097 ppb	19:29:05
3	Mo 202.031†	10.3	-11.5	-0.8022	ug/L	-0.8022 ppb	19:29:05
3	Ni 231.604†	74.7	6.5	0.1599	ug/L	0.1599 ppb	19:29:05
3	P 214.914†	236.4	12.1	7.3834	ug/L	7.3834 ppb	19:29:05
3	Pb 220.353†	-48.0	15.0	1.8164	ug/L	1.8164 ppb	19:29:05
3	S 181.975 Axial†	48.5	3.8	5.3058	ug/L	5.3058 ppb	19:29:05
3	Sb 206.836†	44.4	10.2	3.4571	ug/L	3.4571 ppb	19:29:05
3	Se 196.026†	-33.1	-0.5	-0.3470	ug/L	-0.3470 ppb	19:29:05
3	Si 251.611†	574.1	103.9	3.2977	ug/L	3.2977 ppb	19:29:05
3	Sn 189.927†	3.0	1.3	0.2268	ug/L	0.2268 ppb	19:29:05
3	Ti 334.940†	-1342.3	14.2	0.0229	ug/L	0.0229 ppb	19:28:45
3	Tl 190.801†	-37.4	-2.7	-0.8087	ug/L	-0.8087 ppb	19:29:05
3	U 409.014†	-1887.0	8.3	0.2455	ug/L	0.2455 ppb	19:28:40
3	V 292.402†	-1323.0	58.7	0.3882	ug/L	0.3882 ppb	19:28:45
3	Zn 213.857†	641.3	6.0	0.0572	ug/L	0.0572 ppb	19:29:05
3	SiO2†	607.6	138.5	9.3610	ug/L	9.3610 ppb	19:29:20

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	867154.1	101.06	%	1.554				1.54%
Sc Radial	5317.2	104	%	2.0				1.92%
Y 371.029	733361.9	100.78	%	1.595				1.58%
Y RADIAL	5708.4	103.7	%	2.46				2.37%
Ag 328.068†	-35.6	-0.1664	ug/L	0.26937	-0.1664	ppb	0.26937	161.87%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	8.0	6.3756	ug/L	13.39754	6.3756	ppb	13.39754	210.14%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.4	-0.6024	ug/L	1.25161	-0.6024	ppb	1.25161	207.77%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	168.6	3.7864	ug/L	0.35306	3.7864	ppb	0.35306	9.32%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.5	0.0037	ug/L	0.04349	0.0037	ppb	0.04349	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	45.3	0.0172	ug/L	0.04176	0.0172	ppb	0.04176	242.30%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-2.5	-3.9842	ug/L	4.23789	-3.9842	ppb	4.23789	106.37%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              13.9      0.1548 ug/L       0.12503      0.1548 ppb        0.12503  80.78%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -1.2     -0.0247 ug/L       0.08148     -0.0247 ppb        0.08148 329.75%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               5.7      0.0641 ug/L       0.04151      0.0641 ppb        0.04151  64.74%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -60.6     -0.1803 ug/L       0.19551     -0.1803 ppb        0.19551 108.46%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -1.9     -16.055 ug/L        7.7735     -16.055 ppb         7.7735  48.42%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        93.6      17.039 ug/L       20.5538      17.039 ppb        20.5538 120.63%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.3      11.512 ug/L       27.6628      11.512 ppb        27.6628 240.30%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             -10.6     -0.0137 ug/L       0.00823     -0.0137 ppb        0.00823  60.19%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -0.7     -0.0467 ug/L       0.72002     -0.0467 ppb        0.72002 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -4.5     -1.2795 ug/L       7.05613     -1.2795 ppb        7.05613 551.48%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              13.5      0.3334 ug/L       0.15051      0.3334 ppb        0.15051  45.15%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                9.9      6.0106 ug/L       2.12781      6.0106 ppb        2.12781  35.40%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               6.3      0.7623 ug/L       0.92802      0.7623 ppb        0.92802 121.74%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          0.4      0.5967 ug/L       4.85033      0.5967 ppb        4.85033 812.86%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               5.5      1.8624 ug/L       1.43949      1.8624 ppb        1.43949  77.29%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -0.2     -0.1594 ug/L       1.05724     -0.1594 ppb        1.05724 663.43%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             113.7      3.5992 ug/L       0.36799      3.5992 ppb        0.36799  10.22%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               3.3      0.5805 ug/L       0.30935      0.5805 ppb        0.30935  53.29%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               7.4      0.0473 ug/L       0.07611      0.0473 ppb        0.07611 160.95%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              31.3      0.0498 ug/L       0.06480      0.0498 ppb        0.06480 130.07%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               2.9      0.8715 ug/L       1.87913      0.8715 ppb        1.87913 215.63%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -89.4     -2.6306 ug/L       3.47073     -2.6306 ppb        3.47073 131.94%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -4.1     -0.0310 ug/L       0.39632     -0.0310 ppb        0.39632 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              20.8      0.1952 ug/L       0.19056      0.1952 ppb        0.19056  97.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   115.1      7.7636 ug/L       1.38638      7.7636 ppb        1.38638  17.86%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 43
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 1/12/2010 20:26:43
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	5253.4	5253.4	103	%			20:28:35
1	Y RADIAL	5636.4	5636.4	102.4	%			20:28:35
1	Al 396.153Radial†	6513.8	6355.6	5059.2	ug/L	5059.2	ppb	20:28:35
1	Ca 317.933Radial†	3246.9	3145.8	5078.1	ug/L	5078.1	ppb	20:28:55
1	Fe 238.204 Radial†	617.5	590.4	5034.1	ug/L	5034.1	ppb	20:28:55
1	K 766.490 Radial†	29599.3	26341.1	4790.7	ug/L	4790.7	ppb	20:28:35
1	Mg 279.077 IEC†	161.2	154.0	5115.3	ug/L	5115.3	ppb	20:28:55
1	Na 589.592 Radial†	32469.6	32959.4	9447.8	ug/L	9447.8	ppb	20:28:35
1	Sr 421.552†	77929.3	75953.8	484.89	ug/L	484.89	ppb	20:28:35
1	Sc 361.383	884973.6	884973.6	103.14	%			20:29:55
1	Y 371.029	737090.5	737090.5	101.30	%			20:29:55
1	Ag 328.068†	112014.7	108252.5	499.86	ug/L	499.86	ppb	20:29:55
1	As 188.979†	1162.8	1151.4	496.54	ug/L	496.54	ppb	20:30:15
1	B 249.677†	21943.5	21891.6	489.16	ug/L	489.16	ppb	20:29:55
1	Ba 233.527†	65733.7	63744.0	495.14	ug/L	495.14	ppb	20:29:55
1	Be 313.107†	1370707.7	1333514.6	504.96	ug/L	504.96	ppb	20:29:55
1	Cd 226.502†	46402.1	45193.1	497.03	ug/L	497.03	ppb	20:29:55
1	Co 228.616†	24566.0	23896.4	484.94	ug/L	484.94	ppb	20:30:15
1	Cr 267.716†	46108.4	44627.8	495.75	ug/L	495.75	ppb	20:29:55
1	Cu 324.752†	177436.0	165639.8	494.13	ug/L	494.13	ppb	20:29:55
1	Mn 257.610†	465149.7	450579.9	494.42	ug/L	494.42	ppb	20:29:55
1	Mo 202.031†	7303.6	7060.0	493.07	ug/L	493.07	ppb	20:30:15
1	Ni 231.604†	20435.7	19747.4	488.39	ug/L	488.39	ppb	20:30:15
1	P 214.914†	4426.5	4071.6	2328.6	ug/L	2328.6	ppb	20:30:15
1	Pb 220.353†	4142.3	4078.6	495.28	ug/L	495.28	ppb	20:30:15
1	S 181.975 Axial†	762.5	695.5	966.91	ug/L	966.91	ppb	20:30:15
1	Sb 206.836†	1492.1	1413.4	496.75	ug/L	496.75	ppb	20:30:15
1	Se 196.026†	772.2	780.7	508.35	ug/L	508.35	ppb	20:30:15
1	Si 251.611†	81401.0	78465.9	2477.9	ug/L	2477.9	ppb	20:29:55
1	Sn 189.927†	2906.7	2816.7	491.60	ug/L	491.60	ppb	20:30:15
1	Ti 334.940†	319054.3	310689.6	497.38	ug/L	497.38	ppb	20:29:55
1	Tl 190.801†	1628.6	1613.1	490.44	ug/L	490.44	ppb	20:30:15
1	U 409.014†	14746.4	16162.0	474.11	ug/L	474.11	ppb	20:29:55
1	V 292.402†	73716.7	72835.5	500.54	ug/L	500.54	ppb	20:29:55
1	Zn 213.857†	55442.0	53132.0	494.50	ug/L	494.50	ppb	20:29:55
1	SiO2†	80088.5	77194.8	5193.3	ug/L	5193.3	ppb	20:31:15
2	Sc Radial	5265.3	5265.3	103	%			20:29:01
2	Y RADIAL	5606.7	5606.7	101.8	%			20:29:01
2	Al 396.153Radial†	6512.4	6340.0	5046.2	ug/L	5046.2	ppb	20:29:01
2	Ca 317.933Radial†	3251.4	3143.1	5073.7	ug/L	5073.7	ppb	20:29:21
2	Fe 238.204 Radial†	623.5	594.8	5072.3	ug/L	5072.3	ppb	20:29:21
2	K 766.490 Radial†	29656.8	26332.0	4789.0	ug/L	4789.0	ppb	20:29:01
2	Mg 279.077 IEC†	164.1	156.5	5198.2	ug/L	5198.2	ppb	20:29:21
2	Na 589.592 Radial†	32641.8	33055.5	9475.4	ug/L	9475.4	ppb	20:29:01
2	Sr 421.552†	77950.3	75803.0	483.93	ug/L	483.93	ppb	20:29:01
2	Sc 361.383	882060.8	882060.8	102.80	%			20:30:22
2	Y 371.029	736236.6	736236.6	101.18	%			20:30:22
2	Ag 328.068†	112140.3	108733.4	502.08	ug/L	502.08	ppb	20:30:22
2	As 188.979†	1179.0	1170.9	504.86	ug/L	504.86	ppb	20:30:42
2	B 249.677†	22021.7	22037.9	492.41	ug/L	492.41	ppb	20:30:22
2	Ba 233.527†	65808.6	64027.4	497.34	ug/L	497.34	ppb	20:30:22
2	Be 313.107†	1375502.1	1342567.5	508.39	ug/L	508.39	ppb	20:30:22
2	Cd 226.502†	46559.9	45495.3	500.36	ug/L	500.36	ppb	20:30:22
2	Co 228.616†	24949.3	24348.0	494.12	ug/L	494.12	ppb	20:30:42
2	Cr 267.716†	46190.2	44855.0	498.27	ug/L	498.27	ppb	20:30:22
2	Cu 324.752†	177321.1	166096.1	495.49	ug/L	495.49	ppb	20:30:22
2	Mn 257.610†	466194.0	453085.2	497.17	ug/L	497.17	ppb	20:30:22
2	Mo 202.031†	7414.5	7191.2	502.23	ug/L	502.23	ppb	20:30:42
2	Ni 231.604†	20742.9	20111.8	497.40	ug/L	497.40	ppb	20:30:42

2	P 214.914†	4463.1	4121.4	2358.2 ug/L	2358.2 ppb	20:30:42
2	Pb 220.353†	4187.6	4135.9	502.23 ug/L	502.23 ppb	20:30:42
2	S 181.975 Axial†	789.6	724.2	1006.9 ug/L	1006.9 ppb	20:30:42
2	Sb 206.836†	1530.0	1455.0	511.21 ug/L	511.21 ppb	20:30:42
2	Se 196.026†	788.3	798.9	519.94 ug/L	519.94 ppb	20:30:42
2	Si 251.611†	81502.2	78824.9	2489.1 ug/L	2489.1 ppb	20:30:22
2	Sn 189.927†	2956.3	2874.3	501.63 ug/L	501.63 ppb	20:30:42
2	Ti 334.940†	319600.6	312242.6	499.85 ug/L	499.85 ppb	20:30:22
2	Tl 190.801†	1645.6	1634.9	497.01 ug/L	497.01 ppb	20:30:42
2	U 409.014†	14954.8	16411.9	481.46 ug/L	481.46 ppb	20:30:22
2	V 292.402†	73903.7	73253.5	503.52 ug/L	503.52 ppb	20:30:22
2	Zn 213.857†	55496.2	53362.3	496.59 ug/L	496.59 ppb	20:30:22
2	SiO2†	81765.0	79082.2	5320.3 ug/L	5320.3 ppb	20:31:20
3	Sc Radial	5264.4	5264.4	103 %		20:29:26
3	Y RADIAL	5600.3	5600.3	101.7 %		20:29:26
3	Al 396.153Radial†	6506.1	6335.0	5042.3 ug/L	5042.3 ppb	20:29:26
3	Ca 317.933Radial†	3231.8	3124.5	5043.8 ug/L	5043.8 ppb	20:29:46
3	Fe 238.204 Radial†	620.7	592.2	5050.2 ug/L	5050.2 ppb	20:29:46
3	K 766.490 Radial†	29624.2	26305.5	4784.2 ug/L	4784.2 ppb	20:29:26
3	Mg 279.077 IEC†	163.9	156.4	5192.6 ug/L	5192.6 ppb	20:29:46
3	Na 589.592 Radial†	32834.3	33248.4	9530.7 ug/L	9530.7 ppb	20:29:26
3	Sr 421.552†	78218.8	76077.6	485.68 ug/L	485.68 ppb	20:29:26
3	Sc 361.383	879291.1	879291.1	102.47 %		20:30:49
3	Y 371.029	731803.1	731803.1	100.57 %		20:30:49
3	Ag 328.068†	112155.4	109091.7	503.72 ug/L	503.72 ppb	20:30:49
3	As 188.979†	1173.2	1168.8	504.02 ug/L	504.02 ppb	20:31:10
3	B 249.677†	22134.9	22215.8	496.42 ug/L	496.42 ppb	20:30:49
3	Ba 233.527†	66129.8	64542.5	501.34 ug/L	501.34 ppb	20:30:49
3	Be 313.107†	1375554.7	1346833.7	510.01 ug/L	510.01 ppb	20:30:49
3	Cd 226.502†	46745.6	45819.2	503.92 ug/L	503.92 ppb	20:30:49
3	Co 228.616†	24778.0	24257.3	492.27 ug/L	492.27 ppb	20:31:10
3	Cr 267.716†	46288.6	45092.6	500.91 ug/L	500.91 ppb	20:30:49
3	Cu 324.752†	177433.5	166749.2	497.44 ug/L	497.44 ppb	20:30:49
3	Mn 257.610†	467707.8	455991.0	500.36 ug/L	500.36 ppb	20:30:49
3	Mo 202.031†	7348.7	7149.7	499.33 ug/L	499.33 ppb	20:31:10
3	Ni 231.604†	20579.3	20015.7	495.03 ug/L	495.03 ppb	20:31:10
3	P 214.914†	4421.6	4094.6	2341.6 ug/L	2341.6 ppb	20:31:10
3	Pb 220.353†	4173.4	4134.9	502.10 ug/L	502.10 ppb	20:31:10
3	S 181.975 Axial†	771.0	708.5	985.03 ug/L	985.03 ppb	20:31:10
3	Sb 206.836†	1517.2	1447.2	508.46 ug/L	508.46 ppb	20:31:10
3	Se 196.026†	775.3	788.6	513.38 ug/L	513.38 ppb	20:31:10
3	Si 251.611†	81617.1	79186.8	2500.6 ug/L	2500.6 ppb	20:30:49
3	Sn 189.927†	2933.3	2860.8	499.28 ug/L	499.28 ppb	20:31:10
3	Ti 334.940†	319938.0	313551.2	501.95 ug/L	501.95 ppb	20:30:49
3	Tl 190.801†	1652.9	1647.1	500.72 ug/L	500.72 ppb	20:31:10
3	U 409.014†	14863.0	16368.2	480.17 ug/L	480.17 ppb	20:30:49
3	V 292.402†	73906.3	73482.5	505.02 ug/L	505.02 ppb	20:30:49
3	Zn 213.857†	55879.4	53906.2	501.72 ug/L	501.72 ppb	20:30:49
3	SiO2†	81963.6	79526.6	5350.4 ug/L	5350.4 ppb	20:31:25

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	882108.5	102.80	%	0.331				0.32%
Sc Radial	5261.0	103	%	0.1				0.13%
Y 371.029	735043.4	101.01	%	0.390				0.39%
Y RADIAL	5614.5	102.0	%	0.35				0.34%
Ag 328.068†	108692.5	501.89	ug/L	1.942	501.89	ppb	1.942	0.39%
QC value within limits for Ag 328.068 Recovery = 100.38%								
Al 396.153Radial†	6343.5	5049.2	ug/L	8.81	5049.2	ppb	8.81	0.17%
QC value within limits for Al 396.153Radial Recovery = 100.98%								
As 188.979†	1163.7	501.81	ug/L	4.581	501.81	ppb	4.581	0.91%
QC value within limits for As 188.979 Recovery = 100.36%								
B 249.677†	22048.4	492.66	ug/L	3.633	492.66	ppb	3.633	0.74%
QC value within limits for B 249.677 Recovery = 98.53%								
Ba 233.527†	64104.6	497.94	ug/L	3.141	497.94	ppb	3.141	0.63%
QC value within limits for Ba 233.527 Recovery = 99.59%								
Be 313.107†	1340971.9	507.79	ug/L	2.575	507.79	ppb	2.575	0.51%
QC value within limits for Be 313.107 Recovery = 101.56%								
Ca 317.933Radial†	3137.8	5065.2	ug/L	18.67	5065.2	ppb	18.67	0.37%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.30%
Cd 226.502†            45502.5      500.44 ug/L         3.446      500.44 ppb          3.446   0.69%
   QC value within limits for Cd 226.502  Recovery = 100.09%
Co 228.616†            24167.2      490.44 ug/L         4.854      490.44 ppb          4.854   0.99%
   QC value within limits for Co 228.616  Recovery = 98.09%
Cr 267.716†            44858.5      498.31 ug/L         2.581      498.31 ppb          2.581   0.52%
   QC value within limits for Cr 267.716  Recovery = 99.66%
Cu 324.752†           166161.7      495.68 ug/L         1.662      495.68 ppb          1.662   0.34%
   QC value within limits for Cu 324.752  Recovery = 99.14%
Fe 238.204 Radial†       592.5      5052.2 ug/L         19.19      5052.2 ppb          19.19   0.38%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.04%
K 766.490 Radial†      26326.2      4788.0 ug/L          3.39      4788.0 ppb           3.39   0.07%
   QC value within limits for K 766.490 Radial  Recovery = 95.76%
Mg 279.077 IEC†          155.7      5168.7 ug/L         46.30      5168.7 ppb          46.30   0.90%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.37%
Mn 257.610†           453218.7      497.32 ug/L         2.969      497.32 ppb          2.969   0.60%
   QC value within limits for Mn 257.610  Recovery = 99.46%
Mo 202.031†             7133.6      498.21 ug/L         4.682      498.21 ppb          4.682   0.94%
   QC value within limits for Mo 202.031  Recovery = 99.64%
Na 589.592 Radial†     33087.8      9484.6 ug/L         42.19      9484.6 ppb          42.19   0.44%
   QC value within limits for Na 589.592 Radial  Recovery = 94.85%
Ni 231.604†            19958.3      493.61 ug/L         4.670      493.61 ppb          4.670   0.95%
   QC value within limits for Ni 231.604  Recovery = 98.72%
P 214.914†              4095.9      2342.8 ug/L         14.84      2342.8 ppb          14.84   0.63%
   QC value within limits for P 214.914  Recovery = 93.71%
Pb 220.353†             4116.5      499.87 ug/L         3.980      499.87 ppb          3.980   0.80%
   QC value within limits for Pb 220.353  Recovery = 99.97%
S 181.975 Axial†         709.4      986.28 ug/L        20.032      986.28 ppb         20.032   2.03%
   QC value within limits for S 181.975 Axial  Recovery = 98.63%
Sb 206.836†             1438.5      505.47 ug/L         7.681      505.47 ppb          7.681   1.52%
   QC value within limits for Sb 206.836  Recovery = 101.09%
Se 196.026†              789.4      513.89 ug/L         5.811      513.89 ppb          5.811   1.13%
   QC value within limits for Se 196.026  Recovery = 102.78%
Si 251.611†            78825.9      2489.2 ug/L         11.37      2489.2 ppb          11.37   0.46%
   QC value within limits for Si 251.611  Recovery = 99.57%
Sn 189.927†             2850.6      497.50 ug/L         5.247      497.50 ppb          5.247   1.05%
   QC value within limits for Sn 189.927  Recovery = 99.50%
Sr 421.552†            75944.8      484.83 ug/L         0.878      484.83 ppb          0.878   0.18%
   QC value within limits for Sr 421.552  Recovery = 96.97%
Ti 334.940†           312161.1      499.73 ug/L         2.286      499.73 ppb          2.286   0.46%
   QC value within limits for Ti 334.940  Recovery = 99.95%
Tl 190.801†             1631.7      496.06 ug/L         5.205      496.06 ppb          5.205   1.05%
   QC value within limits for Tl 190.801  Recovery = 99.21%
U 409.014†             16314.0      478.58 ug/L         3.923      478.58 ppb          3.923   0.82%
   QC value within limits for U 409.014  Recovery = 95.72%
V 292.402†             73190.5      503.03 ug/L         2.281      503.03 ppb          2.281   0.45%
   QC value within limits for V 292.402  Recovery = 100.61%
Zn 213.857†            53466.8      497.60 ug/L         3.714      497.60 ppb          3.714   0.75%
   QC value within limits for Zn 213.857  Recovery = 99.52%
SiO2†                  78601.2      5288.0 ug/L         83.39      5288.0 ppb          83.39   1.58%
   QC value within limits for SiO2  Recovery = 98.89%
All analyte(s) passed QC.
```

Sequence No.: 44
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 1/12/2010 20:33:35
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	5260.7	5260.7	103	%			20:35:27
1	Y RADIAL	5627.0	5627.0	102.2	%			20:35:27
1	Al 396.153Radial†	-6.1	0.3	0.1942	ug/L	0.1942	ppb	20:35:27
1	Ca 317.933Radial†	15.3	-4.3	-6.9450	ug/L	-6.9450	ppb	20:35:47
1	Fe 238.204 Radial†	10.4	-1.4	-12.313	ug/L	-12.313	ppb	20:35:47
1	K 766.490 Radial†	2633.0	51.5	9.3887	ug/L	9.3887	ppb	20:35:27
1	Mg 279.077 IEC†	0.4	-2.7	-89.220	ug/L	-89.220	ppb	20:35:47
1	Na 589.592 Radial†	-1441.8	-94.6	-27.108	ug/L	-27.108	ppb	20:35:27
1	Sr 421.552†	1.3	-8.5	-0.0544	ug/L	-0.0544	ppb	20:35:27
1	Sc 361.383	843099.2	843099.2	98.255	%			20:36:44
1	Y 371.029	715967.2	715967.2	98.393	%			20:36:44
1	Ag 328.068†	242.4	-110.3	-0.5061	ug/L	-0.5061	ppb	20:36:44
1	As 188.979†	-18.0	5.6	2.3958	ug/L	2.3958	ppb	20:37:04
1	B 249.677†	-430.2	177.2	3.9800	ug/L	3.9800	ppb	20:37:04
1	Ba 233.527†	-11.3	-2.9	-0.0232	ug/L	-0.0232	ppb	20:37:04
1	Be 313.107†	-4300.6	97.6	0.0368	ug/L	0.0368	ppb	20:36:44
1	Cd 226.502†	-191.1	7.2	0.0793	ug/L	0.0793	ppb	20:37:04
1	Co 228.616†	-77.5	-1.6	-0.0319	ug/L	-0.0319	ppb	20:37:04
1	Cr 267.716†	88.1	10.7	0.1205	ug/L	0.1205	ppb	20:37:04
1	Cu 324.752†	6392.2	103.3	0.3105	ug/L	0.3105	ppb	20:36:44
1	Mn 257.610†	418.2	-4.1	-0.0021	ug/L	-0.0021	ppb	20:37:04
1	Mo 202.031†	23.2	2.0	0.1353	ug/L	0.1353	ppb	20:37:04
1	Ni 231.604†	82.1	16.5	0.4091	ug/L	0.4091	ppb	20:37:04
1	P 214.914†	225.9	9.6	5.7128	ug/L	5.7128	ppb	20:37:04
1	Pb 220.353†	-60.1	1.0	0.1230	ug/L	0.1230	ppb	20:37:04
1	S 181.975 Axial†	42.1	-1.0	-1.3978	ug/L	-1.3978	ppb	20:37:04
1	Sb 206.836†	35.5	2.7	0.9031	ug/L	0.9031	ppb	20:37:04
1	Se 196.026†	-31.1	0.4	0.2267	ug/L	0.2267	ppb	20:37:04
1	Si 251.611†	511.6	60.1	1.8995	ug/L	1.8995	ppb	20:37:04
1	Sn 189.927†	1.6	-0.0	-0.0072	ug/L	-0.0072	ppb	20:37:04
1	Ti 334.940†	-1325.6	-15.0	-0.0153	ug/L	-0.0153	ppb	20:36:44
1	Tl 190.801†	-25.6	8.0	2.4276	ug/L	2.4276	ppb	20:37:04
1	U 409.014†	-2006.1	-177.9	-5.2358	ug/L	-5.2358	ppb	20:36:44
1	V 292.402†	-1355.1	-19.4	-0.1393	ug/L	-0.1393	ppb	20:36:44
1	Zn 213.857†	666.6	53.8	0.5033	ug/L	0.5033	ppb	20:37:04
1	SiO2†	507.1	57.0	3.8435	ug/L	3.8435	ppb	20:38:00
2	Sc Radial	5291.7	5291.7	103	%			20:35:52
2	Y RADIAL	5670.3	5670.3	103.0	%			20:35:52
2	Al 396.153Radial†	-6.6	-0.2	-0.1499	ug/L	-0.1499	ppb	20:35:52
2	Ca 317.933Radial†	19.5	-0.4	-0.6024	ug/L	-0.6024	ppb	20:36:12
2	Fe 238.204 Radial†	10.7	-1.2	-9.7877	ug/L	-9.7877	ppb	20:36:12
2	K 766.490 Radial†	2582.6	-12.2	-2.2156	ug/L	-2.2156	ppb	20:35:52
2	Mg 279.077 IEC†	1.2	-1.9	-62.310	ug/L	-62.310	ppb	20:36:12
2	Na 589.592 Radial†	-1458.3	-102.4	-29.339	ug/L	-29.339	ppb	20:35:52
2	Sr 421.552†	-5.1	-14.7	-0.0940	ug/L	-0.0940	ppb	20:35:52
2	Sc 361.383	855743.9	855743.9	99.729	%			20:37:09
2	Y 371.029	726211.7	726211.7	99.800	%			20:37:09
2	Ag 328.068†	342.0	-14.2	-0.0656	ug/L	-0.0656	ppb	20:37:09
2	As 188.979†	-31.2	-7.4	-3.1505	ug/L	-3.1505	ppb	20:37:29
2	B 249.677†	-446.8	167.1	3.7521	ug/L	3.7521	ppb	20:37:29
2	Ba 233.527†	-3.4	5.2	0.0395	ug/L	0.0395	ppb	20:37:29
2	Be 313.107†	-4301.0	161.9	0.0608	ug/L	0.0608	ppb	20:37:09
2	Cd 226.502†	-183.9	17.3	0.1905	ug/L	0.1905	ppb	20:37:29
2	Co 228.616†	-77.2	-0.1	-0.0020	ug/L	-0.0020	ppb	20:37:29
2	Cr 267.716†	70.8	-8.0	-0.0872	ug/L	-0.0872	ppb	20:37:29
2	Cu 324.752†	6454.1	69.3	0.2085	ug/L	0.2085	ppb	20:37:09
2	Mn 257.610†	430.0	1.3	0.0030	ug/L	0.0030	ppb	20:37:29
2	Mo 202.031†	22.9	1.4	0.0955	ug/L	0.0955	ppb	20:37:29
2	Ni 231.604†	79.2	12.4	0.3057	ug/L	0.3057	ppb	20:37:29

2	P 214.914†	218.4	-1.3	-0.8269 ug/L	-0.8269 ppb	20:37:29
2	Pb 220.353†	-63.4	-1.4	-0.1650 ug/L	-0.1650 ppb	20:37:29
2	S 181.975 Axial†	51.8	8.0	11.160 ug/L	11.160 ppb	20:37:29
2	Sb 206.836†	44.3	11.0	3.7420 ug/L	3.7420 ppb	20:37:29
2	Se 196.026†	-23.7	8.3	5.1999 ug/L	5.1999 ppb	20:37:29
2	Si 251.611†	524.2	65.0	2.0562 ug/L	2.0562 ppb	20:37:29
2	Sn 189.927†	-0.5	-2.1	-0.3724 ug/L	-0.3724 ppb	20:37:29
2	Ti 334.940†	-1430.9	-100.6	-0.1542 ug/L	-0.1542 ppb	20:37:09
2	Tl 190.801†	-25.2	8.8	2.6458 ug/L	2.6458 ppb	20:37:29
2	U 409.014†	-2002.8	-144.4	-4.2493 ug/L	-4.2493 ppb	20:37:09
2	V 292.402†	-1388.4	-32.5	-0.2264 ug/L	-0.2264 ppb	20:37:09
2	Zn 213.857†	657.8	35.0	0.3271 ug/L	0.3271 ppb	20:37:29
2	SiO2†	539.8	82.2	5.5418 ug/L	5.5418 ppb	20:38:05
3	Sc Radial	5225.5	5225.5	102 %		20:36:17
3	Y RADIAL	5596.5	5596.5	101.7 %		20:36:17
3	Al 396.153Radial†	-6.9	-0.6	-0.4419 ug/L	-0.4419 ppb	20:36:17
3	Ca 317.933Radial†	15.9	-3.6	-5.8524 ug/L	-5.8524 ppb	20:36:37
3	Fe 238.204 Radial†	10.6	-1.2	-10.300 ug/L	-10.300 ppb	20:36:37
3	K 766.490 Radial†	2753.4	186.8	34.028 ug/L	34.028 ppb	20:36:17
3	Mg 279.077 IEC†	2.3	-0.8	-26.708 ug/L	-26.708 ppb	20:36:37
3	Na 589.592 Radial†	-1370.9	-34.6	-9.9073 ug/L	-9.9073 ppb	20:36:17
3	Sr 421.552†	9.9	-0.1	-0.0003 ug/L	-0.0003 ppb	20:36:17
3	Sc 361.383	851527.2	851527.2	99.237 %		20:37:34
3	Y 371.029	722573.1	722573.1	99.300 %		20:37:34
3	Ag 328.068†	321.8	-32.8	-0.1495 ug/L	-0.1495 ppb	20:37:34
3	As 188.979†	-16.3	7.5	3.2151 ug/L	3.2151 ppb	20:37:54
3	B 249.677†	-479.9	131.6	2.9542 ug/L	2.9542 ppb	20:37:54
3	Ba 233.527†	-15.0	-6.6	-0.0522 ug/L	-0.0522 ppb	20:37:54
3	Be 313.107†	-4283.0	158.8	0.0602 ug/L	0.0602 ppb	20:37:34
3	Cd 226.502†	-199.9	0.3	0.0024 ug/L	0.0024 ppb	20:37:54
3	Co 228.616†	-68.2	8.5	0.1715 ug/L	0.1715 ppb	20:37:54
3	Cr 267.716†	97.6	19.4	0.2175 ug/L	0.2175 ppb	20:37:54
3	Cu 324.752†	6347.8	-5.8	-0.0139 ug/L	-0.0139 ppb	20:37:34
3	Mn 257.610†	405.0	-21.7	-0.0238 ug/L	-0.0238 ppb	20:37:54
3	Mo 202.031†	14.5	-7.0	-0.4919 ug/L	-0.4919 ppb	20:37:54
3	Ni 231.604†	64.6	-1.9	-0.0469 ug/L	-0.0469 ppb	20:37:54
3	P 214.914†	214.4	-4.2	-2.5260 ug/L	-2.5260 ppb	20:37:54
3	Pb 220.353†	-63.1	-1.4	-0.1730 ug/L	-0.1730 ppb	20:37:54
3	S 181.975 Axial†	40.5	-3.0	-4.2412 ug/L	-4.2412 ppb	20:37:54
3	Sb 206.836†	42.7	9.6	3.2557 ug/L	3.2557 ppb	20:37:54
3	Se 196.026†	-23.1	8.7	5.4584 ug/L	5.4584 ppb	20:37:54
3	Si 251.611†	502.4	45.6	1.4493 ug/L	1.4493 ppb	20:37:54
3	Sn 189.927†	6.7	5.1	0.8859 ug/L	0.8859 ppb	20:37:54
3	Ti 334.940†	-1268.2	56.2	0.0945 ug/L	0.0945 ppb	20:37:34
3	Tl 190.801†	-36.0	-2.2	-0.6637 ug/L	-0.6637 ppb	20:37:54
3	U 409.014†	-2100.0	-252.3	-7.4265 ug/L	-7.4265 ppb	20:37:34
3	V 292.402†	-1415.6	-66.8	-0.4731 ug/L	-0.4731 ppb	20:37:34
3	Zn 213.857†	646.4	26.7	0.2521 ug/L	0.2521 ppb	20:37:54
3	SiO2†	492.2	36.9	2.5041 ug/L	2.5041 ppb	20:38:10

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	850123.4	99.074	%	0.7503				0.76%
Sc Radial	5259.3	103	%	0.6				0.63%
Y 371.029	721584.0	99.164	%	0.7137				0.72%
Y RADIAL	5631.3	102.3	%	0.67				0.66%
Ag 328.068†	-52.4	-0.2404	ug/L	0.23391	-0.2404	ppb	0.23391	97.29%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-0.2	-0.1325	ug/L	0.31837	-0.1325	ppb	0.31837	240.21%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.9	0.8201	ug/L	3.46302	0.8201	ppb	3.46302	422.25%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	158.6	3.5621	ug/L	0.53866	3.5621	ppb	0.53866	15.12%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.4	-0.0120	ug/L	0.04689	-0.0120	ppb	0.04689	391.27%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	139.4	0.0526	ug/L	0.01366	0.0526	ppb	0.01366	25.97%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-2.8	-4.4666	ug/L	3.39082	-4.4666	ppb	3.39082	75.92%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 8.2      0.0907 ug/L       0.09457      0.0907 ppb        0.09457 104.24%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 2.3      0.0459 ug/L       0.10984      0.0459 ppb        0.10984 239.35%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 7.4      0.0836 ug/L       0.15567      0.0836 ppb        0.15567 186.20%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                55.6      0.1684 ug/L       0.16586      0.1684 ppb        0.16586  98.50%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.3     -10.800 ug/L        1.3350     -10.800 ppb         1.3350  12.36%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          75.4      13.734 ug/L       18.5085      13.734 ppb        18.5085 134.77%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.8     -59.413 ug/L       31.3570     -59.413 ppb        31.3570  52.78%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                -8.2     -0.0076 ug/L       0.01422     -0.0076 ppb        0.01422 186.48%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -1.2     -0.0871 ug/L       0.35119     -0.0871 ppb        0.35119 403.40%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -77.2     -22.118 ug/L       10.6335     -22.118 ppb        10.6335  48.08%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 9.0      0.2226 ug/L       0.23908      0.2226 ppb        0.23908 107.39%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  1.4      0.7866 ug/L       4.34995      0.7866 ppb        4.34995 553.00%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -0.6     -0.0717 ug/L       0.16862     -0.0717 ppb        0.16862 235.25%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            1.3      1.8404 ug/L       8.19551      1.8404 ppb        8.19551 445.31%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 7.8      2.6336 ug/L       1.51823      2.6336 ppb        1.51823  57.65%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 5.8      3.6283 ug/L       2.94872      3.6283 ppb        2.94872  81.27%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                56.9      1.8017 ug/L       0.31507      1.8017 ppb        0.31507  17.49%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.0      0.1688 ug/L       0.64732      0.1688 ppb        0.64732 383.55%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -7.8     -0.0496 ug/L       0.04703     -0.0496 ppb        0.04703  94.92%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -19.8     -0.0250 ug/L       0.12463     -0.0250 ppb        0.12463 498.35%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.9      1.4699 ug/L       1.85099      1.4699 ppb        1.85099 125.93%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -191.5     -5.6372 ug/L       1.62622     -5.6372 ppb        1.62622  28.85%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -39.6     -0.2796 ug/L       0.17318     -0.2796 ppb        0.17318  61.94%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                38.5      0.3609 ug/L       0.12896      0.3609 ppb        0.12896  35.74%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      58.7      3.9631 ug/L       1.52234      3.9631 ppb        1.52234  38.41%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 54
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 1/12/2010 21:43:45
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	5257.5	5257.5	103	%			21:45:38
1	Y RADIAL	5561.1	5561.1	101.0	%			21:45:38
1	Al 396.153Radial†	6648.3	6481.8	5159.6	ug/L	5159.6	ppb	21:45:38
1	Ca 317.933Radial†	3291.5	3186.8	5144.3	ug/L	5144.3	ppb	21:45:58
1	Fe 238.204 Radial†	636.7	608.6	5190.1	ug/L	5190.1	ppb	21:45:58
1	K 766.490 Radial†	30383.1	27082.2	4925.5	ug/L	4925.5	ppb	21:45:38
1	Mg 279.077 IEC†	165.7	158.3	5257.9	ug/L	5257.9	ppb	21:45:58
1	Na 589.592 Radial†	34022.5	34447.5	9874.4	ug/L	9874.4	ppb	21:45:38
1	Sr 421.552†	80208.1	78114.6	498.69	ug/L	498.69	ppb	21:45:38
1	Sc 361.383	879029.5	879029.5	102.44	%			21:46:55
1	Y 371.029	732253.9	732253.9	100.63	%			21:46:55
1	Ag 328.068†	112625.8	109583.5	506.02	ug/L	506.02	ppb	21:47:00
1	As 188.979†	1197.2	1192.6	514.09	ug/L	514.09	ppb	21:47:20
1	B 249.677†	22161.7	22248.4	497.10	ug/L	497.10	ppb	21:47:00
1	Ba 233.527†	66092.9	64525.7	501.22	ug/L	501.22	ppb	21:47:00
1	Be 313.107†	1384069.5	1355545.0	513.27	ug/L	513.27	ppb	21:46:55
1	Cd 226.502†	46858.2	45942.6	505.28	ug/L	505.28	ppb	21:47:00
1	Co 228.616†	25267.0	24741.9	502.13	ug/L	502.13	ppb	21:47:00
1	Cr 267.716†	46438.8	45252.7	502.68	ug/L	502.68	ppb	21:47:00
1	Cu 324.752†	176614.7	166001.4	495.20	ug/L	495.20	ppb	21:47:00
1	Mn 257.610†	470806.1	459151.3	503.83	ug/L	503.83	ppb	21:46:55
1	Mo 202.031†	7392.7	7194.8	502.49	ug/L	502.49	ppb	21:47:20
1	Ni 231.604†	20993.3	20425.8	505.17	ug/L	505.17	ppb	21:47:00
1	P 214.914†	4499.4	4171.8	2388.5	ug/L	2388.5	ppb	21:47:20
1	Pb 220.353†	4174.8	4137.5	502.44	ug/L	502.44	ppb	21:47:20
1	S 181.975 Axial†	781.4	718.9	999.45	ug/L	999.45	ppb	21:47:20
1	Sb 206.836†	1519.0	1449.4	509.41	ug/L	509.41	ppb	21:47:20
1	Se 196.026†	794.3	807.4	525.64	ug/L	525.64	ppb	21:47:20
1	Si 251.611†	81989.0	79573.6	2512.8	ug/L	2512.8	ppb	21:47:00
1	Sn 189.927†	2961.8	2889.5	504.30	ug/L	504.30	ppb	21:47:20
1	Ti 334.940†	312954.5	306827.1	491.18	ug/L	491.18	ppb	21:47:00
1	Tl 190.801†	1668.3	1662.6	505.28	ug/L	505.28	ppb	21:47:20
1	U 409.014†	15463.9	16959.1	497.54	ug/L	497.54	ppb	21:47:00
1	V 292.402†	74341.2	73928.5	508.12	ug/L	508.12	ppb	21:47:00
1	Zn 213.857†	55834.2	53878.4	501.38	ug/L	501.38	ppb	21:47:00
1	SiO2†	81639.0	79233.5	5330.5	ug/L	5330.5	ppb	21:48:28
2	Sc Radial	5296.4	5296.4	103	%			21:46:03
2	Y RADIAL	5631.3	5631.3	102.3	%			21:46:03
2	Al 396.153Radial†	6712.3	6496.1	5170.6	ug/L	5170.6	ppb	21:46:03
2	Ca 317.933Radial†	3261.7	3134.5	5059.8	ug/L	5059.8	ppb	21:46:23
2	Fe 238.204 Radial†	633.5	601.0	5125.5	ug/L	5125.5	ppb	21:46:23
2	K 766.490 Radial†	30527.7	27004.7	4911.4	ug/L	4911.4	ppb	21:46:03
2	Mg 279.077 IEC†	166.9	158.3	5256.6	ug/L	5256.6	ppb	21:46:23
2	Na 589.592 Radial†	34100.1	34279.1	9826.1	ug/L	9826.1	ppb	21:46:03
2	Sr 421.552†	80742.9	78057.9	498.33	ug/L	498.33	ppb	21:46:03
2	Sc 361.383	864977.3	864977.3	100.80	%			21:47:26
2	Y 371.029	721286.8	721286.8	99.124	%			21:47:26
2	Ag 328.068†	112435.7	111181.0	513.35	ug/L	513.35	ppb	21:47:31
2	As 188.979†	1197.1	1211.5	522.21	ug/L	522.21	ppb	21:47:51
2	B 249.677†	21977.2	22416.9	500.87	ug/L	500.87	ppb	21:47:31
2	Ba 233.527†	65806.7	65289.9	507.15	ug/L	507.15	ppb	21:47:31
2	Be 313.107†	1361160.8	1354768.3	512.99	ug/L	512.99	ppb	21:47:26
2	Cd 226.502†	46582.0	46411.7	510.45	ug/L	510.45	ppb	21:47:31
2	Co 228.616†	25231.7	25107.5	509.55	ug/L	509.55	ppb	21:47:31
2	Cr 267.716†	46302.5	45853.9	509.36	ug/L	509.36	ppb	21:47:31
2	Cu 324.752†	176056.1	168248.1	501.90	ug/L	501.90	ppb	21:47:31
2	Mn 257.610†	463024.0	458897.5	503.55	ug/L	503.55	ppb	21:47:26
2	Mo 202.031†	7400.4	7319.6	511.19	ug/L	511.19	ppb	21:47:51
2	Ni 231.604†	20862.3	20628.7	510.19	ug/L	510.19	ppb	21:47:31

2	P 214.914†	4496.0	4239.7	2427.8 ug/L	2427.8 ppb	21:47:51
2	Pb 220.353†	4202.4	4231.0	513.78 ug/L	513.78 ppb	21:47:51
2	S 181.975 Axial†	788.6	738.4	1026.6 ug/L	1026.6 ppb	21:47:51
2	Sb 206.836†	1547.8	1502.0	527.58 ug/L	527.58 ppb	21:47:51
2	Se 196.026†	795.8	821.5	534.34 ug/L	534.34 ppb	21:47:51
2	Si 251.611†	81591.2	80479.2	2541.4 ug/L	2541.4 ppb	21:47:31
2	Sn 189.927†	2975.0	2949.6	514.76 ug/L	514.76 ppb	21:47:51
2	Ti 334.940†	312285.1	311126.0	498.04 ug/L	498.04 ppb	21:47:31
2	Tl 190.801†	1656.5	1677.4	509.74 ug/L	509.74 ppb	21:47:51
2	U 409.014†	15471.9	17212.3	504.99 ug/L	504.99 ppb	21:47:31
2	V 292.402†	74143.4	74911.1	514.92 ug/L	514.92 ppb	21:47:31
2	Zn 213.857†	55677.4	54608.3	508.20 ug/L	508.20 ppb	21:47:31
2	SiO2†	82792.3	81672.3	5494.8 ug/L	5494.8 ppb	21:48:33
3	Sc Radial	5202.1	5202.1	102 %		21:46:28
3	Y RADIAL	5556.9	5556.9	100.9 %		21:46:28
3	Al 396.153Radial†	6591.8	6495.1	5170.3 ug/L	5170.3 ppb	21:46:28
3	Ca 317.933Radial†	3277.1	3206.8	5176.5 ug/L	5176.5 ppb	21:46:48
3	Fe 238.204 Radial†	632.7	611.3	5212.9 ug/L	5212.9 ppb	21:46:48
3	K 766.490 Radial†	30147.9	27166.1	4940.8 ug/L	4940.8 ppb	21:46:28
3	Mg 279.077 IEC†	165.4	159.8	5306.3 ug/L	5306.3 ppb	21:46:48
3	Na 589.592 Radial†	33579.6	34364.7	9850.7 ug/L	9850.7 ppb	21:46:28
3	Sr 421.552†	79464.7	78215.4	499.33 ug/L	499.33 ppb	21:46:28
3	Sc 361.383	879418.9	879418.9	102.49 %		21:47:57
3	Y 371.029	732975.4	732975.4	100.73 %		21:47:57
3	Ag 328.068†	113080.1	109978.1	507.84 ug/L	507.84 ppb	21:48:02
3	As 188.979†	1186.9	1182.0	509.60 ug/L	509.60 ppb	21:48:22
3	B 249.677†	22340.6	22413.4	500.80 ug/L	500.80 ppb	21:48:02
3	Ba 233.527†	66137.8	64540.9	501.34 ug/L	501.34 ppb	21:48:02
3	Be 313.107†	1383855.3	1354737.7	512.97 ug/L	512.97 ppb	21:47:57
3	Cd 226.502†	46769.5	45835.8	504.10 ug/L	504.10 ppb	21:48:02
3	Co 228.616†	25304.8	24767.8	502.65 ug/L	502.65 ppb	21:48:02
3	Cr 267.716†	46437.0	45230.8	502.44 ug/L	502.44 ppb	21:48:02
3	Cu 324.752†	177777.3	167059.5	498.36 ug/L	498.36 ppb	21:48:02
3	Mn 257.610†	469746.1	457913.4	502.48 ug/L	502.48 ppb	21:47:57
3	Mo 202.031†	7400.0	7198.8	502.77 ug/L	502.77 ppb	21:48:22
3	Ni 231.604†	20985.2	20408.7	504.75 ug/L	504.75 ppb	21:48:02
3	P 214.914†	4481.4	4152.3	2376.0 ug/L	2376.0 ppb	21:48:22
3	Pb 220.353†	4213.7	4173.6	506.81 ug/L	506.81 ppb	21:48:22
3	S 181.975 Axial†	786.6	723.6	1006.1 ug/L	1006.1 ppb	21:48:22
3	Sb 206.836†	1538.7	1467.9	515.68 ug/L	515.68 ppb	21:48:22
3	Se 196.026†	794.7	807.4	525.71 ug/L	525.71 ppb	21:48:22
3	Si 251.611†	82404.8	79943.9	2524.5 ug/L	2524.5 ppb	21:48:02
3	Sn 189.927†	2962.0	2888.4	504.12 ug/L	504.12 ppb	21:48:22
3	Ti 334.940†	314009.2	307721.0	492.61 ug/L	492.61 ppb	21:48:02
3	Tl 190.801†	1661.0	1654.8	502.92 ug/L	502.92 ppb	21:48:22
3	U 409.014†	15614.4	17099.3	501.67 ug/L	501.67 ppb	21:48:02
3	V 292.402†	74351.5	73906.4	507.98 ug/L	507.98 ppb	21:48:02
3	Zn 213.857†	55951.5	53968.7	502.22 ug/L	502.22 ppb	21:48:02
3	SiO2†	80753.9	78334.6	5269.9 ug/L	5269.9 ppb	21:48:38

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	874475.2	101.91	%	0.959				0.94%
Sc Radial	5252.0	103	%	0.9				0.90%
Y 371.029	728838.7	100.16	%	0.900				0.90%
Y RADIAL	5583.1	101.4	%	0.76				0.75%
Ag 328.068†	110247.5	509.07	ug/L	3.818	509.07	ppb	3.818	0.75%
QC value within limits for Ag 328.068 Recovery = 101.81%								
Al 396.153Radial†	6491.0	5166.8	ug/L	6.25	5166.8	ppb	6.25	0.12%
QC value within limits for Al 396.153Radial Recovery = 103.34%								
As 188.979†	1195.4	515.30	ug/L	6.393	515.30	ppb	6.393	1.24%
QC value within limits for As 188.979 Recovery = 103.06%								
B 249.677†	22359.6	499.59	ug/L	2.157	499.59	ppb	2.157	0.43%
QC value within limits for B 249.677 Recovery = 99.92%								
Ba 233.527†	64785.5	503.24	ug/L	3.392	503.24	ppb	3.392	0.67%
QC value within limits for Ba 233.527 Recovery = 100.65%								
Be 313.107†	1355017.0	513.08	ug/L	0.168	513.08	ppb	0.168	0.03%
QC value within limits for Be 313.107 Recovery = 102.62%								
Ca 317.933Radial†	3176.0	5126.9	ug/L	60.27	5126.9	ppb	60.27	1.18%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.54%
Cd 226.502†            46063.4      506.61 ug/L        3.377      506.61 ppb        3.377   0.67%
   QC value within limits for Cd 226.502  Recovery = 101.32%
Co 228.616†            24872.4      504.78 ug/L        4.144      504.78 ppb        4.144   0.82%
   QC value within limits for Co 228.616  Recovery = 100.96%
Cr 267.716†            45445.8      504.83 ug/L        3.927      504.83 ppb        3.927   0.78%
   QC value within limits for Cr 267.716  Recovery = 100.97%
Cu 324.752†           167103.0      498.49 ug/L        3.349      498.49 ppb        3.349   0.67%
   QC value within limits for Cu 324.752  Recovery = 99.70%
Fe 238.204 Radial†       607.0      5176.1 ug/L       45.35      5176.1 ppb       45.35   0.88%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.52%
K 766.490 Radial†      27084.3      4925.9 ug/L       14.68      4925.9 ppb       14.68   0.30%
   QC value within limits for K 766.490 Radial  Recovery = 98.52%
Mg 279.077 IEC†          158.8      5273.6 ug/L       28.37      5273.6 ppb       28.37   0.54%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.47%
Mn 257.610†           458654.1      503.29 ug/L        0.716      503.29 ppb        0.716   0.14%
   QC value within limits for Mn 257.610  Recovery = 100.66%
Mo 202.031†             7237.7      505.48 ug/L        4.947      505.48 ppb        4.947   0.98%
   QC value within limits for Mo 202.031  Recovery = 101.10%
Na 589.592 Radial†     34363.8      9850.4 ug/L       24.14      9850.4 ppb       24.14   0.25%
   QC value within limits for Na 589.592 Radial  Recovery = 98.50%
Ni 231.604†            20487.8      506.70 ug/L        3.026      506.70 ppb        3.026   0.60%
   QC value within limits for Ni 231.604  Recovery = 101.34%
P 214.914†              4188.0      2397.4 ug/L       27.04      2397.4 ppb       27.04   1.13%
   QC value within limits for P 214.914  Recovery = 95.90%
Pb 220.353†             4180.7      507.68 ug/L        5.720      507.68 ppb        5.720   1.13%
   QC value within limits for Pb 220.353  Recovery = 101.54%
S 181.975 Axial†         727.0      1010.7 ug/L       14.18      1010.7 ppb       14.18   1.40%
   QC value within limits for S 181.975 Axial  Recovery = 101.07%
Sb 206.836†             1473.1      517.56 ug/L        9.233      517.56 ppb        9.233   1.78%
   QC value within limits for Sb 206.836  Recovery = 103.51%
Se 196.026†              812.1      528.56 ug/L        5.003      528.56 ppb        5.003   0.95%
   QC value within limits for Se 196.026  Recovery = 105.71%
Si 251.611†            79998.9      2526.3 ug/L       14.36      2526.3 ppb       14.36   0.57%
   QC value within limits for Si 251.611  Recovery = 101.05%
Sn 189.927†             2909.2      507.72 ug/L        6.089      507.72 ppb        6.089   1.20%
   QC value within limits for Sn 189.927  Recovery = 101.54%
Sr 421.552†            78129.3      498.78 ug/L        0.509      498.78 ppb        0.509   0.10%
   QC value within limits for Sr 421.552  Recovery = 99.76%
Ti 334.940†           308558.0      493.94 ug/L        3.623      493.94 ppb        3.623   0.73%
   QC value within limits for Ti 334.940  Recovery = 98.79%
Tl 190.801†             1664.9      505.98 ug/L        3.465      505.98 ppb        3.465   0.68%
   QC value within limits for Tl 190.801  Recovery = 101.20%
U 409.014†             17090.2      501.40 ug/L        3.729      501.40 ppb        3.729   0.74%
   QC value within limits for U 409.014  Recovery = 100.28%
V 292.402†             74248.7      510.34 ug/L        3.971      510.34 ppb        3.971   0.78%
   QC value within limits for V 292.402  Recovery = 102.07%
Zn 213.857†            54151.8      503.93 ug/L        3.716      503.93 ppb        3.716   0.74%
   QC value within limits for Zn 213.857  Recovery = 100.79%
SiO2†                  79746.8      5365.0 ug/L      116.36      5365.0 ppb      116.36   2.17%
   QC value within limits for SiO2  Recovery = 100.33%
All analyte(s) passed QC.
```

Sequence No.: 55
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 1/12/2010 21:50:48
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	5818.9	5818.9	114	%			21:52:39
1	Y RADIAL	6224.2	6224.2	113.1	%			21:52:39
1	Al 396.153Radial†	-11.9	-4.3	-3.4614	ug/L	-3.4614	ppb	21:52:39
1	Ca 317.933Radial†	22.1	0.2	0.3272	ug/L	0.3272	ppb	21:52:59
1	Fe 238.204 Radial†	7.8	-4.7	-39.965	ug/L	-39.965	ppb	21:52:59
1	K 766.490 Radial†	2946.4	81.4	14.821	ug/L	14.821	ppb	21:52:39
1	Mg 279.077 IEC†	4.7	1.1	36.955	ug/L	36.955	ppb	21:52:59
1	Na 589.592 Radial†	-1418.4	60.6	17.376	ug/L	17.376	ppb	21:52:39
1	Sr 421.552†	4.6	-5.7	-0.0363	ug/L	-0.0363	ppb	21:52:39
1	Sc 361.383	881581.2	881581.2	102.74	%			21:53:56
1	Y 371.029	747066.1	747066.1	102.67	%			21:53:56
1	Ag 328.068†	310.4	-54.9	-0.2598	ug/L	-0.2598	ppb	21:53:56
1	As 188.979†	-19.2	5.2	2.2331	ug/L	2.2331	ppb	21:54:16
1	B 249.677†	-420.2	206.1	4.6326	ug/L	4.6326	ppb	21:54:16
1	Ba 233.527†	-3.5	5.2	0.0396	ug/L	0.0396	ppb	21:54:16
1	Be 313.107†	-4322.3	267.6	0.1015	ug/L	0.1015	ppb	21:53:56
1	Cd 226.502†	-187.3	19.4	0.2162	ug/L	0.2162	ppb	21:54:16
1	Co 228.616†	-87.0	-7.4	-0.1509	ug/L	-0.1509	ppb	21:54:16
1	Cr 267.716†	80.7	-0.4	-0.0030	ug/L	-0.0030	ppb	21:54:16
1	Cu 324.752†	6354.8	-217.0	-0.6469	ug/L	-0.6469	ppb	21:53:56
1	Mn 257.610†	453.3	11.4	0.0071	ug/L	0.0071	ppb	21:54:16
1	Mo 202.031†	22.1	-0.1	-0.0104	ug/L	-0.0104	ppb	21:54:16
1	Ni 231.604†	75.2	6.1	0.1517	ug/L	0.1517	ppb	21:54:16
1	P 214.914†	219.8	-6.3	-3.6074	ug/L	-3.6074	ppb	21:54:16
1	Pb 220.353†	-56.0	7.7	0.9337	ug/L	0.9337	ppb	21:54:16
1	S 181.975 Axial†	41.3	-3.7	-5.0845	ug/L	-5.0845	ppb	21:54:16
1	Sb 206.836†	48.2	13.5	4.5807	ug/L	4.5807	ppb	21:54:16
1	Se 196.026†	-36.0	-3.0	-2.0002	ug/L	-2.0002	ppb	21:54:16
1	Si 251.611†	563.7	88.0	2.7865	ug/L	2.7865	ppb	21:54:16
1	Sn 189.927†	6.1	4.2	0.7387	ug/L	0.7387	ppb	21:54:16
1	Ti 334.940†	-1254.8	112.8	0.1798	ug/L	0.1798	ppb	21:53:56
1	Tl 190.801†	-32.8	2.2	0.6558	ug/L	0.6558	ppb	21:54:16
1	U 409.014†	-2082.0	-162.6	-4.7816	ug/L	-4.7816	ppb	21:53:56
1	V 292.402†	-1356.7	39.2	0.2634	ug/L	0.2634	ppb	21:53:56
1	Zn 213.857†	660.0	17.7	0.1699	ug/L	0.1699	ppb	21:54:16
1	SiO2†	563.5	89.5	6.0355	ug/L	6.0355	ppb	21:55:12
2	Sc Radial	5277.1	5277.1	103	%			21:53:04
2	Y RADIAL	5648.1	5648.1	102.6	%			21:53:04
2	Al 396.153Radial†	23.4	28.9	23.070	ug/L	23.070	ppb	21:53:04
2	Ca 317.933Radial†	21.6	1.8	2.8633	ug/L	2.8633	ppb	21:53:24
2	Fe 238.204 Radial†	9.6	-2.2	-18.901	ug/L	-18.901	ppb	21:53:24
2	K 766.490 Radial†	2825.2	230.0	41.897	ug/L	41.897	ppb	21:53:04
2	Mg 279.077 IEC†	-1.7	-4.7	-156.81	ug/L	-156.81	ppb	21:53:24
2	Na 589.592 Radial†	-1442.1	-90.6	-25.957	ug/L	-25.957	ppb	21:53:04
2	Sr 421.552†	-18.6	-27.8	-0.1774	ug/L	-0.1774	ppb	21:53:04
2	Sc 361.383	872194.2	872194.2	101.65	%			21:54:21
2	Y 371.029	739541.7	739541.7	101.63	%			21:54:21
2	Ag 328.068†	332.0	-30.4	-0.1407	ug/L	-0.1407	ppb	21:54:21
2	As 188.979†	-30.2	-5.8	-2.4685	ug/L	-2.4685	ppb	21:54:41
2	B 249.677†	-408.8	212.9	4.7812	ug/L	4.7812	ppb	21:54:41
2	Ba 233.527†	-23.6	-14.6	-0.1135	ug/L	-0.1135	ppb	21:54:41
2	Be 313.107†	-4387.2	158.4	0.0599	ug/L	0.0599	ppb	21:54:21
2	Cd 226.502†	-191.1	13.7	0.1512	ug/L	0.1512	ppb	21:54:41
2	Co 228.616†	-66.3	12.0	0.2440	ug/L	0.2440	ppb	21:54:41
2	Cr 267.716†	58.5	-21.4	-0.2355	ug/L	-0.2355	ppb	21:54:41
2	Cu 324.752†	6342.8	-162.3	-0.4827	ug/L	-0.4827	ppb	21:54:21
2	Mn 257.610†	451.6	14.5	0.0204	ug/L	0.0204	ppb	21:54:41
2	Mo 202.031†	25.1	3.1	0.2140	ug/L	0.2140	ppb	21:54:41
2	Ni 231.604†	64.2	-3.9	-0.0957	ug/L	-0.0957	ppb	21:54:41

2	P 214.914†	234.5	10.4	6.3486 ug/L	6.3486 ppb	21:54:41
2	Pb 220.353†	-68.6	-5.3	-0.6329 ug/L	-0.6329 ppb	21:54:41
2	S 181.975 Axial†	42.5	-2.1	-2.9003 ug/L	-2.9003 ppb	21:54:41
2	Sb 206.836†	34.3	0.3	0.0921 ug/L	0.0921 ppb	21:54:41
2	Se 196.026†	-27.9	4.6	2.8306 ug/L	2.8306 ppb	21:54:41
2	Si 251.611†	554.0	84.4	2.6676 ug/L	2.6676 ppb	21:54:41
2	Sn 189.927†	-2.7	-4.3	-0.7526 ug/L	-0.7526 ppb	21:54:41
2	Ti 334.940†	-1357.4	-1.3	0.0132 ug/L	0.0132 ppb	21:54:21
2	Tl 190.801†	-35.7	-1.1	-0.3225 ug/L	-0.3225 ppb	21:54:41
2	U 409.014†	-2053.5	-156.3	-4.5999 ug/L	-4.5999 ppb	21:54:21
2	V 292.402†	-1343.9	37.6	0.2495 ug/L	0.2495 ppb	21:54:21
2	Zn 213.857†	656.0	20.7	0.1977 ug/L	0.1977 ppb	21:54:41
2	SiO2†	572.1	103.8	6.9944 ug/L	6.9944 ppb	21:55:17
3	Sc Radial	5319.5	5319.5	104 %		21:53:29
3	Y RADIAL	5702.0	5702.0	103.6 %		21:53:29
3	Al 396.153Radial†	15.1	20.7	16.579 ug/L	16.579 ppb	21:53:29
3	Ca 317.933Radial†	14.3	-5.5	-8.8704 ug/L	-8.8704 ppb	21:53:49
3	Fe 238.204 Radial†	9.8	-2.1	-17.855 ug/L	-17.855 ppb	21:53:49
3	K 766.490 Radial†	2899.9	280.1	51.016 ug/L	51.016 ppb	21:53:29
3	Mg 279.077 IEC†	2.7	-0.4	-14.926 ug/L	-14.926 ppb	21:53:49
3	Na 589.592 Radial†	-1406.6	-45.2	-12.945 ug/L	-12.945 ppb	21:53:29
3	Sr 421.552†	-7.8	-17.2	-0.1101 ug/L	-0.1101 ppb	21:53:29
3	Sc 361.383	869534.2	869534.2	101.34 %		21:54:47
3	Y 371.029	736544.1	736544.1	101.22 %		21:54:47
3	Ag 328.068†	286.4	-74.4	-0.3439 ug/L	-0.3439 ppb	21:54:47
3	As 188.979†	-20.7	3.5	1.4909 ug/L	1.4909 ppb	21:55:07
3	B 249.677†	-398.0	222.3	4.9935 ug/L	4.9935 ppb	21:55:07
3	Ba 233.527†	-4.4	4.2	0.0318 ug/L	0.0318 ppb	21:55:07
3	Be 313.107†	-4348.2	183.8	0.0691 ug/L	0.0691 ppb	21:54:47
3	Cd 226.502†	-188.1	16.0	0.1771 ug/L	0.1771 ppb	21:55:07
3	Co 228.616†	-84.6	-6.3	-0.1274 ug/L	-0.1274 ppb	21:55:07
3	Cr 267.716†	80.1	0.1	0.0027 ug/L	0.0027 ppb	21:55:07
3	Cu 324.752†	6298.7	-186.8	-0.5553 ug/L	-0.5553 ppb	21:54:47
3	Mn 257.610†	457.6	21.8	0.0227 ug/L	0.0227 ppb	21:55:07
3	Mo 202.031†	17.7	-4.2	-0.2953 ug/L	-0.2953 ppb	21:55:07
3	Ni 231.604†	47.1	-20.5	-0.5073 ug/L	-0.5073 ppb	21:55:07
3	P 214.914†	224.4	1.2	0.8692 ug/L	0.8692 ppb	21:55:07
3	Pb 220.353†	-72.5	-9.3	-1.1234 ug/L	-1.1234 ppb	21:55:07
3	S 181.975 Axial†	44.7	0.2	0.3400 ug/L	0.3400 ppb	21:55:07
3	Sb 206.836†	38.0	4.1	1.4070 ug/L	1.4070 ppb	21:55:07
3	Se 196.026†	-35.8	-3.3	-2.1462 ug/L	-2.1462 ppb	21:55:07
3	Si 251.611†	567.6	99.4	3.1507 ug/L	3.1507 ppb	21:55:07
3	Sn 189.927†	12.6	10.8	1.8752 ug/L	1.8752 ppb	21:55:07
3	Ti 334.940†	-1439.1	-86.0	-0.1355 ug/L	-0.1355 ppb	21:54:47
3	Tl 190.801†	-32.9	1.6	0.4875 ug/L	0.4875 ppb	21:55:07
3	U 409.014†	-2061.1	-170.0	-5.0030 ug/L	-5.0030 ppb	21:54:47
3	V 292.402†	-1410.9	-32.5	-0.2317 ug/L	-0.2317 ppb	21:54:47
3	Zn 213.857†	653.7	20.5	0.1979 ug/L	0.1979 ppb	21:55:07
3	SiO2†	546.1	79.9	5.3944 ug/L	5.3944 ppb	21:55:22

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	874436.5	101.91	%	0.738				0.72%
Sc Radial	5471.9	107	%	5.9				5.51%
Y 371.029	741050.7	101.84	%	0.745				0.73%
Y RADIAL	5858.1	106.4	%	5.78				5.43%
Ag 328.068†	-53.3	-0.2481	ug/L	0.10214	-0.2481	ppb	0.10214	41.16%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	15.1	12.063	ug/L	13.8303	12.063	ppb	13.8303	114.65%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.0	0.4185	ug/L	2.52758	0.4185	ppb	2.52758	603.98%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	213.8	4.8024	ug/L	0.18139	4.8024	ppb	0.18139	3.78%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.7	-0.0140	ug/L	0.08621	-0.0140	ppb	0.08621	614.71%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	203.3	0.0768	ug/L	0.02188	0.0768	ppb	0.02188	28.48%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.2	-1.8933	ug/L	6.17397	-1.8933	ppb	6.17397	326.10%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              16.4      0.1815 ug/L       0.03274      0.1815 ppb        0.03274  18.04%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -0.6     -0.0114 ug/L       0.22150     -0.0114 ppb        0.22150 >999.9%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -7.2     -0.0786 ug/L       0.13591     -0.0786 ppb        0.13591 172.94%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -188.7     -0.5616 ug/L       0.08230     -0.5616 ppb        0.08230  14.65%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -3.0     -25.574 ug/L       12.4743     -25.574 ppb        12.4743  48.78%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       197.2      35.911 ug/L       18.8253      35.911 ppb        18.8253  52.42%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -1.4     -44.926 ug/L      100.3040     -44.926 ppb       100.3040 223.27%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              15.9      0.0167 ug/L       0.00846      0.0167 ppb        0.00846  50.53%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -0.4     -0.0306 ug/L       0.25525     -0.0306 ppb        0.25525 834.19%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -25.0     -7.1754 ug/L      22.23534     -7.1754 ppb       22.23534 309.88%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -6.1     -0.1504 ug/L       0.33290     -0.1504 ppb        0.33290 221.31%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                1.7      1.2035 ug/L       4.98642      1.2035 ppb        4.98642 414.34%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -2.3     -0.2742 ug/L       1.07446     -0.2742 ppb        1.07446 391.85%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -1.8     -2.5483 ug/L       2.72929     -2.5483 ppb        2.72929 107.10%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               5.9      2.0266 ug/L       2.30751      2.0266 ppb        2.30751 113.86%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -0.6     -0.4386 ug/L       2.83216     -0.4386 ppb        2.83216 645.75%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              90.6      2.8683 ug/L       0.25170      2.8683 ppb        0.25170   8.78%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               3.6      0.6204 ug/L       1.31785      0.6204 ppb        1.31785 212.41%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -16.9     -0.1079 ug/L       0.07055     -0.1079 ppb        0.07055  65.36%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               8.5      0.0192 ug/L       0.15774      0.0192 ppb        0.15774 822.37%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               0.9      0.2736 ug/L       0.52306      0.2736 ppb        0.52306 191.17%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             -163.0     -4.7948 ug/L       0.20187     -4.7948 ppb        0.20187   4.21%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               14.8      0.0937 ug/L       0.28192      0.0937 ppb        0.28192 300.76%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              19.6      0.1885 ug/L       0.01609      0.1885 ppb        0.01609   8.54%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    91.0      6.1414 ug/L       0.80522      6.1414 ppb        0.80522  13.11%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 64
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 1/12/2010 22:54:42
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	5313.2	5313.2	104	%			22:56:34
1	Y RADIAL	5662.8	5662.8	102.9	%			22:56:34
1	Al 396.153Radial†	6703.3	6466.9	5147.7	ug/L	5147.7	ppb	22:56:34
1	Ca 317.933Radial†	3271.4	3133.8	5058.8	ug/L	5058.8	ppb	22:56:54
1	Fe 238.204 Radial†	627.7	593.5	5061.1	ug/L	5061.1	ppb	22:56:54
1	K 766.490 Radial†	30863.2	27234.9	4953.4	ug/L	4953.4	ppb	22:56:34
1	Mg 279.077 IEC†	164.0	155.0	5148.6	ug/L	5148.6	ppb	22:56:54
1	Na 589.592 Radial†	33258.6	33364.0	9563.8	ug/L	9563.8	ppb	22:56:34
1	Sr 421.552†	79908.7	77007.2	491.62	ug/L	491.62	ppb	22:56:34
1	Sc 361.383	873191.9	873191.9	101.76	%			22:57:51
1	Y 371.029	728427.5	728427.5	100.10	%			22:57:51
1	Ag 328.068†	112129.4	109830.6	507.11	ug/L	507.11	ppb	22:57:56
1	As 188.979†	1174.0	1177.6	507.66	ug/L	507.66	ppb	22:58:17
1	B 249.677†	21757.2	21995.6	491.44	ug/L	491.44	ppb	22:57:56
1	Ba 233.527†	65533.8	64407.6	500.30	ug/L	500.30	ppb	22:57:56
1	Be 313.107†	1361830.4	1342723.4	508.43	ug/L	508.43	ppb	22:57:51
1	Cd 226.502†	46300.7	45700.5	502.63	ug/L	502.63	ppb	22:57:56
1	Co 228.616†	25111.0	24753.4	502.36	ug/L	502.36	ppb	22:57:56
1	Cr 267.716†	46141.6	45263.6	502.80	ug/L	502.80	ppb	22:57:56
1	Cu 324.752†	175956.7	166507.3	496.70	ug/L	496.70	ppb	22:57:56
1	Mn 257.610†	461925.0	453496.4	497.62	ug/L	497.62	ppb	22:57:51
1	Mo 202.031†	7345.9	7197.0	502.63	ug/L	502.63	ppb	22:58:17
1	Ni 231.604†	20834.1	20406.3	504.69	ug/L	504.69	ppb	22:57:56
1	P 214.914†	4459.8	4162.2	2382.4	ug/L	2382.4	ppb	22:58:17
1	Pb 220.353†	4165.9	4156.0	504.68	ug/L	504.68	ppb	22:58:17
1	S 181.975 Axial†	776.2	718.9	999.52	ug/L	999.52	ppb	22:58:17
1	Sb 206.836†	1520.1	1460.3	513.08	ug/L	513.08	ppb	22:58:17
1	Se 196.026†	791.6	810.0	526.87	ug/L	526.87	ppb	22:58:17
1	Si 251.611†	81373.1	79503.3	2510.6	ug/L	2510.6	ppb	22:57:56
1	Sn 189.927†	2930.6	2878.2	502.31	ug/L	502.31	ppb	22:58:17
1	Ti 334.940†	311412.0	307353.7	492.02	ug/L	492.02	ppb	22:57:56
1	Tl 190.801†	1647.4	1652.9	502.34	ug/L	502.34	ppb	22:58:17
1	U 409.014†	15497.1	17092.6	501.49	ug/L	501.49	ppb	22:57:56
1	V 292.402†	73845.9	73926.9	508.13	ug/L	508.13	ppb	22:57:56
1	Zn 213.857†	55466.3	53881.2	501.42	ug/L	501.42	ppb	22:57:56
1	SiO2†	81741.9	79867.4	5373.3	ug/L	5373.3	ppb	22:59:24
2	Sc Radial	5318.7	5318.7	104	%			22:56:59
2	Y RADIAL	5601.3	5601.3	101.7	%			22:56:59
2	Al 396.153Radial†	6691.4	6448.8	5133.4	ug/L	5133.4	ppb	22:56:59
2	Ca 317.933Radial†	3272.0	3131.2	5054.5	ug/L	5054.5	ppb	22:57:19
2	Fe 238.204 Radial†	623.0	588.3	5017.0	ug/L	5017.0	ppb	22:57:19
2	K 766.490 Radial†	30517.3	26871.1	4887.2	ug/L	4887.2	ppb	22:56:59
2	Mg 279.077 IEC†	165.0	155.8	5173.8	ug/L	5173.8	ppb	22:57:19
2	Na 589.592 Radial†	32965.1	33048.2	9473.3	ug/L	9473.3	ppb	22:56:59
2	Sr 421.552†	79279.8	76322.2	487.24	ug/L	487.24	ppb	22:56:59
2	Sc 361.383	883781.7	883781.7	103.00	%			22:58:22
2	Y 371.029	737082.2	737082.2	101.29	%			22:58:22
2	Ag 328.068†	112774.1	109136.3	503.90	ug/L	503.90	ppb	22:58:27
2	As 188.979†	1177.4	1167.1	503.16	ug/L	503.16	ppb	22:58:48
2	B 249.677†	22054.0	22027.5	492.17	ug/L	492.17	ppb	22:58:27
2	Ba 233.527†	66009.0	64097.3	497.89	ug/L	497.89	ppb	22:58:27
2	Be 313.107†	1379253.7	1343604.4	508.76	ug/L	508.76	ppb	22:58:22
2	Cd 226.502†	46715.3	45557.9	501.06	ug/L	501.06	ppb	22:58:27
2	Co 228.616†	25340.1	24680.2	500.87	ug/L	500.87	ppb	22:58:27
2	Cr 267.716†	46547.3	45114.2	501.14	ug/L	501.14	ppb	22:58:27
2	Cu 324.752†	176691.0	165148.4	492.65	ug/L	492.65	ppb	22:58:27
2	Mn 257.610†	467749.0	453711.9	497.85	ug/L	497.85	ppb	22:58:22
2	Mo 202.031†	7379.0	7142.7	498.84	ug/L	498.84	ppb	22:58:48
2	Ni 231.604†	20992.0	20314.3	502.41	ug/L	502.41	ppb	22:58:27

2	P 214.914†	4510.8	4159.3	2381.6 ug/L	2381.6 ppb	22:58:48
2	Pb 220.353†	4183.8	4124.3	500.84 ug/L	500.84 ppb	22:58:48
2	S 181.975 Axial†	786.5	719.7	1000.6 ug/L	1000.6 ppb	22:58:48
2	Sb 206.836†	1534.9	1456.8	511.80 ug/L	511.80 ppb	22:58:48
2	Se 196.026†	801.8	810.5	527.08 ug/L	527.08 ppb	22:58:48
2	Si 251.611†	82105.1	79255.9	2502.8 ug/L	2502.8 ppb	22:58:27
2	Sn 189.927†	2954.8	2867.2	500.39 ug/L	500.39 ppb	22:58:48
2	Ti 334.940†	313024.3	305252.2	488.65 ug/L	488.65 ppb	22:58:27
2	Tl 190.801†	1664.6	1650.3	501.52 ug/L	501.52 ppb	22:58:48
2	U 409.014†	15610.9	17020.6	499.38 ug/L	499.38 ppb	22:58:27
2	V 292.402†	74334.8	73532.1	505.41 ug/L	505.41 ppb	22:58:27
2	Zn 213.857†	55847.2	53597.9	498.78 ug/L	498.78 ppb	22:58:27
2	SiO2†	81518.6	78688.1	5293.8 ug/L	5293.8 ppb	22:59:29
3	Sc Radial	5223.3	5223.3	102 %		22:57:24
3	Y RADIAL	5554.3	5554.3	100.9 %		22:57:24
3	Al 396.153Radial†	6611.9	6488.5	5165.3 ug/L	5165.3 ppb	22:57:24
3	Ca 317.933Radial†	3284.8	3201.3	5167.6 ug/L	5167.6 ppb	22:57:44
3	Fe 238.204 Radial†	625.9	602.1	5134.3 ug/L	5134.3 ppb	22:57:44
3	K 766.490 Radial†	30141.8	27039.7	4917.9 ug/L	4917.9 ppb	22:57:24
3	Mg 279.077 IEC†	166.0	159.7	5302.8 ug/L	5302.8 ppb	22:57:44
3	Na 589.592 Radial†	32477.4	33150.0	9502.5 ug/L	9502.5 ppb	22:57:24
3	Sr 421.552†	78239.6	76697.0	489.64 ug/L	489.64 ppb	22:57:24
3	Sc 361.383	889753.3	889753.3	103.69 %		22:58:53
3	Y 371.029	740457.8	740457.8	101.76 %		22:58:53
3	Ag 328.068†	113605.3	109203.0	504.25 ug/L	504.25 ppb	22:58:58
3	As 188.979†	1183.2	1165.0	502.31 ug/L	502.31 ppb	22:59:18
3	B 249.677†	22183.0	22008.3	491.72 ug/L	491.72 ppb	22:58:58
3	Ba 233.527†	66610.9	64247.6	499.06 ug/L	499.06 ppb	22:58:58
3	Be 313.107†	1383551.9	1338762.0	506.93 ug/L	506.93 ppb	22:58:53
3	Cd 226.502†	47008.4	45536.2	500.81 ug/L	500.81 ppb	22:58:58
3	Co 228.616†	25540.8	24708.6	501.44 ug/L	501.44 ppb	22:58:58
3	Cr 267.716†	46770.5	45026.1	500.17 ug/L	500.17 ppb	22:58:58
3	Cu 324.752†	178271.4	165521.2	493.77 ug/L	493.77 ppb	22:58:58
3	Mn 257.610†	470484.8	453302.3	497.41 ug/L	497.41 ppb	22:58:53
3	Mo 202.031†	7368.1	7084.1	494.76 ug/L	494.76 ppb	22:59:18
3	Ni 231.604†	21128.3	20308.9	502.28 ug/L	502.28 ppb	22:58:58
3	P 214.914†	4455.1	4076.2	2331.3 ug/L	2331.3 ppb	22:59:18
3	Pb 220.353†	4170.4	4084.1	495.97 ug/L	495.97 ppb	22:59:18
3	S 181.975 Axial†	769.2	698.0	970.34 ug/L	970.34 ppb	22:59:18
3	Sb 206.836†	1516.0	1428.6	502.08 ug/L	502.08 ppb	22:59:18
3	Se 196.026†	795.0	798.8	520.01 ug/L	520.01 ppb	22:59:18
3	Si 251.611†	82658.6	79254.6	2502.8 ug/L	2502.8 ppb	22:58:58
3	Sn 189.927†	2949.7	2843.0	496.20 ug/L	496.20 ppb	22:59:18
3	Ti 334.940†	315756.3	305847.2	489.61 ug/L	489.61 ppb	22:58:58
3	Tl 190.801†	1642.0	1617.6	491.67 ug/L	491.67 ppb	22:59:18
3	U 409.014†	15602.1	16910.4	496.12 ug/L	496.12 ppb	22:58:58
3	V 292.402†	74914.3	73606.5	505.83 ug/L	505.83 ppb	22:58:58
3	Zn 213.857†	56230.7	53603.8	498.83 ug/L	498.83 ppb	22:58:58
3	SiO2†	82260.3	78872.2	5306.3 ug/L	5306.3 ppb	22:59:34

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	882242.3	102.82	%	0.977				0.95%
Sc Radial	5285.0	103	%	1.0				1.01%
Y 371.029	735322.5	101.05	%	0.853				0.84%
Y RADIAL	5606.1	101.8	%	0.99				0.97%
Ag 328.068†	109390.0	505.09	ug/L	1.761	505.09	ppb	1.761	0.35%
QC value within limits for Ag 328.068 Recovery = 101.02%								
Al 396.153Radial†	6468.1	5148.8	ug/L	16.00	5148.8	ppb	16.00	0.31%
QC value within limits for Al 396.153Radial Recovery = 102.98%								
As 188.979†	1169.9	504.38	ug/L	2.873	504.38	ppb	2.873	0.57%
QC value within limits for As 188.979 Recovery = 100.88%								
B 249.677†	22010.5	491.78	ug/L	0.368	491.78	ppb	0.368	0.07%
QC value within limits for B 249.677 Recovery = 98.36%								
Ba 233.527†	64250.8	499.08	ug/L	1.206	499.08	ppb	1.206	0.24%
QC value within limits for Ba 233.527 Recovery = 99.82%								
Be 313.107†	1341696.6	508.04	ug/L	0.975	508.04	ppb	0.975	0.19%
QC value within limits for Be 313.107 Recovery = 101.61%								
Ca 317.933Radial†	3155.4	5093.7	ug/L	64.12	5093.7	ppb	64.12	1.26%

QC value within limits for Ca 317.933Radial Recovery = 101.87%

Cd 226.502†	45598.2	501.50 ug/L	0.985	501.50 ppb	0.985	0.20%

QC value within limits for Cd 226.502 Recovery = 100.30%

Co 228.616†	24714.1	501.56 ug/L	0.750	501.56 ppb	0.750	0.15%

QC value within limits for Co 228.616 Recovery = 100.31%

Cr 267.716†	45134.7	501.37 ug/L	1.332	501.37 ppb	1.332	0.27%

QC value within limits for Cr 267.716 Recovery = 100.27%

Cu 324.752†	165725.7	494.37 ug/L	2.094	494.37 ppb	2.094	0.42%

QC value within limits for Cu 324.752 Recovery = 98.87%

Fe 238.204 Radial†	594.6	5070.8 ug/L	59.27	5070.8 ppb	59.27	1.17%

QC value within limits for Fe 238.204 Radial Recovery = 101.42%

K 766.490 Radial†	27048.6	4919.5 ug/L	33.13	4919.5 ppb	33.13	0.67%

QC value within limits for K 766.490 Radial Recovery = 98.39%

Mg 279.077 IEC†	156.8	5208.4 ug/L	82.70	5208.4 ppb	82.70	1.59%

QC value within limits for Mg 279.077 IEC Recovery = 104.17%

Mn 257.610†	453503.5	497.63 ug/L	0.222	497.63 ppb	0.222	0.04%

QC value within limits for Mn 257.610 Recovery = 99.53%

Mo 202.031†	7141.3	498.74 ug/L	3.937	498.74 ppb	3.937	0.79%

QC value within limits for Mo 202.031 Recovery = 99.75%

Na 589.592 Radial†	33187.4	9513.2 ug/L	46.19	9513.2 ppb	46.19	0.49%

QC value within limits for Na 589.592 Radial Recovery = 95.13%

Ni 231.604†	20343.2	503.13 ug/L	1.354	503.13 ppb	1.354	0.27%

QC value within limits for Ni 231.604 Recovery = 100.63%

P 214.914†	4132.6	2365.1 ug/L	29.26	2365.1 ppb	29.26	1.24%

QC value within limits for P 214.914 Recovery = 94.61%

Pb 220.353†	4121.5	500.50 ug/L	4.366	500.50 ppb	4.366	0.87%

QC value within limits for Pb 220.353 Recovery = 100.10%

S 181.975 Axial†	712.2	990.16 ug/L	17.178	990.16 ppb	17.178	1.73%

QC value within limits for S 181.975 Axial Recovery = 99.02%

Sb 206.836†	1448.6	508.99 ug/L	6.016	508.99 ppb	6.016	1.18%

QC value within limits for Sb 206.836 Recovery = 101.80%

Se 196.026†	806.4	524.65 ug/L	4.022	524.65 ppb	4.022	0.77%

QC value within limits for Se 196.026 Recovery = 104.93%

Si 251.611†	79338.0	2505.4 ug/L	4.49	2505.4 ppb	4.49	0.18%

QC value within limits for Si 251.611 Recovery = 100.22%

Sn 189.927†	2862.8	499.63 ug/L	3.121	499.63 ppb	3.121	0.62%

QC value within limits for Sn 189.927 Recovery = 99.93%

Sr 421.552†	76675.5	489.50 ug/L	2.190	489.50 ppb	2.190	0.45%

QC value within limits for Sr 421.552 Recovery = 97.90%

Ti 334.940†	306151.0	490.09 ug/L	1.734	490.09 ppb	1.734	0.35%

QC value within limits for Ti 334.940 Recovery = 98.02%

Tl 190.801†	1640.3	498.51 ug/L	5.938	498.51 ppb	5.938	1.19%

QC value within limits for Tl 190.801 Recovery = 99.70%

U 409.014†	17007.9	498.99 ug/L	2.703	498.99 ppb	2.703	0.54%

QC value within limits for U 409.014 Recovery = 99.80%

V 292.402†	73688.5	506.46 ug/L	1.467	506.46 ppb	1.467	0.29%

QC value within limits for V 292.402 Recovery = 101.29%

Zn 213.857†	53694.3	499.68 ug/L	1.509	499.68 ppb	1.509	0.30%

QC value within limits for Zn 213.857 Recovery = 99.94%

SiO2†	79142.5	5324.5 ug/L	42.71	5324.5 ppb	42.71	0.80%

QC value within limits for SiO2 Recovery = 99.57%

All analyte(s) passed QC.

Sequence No.: 65
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 1/12/2010 23:01:44
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	5420.8	5420.8	106	%			23:03:36
1	Y RADIAL	5784.4	5784.4	105.1	%			23:03:36
1	Al 396.153Radial†	-9.5	-2.8	-2.2443	ug/L	-2.2443	ppb	23:03:36
1	Ca 317.933Radial†	17.5	-2.6	-4.2754	ug/L	-4.2754	ppb	23:03:56
1	Fe 238.204 Radial†	13.0	0.8	6.4294	ug/L	6.4294	ppb	23:03:56
1	K 766.490 Radial†	2867.0	196.9	35.853	ug/L	35.853	ppb	23:03:36
1	Mg 279.077 IEC†	2.8	-0.4	-11.737	ug/L	-11.737	ppb	23:03:56
1	Na 589.592 Radial†	-1391.6	-5.7	-1.6447	ug/L	-1.6447	ppb	23:03:36
1	Sr 421.552†	9.1	-1.1	-0.0071	ug/L	-0.0071	ppb	23:03:36
1	Sc 361.383	867712.3	867712.3	101.12	%			23:04:53
1	Y 371.029	735707.2	735707.2	101.11	%			23:04:53
1	Ag 328.068†	357.2	-3.8	-0.0158	ug/L	-0.0158	ppb	23:04:53
1	As 188.979†	-31.9	-7.6	-3.2398	ug/L	-3.2398	ppb	23:05:13
1	B 249.677†	-491.6	128.9	2.8927	ug/L	2.8927	ppb	23:05:13
1	Ba 233.527†	-8.2	0.4	0.0034	ug/L	0.0034	ppb	23:05:13
1	Be 313.107†	-4315.1	207.5	0.0783	ug/L	0.0783	ppb	23:04:53
1	Cd 226.502†	-191.4	12.3	0.1355	ug/L	0.1355	ppb	23:05:13
1	Co 228.616†	-69.6	8.4	0.1712	ug/L	0.1712	ppb	23:05:13
1	Cr 267.716†	91.6	11.6	0.1289	ug/L	0.1289	ppb	23:05:13
1	Cu 324.752†	6441.3	-32.7	-0.0973	ug/L	-0.0973	ppb	23:04:53
1	Mn 257.610†	441.6	6.9	0.0087	ug/L	0.0087	ppb	23:05:13
1	Mo 202.031†	22.7	0.9	0.0605	ug/L	0.0605	ppb	23:05:13
1	Ni 231.604†	98.7	30.6	0.7570	ug/L	0.7570	ppb	23:05:13
1	P 214.914†	209.5	-13.2	-7.8883	ug/L	-7.8883	ppb	23:05:13
1	Pb 220.353†	-63.8	-0.9	-0.1136	ug/L	-0.1136	ppb	23:05:13
1	S 181.975 Axial†	49.8	5.4	7.5272	ug/L	7.5272	ppb	23:05:13
1	Sb 206.836†	43.2	9.3	3.1567	ug/L	3.1567	ppb	23:05:13
1	Se 196.026†	-34.5	-2.0	-1.2625	ug/L	-1.2625	ppb	23:05:13
1	Si 251.611†	588.4	121.2	3.8373	ug/L	3.8373	ppb	23:05:13
1	Sn 189.927†	3.1	1.4	0.2451	ug/L	0.2451	ppb	23:05:13
1	Ti 334.940†	-1364.4	-15.1	-0.0239	ug/L	-0.0239	ppb	23:04:53
1	Tl 190.801†	-32.3	2.1	0.6339	ug/L	0.6339	ppb	23:05:13
1	U 409.014†	-1880.1	4.6	0.1354	ug/L	0.1354	ppb	23:04:53
1	V 292.402†	-1388.6	-13.5	-0.0914	ug/L	-0.0914	ppb	23:04:53
1	Zn 213.857†	660.3	28.3	0.2602	ug/L	0.2602	ppb	23:05:13
1	SiO2†	568.2	102.9	6.9359	ug/L	6.9359	ppb	23:06:09
2	Sc Radial	5330.5	5330.5	104	%			23:04:01
2	Y RADIAL	5696.3	5696.3	103.5	%			23:04:01
2	Al 396.153Radial†	-0.3	5.9	4.7171	ug/L	4.7171	ppb	23:04:01
2	Ca 317.933Radial†	18.0	-1.9	-3.0971	ug/L	-3.0971	ppb	23:04:21
2	Fe 238.204 Radial†	10.5	-1.4	-12.319	ug/L	-12.319	ppb	23:04:21
2	K 766.490 Radial†	3061.0	429.1	78.159	ug/L	78.159	ppb	23:04:01
2	Mg 279.077 IEC†	3.0	-0.1	-3.8834	ug/L	-3.8834	ppb	23:04:21
2	Na 589.592 Radial†	-1470.8	-104.1	-29.832	ug/L	-29.832	ppb	23:04:01
2	Sr 421.552†	32.7	21.7	0.1385	ug/L	0.1385	ppb	23:04:01
2	Sc 361.383	867166.8	867166.8	101.06	%			23:05:18
2	Y 371.029	734411.3	734411.3	100.93	%			23:05:18
2	Ag 328.068†	316.2	-44.2	-0.2010	ug/L	-0.2010	ppb	23:05:18
2	As 188.979†	-19.9	4.2	1.8068	ug/L	1.8068	ppb	23:05:38
2	B 249.677†	-508.3	112.2	2.5197	ug/L	2.5197	ppb	23:05:38
2	Ba 233.527†	-4.5	4.1	0.0330	ug/L	0.0330	ppb	23:05:38
2	Be 313.107†	-4331.3	188.8	0.0717	ug/L	0.0717	ppb	23:05:18
2	Cd 226.502†	-196.0	7.7	0.0854	ug/L	0.0854	ppb	23:05:38
2	Co 228.616†	-80.9	-2.8	-0.0579	ug/L	-0.0579	ppb	23:05:38
2	Cr 267.716†	72.3	-7.4	-0.0800	ug/L	-0.0800	ppb	23:05:38
2	Cu 324.752†	6291.5	-176.9	-0.5267	ug/L	-0.5267	ppb	23:05:18
2	Mn 257.610†	468.1	33.4	0.0356	ug/L	0.0356	ppb	23:05:38
2	Mo 202.031†	16.7	-5.1	-0.3558	ug/L	-0.3558	ppb	23:05:38
2	Ni 231.604†	77.1	9.3	0.2293	ug/L	0.2293	ppb	23:05:38

2	P 214.914†	234.7	11.9	7.2993	ug/L	7.2993 ppb	23:05:38
2	Pb 220.353†	-69.0	-6.1	-0.7376	ug/L	-0.7376 ppb	23:05:38
2	S 181.975 Axial†	42.3	-2.1	-2.8600	ug/L	-2.8600 ppb	23:05:38
2	Sb 206.836†	32.3	-1.5	-0.4999	ug/L	-0.4999 ppb	23:05:38
2	Se 196.026†	-31.4	0.9	0.5415	ug/L	0.5415 ppb	23:05:38
2	Si 251.611†	563.8	97.2	3.0816	ug/L	3.0816 ppb	23:05:38
2	Sn 189.927†	5.4	3.6	0.6339	ug/L	0.6339 ppb	23:05:38
2	Ti 334.940†	-1258.1	89.2	0.1442	ug/L	0.1442 ppb	23:05:18
2	Tl 190.801†	-35.7	-1.3	-0.3833	ug/L	-0.3833 ppb	23:05:38
2	U 409.014†	-1996.9	-112.1	-3.2979	ug/L	-3.2979 ppb	23:05:18
2	V 292.402†	-1280.8	92.4	0.6165	ug/L	0.6165 ppb	23:05:18
2	Zn 213.857†	643.0	11.6	0.1092	ug/L	0.1092 ppb	23:05:38
2	SiO2†	573.7	108.7	7.3404	ug/L	7.3404 ppb	23:06:14
3	Sc Radial	5348.5	5348.5	104	%		23:04:26
3	Y RADIAL	5723.3	5723.3	104.0	%		23:04:26
3	Al 396.153Radial†	14.8	20.4	16.315	ug/L	16.315 ppb	23:04:26
3	Ca 317.933Radial†	21.7	1.6	2.5665	ug/L	2.5665 ppb	23:04:46
3	Fe 238.204 Radial†	10.8	-1.2	-10.163	ug/L	-10.163 ppb	23:04:46
3	K 766.490 Radial†	2876.5	242.5	44.171	ug/L	44.171 ppb	23:04:26
3	Mg 279.077 IEC†	0.2	-2.9	-96.257	ug/L	-96.257 ppb	23:04:46
3	Na 589.592 Radial†	-1435.6	-65.6	-18.799	ug/L	-18.799 ppb	23:04:26
3	Sr 421.552†	36.9	25.5	0.1630	ug/L	0.1630 ppb	23:04:26
3	Sc 361.383	870620.0	870620.0	101.46	%		23:05:43
3	Y 371.029	737605.1	737605.1	101.37	%		23:05:43
3	Ag 328.068†	350.2	-11.9	-0.0510	ug/L	-0.0510 ppb	23:05:43
3	As 188.979†	-20.4	3.9	1.6476	ug/L	1.6476 ppb	23:06:03
3	B 249.677†	-511.6	110.9	2.4907	ug/L	2.4907 ppb	23:06:03
3	Ba 233.527†	-6.8	1.9	0.0150	ug/L	0.0150 ppb	23:06:03
3	Be 313.107†	-4320.3	216.6	0.0820	ug/L	0.0820 ppb	23:05:43
3	Cd 226.502†	-196.0	8.5	0.0930	ug/L	0.0930 ppb	23:06:03
3	Co 228.616†	-79.1	-0.8	-0.0159	ug/L	-0.0159 ppb	23:06:03
3	Cr 267.716†	79.2	-0.9	-0.0074	ug/L	-0.0074 ppb	23:06:03
3	Cu 324.752†	6338.6	-155.2	-0.4602	ug/L	-0.4602 ppb	23:05:43
3	Mn 257.610†	450.4	14.1	0.0184	ug/L	0.0184 ppb	23:06:03
3	Mo 202.031†	18.0	-3.9	-0.2715	ug/L	-0.2715 ppb	23:06:03
3	Ni 231.604†	78.2	10.1	0.2488	ug/L	0.2488 ppb	23:06:03
3	P 214.914†	215.5	-7.9	-4.6188	ug/L	-4.6188 ppb	23:06:03
3	Pb 220.353†	-66.4	-3.2	-0.3885	ug/L	-0.3885 ppb	23:06:03
3	S 181.975 Axial†	53.0	8.4	11.677	ug/L	11.677 ppb	23:06:03
3	Sb 206.836†	34.9	1.0	0.3361	ug/L	0.3361 ppb	23:06:03
3	Se 196.026†	-27.6	4.8	3.0018	ug/L	3.0018 ppb	23:06:03
3	Si 251.611†	545.9	77.4	2.4524	ug/L	2.4524 ppb	23:06:03
3	Sn 189.927†	8.6	6.8	1.1908	ug/L	1.1908 ppb	23:06:03
3	Ti 334.940†	-1311.2	41.9	0.0780	ug/L	0.0780 ppb	23:05:43
3	Tl 190.801†	-32.6	2.0	0.5926	ug/L	0.5926 ppb	23:06:03
3	U 409.014†	-2103.3	-209.1	-6.1549	ug/L	-6.1549 ppb	23:05:43
3	V 292.402†	-1319.1	59.6	0.3881	ug/L	0.3881 ppb	23:05:43
3	Zn 213.857†	665.8	31.5	0.2958	ug/L	0.2958 ppb	23:06:03
3	SiO2†	565.3	98.1	6.6248	ug/L	6.6248 ppb	23:06:19

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	868499.7	101.22	%	0.216				0.21%
Sc Radial	5366.6	105	%	0.9				0.89%
Y 371.029	735907.9	101.13	%	0.221				0.22%
Y RADIAL	5734.7	104.2	%	0.82				0.79%
Ag 328.068†	-20.0	-0.0893	ug/L	0.09837	-0.0893	ppb	0.09837	110.18%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.8	6.2626	ug/L	9.37574	6.2626	ppb	9.37574	149.71%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.2	0.0715	ug/L	2.86883	0.0715	ppb	2.86883	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	117.3	2.6344	ug/L	0.22415	2.6344	ppb	0.22415	8.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.1	0.0171	ug/L	0.01491	0.0171	ppb	0.01491	87.08%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	204.3	0.0773	ug/L	0.00524	0.0773	ppb	0.00524	6.77%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.0	-1.6020	ug/L	3.65779	-1.6020	ppb	3.65779	228.33%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 9.5      0.1046 ug/L       0.02700      0.1046 ppb        0.02700  25.80%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.6      0.0325 ug/L       0.12197      0.0325 ppb        0.12197 375.43%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 1.1      0.0138 ug/L       0.10603      0.0138 ppb        0.10603 766.77%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -121.6     -0.3614 ug/L       0.23110     -0.3614 ppb        0.23110  63.94%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.6     -5.3510 ug/L      10.25890     -5.3510 ppb       10.25890 191.72%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         289.5      52.728 ug/L       22.4137      52.728 ppb        22.4137  42.51%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.1     -37.293 ug/L       51.2157     -37.293 ppb        51.2157 137.33%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                18.1      0.0209 ug/L       0.01360      0.0209 ppb        0.01360  65.16%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -2.7     -0.1889 ug/L       0.22007     -0.1889 ppb        0.22007 116.47%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -58.5     -16.759 ug/L       14.2041     -16.759 ppb        14.2041  84.76%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                16.6      0.4117 ug/L       0.29923      0.4117 ppb        0.29923  72.68%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -3.1     -1.7359 ug/L       7.99368     -1.7359 ppb        7.99368 460.48%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -3.4     -0.4132 ug/L       0.31273     -0.4132 ppb        0.31273  75.69%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            3.9      5.4481 ug/L       7.48821      5.4481 ppb        7.48821 137.45%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 2.9      0.9977 ug/L       1.91598      0.9977 ppb        1.91598 192.05%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 1.2      0.7603 ug/L       2.14058      0.7603 ppb        2.14058 281.56%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                98.6      3.1238 ug/L       0.69339      3.1238 ppb        0.69339  22.20%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 4.0      0.6899 ug/L       0.47533      0.6899 ppb        0.47533  68.89%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                15.4      0.0981 ug/L       0.09195      0.0981 ppb        0.09195  93.69%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                38.7      0.0661 ug/L       0.08468      0.0661 ppb        0.08468 128.12%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.9      0.2811 ug/L       0.57573      0.2811 ppb        0.57573 204.82%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -105.5     -3.1058 ug/L       3.14957     -3.1058 ppb        3.14957 101.41%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 46.2      0.3044 ug/L       0.36131      0.3044 ppb        0.36131 118.70%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                23.8      0.2217 ug/L       0.09910      0.2217 ppb        0.09910  44.70%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     103.2      6.9670 ug/L       0.35881      6.9670 ppb        0.35881   5.15%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 66
Sample ID: 1202006036|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 86
Date Collected: 1/12/2010 23:08:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202006036|937486|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5245.8	5245.8	102	%			23:10:22
1	Y RADIAL	5635.2	5635.2	102.4	%			23:10:22
1	Al 396.153Radial†	8.6	14.6	11.680	ug/L	11.680	ppb	23:10:22
1	Ca 317.933Radial†	29.3	9.4	15.177	ug/L	15.177	ppb	23:10:42
1	Fe 238.204 Radial†	25.7	13.5	115.05	ug/L	115.05	ppb	23:10:42
1	K 766.490 Radial†	3009.3	426.1	77.594	ug/L	77.594	ppb	23:10:22
1	Mg 279.077 IEC†	-1.6	-4.6	-152.52	ug/L	-152.52	ppb	23:10:42
1	Na 589.592 Radial†	-1352.7	-11.6	-3.3367	ug/L	-3.3367	ppb	23:10:22
1	Sr 421.552†	18.2	8.0	0.0510	ug/L	0.0510	ppb	23:10:22
1	Sc 361.383	856297.4	856297.4	99.793	%			23:11:39
1	Y 371.029	725838.8	725838.8	99.749	%			23:11:39
1	Ag 328.068†	376.9	20.6	0.1364	ug/L	0.1364	ppb	23:11:39
1	As 188.979†	-27.0	-3.1	-1.3112	ug/L	-1.3112	ppb	23:11:59
1	B 249.677†	-528.4	85.6	1.9016	ug/L	1.9016	ppb	23:11:59
1	Ba 233.527†	29.8	38.4	0.3015	ug/L	0.3015	ppb	23:11:59
1	Be 313.107†	-4274.0	191.8	0.0738	ug/L	0.0738	ppb	23:11:39
1	Cd 226.502†	-196.5	4.7	0.0392	ug/L	0.0392	ppb	23:11:59
1	Co 228.616†	-55.5	21.7	0.4368	ug/L	0.4368	ppb	23:11:59
1	Cr 267.716†	105.0	26.3	0.2960	ug/L	0.2960	ppb	23:11:59
1	Cu 324.752†	6375.6	-13.6	-0.0316	ug/L	-0.0316	ppb	23:11:39
1	Mn 257.610†	1774.4	1348.3	1.4962	ug/L	1.4962	ppb	23:11:59
1	Mo 202.031†	21.2	-0.4	-0.0185	ug/L	-0.0185	ppb	23:11:59
1	Ni 231.604†	90.2	23.4	0.5779	ug/L	0.5779	ppb	23:11:59
1	P 214.914†	236.9	17.0	10.163	ug/L	10.163	ppb	23:11:59
1	Pb 220.353†	-57.3	4.7	0.5651	ug/L	0.5651	ppb	23:11:59
1	S 181.975 Axial†	49.1	5.4	7.4454	ug/L	7.4454	ppb	23:11:59
1	Sb 206.836†	31.8	-1.6	-0.5201	ug/L	-0.5201	ppb	23:11:59
1	Se 196.026†	-26.8	5.2	3.6059	ug/L	3.6059	ppb	23:11:59
1	Si 251.611†	979.3	520.6	16.482	ug/L	16.482	ppb	23:11:59
1	Sn 189.927†	12.1	10.5	1.8279	ug/L	1.8279	ppb	23:11:59
1	Ti 334.940†	-957.5	374.6	0.6166	ug/L	0.6166	ppb	23:11:39
1	Tl 190.801†	-31.2	2.9	0.8708	ug/L	0.8708	ppb	23:11:59
1	U 409.014†	-2042.6	-182.9	-5.3991	ug/L	-5.3991	ppb	23:11:39
1	V 292.402†	-1343.8	13.1	0.0560	ug/L	0.0560	ppb	23:11:39
1	Zn 213.857†	776.3	153.3	1.4243	ug/L	1.4243	ppb	23:11:59
1	SiO2†	1045.6	588.8	39.713	ug/L	39.713	ppb	23:12:55
2	Sc Radial	5263.6	5263.6	103	%			23:10:47
2	Y RADIAL	5620.3	5620.3	102.1	%			23:10:47
2	Al 396.153Radial†	-15.3	-8.7	-6.9584	ug/L	-6.9584	ppb	23:10:47
2	Ca 317.933Radial†	27.2	7.3	11.740	ug/L	11.740	ppb	23:11:07
2	Fe 238.204 Radial†	26.7	14.4	122.39	ug/L	122.39	ppb	23:11:07
2	K 766.490 Radial†	2876.8	287.3	52.323	ug/L	52.323	ppb	23:10:47
2	Mg 279.077 IEC†	5.1	1.9	62.323	ug/L	62.323	ppb	23:11:07
2	Na 589.592 Radial†	-1383.4	-37.0	-10.615	ug/L	-10.615	ppb	23:10:47
2	Sr 421.552†	25.0	14.6	0.0930	ug/L	0.0930	ppb	23:10:47
2	Sc 361.383	850662.9	850662.9	99.137	%			23:12:04
2	Y 371.029	719752.0	719752.0	98.913	%			23:12:04
2	Ag 328.068†	299.5	-55.0	-0.2074	ug/L	-0.2074	ppb	23:12:04
2	As 188.979†	-20.9	2.8	1.2381	ug/L	1.2381	ppb	23:12:24
2	B 249.677†	-513.7	97.0	2.1562	ug/L	2.1562	ppb	23:12:24
2	Ba 233.527†	16.0	24.7	0.1960	ug/L	0.1960	ppb	23:12:24
2	Be 313.107†	-4291.0	146.2	0.0562	ug/L	0.0562	ppb	23:12:04
2	Cd 226.502†	-190.9	9.1	0.0871	ug/L	0.0871	ppb	23:12:24
2	Co 228.616†	-62.9	13.8	0.2783	ug/L	0.2783	ppb	23:12:24
2	Cr 267.716†	116.4	38.5	0.4315	ug/L	0.4315	ppb	23:12:24
2	Cu 324.752†	6422.1	75.6	0.2344	ug/L	0.2344	ppb	23:12:04
2	Mn 257.610†	1784.2	1369.9	1.5119	ug/L	1.5119	ppb	23:12:24
2	Mo 202.031†	22.4	0.9	0.0745	ug/L	0.0745	ppb	23:12:24
2	Ni 231.604†	88.3	22.1	0.5462	ug/L	0.5462	ppb	23:12:24

2	P 214.914†	231.7	13.4	7.9056 ug/L	7.9056 ppb	23:12:24
2	Pb 220.353†	-45.5	16.3	1.9632 ug/L	1.9632 ppb	23:12:24
2	S 181.975 Axial†	46.5	3.0	4.2390 ug/L	4.2390 ppb	23:12:24
2	Sb 206.836†	44.5	11.5	3.9341 ug/L	3.9341 ppb	23:12:24
2	Se 196.026†	-32.0	-0.3	0.1833 ug/L	0.1833 ppb	23:12:24
2	Si 251.611†	997.6	545.6	17.272 ug/L	17.272 ppb	23:12:24
2	Sn 189.927†	11.4	9.8	1.7131 ug/L	1.7131 ppb	23:12:24
2	Ti 334.940†	-1064.3	260.6	0.4154 ug/L	0.4154 ppb	23:12:04
2	Tl 190.801†	-48.8	-15.1	-4.5578 ug/L	-4.5578 ppb	23:12:24
2	U 409.014†	-1987.9	-141.4	-4.1767 ug/L	-4.1767 ppb	23:12:04
2	V 292.402†	-1286.2	62.3	0.3963 ug/L	0.3963 ppb	23:12:04
2	Zn 213.857†	756.3	138.2	1.2820 ug/L	1.2820 ppb	23:12:24
2	SiO2†	1006.7	556.4	37.526 ug/L	37.526 ppb	23:13:00
3	Sc Radial	5357.8	5357.8	105 %		23:11:12
3	Y RADIAL	5738.1	5738.1	104.2 %		23:11:12
3	Al 396.153Radial†	5.2	11.1	8.9066 ug/L	8.9066 ppb	23:11:12
3	Ca 317.933Radial†	30.0	9.4	15.194 ug/L	15.194 ppb	23:11:32
3	Fe 238.204 Radial†	28.3	15.5	131.83 ug/L	131.83 ppb	23:11:32
3	K 766.490 Radial†	2827.9	191.3	34.842 ug/L	34.842 ppb	23:11:12
3	Mg 279.077 IEC†	1.2	-1.9	-62.072 ug/L	-62.072 ppb	23:11:32
3	Na 589.592 Radial†	-1391.0	-20.6	-5.9052 ug/L	-5.9052 ppb	23:11:12
3	Sr 421.552†	-27.2	-35.7	-0.2282 ug/L	-0.2282 ppb	23:11:12
3	Sc 361.383	874167.2	874167.2	101.88 %		23:12:29
3	Y 371.029	738189.7	738189.7	101.45 %		23:12:29
3	Ag 328.068†	226.4	-134.8	-0.5792 ug/L	-0.5792 ppb	23:12:29
3	As 188.979†	-25.5	-1.1	-0.4241 ug/L	-0.4241 ppb	23:12:49
3	B 249.677†	-515.2	109.4	2.4339 ug/L	2.4339 ppb	23:12:49
3	Ba 233.527†	29.0	37.0	0.2902 ug/L	0.2902 ppb	23:12:49
3	Be 313.107†	-4312.8	241.2	0.0921 ug/L	0.0921 ppb	23:12:29
3	Cd 226.502†	-204.3	1.1	-0.0014 ug/L	-0.0014 ppb	23:12:49
3	Co 228.616†	-83.7	-4.9	-0.1033 ug/L	-0.1033 ppb	23:12:49
3	Cr 267.716†	125.3	44.0	0.4894 ug/L	0.4894 ppb	23:12:49
3	Cu 324.752†	6327.0	-191.9	-0.5666 ug/L	-0.5666 ppb	23:12:29
3	Mn 257.610†	1780.4	1317.8	1.4608 ug/L	1.4608 ppb	23:12:49
3	Mo 202.031†	20.7	-1.3	-0.0833 ug/L	-0.0833 ppb	23:12:49
3	Ni 231.604†	77.4	9.0	0.2226 ug/L	0.2226 ppb	23:12:49
3	P 214.914†	238.2	13.5	8.1328 ug/L	8.1328 ppb	23:12:49
3	Pb 220.353†	-67.9	-4.5	-0.5542 ug/L	-0.5542 ppb	23:12:49
3	S 181.975 Axial†	47.7	3.0	4.1523 ug/L	4.1523 ppb	23:12:49
3	Sb 206.836†	39.0	4.9	1.6732 ug/L	1.6732 ppb	23:12:49
3	Se 196.026†	-29.5	3.1	2.3540 ug/L	2.3540 ppb	23:12:49
3	Si 251.611†	983.7	504.9	15.985 ug/L	15.985 ppb	23:12:49
3	Sn 189.927†	11.3	9.4	1.6415 ug/L	1.6415 ppb	23:12:49
3	Ti 334.940†	-1093.8	260.5	0.4231 ug/L	0.4231 ppb	23:12:29
3	Tl 190.801†	-26.8	7.8	2.3608 ug/L	2.3608 ppb	23:12:49
3	U 409.014†	-1827.1	70.5	2.0584 ug/L	2.0584 ppb	23:12:29
3	V 292.402†	-1436.5	-50.3	-0.3617 ug/L	-0.3617 ppb	23:12:29
3	Zn 213.857†	764.2	125.5	1.1644 ug/L	1.1644 ppb	23:12:49
3	SiO2†	1032.9	554.8	37.424 ug/L	37.424 ppb	23:13:05

Mean Data: 1202006036|937486|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	860375.8	100.27	%	1.430				1.43%
Sc Radial	5289.1	103	%	1.2				1.14%
Y 371.029	727926.8	100.04	%	1.291				1.29%
Y RADIAL	5664.5	102.9	%	1.17				1.13%
Ag 328.068†	-56.4	-0.2167	ug/L	0.35790	-0.2167	ppb	0.35790	165.14%
Al 396.153Radial†	5.7	4.5427	ug/L	10.05624	4.5427	ppb	10.05624	221.37%
As 188.979†	-0.5	-0.1657	ug/L	1.29417	-0.1657	ppb	1.29417	780.98%
B 249.677†	97.3	2.1639	ug/L	0.26621	2.1639	ppb	0.26621	12.30%
Ba 233.527†	33.4	0.2626	ug/L	0.05795	0.2626	ppb	0.05795	22.07%
Be 313.107†	193.1	0.0740	ug/L	0.01794	0.0740	ppb	0.01794	24.24%
Ca 317.933Radial†	8.7	14.037	ug/L	1.9893	14.037	ppb	1.9893	14.17%
Cd 226.502†	5.0	0.0416	ug/L	0.04431	0.0416	ppb	0.04431	106.41%
Co 228.616†	10.2	0.2039	ug/L	0.27763	0.2039	ppb	0.27763	136.15%
Cr 267.716†	36.3	0.4057	ug/L	0.09924	0.4057	ppb	0.09924	24.46%
Cu 324.752†	-43.3	-0.1212	ug/L	0.40794	-0.1212	ppb	0.40794	336.47%
Fe 238.204 Radial†	14.5	123.09	ug/L	8.414	123.09	ppb	8.414	6.84%
K 766.490 Radial†	301.6	54.920	ug/L	21.4940	54.920	ppb	21.4940	39.14%

Mg 279.077 IEC†	-1.5	-50.757	ug/L	107.8682	-50.757	ppb	107.8682 212.52%
Mn 257.610†	1345.4	1.4896	ug/L	0.02621	1.4896	ppb	0.02621 1.76%
Mo 202.031†	-0.3	-0.0091	ug/L	0.07931	-0.0091	ppb	0.07931 874.01%
Na 589.592 Radial†	-23.1	-6.6190	ug/L	3.69136	-6.6190	ppb	3.69136 55.77%
Ni 231.604†	18.1	0.4489	ug/L	0.19663	0.4489	ppb	0.19663 43.80%
P 214.914†	14.6	8.7337	ug/L	1.24281	8.7337	ppb	1.24281 14.23%
Pb 220.353†	5.5	0.6580	ug/L	1.26127	0.6580	ppb	1.26127 191.69%
S 181.975 Axial†	3.8	5.2789	ug/L	1.87678	5.2789	ppb	1.87678 35.55%
Sb 206.836†	4.9	1.6957	ug/L	2.22717	1.6957	ppb	2.22717 131.34%
Se 196.026†	2.7	2.0478	ug/L	1.73171	2.0478	ppb	1.73171 84.57%
Si 251.611†	523.7	16.580	ug/L	0.6491	16.580	ppb	0.6491 3.91%
Sn 189.927†	9.9	1.7275	ug/L	0.09406	1.7275	ppb	0.09406 5.44%
Sr 421.552†	-4.4	-0.0280	ug/L	0.17459	-0.0280	ppb	0.17459 622.92%
Ti 334.940†	298.6	0.4851	ug/L	0.11402	0.4851	ppb	0.11402 23.51%
Tl 190.801†	-1.5	-0.4421	ug/L	3.64135	-0.4421	ppb	3.64135 823.74%
U 409.014†	-84.6	-2.5058	ug/L	3.99969	-2.5058	ppb	3.99969 159.62%
V 292.402†	8.4	0.0302	ug/L	0.37961	0.0302	ppb	0.37961 >999.9%
Zn 213.857†	139.0	1.2902	ug/L	0.13015	1.2902	ppb	0.13015 10.09%
SiO2†	566.7	38.221	ug/L	1.2932	38.221	ppb	1.2932 3.38%

Sequence No.: 67
Sample ID: 1202006037|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 87
Date Collected: 1/12/2010 23:15:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202006037|937486|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5393.9	5393.9	105	%			23:17:29
1	Y RADIAL	6252.1	6252.1	113.6	%			23:17:29
1	Al 396.153Radial†	129198.2	122665.1	98081	ug/L	98081	ppb	23:17:09
1	Ca 317.933Radial†	65033.0	61722.2	99636	ug/L	99636	ppb	23:17:09
1	Fe 238.204 Radial†	22985.7	21810.8	185480	ug/L	185480	ppb	23:17:09
1	K 766.490 Radial†	241336.9	226610.3	41228	ug/L	41228	ppb	23:17:09
1	Mg 279.077 IEC†	1263.0	1196.1	39529	ug/L	39529	ppb	23:17:29
1	Na 589.592 Radial†	34364.2	33933.8	9727.1	ug/L	9727.1	ppb	23:17:09
1	Sr 421.552†	362665.2	344299.4	2197.4	ug/L	2197.4	ppb	23:17:09
1	Sc 361.383	883742.1	883742.1	102.99	%			23:18:30
1	Y 371.029	798423.1	798423.1	109.72	%			23:18:30
1	Ag 328.068†	53875.9	51953.9	302.57	ug/L	302.57	ppb	23:18:30
1	As 188.979†	2344.9	2300.7	1077.2	ug/L	1077.2	ppb	23:18:35
1	B 249.677†	66156.8	64850.3	1423.0	ug/L	1423.0	ppb	23:18:30
1	Ba 233.527†	252565.8	245237.9	1908.5	ug/L	1908.5	ppb	23:18:30
1	Be 313.107†	2092430.7	2036125.4	782.74	ug/L	782.74	ppb	23:18:30
1	Cd 226.502†	52743.7	51413.2	547.16	ug/L	547.16	ppb	23:18:35
1	Co 228.616†	43922.0	42723.4	852.86	ug/L	852.86	ppb	23:18:35
1	Cr 267.716†	206587.1	200507.3	2230.0	ug/L	2230.0	ppb	23:18:30
1	Cu 324.752†	617171.7	592842.0	1778.5	ug/L	1778.5	ppb	23:18:30
1	Mn 257.610†	4830179.5	4689444.9	5159.5	ug/L	5159.5	ppb	23:18:30
1	Mo 202.031†	7052.1	6825.7	491.85	ug/L	491.85	ppb	23:18:35
1	Ni 231.604†	51017.6	49468.7	1223.7	ug/L	1223.7	ppb	23:18:35
1	P 214.914†	13214.4	12610.2	7033.7	ug/L	7033.7	ppb	23:18:35
1	Pb 220.353†	6633.6	6503.1	794.09	ug/L	794.09	ppb	23:18:35
1	S 181.975 Axial†	2826.6	2700.6	3740.0	ug/L	3740.0	ppb	23:18:35
1	Sb 206.836†	4389.5	4228.5	1444.0	ug/L	1444.0	ppb	23:18:35
1	Se 196.026†	3715.8	3639.9	2849.5	ug/L	2849.5	ppb	23:18:35
1	Si 251.611†	917073.6	889974.2	28167	ug/L	28167	ppb	23:18:30
1	Sn 189.927†	5863.9	5691.9	1011.4	ug/L	1011.4	ppb	23:18:35
1	Ti 334.940†	3806609.9	3697371.5	5930.0	ug/L	5930.0	ppb	23:18:30
1	Tl 190.801†	3704.3	3630.8	1163.8	ug/L	1163.8	ppb	23:18:35
1	U 409.014†	-8705.1	-6588.4	-220.07	ug/L	-220.07	ppb	23:18:30
1	V 292.402†	181862.0	177939.1	1176.5	ug/L	1176.5	ppb	23:18:30
1	Zn 213.857†	613738.7	595286.5	5559.9	ug/L	5559.9	ppb	23:18:30
1	SiO2†	921325.6	894104.3	60293	ug/L	60293	ppb	23:19:10
2	Sc Radial	5434.3	5434.3	106	%			23:17:54
2	Y RADIAL	6301.8	6301.8	114.5	%			23:17:54
2	Al 396.153Radial†	129394.6	121939.3	97500	ug/L	97500	ppb	23:17:34
2	Ca 317.933Radial†	64970.8	61205.0	98801	ug/L	98801	ppb	23:17:34
2	Fe 238.204 Radial†	22989.1	21651.9	184130	ug/L	184130	ppb	23:17:34
2	K 766.490 Radial†	242043.9	225575.0	41039	ug/L	41039	ppb	23:17:34
2	Mg 279.077 IEC†	1253.0	1177.7	38919	ug/L	38919	ppb	23:17:54
2	Na 589.592 Radial†	34490.7	33810.7	9691.9	ug/L	9691.9	ppb	23:17:34
2	Sr 421.552†	364865.9	343816.4	2194.4	ug/L	2194.4	ppb	23:17:34
2	Sc 361.383	883694.4	883694.4	102.99	%			23:18:45
2	Y 371.029	797347.4	797347.4	109.58	%			23:18:45
2	Ag 328.068†	53820.3	51902.7	301.90	ug/L	301.90	ppb	23:18:45
2	As 188.979†	2327.9	2284.4	1069.9	ug/L	1069.9	ppb	23:18:50
2	B 249.677†	65869.0	64574.2	1417.0	ug/L	1417.0	ppb	23:18:45
2	Ba 233.527†	252849.5	245526.6	1910.6	ug/L	1910.6	ppb	23:18:45
2	Be 313.107†	2087547.1	2031492.9	780.99	ug/L	780.99	ppb	23:18:45
2	Cd 226.502†	52955.9	51622.1	549.60	ug/L	549.60	ppb	23:18:50
2	Co 228.616†	44051.5	42851.5	855.48	ug/L	855.48	ppb	23:18:50
2	Cr 267.716†	206164.1	200107.4	2225.5	ug/L	2225.5	ppb	23:18:45
2	Cu 324.752†	618188.5	593861.6	1781.4	ug/L	1781.4	ppb	23:18:45
2	Mn 257.610†	4830178.0	4689696.3	5159.6	ug/L	5159.6	ppb	23:18:45
2	Mo 202.031†	7087.4	6860.3	494.15	ug/L	494.15	ppb	23:18:50
2	Ni 231.604†	51322.9	49767.8	1231.1	ug/L	1231.1	ppb	23:18:50

2	P 214.914†	13296.2	12690.3	7082.0	ug/L	7082.0	ppb	23:18:50
2	Pb 220.353†	6631.1	6501.0	793.82	ug/L	793.82	ppb	23:18:50
2	S 181.975 Axial†	2842.1	2715.8	3761.1	ug/L	3761.1	ppb	23:18:50
2	Sb 206.836†	4447.6	4285.2	1463.2	ug/L	1463.2	ppb	23:18:50
2	Se 196.026†	3670.0	3595.6	2817.6	ug/L	2817.6	ppb	23:18:50
2	Si 251.611†	917278.9	890221.5	28175	ug/L	28175	ppb	23:18:45
2	Sn 189.927†	5854.7	5683.2	1009.7	ug/L	1009.7	ppb	23:18:50
2	Ti 334.940†	3808373.9	3699283.5	5933.0	ug/L	5933.0	ppb	23:18:45
2	Tl 190.801†	3700.1	3626.9	1162.6	ug/L	1162.6	ppb	23:18:50
2	U 409.014†	-8715.3	-6598.7	-220.22	ug/L	-220.22	ppb	23:18:45
2	V 292.402†	181676.1	177768.1	1175.6	ug/L	1175.6	ppb	23:18:45
2	Zn 213.857†	613552.9	595138.2	5558.6	ug/L	5558.6	ppb	23:18:45
2	SiO2†	922084.4	894889.4	60346	ug/L	60346	ppb	23:19:16
3	Sc Radial	5458.8	5458.8	107	%			23:18:19
3	Y RADIAL	6313.2	6313.2	114.7	%			23:18:19
3	Al 396.153Radial†	129565.6	121552.1	97191	ug/L	97191	ppb	23:17:59
3	Ca 317.933Radial†	65221.0	61164.8	98736	ug/L	98736	ppb	23:17:59
3	Fe 238.204 Radial†	22997.5	21562.5	183370	ug/L	183370	ppb	23:17:59
3	K 766.490 Radial†	242806.4	225266.0	40983	ug/L	40983	ppb	23:17:59
3	Mg 279.077 IEC†	1249.8	1169.4	38645	ug/L	38645	ppb	23:18:19
3	Na 589.592 Radial†	34405.9	33585.2	9627.2	ug/L	9627.2	ppb	23:17:59
3	Sr 421.552†	364241.7	341686.6	2180.8	ug/L	2180.8	ppb	23:17:59
3	Sc 361.383	886227.3	886227.3	103.28	%			23:18:59
3	Y 371.029	798758.5	798758.5	109.77	%			23:18:59
3	Ag 328.068†	54018.1	51944.9	301.85	ug/L	301.85	ppb	23:18:59
3	As 188.979†	2307.4	2258.1	1058.5	ug/L	1058.5	ppb	23:19:04
3	B 249.677†	66446.1	64950.2	1425.6	ug/L	1425.6	ppb	23:18:59
3	Ba 233.527†	253290.0	245251.5	1908.5	ug/L	1908.5	ppb	23:18:59
3	Be 313.107†	2093561.6	2031523.0	781.01	ug/L	781.01	ppb	23:18:59
3	Cd 226.502†	53025.3	51542.3	548.80	ug/L	548.80	ppb	23:19:04
3	Co 228.616†	44053.8	42731.4	853.04	ug/L	853.04	ppb	23:19:04
3	Cr 267.716†	206518.7	199878.6	2223.0	ug/L	2223.0	ppb	23:18:59
3	Cu 324.752†	621449.6	595303.4	1785.7	ug/L	1785.7	ppb	23:18:59
3	Mn 257.610†	4844574.5	4690230.7	5160.2	ug/L	5160.2	ppb	23:18:59
3	Mo 202.031†	7056.6	6810.8	490.63	ug/L	490.63	ppb	23:19:04
3	Ni 231.604†	51268.9	49573.1	1226.3	ug/L	1226.3	ppb	23:19:04
3	P 214.914†	13238.4	12597.5	7025.9	ug/L	7025.9	ppb	23:19:04
3	Pb 220.353†	6664.1	6514.6	795.45	ug/L	795.45	ppb	23:19:04
3	S 181.975 Axial†	2824.0	2690.4	3725.8	ug/L	3725.8	ppb	23:19:04
3	Sb 206.836†	4378.6	4206.0	1436.3	ug/L	1436.3	ppb	23:19:04
3	Se 196.026†	3674.3	3589.6	2811.5	ug/L	2811.5	ppb	23:19:04
3	Si 251.611†	920951.0	891231.4	28207	ug/L	28207	ppb	23:18:59
3	Sn 189.927†	5877.8	5689.4	1010.8	ug/L	1010.8	ppb	23:19:04
3	Ti 334.940†	3821231.9	3701164.0	5936.0	ug/L	5936.0	ppb	23:18:59
3	Tl 190.801†	3715.1	3631.1	1163.9	ug/L	1163.9	ppb	23:19:04
3	U 409.014†	-8676.0	-6536.5	-218.29	ug/L	-218.29	ppb	23:18:59
3	V 292.402†	182207.3	177778.3	1175.7	ug/L	1175.7	ppb	23:18:59
3	Zn 213.857†	615256.7	595085.1	5558.2	ug/L	5558.2	ppb	23:18:59
3	SiO2†	924610.7	894776.4	60338	ug/L	60338	ppb	23:19:22

Mean Data: 1202006037|937486|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	884554.6	103.09	%	0.169				0.16%
Sc Radial	5429.0	106	%	0.6				0.60%
Y 371.029	798176.4	109.69	%	0.101				0.09%
Y RADIAL	6289.0	114.2	%	0.59				0.52%
Ag 328.068†	51933.8	302.11	ug/L	0.401	302.11	ppb	0.401	0.13%
Al 396.153Radial†	122052.2	97591	ug/L	451.9	97591	ppb	451.9	0.46%
As 188.979†	2281.0	1068.5	ug/L	9.41	1068.5	ppb	9.41	0.88%
B 249.677†	64791.5	1421.9	ug/L	4.40	1421.9	ppb	4.40	0.31%
Ba 233.527†	245338.7	1909.2	ug/L	1.26	1909.2	ppb	1.26	0.07%
Be 313.107†	2033047.1	781.58	ug/L	1.001	781.58	ppb	1.001	0.13%
Ca 317.933Radial†	61364.0	99057	ug/L	501.8	99057	ppb	501.8	0.51%
Cd 226.502†	51525.9	548.52	ug/L	1.244	548.52	ppb	1.244	0.23%
Co 228.616†	42768.8	853.80	ug/L	1.463	853.80	ppb	1.463	0.17%
Cr 267.716†	200164.4	2226.2	ug/L	3.55	2226.2	ppb	3.55	0.16%
Cu 324.752†	594002.3	1781.9	ug/L	3.63	1781.9	ppb	3.63	0.20%
Fe 238.204 Radial†	21675.1	184320	ug/L	1069.3	184320	ppb	1069.3	0.58%
K 766.490 Radial†	225817.1	41083	ug/L	128.0	41083	ppb	128.0	0.31%

Mg 279.077 IEC†	1181.0	39031	ug/L	452.7	39031	ppb	452.7	1.16%
Mn 257.610†	4689790.6	5159.7	ug/L	0.36	5159.7	ppb	0.36	0.01%
Mo 202.031†	6832.2	492.21	ug/L	1.786	492.21	ppb	1.786	0.36%
Na 589.592 Radial†	33776.6	9682.1	ug/L	50.67	9682.1	ppb	50.67	0.52%
Ni 231.604†	49603.2	1227.0	ug/L	3.76	1227.0	ppb	3.76	0.31%
P 214.914†	12632.7	7047.2	ug/L	30.41	7047.2	ppb	30.41	0.43%
Pb 220.353†	6506.2	794.45	ug/L	0.875	794.45	ppb	0.875	0.11%
S 181.975 Axial†	2702.3	3742.3	ug/L	17.76	3742.3	ppb	17.76	0.47%
Sb 206.836†	4239.9	1447.8	ug/L	13.87	1447.8	ppb	13.87	0.96%
Se 196.026†	3608.4	2826.2	ug/L	20.41	2826.2	ppb	20.41	0.72%
Si 251.611†	890475.7	28183	ug/L	21.1	28183	ppb	21.1	0.07%
Sn 189.927†	5688.2	1010.6	ug/L	0.84	1010.6	ppb	0.84	0.08%
Sr 421.552†	343267.5	2190.9	ug/L	8.87	2190.9	ppb	8.87	0.41%
Ti 334.940†	3699273.0	5933.0	ug/L	3.01	5933.0	ppb	3.01	0.05%
Tl 190.801†	3629.6	1163.4	ug/L	0.71	1163.4	ppb	0.71	0.06%
U 409.014†	-6574.5	-219.53	ug/L	1.072	-219.53	ppb	1.072	0.49%
V 292.402†	177828.5	1175.9	ug/L	0.50	1175.9	ppb	0.50	0.04%
Zn 213.857†	595169.9	5558.9	ug/L	0.90	5558.9	ppb	0.90	0.02%
SiO2†	894590.1	60326	ug/L	28.6	60326	ppb	28.6	0.05%

Sequence No.: 68
Sample ID: 243628001|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 88
Date Collected: 1/12/2010 23:21:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243628001|937486|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5282.4	5282.4	103	%			23:23:47
1	Y RADIAL	6148.1	6148.1	111.7	%			23:23:47
1	Al 396.153Radial†	185563.7	179898.5	143880	ug/L	143880	ppb	23:23:27
1	Ca 317.933Radial†	17434.9	16882.8	27253	ug/L	27253	ppb	23:23:27
1	Fe 238.204 Radial†	16172.3	15666.4	133210	ug/L	133210	ppb	23:23:27
1	K 766.490 Radial†	110935.4	105033.3	19117	ug/L	19117	ppb	23:23:27
1	Mg 279.077 IEC†	769.7	743.1	24537	ug/L	24537	ppb	23:23:47
1	Na 589.592 Radial†	1387.0	2653.5	760.62	ug/L	760.62	ppb	23:23:27
1	Sr 421.552†	50489.2	48936.3	312.23	ug/L	312.23	ppb	23:23:27
1	Sc 361.383	887606.2	887606.2	103.44	%			23:24:45
1	Y 371.029	808560.0	808560.0	111.12	%			23:24:45
1	Ag 328.068†	-8599.9	-8670.8	4.2607	ug/L	4.2607	ppb	23:24:45
1	As 188.979†	-66.3	-40.1	47.940	ug/L	47.940	ppb	23:25:05
1	B 249.677†	1530.5	2094.7	25.243	ug/L	25.243	ppb	23:24:45
1	Ba 233.527†	222866.8	215459.6	1674.0	ug/L	1674.0	ppb	23:24:45
1	Be 313.107†	-429.8	4059.2	10.411	ug/L	10.411	ppb	23:24:45
1	Cd 226.502†	1046.9	1213.7	-0.3927	ug/L	-0.3927	ppb	23:25:05
1	Co 228.616†	2418.7	2415.5	39.639	ug/L	39.639	ppb	23:25:05
1	Cr 267.716†	10569.4	10138.7	115.50	ug/L	115.50	ppb	23:25:05
1	Cu 324.752†	27776.7	20450.0	68.159	ug/L	68.159	ppb	23:24:45
1	Mn 257.610†	2474098.4	2391344.2	2634.7	ug/L	2634.7	ppb	23:24:45
1	Mo 202.031†	-57.3	-77.0	5.2894	ug/L	5.2894	ppb	23:25:05
1	Ni 231.604†	3468.9	3286.5	81.300	ug/L	81.300	ppb	23:25:05
1	P 214.914†	1908.9	1625.1	889.43	ug/L	889.43	ppb	23:25:05
1	Pb 220.353†	647.9	688.5	104.54	ug/L	104.54	ppb	23:25:05
1	S 181.975 Axial†	429.5	371.3	489.80	ug/L	489.80	ppb	23:25:05
1	Sb 206.836†	84.5	48.2	1.3895	ug/L	1.3895	ppb	23:25:05
1	Se 196.026†	-648.8	-595.1	28.223	ug/L	28.223	ppb	23:25:05
1	Si 251.611†	808117.6	780767.2	24716	ug/L	24716	ppb	23:24:45
1	Sn 189.927†	-141.0	-137.9	-17.212	ug/L	-17.212	ppb	23:25:05
1	Ti 334.940†	2524589.1	2441918.8	3911.9	ug/L	3911.9	ppb	23:24:45
1	Tl 190.801†	-192.6	-152.1	-1.6220	ug/L	-1.6220	ppb	23:25:05
1	U 409.014†	-8455.7	-6310.4	-201.21	ug/L	-201.21	ppb	23:24:45
1	V 292.402†	36021.5	36182.7	219.52	ug/L	219.52	ppb	23:24:45
1	Zn 213.857†	30706.9	29060.5	259.28	ug/L	259.28	ppb	23:25:05
1	SiO2†	802971.1	775793.6	52326	ug/L	52326	ppb	23:26:05
2	Sc Radial	5331.3	5331.3	104	%			23:24:12
2	Y RADIAL	6188.8	6188.8	112.4	%			23:24:12
2	Al 396.153Radial†	185920.1	178589.3	142830	ug/L	142830	ppb	23:23:52
2	Ca 317.933Radial†	17430.4	16723.3	26996	ug/L	26996	ppb	23:23:52
2	Fe 238.204 Radial†	16129.6	15481.5	131640	ug/L	131640	ppb	23:23:52
2	K 766.490 Radial†	111085.2	104189.9	18963	ug/L	18963	ppb	23:23:52
2	Mg 279.077 IEC†	778.8	745.0	24603	ug/L	24603	ppb	23:24:12
2	Na 589.592 Radial†	1361.7	2616.8	750.12	ug/L	750.12	ppb	23:23:52
2	Sr 421.552†	50500.4	48497.8	309.43	ug/L	309.43	ppb	23:23:52
2	Sc 361.383	880279.8	880279.8	102.59	%			23:25:12
2	Y 371.029	802181.2	802181.2	110.24	%			23:25:12
2	Ag 328.068†	-8570.5	-8711.4	3.5685	ug/L	3.5685	ppb	23:25:12
2	As 188.979†	-79.3	-53.3	41.930	ug/L	41.930	ppb	23:25:32
2	B 249.677†	1593.9	2168.8	27.161	ug/L	27.161	ppb	23:25:12
2	Ba 233.527†	221012.9	215445.6	1673.9	ug/L	1673.9	ppb	23:25:12
2	Be 313.107†	-526.2	3961.7	10.374	ug/L	10.374	ppb	23:25:12
2	Cd 226.502†	1092.9	1267.0	0.3559	ug/L	0.3559	ppb	23:25:32
2	Co 228.616†	2413.4	2429.7	39.948	ug/L	39.948	ppb	23:25:32
2	Cr 267.716†	10603.2	10256.7	116.78	ug/L	116.78	ppb	23:25:32
2	Cu 324.752†	27702.7	20601.4	68.529	ug/L	68.529	ppb	23:25:12
2	Mn 257.610†	2456061.1	2393668.3	2637.1	ug/L	2637.1	ppb	23:25:12
2	Mo 202.031†	-68.1	-88.0	4.4004	ug/L	4.4004	ppb	23:25:32
2	Ni 231.604†	3478.2	3323.5	82.216	ug/L	82.216	ppb	23:25:32

2	P 214.914†	1924.0	1655.2	908.44	ug/L	908.44 ppb	23:25:32
2	Pb 220.353†	639.2	685.2	104.04	ug/L	104.04 ppb	23:25:32
2	S 181.975 Axial†	429.5	374.8	494.77	ug/L	494.77 ppb	23:25:32
2	Sb 206.836†	69.0	33.9	-3.4677	ug/L	-3.4677 ppb	23:25:32
2	Se 196.026†	-651.3	-602.8	18.682	ug/L	18.682 ppb	23:25:32
2	Si 251.611†	802749.2	782036.3	24756	ug/L	24756 ppb	23:25:12
2	Sn 189.927†	-130.2	-128.6	-15.657	ug/L	-15.657 ppb	23:25:32
2	Ti 334.940†	2503765.9	2441933.6	3911.9	ug/L	3911.9 ppb	23:25:12
2	Tl 190.801†	-193.2	-154.2	-2.2378	ug/L	-2.2378 ppb	23:25:32
2	U 409.014†	-8486.1	-6408.2	-203.91	ug/L	-203.91 ppb	23:25:12
2	V 292.402†	35629.0	36089.8	219.13	ug/L	219.13 ppb	23:25:12
2	Zn 213.857†	30757.3	29356.6	262.20	ug/L	262.20 ppb	23:25:32
2	SiO2†	797192.0	776620.9	52382	ug/L	52382 ppb	23:26:11
3	Sc Radial	5357.8	5357.8	105	%		23:24:37
3	Y RADIAL	6207.8	6207.8	112.8	%		23:24:37
3	Al 396.153Radial†	182761.0	174686.5	139710	ug/L	139710 ppb	23:24:17
3	Ca 317.933Radial†	17088.0	16313.3	26334	ug/L	26334 ppb	23:24:17
3	Fe 238.204 Radial†	15869.5	15156.3	128870	ug/L	128870 ppb	23:24:17
3	K 766.490 Radial†	108781.1	101459.9	18466	ug/L	18466 ppb	23:24:17
3	Mg 279.077 IEC†	771.2	734.0	24240	ug/L	24240 ppb	23:24:37
3	Na 589.592 Radial†	1304.5	2555.7	732.59	ug/L	732.59 ppb	23:24:17
3	Sr 421.552†	49616.1	47412.6	302.51	ug/L	302.51 ppb	23:24:17
3	Sc 361.383	885166.2	885166.2	103.16	%		23:25:39
3	Y 371.029	805266.1	805266.1	110.66	%		23:25:39
3	Ag 328.068†	-8625.6	-8718.6	2.6541	ug/L	2.6541 ppb	23:25:39
3	As 188.979†	-68.7	-42.6	45.888	ug/L	45.888 ppb	23:25:59
3	B 249.677†	1598.3	2164.5	27.515	ug/L	27.515 ppb	23:25:39
3	Ba 233.527†	222229.2	215435.4	1673.7	ug/L	1673.7 ppb	23:25:39
3	Be 313.107†	-548.1	3943.3	10.378	ug/L	10.378 ppb	23:25:39
3	Cd 226.502†	1046.1	1215.8	0.0775	ug/L	0.0775 ppb	23:25:59
3	Co 228.616†	2413.6	2416.9	39.720	ug/L	39.720 ppb	23:25:59
3	Cr 267.716†	10583.9	10181.0	115.88	ug/L	115.88 ppb	23:25:59
3	Cu 324.752†	27979.2	20720.3	68.738	ug/L	68.738 ppb	23:25:39
3	Mn 257.610†	2473035.2	2396906.6	2640.3	ug/L	2640.3 ppb	23:25:39
3	Mo 202.031†	-58.5	-78.3	4.8524	ug/L	4.8524 ppb	23:25:59
3	Ni 231.604†	3468.2	3295.0	81.512	ug/L	81.512 ppb	23:25:59
3	P 214.914†	1923.1	1643.9	903.01	ug/L	903.01 ppb	23:25:59
3	Pb 220.353†	643.9	686.4	103.70	ug/L	103.70 ppb	23:25:59
3	S 181.975 Axial†	427.6	370.6	489.59	ug/L	489.59 ppb	23:25:59
3	Sb 206.836†	73.0	37.3	-2.2793	ug/L	-2.2793 ppb	23:25:59
3	Se 196.026†	-657.2	-605.0	8.9134	ug/L	8.9134 ppb	23:25:59
3	Si 251.611†	808681.3	783467.2	24802	ug/L	24802 ppb	23:25:39
3	Sn 189.927†	-146.9	-144.1	-18.503	ug/L	-18.503 ppb	23:25:59
3	Ti 334.940†	2520762.9	2444937.4	3916.6	ug/L	3916.6 ppb	23:25:39
3	Tl 190.801†	-204.4	-164.0	-5.1476	ug/L	-5.1476 ppb	23:25:59
3	U 409.014†	-8577.5	-6451.1	-204.86	ug/L	-204.86 ppb	23:25:39
3	V 292.402†	35964.6	36223.4	220.48	ug/L	220.48 ppb	23:25:39
3	Zn 213.857†	30678.7	29115.0	260.21	ug/L	260.21 ppb	23:25:59
3	SiO2†	805051.8	779950.5	52607	ug/L	52607 ppb	23:26:17

Mean Data: 243628001|937486|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	884350.7	103.06	%	0.435				0.42%
Sc Radial	5323.8	104	%	0.7				0.72%
Y 371.029	805335.8	110.67	%	0.438				0.40%
Y RADIAL	6181.6	112.3	%	0.55				0.49%
Ag 328.068†	-8700.3	3.4945	ug/L	0.80590	3.4945	ppb	0.80590	23.06%
Al 396.153Radial†	177724.8	142140	ug/L	2168.5	142140	ppb	2168.5	1.53%
As 188.979†	-45.4	45.253	ug/L	3.0551	45.253	ppb	3.0551	6.75%
B 249.677†	2142.6	26.639	ug/L	1.2224	26.639	ppb	1.2224	4.59%
Ba 233.527†	215446.9	1673.9	ug/L	0.16	1673.9	ppb	0.16	0.01%
Be 313.107†	3988.1	10.388	ug/L	0.0202	10.388	ppb	0.0202	0.19%
Ca 317.933Radial†	16639.8	26861	ug/L	474.3	26861	ppb	474.3	1.77%
Cd 226.502†	1232.1	0.0136	ug/L	0.37839	0.0136	ppb	0.37839	>999.9%
Co 228.616†	2420.7	39.769	ug/L	0.1602	39.769	ppb	0.1602	0.40%
Cr 267.716†	10192.1	116.05	ug/L	0.656	116.05	ppb	0.656	0.57%
Cu 324.752†	20590.6	68.475	ug/L	0.2933	68.475	ppb	0.2933	0.43%
Fe 238.204 Radial†	15434.7	131240	ug/L	2195.9	131240	ppb	2195.9	1.67%
K 766.490 Radial†	103561.0	18849	ug/L	340.0	18849	ppb	340.0	1.80%

Mg 279.077 IEC†	740.7	24460	ug/L	193.5	24460	ppb	193.5	0.79%
Mn 257.610†	2393973.0	2637.4	ug/L	2.85	2637.4	ppb	2.85	0.11%
Mo 202.031†	-81.1	4.8474	ug/L	0.44453	4.8474	ppb	0.44453	9.17%
Na 589.592 Radial†	2608.7	747.78	ug/L	14.162	747.78	ppb	14.162	1.89%
Ni 231.604†	3301.7	81.676	ug/L	0.4793	81.676	ppb	0.4793	0.59%
P 214.914†	1641.4	900.29	ug/L	9.790	900.29	ppb	9.790	1.09%
Pb 220.353†	686.7	104.09	ug/L	0.421	104.09	ppb	0.421	0.40%
S 181.975 Axial†	372.2	491.39	ug/L	2.934	491.39	ppb	2.934	0.60%
Sb 206.836†	39.8	-1.4525	ug/L	2.53197	-1.4525	ppb	2.53197	174.32%
Se 196.026†	-601.0	18.606	ug/L	9.6551	18.606	ppb	9.6551	51.89%
Si 251.611†	782090.2	24758	ug/L	42.8	24758	ppb	42.8	0.17%
Sn 189.927†	-136.9	-17.124	ug/L	1.4248	-17.124	ppb	1.4248	8.32%
Sr 421.552†	48282.2	308.06	ug/L	5.004	308.06	ppb	5.004	1.62%
Ti 334.940†	2442929.9	3913.4	ug/L	2.74	3913.4	ppb	2.74	0.07%
Tl 190.801†	-156.8	-3.0025	ug/L	1.88311	-3.0025	ppb	1.88311	62.72%
U 409.014†	-6389.9	-203.33	ug/L	1.893	-203.33	ppb	1.893	0.93%
V 292.402†	36165.3	219.71	ug/L	0.695	219.71	ppb	0.695	0.32%
Zn 213.857†	29177.4	260.56	ug/L	1.495	260.56	ppb	1.495	0.57%
SiO2†	777455.0	52438	ug/L	148.4	52438	ppb	148.4	0.28%

Sequence No.: 69
Sample ID: 1202006038|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 89
Date Collected: 1/12/2010 23:28:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202006038|937486|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5331.8	5331.8	104	%			23:30:42
1	Y RADIAL	6361.4	6361.4	115.5	%			23:30:42
1	Al 396.153Radial†	196455.7	188692.1	150910	ug/L	150910	ppb	23:30:22
1	Ca 317.933Radial†	14770.5	14167.1	22869	ug/L	22869	ppb	23:30:22
1	Fe 238.204 Radial†	16924.5	16243.6	138120	ug/L	138120	ppb	23:30:22
1	K 766.490 Radial†	110099.1	103233.2	18789	ug/L	18789	ppb	23:30:22
1	Mg 279.077 IEC†	700.8	670.0	22104	ug/L	22104	ppb	23:30:42
1	Na 589.592 Radial†	1539.6	2787.6	799.07	ug/L	799.07	ppb	23:30:22
1	Sr 421.552†	46828.7	44966.9	286.92	ug/L	286.92	ppb	23:30:22
1	Sc 361.383	884783.9	884783.9	103.11	%			23:31:41
1	Y 371.029	828726.1	828726.1	113.89	%			23:31:41
1	Ag 328.068†	-8937.7	-9025.0	4.4481	ug/L	4.4481	ppb	23:31:46
1	As 188.979†	-80.2	-53.9	54.284	ug/L	54.284	ppb	23:32:06
1	B 249.677†	1501.5	2071.3	23.814	ug/L	23.814	ppb	23:31:46
1	Ba 233.527†	265030.8	257037.9	1996.4	ug/L	1996.4	ppb	23:31:46
1	Be 313.107†	-6196.5	-1534.7	11.198	ug/L	11.198	ppb	23:31:46
1	Cd 226.502†	1110.9	1279.0	-0.1817	ug/L	-0.1817	ppb	23:32:06
1	Co 228.616†	4323.9	4270.6	74.683	ug/L	74.683	ppb	23:32:06
1	Cr 267.716†	11574.9	11146.5	126.83	ug/L	126.83	ppb	23:31:46
1	Cu 324.752†	28760.1	21489.4	71.541	ug/L	71.541	ppb	23:31:46
1	Mn 257.610†	4866375.3	4719025.8	5187.9	ug/L	5187.9	ppb	23:31:41
1	Mo 202.031†	-60.3	-80.1	5.4045	ug/L	5.4045	ppb	23:32:06
1	Ni 231.604†	3885.1	3700.8	91.531	ug/L	91.531	ppb	23:32:06
1	P 214.914†	2150.8	1865.5	1030.9	ug/L	1030.9	ppb	23:32:06
1	Pb 220.353†	903.5	938.4	135.86	ug/L	135.86	ppb	23:32:06
1	S 181.975 Axial†	391.6	335.9	439.12	ug/L	439.12	ppb	23:32:06
1	Sb 206.836†	95.2	58.9	0.7584	ug/L	0.7584	ppb	23:32:06
1	Se 196.026†	-674.0	-621.6	26.505	ug/L	26.505	ppb	23:32:06
1	Si 251.611†	1048684.5	1016563.2	32181	ug/L	32181	ppb	23:31:41
1	Sn 189.927†	-125.7	-123.5	-15.353	ug/L	-15.353	ppb	23:32:06
1	Ti 334.940†	3339274.2	3239793.0	5189.1	ug/L	5189.1	ppb	23:31:41
1	Tl 190.801†	-259.3	-217.3	1.2677	ug/L	1.2677	ppb	23:32:06
1	U 409.014†	-9781.0	-7621.8	-240.40	ug/L	-240.40	ppb	23:31:41
1	V 292.402†	40330.1	40472.2	246.32	ug/L	246.32	ppb	23:31:46
1	Zn 213.857†	32396.1	30793.3	275.00	ug/L	275.00	ppb	23:31:46
1	SiO2†	1050787.7	1018604.6	68704	ug/L	68704	ppb	23:33:17
2	Sc Radial	5300.5	5300.5	104	%			23:31:08
2	Y RADIAL	6335.5	6335.5	115.1	%			23:31:08
2	Al 396.153Radial†	193002.3	186468.3	149130	ug/L	149130	ppb	23:30:48
2	Ca 317.933Radial†	14499.8	13989.2	22582	ug/L	22582	ppb	23:30:48
2	Fe 238.204 Radial†	16635.7	16060.5	136560	ug/L	136560	ppb	23:30:48
2	K 766.490 Radial†	108227.0	102048.1	18574	ug/L	18574	ppb	23:30:48
2	Mg 279.077 IEC†	696.6	669.9	22104	ug/L	22104	ppb	23:31:08
2	Na 589.592 Radial†	1536.0	2792.9	800.57	ug/L	800.57	ppb	23:30:48
2	Sr 421.552†	45999.4	44430.9	283.50	ug/L	283.50	ppb	23:30:48
2	Sc 361.383	879829.1	879829.1	102.54	%			23:32:13
2	Y 371.029	823911.0	823911.0	113.23	%			23:32:13
2	Ag 328.068†	-8863.3	-9001.2	4.0611	ug/L	4.0611	ppb	23:32:18
2	As 188.979†	-82.6	-56.6	52.966	ug/L	52.966	ppb	23:32:38
2	B 249.677†	1555.6	2132.2	25.433	ug/L	25.433	ppb	23:32:18
2	Ba 233.527†	264576.8	258042.5	2004.1	ug/L	2004.1	ppb	23:32:18
2	Be 313.107†	-5728.0	-1111.7	11.417	ug/L	11.417	ppb	23:32:18
2	Cd 226.502†	1096.6	1271.1	-0.1072	ug/L	-0.1072	ppb	23:32:38
2	Co 228.616†	4312.5	4283.1	74.906	ug/L	74.906	ppb	23:32:38
2	Cr 267.716†	11677.0	11309.3	128.61	ug/L	128.61	ppb	23:32:18
2	Cu 324.752†	28676.5	21564.9	71.684	ug/L	71.684	ppb	23:32:18
2	Mn 257.610†	4864994.0	4744256.3	5215.5	ug/L	5215.5	ppb	23:32:13
2	Mo 202.031†	-65.2	-85.2	4.9249	ug/L	4.9249	ppb	23:32:38
2	Ni 231.604†	3898.9	3735.5	92.388	ug/L	92.388	ppb	23:32:38

2	P 214.914†	2138.9	1865.7	1031.8	ug/L	1031.8 ppb	23:32:38
2	Pb 220.353†	915.8	955.4	137.64	ug/L	137.64 ppb	23:32:38
2	S 181.975 Axial†	394.9	341.3	446.96	ug/L	446.96 ppb	23:32:38
2	Sb 206.836†	98.2	62.3	1.9006	ug/L	1.9006 ppb	23:32:38
2	Se 196.026†	-674.8	-626.1	18.954	ug/L	18.954 ppb	23:32:38
2	Si 251.611†	1049631.8	1023214.5	32391	ug/L	32391 ppb	23:32:13
2	Sn 189.927†	-118.6	-117.3	-14.345	ug/L	-14.345 ppb	23:32:38
2	Ti 334.940†	3337391.3	3256194.0	5215.3	ug/L	5215.3 ppb	23:32:13
2	Tl 190.801†	-266.9	-226.2	-1.0658	ug/L	-1.0658 ppb	23:32:38
2	U 409.014†	-9730.3	-7625.8	-240.34	ug/L	-240.34 ppb	23:32:13
2	V 292.402†	40253.6	40617.9	247.52	ug/L	247.52 ppb	23:32:18
2	Zn 213.857†	32315.8	30892.0	276.07	ug/L	276.07 ppb	23:32:18
2	SiO2†	1042046.1	1015818.0	68516	ug/L	68516 ppb	23:33:22
3	Sc Radial	5344.1	5344.1	104	%		23:31:33
3	Y RADIAL	6387.8	6387.8	116.0	%		23:31:33
3	Al 396.153Radial†	196231.3	188043.7	150390	ug/L	150390 ppb	23:31:13
3	Ca 317.933Radial†	14708.0	14074.6	22720	ug/L	22720 ppb	23:31:13
3	Fe 238.204 Radial†	16849.1	16134.0	137190	ug/L	137190 ppb	23:31:13
3	K 766.490 Radial†	109889.5	102789.4	18709	ug/L	18709 ppb	23:31:13
3	Mg 279.077 IEC†	702.5	670.1	22110	ug/L	22110 ppb	23:31:33
3	Na 589.592 Radial†	1589.9	2832.4	811.90	ug/L	811.90 ppb	23:31:13
3	Sr 421.552†	46782.7	44819.5	285.98	ug/L	285.98 ppb	23:31:13
3	Sc 361.383	878696.9	878696.9	102.40	%		23:32:45
3	Y 371.029	823182.5	823182.5	113.13	%		23:32:45
3	Ag 328.068†	-8613.5	-8768.4	5.3022	ug/L	5.3022 ppb	23:32:50
3	As 188.979†	-75.0	-49.3	56.234	ug/L	56.234 ppb	23:33:10
3	B 249.677†	1445.9	2027.1	22.972	ug/L	22.972 ppb	23:32:50
3	Ba 233.527†	258376.6	252320.3	1959.8	ug/L	1959.8 ppb	23:32:50
3	Be 313.107†	-5816.0	-1204.9	11.376	ug/L	11.376 ppb	23:32:50
3	Cd 226.502†	1111.3	1286.9	0.0014	ug/L	0.0014 ppb	23:33:10
3	Co 228.616†	4324.0	4299.7	75.221	ug/L	75.221 ppb	23:33:10
3	Cr 267.716†	11347.9	11002.6	125.21	ug/L	125.21 ppb	23:32:50
3	Cu 324.752†	28208.3	21143.7	70.460	ug/L	70.460 ppb	23:32:50
3	Mn 257.610†	4855575.5	4741172.5	5212.1	ug/L	5212.1 ppb	23:32:45
3	Mo 202.031†	-63.1	-83.3	5.1110	ug/L	5.1110 ppb	23:33:10
3	Ni 231.604†	3898.6	3740.1	92.502	ug/L	92.502 ppb	23:33:10
3	P 214.914†	2163.8	1892.7	1048.1	ug/L	1048.1 ppb	23:33:10
3	Pb 220.353†	907.8	948.7	137.07	ug/L	137.07 ppb	23:33:10
3	S 181.975 Axial†	394.2	341.0	446.42	ug/L	446.42 ppb	23:33:10
3	Sb 206.836†	90.5	55.0	-0.6137	ug/L	-0.6137 ppb	23:33:10
3	Se 196.026†	-684.8	-636.7	14.220	ug/L	14.220 ppb	23:33:10
3	Si 251.611†	1046855.6	1021822.5	32347	ug/L	32347 ppb	23:32:45
3	Sn 189.927†	-111.4	-110.4	-13.111	ug/L	-13.111 ppb	23:33:10
3	Ti 334.940†	3331443.7	3254580.1	5212.7	ug/L	5212.7 ppb	23:32:45
3	Tl 190.801†	-277.9	-237.3	-4.4379	ug/L	-4.4379 ppb	23:33:10
3	U 409.014†	-9736.0	-7643.6	-240.93	ug/L	-240.93 ppb	23:32:45
3	V 292.402†	39272.0	39709.9	241.27	ug/L	241.27 ppb	23:32:50
3	Zn 213.857†	31603.3	30236.8	269.86	ug/L	269.86 ppb	23:32:50
3	SiO2†	1028198.8	1003605.2	67692	ug/L	67692 ppb	23:33:28

Mean Data: 1202006038|937486|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	881103.3	102.68	%	0.377				0.37%
Sc Radial	5325.5	104	%	0.4				0.42%
Y 371.029	825273.2	113.41	%	0.414				0.37%
Y RADIAL	6361.6	115.6	%	0.47				0.41%
Ag 328.068†	-8931.5	4.6038	ug/L	0.63506	4.6038	ppb	0.63506	13.79%
Al 396.153Radial†	187734.7	150150	ug/L	914.6	150150	ppb	914.6	0.61%
As 188.979†	-53.2	54.495	ug/L	1.6438	54.495	ppb	1.6438	3.02%
B 249.677†	2076.9	24.073	ug/L	1.2508	24.073	ppb	1.2508	5.20%
Ba 233.527†	255800.2	1986.8	ug/L	23.68	1986.8	ppb	23.68	1.19%
Be 313.107†	-1283.8	11.330	ug/L	0.1167	11.330	ppb	0.1167	1.03%
Ca 317.933Radial†	14077.0	22724	ug/L	143.6	22724	ppb	143.6	0.63%
Cd 226.502†	1279.0	-0.0958	ug/L	0.09205	-0.0958	ppb	0.09205	96.05%
Co 228.616†	4284.5	74.937	ug/L	0.2704	74.937	ppb	0.2704	0.36%
Cr 267.716†	11152.8	126.88	ug/L	1.700	126.88	ppb	1.700	1.34%
Cu 324.752†	21399.4	71.228	ug/L	0.6687	71.228	ppb	0.6687	0.94%
Fe 238.204 Radial†	16146.0	137290	ug/L	783.5	137290	ppb	783.5	0.57%
K 766.490 Radial†	102690.3	18691	ug/L	109.0	18691	ppb	109.0	0.58%

Mg 279.077 IEC†	670.0	22106	ug/L	3.2	22106	ppb	3.2	0.01%
Mn 257.610†	4734818.2	5205.2	ug/L	15.02	5205.2	ppb	15.02	0.29%
Mo 202.031†	-82.9	5.1468	ug/L	0.24178	5.1468	ppb	0.24178	4.70%
Na 589.592 Radial†	2804.3	803.85	ug/L	7.012	803.85	ppb	7.012	0.87%
Ni 231.604†	3725.4	92.141	ug/L	0.5310	92.141	ppb	0.5310	0.58%
P 214.914†	1874.6	1036.9	ug/L	9.68	1036.9	ppb	9.68	0.93%
Pb 220.353†	947.5	136.86	ug/L	0.907	136.86	ppb	0.907	0.66%
S 181.975 Axial†	339.4	444.17	ug/L	4.378	444.17	ppb	4.378	0.99%
Sb 206.836†	58.7	0.6818	ug/L	1.25887	0.6818	ppb	1.25887	184.65%
Se 196.026†	-628.1	19.893	ug/L	6.1963	19.893	ppb	6.1963	31.15%
Si 251.611†	1020533.4	32306	ug/L	111.1	32306	ppb	111.1	0.34%
Sn 189.927†	-117.1	-14.270	ug/L	1.1230	-14.270	ppb	1.1230	7.87%
Sr 421.552†	44739.1	285.47	ug/L	1.767	285.47	ppb	1.767	0.62%
Ti 334.940†	3250189.0	5205.7	ug/L	14.46	5205.7	ppb	14.46	0.28%
Tl 190.801†	-227.0	-1.4120	ug/L	2.86854	-1.4120	ppb	2.86854	203.15%
U 409.014†	-7630.4	-240.56	ug/L	0.324	-240.56	ppb	0.324	0.13%
V 292.402†	40266.7	245.04	ug/L	3.316	245.04	ppb	3.316	1.35%
Zn 213.857†	30640.7	273.64	ug/L	3.320	273.64	ppb	3.320	1.21%
SiO2†	1012675.9	68304	ug/L	538.1	68304	ppb	538.1	0.79%

Sequence No.: 70
Sample ID: 1202006039|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 90
Date Collected: 1/12/2010 23:35:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202006039|937486|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5413.9	5413.9	106	%			23:37:53
1	Y RADIAL	6436.8	6436.8	116.9	%			23:37:53
1	Al 396.153Radial†	308725.4	292026.1	233530	ug/L	233530	ppb	23:37:33
1	Ca 317.933Radial†	18856.7	17817.1	28761	ug/L	28761	ppb	23:37:33
1	Fe 238.204 Radial†	19677.8	18601.4	158180	ug/L	158180	ppb	23:37:33
1	K 766.490 Radial†	162127.7	150843.3	27456	ug/L	27456	ppb	23:37:33
1	Mg 279.077 IEC†	1003.2	945.9	31248	ug/L	31248	ppb	23:37:53
1	Na 589.592 Radial†	20393.7	20599.1	5904.7	ug/L	5904.7	ppb	23:37:33
1	Sr 421.552†	131117.7	124013.0	791.55	ug/L	791.55	ppb	23:37:33
1	Sc 361.383	871918.7	871918.7	101.61	%			23:38:52
1	Y 371.029	795404.2	795404.2	109.31	%			23:38:57
1	Ag 328.068†	101029.3	99067.7	508.50	ug/L	508.50	ppb	23:38:57
1	As 188.979†	1030.7	1038.2	539.37	ug/L	539.37	ppb	23:39:17
1	B 249.677†	23505.5	23747.3	505.82	ug/L	505.82	ppb	23:38:57
1	Ba 233.527†	308207.7	303321.6	2356.8	ug/L	2356.8	ppb	23:38:57
1	Be 313.107†	1366171.7	1348949.8	525.28	ug/L	525.28	ppb	23:38:52
1	Cd 226.502†	45136.4	44621.2	474.94	ug/L	474.94	ppb	23:38:57
1	Co 228.616†	26291.4	25951.1	511.82	ug/L	511.82	ppb	23:39:17
1	Cr 267.716†	56452.8	55477.3	619.59	ug/L	619.59	ppb	23:38:57
1	Cu 324.752†	209071.4	199348.7	602.88	ug/L	602.88	ppb	23:38:57
1	Mn 257.610†	3119263.9	3069296.1	3380.3	ug/L	3380.3	ppb	23:38:52
1	Mo 202.031†	6721.8	6593.4	472.68	ug/L	472.68	ppb	23:39:17
1	Ni 231.604†	23069.3	22635.9	559.85	ug/L	559.85	ppb	23:39:17
1	P 214.914†	3151.0	2880.6	1523.1	ug/L	1523.1	ppb	23:39:17
1	Pb 220.353†	4598.4	4587.5	595.71	ug/L	595.71	ppb	23:39:17
1	S 181.975 Axial†	4104.4	3995.4	5516.4	ug/L	5516.4	ppb	23:39:17
1	Sb 206.836†	1239.3	1186.2	394.21	ug/L	394.21	ppb	23:39:17
1	Se 196.026†	6.2	38.1	507.22	ug/L	507.22	ppb	23:39:17
1	Si 251.611†	911168.7	896237.5	28366	ug/L	28366	ppb	23:38:52
1	Sn 189.927†	2778.8	2733.0	483.58	ug/L	483.58	ppb	23:39:17
1	Ti 334.940†	4362711.4	4294760.0	6878.0	ug/L	6878.0	ppb	23:38:52
1	Tl 190.801†	1325.8	1338.8	473.53	ug/L	473.53	ppb	23:39:17
1	U 409.014†	8943.7	10665.5	294.57	ug/L	294.57	ppb	23:38:57
1	V 292.402†	117783.1	117272.3	769.83	ug/L	769.83	ppb	23:38:57
1	Zn 213.857†	88298.8	86271.8	790.14	ug/L	790.14	ppb	23:38:57
1	SiO2†	920082.9	905011.8	61029	ug/L	61029	ppb	23:40:28
2	Sc Radial	5395.9	5395.9	105	%			23:38:18
2	Y RADIAL	6424.0	6424.0	116.7	%			23:38:18
2	Al 396.153Radial†	302313.2	286911.5	229440	ug/L	229440	ppb	23:37:58
2	Ca 317.933Radial†	18399.8	17442.8	28157	ug/L	28157	ppb	23:37:58
2	Fe 238.204 Radial†	19163.1	18174.9	154550	ug/L	154550	ppb	23:37:58
2	K 766.490 Radial†	158331.6	147750.5	26893	ug/L	26893	ppb	23:37:58
2	Mg 279.077 IEC†	1006.3	951.9	31454	ug/L	31454	ppb	23:38:18
2	Na 589.592 Radial†	19832.3	20130.5	5770.4	ug/L	5770.4	ppb	23:37:58
2	Sr 421.552†	127864.5	121337.9	774.48	ug/L	774.48	ppb	23:37:58
2	Sc 361.383	873611.2	873611.2	101.81	%			23:39:24
2	Y 371.029	794564.1	794564.1	109.19	%			23:39:30
2	Ag 328.068†	100913.1	98761.0	505.91	ug/L	505.91	ppb	23:39:30
2	As 188.979†	1052.0	1057.3	546.77	ug/L	546.77	ppb	23:39:50
2	B 249.677†	23523.3	23720.0	505.81	ug/L	505.81	ppb	23:39:30
2	Ba 233.527†	307283.3	301826.0	2345.1	ug/L	2345.1	ppb	23:39:30
2	Be 313.107†	1365701.1	1345882.8	524.15	ug/L	524.15	ppb	23:39:24
2	Cd 226.502†	44894.6	44297.7	471.75	ug/L	471.75	ppb	23:39:30
2	Co 228.616†	26167.6	25779.3	508.34	ug/L	508.34	ppb	23:39:50
2	Cr 267.716†	56218.4	55139.5	615.77	ug/L	615.77	ppb	23:39:30
2	Cu 324.752†	209047.7	198926.8	601.43	ug/L	601.43	ppb	23:39:30
2	Mn 257.610†	3129250.3	3073157.8	3384.2	ug/L	3384.2	ppb	23:39:24
2	Mo 202.031†	6659.9	6519.8	467.25	ug/L	467.25	ppb	23:39:50
2	Ni 231.604†	23017.3	22540.9	557.50	ug/L	557.50	ppb	23:39:50

2	P 214.914†	3127.4	2851.4	1507.7 ug/L	1507.7 ppb	23:39:50
2	Pb 220.353†	4576.0	4556.8	591.36 ug/L	591.36 ppb	23:39:50
2	S 181.975 Axial†	4062.6	3946.5	5449.1 ug/L	5449.1 ppb	23:39:50
2	Sb 206.836†	1206.7	1151.8	382.36 ug/L	382.36 ppb	23:39:50
2	Se 196.026†	12.6	44.4	500.18 ug/L	500.18 ppb	23:39:50
2	Si 251.611†	914988.1	898251.7	28430 ug/L	28430 ppb	23:39:24
2	Sn 189.927†	2760.6	2709.8	479.38 ug/L	479.38 ppb	23:39:50
2	Ti 334.940†	4378711.8	4302158.0	6889.8 ug/L	6889.8 ppb	23:39:24
2	Tl 190.801†	1320.3	1330.9	471.28 ug/L	471.28 ppb	23:39:50
2	U 409.014†	8818.4	10525.4	290.87 ug/L	290.87 ppb	23:39:30
2	V 292.402†	117589.3	116857.3	767.52 ug/L	767.52 ppb	23:39:30
2	Zn 213.857†	88220.8	86026.9	788.21 ug/L	788.21 ppb	23:39:30
2	SiO2†	924092.3	907195.6	61177 ug/L	61177 ppb	23:40:34
3	Sc Radial	5395.6	5395.6	105 %		23:38:44
3	Y RADIAL	6416.9	6416.9	116.6 %		23:38:44
3	Al 396.153Radial†	303267.3	287836.9	230180 ug/L	230180 ppb	23:38:24
3	Ca 317.933Radial†	18467.2	17508.0	28262 ug/L	28262 ppb	23:38:24
3	Fe 238.204 Radial†	19202.4	18213.5	154880 ug/L	154880 ppb	23:38:24
3	K 766.490 Radial†	159228.1	148611.7	27050 ug/L	27050 ppb	23:38:24
3	Mg 279.077 IEC†	1004.4	950.2	31397 ug/L	31397 ppb	23:38:44
3	Na 589.592 Radial†	19829.4	20129.0	5770.0 ug/L	5770.0 ppb	23:38:24
3	Sr 421.552†	128636.7	122079.2	779.21 ug/L	779.21 ppb	23:38:24
3	Sc 361.383	876419.6	876419.6	102.14 %		23:39:57
3	Y 371.029	797022.4	797022.4	109.53 %		23:40:02
3	Ag 328.068†	101225.3	98749.1	505.96 ug/L	505.96 ppb	23:40:02
3	As 188.979†	1054.0	1055.8	546.12 ug/L	546.12 ppb	23:40:22
3	B 249.677†	23533.9	23656.4	504.33 ug/L	504.33 ppb	23:40:02
3	Ba 233.527†	307823.8	301388.0	2341.7 ug/L	2341.7 ppb	23:40:02
3	Be 313.107†	1371294.0	1347060.4	524.56 ug/L	524.56 ppb	23:39:57
3	Cd 226.502†	45140.9	44397.5	472.82 ug/L	472.82 ppb	23:40:02
3	Co 228.616†	26249.4	25777.1	508.32 ug/L	508.32 ppb	23:40:22
3	Cr 267.716†	56478.2	55216.9	616.63 ug/L	616.63 ppb	23:40:02
3	Cu 324.752†	209531.7	198742.7	600.90 ug/L	600.90 ppb	23:40:02
3	Mn 257.610†	3128023.9	3062108.2	3372.1 ug/L	3372.1 ppb	23:39:57
3	Mo 202.031†	6699.7	6537.8	468.54 ug/L	468.54 ppb	23:40:22
3	Ni 231.604†	23094.1	22543.6	557.57 ug/L	557.57 ppb	23:40:22
3	P 214.914†	3093.0	2807.9	1481.6 ug/L	1481.6 ppb	23:40:22
3	Pb 220.353†	4623.8	4589.2	595.43 ug/L	595.43 ppb	23:40:22
3	S 181.975 Axial†	4094.0	3964.4	5474.0 ug/L	5474.0 ppb	23:40:22
3	Sb 206.836†	1216.4	1157.5	384.40 ug/L	384.40 ppb	23:40:22
3	Se 196.026†	-14.2	18.1	484.64 ug/L	484.64 ppb	23:40:22
3	Si 251.611†	915599.0	895970.1	28357 ug/L	28357 ppb	23:39:57
3	Sn 189.927†	2787.8	2727.8	482.53 ug/L	482.53 ppb	23:40:22
3	Ti 334.940†	4384266.6	4293815.2	6876.4 ug/L	6876.4 ppb	23:39:57
3	Tl 190.801†	1317.7	1324.2	469.11 ug/L	469.11 ppb	23:40:22
3	U 409.014†	9003.3	10678.7	295.34 ug/L	295.34 ppb	23:40:02
3	V 292.402†	117797.0	116690.6	766.37 ug/L	766.37 ppb	23:40:02
3	Zn 213.857†	88360.5	85886.0	786.86 ug/L	786.86 ppb	23:40:02
3	SiO2†	920577.3	900845.8	60748 ug/L	60748 ppb	23:40:40

Mean Data: 1202006039|937486|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	873983.2	101.85	%	0.265				0.26%
Sc Radial	5401.8	105	%	0.2				0.19%
Y 371.029	795663.6	109.34	%	0.172				0.16%
Y RADIAL	6425.9	116.7	%	0.18				0.16%
Ag 328.068†	98859.3	506.79	ug/L	1.479	506.79	ppb	1.479	0.29%
Al 396.153Radial†	288924.8	231050	ug/L	2179.5	231050	ppb	2179.5	0.94%
As 188.979†	1050.4	544.09	ug/L	4.097	544.09	ppb	4.097	0.75%
B 249.677†	23707.9	505.32	ug/L	0.859	505.32	ppb	0.859	0.17%
Ba 233.527†	302178.5	2347.8	ug/L	7.92	2347.8	ppb	7.92	0.34%
Be 313.107†	1347297.7	524.66	ug/L	0.573	524.66	ppb	0.573	0.11%
Ca 317.933Radial†	17589.3	28394	ug/L	322.8	28394	ppb	322.8	1.14%
Cd 226.502†	44438.8	473.17	ug/L	1.622	473.17	ppb	1.622	0.34%
Co 228.616†	25835.8	509.50	ug/L	2.012	509.50	ppb	2.012	0.39%
Cr 267.716†	55277.9	617.33	ug/L	2.004	617.33	ppb	2.004	0.32%
Cu 324.752†	199006.1	601.74	ug/L	1.026	601.74	ppb	1.026	0.17%
Fe 238.204 Radial†	18329.9	155870	ug/L	2006.1	155870	ppb	2006.1	1.29%
K 766.490 Radial†	149068.5	27133	ug/L	290.5	27133	ppb	290.5	1.07%

Mg 279.077 IEC†	949.3	31367	ug/L	106.1	31367	ppb	106.1	0.34%
Mn 257.610†	3068187.4	3378.9	ug/L	6.17	3378.9	ppb	6.17	0.18%
Mo 202.031†	6550.3	469.49	ug/L	2.835	469.49	ppb	2.835	0.60%
Na 589.592 Radial†	20286.2	5815.0	ug/L	77.68	5815.0	ppb	77.68	1.34%
Ni 231.604†	22573.4	558.30	ug/L	1.337	558.30	ppb	1.337	0.24%
P 214.914†	2846.6	1504.1	ug/L	20.94	1504.1	ppb	20.94	1.39%
Pb 220.353†	4577.9	594.17	ug/L	2.431	594.17	ppb	2.431	0.41%
S 181.975 Axial†	3968.8	5479.8	ug/L	34.02	5479.8	ppb	34.02	0.62%
Sb 206.836†	1165.2	386.99	ug/L	6.331	386.99	ppb	6.331	1.64%
Se 196.026†	33.6	497.35	ug/L	11.557	497.35	ppb	11.557	2.32%
Si 251.611†	896819.8	28384	ug/L	39.5	28384	ppb	39.5	0.14%
Sn 189.927†	2723.5	481.83	ug/L	2.185	481.83	ppb	2.185	0.45%
Sr 421.552†	122476.7	781.74	ug/L	8.816	781.74	ppb	8.816	1.13%
Ti 334.940†	4296911.1	6881.4	ug/L	7.29	6881.4	ppb	7.29	0.11%
Tl 190.801†	1331.3	471.31	ug/L	2.211	471.31	ppb	2.211	0.47%
U 409.014†	10623.2	293.59	ug/L	2.392	293.59	ppb	2.392	0.81%
V 292.402†	116940.1	767.91	ug/L	1.762	767.91	ppb	1.762	0.23%
Zn 213.857†	86061.6	788.40	ug/L	1.651	788.40	ppb	1.651	0.21%
SiO2†	904351.1	60985	ug/L	217.6	60985	ppb	217.6	0.36%

Sequence No.: 71
Sample ID: 1202006041|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 91
Date Collected: 1/12/2010 23:42:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202006041|937486|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5373.3	5373.3	105	%			23:45:04
1	Y RADIAL	6390.5	6390.5	116.1	%			23:45:04
1	Al 396.153Radial†	309560.3	295028.0	235930	ug/L	235930	ppb	23:44:44
1	Ca 317.933Radial†	19082.4	18167.0	29326	ug/L	29326	ppb	23:44:44
1	Fe 238.204 Radial†	18774.6	17881.3	152060	ug/L	152060	ppb	23:44:44
1	K 766.490 Radial†	158405.5	148454.4	27020	ug/L	27020	ppb	23:44:44
1	Mg 279.077 IEC†	987.7	938.3	31003	ug/L	31003	ppb	23:45:04
1	Na 589.592 Radial†	19237.4	19642.8	5630.6	ug/L	5630.6	ppb	23:44:44
1	Sr 421.552†	125958.0	120032.6	766.13	ug/L	766.13	ppb	23:44:44
1	Sc 361.383	863115.0	863115.0	100.59	%			23:46:08
1	Y 371.029	794117.7	794117.7	109.13	%			23:46:08
1	Ag 328.068†	101224.6	100276.1	512.07	ug/L	512.07	ppb	23:46:08
1	As 188.979†	1024.5	1042.5	540.83	ug/L	540.83	ppb	23:46:28
1	B 249.677†	23533.4	24011.0	512.71	ug/L	512.71	ppb	23:46:08
1	Ba 233.527†	333320.5	331381.3	2574.0	ug/L	2574.0	ppb	23:46:08
1	Be 313.107†	1358936.1	1355470.0	528.02	ug/L	528.02	ppb	23:46:02
1	Cd 226.502†	45160.3	45098.1	480.81	ug/L	480.81	ppb	23:46:08
1	Co 228.616†	26573.6	26495.6	522.78	ug/L	522.78	ppb	23:46:28
1	Cr 267.716†	56246.6	55838.9	623.49	ug/L	623.49	ppb	23:46:08
1	Cu 324.752†	208508.8	200888.0	607.16	ug/L	607.16	ppb	23:46:08
1	Mn 257.610†	4355074.7	4329196.6	4761.4	ug/L	4761.4	ppb	23:46:02
1	Mo 202.031†	6525.0	6465.2	463.27	ug/L	463.27	ppb	23:46:28
1	Ni 231.604†	22796.9	22596.6	558.87	ug/L	558.87	ppb	23:46:28
1	P 214.914†	3344.5	3104.6	1661.9	ug/L	1661.9	ppb	23:46:28
1	Pb 220.353†	4632.8	4667.9	606.56	ug/L	606.56	ppb	23:46:28
1	S 181.975 Axial†	4022.5	3955.1	5460.0	ug/L	5460.0	ppb	23:46:28
1	Sb 206.836†	1215.5	1175.0	389.57	ug/L	389.57	ppb	23:46:28
1	Se 196.026†	10.6	42.6	491.93	ug/L	491.93	ppb	23:46:28
1	Si 251.611†	787686.0	782622.6	24769	ug/L	24769	ppb	23:46:02
1	Sn 189.927†	2708.6	2691.1	476.27	ug/L	476.27	ppb	23:46:28
1	Ti 334.940†	4395425.9	4371076.0	7000.3	ug/L	7000.3	ppb	23:46:02
1	Tl 190.801†	1286.4	1313.0	473.30	ug/L	473.30	ppb	23:46:28
1	U 409.014†	8339.3	10154.5	280.22	ug/L	280.22	ppb	23:46:08
1	V 292.402†	117059.6	117735.3	773.67	ug/L	773.67	ppb	23:46:08
1	Zn 213.857†	87219.5	86085.2	788.98	ug/L	788.98	ppb	23:46:08
1	SiO2†	785169.2	780122.1	52606	ug/L	52606	ppb	23:47:38
2	Sc Radial	5338.8	5338.8	104	%			23:45:29
2	Y RADIAL	6366.4	6366.4	115.6	%			23:45:29
2	Al 396.153Radial†	303716.4	291328.9	232970	ug/L	232970	ppb	23:45:09
2	Ca 317.933Radial†	18737.7	17953.8	28982	ug/L	28982	ppb	23:45:09
2	Fe 238.204 Radial†	18355.9	17595.3	149630	ug/L	149630	ppb	23:45:09
2	K 766.490 Radial†	155679.3	146815.0	26722	ug/L	26722	ppb	23:45:09
2	Mg 279.077 IEC†	983.8	940.6	31082	ug/L	31082	ppb	23:45:29
2	Na 589.592 Radial†	18749.6	19293.4	5530.5	ug/L	5530.5	ppb	23:45:09
2	Sr 421.552†	123413.7	118367.8	755.51	ug/L	755.51	ppb	23:45:09
2	Sc 361.383	854286.0	854286.0	99.559	%			23:46:40
2	Y 371.029	787662.0	787662.0	108.25	%			23:46:40
2	Ag 328.068†	100176.8	100263.6	511.22	ug/L	511.22	ppb	23:46:40
2	As 188.979†	1031.0	1059.5	548.57	ug/L	548.57	ppb	23:47:00
2	B 249.677†	23120.1	23837.7	509.18	ug/L	509.18	ppb	23:46:40
2	Ba 233.527†	329186.5	330653.8	2568.3	ug/L	2568.3	ppb	23:46:40
2	Be 313.107†	1368187.4	1378724.7	537.08	ug/L	537.08	ppb	23:46:34
2	Cd 226.502†	44539.2	44938.2	479.31	ug/L	479.31	ppb	23:46:40
2	Co 228.616†	26819.9	27016.0	533.14	ug/L	533.14	ppb	23:47:00
2	Cr 267.716†	55620.5	55788.0	622.88	ug/L	622.88	ppb	23:46:40
2	Cu 324.752†	206237.8	200749.3	606.61	ug/L	606.61	ppb	23:46:40
2	Mn 257.610†	4376558.7	4395522.4	4833.9	ug/L	4833.9	ppb	23:46:34
2	Mo 202.031†	6609.2	6616.9	473.66	ug/L	473.66	ppb	23:47:00
2	Ni 231.604†	22999.8	23034.7	569.71	ug/L	569.71	ppb	23:47:00

2	P 214.914†	3405.1	3199.9	1720.6	ug/L	1720.6 ppb	23:47:00
2	Pb 220.353†	4677.1	4760.0	617.27	ug/L	617.27 ppb	23:47:00
2	S 181.975 Axial†	4066.3	4040.4	5579.2	ug/L	5579.2 ppb	23:47:00
2	Sb 206.836†	1227.3	1199.3	397.90	ug/L	397.90 ppb	23:47:00
2	Se 196.026†	-5.3	26.7	474.59	ug/L	474.59 ppb	23:47:00
2	Si 251.611†	791841.4	794889.6	25158	ug/L	25158 ppb	23:46:34
2	Sn 189.927†	2763.4	2773.9	490.60	ug/L	490.60 ppb	23:47:00
2	Ti 334.940†	4425673.6	4446618.9	7121.2	ug/L	7121.2 ppb	23:46:34
2	Tl 190.801†	1286.2	1325.9	478.52	ug/L	478.52 ppb	23:47:00
2	U 409.014†	8386.2	10287.3	284.40	ug/L	284.40 ppb	23:46:40
2	V 292.402†	115653.1	117525.3	772.68	ug/L	772.68 ppb	23:46:40
2	Zn 213.857†	86125.9	85882.8	787.25	ug/L	787.25 ppb	23:46:40
2	SiO2†	790590.9	793635.1	53517	ug/L	53517 ppb	23:47:44
3	Sc Radial	5364.6	5364.6	105	%		23:45:54
3	Y RADIAL	6397.6	6397.6	116.2	%		23:45:54
3	Al 396.153Radial†	313989.0	299733.1	239700	ug/L	239700 ppb	23:45:34
3	Ca 317.933Radial†	19249.4	18355.8	29631	ug/L	29631 ppb	23:45:34
3	Fe 238.204 Radial†	18961.0	18088.2	153820	ug/L	153820 ppb	23:45:34
3	K 766.490 Radial†	160384.8	150588.2	27409	ug/L	27409 ppb	23:45:34
3	Mg 279.077 IEC†	981.0	933.4	30839	ug/L	30839 ppb	23:45:54
3	Na 589.592 Radial†	19340.4	19770.8	5667.3	ug/L	5667.3 ppb	23:45:34
3	Sr 421.552†	127611.6	121805.4	777.45	ug/L	777.45 ppb	23:45:34
3	Sc 361.383	865845.4	865845.4	100.91	%		23:47:12
3	Y 371.029	797140.7	797140.7	109.55	%		23:47:12
3	Ag 328.068†	101331.6	100064.8	511.66	ug/L	511.66 ppb	23:47:12
3	As 188.979†	1049.6	1064.1	550.92	ug/L	550.92 ppb	23:47:32
3	B 249.677†	23542.6	23946.3	510.96	ug/L	510.96 ppb	23:47:12
3	Ba 233.527†	333242.8	330259.4	2565.3	ug/L	2565.3 ppb	23:47:12
3	Be 313.107†	1376535.7	1368651.4	533.11	ug/L	533.11 ppb	23:47:06
3	Cd 226.502†	45164.8	44961.0	479.12	ug/L	479.12 ppb	23:47:12
3	Co 228.616†	26785.7	26622.4	525.23	ug/L	525.23 ppb	23:47:32
3	Cr 267.716†	56291.3	55707.0	622.06	ug/L	622.06 ppb	23:47:12
3	Cu 324.752†	208427.2	200153.5	605.06	ug/L	605.06 ppb	23:47:12
3	Mn 257.610†	4388061.6	4348234.3	4782.5	ug/L	4782.5 ppb	23:47:06
3	Mo 202.031†	6615.4	6534.3	468.23	ug/L	468.23 ppb	23:47:32
3	Ni 231.604†	22984.0	22710.6	561.69	ug/L	561.69 ppb	23:47:32
3	P 214.914†	3397.7	3146.9	1687.3	ug/L	1687.3 ppb	23:47:32
3	Pb 220.353†	4697.7	4717.7	613.31	ug/L	613.31 ppb	23:47:32
3	S 181.975 Axial†	4063.3	3982.9	5497.9	ug/L	5497.9 ppb	23:47:32
3	Sb 206.836†	1228.5	1184.0	392.52	ug/L	392.52 ppb	23:47:32
3	Se 196.026†	11.5	43.4	497.90	ug/L	497.90 ppb	23:47:32
3	Si 251.611†	794925.1	787327.3	24918	ug/L	24918 ppb	23:47:06
3	Sn 189.927†	2735.1	2708.8	479.44	ug/L	479.44 ppb	23:47:32
3	Ti 334.940†	4441174.0	4402633.8	7050.9	ug/L	7050.9 ppb	23:47:06
3	Tl 190.801†	1274.0	1296.6	468.87	ug/L	468.87 ppb	23:47:32
3	U 409.014†	8495.8	10283.4	283.81	ug/L	283.81 ppb	23:47:12
3	V 292.402†	117175.7	117483.4	771.70	ug/L	771.70 ppb	23:47:12
3	Zn 213.857†	87213.7	85806.0	786.18	ug/L	786.18 ppb	23:47:12
3	SiO2†	788349.6	780812.5	52652	ug/L	52652 ppb	23:47:50

Mean Data: 1202006041|937486|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	861082.1	100.35	%	0.704				0.70%
Sc Radial	5358.9	105	%	0.4				0.33%
Y 371.029	792973.5	108.98	%	0.665				0.61%
Y RADIAL	6384.8	116.0	%	0.30				0.26%
Ag 328.068†	100201.5	511.65	ug/L	0.425	511.65	ppb	0.425	0.08%
Al 396.153Radial†	295363.4	236200	ug/L	3368.9	236200	ppb	3368.9	1.43%
As 188.979†	1055.4	546.77	ug/L	5.282	546.77	ppb	5.282	0.97%
B 249.677†	23931.7	510.95	ug/L	1.762	510.95	ppb	1.762	0.34%
Ba 233.527†	330764.8	2569.2	ug/L	4.40	2569.2	ppb	4.40	0.17%
Be 313.107†	1367615.4	532.74	ug/L	4.542	532.74	ppb	4.542	0.85%
Ca 317.933Radial†	18158.9	29313	ug/L	324.7	29313	ppb	324.7	1.11%
Cd 226.502†	44999.1	479.75	ug/L	0.925	479.75	ppb	0.925	0.19%
Co 228.616†	26711.3	527.05	ug/L	5.416	527.05	ppb	5.416	1.03%
Cr 267.716†	55778.0	622.81	ug/L	0.719	622.81	ppb	0.719	0.12%
Cu 324.752†	200596.9	606.28	ug/L	1.090	606.28	ppb	1.090	0.18%
Fe 238.204 Radial†	17854.9	151830	ug/L	2104.5	151830	ppb	2104.5	1.39%
K 766.490 Radial†	148619.2	27050	ug/L	344.4	27050	ppb	344.4	1.27%

Mg 279.077 IEC†	937.4	30975	ug/L	124.2	30975	ppb	124.2	0.40%
Mn 257.610†	4357651.1	4792.6	ug/L	37.29	4792.6	ppb	37.29	0.78%
Mo 202.031†	6538.8	468.39	ug/L	5.197	468.39	ppb	5.197	1.11%
Na 589.592 Radial†	19569.0	5609.5	ug/L	70.85	5609.5	ppb	70.85	1.26%
Ni 231.604†	22780.7	563.42	ug/L	5.621	563.42	ppb	5.621	1.00%
P 214.914†	3150.5	1689.9	ug/L	29.42	1689.9	ppb	29.42	1.74%
Pb 220.353†	4715.2	612.38	ug/L	5.414	612.38	ppb	5.414	0.88%
S 181.975 Axial†	3992.8	5512.4	ug/L	60.90	5512.4	ppb	60.90	1.10%
Sb 206.836†	1186.1	393.33	ug/L	4.225	393.33	ppb	4.225	1.07%
Se 196.026†	37.6	488.14	ug/L	12.109	488.14	ppb	12.109	2.48%
Si 251.611†	788279.8	24948	ug/L	195.8	24948	ppb	195.8	0.79%
Sn 189.927†	2724.6	482.10	ug/L	7.528	482.10	ppb	7.528	1.56%
Sr 421.552†	120068.6	766.36	ug/L	10.973	766.36	ppb	10.973	1.43%
Ti 334.940†	4406776.2	7057.5	ug/L	60.72	7057.5	ppb	60.72	0.86%
Tl 190.801†	1311.9	473.57	ug/L	4.829	473.57	ppb	4.829	1.02%
U 409.014†	10241.7	282.81	ug/L	2.267	282.81	ppb	2.267	0.80%
V 292.402†	117581.3	772.68	ug/L	0.985	772.68	ppb	0.985	0.13%
Zn 213.857†	85924.7	787.47	ug/L	1.416	787.47	ppb	1.416	0.18%
SiO2†	784856.6	52925	ug/L	513.2	52925	ppb	513.2	0.97%

Sequence No.: 72
Sample ID: 1202006040|937486|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 92
Date Collected: 1/12/2010 23:50:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202006040|937486|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5427.1	5427.1	106	%			23:51:54
1	Y RADIAL	5868.6	5868.6	106.6	%			23:51:54
1	Al 396.153Radial†	37220.7	35126.8	28094	ug/L	28094	ppb	23:51:54
1	Ca 317.933Radial†	3506.1	3289.1	5309.5	ug/L	5309.5	ppb	23:52:14
1	Fe 238.204 Radial†	3310.1	3111.8	26459	ug/L	26459	ppb	23:52:14
1	K 766.490 Radial†	24392.1	20504.3	3731.9	ug/L	3731.9	ppb	23:51:54
1	Mg 279.077 IEC†	162.2	150.0	4954.7	ug/L	4954.7	ppb	23:52:14
1	Na 589.592 Radial†	-892.5	466.7	133.79	ug/L	133.79	ppb	23:51:54
1	Sr 421.552†	9911.2	9342.2	59.606	ug/L	59.606	ppb	23:51:54
1	Sc 361.383	858887.3	858887.3	100.10	%			23:53:11
1	Y 371.029	731379.2	731379.2	100.51	%			23:53:11
1	Ag 328.068†	-1462.1	-1817.8	0.4274	ug/L	0.4274	ppb	23:53:11
1	As 188.979†	-36.7	-12.7	7.8544	ug/L	7.8544	ppb	23:53:31
1	B 249.677†	-31.1	584.0	8.7803	ug/L	8.7803	ppb	23:53:11
1	Ba 233.527†	45821.1	45786.1	355.68	ug/L	355.68	ppb	23:53:11
1	Be 313.107†	-3680.9	797.3	2.1588	ug/L	2.1588	ppb	23:53:11
1	Cd 226.502†	71.4	273.0	0.2726	ug/L	0.2726	ppb	23:53:31
1	Co 228.616†	454.9	531.7	8.8474	ug/L	8.8474	ppb	23:53:31
1	Cr 267.716†	2293.6	2212.5	25.152	ug/L	25.152	ppb	23:53:11
1	Cu 324.752†	10616.4	4203.9	13.966	ug/L	13.966	ppb	23:53:11
1	Mn 257.610†	517152.9	516231.9	568.55	ug/L	568.55	ppb	23:53:11
1	Mo 202.031†	-6.2	-27.8	0.1774	ug/L	0.1774	ppb	23:53:31
1	Ni 231.604†	789.1	721.3	17.843	ug/L	17.843	ppb	23:53:31
1	P 214.914†	565.7	344.9	189.69	ug/L	189.69	ppb	23:53:31
1	Pb 220.353†	82.4	144.5	21.583	ug/L	21.583	ppb	23:53:31
1	S 181.975 Axial†	119.4	75.4	99.622	ug/L	99.622	ppb	23:53:31
1	Sb 206.836†	46.0	12.5	1.0774	ug/L	1.0774	ppb	23:53:31
1	Se 196.026†	-156.4	-124.2	1.7868	ug/L	1.7868	ppb	23:53:31
1	Si 251.611†	163915.8	163299.5	5169.5	ug/L	5169.5	ppb	23:53:11
1	Sn 189.927†	-43.4	-45.1	-6.5110	ug/L	-6.5110	ppb	23:53:31
1	Ti 334.940†	510144.4	510994.0	818.56	ug/L	818.56	ppb	23:53:11
1	Tl 190.801†	-60.9	-26.7	1.2832	ug/L	1.2832	ppb	23:53:31
1	U 409.014†	-3395.6	-1528.4	-48.067	ug/L	-48.067	ppb	23:53:11
1	V 292.402†	6200.6	7554.5	46.023	ug/L	46.023	ppb	23:53:11
1	Zn 213.857†	7140.8	6509.3	58.408	ug/L	58.408	ppb	23:53:11
1	SiO2†	163710.9	163096.4	11001	ug/L	11001	ppb	23:54:28
2	Sc Radial	5383.5	5383.5	105	%			23:52:19
2	Y RADIAL	5831.9	5831.9	105.9	%			23:52:19
2	Al 396.153Radial†	37763.1	35927.5	28734	ug/L	28734	ppb	23:52:19
2	Ca 317.933Radial†	3535.3	3343.6	5397.5	ug/L	5397.5	ppb	23:52:39
2	Fe 238.204 Radial†	3332.9	3158.8	26859	ug/L	26859	ppb	23:52:39
2	K 766.490 Radial†	24610.0	20898.1	3803.6	ug/L	3803.6	ppb	23:52:19
2	Mg 279.077 IEC†	161.1	150.2	4959.2	ug/L	4959.2	ppb	23:52:39
2	Na 589.592 Radial†	-948.3	406.9	116.63	ug/L	116.63	ppb	23:52:19
2	Sr 421.552†	10065.7	9565.0	61.028	ug/L	61.028	ppb	23:52:19
2	Sc 361.383	864952.4	864952.4	100.80	%			23:53:36
2	Y 371.029	737516.1	737516.1	101.35	%			23:53:36
2	Ag 328.068†	-1603.2	-1947.5	-0.0474	ug/L	-0.0474	ppb	23:53:36
2	As 188.979†	-38.1	-13.8	7.4662	ug/L	7.4662	ppb	23:53:56
2	B 249.677†	15.3	630.3	9.7544	ug/L	9.7544	ppb	23:53:36
2	Ba 233.527†	46179.1	45820.3	355.95	ug/L	355.95	ppb	23:53:36
2	Be 313.107†	-3618.9	884.6	2.1912	ug/L	2.1912	ppb	23:53:36
2	Cd 226.502†	67.2	268.3	0.1811	ug/L	0.1811	ppb	23:53:56
2	Co 228.616†	450.8	524.4	8.6952	ug/L	8.6952	ppb	23:53:56
2	Cr 267.716†	2286.3	2189.1	24.896	ug/L	24.896	ppb	23:53:36
2	Cu 324.752†	10636.3	4149.3	13.819	ug/L	13.819	ppb	23:53:36
2	Mn 257.610†	519759.9	515195.3	567.45	ug/L	567.45	ppb	23:53:36
2	Mo 202.031†	-8.2	-29.7	0.0741	ug/L	0.0741	ppb	23:53:56
2	Ni 231.604†	780.9	707.7	17.506	ug/L	17.506	ppb	23:53:56

2	P 214.914†	562.1	337.3	185.01 ug/L	185.01 ppb	23:53:56
2	Pb 220.353†	96.7	158.2	23.348 ug/L	23.348 ppb	23:53:56
2	S 181.975 Axial†	122.7	77.8	102.90 ug/L	102.90 ppb	23:53:56
2	Sb 206.836†	40.1	6.3	-1.0370 ug/L	-1.0370 ppb	23:53:56
2	Se 196.026†	-165.0	-131.6	-1.6644 ug/L	-1.6644 ppb	23:53:56
2	Si 251.611†	164871.6	163099.3	5163.1 ug/L	5163.1 ppb	23:53:36
2	Sn 189.927†	-45.3	-46.7	-6.7681 ug/L	-6.7681 ppb	23:53:56
2	Ti 334.940†	513577.5	510826.1	818.30 ug/L	818.30 ppb	23:53:36
2	Tl 190.801†	-69.9	-35.2	-1.2939 ug/L	-1.2939 ppb	23:53:56
2	U 409.014†	-3076.7	-1188.4	-38.101 ug/L	-38.101 ppb	23:53:36
2	V 292.402†	6241.5	7551.5	45.955 ug/L	45.955 ppb	23:53:36
2	Zn 213.857†	7218.0	6535.9	58.621 ug/L	58.621 ppb	23:53:36
2	SiO2†	163698.7	161937.4	10922 ug/L	10922 ppb	23:54:33
3	Sc Radial	5334.2	5334.2	104 %		23:52:44
3	Y RADIAL	5793.8	5793.8	105.2 %		23:52:44
3	Al 396.153Radial†	37829.7	36323.6	29051 ug/L	29051 ppb	23:52:44
3	Ca 317.933Radial†	3503.0	3343.7	5397.6 ug/L	5397.6 ppb	23:53:04
3	Fe 238.204 Radial†	3314.4	3170.3	26957 ug/L	26957 ppb	23:53:04
3	K 766.490 Radial†	24666.3	21168.8	3852.9 ug/L	3852.9 ppb	23:52:44
3	Mg 279.077 IEC†	162.7	153.2	5058.4 ug/L	5058.4 ppb	23:53:04
3	Na 589.592 Radial†	-924.4	421.5	120.81 ug/L	120.81 ppb	23:52:44
3	Sr 421.552†	10032.4	9621.6	61.389 ug/L	61.389 ppb	23:52:44
3	Sc 361.383	859284.2	859284.2	100.14 %		23:54:02
3	Y 371.029	733453.6	733453.6	100.80 %		23:54:02
3	Ag 328.068†	-1459.9	-1814.9	0.5986 ug/L	0.5986 ppb	23:54:02
3	As 188.979†	-24.8	-0.8	13.040 ug/L	13.040 ppb	23:54:22
3	B 249.677†	-15.8	599.4	9.0461 ug/L	9.0461 ppb	23:54:02
3	Ba 233.527†	45826.4	45770.3	355.57 ug/L	355.57 ppb	23:54:02
3	Be 313.107†	-3739.9	740.1	2.1332 ug/L	2.1332 ppb	23:54:02
3	Cd 226.502†	71.8	273.3	0.2251 ug/L	0.2251 ppb	23:54:22
3	Co 228.616†	428.7	505.3	8.3116 ug/L	8.3116 ppb	23:54:22
3	Cr 267.716†	2257.1	2174.9	24.744 ug/L	24.744 ppb	23:54:02
3	Cu 324.752†	10531.5	4114.2	13.724 ug/L	13.724 ppb	23:54:02
3	Mn 257.610†	515835.6	514677.9	566.89 ug/L	566.89 ppb	23:54:02
3	Mo 202.031†	10.0	-11.7	1.3436 ug/L	1.3436 ppb	23:54:22
3	Ni 231.604†	781.8	713.7	17.654 ug/L	17.654 ppb	23:54:22
3	P 214.914†	572.7	351.6	193.60 ug/L	193.60 ppb	23:54:22
3	Pb 220.353†	82.3	144.4	21.746 ug/L	21.746 ppb	23:54:22
3	S 181.975 Axial†	132.9	88.9	118.23 ug/L	118.23 ppb	23:54:22
3	Sb 206.836†	35.9	2.4	-2.3344 ug/L	-2.3344 ppb	23:54:22
3	Se 196.026†	-152.2	-119.9	6.0175 ug/L	6.0175 ppb	23:54:22
3	Si 251.611†	163531.3	162839.8	5154.9 ug/L	5154.9 ppb	23:54:02
3	Sn 189.927†	-47.8	-49.4	-7.2383 ug/L	-7.2383 ppb	23:54:22
3	Ti 334.940†	509258.8	509874.2	816.77 ug/L	816.77 ppb	23:54:02
3	Tl 190.801†	-61.7	-27.5	1.0207 ug/L	1.0207 ppb	23:54:22
3	U 409.014†	-3320.0	-1451.4	-45.854 ug/L	-45.854 ppb	23:54:02
3	V 292.402†	6198.2	7549.2	45.931 ug/L	45.931 ppb	23:54:02
3	Zn 213.857†	7144.5	6509.7	58.365 ug/L	58.365 ppb	23:54:02
3	SiO2†	164759.9	164068.4	11066 ug/L	11066 ppb	23:54:38

Mean Data: 1202006040|937486|5

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	861041.3	100.35	%	0.395				0.39%
Sc Radial	5381.6	105	%	0.9				0.86%
Y 371.029	734116.3	100.89	%	0.429				0.43%
Y RADIAL	5831.5	105.9	%	0.68				0.64%
Ag 328.068†	-1860.1	0.3262	ug/L	0.33470	0.3262	ppb	0.33470	102.61%
Al 396.153Radial†	35792.6	28626	ug/L	487.6	28626	ppb	487.6	1.70%
As 188.979†	-9.1	9.4536	ug/L	3.11221	9.4536	ppb	3.11221	32.92%
B 249.677†	604.5	9.1936	ug/L	0.50353	9.1936	ppb	0.50353	5.48%
Ba 233.527†	45792.2	355.73	ug/L	0.199	355.73	ppb	0.199	0.06%
Be 313.107†	807.3	2.1611	ug/L	0.02909	2.1611	ppb	0.02909	1.35%
Ca 317.933Radial†	3325.5	5368.2	ug/L	50.87	5368.2	ppb	50.87	0.95%
Cd 226.502†	271.5	0.2263	ug/L	0.04576	0.2263	ppb	0.04576	20.22%
Co 228.616†	520.5	8.6181	ug/L	0.27611	8.6181	ppb	0.27611	3.20%
Cr 267.716†	2192.2	24.931	ug/L	0.2062	24.931	ppb	0.2062	0.83%
Cu 324.752†	4155.8	13.836	ug/L	0.1222	13.836	ppb	0.1222	0.88%
Fe 238.204 Radial†	3147.0	26758	ug/L	263.7	26758	ppb	263.7	0.99%
K 766.490 Radial†	20857.1	3796.1	ug/L	60.83	3796.1	ppb	60.83	1.60%

Mg 279.077 IEC†	151.1	4990.8	ug/L	58.62	4990.8	ppb	58.62	1.17%
Mn 257.610†	515368.4	567.63	ug/L	0.844	567.63	ppb	0.844	0.15%
Mo 202.031†	-23.1	0.5317	ug/L	0.70499	0.5317	ppb	0.70499	132.59%
Na 589.592 Radial†	431.7	123.74	ug/L	8.947	123.74	ppb	8.947	7.23%
Ni 231.604†	714.2	17.668	ug/L	0.1687	17.668	ppb	0.1687	0.95%
P 214.914†	344.6	189.43	ug/L	4.300	189.43	ppb	4.300	2.27%
Pb 220.353†	149.0	22.225	ug/L	0.9753	22.225	ppb	0.9753	4.39%
S 181.975 Axial†	80.7	106.92	ug/L	9.935	106.92	ppb	9.935	9.29%
Sb 206.836†	7.1	-0.7647	ug/L	1.72212	-0.7647	ppb	1.72212	225.21%
Se 196.026†	-125.3	2.0466	ug/L	3.84751	2.0466	ppb	3.84751	187.99%
Si 251.611†	163079.6	5162.5	ug/L	7.30	5162.5	ppb	7.30	0.14%
Sn 189.927†	-47.0	-6.8391	ug/L	0.36882	-6.8391	ppb	0.36882	5.39%
Sr 421.552†	9509.6	60.674	ug/L	0.9425	60.674	ppb	0.9425	1.55%
Ti 334.940†	510564.8	817.87	ug/L	0.967	817.87	ppb	0.967	0.12%
Tl 190.801†	-29.8	0.3367	ug/L	1.41825	0.3367	ppb	1.41825	421.24%
U 409.014†	-1389.4	-44.007	ug/L	5.2335	-44.007	ppb	5.2335	11.89%
V 292.402†	7551.7	45.970	ug/L	0.0475	45.970	ppb	0.0475	0.10%
Zn 213.857†	6518.3	58.464	ug/L	0.1371	58.464	ppb	0.1371	0.23%
SiO2†	163034.1	10996	ug/L	71.9	10996	ppb	71.9	0.65%

Sequence No.: 73
Sample ID: 243628002|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 93
Date Collected: 1/12/2010 23:56:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243628002|937486|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5329.8	5329.8	104	%			23:59:02
1	Y RADIAL	6122.5	6122.5	111.2	%			23:59:02
1	Al 396.153Radial†	76311.0	73326.6	58644	ug/L	58644	ppb	23:58:42
1	Ca 317.933Radial†	12294.7	11793.7	19038	ug/L	19038	ppb	23:58:42
1	Fe 238.204 Radial†	10837.2	10401.0	88439	ug/L	88439	ppb	23:58:42
1	K 766.490 Radial†	48953.3	44523.3	8100.2	ug/L	8100.2	ppb	23:58:42
1	Mg 279.077 IEC†	339.5	323.2	10639	ug/L	10639	ppb	23:59:02
1	Na 589.592 Radial†	2209.1	3431.4	983.60	ug/L	983.60	ppb	23:58:42
1	Sr 421.552†	24049.7	23097.5	147.32	ug/L	147.32	ppb	23:58:42
1	Sc 361.383	887384.5	887384.5	103.42	%			00:00:00
1	Y 371.029	801859.9	801859.9	110.20	%			00:00:00
1	Ag 328.068†	-5439.6	-5617.0	3.5872	ug/L	3.5872	ppb	00:00:05
1	As 188.979†	-91.1	-64.2	24.314	ug/L	24.314	ppb	00:00:25
1	B 249.677†	694.7	1286.9	14.374	ug/L	14.374	ppb	00:00:05
1	Ba 233.527†	127103.6	122913.6	955.47	ug/L	955.47	ppb	00:00:05
1	Be 313.107†	-15839.7	-10841.8	4.0390	ug/L	4.0390	ppb	00:00:05
1	Cd 226.502†	644.3	824.7	0.3398	ug/L	0.3398	ppb	00:00:25
1	Co 228.616†	2553.6	2546.5	42.677	ug/L	42.677	ppb	00:00:25
1	Cr 267.716†	143738.7	138911.7	1543.3	ug/L	1543.3	ppb	00:00:05
1	Cu 324.752†	33905.3	26382.9	83.455	ug/L	83.455	ppb	00:00:05
1	Mn 257.610†	2477264.8	2395003.6	2634.8	ug/L	2634.8	ppb	00:00:00
1	Mo 202.031†	136.1	110.0	14.768	ug/L	14.768	ppb	00:00:25
1	Ni 231.604†	28166.9	27169.4	672.33	ug/L	672.33	ppb	00:00:05
1	P 214.914†	4927.1	4544.0	2652.5	ug/L	2652.5	ppb	00:00:25
1	Pb 220.353†	3136.9	3095.5	380.11	ug/L	380.11	ppb	00:00:25
1	S 181.975 Axial†	1033.3	955.3	1318.4	ug/L	1318.4	ppb	00:00:25
1	Sb 206.836†	160.0	121.3	29.790	ug/L	29.790	ppb	00:00:25
1	Se 196.026†	-422.7	-376.7	28.452	ug/L	28.452	ppb	00:00:25
1	Si 251.611†	909024.5	878536.1	27811	ug/L	27811	ppb	00:00:00
1	Sn 189.927†	-81.7	-80.7	-9.3699	ug/L	-9.3699	ppb	00:00:25
1	Ti 334.940†	2312944.4	2237875.2	3584.6	ug/L	3584.6	ppb	00:00:00
1	Tl 190.801†	-176.6	-136.7	0.4418	ug/L	0.4418	ppb	00:00:25
1	U 409.014†	-6391.0	-4316.0	-140.59	ug/L	-140.59	ppb	00:00:05
1	V 292.402†	27773.7	28216.0	172.64	ug/L	172.64	ppb	00:00:05
1	Zn 213.857†	29182.1	27593.5	246.06	ug/L	246.06	ppb	00:00:05
1	SiO2†	905209.2	874848.5	59007	ug/L	59007	ppb	00:01:33
2	Sc Radial	5327.7	5327.7	104	%			23:59:27
2	Y RADIAL	6123.0	6123.0	111.2	%			23:59:27
2	Al 396.153Radial†	75034.7	72128.0	57686	ug/L	57686	ppb	23:59:07
2	Ca 317.933Radial†	12143.3	11652.7	18810	ug/L	18810	ppb	23:59:07
2	Fe 238.204 Radial†	10663.9	10238.4	87057	ug/L	87057	ppb	23:59:07
2	K 766.490 Radial†	48187.3	43805.1	7969.5	ug/L	7969.5	ppb	23:59:07
2	Mg 279.077 IEC†	346.0	329.5	10851	ug/L	10851	ppb	23:59:27
2	Na 589.592 Radial†	2114.9	3341.7	957.90	ug/L	957.90	ppb	23:59:07
2	Sr 421.552†	23527.7	22604.5	144.18	ug/L	144.18	ppb	23:59:07
2	Sc 361.383	889591.3	889591.3	103.67	%			00:00:31
2	Y 371.029	805553.2	805553.2	110.70	%			00:00:31
2	Ag 328.068†	-5413.6	-5578.9	3.3160	ug/L	3.3160	ppb	00:00:36
2	As 188.979†	-90.8	-63.7	24.171	ug/L	24.171	ppb	00:00:56
2	B 249.677†	627.8	1220.7	13.115	ug/L	13.115	ppb	00:00:36
2	Ba 233.527†	127515.9	123006.4	956.15	ug/L	956.15	ppb	00:00:36
2	Be 313.107†	-16055.4	-11011.8	3.9658	ug/L	3.9658	ppb	00:00:36
2	Cd 226.502†	651.0	829.6	0.5373	ug/L	0.5373	ppb	00:00:56
2	Co 228.616†	2526.7	2514.4	42.053	ug/L	42.053	ppb	00:00:56
2	Cr 267.716†	144432.0	139235.6	1546.8	ug/L	1546.8	ppb	00:00:36
2	Cu 324.752†	34033.6	26425.3	83.506	ug/L	83.506	ppb	00:00:36
2	Mn 257.610†	2479275.2	2391000.4	2630.3	ug/L	2630.3	ppb	00:00:31
2	Mo 202.031†	132.2	105.9	14.373	ug/L	14.373	ppb	00:00:56
2	Ni 231.604†	28242.8	27175.1	672.47	ug/L	672.47	ppb	00:00:36

2	P 214.914†	4920.9	4526.2	2642.7 ug/L	2642.7 ppb	00:00:56
2	Pb 220.353†	3162.3	3112.4	382.06 ug/L	382.06 ppb	00:00:56
2	S 181.975 Axial†	1021.6	941.5	1299.4 ug/L	1299.4 ppb	00:00:56
2	Sb 206.836†	167.4	128.0	32.106 ug/L	32.106 ppb	00:00:56
2	Se 196.026†	-433.2	-385.8	18.575 ug/L	18.575 ppb	00:00:56
2	Si 251.611†	909146.6	876473.4	27746 ug/L	27746 ppb	00:00:31
2	Sn 189.927†	-75.6	-74.6	-8.3643 ug/L	-8.3643 ppb	00:00:56
2	Ti 334.940†	2316128.0	2235397.8	3580.6 ug/L	3580.6 ppb	00:00:31
2	Tl 190.801†	-188.4	-147.6	-2.9233 ug/L	-2.9233 ppb	00:00:56
2	U 409.014†	-6247.9	-4162.7	-135.93 ug/L	-135.93 ppb	00:00:36
2	V 292.402†	27918.2	28288.7	173.36 ug/L	173.36 ppb	00:00:36
2	Zn 213.857†	29302.7	27639.8	246.63 ug/L	246.63 ppb	00:00:36
2	SiO2†	903385.8	870918.3	58742 ug/L	58742 ppb	00:01:39
3	Sc Radial	5319.7	5319.7	104 %		23:59:52
3	Y RADIAL	6121.2	6121.2	111.2 %		23:59:52
3	Al 396.153Radial†	74472.3	71696.1	57340 ug/L	57340 ppb	23:59:32
3	Ca 317.933Radial†	11974.3	11507.7	18576 ug/L	18576 ppb	23:59:32
3	Fe 238.204 Radial†	10527.6	10122.7	86073 ug/L	86073 ppb	23:59:32
3	K 766.490 Radial†	47672.7	43380.0	7892.2 ug/L	7892.2 ppb	23:59:32
3	Mg 279.077 IEC†	339.7	323.9	10666 ug/L	10666 ppb	23:59:52
3	Na 589.592 Radial†	2152.8	3381.3	969.25 ug/L	969.25 ppb	23:59:32
3	Sr 421.552†	23314.0	22433.2	143.09 ug/L	143.09 ppb	23:59:32
3	Sc 361.383	900992.2	900992.2	105.00 %		00:01:02
3	Y 371.029	814889.4	814889.4	111.99 %		00:01:02
3	Ag 328.068†	-5425.5	-5524.1	3.2503 ug/L	3.2503 ppb	00:01:07
3	As 188.979†	-85.5	-57.5	26.645 ug/L	26.645 ppb	00:01:27
3	B 249.677†	659.8	1243.5	13.790 ug/L	13.790 ppb	00:01:07
3	Ba 233.527†	128699.2	122576.9	952.79 ug/L	952.79 ppb	00:01:07
3	Be 313.107†	-16124.3	-10881.5	4.0348 ug/L	4.0348 ppb	00:01:07
3	Cd 226.502†	637.8	809.1	0.4113 ug/L	0.4113 ppb	00:01:27
3	Co 228.616†	2523.3	2480.4	41.362 ug/L	41.362 ppb	00:01:27
3	Cr 267.716†	145595.7	138580.9	1539.5 ug/L	1539.5 ppb	00:01:07
3	Cu 324.752†	34331.1	26293.3	83.063 ug/L	83.063 ppb	00:01:07
3	Mn 257.610†	2516333.7	2396033.1	2635.7 ug/L	2635.7 ppb	00:01:02
3	Mo 202.031†	144.2	115.7	14.974 ug/L	14.974 ppb	00:01:27
3	Ni 231.604†	28536.3	27109.9	670.85 ug/L	670.85 ppb	00:01:07
3	P 214.914†	4919.1	4464.5	2606.4 ug/L	2606.4 ppb	00:01:27
3	Pb 220.353†	3136.7	3049.5	374.46 ug/L	374.46 ppb	00:01:27
3	S 181.975 Axial†	1034.8	941.6	1299.7 ug/L	1299.7 ppb	00:01:27
3	Sb 206.836†	162.5	121.3	29.822 ug/L	29.822 ppb	00:01:27
3	Se 196.026†	-435.9	-383.1	17.342 ug/L	17.342 ppb	00:01:27
3	Si 251.611†	925474.0	880926.4	27887 ug/L	27887 ppb	00:01:02
3	Sn 189.927†	-75.0	-73.1	-8.1619 ug/L	-8.1619 ppb	00:01:27
3	Ti 334.940†	2351514.9	2240829.7	3589.3 ug/L	3589.3 ppb	00:01:02
3	Tl 190.801†	-180.9	-138.2	0.0255 ug/L	0.0255 ppb	00:01:27
3	U 409.014†	-6496.0	-4322.6	-140.51 ug/L	-140.51 ppb	00:01:07
3	V 292.402†	28088.2	28109.9	172.30 ug/L	172.30 ppb	00:01:07
3	Zn 213.857†	29663.0	27625.3	246.60 ug/L	246.60 ppb	00:01:07
3	SiO2†	905285.8	861701.6	58120 ug/L	58120 ppb	00:01:45

Mean Data: 243628002|937486|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	892656.0	104.03	%	0.851				0.82%
Sc Radial	5325.7	104	%	0.1				0.10%
Y 371.029	807434.2	110.96	%	0.923				0.83%
Y RADIAL	6122.2	111.2	%	0.02				0.02%
Ag 328.068†	-5573.3	3.3845	ug/L	0.17856	3.3845	ppb	0.17856	5.28%
Al 396.153Radial†	72383.6	57890	ug/L	675.6	57890	ppb	675.6	1.17%
As 188.979†	-61.8	25.044	ug/L	1.3888	25.044	ppb	1.3888	5.55%
B 249.677†	1250.4	13.760	ug/L	0.6300	13.760	ppb	0.6300	4.58%
Ba 233.527†	122832.3	954.80	ug/L	1.777	954.80	ppb	1.777	0.19%
Be 313.107†	-10911.7	4.0132	ug/L	0.04112	4.0132	ppb	0.04112	1.02%
Ca 317.933Radial†	11651.4	18808	ug/L	230.8	18808	ppb	230.8	1.23%
Cd 226.502†	821.1	0.4295	ug/L	0.10000	0.4295	ppb	0.10000	23.28%
Co 228.616†	2513.8	42.031	ug/L	0.6580	42.031	ppb	0.6580	1.57%
Cr 267.716†	138909.4	1543.2	ug/L	3.64	1543.2	ppb	3.64	0.24%
Cu 324.752†	26367.2	83.341	ug/L	0.2426	83.341	ppb	0.2426	0.29%
Fe 238.204 Radial†	10254.0	87189	ug/L	1188.5	87189	ppb	1188.5	1.36%
K 766.490 Radial†	43902.8	7987.3	ug/L	105.15	7987.3	ppb	105.15	1.32%

Mg 279.077 IEC†	325.5	10719	ug/L	115.4	10719	ppb	115.4	1.08%
Mn 257.610†	2394012.4	2633.6	ug/L	2.91	2633.6	ppb	2.91	0.11%
Mo 202.031†	110.5	14.705	ug/L	0.3052	14.705	ppb	0.3052	2.08%
Na 589.592 Radial†	3384.8	970.25	ug/L	12.880	970.25	ppb	12.880	1.33%
Ni 231.604†	27151.5	671.88	ug/L	0.893	671.88	ppb	0.893	0.13%
P 214.914†	4511.6	2633.9	ug/L	24.28	2633.9	ppb	24.28	0.92%
Pb 220.353†	3085.8	378.88	ug/L	3.948	378.88	ppb	3.948	1.04%
S 181.975 Axial†	946.1	1305.9	ug/L	10.90	1305.9	ppb	10.90	0.83%
Sb 206.836†	123.5	30.573	ug/L	1.3277	30.573	ppb	1.3277	4.34%
Se 196.026†	-381.9	21.456	ug/L	6.0900	21.456	ppb	6.0900	28.38%
Si 251.611†	878645.3	27815	ug/L	70.5	27815	ppb	70.5	0.25%
Sn 189.927†	-76.1	-8.6320	ug/L	0.64696	-8.6320	ppb	0.64696	7.49%
Sr 421.552†	22711.8	144.86	ug/L	2.200	144.86	ppb	2.200	1.52%
Ti 334.940†	2238034.2	3584.8	ug/L	4.35	3584.8	ppb	4.35	0.12%
Tl 190.801†	-140.8	-0.8187	ug/L	1.83454	-0.8187	ppb	1.83454	224.09%
U 409.014†	-4267.1	-139.01	ug/L	2.669	-139.01	ppb	2.669	1.92%
V 292.402†	28204.9	172.77	ug/L	0.543	172.77	ppb	0.543	0.31%
Zn 213.857†	27619.5	246.43	ug/L	0.320	246.43	ppb	0.320	0.13%
SiO2†	869156.1	58623	ug/L	455.2	58623	ppb	455.2	0.78%

Sequence No.: 74
Sample ID: 243628003|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 94
Date Collected: 1/13/2010 00:03:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243628003|937486|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5021.0	5021.0	98.0	%			00:06:09
1	Y RADIAL	5730.9	5730.9	104.1	%			00:06:09
1	Al 396.153Radial†	119453.8	121836.4	97442	ug/L	97442	ppb	00:05:49
1	Ca 317.933Radial†	9879.3	10056.6	16234	ug/L	16234	ppb	00:05:49
1	Fe 238.204 Radial†	11609.3	11828.7	100580	ug/L	100580	ppb	00:05:49
1	K 766.490 Radial†	73915.0	72873.9	13264	ug/L	13264	ppb	00:05:49
1	Mg 279.077 IEC†	428.1	433.6	14294	ug/L	14294	ppb	00:06:09
1	Na 589.592 Radial†	1227.2	2560.5	733.96	ug/L	733.96	ppb	00:05:49
1	Sr 421.552†	28609.5	29168.9	186.11	ug/L	186.11	ppb	00:05:49
1	Sc 361.383	878414.6	878414.6	102.37	%			00:07:07
1	Y 371.029	787475.1	787475.1	108.22	%			00:07:07
1	Ag 328.068†	-5961.1	-6180.1	5.0157	ug/L	5.0157	ppb	00:07:12
1	As 188.979†	-73.1	-47.5	39.989	ug/L	39.989	ppb	00:07:32
1	B 249.677†	754.5	1352.1	13.827	ug/L	13.827	ppb	00:07:12
1	Ba 233.527†	171129.8	167175.2	1298.8	ug/L	1298.8	ppb	00:07:12
1	Be 313.107†	-12334.4	-7574.1	6.7638	ug/L	6.7638	ppb	00:07:12
1	Cd 226.502†	729.5	914.3	-0.3199	ug/L	-0.3199	ppb	00:07:32
1	Co 228.616†	3259.1	3260.9	56.413	ug/L	56.413	ppb	00:07:32
1	Cr 267.716†	7094.4	6851.1	78.302	ug/L	78.302	ppb	00:07:12
1	Cu 324.752†	22010.5	15098.3	50.437	ug/L	50.437	ppb	00:07:12
1	Mn 257.610†	2749803.3	2685691.1	2954.7	ug/L	2954.7	ppb	00:07:07
1	Mo 202.031†	-32.6	-53.5	4.2707	ug/L	4.2707	ppb	00:07:32
1	Ni 231.604†	2485.3	2360.7	58.380	ug/L	58.380	ppb	00:07:32
1	P 214.914†	1701.3	1441.6	797.83	ug/L	797.83	ppb	00:07:32
1	Pb 220.353†	566.2	615.3	87.790	ug/L	87.790	ppb	00:07:32
1	S 181.975 Axial†	381.0	328.3	438.65	ug/L	438.65	ppb	00:07:32
1	Sb 206.836†	70.9	35.8	-3.0686	ug/L	-3.0686	ppb	00:07:32
1	Se 196.026†	-474.1	-431.1	32.227	ug/L	32.227	ppb	00:07:32
1	Si 251.611†	932157.6	910109.2	28811	ug/L	28811	ppb	00:07:07
1	Sn 189.927†	-104.8	-104.0	-13.701	ug/L	-13.701	ppb	00:07:32
1	Ti 334.940†	2709201.6	2647793.7	4240.9	ug/L	4240.9	ppb	00:07:07
1	Tl 190.801†	-192.8	-154.3	2.0110	ug/L	2.0110	ppb	00:07:32
1	U 409.014†	-6516.1	-4501.3	-144.15	ug/L	-144.15	ppb	00:07:12
1	V 292.402†	28732.0	29426.3	178.60	ug/L	178.60	ppb	00:07:12
1	Zn 213.857†	20264.7	19170.8	169.77	ug/L	169.77	ppb	00:07:12
1	SiO2†	940765.7	918519.6	61953	ug/L	61953	ppb	00:08:40
2	Sc Radial	5081.4	5081.4	99.2	%			00:06:34
2	Y RADIAL	5799.0	5799.0	105.3	%			00:06:34
2	Al 396.153Radial†	118861.6	119791.9	95806	ug/L	95806	ppb	00:06:14
2	Ca 317.933Radial†	9810.5	9867.6	15929	ug/L	15929	ppb	00:06:14
2	Fe 238.204 Radial†	11487.6	11565.4	98340	ug/L	98340	ppb	00:06:14
2	K 766.490 Radial†	73305.8	71364.2	12989	ug/L	12989	ppb	00:06:14
2	Mg 279.077 IEC†	444.3	444.7	14663	ug/L	14663	ppb	00:06:34
2	Na 589.592 Radial†	1197.8	2516.0	721.21	ug/L	721.21	ppb	00:06:14
2	Sr 421.552†	28435.0	28646.3	182.77	ug/L	182.77	ppb	00:06:14
2	Sc 361.383	888184.7	888184.7	103.51	%			00:07:38
2	Y 371.029	795264.6	795264.6	109.29	%			00:07:38
2	Ag 328.068†	-5973.3	-6127.8	4.5407	ug/L	4.5407	ppb	00:07:43
2	As 188.979†	-79.8	-53.2	37.124	ug/L	37.124	ppb	00:08:03
2	B 249.677†	936.3	1519.6	17.952	ug/L	17.952	ppb	00:07:43
2	Ba 233.527†	175543.5	169600.4	1317.5	ug/L	1317.5	ppb	00:07:43
2	Be 313.107†	-12315.2	-7423.0	6.8415	ug/L	6.8415	ppb	00:07:43
2	Cd 226.502†	722.6	899.7	-0.2481	ug/L	-0.2481	ppb	00:08:03
2	Co 228.616†	3263.4	3230.0	55.808	ug/L	55.808	ppb	00:08:03
2	Cr 267.716†	7285.6	6959.7	79.464	ug/L	79.464	ppb	00:07:43
2	Cu 324.752†	22602.5	15433.8	51.316	ug/L	51.316	ppb	00:07:43
2	Mn 257.610†	2785351.8	2690487.0	2959.7	ug/L	2959.7	ppb	00:07:38
2	Mo 202.031†	-41.9	-62.1	3.4925	ug/L	3.4925	ppb	00:08:03
2	Ni 231.604†	2469.9	2319.2	57.352	ug/L	57.352	ppb	00:08:03

2	P 214.914†	1694.5	1416.7	784.05 ug/L	784.05 ppb	00:08:03
2	Pb 220.353†	563.2	606.3	86.527 ug/L	86.527 ppb	00:08:03
2	S 181.975 Axial†	385.9	328.9	439.79 ug/L	439.79 ppb	00:08:03
2	Sb 206.836†	65.4	29.8	-5.1707 ug/L	-5.1707 ppb	00:08:03
2	Se 196.026†	-462.7	-414.9	35.671 ug/L	35.671 ppb	00:08:03
2	Si 251.611†	944008.1	911541.6	28856 ug/L	28856 ppb	00:07:38
2	Sn 189.927†	-119.8	-117.4	-16.116 ug/L	-16.116 ppb	00:08:03
2	Ti 334.940†	2745200.5	2653460.9	4249.9 ug/L	4249.9 ppb	00:07:38
2	Tl 190.801†	-199.8	-159.0	0.6920 ug/L	0.6920 ppb	00:08:03
2	U 409.014†	-6385.0	-4304.7	-138.11 ug/L	-138.11 ppb	00:07:43
2	V 292.402†	29419.8	29782.1	181.38 ug/L	181.38 ppb	00:07:43
2	Zn 213.857†	20779.4	19450.2	172.62 ug/L	172.62 ppb	00:07:43
2	SiO2†	933371.4	901267.2	60789 ug/L	60789 ppb	00:08:46
3	Sc Radial	5177.8	5177.8	101 %		00:06:59
3	Y RADIAL	5906.3	5906.3	107.3 %		00:06:59
3	Al 396.153Radial†	114818.6	113564.4	90826 ug/L	90826 ppb	00:06:39
3	Ca 317.933Radial†	9470.3	9347.1	15089 ug/L	15089 ppb	00:06:39
3	Fe 238.204 Radial†	11156.3	11022.3	93722 ug/L	93722 ppb	00:06:39
3	K 766.490 Radial†	71445.4	68149.6	12404 ug/L	12404 ppb	00:06:39
3	Mg 279.077 IEC†	443.4	435.5	14363 ug/L	14363 ppb	00:06:59
3	Na 589.592 Radial†	1018.5	2316.2	663.94 ug/L	663.94 ppb	00:06:39
3	Sr 421.552†	27437.3	27126.4	173.08 ug/L	173.08 ppb	00:06:39
3	Sc 361.383	881730.3	881730.3	102.76 %		00:08:09
3	Y 371.029	789707.7	789707.7	108.53 %		00:08:09
3	Ag 328.068†	-6013.8	-6209.5	2.6983 ug/L	2.6983 ppb	00:08:14
3	As 188.979†	-83.8	-57.6	34.195 ug/L	34.195 ppb	00:08:34
3	B 249.677†	1001.2	1589.5	20.269 ug/L	20.269 ppb	00:08:14
3	Ba 233.527†	176077.5	171361.6	1331.0 ug/L	1331.0 ppb	00:08:14
3	Be 313.107†	-12343.6	-7537.8	6.8108 ug/L	6.8108 ppb	00:08:14
3	Cd 226.502†	725.3	907.5	0.3129 ug/L	0.3129 ppb	00:08:34
3	Co 228.616†	3255.7	3245.6	56.185 ug/L	56.185 ppb	00:08:34
3	Cr 267.716†	7336.7	7060.9	80.502 ug/L	80.502 ppb	00:08:14
3	Cu 324.752†	22690.2	15678.9	51.806 ug/L	51.806 ppb	00:08:14
3	Mn 257.610†	2772395.5	2697576.4	2967.0 ug/L	2967.0 ppb	00:08:09
3	Mo 202.031†	-37.7	-58.3	3.3875 ug/L	3.3875 ppb	00:08:34
3	Ni 231.604†	2457.0	2324.1	57.474 ug/L	57.474 ppb	00:08:34
3	P 214.914†	1683.4	1418.0	787.12 ug/L	787.12 ppb	00:08:34
3	Pb 220.353†	575.8	622.5	87.762 ug/L	87.762 ppb	00:08:34
3	S 181.975 Axial†	383.0	328.9	440.62 ug/L	440.62 ppb	00:08:34
3	Sb 206.836†	77.5	42.0	-0.9432 ug/L	-0.9432 ppb	00:08:34
3	Se 196.026†	-444.7	-400.7	30.633 ug/L	30.633 ppb	00:08:34
3	Si 251.611†	940305.5	914614.5	28953 ug/L	28953 ppb	00:08:09
3	Sn 189.927†	-108.4	-107.1	-14.553 ug/L	-14.553 ppb	00:08:34
3	Ti 334.940†	2728820.2	2656934.3	4255.3 ug/L	4255.3 ppb	00:08:09
3	Tl 190.801†	-198.0	-158.6	0.8912 ug/L	0.8912 ppb	00:08:34
3	U 409.014†	-6507.1	-4468.7	-142.41 ug/L	-142.41 ppb	00:08:14
3	V 292.402†	29614.9	30180.0	184.81 ug/L	184.81 ppb	00:08:14
3	Zn 213.857†	20847.2	19663.1	175.06 ug/L	175.06 ppb	00:08:14
3	SiO2†	935225.5	909672.3	61356 ug/L	61356 ppb	00:08:52

Mean Data: 243628003|937486|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	882776.5	102.88	%	0.579				0.56%
Sc Radial	5093.4	99.5	%	1.54				1.55%
Y 371.029	790815.8	108.68	%	0.551				0.51%
Y RADIAL	5812.1	105.6	%	1.61				1.52%
Ag 328.068†	-6172.5	4.0849	ug/L	1.22410	4.0849	ppb	1.22410	29.97%
Al 396.153Radial†	118397.6	94691	ug/L	3446.0	94691	ppb	3446.0	3.64%
As 188.979†	-52.8	37.102	ug/L	2.8970	37.102	ppb	2.8970	7.81%
B 249.677†	1487.1	17.349	ug/L	3.2630	17.349	ppb	3.2630	18.81%
Ba 233.527†	169379.1	1315.8	ug/L	16.19	1315.8	ppb	16.19	1.23%
Be 313.107†	-7511.6	6.8053	ug/L	0.03913	6.8053	ppb	0.03913	0.57%
Ca 317.933Radial†	9757.1	15751	ug/L	593.1	15751	ppb	593.1	3.77%
Cd 226.502†	907.2	-0.0850	ug/L	0.34650	-0.0850	ppb	0.34650	407.50%
Co 228.616†	3245.5	56.135	ug/L	0.3057	56.135	ppb	0.3057	0.54%
Cr 267.716†	6957.2	79.422	ug/L	1.1008	79.422	ppb	1.1008	1.39%
Cu 324.752†	15403.7	51.186	ug/L	0.6934	51.186	ppb	0.6934	1.35%
Fe 238.204 Radial†	11472.1	97547	ug/L	3496.4	97547	ppb	3496.4	3.58%
K 766.490 Radial†	70795.9	12886	ug/L	439.2	12886	ppb	439.2	3.41%

Mg 279.077 IEC†	437.9	14440	ug/L	196.5	14440	ppb	196.5	1.36%
Mn 257.610†	2691251.5	2960.5	ug/L	6.21	2960.5	ppb	6.21	0.21%
Mo 202.031†	-57.9	3.7169	ug/L	0.48248	3.7169	ppb	0.48248	12.98%
Na 589.592 Radial†	2464.2	706.37	ug/L	37.298	706.37	ppb	37.298	5.28%
Ni 231.604†	2334.6	57.735	ug/L	0.5615	57.735	ppb	0.5615	0.97%
P 214.914†	1425.4	789.67	ug/L	7.236	789.67	ppb	7.236	0.92%
Pb 220.353†	614.7	87.360	ug/L	0.7209	87.360	ppb	0.7209	0.83%
S 181.975 Axial†	328.7	439.69	ug/L	0.992	439.69	ppb	0.992	0.23%
Sb 206.836†	35.9	-3.0608	ug/L	2.11376	-3.0608	ppb	2.11376	69.06%
Se 196.026†	-415.6	32.844	ug/L	2.5748	32.844	ppb	2.5748	7.84%
Si 251.611†	912088.4	28873	ug/L	72.9	28873	ppb	72.9	0.25%
Sn 189.927†	-109.5	-14.790	ug/L	1.2248	-14.790	ppb	1.2248	8.28%
Sr 421.552†	28313.9	180.65	ug/L	6.770	180.65	ppb	6.770	3.75%
Ti 334.940†	2652729.6	4248.7	ug/L	7.31	4248.7	ppb	7.31	0.17%
Tl 190.801†	-157.3	1.1981	ug/L	0.71104	1.1981	ppb	0.71104	59.35%
U 409.014†	-4424.9	-141.56	ug/L	3.111	-141.56	ppb	3.111	2.20%
V 292.402†	29796.1	181.60	ug/L	3.107	181.60	ppb	3.107	1.71%
Zn 213.857†	19428.0	172.48	ug/L	2.648	172.48	ppb	2.648	1.54%
SiO2†	909819.7	61366	ug/L	581.9	61366	ppb	581.9	0.95%

Sequence No.: 75
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 1/13/2010 00:11:02
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	5264.9	5264.9	103	%			00:12:54
1	Y RADIAL	5604.8	5604.8	101.8	%			00:12:54
1	Al 396.153Radial†	6693.9	6517.1	5188.1	ug/L	5188.1	ppb	00:12:54
1	Ca 317.933Radial†	3298.8	3189.4	5148.5	ug/L	5148.5	ppb	00:13:14
1	Fe 238.204 Radial†	625.2	596.5	5087.1	ug/L	5087.1	ppb	00:13:14
1	K 766.490 Radial†	30498.6	27153.2	4938.6	ug/L	4938.6	ppb	00:12:54
1	Mg 279.077 IEC†	168.4	160.8	5339.4	ug/L	5339.4	ppb	00:13:14
1	Na 589.592 Radial†	32697.6	33112.5	9491.7	ug/L	9491.7	ppb	00:12:54
1	Sr 421.552†	78945.8	76777.6	490.15	ug/L	490.15	ppb	00:12:54
1	Sc 361.383	887278.9	887278.9	103.40	%			00:14:12
1	Y 371.029	738630.6	738630.6	101.51	%			00:14:12
1	Ag 328.068†	111696.7	107662.8	497.14	ug/L	497.14	ppb	00:14:17
1	As 188.979†	1193.5	1178.2	507.85	ug/L	507.85	ppb	00:14:37
1	B 249.677†	21765.4	21664.0	484.02	ug/L	484.02	ppb	00:14:17
1	Ba 233.527†	65523.7	63375.4	492.28	ug/L	492.28	ppb	00:14:17
1	Be 313.107†	1393266.9	1351878.2	511.87	ug/L	511.87	ppb	00:14:12
1	Cd 226.502†	46311.8	44989.0	494.79	ug/L	494.79	ppb	00:14:17
1	Co 228.616†	25054.9	24307.4	493.32	ug/L	493.32	ppb	00:14:17
1	Cr 267.716†	46099.0	44502.6	494.35	ug/L	494.35	ppb	00:14:17
1	Cu 324.752†	174745.3	162590.7	485.02	ug/L	485.02	ppb	00:14:17
1	Mn 257.610†	473015.5	457015.0	501.48	ug/L	501.48	ppb	00:14:12
1	Mo 202.031†	7393.2	7128.2	497.84	ug/L	497.84	ppb	00:14:37
1	Ni 231.604†	20768.5	20017.8	495.08	ug/L	495.08	ppb	00:14:17
1	P 214.914†	4501.5	4133.0	2367.6	ug/L	2367.6	ppb	00:14:37
1	Pb 220.353†	4177.8	4102.5	498.21	ug/L	498.21	ppb	00:14:37
1	S 181.975 Axial†	787.4	717.6	997.69	ug/L	997.69	ppb	00:14:37
1	Sb 206.836†	1536.3	1452.2	510.22	ug/L	510.22	ppb	00:14:37
1	Se 196.026†	798.7	804.5	523.49	ug/L	523.49	ppb	00:14:37
1	Si 251.611†	81179.7	78046.8	2464.6	ug/L	2464.6	ppb	00:14:17
1	Sn 189.927†	2962.6	2863.4	499.76	ug/L	499.76	ppb	00:14:37
1	Ti 334.940†	310482.0	301595.7	482.80	ug/L	482.80	ppb	00:14:17
1	Tl 190.801†	1672.7	1651.7	501.98	ug/L	501.98	ppb	00:14:37
1	U 409.014†	15488.8	16842.8	494.15	ug/L	494.15	ppb	00:14:17
1	V 292.402†	73577.9	72515.6	498.49	ug/L	498.49	ppb	00:14:17
1	Zn 213.857†	55383.2	52935.4	492.61	ug/L	492.61	ppb	00:14:17
1	SiO2†	83143.2	79947.2	5378.8	ug/L	5378.8	ppb	00:15:44
2	Sc Radial	5207.8	5207.8	102	%			00:13:19
2	Y RADIAL	5551.2	5551.2	100.8	%			00:13:19
2	Al 396.153Radial†	6658.0	6553.1	5216.5	ug/L	5216.5	ppb	00:13:19
2	Ca 317.933Radial†	3274.9	3201.1	5167.4	ug/L	5167.4	ppb	00:13:39
2	Fe 238.204 Radial†	620.9	599.0	5108.6	ug/L	5108.6	ppb	00:13:39
2	K 766.490 Radial†	30050.6	27037.9	4917.6	ug/L	4917.6	ppb	00:13:19
2	Mg 279.077 IEC†	167.3	161.5	5363.1	ug/L	5363.1	ppb	00:13:39
2	Na 589.592 Radial†	32215.2	32986.8	9455.7	ug/L	9455.7	ppb	00:13:19
2	Sr 421.552†	78227.1	76912.7	491.01	ug/L	491.01	ppb	00:13:19
2	Sc 361.383	874381.4	874381.4	101.90	%			00:14:43
2	Y 371.029	727634.3	727634.3	99.996	%			00:14:43
2	Ag 328.068†	113636.5	111159.8	513.24	ug/L	513.24	ppb	00:14:48
2	As 188.979†	1191.8	1193.5	514.52	ug/L	514.52	ppb	00:15:08
2	B 249.677†	22310.6	22509.6	502.95	ug/L	502.95	ppb	00:14:48
2	Ba 233.527†	66618.2	65384.2	507.88	ug/L	507.88	ppb	00:14:48
2	Be 313.107†	1373182.7	1352043.4	511.97	ug/L	511.97	ppb	00:14:43
2	Cd 226.502†	47018.9	46343.5	509.70	ug/L	509.70	ppb	00:14:48
2	Co 228.616†	25507.6	25109.1	509.57	ug/L	509.57	ppb	00:14:48
2	Cr 267.716†	46779.3	45827.8	509.07	ug/L	509.07	ppb	00:14:48
2	Cu 324.752†	178525.6	168793.2	503.52	ug/L	503.52	ppb	00:14:48
2	Mn 257.610†	466755.7	457619.5	502.14	ug/L	502.14	ppb	00:14:43
2	Mo 202.031†	7394.0	7234.4	505.25	ug/L	505.25	ppb	00:15:08
2	Ni 231.604†	21103.9	20643.2	510.55	ug/L	510.55	ppb	00:14:48

2	P 214.914†	4485.4	4181.4	2392.3 ug/L	2392.3 ppb	00:15:08
2	Pb 220.353†	4170.4	4154.8	504.56 ug/L	504.56 ppb	00:15:08
2	S 181.975 Axial†	798.6	739.8	1028.6 ug/L	1028.6 ppb	00:15:08
2	Sb 206.836†	1531.4	1469.4	516.26 ug/L	516.26 ppb	00:15:08
2	Se 196.026†	786.1	803.5	522.96 ug/L	522.96 ppb	00:15:08
2	Si 251.611†	82654.9	80652.5	2546.9 ug/L	2546.9 ppb	00:14:48
2	Sn 189.927†	2953.0	2896.3	505.48 ug/L	505.48 ppb	00:15:08
2	Ti 334.940†	315909.8	311351.3	498.41 ug/L	498.41 ppb	00:14:48
2	Tl 190.801†	1669.7	1672.6	508.32 ug/L	508.32 ppb	00:15:08
2	U 409.014†	15886.3	17453.8	512.10 ug/L	512.10 ppb	00:14:48
2	V 292.402†	74811.5	74775.8	513.94 ug/L	513.94 ppb	00:14:48
2	Zn 213.857†	56341.5	54665.9	508.73 ug/L	508.73 ppb	00:14:48
2	SiO2†	81621.7	79640.2	5357.9 ug/L	5357.9 ppb	00:15:49
3	Sc Radial	5243.5	5243.5	102 %		00:13:45
3	Y RADIAL	5557.0	5557.0	100.9 %		00:13:45
3	Al 396.153Radial†	6613.5	6465.0	5146.5 ug/L	5146.5 ppb	00:13:45
3	Ca 317.933Radial†	3289.2	3193.1	5154.5 ug/L	5154.5 ppb	00:14:05
3	Fe 238.204 Radial†	625.1	598.9	5107.7 ug/L	5107.7 ppb	00:14:05
3	K 766.490 Radial†	30062.5	26847.9	4883.0 ug/L	4883.0 ppb	00:13:45
3	Mg 279.077 IEC†	163.7	156.8	5207.7 ug/L	5207.7 ppb	00:14:05
3	Na 589.592 Radial†	32020.1	32580.2	9339.1 ug/L	9339.1 ppb	00:13:45
3	Sr 421.552†	78037.4	76202.6	486.48 ug/L	486.48 ppb	00:13:45
3	Sc 361.383	884099.0	884099.0	103.03 %		00:15:14
3	Y 371.029	734929.5	734929.5	101.00 %		00:15:14
3	Ag 328.068†	114047.6	110333.0	509.44 ug/L	509.44 ppb	00:15:19
3	As 188.979†	1176.9	1166.2	502.84 ug/L	502.84 ppb	00:15:39
3	B 249.677†	22507.6	22460.1	501.85 ug/L	501.85 ppb	00:15:19
3	Ba 233.527†	66978.7	65015.4	505.02 ug/L	505.02 ppb	00:15:19
3	Be 313.107†	1384206.0	1347930.3	510.41 ug/L	510.41 ppb	00:15:14
3	Cd 226.502†	47222.3	46033.8	506.29 ug/L	506.29 ppb	00:15:19
3	Co 228.616†	25646.1	24968.3	506.70 ug/L	506.70 ppb	00:15:19
3	Cr 267.716†	46874.7	45415.7	504.49 ug/L	504.49 ppb	00:15:19
3	Cu 324.752†	179621.1	167930.7	500.95 ug/L	500.95 ppb	00:15:19
3	Mn 257.610†	471702.7	457386.1	501.89 ug/L	501.89 ppb	00:15:14
3	Mo 202.031†	7339.0	7101.3	495.96 ug/L	495.96 ppb	00:15:39
3	Ni 231.604†	21164.5	20474.4	506.37 ug/L	506.37 ppb	00:15:19
3	P 214.914†	4481.6	4129.3	2361.6 ug/L	2361.6 ppb	00:15:39
3	Pb 220.353†	4157.1	4096.9	497.51 ug/L	497.51 ppb	00:15:39
3	S 181.975 Axial†	783.3	716.4	995.97 ug/L	995.97 ppb	00:15:39
3	Sb 206.836†	1514.3	1436.3	504.72 ug/L	504.72 ppb	00:15:39
3	Se 196.026†	788.6	797.5	519.11 ug/L	519.11 ppb	00:15:39
3	Si 251.611†	83089.3	80182.5	2532.2 ug/L	2532.2 ppb	00:15:19
3	Sn 189.927†	2941.6	2853.3	497.99 ug/L	497.99 ppb	00:15:39
3	Ti 334.940†	317633.2	309616.4	495.64 ug/L	495.64 ppb	00:15:19
3	Tl 190.801†	1644.9	1630.5	495.60 ug/L	495.60 ppb	00:15:39
3	U 409.014†	15901.3	17297.0	507.50 ug/L	507.50 ppb	00:15:19
3	V 292.402†	75149.3	74296.7	510.54 ug/L	510.54 ppb	00:15:19
3	Zn 213.857†	56534.7	54245.6	504.82 ug/L	504.82 ppb	00:15:19
3	SiO2†	82204.4	79325.3	5336.9 ug/L	5336.9 ppb	00:15:55

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	881919.8	102.78	%	0.783				0.76%
Sc Radial	5238.7	102	%	0.6				0.55%
Y 371.029	733731.5	100.83	%	0.769				0.76%
Y RADIAL	5571.0	101.2	%	0.53				0.53%
Ag 328.068†	109718.5	506.61	ug/L	8.415	506.61	ppb	8.415	1.66%
QC value within limits for Ag 328.068 Recovery = 101.32%								
Al 396.153Radial†	6511.7	5183.7	ug/L	35.19	5183.7	ppb	35.19	0.68%
QC value within limits for Al 396.153Radial Recovery = 103.67%								
As 188.979†	1179.3	508.40	ug/L	5.863	508.40	ppb	5.863	1.15%
QC value within limits for As 188.979 Recovery = 101.68%								
B 249.677†	22211.2	496.27	ug/L	10.625	496.27	ppb	10.625	2.14%
QC value within limits for B 249.677 Recovery = 99.25%								
Ba 233.527†	64591.7	501.73	ug/L	8.304	501.73	ppb	8.304	1.65%
QC value within limits for Ba 233.527 Recovery = 100.35%								
Be 313.107†	1350617.3	511.41	ug/L	0.874	511.41	ppb	0.874	0.17%
QC value within limits for Be 313.107 Recovery = 102.28%								
Ca 317.933Radial†	3194.5	5156.8	ug/L	9.67	5156.8	ppb	9.67	0.19%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.14%
Cd 226.502†            45788.7      503.59 ug/L         7.813      503.59 ppb         7.813   1.55%
   QC value within limits for Cd 226.502  Recovery = 100.72%
Co 228.616†            24794.9      503.20 ug/L         8.674      503.20 ppb         8.674   1.72%
   QC value within limits for Co 228.616  Recovery = 100.64%
Cr 267.716†            45248.7      502.64 ug/L         7.533      502.64 ppb         7.533   1.50%
   QC value within limits for Cr 267.716  Recovery = 100.53%
Cu 324.752†           166438.2      496.50 ug/L        10.018      496.50 ppb        10.018   2.02%
   QC value within limits for Cu 324.752  Recovery = 99.30%
Fe 238.204 Radial†       598.2      5101.1 ug/L        12.17      5101.1 ppb         12.17   0.24%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.02%
K 766.490 Radial†      27013.0      4913.1 ug/L        28.04      4913.1 ppb         28.04   0.57%
   QC value within limits for K 766.490 Radial  Recovery = 98.26%
Mg 279.077 IEC†          159.7      5303.4 ug/L        83.70      5303.4 ppb         83.70   1.58%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.07%
Mn 257.610†           457340.2      501.84 ug/L         0.335      501.84 ppb         0.335   0.07%
   QC value within limits for Mn 257.610  Recovery = 100.37%
Mo 202.031†             7154.7      499.68 ug/L         4.912      499.68 ppb         4.912   0.98%
   QC value within limits for Mo 202.031  Recovery = 99.94%
Na 589.592 Radial†     32893.2      9428.9 ug/L        79.76      9428.9 ppb         79.76   0.85%
   QC value within limits for Na 589.592 Radial  Recovery = 94.29%
Ni 231.604†            20378.5      504.00 ug/L         8.002      504.00 ppb         8.002   1.59%
   QC value within limits for Ni 231.604  Recovery = 100.80%
P 214.914†              4147.9      2373.8 ug/L        16.29      2373.8 ppb         16.29   0.69%
   QC value within limits for P 214.914  Recovery = 94.95%
Pb 220.353†             4118.1      500.09 ug/L         3.883      500.09 ppb         3.883   0.78%
   QC value within limits for Pb 220.353  Recovery = 100.02%
S 181.975 Axial†         724.6      1007.4 ug/L        18.34      1007.4 ppb         18.34   1.82%
   QC value within limits for S 181.975 Axial  Recovery = 100.74%
Sb 206.836†             1452.6      510.40 ug/L         5.771      510.40 ppb         5.771   1.13%
   QC value within limits for Sb 206.836  Recovery = 102.08%
Se 196.026†              801.8      521.85 ug/L         2.389      521.85 ppb         2.389   0.46%
   QC value within limits for Se 196.026  Recovery = 104.37%
Si 251.611†            79627.3      2514.6 ug/L        43.93      2514.6 ppb         43.93   1.75%
   QC value within limits for Si 251.611  Recovery = 100.58%
Sn 189.927†             2871.0      501.08 ug/L         3.917      501.08 ppb         3.917   0.78%
   QC value within limits for Sn 189.927  Recovery = 100.22%
Sr 421.552†            76631.0      489.21 ug/L         2.408      489.21 ppb         2.408   0.49%
   QC value within limits for Sr 421.552  Recovery = 97.84%
Ti 334.940†           307521.1      492.28 ug/L         8.329      492.28 ppb         8.329   1.69%
   QC value within limits for Ti 334.940  Recovery = 98.46%
Tl 190.801†             1651.6      501.96 ug/L         6.362      501.96 ppb         6.362   1.27%
   QC value within limits for Tl 190.801  Recovery = 100.39%
U 409.014†             17197.9      504.58 ug/L         9.324      504.58 ppb         9.324   1.85%
   QC value within limits for U 409.014  Recovery = 100.92%
V 292.402†             73862.7      507.66 ug/L         8.115      507.66 ppb         8.115   1.60%
   QC value within limits for V 292.402  Recovery = 101.53%
Zn 213.857†            53949.0      502.06 ug/L         8.407      502.06 ppb         8.407   1.67%
   QC value within limits for Zn 213.857  Recovery = 100.41%
SiO2†                  79637.6      5357.8 ug/L        20.95      5357.8 ppb         20.95   0.39%
   QC value within limits for SiO2  Recovery = 100.19%
All analyte(s) passed QC.
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Sequence No.: 76
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 1/13/2010 00:18:05
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	5343.6	5343.6	104	%			00:19:56
1	Y RADIAL	5759.6	5759.6	104.6	%			00:19:56
1	Al 396.153Radial†	6.9	12.8	10.258	ug/L	10.258	ppb	00:19:56
1	Ca 317.933Radial†	19.2	-0.8	-1.3181	ug/L	-1.3181	ppb	00:20:16
1	Fe 238.204 Radial†	8.9	-3.1	-26.092	ug/L	-26.092	ppb	00:20:16
1	K 766.490 Radial†	2934.0	300.2	54.670	ug/L	54.670	ppb	00:19:56
1	Mg 279.077 IEC†	1.5	-1.6	-53.595	ug/L	-53.595	ppb	00:20:16
1	Na 589.592 Radial†	-1413.2	-45.4	-13.026	ug/L	-13.026	ppb	00:19:56
1	Sr 421.552†	-11.6	-20.9	-0.1334	ug/L	-0.1334	ppb	00:19:56
1	Sc 361.383	876008.5	876008.5	102.09	%			00:21:13
1	Y 371.029	741301.1	741301.1	101.87	%			00:21:13
1	Ag 328.068†	257.3	-105.1	-0.4887	ug/L	-0.4887	ppb	00:21:13
1	As 188.979†	-24.1	0.3	0.1182	ug/L	0.1182	ppb	00:21:33
1	B 249.677†	-412.6	211.0	4.7392	ug/L	4.7392	ppb	00:21:33
1	Ba 233.527†	-10.5	-1.7	-0.0141	ug/L	-0.0141	ppb	00:21:33
1	Be 313.107†	-4382.9	181.5	0.0688	ug/L	0.0688	ppb	00:21:13
1	Cd 226.502†	-182.4	23.0	0.2550	ug/L	0.2550	ppb	00:21:33
1	Co 228.616†	-78.4	0.4	0.0088	ug/L	0.0088	ppb	00:21:33
1	Cr 267.716†	86.0	5.3	0.0590	ug/L	0.0590	ppb	00:21:33
1	Cu 324.752†	6478.4	-56.6	-0.1688	ug/L	-0.1688	ppb	00:21:13
1	Mn 257.610†	433.4	-5.3	-0.0062	ug/L	-0.0062	ppb	00:21:33
1	Mo 202.031†	21.4	-0.7	-0.0503	ug/L	-0.0503	ppb	00:21:33
1	Ni 231.604†	68.5	0.0	0.0011	ug/L	0.0011	ppb	00:21:33
1	P 214.914†	218.5	-6.3	-3.7098	ug/L	-3.7098	ppb	00:21:33
1	Pb 220.353†	-47.0	16.1	1.9574	ug/L	1.9574	ppb	00:21:33
1	S 181.975 Axial†	40.3	-4.4	-6.1506	ug/L	-6.1506	ppb	00:21:33
1	Sb 206.836†	38.0	3.8	1.2907	ug/L	1.2907	ppb	00:21:33
1	Se 196.026†	-25.7	6.8	4.2319	ug/L	4.2319	ppb	00:21:33
1	Si 251.611†	539.7	68.0	2.1521	ug/L	2.1521	ppb	00:21:33
1	Sn 189.927†	3.4	1.7	0.2884	ug/L	0.2884	ppb	00:21:33
1	Ti 334.940†	-1303.7	57.1	0.0969	ug/L	0.0969	ppb	00:21:13
1	Tl 190.801†	-28.4	6.3	1.8919	ug/L	1.8919	ppb	00:21:33
1	U 409.014†	-1996.6	-91.8	-2.7009	ug/L	-2.7009	ppb	00:21:13
1	V 292.402†	-1409.5	-20.9	-0.1445	ug/L	-0.1445	ppb	00:21:13
1	Zn 213.857†	659.8	21.6	0.2058	ug/L	0.2058	ppb	00:21:33
1	SiO2†	552.6	82.3	5.5514	ug/L	5.5514	ppb	00:22:29
2	Sc Radial	5307.0	5307.0	104	%			00:20:21
2	Y RADIAL	5675.5	5675.5	103.1	%			00:20:21
2	Al 396.153Radial†	-1.1	5.1	4.1053	ug/L	4.1053	ppb	00:20:21
2	Ca 317.933Radial†	18.4	-1.4	-2.2957	ug/L	-2.2957	ppb	00:20:42
2	Fe 238.204 Radial†	10.3	-1.6	-13.583	ug/L	-13.583	ppb	00:20:42
2	K 766.490 Radial†	2939.4	324.7	59.152	ug/L	59.152	ppb	00:20:21
2	Mg 279.077 IEC†	4.3	1.1	35.275	ug/L	35.275	ppb	00:20:42
2	Na 589.592 Radial†	-1468.0	-107.6	-30.848	ug/L	-30.848	ppb	00:20:21
2	Sr 421.552†	-0.2	-10.0	-0.0636	ug/L	-0.0636	ppb	00:20:21
2	Sc 361.383	874757.3	874757.3	101.94	%			00:21:39
2	Y 371.029	739596.1	739596.1	101.64	%			00:21:39
2	Ag 328.068†	371.3	7.1	0.0307	ug/L	0.0307	ppb	00:21:39
2	As 188.979†	-21.5	2.8	1.2082	ug/L	1.2082	ppb	00:21:59
2	B 249.677†	-383.7	238.7	5.3604	ug/L	5.3604	ppb	00:21:59
2	Ba 233.527†	-23.7	-14.6	-0.1133	ug/L	-0.1133	ppb	00:21:59
2	Be 313.107†	-4435.7	123.5	0.0469	ug/L	0.0469	ppb	00:21:39
2	Cd 226.502†	-196.0	9.4	0.1042	ug/L	0.1042	ppb	00:21:59
2	Co 228.616†	-78.2	0.6	0.0111	ug/L	0.0111	ppb	00:21:59
2	Cr 267.716†	78.5	-1.9	-0.0209	ug/L	-0.0209	ppb	00:21:59
2	Cu 324.752†	6520.4	-6.4	-0.0188	ug/L	-0.0188	ppb	00:21:39
2	Mn 257.610†	452.7	14.3	0.0129	ug/L	0.0129	ppb	00:21:59
2	Mo 202.031†	20.8	-1.3	-0.0885	ug/L	-0.0885	ppb	00:21:59
2	Ni 231.604†	77.0	8.5	0.2114	ug/L	0.2114	ppb	00:21:59

2	P 214.914†	224.5	-0.1	-0.0252 ug/L	-0.0252 ppb	00:21:59
2	Pb 220.353†	-66.3	-2.9	-0.3471 ug/L	-0.3471 ppb	00:21:59
2	S 181.975 Axial†	49.2	4.4	6.1006 ug/L	6.1006 ppb	00:21:59
2	Sb 206.836†	41.3	7.1	2.3985 ug/L	2.3985 ppb	00:21:59
2	Se 196.026†	-32.0	0.6	0.3623 ug/L	0.3623 ppb	00:21:59
2	Si 251.611†	552.5	81.3	2.5737 ug/L	2.5737 ppb	00:21:59
2	Sn 189.927†	2.6	0.9	0.1483 ug/L	0.1483 ppb	00:21:59
2	Ti 334.940†	-1308.9	50.2	0.0780 ug/L	0.0780 ppb	00:21:39
2	Tl 190.801†	-37.5	-2.7	-0.8189 ug/L	-0.8189 ppb	00:21:59
2	U 409.014†	-1962.5	-61.2	-1.8008 ug/L	-1.8008 ppb	00:21:39
2	V 292.402†	-1357.0	28.6	0.1920 ug/L	0.1920 ppb	00:21:39
2	Zn 213.857†	659.4	22.2	0.2082 ug/L	0.2082 ppb	00:21:59
2	SiO2†	595.6	125.2	8.4466 ug/L	8.4466 ppb	00:22:34
3	Sc Radial	5294.3	5294.3	103 %		00:20:47
3	Y RADIAL	5689.3	5689.3	103.3 %		00:20:47
3	Al 396.153Radial†	9.6	15.4	12.361 ug/L	12.361 ppb	00:20:47
3	Ca 317.933Radial†	12.7	-6.9	-11.131 ug/L	-11.131 ppb	00:21:07
3	Fe 238.204 Radial†	8.6	-3.2	-27.090 ug/L	-27.090 ppb	00:21:07
3	K 766.490 Radial†	2904.7	298.1	54.306 ug/L	54.306 ppb	00:20:47
3	Mg 279.077 IEC†	0.5	-2.6	-85.931 ug/L	-85.931 ppb	00:21:07
3	Na 589.592 Radial†	-1500.9	-142.9	-40.965 ug/L	-40.965 ppb	00:20:47
3	Sr 421.552†	2.2	-7.6	-0.0485 ug/L	-0.0485 ppb	00:20:47
3	Sc 361.383	870156.0	870156.0	101.41 %		00:22:04
3	Y 371.029	735928.0	735928.0	101.14 %		00:22:04
3	Ag 328.068†	448.3	85.0	0.3874 ug/L	0.3874 ppb	00:22:04
3	As 188.979†	-23.4	0.9	0.3681 ug/L	0.3681 ppb	00:22:24
3	B 249.677†	-400.3	220.4	4.9515 ug/L	4.9515 ppb	00:22:24
3	Ba 233.527†	2.4	11.0	0.0848 ug/L	0.0848 ppb	00:22:24
3	Be 313.107†	-4406.4	129.5	0.0491 ug/L	0.0491 ppb	00:22:04
3	Cd 226.502†	-195.8	8.6	0.0966 ug/L	0.0966 ppb	00:22:24
3	Co 228.616†	-78.8	-0.4	-0.0085 ug/L	-0.0085 ppb	00:22:24
3	Cr 267.716†	79.8	-0.2	-0.0005 ug/L	-0.0005 ppb	00:22:24
3	Cu 324.752†	6413.6	-77.9	-0.2305 ug/L	-0.2305 ppb	00:22:04
3	Mn 257.610†	453.1	17.0	0.0195 ug/L	0.0195 ppb	00:22:24
3	Mo 202.031†	20.3	-1.6	-0.1131 ug/L	-0.1131 ppb	00:22:24
3	Ni 231.604†	87.4	19.1	0.4738 ug/L	0.4738 ppb	00:22:24
3	P 214.914†	221.5	-1.9	-1.0540 ug/L	-1.0540 ppb	00:22:24
3	Pb 220.353†	-53.4	9.5	1.1553 ug/L	1.1553 ppb	00:22:24
3	S 181.975 Axial†	49.0	4.5	6.2092 ug/L	6.2092 ppb	00:22:24
3	Sb 206.836†	41.2	7.2	2.4631 ug/L	2.4631 ppb	00:22:24
3	Se 196.026†	-26.8	5.6	3.4622 ug/L	3.4622 ppb	00:22:24
3	Si 251.611†	540.2	72.0	2.2807 ug/L	2.2807 ppb	00:22:24
3	Sn 189.927†	6.9	5.1	0.8914 ug/L	0.8914 ppb	00:22:24
3	Ti 334.940†	-1289.0	63.0	0.1090 ug/L	0.1090 ppb	00:22:04
3	Tl 190.801†	-18.5	15.9	4.7965 ug/L	4.7965 ppb	00:22:24
3	U 409.014†	-2088.7	-195.8	-5.7616 ug/L	-5.7616 ppb	00:22:04
3	V 292.402†	-1334.8	43.4	0.2843 ug/L	0.2843 ppb	00:22:04
3	Zn 213.857†	659.0	25.2	0.2368 ug/L	0.2368 ppb	00:22:24
3	SiO2†	569.8	102.8	6.9390 ug/L	6.9390 ppb	00:22:39

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	873640.6	101.81	%	0.359				0.35%
Sc Radial	5315.0	104	%	0.5				0.48%
Y 371.029	738941.7	101.55	%	0.377				0.37%
Y RADIAL	5708.2	103.7	%	0.82				0.79%
Ag 328.068†	-4.3	-0.0235	ug/L	0.44054	-0.0235	ppb	0.44054	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.1	8.9084	ug/L	4.29044	8.9084	ppb	4.29044	48.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.3	0.5648	ug/L	0.57102	0.5648	ppb	0.57102	101.10%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	223.4	5.0170	ug/L	0.31574	5.0170	ppb	0.31574	6.29%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.8	-0.0142	ug/L	0.09908	-0.0142	ppb	0.09908	698.45%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	144.8	0.0549	ug/L	0.01206	0.0549	ppb	0.01206	21.96%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-3.0	-4.9150	ug/L	5.40547	-4.9150	ppb	5.40547	109.98%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              13.7      0.1519 ug/L       0.08932      0.1519 ppb        0.08932  58.78%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               0.2      0.0038 ug/L       0.01073      0.0038 ppb        0.01073 283.20%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               1.0      0.0125 ug/L       0.04148      0.0125 ppb        0.04148 330.90%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -47.0     -0.1394 ug/L       0.10887     -0.1394 ppb        0.10887  78.10%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -2.6     -22.255 ug/L        7.5264     -22.255 ppb         7.5264  33.82%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       307.7      56.043 ug/L        2.6989      56.043 ppb         2.6989   4.82%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -1.0     -34.750 ug/L       62.7620     -34.750 ppb        62.7620 180.61%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               8.7      0.0087 ug/L       0.01333      0.0087 ppb        0.01333 153.06%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -1.2     -0.0840 ug/L       0.03163     -0.0840 ppb        0.03163  37.67%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -98.7     -28.280 ug/L       14.1456     -28.280 ppb        14.1456  50.02%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               9.2      0.2288 ug/L       0.23683      0.2288 ppb        0.23683 103.52%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -2.8     -1.5963 ug/L       1.90123     -1.5963 ppb        1.90123 119.10%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               7.6      0.9219 ug/L       1.16983      0.9219 ppb        1.16983 126.90%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          1.5      2.0531 ug/L       7.10480      2.0531 ppb        7.10480 346.06%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               6.0      2.0508 ug/L       0.65906      2.0508 ppb        0.65906  32.14%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               4.4      2.6855 ug/L       2.04837      2.6855 ppb        2.04837  76.28%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              73.7      2.3355 ug/L       0.21604      2.3355 ppb        0.21604   9.25%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               2.5      0.4427 ug/L       0.39487      0.4427 ppb        0.39487  89.20%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -12.8     -0.0818 ug/L       0.04529     -0.0818 ppb        0.04529  55.37%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              56.8      0.0946 ug/L       0.01558      0.0946 ppb        0.01558  16.47%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               6.5      1.9565 ug/L       2.80826      1.9565 ppb        2.80826 143.53%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             -116.3     -3.4211 ug/L       2.07629     -3.4211 ppb        2.07629  60.69%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               17.0      0.1106 ug/L       0.22568      0.1106 ppb        0.22568 204.07%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              23.0      0.2169 ug/L       0.01725      0.2169 ppb        0.01725   7.95%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   103.4      6.9790 ug/L       1.44802      6.9790 ppb        1.44802  20.75%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 77
Sample ID: 243628004|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 95
Date Collected: 1/13/2010 00:24:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243628004|937486|1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5332.5	5332.5	104	%			00:27:02
1	Y RADIAL	6266.2	6266.2	113.8	%			00:27:02
1	Al 396.153Radial†	161272.8	154880.1	123870	ug/L	123870	ppb	00:26:42
1	Ca 317.933Radial†	13349.1	12800.3	20663	ug/L	20663	ppb	00:26:42
1	Fe 238.204 Radial†	15533.4	14905.5	126740	ug/L	126740	ppb	00:26:42
1	K 766.490 Radial†	98758.9	92328.8	16805	ug/L	16805	ppb	00:26:42
1	Mg 279.077 IEC†	626.1	598.2	19731	ug/L	19731	ppb	00:27:02
1	Na 589.592 Radial†	1544.5	2792.1	800.37	ug/L	800.37	ppb	00:26:42
1	Sr 421.552†	41399.6	39747.3	253.61	ug/L	253.61	ppb	00:26:42
1	Sc 361.383	884684.4	884684.4	103.10	%			00:28:01
1	Y 371.029	818869.3	818869.3	112.53	%			00:28:01
1	Ag 328.068†	-8258.0	-8366.6	3.7180	ug/L	3.7180	ppb	00:28:06
1	As 188.979†	-93.4	-66.7	42.990	ug/L	42.990	ppb	00:28:26
1	B 249.677†	1374.4	1948.2	22.932	ug/L	22.932	ppb	00:28:06
1	Ba 233.527†	229442.6	222549.1	1728.8	ug/L	1728.8	ppb	00:28:06
1	Be 313.107†	-6776.4	-2097.9	10.159	ug/L	10.159	ppb	00:28:06
1	Cd 226.502†	1024.7	1195.5	0.0660	ug/L	0.0660	ppb	00:28:26
1	Co 228.616†	3719.4	3684.7	63.609	ug/L	63.609	ppb	00:28:26
1	Cr 267.716†	8472.6	8138.8	93.206	ug/L	93.206	ppb	00:28:06
1	Cu 324.752†	31466.7	24117.7	78.765	ug/L	78.765	ppb	00:28:06
1	Mn 257.610†	3706355.4	3594432.0	3953.6	ug/L	3953.6	ppb	00:28:01
1	Mo 202.031†	-52.3	-72.4	5.0359	ug/L	5.0359	ppb	00:28:26
1	Ni 231.604†	3009.3	2851.7	70.526	ug/L	70.526	ppb	00:28:26
1	P 214.914†	1856.4	1580.3	860.19	ug/L	860.19	ppb	00:28:26
1	Pb 220.353†	770.8	809.8	115.04	ug/L	115.04	ppb	00:28:26
1	S 181.975 Axial†	381.5	326.2	430.68	ug/L	430.68	ppb	00:28:26
1	Sb 206.836†	76.4	40.7	-3.6364	ug/L	-3.6364	ppb	00:28:26
1	Se 196.026†	-627.9	-577.0	19.410	ug/L	19.410	ppb	00:28:26
1	Si 251.611†	952997.4	923868.9	29246	ug/L	29246	ppb	00:28:01
1	Sn 189.927†	-115.1	-113.3	-14.136	ug/L	-14.136	ppb	00:28:26
1	Ti 334.940†	3104768.5	3012705.9	4825.4	ug/L	4825.4	ppb	00:28:01
1	Tl 190.801†	-241.2	-199.9	-2.2836	ug/L	-2.2836	ppb	00:28:26
1	U 409.014†	-8895.9	-6764.4	-213.79	ug/L	-213.79	ppb	00:28:01
1	V 292.402†	37827.2	38049.0	232.15	ug/L	232.15	ppb	00:28:06
1	Zn 213.857†	28719.9	27231.3	242.79	ug/L	242.79	ppb	00:28:06
1	SiO2†	954850.7	925668.1	62435	ug/L	62435	ppb	00:29:36
2	Sc Radial	5313.8	5313.8	104	%			00:27:28
2	Y RADIAL	6251.2	6251.2	113.5	%			00:27:28
2	Al 396.153Radial†	159826.2	154030.8	123190	ug/L	123190	ppb	00:27:07
2	Ca 317.933Radial†	13191.2	12693.2	20490	ug/L	20490	ppb	00:27:07
2	Fe 238.204 Radial†	15342.6	14774.1	125620	ug/L	125620	ppb	00:27:07
2	K 766.490 Radial†	97316.5	91272.5	16613	ug/L	16613	ppb	00:27:07
2	Mg 279.077 IEC†	622.3	596.6	19681	ug/L	19681	ppb	00:27:28
2	Na 589.592 Radial†	1523.8	2777.4	796.13	ug/L	796.13	ppb	00:27:07
2	Sr 421.552†	40880.2	39386.6	251.31	ug/L	251.31	ppb	00:27:07
2	Sc 361.383	885950.1	885950.1	103.25	%			00:28:33
2	Y 371.029	818725.8	818725.8	112.51	%			00:28:33
2	Ag 328.068†	-8120.9	-8222.4	4.0175	ug/L	4.0175	ppb	00:28:38
2	As 188.979†	-76.8	-50.4	49.643	ug/L	49.643	ppb	00:28:58
2	B 249.677†	1349.8	1922.4	22.538	ug/L	22.538	ppb	00:28:38
2	Ba 233.527†	229282.4	222076.1	1725.1	ug/L	1725.1	ppb	00:28:38
2	Be 313.107†	-6719.8	-2033.7	10.175	ug/L	10.175	ppb	00:28:38
2	Cd 226.502†	1034.9	1204.0	0.2752	ug/L	0.2752	ppb	00:28:58
2	Co 228.616†	3674.9	3636.5	62.652	ug/L	62.652	ppb	00:28:58
2	Cr 267.716†	8509.1	8162.4	93.444	ug/L	93.444	ppb	00:28:38
2	Cu 324.752†	31835.8	24431.5	79.641	ug/L	79.641	ppb	00:28:38
2	Mn 257.610†	3704081.3	3587093.8	3945.5	ug/L	3945.5	ppb	00:28:33
2	Mo 202.031†	-51.5	-71.6	5.0030	ug/L	5.0030	ppb	00:28:58
2	Ni 231.604†	2984.8	2823.8	69.836	ug/L	69.836	ppb	00:28:58

2	P 214.914†	1830.7	1552.7	844.18 ug/L	844.18 ppb	00:28:58
2	Pb 220.353†	736.9	776.0	110.89 ug/L	110.89 ppb	00:28:58
2	S 181.975 Axial†	387.1	331.1	437.62 ug/L	437.62 ppb	00:28:58
2	Sb 206.836†	75.9	40.1	-3.8228 ug/L	-3.8228 ppb	00:28:58
2	Se 196.026†	-623.6	-572.0	19.206 ug/L	19.206 ppb	00:28:58
2	Si 251.611†	953356.3	922896.0	29216 ug/L	29216 ppb	00:28:33
2	Sn 189.927†	-113.7	-111.8	-13.924 ug/L	-13.924 ppb	00:28:58
2	Ti 334.940†	3106888.6	3010457.1	4821.7 ug/L	4821.7 ppb	00:28:33
2	Tl 190.801†	-227.9	-186.6	1.6453 ug/L	1.6453 ppb	00:28:58
2	U 409.014†	-8833.9	-6692.0	-211.53 ug/L	-211.53 ppb	00:28:33
2	V 292.402†	37852.9	38021.5	232.15 ug/L	232.15 ppb	00:28:38
2	Zn 213.857†	28843.9	27311.6	243.65 ug/L	243.65 ppb	00:28:38
2	SiO2†	935953.4	906042.4	61111 ug/L	61111 ppb	00:29:42
3	Sc Radial	5303.4	5303.4	104 %		00:27:53
3	Y RADIAL	6245.1	6245.1	113.4 %		00:27:53
3	Al 396.153Radial†	162176.1	156603.1	125250 ug/L	125250 ppb	00:27:33
3	Ca 317.933Radial†	13416.0	12935.2	20881 ug/L	20881 ppb	00:27:33
3	Fe 238.204 Radial†	15547.4	15001.0	127550 ug/L	127550 ppb	00:27:33
3	K 766.490 Radial†	98753.5	92844.7	16899 ug/L	16899 ppb	00:27:33
3	Mg 279.077 IEC†	617.0	592.7	19549 ug/L	19549 ppb	00:27:53
3	Na 589.592 Radial†	1498.0	2755.4	789.82 ug/L	789.82 ppb	00:27:33
3	Sr 421.552†	41464.3	40028.1	255.40 ug/L	255.40 ppb	00:27:33
3	Sc 361.383	884222.5	884222.5	103.05 %		00:29:05
3	Y 371.029	817433.0	817433.0	112.34 %		00:29:05
3	Ag 328.068†	-8153.2	-8269.1	4.4154 ug/L	4.4154 ppb	00:29:10
3	As 188.979†	-79.0	-52.8	49.034 ug/L	49.034 ppb	00:29:30
3	B 249.677†	1355.1	1930.1	22.396 ug/L	22.396 ppb	00:29:10
3	Ba 233.527†	227419.6	220702.3	1714.5 ug/L	1714.5 ppb	00:29:10
3	Be 313.107†	-6910.8	-2231.7	10.083 ug/L	10.083 ppb	00:29:10
3	Cd 226.502†	1038.1	1209.0	0.1311 ug/L	0.1311 ppb	00:29:30
3	Co 228.616†	3700.8	3668.6	63.287 ug/L	63.287 ppb	00:29:30
3	Cr 267.716†	8460.8	8131.6	93.139 ug/L	93.139 ppb	00:29:10
3	Cu 324.752†	31206.6	23881.2	78.102 ug/L	78.102 ppb	00:29:10
3	Mn 257.610†	3687884.5	3578385.1	3936.1 ug/L	3936.1 ppb	00:29:05
3	Mo 202.031†	-56.2	-76.1	4.8380 ug/L	4.8380 ppb	00:29:30
3	Ni 231.604†	3005.9	2850.0	70.484 ug/L	70.484 ppb	00:29:30
3	P 214.914†	1837.6	1562.9	849.66 ug/L	849.66 ppb	00:29:30
3	Pb 220.353†	737.7	778.1	111.46 ug/L	111.46 ppb	00:29:30
3	S 181.975 Axial†	378.4	323.4	426.55 ug/L	426.55 ppb	00:29:30
3	Sb 206.836†	73.8	38.2	-4.4458 ug/L	-4.4458 ppb	00:29:30
3	Se 196.026†	-626.1	-575.6	22.773 ug/L	22.773 ppb	00:29:30
3	Si 251.611†	950070.0	921510.9	29172 ug/L	29172 ppb	00:29:05
3	Sn 189.927†	-103.7	-102.3	-12.161 ug/L	-12.161 ppb	00:29:30
3	Ti 334.940†	3095924.4	3005696.3	4814.2 ug/L	4814.2 ppb	00:29:05
3	Tl 190.801†	-226.0	-185.2	1.9656 ug/L	1.9656 ppb	00:29:30
3	U 409.014†	-8839.0	-6713.7	-212.39 ug/L	-212.39 ppb	00:29:05
3	V 292.402†	37517.9	37768.0	230.12 ug/L	230.12 ppb	00:29:10
3	Zn 213.857†	28519.0	27050.9	241.01 ug/L	241.01 ppb	00:29:10
3	SiO2†	962298.2	933379.1	62955 ug/L	62955 ppb	00:29:48

Mean Data: 243628004|937486|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	884952.3	103.13	%	0.104				0.10%
Sc Radial	5316.6	104	%	0.3				0.28%
Y 371.029	818342.7	112.46	%	0.109				0.10%
Y RADIAL	6254.2	113.6	%	0.20				0.17%
Ag 328.068†	-8286.0	4.0503	ug/L	0.34984	4.0503	ppb	0.34984	8.64%
Al 396.153Radial†	155171.3	124100	ug/L	1048.3	124100	ppb	1048.3	0.84%
As 188.979†	-56.6	47.222	ug/L	3.6775	47.222	ppb	3.6775	7.79%
B 249.677†	1933.6	22.622	ug/L	0.2778	22.622	ppb	0.2778	1.23%
Ba 233.527†	221775.8	1722.8	ug/L	7.42	1722.8	ppb	7.42	0.43%
Be 313.107†	-2121.1	10.139	ug/L	0.0492	10.139	ppb	0.0492	0.49%
Ca 317.933Radial†	12809.6	20678	ug/L	195.8	20678	ppb	195.8	0.95%
Cd 226.502†	1202.8	0.1574	ug/L	0.10704	0.1574	ppb	0.10704	68.00%
Co 228.616†	3663.3	63.182	ug/L	0.4870	63.182	ppb	0.4870	0.77%
Cr 267.716†	8144.3	93.263	ug/L	0.1605	93.263	ppb	0.1605	0.17%
Cu 324.752†	24143.5	78.836	ug/L	0.7720	78.836	ppb	0.7720	0.98%
Fe 238.204 Radial†	14893.5	126640	ug/L	968.6	126640	ppb	968.6	0.76%
K 766.490 Radial†	92148.7	16772	ug/L	145.9	16772	ppb	145.9	0.87%

Mg 279.077 IEC†	595.8	19654	ug/L	94.4	19654	ppb	94.4	0.48%
Mn 257.610†	3586637.0	3945.1	ug/L	8.76	3945.1	ppb	8.76	0.22%
Mo 202.031†	-73.3	4.9590	ug/L	0.10603	4.9590	ppb	0.10603	2.14%
Na 589.592 Radial†	2774.9	795.44	ug/L	5.305	795.44	ppb	5.305	0.67%
Ni 231.604†	2841.9	70.282	ug/L	0.3869	70.282	ppb	0.3869	0.55%
P 214.914†	1565.3	851.34	ug/L	8.137	851.34	ppb	8.137	0.96%
Pb 220.353†	788.0	112.46	ug/L	2.252	112.46	ppb	2.252	2.00%
S 181.975 Axial†	326.9	431.62	ug/L	5.595	431.62	ppb	5.595	1.30%
Sb 206.836†	39.7	-3.9683	ug/L	0.42385	-3.9683	ppb	0.42385	10.68%
Se 196.026†	-574.8	20.463	ug/L	2.0028	20.463	ppb	2.0028	9.79%
Si 251.611†	922758.6	29211	ug/L	37.5	29211	ppb	37.5	0.13%
Sn 189.927†	-109.1	-13.407	ug/L	1.0841	-13.407	ppb	1.0841	8.09%
Sr 421.552†	39720.7	253.44	ug/L	2.052	253.44	ppb	2.052	0.81%
Ti 334.940†	3009619.8	4820.4	ug/L	5.70	4820.4	ppb	5.70	0.12%
Tl 190.801†	-190.6	0.4424	ug/L	2.36626	0.4424	ppb	2.36626	534.86%
U 409.014†	-6723.4	-212.57	ug/L	1.140	-212.57	ppb	1.140	0.54%
V 292.402†	37946.2	231.47	ug/L	1.172	231.47	ppb	1.172	0.51%
Zn 213.857†	27197.9	242.48	ug/L	1.344	242.48	ppb	1.344	0.55%
SiO2†	921696.5	62167	ug/L	950.7	62167	ppb	950.7	1.53%

Sequence No.: 78
Sample ID: 243628005|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 96
Date Collected: 1/13/2010 00:32:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243628005|937486|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5308.0	5308.0	104	%			00:34:13
1	Y RADIAL	6187.2	6187.2	112.4	%			00:34:13
1	Al 396.153Radial†	128493.1	123971.3	99148	ug/L	99148	ppb	00:33:53
1	Ca 317.933Radial†	12275.8	11824.0	19087	ug/L	19087	ppb	00:33:53
1	Fe 238.204 Radial†	13265.3	12786.2	108720	ug/L	108720	ppb	00:33:53
1	K 766.490 Radial†	92925.0	87138.9	15861	ug/L	15861	ppb	00:33:53
1	Mg 279.077 IEC†	538.4	516.4	17035	ug/L	17035	ppb	00:34:13
1	Na 589.592 Radial†	856.9	2135.6	612.18	ug/L	612.18	ppb	00:33:53
1	Sr 421.552†	35293.6	34040.2	217.19	ug/L	217.19	ppb	00:33:53
1	Sc 361.383	862298.7	862298.7	100.49	%			00:35:17
1	Y 371.029	787535.4	787535.4	108.23	%			00:35:17
1	Ag 328.068†	-6948.6	-7271.6	2.8073	ug/L	2.8073	ppb	00:35:17
1	As 188.979†	-101.7	-77.2	37.258	ug/L	37.258	ppb	00:35:37
1	B 249.677†	1141.3	1750.8	21.463	ug/L	21.463	ppb	00:35:17
1	Ba 233.527†	209703.7	208684.3	1620.8	ug/L	1620.8	ppb	00:35:17
1	Be 313.107†	-13654.9	-9113.3	8.3057	ug/L	8.3057	ppb	00:35:17
1	Cd 226.502†	1209.8	1405.5	4.3098	ug/L	4.3098	ppb	00:35:37
1	Co 228.616†	3034.8	3097.2	51.119	ug/L	51.119	ppb	00:35:37
1	Cr 267.716†	23327.6	23134.3	259.18	ug/L	259.18	ppb	00:35:37
1	Cu 324.752†	28551.9	22009.5	71.486	ug/L	71.486	ppb	00:35:17
1	Mn 257.610†	3306850.4	3290209.6	3618.3	ug/L	3618.3	ppb	00:35:11
1	Mo 202.031†	151.3	128.9	17.664	ug/L	17.664	ppb	00:35:37
1	Ni 231.604†	6751.9	6651.8	164.57	ug/L	164.57	ppb	00:35:37
1	P 214.914†	2145.8	1914.9	1071.0	ug/L	1071.0	ppb	00:35:37
1	Pb 220.353†	1138.1	1194.7	157.59	ug/L	157.59	ppb	00:35:37
1	S 181.975 Axial†	602.3	555.5	754.42	ug/L	754.42	ppb	00:35:37
1	Sb 206.836†	95.1	61.2	2.9084	ug/L	2.9084	ppb	00:35:37
1	Se 196.026†	-525.5	-490.8	18.907	ug/L	18.907	ppb	00:35:37
1	Si 251.611†	1081040.4	1075280.3	34039	ug/L	34039	ppb	00:35:11
1	Sn 189.927†	-119.0	-120.1	-15.882	ug/L	-15.882	ppb	00:35:37
1	Ti 334.940†	3246485.2	3231904.3	5176.3	ug/L	5176.3	ppb	00:35:11
1	Tl 190.801†	-250.0	-214.7	-5.3750	ug/L	-5.3750	ppb	00:35:37
1	U 409.014†	-6414.4	-4519.1	-146.01	ug/L	-146.01	ppb	00:35:17
1	V 292.402†	34750.7	35940.1	220.62	ug/L	220.62	ppb	00:35:17
1	Zn 213.857†	32224.4	31441.8	283.47	ug/L	283.47	ppb	00:35:17
1	SiO2†	1086731.5	1080945.0	72908	ug/L	72908	ppb	00:36:46
2	Sc Radial	5268.3	5268.3	103	%			00:34:38
2	Y RADIAL	6152.1	6152.1	111.7	%			00:34:38
2	Al 396.153Radial†	127783.2	124214.1	99343	ug/L	99343	ppb	00:34:18
2	Ca 317.933Radial†	12209.2	11848.4	19126	ug/L	19126	ppb	00:34:18
2	Fe 238.204 Radial†	13207.8	12826.7	109060	ug/L	109060	ppb	00:34:18
2	K 766.490 Radial†	92518.5	87418.3	15911	ug/L	15911	ppb	00:34:18
2	Mg 279.077 IEC†	535.2	517.2	17061	ug/L	17061	ppb	00:34:38
2	Na 589.592 Radial†	747.4	2035.3	583.43	ug/L	583.43	ppb	00:34:18
2	Sr 421.552†	34948.4	33960.8	216.68	ug/L	216.68	ppb	00:34:18
2	Sc 361.383	870298.6	870298.6	101.42	%			00:35:48
2	Y 371.029	793908.2	793908.2	109.10	%			00:35:48
2	Ag 328.068†	-6980.6	-7239.6	3.0646	ug/L	3.0646	ppb	00:35:48
2	As 188.979†	-99.8	-74.5	37.380	ug/L	37.380	ppb	00:36:08
2	B 249.677†	1095.7	1695.4	20.166	ug/L	20.166	ppb	00:35:48
2	Ba 233.527†	211580.7	208616.7	1620.3	ug/L	1620.3	ppb	00:35:48
2	Be 313.107†	-13848.5	-9179.3	7.9839	ug/L	7.9839	ppb	00:35:48
2	Cd 226.502†	1195.7	1380.5	3.9986	ug/L	3.9986	ppb	00:36:08
2	Co 228.616†	3009.2	3044.1	50.313	ug/L	50.313	ppb	00:36:08
2	Cr 267.716†	23315.2	22908.7	256.69	ug/L	256.69	ppb	00:36:08
2	Cu 324.752†	28722.8	21916.8	71.227	ug/L	71.227	ppb	00:35:48
2	Mn 257.610†	3252701.1	3206573.1	3526.6	ug/L	3526.6	ppb	00:35:43
2	Mo 202.031†	154.5	130.7	17.814	ug/L	17.814	ppb	00:36:08
2	Ni 231.604†	6709.4	6548.1	162.01	ug/L	162.01	ppb	00:36:08

2	P 214.914†	2144.4	1894.0	1058.2	ug/L	1058.2 ppb	00:36:08
2	Pb 220.353†	1124.7	1171.1	154.76	ug/L	154.76 ppb	00:36:08
2	S 181.975 Axial†	591.7	539.5	732.24	ug/L	732.24 ppb	00:36:08
2	Sb 206.836†	88.6	53.9	0.8575	ug/L	0.8575 ppb	00:36:08
2	Se 196.026†	-517.6	-478.2	27.870	ug/L	27.870 ppb	00:36:08
2	Si 251.611†	1061546.0	1046171.3	33118	ug/L	33118 ppb	00:35:43
2	Sn 189.927†	-120.3	-120.3	-15.906	ug/L	-15.906 ppb	00:36:08
2	Ti 334.940†	3193800.1	3150263.6	5045.5	ug/L	5045.5 ppb	00:35:43
2	Tl 190.801†	-233.1	-195.8	-1.1684	ug/L	-1.1684 ppb	00:36:08
2	U 409.014†	-6427.1	-4472.9	-144.68	ug/L	-144.68 ppb	00:35:48
2	V 292.402†	35091.0	35957.7	220.83	ug/L	220.83 ppb	00:35:48
2	Zn 213.857†	32469.0	31388.2	282.95	ug/L	282.95 ppb	00:35:48
2	SiO2†	1079965.5	1064333.7	71788	ug/L	71788 ppb	00:36:52
3	Sc Radial	5333.3	5333.3	104	%		00:35:04
3	Y RADIAL	6184.3	6184.3	112.3	%		00:35:04
3	Al 396.153Radial†	128919.9	123793.1	99006	ug/L	99006 ppb	00:34:43
3	Ca 317.933Radial†	12312.2	11802.8	19053	ug/L	19053 ppb	00:34:43
3	Fe 238.204 Radial†	13268.0	12728.2	108230	ug/L	108230 ppb	00:34:43
3	K 766.490 Radial†	93066.5	86849.5	15808	ug/L	15808 ppb	00:34:43
3	Mg 279.077 IEC†	535.8	511.4	16870	ug/L	16870 ppb	00:35:04
3	Na 589.592 Radial†	871.3	2145.5	615.00	ug/L	615.00 ppb	00:34:43
3	Sr 421.552†	35258.1	33844.5	215.94	ug/L	215.94 ppb	00:34:43
3	Sc 361.383	865941.5	865941.5	100.92	%		00:36:20
3	Y 371.029	790586.7	790586.7	108.65	%		00:36:20
3	Ag 328.068†	-6877.3	-7171.8	3.1056	ug/L	3.1056 ppb	00:36:20
3	As 188.979†	-90.4	-65.7	42.036	ug/L	42.036 ppb	00:36:40
3	B 249.677†	1149.2	1753.9	21.614	ug/L	21.614 ppb	00:36:20
3	Ba 233.527†	210254.2	208351.9	1618.2	ug/L	1618.2 ppb	00:36:20
3	Be 313.107†	-14107.3	-9504.4	8.1474	ug/L	8.1474 ppb	00:36:20
3	Cd 226.502†	1200.7	1391.4	4.2053	ug/L	4.2053 ppb	00:36:40
3	Co 228.616†	3003.7	3053.6	50.253	ug/L	50.253 ppb	00:36:40
3	Cr 267.716†	23255.9	22965.6	257.30	ug/L	257.30 ppb	00:36:40
3	Cu 324.752†	28675.8	22012.8	71.469	ug/L	71.469 ppb	00:36:20
3	Mn 257.610†	3311016.9	3280495.4	3607.6	ug/L	3607.6 ppb	00:36:15
3	Mo 202.031†	163.6	140.5	18.433	ug/L	18.433 ppb	00:36:40
3	Ni 231.604†	6729.0	6600.8	163.31	ug/L	163.31 ppb	00:36:40
3	P 214.914†	2130.6	1891.0	1056.9	ug/L	1056.9 ppb	00:36:40
3	Pb 220.353†	1127.3	1179.2	155.74	ug/L	155.74 ppb	00:36:40
3	S 181.975 Axial†	595.0	545.7	740.87	ug/L	740.87 ppb	00:36:40
3	Sb 206.836†	89.9	55.6	1.0101	ug/L	1.0101 ppb	00:36:40
3	Se 196.026†	-543.5	-506.6	7.5288	ug/L	7.5288 ppb	00:36:40
3	Si 251.611†	1083254.3	1072948.7	33965	ug/L	33965 ppb	00:36:15
3	Sn 189.927†	-134.6	-135.0	-18.496	ug/L	-18.496 ppb	00:36:40
3	Ti 334.940†	3257289.2	3229019.9	5171.7	ug/L	5171.7 ppb	00:36:15
3	Tl 190.801†	-231.8	-195.7	0.2994	ug/L	0.2994 ppb	00:36:40
3	U 409.014†	-6460.7	-4538.1	-146.50	ug/L	-146.50 ppb	00:36:20
3	V 292.402†	34890.2	35932.9	220.67	ug/L	220.67 ppb	00:36:20
3	Zn 213.857†	32296.8	31378.6	282.93	ug/L	282.93 ppb	00:36:20
3	SiO2†	1084218.3	1073905.5	72433	ug/L	72433 ppb	00:36:58

Mean Data: 243628005|937486|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	866179.6	100.94	%	0.467				0.46%
Sc Radial	5303.2	104	%	0.6				0.62%
Y 371.029	790676.8	108.66	%	0.438				0.40%
Y RADIAL	6174.5	112.2	%	0.35				0.31%
Ag 328.068†	-7227.7	2.9925	ug/L	0.16173	2.9925	ppb	0.16173	5.40%
Al 396.153Radial†	123992.8	99166	ug/L	169.0	99166	ppb	169.0	0.17%
As 188.979†	-72.5	38.892	ug/L	2.7241	38.892	ppb	2.7241	7.00%
B 249.677†	1733.4	21.081	ug/L	0.7958	21.081	ppb	0.7958	3.77%
Ba 233.527†	208551.0	1619.7	ug/L	1.37	1619.7	ppb	1.37	0.08%
Be 313.107†	-9265.7	8.1457	ug/L	0.16087	8.1457	ppb	0.16087	1.97%
Ca 317.933Radial†	11825.1	19089	ug/L	36.8	19089	ppb	36.8	0.19%
Cd 226.502†	1392.5	4.1712	ug/L	0.15835	4.1712	ppb	0.15835	3.80%
Co 228.616†	3065.0	50.562	ug/L	0.4834	50.562	ppb	0.4834	0.96%
Cr 267.716†	23002.8	257.72	ug/L	1.300	257.72	ppb	1.300	0.50%
Cu 324.752†	21979.7	71.394	ug/L	0.1452	71.394	ppb	0.1452	0.20%
Fe 238.204 Radial†	12780.4	108670	ug/L	421.3	108670	ppb	421.3	0.39%
K 766.490 Radial†	87135.6	15860	ug/L	51.8	15860	ppb	51.8	0.33%

Mg 279.077 IEC†	515.0	16988	ug/L	103.7	16988	ppb	103.7	0.61%
Mn 257.610†	3259092.7	3584.2	ug/L	50.14	3584.2	ppb	50.14	1.40%
Mo 202.031†	133.4	17.970	ug/L	0.4080	17.970	ppb	0.4080	2.27%
Na 589.592 Radial†	2105.5	603.54	ug/L	17.470	603.54	ppb	17.470	2.89%
Ni 231.604†	6600.2	163.30	ug/L	1.283	163.30	ppb	1.283	0.79%
P 214.914†	1900.0	1062.0	ug/L	7.76	1062.0	ppb	7.76	0.73%
Pb 220.353†	1181.7	156.03	ug/L	1.439	156.03	ppb	1.439	0.92%
S 181.975 Axial†	546.9	742.51	ug/L	11.185	742.51	ppb	11.185	1.51%
Sb 206.836†	56.9	1.5920	ug/L	1.14259	1.5920	ppb	1.14259	71.77%
Se 196.026†	-491.9	18.102	ug/L	10.1946	18.102	ppb	10.1946	56.32%
Si 251.611†	1064800.1	33708	ug/L	512.0	33708	ppb	512.0	1.52%
Sn 189.927†	-125.1	-16.761	ug/L	1.5022	-16.761	ppb	1.5022	8.96%
Sr 421.552†	33948.5	216.60	ug/L	0.628	216.60	ppb	0.628	0.29%
Ti 334.940†	3203729.3	5131.2	ug/L	74.18	5131.2	ppb	74.18	1.45%
Tl 190.801†	-202.1	-2.0813	ug/L	2.94526	-2.0813	ppb	2.94526	141.51%
U 409.014†	-4510.0	-145.73	ug/L	0.943	-145.73	ppb	0.943	0.65%
V 292.402†	35943.5	220.71	ug/L	0.110	220.71	ppb	0.110	0.05%
Zn 213.857†	31402.8	283.12	ug/L	0.305	283.12	ppb	0.305	0.11%
SiO2†	1073061.4	72376	ug/L	562.4	72376	ppb	562.4	0.78%

Sequence No.: 79
Sample ID: 243628006|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 97
Date Collected: 1/13/2010 00:39:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243628006|937486|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5290.8	5290.8	103	%			00:41:22
1	Y RADIAL	6312.0	6312.0	114.7	%			00:41:22
1	Al 396.153Radial†	225771.2	218526.9	174770	ug/L	174770	ppb	00:41:02
1	Ca 317.933Radial†	15390.5	14877.0	24015	ug/L	24015	ppb	00:41:02
1	Fe 238.204 Radial†	17904.0	17317.4	147250	ug/L	147250	ppb	00:41:02
1	K 766.490 Radial†	119870.5	113509.4	20661	ug/L	20661	ppb	00:41:02
1	Mg 279.077 IEC†	762.8	735.3	24263	ug/L	24263	ppb	00:41:22
1	Na 589.592 Radial†	2485.8	3714.9	1064.9	ug/L	1064.9	ppb	00:41:02
1	Sr 421.552†	48838.2	47260.0	301.55	ug/L	301.55	ppb	00:41:02
1	Sc 361.383	812647.7	812647.7	94.706	%			00:42:26
1	Y 371.029	766209.6	766209.6	105.30	%			00:42:26
1	Ag 328.068†	-9855.7	-10763.7	-0.2513	ug/L	-0.2513	ppb	00:42:26
1	As 188.979†	-121.2	-104.0	51.153	ug/L	51.153	ppb	00:42:46
1	B 249.677†	1552.1	2254.0	26.464	ug/L	26.464	ppb	00:42:26
1	Ba 233.527†	259420.3	273929.5	2127.7	ug/L	2127.7	ppb	00:42:26
1	Be 313.107†	-11394.5	-7556.8	13.160	ug/L	13.160	ppb	00:42:26
1	Cd 226.502†	1253.0	1524.7	1.5877	ug/L	1.5877	ppb	00:42:46
1	Co 228.616†	3431.8	3700.9	59.136	ug/L	59.136	ppb	00:42:46
1	Cr 267.716†	10988.0	11523.2	131.29	ug/L	131.29	ppb	00:42:46
1	Cu 324.752†	32043.1	27431.8	89.741	ug/L	89.741	ppb	00:42:26
1	Mn 257.610†	3214448.7	3393694.2	3735.3	ug/L	3735.3	ppb	00:42:20
1	Mo 202.031†	-91.7	-118.4	3.4545	ug/L	3.4545	ppb	00:42:46
1	Ni 231.604†	3959.0	4113.3	101.75	ug/L	101.75	ppb	00:42:46
1	P 214.914†	2287.3	2194.8	1223.0	ug/L	1223.0	ppb	00:42:46
1	Pb 220.353†	843.2	952.5	142.25	ug/L	142.25	ppb	00:42:46
1	S 181.975 Axial†	418.1	397.6	520.56	ug/L	520.56	ppb	00:42:46
1	Sb 206.836†	105.7	78.1	0.8431	ug/L	0.8431	ppb	00:42:46
1	Se 196.026†	-752.6	-762.7	-34.001	ug/L	-34.001	ppb	00:42:46
1	Si 251.611†	1065530.6	1124629.0	35602	ug/L	35602	ppb	00:42:20
1	Sn 189.927†	-79.8	-85.9	-8.4487	ug/L	-8.4487	ppb	00:42:46
1	Ti 334.940†	4170946.1	4405420.0	7055.5	ug/L	7055.5	ppb	00:42:20
1	Tl 190.801†	-267.1	-248.0	0.4671	ug/L	0.4671	ppb	00:42:46
1	U 409.014†	-8415.0	-7021.5	-223.78	ug/L	-223.78	ppb	00:42:26
1	V 292.402†	47822.7	51855.5	320.06	ug/L	320.06	ppb	00:42:26
1	Zn 213.857†	32026.3	33191.7	296.54	ug/L	296.54	ppb	00:42:26
1	SiO2†	1047755.0	1105861.4	74589	ug/L	74589	ppb	00:43:55
2	Sc Radial	5377.7	5377.7	105	%			00:41:47
2	Y RADIAL	6419.3	6419.3	116.6	%			00:41:47
2	Al 396.153Radial†	226709.6	215888.6	172660	ug/L	172660	ppb	00:41:27
2	Ca 317.933Radial†	15447.9	14690.9	23715	ug/L	23715	ppb	00:41:27
2	Fe 238.204 Radial†	17877.6	17012.3	144650	ug/L	144650	ppb	00:41:27
2	K 766.490 Radial†	119919.8	111681.2	20328	ug/L	20328	ppb	00:41:27
2	Mg 279.077 IEC†	778.8	738.6	24376	ug/L	24376	ppb	00:41:47
2	Na 589.592 Radial†	2407.8	3601.7	1032.4	ug/L	1032.4	ppb	00:41:27
2	Sr 421.552†	48756.5	46418.2	296.18	ug/L	296.18	ppb	00:41:27
2	Sc 361.383	857724.1	857724.1	99.960	%			00:42:57
2	Y 371.029	798901.5	798901.5	109.79	%			00:42:57
2	Ag 328.068†	-9670.2	-10031.2	2.1585	ug/L	2.1585	ppb	00:42:57
2	As 188.979†	-117.9	-94.0	50.996	ug/L	50.996	ppb	00:43:17
2	B 249.677†	1555.4	2171.1	25.038	ug/L	25.038	ppb	00:42:57
2	Ba 233.527†	256105.6	256217.9	1990.4	ug/L	1990.4	ppb	00:42:57
2	Be 313.107†	-11671.9	-7202.0	12.293	ug/L	12.293	ppb	00:42:57
2	Cd 226.502†	1226.6	1428.7	0.7979	ug/L	0.7979	ppb	00:43:17
2	Co 228.616†	3420.9	3499.6	55.953	ug/L	55.953	ppb	00:43:17
2	Cr 267.716†	10860.4	10785.8	123.02	ug/L	123.02	ppb	00:43:17
2	Cu 324.752†	31362.4	24972.7	82.261	ug/L	82.261	ppb	00:42:57
2	Mn 257.610†	3176317.9	3177174.7	3497.6	ug/L	3497.6	ppb	00:42:52
2	Mo 202.031†	-78.7	-100.4	4.5074	ug/L	4.5074	ppb	00:43:17
2	Ni 231.604†	3915.3	3849.9	95.230	ug/L	95.230	ppb	00:43:17

2	P 214.914†	2248.4	2029.0	1126.8	ug/L	1126.8 ppb	00:43:17
2	Pb 220.353†	865.8	928.3	139.08	ug/L	139.08 ppb	00:43:17
2	S 181.975 Axial†	423.6	379.9	496.32	ug/L	496.32 ppb	00:43:17
2	Sb 206.836†	93.1	59.7	-3.9760	ug/L	-3.9760 ppb	00:43:17
2	Se 196.026†	-739.3	-707.5	-7.0878	ug/L	-7.0878 ppb	00:43:17
2	Si 251.611†	1055124.9	1055091.6	33400	ug/L	33400 ppb	00:42:52
2	Sn 189.927†	-89.3	-91.0	-9.4429	ug/L	-9.4429 ppb	00:43:17
2	Ti 334.940†	4127019.8	4130025.6	6614.5	ug/L	6614.5 ppb	00:42:52
2	Tl 190.801†	-283.7	-249.7	-4.7851	ug/L	-4.7851 ppb	00:43:17
2	U 409.014†	-8451.0	-6590.5	-210.78	ug/L	-210.78 ppb	00:42:57
2	V 292.402†	47097.6	48476.4	298.09	ug/L	298.09 ppb	00:42:57
2	Zn 213.857†	31609.3	30997.5	276.24	ug/L	276.24 ppb	00:42:57
2	SiO2†	1049244.7	1049210.7	70768	ug/L	70768 ppb	00:44:01
3	Sc Radial	5372.6	5372.6	105	%		00:42:13
3	Y RADIAL	6409.5	6409.5	116.4	%		00:42:13
3	Al 396.153Radial†	226032.1	215450.0	172310	ug/L	172310 ppb	00:41:53
3	Ca 317.933Radial†	15417.0	14675.6	23690	ug/L	23690 ppb	00:41:53
3	Fe 238.204 Radial†	17830.0	16983.2	144410	ug/L	144410 ppb	00:41:53
3	K 766.490 Radial†	119560.1	111447.9	20286	ug/L	20286 ppb	00:41:53
3	Mg 279.077 IEC†	768.0	729.0	24056	ug/L	24056 ppb	00:42:13
3	Na 589.592 Radial†	2383.2	3580.4	1026.3	ug/L	1026.3 ppb	00:41:53
3	Sr 421.552†	48521.8	46239.1	295.04	ug/L	295.04 ppb	00:41:53
3	Sc 361.383	855602.5	855602.5	99.712	%		00:43:29
3	Y 371.029	796899.7	796899.7	109.51	%		00:43:29
3	Ag 328.068†	-9654.9	-10039.8	2.0387	ug/L	2.0387 ppb	00:43:29
3	As 188.979†	-113.3	-89.7	52.305	ug/L	52.305 ppb	00:43:49
3	B 249.677†	1568.9	2188.5	25.469	ug/L	25.469 ppb	00:43:29
3	Ba 233.527†	255974.8	256722.0	1994.3	ug/L	1994.3 ppb	00:43:29
3	Be 313.107†	-11604.6	-7163.4	12.184	ug/L	12.184 ppb	00:43:29
3	Cd 226.502†	1223.1	1428.2	0.8184	ug/L	0.8184 ppb	00:43:49
3	Co 228.616†	3407.5	3494.6	55.970	ug/L	55.970 ppb	00:43:49
3	Cr 267.716†	10817.4	10769.6	122.84	ug/L	122.84 ppb	00:43:49
3	Cu 324.752†	31358.2	25046.2	82.466	ug/L	82.466 ppb	00:43:29
3	Mn 257.610†	3144923.4	3153569.0	3471.7	ug/L	3471.7 ppb	00:43:24
3	Mo 202.031†	-81.6	-103.5	4.2723	ug/L	4.2723 ppb	00:43:49
3	Ni 231.604†	3880.6	3824.8	94.608	ug/L	94.608 ppb	00:43:49
3	P 214.914†	2258.6	2044.8	1136.3	ug/L	1136.3 ppb	00:43:49
3	Pb 220.353†	882.3	947.0	141.28	ug/L	141.28 ppb	00:43:49
3	S 181.975 Axial†	409.0	366.3	477.53	ug/L	477.53 ppb	00:43:49
3	Sb 206.836†	106.3	73.2	0.7939	ug/L	0.7939 ppb	00:43:49
3	Se 196.026†	-716.1	-686.2	5.6171	ug/L	5.6171 ppb	00:43:49
3	Si 251.611†	1043796.9	1046348.3	33124	ug/L	33124 ppb	00:43:24
3	Sn 189.927†	-83.4	-85.3	-8.4461	ug/L	-8.4461 ppb	00:43:49
3	Ti 334.940†	4083078.1	4096194.9	6560.3	ug/L	6560.3 ppb	00:43:24
3	Tl 190.801†	-278.5	-245.2	-3.9985	ug/L	-3.9985 ppb	00:43:49
3	U 409.014†	-8330.7	-6490.8	-207.81	ug/L	-207.81 ppb	00:43:29
3	V 292.402†	47044.4	48539.8	298.61	ug/L	298.61 ppb	00:43:29
3	Zn 213.857†	31550.1	31016.5	276.45	ug/L	276.45 ppb	00:43:29
3	SiO2†	1059325.4	1061923.3	71625	ug/L	71625 ppb	00:44:07

Mean Data: 243628006|937486|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	841991.4	98.126	%	2.9642				3.02%
Sc Radial	5347.1	104	%	1.0				0.91%
Y 371.029	787336.9	108.20	%	2.518				2.33%
Y RADIAL	6380.3	115.9	%	1.08				0.93%
Ag 328.068†	-10278.2	1.3153	ug/L	1.35800	1.3153	ppb	1.35800	103.25%
Al 396.153Radial†	216621.8	173250	ug/L	1331.1	173250	ppb	1331.1	0.77%
As 188.979†	-95.9	51.485	ug/L	0.7143	51.485	ppb	0.7143	1.39%
B 249.677†	2204.6	25.657	ug/L	0.7315	25.657	ppb	0.7315	2.85%
Ba 233.527†	262289.8	2037.4	ug/L	78.20	2037.4	ppb	78.20	3.84%
Be 313.107†	-7307.4	12.546	ug/L	0.5347	12.546	ppb	0.5347	4.26%
Ca 317.933Radial†	14747.9	23807	ug/L	181.0	23807	ppb	181.0	0.76%
Cd 226.502†	1460.6	1.0680	ug/L	0.45021	1.0680	ppb	0.45021	42.15%
Co 228.616†	3565.0	57.020	ug/L	1.8327	57.020	ppb	1.8327	3.21%
Cr 267.716†	11026.2	125.72	ug/L	4.829	125.72	ppb	4.829	3.84%
Cu 324.752†	25816.9	84.822	ug/L	4.2609	84.822	ppb	4.2609	5.02%
Fe 238.204 Radial†	17104.3	145440	ug/L	1574.2	145440	ppb	1574.2	1.08%
K 766.490 Radial†	112212.8	20425	ug/L	205.5	20425	ppb	205.5	1.01%

Mg 279.077 IEC†	734.3	24232	ug/L	162.4	24232	ppb	162.4	0.67%
Mn 257.610†	3241479.3	3568.2	ug/L	145.30	3568.2	ppb	145.30	4.07%
Mo 202.031†	-107.4	4.0781	ug/L	0.55269	4.0781	ppb	0.55269	13.55%
Na 589.592 Radial†	3632.3	1041.2	ug/L	20.71	1041.2	ppb	20.71	1.99%
Ni 231.604†	3929.3	97.195	ug/L	3.9540	97.195	ppb	3.9540	4.07%
P 214.914†	2089.5	1162.0	ug/L	53.02	1162.0	ppb	53.02	4.56%
Pb 220.353†	942.6	140.87	ug/L	1.622	140.87	ppb	1.622	1.15%
S 181.975 Axial†	381.3	498.14	ug/L	21.573	498.14	ppb	21.573	4.33%
Sb 206.836†	70.4	-0.7797	ug/L	2.76820	-0.7797	ppb	2.76820	355.03%
Se 196.026†	-718.8	-11.824	ug/L	20.2294	-11.824	ppb	20.2294	171.09%
Si 251.611†	1075356.3	34042	ug/L	1357.9	34042	ppb	1357.9	3.99%
Sn 189.927†	-87.4	-8.7792	ug/L	0.57474	-8.7792	ppb	0.57474	6.55%
Sr 421.552†	46639.1	297.59	ug/L	3.479	297.59	ppb	3.479	1.17%
Ti 334.940†	4210546.8	6743.5	ug/L	271.61	6743.5	ppb	271.61	4.03%
Tl 190.801†	-247.6	-2.7722	ug/L	2.83268	-2.7722	ppb	2.83268	102.18%
U 409.014†	-6700.9	-214.12	ug/L	8.492	-214.12	ppb	8.492	3.97%
V 292.402†	49623.9	305.59	ug/L	12.536	305.59	ppb	12.536	4.10%
Zn 213.857†	31735.2	283.08	ug/L	11.658	283.08	ppb	11.658	4.12%
SiO2†	1072331.8	72327	ug/L	2004.9	72327	ppb	2004.9	2.77%

Sequence No.: 80
Sample ID: 243628007|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 98
Date Collected: 1/13/2010 00:46:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243628007|937486|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5419.7	5419.7	106	%			00:48:32
1	Y RADIAL	6428.2	6428.2	116.8	%			00:48:32
1	Al 396.153Radial†	177533.6	167752.5	134160	ug/L	134160	ppb	00:48:12
1	Ca 317.933Radial†	15474.0	14601.7	23571	ug/L	23571	ppb	00:48:12
1	Fe 238.204 Radial†	16041.2	15145.3	128780	ug/L	128780	ppb	00:48:12
1	K 766.490 Radial†	122445.8	113184.0	20602	ug/L	20602	ppb	00:48:12
1	Mg 279.077 IEC†	661.2	621.7	20510	ug/L	20510	ppb	00:48:32
1	Na 589.592 Radial†	783.8	2049.4	587.48	ug/L	587.48	ppb	00:48:12
1	Sr 421.552†	45134.9	42636.9	272.04	ug/L	272.04	ppb	00:48:12
1	Sc 361.383	861762.3	861762.3	100.43	%			00:49:35
1	Y 371.029	797664.8	797664.8	109.62	%			00:49:35
1	Ag 328.068†	-8545.6	-8866.1	2.1895	ug/L	2.1895	ppb	00:49:35
1	As 188.979†	-80.4	-56.1	59.012	ug/L	59.012	ppb	00:49:55
1	B 249.677†	1426.6	2035.6	24.561	ug/L	24.561	ppb	00:49:35
1	Ba 233.527†	266264.7	265132.9	2058.9	ug/L	2058.9	ppb	00:49:35
1	Be 313.107†	-13441.8	-8909.6	10.475	ug/L	10.475	ppb	00:49:35
1	Cd 226.502†	1128.2	1325.0	1.3020	ug/L	1.3020	ppb	00:49:55
1	Co 228.616†	3648.3	3709.9	61.562	ug/L	61.562	ppb	00:49:55
1	Cr 267.716†	12535.2	12402.6	140.59	ug/L	140.59	ppb	00:49:55
1	Cu 324.752†	29415.4	22887.0	75.187	ug/L	75.187	ppb	00:49:35
1	Mn 257.610†	4121035.3	4102955.8	4511.5	ug/L	4511.5	ppb	00:49:30
1	Mo 202.031†	-55.3	-76.7	4.9285	ug/L	4.9285	ppb	00:49:55
1	Ni 231.604†	4042.5	3958.2	97.906	ug/L	97.906	ppb	00:49:55
1	P 214.914†	2544.1	2312.9	1301.9	ug/L	1301.9	ppb	00:49:55
1	Pb 220.353†	1016.4	1074.2	149.30	ug/L	149.30	ppb	00:49:55
1	S 181.975 Axial†	847.9	800.4	1088.8	ug/L	1088.8	ppb	00:49:55
1	Sb 206.836†	82.3	48.5	-5.3235	ug/L	-5.3235	ppb	00:49:55
1	Se 196.026†	-651.1	-616.3	1.2664	ug/L	1.2664	ppb	00:49:55
1	Si 251.611†	1117887.2	1112638.8	35222	ug/L	35222	ppb	00:49:30
1	Sn 189.927†	-106.9	-108.1	-12.707	ug/L	-12.707	ppb	00:49:55
1	Ti 334.940†	3822594.5	3807557.1	6098.4	ug/L	6098.4	ppb	00:49:30
1	Tl 190.801†	-276.1	-240.9	-1.5035	ug/L	-1.5035	ppb	00:49:55
1	U 409.014†	-7785.5	-5888.3	-188.33	ug/L	-188.33	ppb	00:49:35
1	V 292.402†	42177.9	43357.0	266.49	ug/L	266.49	ppb	00:49:35
1	Zn 213.857†	29681.3	28929.5	258.36	ug/L	258.36	ppb	00:49:55
1	SiO2†	1120951.6	1115691.7	75252	ug/L	75252	ppb	00:51:05
2	Sc Radial	5357.7	5357.7	105	%			00:48:57
2	Y RADIAL	6350.0	6350.0	115.3	%			00:48:57
2	Al 396.153Radial†	178870.1	170970.6	136740	ug/L	136740	ppb	00:48:37
2	Ca 317.933Radial†	15509.4	14804.7	23899	ug/L	23899	ppb	00:48:37
2	Fe 238.204 Radial†	16083.7	15361.3	130620	ug/L	130620	ppb	00:48:37
2	K 766.490 Radial†	122828.1	114887.8	20912	ug/L	20912	ppb	00:48:37
2	Mg 279.077 IEC†	659.1	626.9	20682	ug/L	20682	ppb	00:48:57
2	Na 589.592 Radial†	909.5	2178.2	624.39	ug/L	624.39	ppb	00:48:37
2	Sr 421.552†	45472.8	43453.3	277.25	ug/L	277.25	ppb	00:48:37
2	Sc 361.383	868064.0	868064.0	101.16	%			00:50:07
2	Y 371.029	802223.8	802223.8	110.25	%			00:50:07
2	Ag 328.068†	-8572.1	-8830.4	2.9384	ug/L	2.9384	ppb	00:50:07
2	As 188.979†	-101.2	-76.1	50.956	ug/L	50.956	ppb	00:50:27
2	B 249.677†	1562.7	2159.9	27.054	ug/L	27.054	ppb	00:50:07
2	Ba 233.527†	267801.9	264727.8	2055.8	ug/L	2055.8	ppb	00:50:07
2	Be 313.107†	-13635.5	-9003.9	10.456	ug/L	10.456	ppb	00:50:07
2	Cd 226.502†	1138.5	1327.1	1.1346	ug/L	1.1346	ppb	00:50:27
2	Co 228.616†	3660.2	3695.3	61.221	ug/L	61.221	ppb	00:50:27
2	Cr 267.716†	12508.0	12285.1	139.32	ug/L	139.32	ppb	00:50:27
2	Cu 324.752†	29454.9	22713.5	74.767	ug/L	74.767	ppb	00:50:07
2	Mn 257.610†	4152568.0	4104337.3	4513.1	ug/L	4513.1	ppb	00:50:01
2	Mo 202.031†	-58.3	-79.2	4.8950	ug/L	4.8950	ppb	00:50:27
2	Ni 231.604†	4022.0	3908.7	96.683	ug/L	96.683	ppb	00:50:27

2	P 214.914†	2575.2	2325.3	1308.6	ug/L	1308.6 ppb	00:50:27
2	Pb 220.353†	998.2	1048.9	146.66	ug/L	146.66 ppb	00:50:27
2	S 181.975 Axial†	844.6	791.0	1075.2	ug/L	1075.2 ppb	00:50:27
2	Sb 206.836†	92.0	57.5	-2.2921	ug/L	-2.2921 ppb	00:50:27
2	Se 196.026†	-632.1	-592.8	21.617	ug/L	21.617 ppb	00:50:27
2	Si 251.611†	1127316.9	1113879.5	35261	ug/L	35261 ppb	00:50:01
2	Sn 189.927†	-91.1	-91.7	-9.7641	ug/L	-9.7641 ppb	00:50:27
2	Ti 334.940†	3855109.0	3812066.3	6105.7	ug/L	6105.7 ppb	00:50:01
2	Tl 190.801†	-272.1	-234.9	0.3706	ug/L	0.3706 ppb	00:50:27
2	U 409.014†	-7876.8	-5922.2	-189.54	ug/L	-189.54 ppb	00:50:07
2	V 292.402†	42302.3	43175.1	264.95	ug/L	264.95 ppb	00:50:07
2	Zn 213.857†	29681.0	28714.6	256.17	ug/L	256.17 ppb	00:50:27
2	SiO2†	1122637.3	1109255.4	74818	ug/L	74818 ppb	00:51:10
3	Sc Radial	5361.4	5361.4	105	%		00:49:22
3	Y RADIAL	6348.6	6348.6	115.3	%		00:49:22
3	Al 396.153Radial†	177958.2	169982.4	135950	ug/L	135950 ppb	00:49:02
3	Ca 317.933Radial†	15374.4	14665.6	23674	ug/L	23674 ppb	00:49:02
3	Fe 238.204 Radial†	15977.3	15249.2	129660	ug/L	129660 ppb	00:49:02
3	K 766.490 Radial†	122141.2	114151.3	20778	ug/L	20778 ppb	00:49:02
3	Mg 279.077 IEC†	657.1	624.6	20605	ug/L	20605 ppb	00:49:22
3	Na 589.592 Radial†	797.6	2070.8	593.58	ug/L	593.58 ppb	00:49:02
3	Sr 421.552†	45041.1	43011.1	274.43	ug/L	274.43 ppb	00:49:02
3	Sc 361.383	866619.3	866619.3	101.00	%		00:50:38
3	Y 371.029	801685.3	801685.3	110.17	%		00:50:38
3	Ag 328.068†	-8559.0	-8831.6	2.6300	ug/L	2.6300 ppb	00:50:38
3	As 188.979†	-98.8	-73.9	51.221	ug/L	51.221 ppb	00:50:58
3	B 249.677†	1493.8	2094.1	25.733	ug/L	25.733 ppb	00:50:38
3	Ba 233.527†	267348.4	264720.1	2055.7	ug/L	2055.7 ppb	00:50:38
3	Be 313.107†	-13389.9	-8783.2	10.416	ug/L	10.416 ppb	00:50:38
3	Cd 226.502†	1111.7	1302.4	0.9622	ug/L	0.9622 ppb	00:50:58
3	Co 228.616†	3650.1	3691.3	61.268	ug/L	61.268 ppb	00:50:58
3	Cr 267.716†	12577.5	12374.5	140.30	ug/L	140.30 ppb	00:50:58
3	Cu 324.752†	29723.6	23028.0	75.654	ug/L	75.654 ppb	00:50:38
3	Mn 257.610†	4113486.1	4072483.5	4478.1	ug/L	4478.1 ppb	00:50:33
3	Mo 202.031†	-65.7	-86.7	4.2986	ug/L	4.2986 ppb	00:50:58
3	Ni 231.604†	4035.2	3928.4	97.171	ug/L	97.171 ppb	00:50:58
3	P 214.914†	2582.8	2337.0	1316.0	ug/L	1316.0 ppb	00:50:58
3	Pb 220.353†	984.6	1037.1	145.13	ug/L	145.13 ppb	00:50:58
3	S 181.975 Axial†	853.0	800.7	1088.9	ug/L	1088.9 ppb	00:50:58
3	Sb 206.836†	91.0	56.6	-2.4156	ug/L	-2.4156 ppb	00:50:58
3	Se 196.026†	-641.3	-603.0	12.333	ug/L	12.333 ppb	00:50:58
3	Si 251.611†	1115443.7	1103981.0	34948	ug/L	34948 ppb	00:50:33
3	Sn 189.927†	-90.1	-90.9	-9.6744	ug/L	-9.6744 ppb	00:50:58
3	Ti 334.940†	3814307.6	3778019.8	6051.1	ug/L	6051.1 ppb	00:50:33
3	Tl 190.801†	-262.9	-226.2	2.3582	ug/L	2.3582 ppb	00:50:58
3	U 409.014†	-7776.7	-5836.1	-186.90	ug/L	-186.90 ppb	00:50:38
3	V 292.402†	42390.2	43331.8	266.22	ug/L	266.22 ppb	00:50:38
3	Zn 213.857†	29813.2	28894.4	257.95	ug/L	257.95 ppb	00:50:58
3	SiO2†	1119847.5	1108343.0	74756	ug/L	74756 ppb	00:51:16

Mean Data: 243628007|937486|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	865481.9	100.86	%	0.385				0.38%
Sc Radial	5379.6	105	%	0.7				0.65%
Y 371.029	800524.7	110.01	%	0.342				0.31%
Y RADIAL	6375.6	115.8	%	0.83				0.71%
Ag 328.068†	-8842.7	2.5860	ug/L	0.37639	2.5860	ppb	0.37639	14.56%
Al 396.153Radial†	169568.5	135620	ug/L	1318.4	135620	ppb	1318.4	0.97%
As 188.979†	-68.7	53.730	ug/L	4.5770	53.730	ppb	4.5770	8.52%
B 249.677†	2096.5	25.783	ug/L	1.2470	25.783	ppb	1.2470	4.84%
Ba 233.527†	264860.3	2056.8	ug/L	1.81	2056.8	ppb	1.81	0.09%
Be 313.107†	-8898.9	10.449	ug/L	0.0304	10.449	ppb	0.0304	0.29%
Ca 317.933Radial†	14690.7	23715	ug/L	167.5	23715	ppb	167.5	0.71%
Cd 226.502†	1318.1	1.1329	ug/L	0.16989	1.1329	ppb	0.16989	15.00%
Co 228.616†	3698.8	61.350	ug/L	0.1847	61.350	ppb	0.1847	0.30%
Cr 267.716†	12354.1	140.07	ug/L	0.664	140.07	ppb	0.664	0.47%
Cu 324.752†	22876.2	75.203	ug/L	0.4435	75.203	ppb	0.4435	0.59%
Fe 238.204 Radial†	15251.9	129690	ug/L	918.3	129690	ppb	918.3	0.71%
K 766.490 Radial†	114074.4	20764	ug/L	155.6	20764	ppb	155.6	0.75%

Mg 279.077 IEC†	624.4	20599	ug/L	86.1	20599	ppb	86.1	0.42%
Mn 257.610†	4093258.8	4500.9	ug/L	19.75	4500.9	ppb	19.75	0.44%
Mo 202.031†	-80.9	4.7074	ug/L	0.35437	4.7074	ppb	0.35437	7.53%
Na 589.592 Radial†	2099.5	601.82	ug/L	19.785	601.82	ppb	19.785	3.29%
Ni 231.604†	3931.8	97.253	ug/L	0.6160	97.253	ppb	0.6160	0.63%
P 214.914†	2325.1	1308.8	ug/L	7.07	1308.8	ppb	7.07	0.54%
Pb 220.353†	1053.4	147.03	ug/L	2.108	147.03	ppb	2.108	1.43%
S 181.975 Axial†	797.4	1084.3	ug/L	7.88	1084.3	ppb	7.88	0.73%
Sb 206.836†	54.2	-3.3438	ug/L	1.71564	-3.3438	ppb	1.71564	51.31%
Se 196.026†	-604.0	11.739	ug/L	10.1882	11.739	ppb	10.1882	86.79%
Si 251.611†	1110166.4	35144	ug/L	170.7	35144	ppb	170.7	0.49%
Sn 189.927†	-96.9	-10.715	ug/L	1.7253	-10.715	ppb	1.7253	16.10%
Sr 421.552†	43033.8	274.57	ug/L	2.608	274.57	ppb	2.608	0.95%
Ti 334.940†	3799214.4	6085.1	ug/L	29.62	6085.1	ppb	29.62	0.49%
Tl 190.801†	-234.0	0.4084	ug/L	1.93114	0.4084	ppb	1.93114	472.81%
U 409.014†	-5882.2	-188.26	ug/L	1.323	-188.26	ppb	1.323	0.70%
V 292.402†	43288.0	265.89	ug/L	0.822	265.89	ppb	0.822	0.31%
Zn 213.857†	28846.2	257.49	ug/L	1.162	257.49	ppb	1.162	0.45%
SiO2†	1111096.7	74942	ug/L	270.2	74942	ppb	270.2	0.36%

Sequence No.: 81
Sample ID: 243628008|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 99
Date Collected: 1/13/2010 00:53:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243628008|937486|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5319.0	5319.0	104	%			00:55:42
1	Y RADIAL	6409.3	6409.3	116.4	%			00:55:42
1	Al 396.153Radial†	225747.4	217344.9	173830	ug/L	173830	ppb	00:55:22
1	Ca 317.933Radial†	14937.0	14361.4	23183	ug/L	23183	ppb	00:55:22
1	Fe 238.204 Radial†	17094.5	16446.2	139840	ug/L	139840	ppb	00:55:22
1	K 766.490 Radial†	120752.6	113743.2	20704	ug/L	20704	ppb	00:55:22
1	Mg 279.077 IEC†	746.7	715.8	23624	ug/L	23624	ppb	00:55:42
1	Na 589.592 Radial†	2933.3	4133.0	1184.7	ug/L	1184.7	ppb	00:55:22
1	Sr 421.552†	47589.7	45807.3	292.29	ug/L	292.29	ppb	00:55:22
1	Sc 361.383	860152.7	860152.7	100.24	%			00:56:46
1	Y 371.029	804012.0	804012.0	110.49	%			00:56:46
1	Ag 328.068†	-9061.2	-9396.3	3.4158	ug/L	3.4158	ppb	00:56:46
1	As 188.979†	-104.3	-80.1	55.153	ug/L	55.153	ppb	00:57:06
1	B 249.677†	1422.3	2034.0	22.740	ug/L	22.740	ppb	00:56:46
1	Ba 233.527†	260331.4	259710.1	2017.2	ug/L	2017.2	ppb	00:56:46
1	Be 313.107†	-11359.7	-6857.5	12.244	ug/L	12.244	ppb	00:56:46
1	Cd 226.502†	1165.9	1364.8	0.5838	ug/L	0.5838	ppb	00:57:06
1	Co 228.616†	3460.7	3529.6	56.815	ug/L	56.815	ppb	00:57:06
1	Cr 267.716†	9326.4	9224.9	105.58	ug/L	105.58	ppb	00:57:06
1	Cu 324.752†	29430.1	22956.5	75.992	ug/L	75.992	ppb	00:56:46
1	Mn 257.610†	3508882.6	3499963.1	3851.1	ug/L	3851.1	ppb	00:56:40
1	Mo 202.031†	-94.2	-115.6	3.0678	ug/L	3.0678	ppb	00:57:06
1	Ni 231.604†	3453.7	3378.3	83.559	ug/L	83.559	ppb	00:57:06
1	P 214.914†	2098.4	1873.0	1038.7	ug/L	1038.7	ppb	00:57:06
1	Pb 220.353†	889.1	949.2	142.33	ug/L	142.33	ppb	00:57:06
1	S 181.975 Axial†	585.7	540.4	719.49	ug/L	719.49	ppb	00:57:06
1	Sb 206.836†	99.9	66.3	-1.7238	ug/L	-1.7238	ppb	00:57:06
1	Se 196.026†	-691.8	-658.1	9.7917	ug/L	9.7917	ppb	00:57:06
1	Si 251.611†	1040990.5	1038011.2	32860	ug/L	32860	ppb	00:56:40
1	Sn 189.927†	-109.7	-111.1	-13.111	ug/L	-13.111	ppb	00:57:06
1	Ti 334.940†	4089497.1	4080936.8	6535.9	ug/L	6535.9	ppb	00:56:40
1	Tl 190.801†	-290.1	-255.3	-5.3888	ug/L	-5.3888	ppb	00:57:06
1	U 409.014†	-8522.7	-6638.2	-211.59	ug/L	-211.59	ppb	00:56:46
1	V 292.402†	43826.6	45080.3	275.90	ug/L	275.90	ppb	00:56:46
1	Zn 213.857†	31226.9	30526.7	272.37	ug/L	272.37	ppb	00:56:46
1	SiO2†	1041169.7	1038191.6	70025	ug/L	70025	ppb	00:58:15
2	Sc Radial	5310.1	5310.1	104	%			00:56:07
2	Y RADIAL	6396.7	6396.7	116.2	%			00:56:07
2	Al 396.153Radial†	227560.2	219459.3	175520	ug/L	175520	ppb	00:55:47
2	Ca 317.933Radial†	15093.3	14536.4	23465	ug/L	23465	ppb	00:55:47
2	Fe 238.204 Radial†	17254.6	16628.3	141390	ug/L	141390	ppb	00:55:47
2	K 766.490 Radial†	121310.5	114477.2	20837	ug/L	20837	ppb	00:55:47
2	Mg 279.077 IEC†	747.5	717.8	23688	ug/L	23688	ppb	00:56:07
2	Na 589.592 Radial†	3084.9	4283.9	1228.0	ug/L	1228.0	ppb	00:55:47
2	Sr 421.552†	47943.6	46225.8	294.95	ug/L	294.95	ppb	00:55:47
2	Sc 361.383	869414.3	869414.3	101.32	%			00:57:17
2	Y 371.029	813140.1	813140.1	111.75	%			00:57:17
2	Ag 328.068†	-9108.0	-9346.2	4.1460	ug/L	4.1460	ppb	00:57:17
2	As 188.979†	-119.4	-93.9	48.592	ug/L	48.592	ppb	00:57:37
2	B 249.677†	1469.5	2065.4	23.195	ug/L	23.195	ppb	00:57:17
2	Ba 233.527†	263844.8	260411.1	2022.7	ug/L	2022.7	ppb	00:57:17
2	Be 313.107†	-11365.3	-6742.4	12.023	ug/L	12.023	ppb	00:57:17
2	Cd 226.502†	1179.6	1365.8	0.4346	ug/L	0.4346	ppb	00:57:37
2	Co 228.616†	3478.0	3509.9	56.644	ug/L	56.644	ppb	00:57:37
2	Cr 267.716†	9354.0	9153.0	104.81	ug/L	104.81	ppb	00:57:37
2	Cu 324.752†	29701.3	22911.4	75.940	ug/L	75.940	ppb	00:57:17
2	Mn 257.610†	3484993.6	3439097.0	3784.5	ug/L	3784.5	ppb	00:57:12
2	Mo 202.031†	-69.5	-90.2	4.9624	ug/L	4.9624	ppb	00:57:37
2	Ni 231.604†	3434.3	3322.5	82.178	ug/L	82.178	ppb	00:57:37

2	P 214.914†	2135.0	1886.9	1046.2	ug/L	1046.2 ppb	00:57:37
2	Pb 220.353†	905.5	955.9	143.40	ug/L	143.40 ppb	00:57:37
2	S 181.975 Axial†	568.5	517.2	686.88	ug/L	686.88 ppb	00:57:37
2	Sb 206.836†	79.8	45.4	-8.4383	ug/L	-8.4383 ppb	00:57:37
2	Se 196.026†	-704.9	-663.6	11.008	ug/L	11.008 ppb	00:57:37
2	Si 251.611†	1033057.8	1019119.4	32262	ug/L	32262 ppb	00:57:12
2	Sn 189.927†	-114.9	-115.1	-13.726	ug/L	-13.726 ppb	00:57:37
2	Ti 334.940†	4059739.0	4008107.9	6419.3	ug/L	6419.3 ppb	00:57:12
2	Tl 190.801†	-284.1	-246.3	-3.9574	ug/L	-3.9574 ppb	00:57:37
2	U 409.014†	-8649.6	-6672.9	-212.79	ug/L	-212.79 ppb	00:57:17
2	V 292.402†	44360.5	45141.4	276.22	ug/L	276.22 ppb	00:57:17
2	Zn 213.857†	31581.7	30545.0	272.40	ug/L	272.40 ppb	00:57:17
2	SiO2†	1027297.0	1013435.3	68355	ug/L	68355 ppb	00:58:21
3	Sc Radial	5280.5	5280.5	103	%		00:56:33
3	Y RADIAL	6356.4	6356.4	115.5	%		00:56:33
3	Al 396.153Radial†	220906.7	214234.9	171340	ug/L	171340 ppb	00:56:12
3	Ca 317.933Radial†	14598.9	14138.3	22823	ug/L	22823 ppb	00:56:12
3	Fe 238.204 Radial†	16736.4	16218.9	137910	ug/L	137910 ppb	00:56:12
3	K 766.490 Radial†	118205.1	112120.2	20408	ug/L	20408 ppb	00:56:12
3	Mg 279.077 IEC†	737.3	712.0	23499	ug/L	23499 ppb	00:56:33
3	Na 589.592 Radial†	2908.9	4129.8	1183.8	ug/L	1183.8 ppb	00:56:12
3	Sr 421.552†	46607.6	45188.9	288.34	ug/L	288.34 ppb	00:56:12
3	Sc 361.383	855597.4	855597.4	99.712	%		00:57:49
3	Y 371.029	802217.0	802217.0	110.25	%		00:57:49
3	Ag 328.068†	-8991.4	-9374.4	2.8965	ug/L	2.8965 ppb	00:57:49
3	As 188.979†	-108.9	-85.3	53.003	ug/L	53.003 ppb	00:58:09
3	B 249.677†	1370.3	1989.4	22.052	ug/L	22.052 ppb	00:57:49
3	Ba 233.527†	259864.2	260624.2	2024.2	ug/L	2024.2 ppb	00:57:49
3	Be 313.107†	-11069.7	-6627.1	12.472	ug/L	12.472 ppb	00:57:49
3	Cd 226.502†	1197.6	1402.7	1.2017	ug/L	1.2017 ppb	00:58:09
3	Co 228.616†	3454.0	3541.2	56.954	ug/L	56.954 ppb	00:58:09
3	Cr 267.716†	9359.8	9308.0	106.46	ug/L	106.46 ppb	00:58:09
3	Cu 324.752†	29281.7	22964.0	75.911	ug/L	75.911 ppb	00:57:49
3	Mn 257.610†	3520973.8	3530725.6	3884.7	ug/L	3884.7 ppb	00:57:44
3	Mo 202.031†	-85.5	-107.4	3.4833	ug/L	3.4833 ppb	00:58:09
3	Ni 231.604†	3473.0	3416.0	84.492	ug/L	84.492 ppb	00:58:09
3	P 214.914†	2118.3	1904.1	1058.3	ug/L	1058.3 ppb	00:58:09
3	Pb 220.353†	897.3	962.1	143.49	ug/L	143.49 ppb	00:58:09
3	S 181.975 Axial†	572.0	529.8	705.14	ug/L	705.14 ppb	00:58:09
3	Sb 206.836†	97.2	64.1	-2.6202	ug/L	-2.6202 ppb	00:58:09
3	Se 196.026†	-692.8	-662.8	1.0055	ug/L	1.0055 ppb	00:58:09
3	Si 251.611†	1044693.4	1047253.7	33152	ug/L	33152 ppb	00:57:44
3	Sn 189.927†	-113.1	-115.1	-13.892	ug/L	-13.892 ppb	00:58:09
3	Ti 334.940†	4106245.9	4119454.1	6597.5	ug/L	6597.5 ppb	00:57:44
3	Tl 190.801†	-276.1	-242.8	-0.9506	ug/L	-0.9506 ppb	00:58:09
3	U 409.014†	-8371.0	-6531.3	-208.23	ug/L	-208.23 ppb	00:57:49
3	V 292.402†	43724.9	45211.1	277.05	ug/L	277.05 ppb	00:57:49
3	Zn 213.857†	31096.8	30562.1	272.89	ug/L	272.89 ppb	00:57:49
3	SiO2†	1037451.0	1039992.0	70146	ug/L	70146 ppb	00:58:27

Mean Data: 243628008|937486|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	861721.5	100.43	%	0.821				0.82%
Sc Radial	5303.2	104	%	0.4				0.38%
Y 371.029	806456.4	110.83	%	0.805				0.73%
Y RADIAL	6387.5	116.0	%	0.50				0.43%
Ag 328.068†	-9372.3	3.4861	ug/L	0.62767	3.4861	ppb	0.62767	18.00%
Al 396.153Radial†	217013.0	173560	ug/L	2101.7	173560	ppb	2101.7	1.21%
As 188.979†	-86.4	52.249	ug/L	3.3445	52.249	ppb	3.3445	6.40%
B 249.677†	2029.6	22.662	ug/L	0.5757	22.662	ppb	0.5757	2.54%
Ba 233.527†	260248.5	2021.4	ug/L	3.69	2021.4	ppb	3.69	0.18%
Be 313.107†	-6742.3	12.246	ug/L	0.2242	12.246	ppb	0.2242	1.83%
Ca 317.933Radial†	14345.4	23157	ug/L	322.0	23157	ppb	322.0	1.39%
Cd 226.502†	1377.8	0.7401	ug/L	0.40671	0.7401	ppb	0.40671	54.96%
Co 228.616†	3526.9	56.804	ug/L	0.1552	56.804	ppb	0.1552	0.27%
Cr 267.716†	9228.6	105.62	ug/L	0.826	105.62	ppb	0.826	0.78%
Cu 324.752†	22944.0	75.948	ug/L	0.0413	75.948	ppb	0.0413	0.05%
Fe 238.204 Radial†	16431.1	139710	ug/L	1744.2	139710	ppb	1744.2	1.25%
K 766.490 Radial†	113446.9	20650	ug/L	219.5	20650	ppb	219.5	1.06%

Mg 279.077 IEC†	715.2	23603	ug/L	96.1	23603	ppb	96.1	0.41%
Mn 257.610†	3489928.6	3840.1	ug/L	50.98	3840.1	ppb	50.98	1.33%
Mo 202.031†	-104.4	3.8379	ug/L	0.99582	3.8379	ppb	0.99582	25.95%
Na 589.592 Radial†	4182.2	1198.8	ug/L	25.24	1198.8	ppb	25.24	2.11%
Ni 231.604†	3372.3	83.409	ug/L	1.1642	83.409	ppb	1.1642	1.40%
P 214.914†	1888.0	1047.7	ug/L	9.89	1047.7	ppb	9.89	0.94%
Pb 220.353†	955.7	143.07	ug/L	0.647	143.07	ppb	0.647	0.45%
S 181.975 Axial†	529.1	703.84	ug/L	16.348	703.84	ppb	16.348	2.32%
Sb 206.836†	58.6	-4.2607	ug/L	3.64550	-4.2607	ppb	3.64550	85.56%
Se 196.026†	-661.5	7.2683	ug/L	5.45776	7.2683	ppb	5.45776	75.09%
Si 251.611†	1034794.8	32758	ug/L	454.0	32758	ppb	454.0	1.39%
Sn 189.927†	-113.8	-13.576	ug/L	0.4112	-13.576	ppb	0.4112	3.03%
Sr 421.552†	45740.7	291.86	ug/L	3.328	291.86	ppb	3.328	1.14%
Ti 334.940†	4069499.6	6517.6	ug/L	90.51	6517.6	ppb	90.51	1.39%
Tl 190.801†	-248.1	-3.4323	ug/L	2.26525	-3.4323	ppb	2.26525	66.00%
U 409.014†	-6614.1	-210.87	ug/L	2.365	-210.87	ppb	2.365	1.12%
V 292.402†	45144.3	276.39	ug/L	0.593	276.39	ppb	0.593	0.21%
Zn 213.857†	30544.6	272.55	ug/L	0.288	272.55	ppb	0.288	0.11%
SiO2†	1030539.6	69509	ug/L	1001.0	69509	ppb	1001.0	1.44%

Sequence No.: 82
Sample ID: 243628009|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 100
Date Collected: 1/13/2010 01:00:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243628009|937486|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5297.2	5297.2	103	%			01:02:52
1	Y RADIAL	6335.2	6335.2	115.1	%			01:02:52
1	Al 396.153Radial†	222103.9	214717.3	171730	ug/L	171730	ppb	01:02:32
1	Ca 317.933Radial†	14582.4	14077.8	22725	ug/L	22725	ppb	01:02:32
1	Fe 238.204 Radial†	16903.0	16328.8	138840	ug/L	138840	ppb	01:02:32
1	K 766.490 Radial†	119563.5	113072.3	20582	ug/L	20582	ppb	01:02:32
1	Mg 279.077 IEC†	739.5	711.9	23494	ug/L	23494	ppb	01:02:52
1	Na 589.592 Radial†	3016.0	4224.5	1211.0	ug/L	1211.0	ppb	01:02:32
1	Sr 421.552†	47098.1	45520.7	290.46	ug/L	290.46	ppb	01:02:32
1	Sc 361.383	857162.5	857162.5	99.894	%			01:03:55
1	Y 371.029	800420.9	800420.9	110.00	%			01:03:55
1	Ag 328.068†	-8904.2	-9270.8	3.6563	ug/L	3.6563	ppb	01:03:55
1	As 188.979†	-107.4	-83.6	52.864	ug/L	52.864	ppb	01:04:15
1	B 249.677†	1295.7	1912.2	20.155	ug/L	20.155	ppb	01:03:55
1	Ba 233.527†	267230.6	267522.6	2077.7	ug/L	2077.7	ppb	01:03:55
1	Be 313.107†	-10657.9	-6194.5	12.350	ug/L	12.350	ppb	01:03:55
1	Cd 226.502†	1173.4	1376.2	0.8137	ug/L	0.8137	ppb	01:04:15
1	Co 228.616†	3658.3	3739.4	61.247	ug/L	61.247	ppb	01:04:15
1	Cr 267.716†	9770.3	9701.7	110.84	ug/L	110.84	ppb	01:04:15
1	Cu 324.752†	29079.6	22708.1	75.198	ug/L	75.198	ppb	01:03:55
1	Mn 257.610†	3496871.2	3500150.1	3851.3	ug/L	3851.3	ppb	01:03:50
1	Mo 202.031†	-94.8	-116.5	2.9174	ug/L	2.9174	ppb	01:04:15
1	Ni 231.604†	3466.9	3403.5	84.181	ug/L	84.181	ppb	01:04:15
1	P 214.914†	2145.5	1927.4	1071.8	ug/L	1071.8	ppb	01:04:15
1	Pb 220.353†	857.3	920.4	138.44	ug/L	138.44	ppb	01:04:15
1	S 181.975 Axial†	587.7	544.5	725.52	ug/L	725.52	ppb	01:04:15
1	Sb 206.836†	95.9	62.6	-2.8178	ug/L	-2.8178	ppb	01:04:15
1	Se 196.026†	-685.0	-653.7	9.5124	ug/L	9.5124	ppb	01:04:15
1	Si 251.611†	1072999.9	1073677.3	33989	ug/L	33989	ppb	01:03:50
1	Sn 189.927†	-138.7	-140.5	-18.329	ug/L	-18.329	ppb	01:04:15
1	Ti 334.940†	4035458.3	4041072.4	6472.0	ug/L	6472.0	ppb	01:03:50
1	Tl 190.801†	-271.4	-237.6	-0.5994	ug/L	-0.5994	ppb	01:04:15
1	U 409.014†	-8482.2	-6627.3	-211.17	ug/L	-211.17	ppb	01:03:55
1	V 292.402†	43083.4	44488.8	272.12	ug/L	272.12	ppb	01:03:55
1	Zn 213.857†	30269.7	29677.2	264.49	ug/L	264.49	ppb	01:04:15
1	SiO2†	1073443.3	1074122.7	72448	ug/L	72448	ppb	01:05:25
2	Sc Radial	5321.5	5321.5	104	%			01:03:17
2	Y RADIAL	6375.1	6375.1	115.8	%			01:03:17
2	Al 396.153Radial†	223577.0	215155.8	172080	ug/L	172080	ppb	01:02:57
2	Ca 317.933Radial†	14600.3	14030.7	22649	ug/L	22649	ppb	01:02:57
2	Fe 238.204 Radial†	16943.0	16292.8	138540	ug/L	138540	ppb	01:02:57
2	K 766.490 Radial†	120512.9	113458.7	20652	ug/L	20652	ppb	01:02:57
2	Mg 279.077 IEC†	742.4	711.4	23478	ug/L	23478	ppb	01:03:17
2	Na 589.592 Radial†	2981.3	4177.8	1197.6	ug/L	1197.6	ppb	01:02:57
2	Sr 421.552†	47353.4	45558.8	290.70	ug/L	290.70	ppb	01:02:57
2	Sc 361.383	859880.7	859880.7	100.21	%			01:04:27
2	Y 371.029	802082.8	802082.8	110.23	%			01:04:27
2	Ag 328.068†	-9081.6	-9419.5	2.8717	ug/L	2.8717	ppb	01:04:27
2	As 188.979†	-109.3	-85.1	52.496	ug/L	52.496	ppb	01:04:47
2	B 249.677†	1517.7	2129.6	25.087	ug/L	25.087	ppb	01:04:27
2	Ba 233.527†	268300.2	267744.3	2079.4	ug/L	2079.4	ppb	01:04:27
2	Be 313.107†	-10595.3	-6098.4	12.478	ug/L	12.478	ppb	01:04:27
2	Cd 226.502†	1184.2	1383.4	0.9238	ug/L	0.9238	ppb	01:04:47
2	Co 228.616†	3644.5	3714.1	60.657	ug/L	60.657	ppb	01:04:47
2	Cr 267.716†	9751.7	9652.3	110.29	ug/L	110.29	ppb	01:04:47
2	Cu 324.752†	29171.2	22707.4	75.180	ug/L	75.180	ppb	01:04:27
2	Mn 257.610†	3528683.0	3520828.9	3873.9	ug/L	3873.9	ppb	01:04:21
2	Mo 202.031†	-72.7	-94.1	4.4550	ug/L	4.4550	ppb	01:04:47
2	Ni 231.604†	3471.4	3397.1	84.021	ug/L	84.021	ppb	01:04:47

2	P 214.914†	2141.9	1917.1	1065.9 ug/L	1065.9 ppb	01:04:47
2	Pb 220.353†	823.3	883.7	134.12 ug/L	134.12 ppb	01:04:47
2	S 181.975 Axial†	572.8	527.8	702.20 ug/L	702.20 ppb	01:04:47
2	Sb 206.836†	82.9	49.3	-7.4228 ug/L	-7.4228 ppb	01:04:47
2	Se 196.026†	-675.3	-641.9	16.070 ug/L	16.070 ppb	01:04:47
2	Si 251.611†	1083080.8	1080341.4	34200 ug/L	34200 ppb	01:04:21
2	Sn 189.927†	-130.9	-132.3	-16.915 ug/L	-16.915 ppb	01:04:47
2	Ti 334.940†	4073426.3	4066190.0	6512.2 ug/L	6512.2 ppb	01:04:21
2	Tl 190.801†	-266.7	-232.1	1.5220 ug/L	1.5220 ppb	01:04:47
2	U 409.014†	-8480.1	-6598.4	-210.28 ug/L	-210.28 ppb	01:04:27
2	V 292.402†	43109.5	44378.5	271.40 ug/L	271.40 ppb	01:04:27
2	Zn 213.857†	30190.9	29502.7	262.88 ug/L	262.88 ppb	01:04:47
2	SiO2†	1079264.1	1076534.3	72611 ug/L	72611 ppb	01:05:31
3	Sc Radial	5327.8	5327.8	104 %		01:03:42
3	Y RADIAL	6414.7	6414.7	116.5 %		01:03:42
3	Al 396.153Radial†	226140.4	217365.8	173840 ug/L	173840 ppb	01:03:22
3	Ca 317.933Radial†	14726.9	14135.9	22819 ug/L	22819 ppb	01:03:22
3	Fe 238.204 Radial†	17088.3	16413.2	139560 ug/L	139560 ppb	01:03:22
3	K 766.490 Radial†	121252.9	114033.2	20757 ug/L	20757 ppb	01:03:22
3	Mg 279.077 IEC†	741.0	709.2	23404 ug/L	23404 ppb	01:03:42
3	Na 589.592 Radial†	3004.0	4196.3	1202.9 ug/L	1202.9 ppb	01:03:22
3	Sr 421.552†	47858.4	45990.4	293.46 ug/L	293.46 ppb	01:03:22
3	Sc 361.383	866459.0	866459.0	100.98 %		01:04:58
3	Y 371.029	806104.2	806104.2	110.78 %		01:04:58
3	Ag 328.068†	-9015.7	-9285.5	3.8122 ug/L	3.8122 ppb	01:04:58
3	As 188.979†	-110.0	-85.0	52.080 ug/L	52.080 ppb	01:05:18
3	B 249.677†	1383.7	1985.5	21.688 ug/L	21.688 ppb	01:04:58
3	Ba 233.527†	270078.7	267472.9	2077.3 ug/L	2077.3 ppb	01:04:58
3	Be 313.107†	-10895.4	-6315.3	12.216 ug/L	12.216 ppb	01:04:58
3	Cd 226.502†	1161.5	1351.9	0.4727 ug/L	0.4727 ppb	01:05:18
3	Co 228.616†	3630.5	3672.6	59.967 ug/L	59.967 ppb	01:05:18
3	Cr 267.716†	9744.1	9570.8	109.40 ug/L	109.40 ppb	01:05:18
3	Cu 324.752†	29193.8	22508.8	74.638 ug/L	74.638 ppb	01:04:58
3	Mn 257.610†	3509534.7	3475132.1	3823.9 ug/L	3823.9 ppb	01:04:53
3	Mo 202.031†	-72.9	-93.8	4.5614 ug/L	4.5614 ppb	01:05:18
3	Ni 231.604†	3463.3	3362.8	83.173 ug/L	83.173 ppb	01:05:18
3	P 214.914†	2126.5	1885.7	1046.8 ug/L	1046.8 ppb	01:05:18
3	Pb 220.353†	836.0	890.1	135.21 ug/L	135.21 ppb	01:05:18
3	S 181.975 Axial†	585.0	535.5	712.66 ug/L	712.66 ppb	01:05:18
3	Sb 206.836†	95.3	60.9	-3.2397 ug/L	-3.2397 ppb	01:05:18
3	Se 196.026†	-692.9	-654.1	11.477 ug/L	11.477 ppb	01:05:18
3	Si 251.611†	1077424.0	1066533.7	33763 ug/L	33763 ppb	01:04:53
3	Sn 189.927†	-134.2	-134.6	-17.268 ug/L	-17.268 ppb	01:05:18
3	Ti 334.940†	4054802.7	4016885.7	6433.3 ug/L	6433.3 ppb	01:04:53
3	Tl 190.801†	-274.6	-237.8	-1.1077 ug/L	-1.1077 ppb	01:05:18
3	U 409.014†	-8369.8	-6424.9	-205.29 ug/L	-205.29 ppb	01:04:58
3	V 292.402†	43461.8	44400.9	271.48 ug/L	271.48 ppb	01:04:58
3	Zn 213.857†	30206.9	29289.8	260.79 ug/L	260.79 ppb	01:05:18
3	SiO2†	1083356.0	1072409.9	72333 ug/L	72333 ppb	01:05:36

Mean Data: 243628009|937486|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	861167.4	100.36	%	0.557				0.56%
Sc Radial	5315.5	104	%	0.3				0.30%
Y 371.029	802869.3	110.34	%	0.402				0.36%
Y RADIAL	6375.0	115.8	%	0.72				0.62%
Ag 328.068†	-9325.3	3.4467	ug/L	0.50408	3.4467	ppb	0.50408	14.63%
Al 396.153Radial†	215746.3	172550	ug/L	1135.3	172550	ppb	1135.3	0.66%
As 188.979†	-84.6	52.480	ug/L	0.3920	52.480	ppb	0.3920	0.75%
B 249.677†	2009.1	22.310	ug/L	2.5238	22.310	ppb	2.5238	11.31%
Ba 233.527†	267579.9	2078.2	ug/L	1.11	2078.2	ppb	1.11	0.05%
Be 313.107†	-6202.7	12.348	ug/L	0.1306	12.348	ppb	0.1306	1.06%
Ca 317.933Radial†	14081.5	22731	ug/L	85.0	22731	ppb	85.0	0.37%
Cd 226.502†	1370.5	0.7367	ug/L	0.23516	0.7367	ppb	0.23516	31.92%
Co 228.616†	3708.7	60.624	ug/L	0.6405	60.624	ppb	0.6405	1.06%
Cr 267.716†	9641.6	110.18	ug/L	0.727	110.18	ppb	0.727	0.66%
Cu 324.752†	22641.4	75.005	ug/L	0.3180	75.005	ppb	0.3180	0.42%
Fe 238.204 Radial†	16344.9	138980	ug/L	525.5	138980	ppb	525.5	0.38%
K 766.490 Radial†	113521.4	20663	ug/L	88.0	20663	ppb	88.0	0.43%

Mg 279.077 IEC†	710.8	23459	ug/L	47.6	23459	ppb	47.6	0.20%
Mn 257.610†	3498703.7	3849.7	ug/L	25.04	3849.7	ppb	25.04	0.65%
Mo 202.031†	-101.5	3.9779	ug/L	0.92000	3.9779	ppb	0.92000	23.13%
Na 589.592 Radial†	4199.5	1203.8	ug/L	6.74	1203.8	ppb	6.74	0.56%
Ni 231.604†	3387.8	83.792	ug/L	0.5415	83.792	ppb	0.5415	0.65%
P 214.914†	1910.0	1061.5	ug/L	13.06	1061.5	ppb	13.06	1.23%
Pb 220.353†	898.1	135.92	ug/L	2.247	135.92	ppb	2.247	1.65%
S 181.975 Axial†	535.9	713.46	ug/L	11.679	713.46	ppb	11.679	1.64%
Sb 206.836†	57.6	-4.4934	ug/L	2.54568	-4.4934	ppb	2.54568	56.65%
Se 196.026†	-649.9	12.353	ug/L	3.3654	12.353	ppb	3.3654	27.24%
Si 251.611†	1073517.4	33984	ug/L	218.6	33984	ppb	218.6	0.64%
Sn 189.927†	-135.8	-17.504	ug/L	0.7357	-17.504	ppb	0.7357	4.20%
Sr 421.552†	45690.0	291.54	ug/L	1.665	291.54	ppb	1.665	0.57%
Ti 334.940†	4041382.7	6472.5	ug/L	39.46	6472.5	ppb	39.46	0.61%
Tl 190.801†	-235.8	-0.0617	ug/L	1.39488	-0.0617	ppb	1.39488	>999.9%
U 409.014†	-6550.2	-208.91	ug/L	3.170	-208.91	ppb	3.170	1.52%
V 292.402†	44422.7	271.67	ug/L	0.393	271.67	ppb	0.393	0.14%
Zn 213.857†	29489.9	262.72	ug/L	1.855	262.72	ppb	1.855	0.71%
SiO2†	1074355.6	72464	ug/L	139.8	72464	ppb	139.8	0.19%

Sequence No.: 83
Sample ID: 243628010|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 1/13/2010 01:07:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243628010|937486|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5435.7	5435.7	106	%			01:10:02
1	Y RADIAL	6434.1	6434.1	116.9	%			01:10:02
1	Al 396.153Radial†	197916.1	186460.5	149130	ug/L	149130	ppb	01:09:42
1	Ca 317.933Radial†	12997.7	12225.7	19736	ug/L	19736	ppb	01:09:42
1	Fe 238.204 Radial†	15724.6	14802.4	125860	ug/L	125860	ppb	01:09:42
1	K 766.490 Radial†	108107.6	99335.3	18081	ug/L	18081	ppb	01:09:42
1	Mg 279.077 IEC†	665.8	624.2	20596	ug/L	20596	ppb	01:10:02
1	Na 589.592 Radial†	2458.2	3624.7	1039.0	ug/L	1039.0	ppb	01:09:42
1	Sr 421.552†	41972.2	39531.8	252.24	ug/L	252.24	ppb	01:09:42
1	Sc 361.383	858132.4	858132.4	100.01	%			01:11:05
1	Y 371.029	804810.0	804810.0	110.60	%			01:11:05
1	Ag 328.068†	-8372.6	-8729.1	1.8705	ug/L	1.8705	ppb	01:11:05
1	As 188.979†	-103.0	-79.1	50.772	ug/L	50.772	ppb	01:11:25
1	B 249.677†	1244.0	1859.0	21.111	ug/L	21.111	ppb	01:11:05
1	Ba 233.527†	237812.0	237803.8	1847.0	ug/L	1847.0	ppb	01:11:05
1	Be 313.107†	-12107.8	-7632.3	11.549	ug/L	11.549	ppb	01:11:05
1	Cd 226.502†	1055.2	1256.8	0.8382	ug/L	0.8382	ppb	01:11:25
1	Co 228.616†	2958.4	3035.4	47.286	ug/L	47.286	ppb	01:11:25
1	Cr 267.716†	8487.0	8407.4	96.192	ug/L	96.192	ppb	01:11:25
1	Cu 324.752†	26638.7	20234.4	67.119	ug/L	67.119	ppb	01:11:05
1	Mn 257.610†	2937372.4	2936734.2	3232.2	ug/L	3232.2	ppb	01:11:00
1	Mo 202.031†	-75.8	-97.4	3.2082	ug/L	3.2082	ppb	01:11:25
1	Ni 231.604†	3050.7	2983.5	73.794	ug/L	73.794	ppb	01:11:25
1	P 214.914†	1901.7	1681.2	930.58	ug/L	930.58	ppb	01:11:25
1	Pb 220.353†	806.1	868.2	128.06	ug/L	128.06	ppb	01:11:25
1	S 181.975 Axial†	515.0	471.1	627.71	ug/L	627.71	ppb	01:11:25
1	Sb 206.836†	100.0	66.5	-0.5886	ug/L	-0.5886	ppb	01:11:25
1	Se 196.026†	-626.7	-594.6	7.0168	ug/L	7.0168	ppb	01:11:25
1	Si 251.611†	1118305.4	1117765.4	35384	ug/L	35384	ppb	01:11:00
1	Sn 189.927†	-108.5	-110.2	-13.762	ug/L	-13.762	ppb	01:11:25
1	Ti 334.940†	3969117.6	3970170.1	6358.3	ug/L	6358.3	ppb	01:11:00
1	Tl 190.801†	-250.5	-216.4	2.0025	ug/L	2.0025	ppb	01:11:25
1	U 409.014†	-7699.7	-5835.2	-186.34	ug/L	-186.34	ppb	01:11:05
1	V 292.402†	40234.9	41591.8	254.72	ug/L	254.72	ppb	01:11:05
1	Zn 213.857†	27401.1	26774.5	238.58	ug/L	238.58	ppb	01:11:25
1	SiO2†	1108663.7	1108126.0	74742	ug/L	74742	ppb	01:12:35
2	Sc Radial	5285.5	5285.5	103	%			01:10:27
2	Y RADIAL	6284.2	6284.2	114.1	%			01:10:27
2	Al 396.153Radial†	197530.6	191387.6	153070	ug/L	153070	ppb	01:10:07
2	Ca 317.933Radial†	12912.9	12491.7	20165	ug/L	20165	ppb	01:10:07
2	Fe 238.204 Radial†	15709.2	15208.6	129320	ug/L	129320	ppb	01:10:07
2	K 766.490 Radial†	107294.2	101442.6	18465	ug/L	18465	ppb	01:10:07
2	Mg 279.077 IEC†	662.3	638.6	21072	ug/L	21072	ppb	01:10:27
2	Na 589.592 Radial†	2372.4	3607.4	1034.1	ug/L	1034.1	ppb	01:10:07
2	Sr 421.552†	41711.3	40403.1	257.80	ug/L	257.80	ppb	01:10:07
2	Sc 361.383	860181.0	860181.0	100.25	%			01:11:37
2	Y 371.029	806592.2	806592.2	110.85	%			01:11:37
2	Ag 328.068†	-8220.9	-8557.9	3.7738	ug/L	3.7738	ppb	01:11:37
2	As 188.979†	-108.1	-83.9	48.526	ug/L	48.526	ppb	01:11:57
2	B 249.677†	1209.7	1821.9	19.716	ug/L	19.716	ppb	01:11:37
2	Ba 233.527†	238797.4	238220.4	1850.3	ug/L	1850.3	ppb	01:11:37
2	Be 313.107†	-12487.0	-7981.8	11.155	ug/L	11.155	ppb	01:11:37
2	Cd 226.502†	1046.1	1245.2	0.3538	ug/L	0.3538	ppb	01:11:57
2	Co 228.616†	2972.3	3042.3	47.623	ug/L	47.623	ppb	01:11:57
2	Cr 267.716†	8446.4	8346.7	95.587	ug/L	95.587	ppb	01:11:57
2	Cu 324.752†	26898.3	20429.9	67.885	ug/L	67.885	ppb	01:11:37
2	Mn 257.610†	2889236.0	2881720.7	3172.2	ug/L	3172.2	ppb	01:11:32
2	Mo 202.031†	-49.9	-71.4	5.2973	ug/L	5.2973	ppb	01:11:57
2	Ni 231.604†	3073.9	2999.4	74.188	ug/L	74.188	ppb	01:11:57

2	P 214.914†	1874.7	1649.8	909.75	ug/L	909.75 ppb	01:11:57
2	Pb 220.353†	783.3	843.6	125.68	ug/L	125.68 ppb	01:11:57
2	S 181.975 Axial†	493.7	448.6	595.62	ug/L	595.62 ppb	01:11:57
2	Sb 206.836†	95.1	61.4	-2.0016	ug/L	-2.0016 ppb	01:11:57
2	Se 196.026†	-633.1	-599.5	14.369	ug/L	14.369 ppb	01:11:57
2	Si 251.611†	1099281.0	1096124.4	34699	ug/L	34699 ppb	01:11:32
2	Sn 189.927†	-119.7	-121.1	-15.525	ug/L	-15.525 ppb	01:11:57
2	Ti 334.940†	3906304.4	3898058.7	6242.8	ug/L	6242.8 ppb	01:11:32
2	Tl 190.801†	-258.9	-224.1	-1.5763	ug/L	-1.5763 ppb	01:11:57
2	U 409.014†	-7710.7	-5828.0	-186.52	ug/L	-186.52 ppb	01:11:37
2	V 292.402†	40516.6	41776.9	255.58	ug/L	255.58 ppb	01:11:37
2	Zn 213.857†	27379.8	26688.0	237.43	ug/L	237.43 ppb	01:11:57
2	SiO2†	1113449.6	1110260.0	74886	ug/L	74886 ppb	01:12:41
3	Sc Radial	5276.1	5276.1	103	%		01:10:52
3	Y RADIAL	6252.2	6252.2	113.6	%		01:10:52
3	Al 396.153Radial†	201314.5	195400.1	156280	ug/L	156280 ppb	01:10:32
3	Ca 317.933Radial†	13149.4	12743.5	20571	ug/L	20571 ppb	01:10:32
3	Fe 238.204 Radial†	15947.7	15467.2	131520	ug/L	131520 ppb	01:10:32
3	K 766.490 Radial†	109283.6	103558.0	18850	ug/L	18850 ppb	01:10:32
3	Mg 279.077 IEC†	666.1	643.5	21230	ug/L	21230 ppb	01:10:52
3	Na 589.592 Radial†	2479.3	3715.3	1065.0	ug/L	1065.0 ppb	01:10:32
3	Sr 421.552†	42493.5	41234.1	263.11	ug/L	263.11 ppb	01:10:32
3	Sc 361.383	859997.9	859997.9	100.22	%		01:12:09
3	Y 371.029	809900.3	809900.3	111.30	%		01:12:09
3	Ag 328.068†	-8329.4	-8667.8	3.9784	ug/L	3.9784 ppb	01:12:09
3	As 188.979†	-111.7	-87.5	47.898	ug/L	47.898 ppb	01:12:29
3	B 249.677†	1201.5	1813.9	19.178	ug/L	19.178 ppb	01:12:09
3	Ba 233.527†	239203.3	238676.1	1853.9	ug/L	1853.9 ppb	01:12:09
3	Be 313.107†	-12693.9	-8190.8	11.185	ug/L	11.185 ppb	01:12:09
3	Cd 226.502†	1079.8	1279.0	0.5000	ug/L	0.5000 ppb	01:12:29
3	Co 228.616†	3011.0	3081.5	48.285	ug/L	48.285 ppb	01:12:29
3	Cr 267.716†	8548.6	8450.5	96.782	ug/L	96.782 ppb	01:12:29
3	Cu 324.752†	26799.8	20337.4	67.724	ug/L	67.724 ppb	01:12:09
3	Mn 257.610†	2909503.4	2902556.3	3195.3	ug/L	3195.3 ppb	01:12:03
3	Mo 202.031†	-59.1	-80.6	4.8329	ug/L	4.8329 ppb	01:12:29
3	Ni 231.604†	3085.1	3011.2	74.479	ug/L	74.479 ppb	01:12:29
3	P 214.914†	1914.6	1690.0	933.02	ug/L	933.02 ppb	01:12:29
3	Pb 220.353†	803.6	864.0	128.70	ug/L	128.70 ppb	01:12:29
3	S 181.975 Axial†	516.3	471.3	626.56	ug/L	626.56 ppb	01:12:29
3	Sb 206.836†	94.0	60.4	-2.5481	ug/L	-2.5481 ppb	01:12:29
3	Se 196.026†	-637.3	-603.9	18.328	ug/L	18.328 ppb	01:12:29
3	Si 251.611†	1105958.5	1103020.5	34918	ug/L	34918 ppb	01:12:03
3	Sn 189.927†	-111.2	-112.6	-13.946	ug/L	-13.946 ppb	01:12:29
3	Ti 334.940†	3935633.3	3928151.6	6291.1	ug/L	6291.1 ppb	01:12:03
3	Tl 190.801†	-246.4	-211.8	2.6646	ug/L	2.6646 ppb	01:12:29
3	U 409.014†	-7646.0	-5765.0	-184.92	ug/L	-184.92 ppb	01:12:09
3	V 292.402†	40632.4	41901.1	256.01	ug/L	256.01 ppb	01:12:09
3	Zn 213.857†	27634.5	26947.9	239.65	ug/L	239.65 ppb	01:12:29
3	SiO2†	1113513.8	1110560.5	74906	ug/L	74906 ppb	01:12:47

Mean Data: 243628010|937486|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	859437.1	100.16	%	0.132				0.13%
Sc Radial	5332.4	104	%	1.7				1.68%
Y 371.029	807100.9	110.92	%	0.355				0.32%
Y RADIAL	6323.5	114.9	%	1.76				1.54%
Ag 328.068†	-8651.6	3.2076	ug/L	1.16247	3.2076	ppb	1.16247	36.24%
Al 396.153Radial†	191082.8	152820	ug/L	3581.0	152820	ppb	3581.0	2.34%
As 188.979†	-83.5	49.065	ug/L	1.5113	49.065	ppb	1.5113	3.08%
B 249.677†	1831.6	20.002	ug/L	0.9976	20.002	ppb	0.9976	4.99%
Ba 233.527†	238233.4	1850.4	ug/L	3.47	1850.4	ppb	3.47	0.19%
Be 313.107†	-7935.0	11.296	ug/L	0.2193	11.296	ppb	0.2193	1.94%
Ca 317.933Radial†	12487.0	20157	ug/L	417.9	20157	ppb	417.9	2.07%
Cd 226.502†	1260.3	0.5640	ug/L	0.24846	0.5640	ppb	0.24846	44.05%
Co 228.616†	3053.1	47.732	ug/L	0.5084	47.732	ppb	0.5084	1.07%
Cr 267.716†	8401.5	96.187	ug/L	0.5973	96.187	ppb	0.5973	0.62%
Cu 324.752†	20333.9	67.576	ug/L	0.4040	67.576	ppb	0.4040	0.60%
Fe 238.204 Radial†	15159.4	128900	ug/L	2849.4	128900	ppb	2849.4	2.21%
K 766.490 Radial†	101445.3	18465	ug/L	384.4	18465	ppb	384.4	2.08%

Mg 279.077 IEC†	635.4	20966	ug/L	330.3	20966	ppb	330.3	1.58%
Mn 257.610†	2907003.7	3199.9	ug/L	30.27	3199.9	ppb	30.27	0.95%
Mo 202.031†	-83.1	4.4461	ug/L	1.09692	4.4461	ppb	1.09692	24.67%
Na 589.592 Radial†	3649.1	1046.0	ug/L	16.60	1046.0	ppb	16.60	1.59%
Ni 231.604†	2998.0	74.154	ug/L	0.3436	74.154	ppb	0.3436	0.46%
P 214.914†	1673.7	924.45	ug/L	12.786	924.45	ppb	12.786	1.38%
Pb 220.353†	858.6	127.48	ug/L	1.591	127.48	ppb	1.591	1.25%
S 181.975 Axial†	463.7	616.63	ug/L	18.206	616.63	ppb	18.206	2.95%
Sb 206.836†	62.8	-1.7128	ug/L	1.01117	-1.7128	ppb	1.01117	59.04%
Se 196.026†	-599.3	13.238	ug/L	5.7399	13.238	ppb	5.7399	43.36%
Si 251.611†	1105636.8	35000	ug/L	350.0	35000	ppb	350.0	1.00%
Sn 189.927†	-114.6	-14.411	ug/L	0.9690	-14.411	ppb	0.9690	6.72%
Sr 421.552†	40389.6	257.72	ug/L	5.432	257.72	ppb	5.432	2.11%
Ti 334.940†	3932126.8	6297.4	ug/L	57.98	6297.4	ppb	57.98	0.92%
Tl 190.801†	-217.4	1.0303	ug/L	2.28148	1.0303	ppb	2.28148	221.44%
U 409.014†	-5809.4	-185.92	ug/L	0.878	-185.92	ppb	0.878	0.47%
V 292.402†	41756.6	255.43	ug/L	0.654	255.43	ppb	0.654	0.26%
Zn 213.857†	26803.5	238.55	ug/L	1.113	238.55	ppb	1.113	0.47%
SiO2†	1109648.8	74844	ug/L	89.5	74844	ppb	89.5	0.12%

Sequence No.: 84
Sample ID: 243628011|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 102
Date Collected: 1/13/2010 01:14:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243628011|937486|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5329.5	5329.5	104	%			01:17:12
1	Y RADIAL	6181.6	6181.6	112.3	%			01:17:12
1	Al 396.153Radial†	131932.7	126775.5	101390	ug/L	101390	ppb	01:16:52
1	Ca 317.933Radial†	14574.3	13984.7	22575	ug/L	22575	ppb	01:16:52
1	Fe 238.204 Radial†	12646.7	12140.2	103230	ug/L	103230	ppb	01:16:52
1	K 766.490 Radial†	115524.2	108491.5	19748	ug/L	19748	ppb	01:16:52
1	Mg 279.077 IEC†	524.4	500.9	16524	ug/L	16524	ppb	01:17:12
1	Na 589.592 Radial†	385.5	1679.3	481.36	ug/L	481.36	ppb	01:16:52
1	Sr 421.552†	37686.4	36201.7	230.96	ug/L	230.96	ppb	01:16:52
1	Sc 361.383	885146.6	885146.6	103.16	%			01:18:11
1	Y 371.029	804006.1	804006.1	110.49	%			01:18:11
1	Ag 328.068†	-6637.0	-6791.0	3.1348	ug/L	3.1348	ppb	01:18:11
1	As 188.979†	-88.1	-61.4	39.939	ug/L	39.939	ppb	01:18:31
1	B 249.677†	1241.2	1818.3	23.886	ug/L	23.886	ppb	01:18:11
1	Ba 233.527†	208759.3	202382.3	1571.7	ug/L	1571.7	ppb	01:18:11
1	Be 313.107†	-14285.5	-9373.8	7.4712	ug/L	7.4712	ppb	01:18:11
1	Cd 226.502†	835.8	1011.9	0.5441	ug/L	0.5441	ppb	01:18:31
1	Co 228.616†	2821.5	2812.5	46.044	ug/L	46.044	ppb	01:18:31
1	Cr 267.716†	27338.3	26423.1	295.55	ug/L	295.55	ppb	01:18:11
1	Cu 324.752†	26005.4	18807.5	61.654	ug/L	61.654	ppb	01:18:11
1	Mn 257.610†	3124091.4	3028101.3	3330.3	ug/L	3330.3	ppb	01:18:11
1	Mo 202.031†	47.8	24.7	10.005	ug/L	10.005	ppb	01:18:31
1	Ni 231.604†	6956.4	6676.6	165.19	ug/L	165.19	ppb	01:18:31
1	P 214.914†	2739.4	2435.3	1390.8	ug/L	1390.8	ppb	01:18:31
1	Pb 220.353†	778.7	817.1	113.01	ug/L	113.01	ppb	01:18:31
1	S 181.975 Axial†	852.9	782.9	1070.5	ug/L	1070.5	ppb	01:18:31
1	Sb 206.836†	88.9	52.7	1.0841	ug/L	1.0841	ppb	01:18:31
1	Se 196.026†	-513.7	-465.9	18.381	ug/L	18.381	ppb	01:18:31
1	Si 251.611†	1108799.4	1074422.5	34012	ug/L	34012	ppb	01:18:11
1	Sn 189.927†	-14.8	-16.0	2.7382	ug/L	2.7382	ppb	01:18:31
1	Ti 334.940†	3123651.2	3029438.5	4852.6	ug/L	4852.6	ppb	01:18:11
1	Tl 190.801†	-238.8	-197.4	-4.1601	ug/L	-4.1601	ppb	01:18:31
1	U 409.014†	-7283.8	-5197.1	-165.42	ug/L	-165.42	ppb	01:18:11
1	V 292.402†	33430.8	33768.0	206.96	ug/L	206.96	ppb	01:18:11
1	Zn 213.857†	25393.5	23992.1	214.08	ug/L	214.08	ppb	01:18:31
1	SiO2†	1126633.3	1091712.6	73634	ug/L	73634	ppb	01:19:32
2	Sc Radial	5373.6	5373.6	105	%			01:17:38
2	Y RADIAL	6219.0	6219.0	113.0	%			01:17:38
2	Al 396.153Radial†	131663.1	125477.9	100350	ug/L	100350	ppb	01:17:18
2	Ca 317.933Radial†	14481.5	13781.3	22247	ug/L	22247	ppb	01:17:18
2	Fe 238.204 Radial†	12536.2	11935.1	101480	ug/L	101480	ppb	01:17:18
2	K 766.490 Radial†	115142.7	107216.7	19516	ug/L	19516	ppb	01:17:18
2	Mg 279.077 IEC†	521.3	493.7	16290	ug/L	16290	ppb	01:17:38
2	Na 589.592 Radial†	378.5	1669.6	478.58	ug/L	478.58	ppb	01:17:18
2	Sr 421.552†	37455.9	35684.8	227.66	ug/L	227.66	ppb	01:17:18
2	Sc 361.383	884669.4	884669.4	103.10	%			01:18:38
2	Y 371.029	804119.3	804119.3	110.51	%			01:18:38
2	Ag 328.068†	-6508.7	-6670.1	3.1206	ug/L	3.1206	ppb	01:18:38
2	As 188.979†	-91.1	-64.5	38.157	ug/L	38.157	ppb	01:18:58
2	B 249.677†	1086.8	1669.3	20.824	ug/L	20.824	ppb	01:18:38
2	Ba 233.527†	208430.3	202172.3	1570.1	ug/L	1570.1	ppb	01:18:38
2	Be 313.107†	-14583.6	-9670.5	7.3399	ug/L	7.3399	ppb	01:18:38
2	Cd 226.502†	849.9	1026.0	0.8809	ug/L	0.8809	ppb	01:18:58
2	Co 228.616†	2832.5	2824.6	46.333	ug/L	46.333	ppb	01:18:58
2	Cr 267.716†	27330.1	26429.4	295.58	ug/L	295.58	ppb	01:18:38
2	Cu 324.752†	25759.1	18582.2	60.887	ug/L	60.887	ppb	01:18:38
2	Mn 257.610†	3118281.9	3024099.9	3325.8	ug/L	3325.8	ppb	01:18:38
2	Mo 202.031†	59.4	35.9	10.650	ug/L	10.650	ppb	01:18:58
2	Ni 231.604†	6969.6	6693.0	165.60	ug/L	165.60	ppb	01:18:58

2	P 214.914†	2693.6	2392.3	1366.3	ug/L	1366.3 ppb	01:18:58
2	Pb 220.353†	766.4	805.6	111.54	ug/L	111.54 ppb	01:18:58
2	S 181.975 Axial†	852.6	783.1	1070.9	ug/L	1070.9 ppb	01:18:58
2	Sb 206.836†	88.5	52.4	1.0407	ug/L	1.0407 ppb	01:18:58
2	Se 196.026†	-512.1	-464.7	13.914	ug/L	13.914 ppb	01:18:58
2	Si 251.611†	1105848.4	1072140.0	33940	ug/L	33940 ppb	01:18:38
2	Sn 189.927†	-7.0	-8.4	3.9762	ug/L	3.9762 ppb	01:18:58
2	Ti 334.940†	3116528.4	3024163.0	4844.1	ug/L	4844.1 ppb	01:18:38
2	Tl 190.801†	-227.2	-186.3	-0.8819	ug/L	-0.8819 ppb	01:18:58
2	U 409.014†	-7099.6	-5022.3	-160.08	ug/L	-160.08 ppb	01:18:38
2	V 292.402†	33261.4	33621.1	206.28	ug/L	206.28 ppb	01:18:38
2	Zn 213.857†	25376.0	23988.4	214.21	ug/L	214.21 ppb	01:18:58
2	SiO2†	1134065.1	1099510.0	74160	ug/L	74160 ppb	01:19:38
3	Sc Radial	5422.1	5422.1	106	%		01:18:03
3	Y RADIAL	6275.6	6275.6	114.0	%		01:18:03
3	Al 396.153Radial†	132238.5	124899.1	99891	ug/L	99891 ppb	01:17:43
3	Ca 317.933Radial†	14603.2	13772.8	22233	ug/L	22233 ppb	01:17:43
3	Fe 238.204 Radial†	12641.8	11928.0	101420	ug/L	101420 ppb	01:17:43
3	K 766.490 Radial†	115278.2	106363.1	19361	ug/L	19361 ppb	01:17:43
3	Mg 279.077 IEC†	528.0	495.6	16352	ug/L	16352 ppb	01:18:03
3	Na 589.592 Radial†	334.2	1624.5	465.68	ug/L	465.68 ppb	01:17:43
3	Sr 421.552†	37524.1	35429.9	226.04	ug/L	226.04 ppb	01:17:43
3	Sc 361.383	896370.8	896370.8	104.46	%		01:19:06
3	Y 371.029	816349.7	816349.7	112.19	%		01:19:06
3	Ag 328.068†	-6667.5	-6739.7	2.7783	ug/L	2.7783 ppb	01:19:06
3	As 188.979†	-83.6	-56.1	41.564	ug/L	41.564 ppb	01:19:26
3	B 249.677†	1145.5	1711.7	21.788	ug/L	21.788 ppb	01:19:06
3	Ba 233.527†	209965.2	201002.6	1561.0	ug/L	1561.0 ppb	01:19:06
3	Be 313.107†	-14728.8	-9624.8	7.3143	ug/L	7.3143 ppb	01:19:06
3	Cd 226.502†	838.9	1004.7	0.6511	ug/L	0.6511 ppb	01:19:26
3	Co 228.616†	2824.1	2780.7	45.477	ug/L	45.477 ppb	01:19:26
3	Cr 267.716†	27577.8	26320.5	294.37	ug/L	294.37 ppb	01:19:06
3	Cu 324.752†	26088.0	18570.9	60.848	ug/L	60.848 ppb	01:19:06
3	Mn 257.610†	3143060.9	3008337.5	3308.5	ug/L	3308.5 ppb	01:19:06
3	Mo 202.031†	40.7	17.3	9.3449	ug/L	9.3449 ppb	01:19:26
3	Ni 231.604†	6958.5	6594.1	163.15	ug/L	163.15 ppb	01:19:26
3	P 214.914†	2697.0	2361.4	1347.7	ug/L	1347.7 ppb	01:19:26
3	Pb 220.353†	775.6	804.6	111.31	ug/L	111.31 ppb	01:19:26
3	S 181.975 Axial†	855.3	774.9	1059.7	ug/L	1059.7 ppb	01:19:26
3	Sb 206.836†	80.5	43.6	-1.9151	ug/L	-1.9151 ppb	01:19:26
3	Se 196.026†	-509.0	-455.2	19.700	ug/L	19.700 ppb	01:19:26
3	Si 251.611†	1116584.6	1068415.6	33822	ug/L	33822 ppb	01:19:06
3	Sn 189.927†	-14.5	-15.5	2.7323	ug/L	2.7323 ppb	01:19:26
3	Ti 334.940†	3145416.8	3012356.7	4825.2	ug/L	4825.2 ppb	01:19:06
3	Tl 190.801†	-235.3	-191.2	-2.5933	ug/L	-2.5933 ppb	01:19:26
3	U 409.014†	-7111.6	-4943.9	-157.76	ug/L	-157.76 ppb	01:19:06
3	V 292.402†	33644.3	33566.5	205.92	ug/L	205.92 ppb	01:19:06
3	Zn 213.857†	25382.2	23673.1	211.27	ug/L	211.27 ppb	01:19:26
3	SiO2†	1119966.6	1071654.8	72282	ug/L	72282 ppb	01:19:44

Mean Data: 243628011|937486|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	888728.9	103.57	%	0.772				0.75%
Sc Radial	5375.1	105	%	0.9				0.86%
Y 371.029	808158.4	111.06	%	0.975				0.88%
Y RADIAL	6225.4	113.1	%	0.86				0.76%
Ag 328.068†	-6733.6	3.0112	ug/L	0.20185	3.0112	ppb	0.20185	6.70%
Al 396.153Radial†	125717.5	100550	ug/L	768.5	100550	ppb	768.5	0.76%
As 188.979†	-60.7	39.887	ug/L	1.7041	39.887	ppb	1.7041	4.27%
B 249.677†	1733.1	22.166	ug/L	1.5658	22.166	ppb	1.5658	7.06%
Ba 233.527†	201852.4	1567.6	ug/L	5.78	1567.6	ppb	5.78	0.37%
Be 313.107†	-9556.4	7.3751	ug/L	0.08417	7.3751	ppb	0.08417	1.14%
Ca 317.933Radial†	13846.3	22351	ug/L	193.6	22351	ppb	193.6	0.87%
Cd 226.502†	1014.2	0.6920	ug/L	0.17211	0.6920	ppb	0.17211	24.87%
Co 228.616†	2805.9	45.951	ug/L	0.4355	45.951	ppb	0.4355	0.95%
Cr 267.716†	26391.0	295.17	ug/L	0.690	295.17	ppb	0.690	0.23%
Cu 324.752†	18653.5	61.130	ug/L	0.4544	61.130	ppb	0.4544	0.74%
Fe 238.204 Radial†	12001.1	102040	ug/L	1024.5	102040	ppb	1024.5	1.00%
K 766.490 Radial†	107357.1	19541	ug/L	195.0	19541	ppb	195.0	1.00%

Mg 279.077 IEC†	496.7	16389	ug/L	121.6	16389	ppb	121.6	0.74%
Mn 257.610†	3020179.5	3321.5	ug/L	11.53	3321.5	ppb	11.53	0.35%
Mo 202.031†	26.0	10.000	ug/L	0.6527	10.000	ppb	0.6527	6.53%
Na 589.592 Radial†	1657.8	475.21	ug/L	8.370	475.21	ppb	8.370	1.76%
Ni 231.604†	6654.6	164.65	ug/L	1.311	164.65	ppb	1.311	0.80%
P 214.914†	2396.3	1368.2	ug/L	21.62	1368.2	ppb	21.62	1.58%
Pb 220.353†	809.1	111.95	ug/L	0.919	111.95	ppb	0.919	0.82%
S 181.975 Axial†	780.3	1067.1	ug/L	6.38	1067.1	ppb	6.38	0.60%
Sb 206.836†	49.6	0.0699	ug/L	1.71924	0.0699	ppb	1.71924	>999.9%
Se 196.026†	-461.9	17.332	ug/L	3.0321	17.332	ppb	3.0321	17.49%
Si 251.611†	1071659.4	33925	ug/L	96.0	33925	ppb	96.0	0.28%
Sn 189.927†	-13.3	3.1489	ug/L	0.71645	3.1489	ppb	0.71645	22.75%
Sr 421.552†	35772.1	228.22	ug/L	2.509	228.22	ppb	2.509	1.10%
Ti 334.940†	3021986.1	4840.6	ug/L	14.02	4840.6	ppb	14.02	0.29%
Tl 190.801†	-191.6	-2.5451	ug/L	1.63963	-2.5451	ppb	1.63963	64.42%
U 409.014†	-5054.4	-161.08	ug/L	3.930	-161.08	ppb	3.930	2.44%
V 292.402†	33651.9	206.39	ug/L	0.529	206.39	ppb	0.529	0.26%
Zn 213.857†	23884.5	213.19	ug/L	1.660	213.19	ppb	1.660	0.78%
SiO2†	1087625.8	73359	ug/L	969.2	73359	ppb	969.2	1.32%

Sequence No.: 85
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/13/2010 01:21:56
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	5178.1	5178.1	101	%			01:23:48
1	Y RADIAL	5482.7	5482.7	99.59	%			01:23:48
1	Al 396.153Radial†	7069.0	6997.1	5570.1	ug/L	5570.1	ppb	01:23:48
1	Ca 317.933Radial†	3529.7	3471.5	5604.0	ug/L	5604.0	ppb	01:24:08
1	Fe 238.204 Radial†	671.6	652.6	5565.4	ug/L	5565.4	ppb	01:24:08
1	K 766.490 Radial†	32015.9	29150.7	5301.9	ug/L	5301.9	ppb	01:23:48
1	Mg 279.077 IEC†	177.9	172.9	5740.7	ug/L	5740.7	ppb	01:24:08
1	Na 589.592 Radial†	34213.3	35144.2	10074	ug/L	10074	ppb	01:23:48
1	Sr 421.552†	83390.2	82459.3	526.42	ug/L	526.42	ppb	01:23:48
1	Sc 361.383	878903.8	878903.8	102.43	%			01:25:05
1	Y 371.029	730409.2	730409.2	100.38	%			01:25:05
1	Ag 328.068†	121868.7	118623.0	547.74	ug/L	547.74	ppb	01:25:10
1	As 188.979†	1269.7	1263.5	544.79	ug/L	544.79	ppb	01:25:30
1	B 249.677†	23824.1	23874.5	533.42	ug/L	533.42	ppb	01:25:10
1	Ba 233.527†	71379.3	69696.0	541.38	ug/L	541.38	ppb	01:25:10
1	Be 313.107†	1484003.3	1453303.3	550.30	ug/L	550.30	ppb	01:25:05
1	Cd 226.502†	50254.0	49264.5	541.82	ug/L	541.82	ppb	01:25:10
1	Co 228.616†	27331.6	26761.0	543.08	ug/L	543.08	ppb	01:25:10
1	Cr 267.716†	50133.9	48866.7	542.83	ug/L	542.83	ppb	01:25:10
1	Cu 324.752†	191683.0	180737.2	539.15	ug/L	539.15	ppb	01:25:10
1	Mn 257.610†	504864.5	492468.1	540.39	ug/L	540.39	ppb	01:25:05
1	Mo 202.031†	7873.3	7665.0	535.33	ug/L	535.33	ppb	01:25:30
1	Ni 231.604†	22640.7	22037.0	545.02	ug/L	545.02	ppb	01:25:10
1	P 214.914†	4766.9	4433.6	2535.2	ug/L	2535.2	ppb	01:25:30
1	Pb 220.353†	4460.7	4417.2	536.41	ug/L	536.41	ppb	01:25:30
1	S 181.975 Axial†	840.0	776.2	1079.2	ug/L	1079.2	ppb	01:25:30
1	Sb 206.836†	1619.2	1547.4	543.78	ug/L	543.78	ppb	01:25:30
1	Se 196.026†	851.0	862.9	561.82	ug/L	561.82	ppb	01:25:30
1	Si 251.611†	88878.3	86311.0	2725.7	ug/L	2725.7	ppb	01:25:10
1	Sn 189.927†	3147.7	3071.5	536.08	ug/L	536.08	ppb	01:25:30
1	Ti 334.940†	339459.9	332748.0	532.67	ug/L	532.67	ppb	01:25:10
1	Tl 190.801†	1770.7	1762.8	535.79	ug/L	535.79	ppb	01:25:30
1	U 409.014†	17192.1	18648.5	547.14	ug/L	547.14	ppb	01:25:10
1	V 292.402†	80580.0	80029.8	549.95	ug/L	549.95	ppb	01:25:10
1	Zn 213.857†	60129.3	58079.4	540.47	ug/L	540.47	ppb	01:25:10
1	SiO2†	88525.9	85968.6	5783.9	ug/L	5783.9	ppb	01:26:38
2	Sc Radial	5277.2	5277.2	103	%			01:24:13
2	Y RADIAL	5583.4	5583.4	101.4	%			01:24:13
2	Al 396.153Radial†	7189.7	6983.0	5558.9	ug/L	5558.9	ppb	01:24:13
2	Ca 317.933Radial†	3528.8	3405.1	5496.7	ug/L	5496.7	ppb	01:24:33
2	Fe 238.204 Radial†	672.7	641.3	5468.7	ug/L	5468.7	ppb	01:24:33
2	K 766.490 Radial†	32405.7	28934.8	5262.6	ug/L	5262.6	ppb	01:24:13
2	Mg 279.077 IEC†	180.5	172.1	5715.7	ug/L	5715.7	ppb	01:24:33
2	Na 589.592 Radial†	34766.2	35045.8	10046	ug/L	10046	ppb	01:24:13
2	Sr 421.552†	84664.6	82148.3	524.44	ug/L	524.44	ppb	01:24:13
2	Sc 361.383	876603.1	876603.1	102.16	%			01:25:36
2	Y 371.029	729663.5	729663.5	100.27	%			01:25:36
2	Ag 328.068†	120586.5	117680.2	543.38	ug/L	543.38	ppb	01:25:41
2	As 188.979†	1262.0	1259.3	542.92	ug/L	542.92	ppb	01:26:01
2	B 249.677†	23625.6	23741.3	530.46	ug/L	530.46	ppb	01:25:41
2	Ba 233.527†	70667.0	69181.7	537.39	ug/L	537.39	ppb	01:25:41
2	Be 313.107†	1482325.8	1455463.9	551.11	ug/L	551.11	ppb	01:25:36
2	Cd 226.502†	49882.2	49029.4	539.23	ug/L	539.23	ppb	01:25:41
2	Co 228.616†	27030.8	26536.6	538.54	ug/L	538.54	ppb	01:25:41
2	Cr 267.716†	49670.5	48541.5	539.22	ug/L	539.22	ppb	01:25:41
2	Cu 324.752†	189389.4	178983.3	533.92	ug/L	533.92	ppb	01:25:41
2	Mn 257.610†	502843.1	491783.1	539.63	ug/L	539.63	ppb	01:25:36
2	Mo 202.031†	7849.9	7662.4	535.14	ug/L	535.14	ppb	01:26:01
2	Ni 231.604†	22352.7	21813.1	539.48	ug/L	539.48	ppb	01:25:41

2	P 214.914†	4764.1	4443.0	2542.2 ug/L	2542.2 ppb	01:26:01
2	Pb 220.353†	4461.1	4429.0	537.85 ug/L	537.85 ppb	01:26:01
2	S 181.975 Axial†	836.1	774.5	1076.8 ug/L	1076.8 ppb	01:26:01
2	Sb 206.836†	1629.6	1561.7	548.64 ug/L	548.64 ppb	01:26:01
2	Se 196.026†	842.0	856.2	557.32 ug/L	557.32 ppb	01:26:01
2	Si 251.611†	87837.0	85519.4	2700.6 ug/L	2700.6 ppb	01:25:41
2	Sn 189.927†	3133.1	3065.2	534.96 ug/L	534.96 ppb	01:26:01
2	Ti 334.940†	335459.8	329702.3	527.79 ug/L	527.79 ppb	01:25:41
2	Tl 190.801†	1777.8	1774.3	539.25 ug/L	539.25 ppb	01:26:01
2	U 409.014†	16769.2	18278.6	536.27 ug/L	536.27 ppb	01:25:41
2	V 292.402†	79832.3	79504.4	546.39 ug/L	546.39 ppb	01:25:41
2	Zn 213.857†	59689.7	57803.2	537.92 ug/L	537.92 ppb	01:25:41
2	SiO2†	87851.1	85534.9	5754.6 ug/L	5754.6 ppb	01:26:43
3	Sc Radial	5246.1	5246.1	102 %		01:24:38
3	Y RADIAL	5575.0	5575.0	101.3 %		01:24:38
3	Al 396.153Radial†	7225.1	7059.0	5619.6 ug/L	5619.6 ppb	01:24:38
3	Ca 317.933Radial†	3525.3	3422.0	5524.0 ug/L	5524.0 ppb	01:24:58
3	Fe 238.204 Radial†	670.3	642.8	5481.4 ug/L	5481.4 ppb	01:24:58
3	K 766.490 Radial†	32527.7	29240.2	5318.2 ug/L	5318.2 ppb	01:24:38
3	Mg 279.077 IEC†	175.8	168.6	5598.1 ug/L	5598.1 ppb	01:24:58
3	Na 589.592 Radial†	35078.4	35550.4	10191 ug/L	10191 ppb	01:24:38
3	Sr 421.552†	85077.8	83038.3	530.12 ug/L	530.12 ppb	01:24:38
3	Sc 361.383	878597.4	878597.4	102.39 %		01:26:07
3	Y 371.029	729211.6	729211.6	100.21 %		01:26:07
3	Ag 328.068†	119378.6	116232.6	536.70 ug/L	536.70 ppb	01:26:12
3	As 188.979†	1270.8	1265.0	545.31 ug/L	545.31 ppb	01:26:32
3	B 249.677†	23301.5	23372.2	522.19 ug/L	522.19 ppb	01:26:12
3	Ba 233.527†	69915.4	68290.6	530.46 ug/L	530.46 ppb	01:26:12
3	Be 313.107†	1482777.0	1452610.9	550.01 ug/L	550.01 ppb	01:26:07
3	Cd 226.502†	49329.0	48378.2	532.07 ug/L	532.07 ppb	01:26:12
3	Co 228.616†	26808.4	26259.4	532.93 ug/L	532.93 ppb	01:26:12
3	Cr 267.716†	49088.7	47862.9	531.68 ug/L	531.68 ppb	01:26:12
3	Cu 324.752†	187057.8	176285.3	525.87 ug/L	525.87 ppb	01:26:12
3	Mn 257.610†	504950.0	492723.5	540.67 ug/L	540.67 ppb	01:26:07
3	Mo 202.031†	7888.9	7683.0	536.58 ug/L	536.58 ppb	01:26:32
3	Ni 231.604†	22176.9	21591.8	534.01 ug/L	534.01 ppb	01:26:12
3	P 214.914†	4776.3	4444.4	2545.0 ug/L	2545.0 ppb	01:26:32
3	Pb 220.353†	4491.6	4448.8	540.27 ug/L	540.27 ppb	01:26:32
3	S 181.975 Axial†	830.3	767.1	1066.4 ug/L	1066.4 ppb	01:26:32
3	Sb 206.836†	1638.6	1566.9	550.48 ug/L	550.48 ppb	01:26:32
3	Se 196.026†	846.8	859.0	559.15 ug/L	559.15 ppb	01:26:32
3	Si 251.611†	86850.7	84361.1	2664.0 ug/L	2664.0 ppb	01:26:12
3	Sn 189.927†	3164.6	3089.0	539.13 ug/L	539.13 ppb	01:26:32
3	Ti 334.940†	331960.9	325539.7	521.14 ug/L	521.14 ppb	01:26:12
3	Tl 190.801†	1765.9	1758.7	534.52 ug/L	534.52 ppb	01:26:32
3	U 409.014†	16813.2	18284.3	536.46 ug/L	536.46 ppb	01:26:12
3	V 292.402†	78665.7	78187.6	537.49 ug/L	537.49 ppb	01:26:12
3	Zn 213.857†	59078.4	57073.5	531.12 ug/L	531.12 ppb	01:26:12
3	SiO2†	88035.8	85520.1	5753.6 ug/L	5753.6 ppb	01:26:48

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	878034.8	102.33	%	0.146				0.14%
Sc Radial	5233.8	102	%	1.0				0.97%
Y 371.029	729761.4	100.29	%	0.083				0.08%
Y RADIAL	5547.0	100.8	%	1.01				1.01%
Ag 328.068†	117511.9	542.61	ug/L	5.558	542.61	ppb	5.558	1.02%
QC value within limits for Ag 328.068 Recovery = 108.52%								
Al 396.153Radial†	7013.0	5582.9	ug/L	32.28	5582.9	ppb	32.28	0.58%
QC value greater than the upper limit for Al 396.153Radial Recovery = 111.66%								
As 188.979†	1262.6	544.34	ug/L	1.256	544.34	ppb	1.256	0.23%
QC value within limits for As 188.979 Recovery = 108.87%								
B 249.677†	23662.7	528.69	ug/L	5.821	528.69	ppb	5.821	1.10%
QC value within limits for B 249.677 Recovery = 105.74%								
Ba 233.527†	69056.1	536.41	ug/L	5.525	536.41	ppb	5.525	1.03%
QC value within limits for Ba 233.527 Recovery = 107.28%								
Be 313.107†	1453792.7	550.47	ug/L	0.567	550.47	ppb	0.567	0.10%
QC value greater than the upper limit for Be 313.107 Recovery = 110.09%								
Ca 317.933Radial†	3432.9	5541.6	ug/L	55.74	5541.6	ppb	55.74	1.01%

QC value greater than the upper limit for Ca 317.933Radial Recovery = 110.83%

Cd 226.502†	48890.7	537.71 ug/L	5.052	537.71 ppb	5.052	0.94%

QC value within limits for Cd 226.502 Recovery = 107.54%

Co 228.616†	26519.0	538.18 ug/L	5.084	538.18 ppb	5.084	0.94%

QC value within limits for Co 228.616 Recovery = 107.64%

Cr 267.716†	48423.7	537.91 ug/L	5.690	537.91 ppb	5.690	1.06%

QC value within limits for Cr 267.716 Recovery = 107.58%

Cu 324.752†	178668.6	532.98 ug/L	6.689	532.98 ppb	6.689	1.26%

QC value within limits for Cu 324.752 Recovery = 106.60%

Fe 238.204 Radial†	645.6	5505.1 ug/L	52.57	5505.1 ppb	52.57	0.95%

QC value greater than the upper limit for Fe 238.204 Radial Recovery = 110.10%

K 766.490 Radial†	29108.6	5294.2 ug/L	28.56	5294.2 ppb	28.56	0.54%

QC value within limits for K 766.490 Radial Recovery = 105.88%

Mg 279.077 IEC†	171.2	5684.8 ug/L	76.15	5684.8 ppb	76.15	1.34%

QC value greater than the upper limit for Mg 279.077 IEC Recovery = 113.70%

Mn 257.610†	492324.9	540.23 ug/L	0.537	540.23 ppb	0.537	0.10%

QC value within limits for Mn 257.610 Recovery = 108.05%

Mo 202.031†	7670.1	535.68 ug/L	0.782	535.68 ppb	0.782	0.15%

QC value within limits for Mo 202.031 Recovery = 107.14%

Na 589.592 Radial†	35246.8	10104 ug/L	76.7	10104 ppb	76.7	0.76%

QC value within limits for Na 589.592 Radial Recovery = 101.04%

Ni 231.604†	21814.0	539.50 ug/L	5.506	539.50 ppb	5.506	1.02%

QC value within limits for Ni 231.604 Recovery = 107.90%

P 214.914†	4440.3	2540.8 ug/L	5.03	2540.8 ppb	5.03	0.20%

QC value within limits for P 214.914 Recovery = 101.63%

Pb 220.353†	4431.7	538.18 ug/L	1.950	538.18 ppb	1.950	0.36%

QC value within limits for Pb 220.353 Recovery = 107.64%

S 181.975 Axial†	772.6	1074.1 ug/L	6.79	1074.1 ppb	6.79	0.63%

QC value within limits for S 181.975 Axial Recovery = 107.41%

Sb 206.836†	1558.7	547.63 ug/L	3.460	547.63 ppb	3.460	0.63%

QC value within limits for Sb 206.836 Recovery = 109.53%

Se 196.026†	859.4	559.43 ug/L	2.260	559.43 ppb	2.260	0.40%

QC value greater than the upper limit for Se 196.026 Recovery = 111.89%

Si 251.611†	85397.2	2696.8 ug/L	31.05	2696.8 ppb	31.05	1.15%

QC value within limits for Si 251.611 Recovery = 107.87%

Sn 189.927†	3075.2	536.72 ug/L	2.155	536.72 ppb	2.155	0.40%

QC value within limits for Sn 189.927 Recovery = 107.34%

Sr 421.552†	82548.6	526.99 ug/L	2.884	526.99 ppb	2.884	0.55%

QC value within limits for Sr 421.552 Recovery = 105.40%

Ti 334.940†	329330.0	527.20 ug/L	5.789	527.20 ppb	5.789	1.10%

QC value within limits for Ti 334.940 Recovery = 105.44%

Tl 190.801†	1765.3	536.52 ug/L	2.447	536.52 ppb	2.447	0.46%

QC value within limits for Tl 190.801 Recovery = 107.30%

U 409.014†	18403.8	539.96 ug/L	6.224	539.96 ppb	6.224	1.15%

QC value within limits for U 409.014 Recovery = 107.99%

V 292.402†	79240.6	544.61 ug/L	6.419	544.61 ppb	6.419	1.18%

QC value within limits for V 292.402 Recovery = 108.92%

Zn 213.857†	57652.1	536.50 ug/L	4.832	536.50 ppb	4.832	0.90%

QC value within limits for Zn 213.857 Recovery = 107.30%

SiO2†	85674.5	5764.0 ug/L	17.19	5764.0 ppb	17.19	0.30%

QC value within limits for SiO2 Recovery = 107.79%

QC Failed. Continue with analysis.

Sequence No.: 86
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/13/2010 01:28:58
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	5314.1	5314.1	104	%			01:30:50
1	Y RADIAL	5734.6	5734.6	104.2	%			01:30:50
1	Al 396.153Radial†	-2.3	4.0	3.1681	ug/L	3.1681	ppb	01:30:50
1	Ca 317.933Radial†	19.5	-0.5	-0.7380	ug/L	-0.7380	ppb	01:31:10
1	Fe 238.204 Radial†	12.3	0.3	2.1581	ug/L	2.1581	ppb	01:31:10
1	K 766.490 Radial†	2941.0	322.5	58.746	ug/L	58.746	ppb	01:30:50
1	Mg 279.077 IEC†	3.8	0.6	18.986	ug/L	18.986	ppb	01:31:10
1	Na 589.592 Radial†	-1475.6	-113.1	-32.417	ug/L	-32.417	ppb	01:30:50
1	Sr 421.552†	-5.0	-14.5	-0.0928	ug/L	-0.0928	ppb	01:30:50
1	Sc 361.383	869866.7	869866.7	101.37	%			01:32:07
1	Y 371.029	735253.0	735253.0	101.04	%			01:32:07
1	Ag 328.068†	346.3	-15.5	-0.0679	ug/L	-0.0679	ppb	01:32:07
1	As 188.979†	-20.2	4.1	1.7357	ug/L	1.7357	ppb	01:32:27
1	B 249.677†	-458.1	163.2	3.6619	ug/L	3.6619	ppb	01:32:27
1	Ba 233.527†	-16.6	-7.8	-0.0599	ug/L	-0.0599	ppb	01:32:27
1	Be 313.107†	-4363.1	170.7	0.0647	ug/L	0.0647	ppb	01:32:07
1	Cd 226.502†	-185.7	18.5	0.2034	ug/L	0.2034	ppb	01:32:27
1	Co 228.616†	-71.6	6.7	0.1349	ug/L	0.1349	ppb	01:32:27
1	Cr 267.716†	79.3	-0.8	-0.0076	ug/L	-0.0076	ppb	01:32:27
1	Cu 324.752†	6573.3	81.7	0.2445	ug/L	0.2445	ppb	01:32:07
1	Mn 257.610†	462.8	26.7	0.0288	ug/L	0.0288	ppb	01:32:27
1	Mo 202.031†	22.4	0.4	0.0296	ug/L	0.0296	ppb	01:32:27
1	Ni 231.604†	91.0	22.8	0.5639	ug/L	0.5639	ppb	01:32:27
1	P 214.914†	223.3	-0.1	-0.1001	ug/L	-0.1001	ppb	01:32:27
1	Pb 220.353†	-80.6	-17.3	-2.0932	ug/L	-2.0932	ppb	01:32:27
1	S 181.975 Axial†	45.3	0.8	1.0860	ug/L	1.0860	ppb	01:32:27
1	Sb 206.836†	47.2	13.2	4.4714	ug/L	4.4714	ppb	01:32:27
1	Se 196.026†	-30.9	1.5	0.9673	ug/L	0.9673	ppb	01:32:27
1	Si 251.611†	576.8	108.3	3.4275	ug/L	3.4275	ppb	01:32:27
1	Sn 189.927†	2.1	0.5	0.0789	ug/L	0.0789	ppb	01:32:27
1	Ti 334.940†	-1283.9	67.7	0.1072	ug/L	0.1072	ppb	01:32:07
1	Tl 190.801†	-32.7	1.8	0.5552	ug/L	0.5552	ppb	01:32:27
1	U 409.014†	-1922.8	-32.8	-0.9667	ug/L	-0.9667	ppb	01:32:07
1	V 292.402†	-1326.6	51.1	0.3452	ug/L	0.3452	ppb	01:32:07
1	Zn 213.857†	688.6	54.7	0.5089	ug/L	0.5089	ppb	01:32:27
1	SiO2†	565.5	98.8	6.6638	ug/L	6.6638	ppb	01:33:23
2	Sc Radial	5249.5	5249.5	103	%			01:31:15
2	Y RADIAL	5612.3	5612.3	101.9	%			01:31:15
2	Al 396.153Radial†	4.5	10.5	8.3988	ug/L	8.3988	ppb	01:31:15
2	Ca 317.933Radial†	22.6	2.8	4.5951	ug/L	4.5951	ppb	01:31:35
2	Fe 238.204 Radial†	10.4	-1.4	-12.239	ug/L	-12.239	ppb	01:31:35
2	K 766.490 Radial†	2950.4	366.6	66.766	ug/L	66.766	ppb	01:31:15
2	Mg 279.077 IEC†	-2.6	-5.6	-186.89	ug/L	-186.89	ppb	01:31:35
2	Na 589.592 Radial†	-1452.1	-107.6	-30.844	ug/L	-30.844	ppb	01:31:15
2	Sr 421.552†	1.6	-8.2	-0.0524	ug/L	-0.0524	ppb	01:31:15
2	Sc 361.383	867069.1	867069.1	101.05	%			01:32:32
2	Y 371.029	734083.6	734083.6	100.88	%			01:32:32
2	Ag 328.068†	317.8	-42.6	-0.1996	ug/L	-0.1996	ppb	01:32:32
2	As 188.979†	-21.4	2.7	1.1567	ug/L	1.1567	ppb	01:32:52
2	B 249.677†	-481.0	139.1	3.1234	ug/L	3.1234	ppb	01:32:52
2	Ba 233.527†	-11.4	-2.7	-0.0220	ug/L	-0.0220	ppb	01:32:52
2	Be 313.107†	-4330.5	189.1	0.0718	ug/L	0.0718	ppb	01:32:32
2	Cd 226.502†	-197.0	6.6	0.0740	ug/L	0.0740	ppb	01:32:52
2	Co 228.616†	-81.7	-3.7	-0.0737	ug/L	-0.0737	ppb	01:32:52
2	Cr 267.716†	88.4	8.5	0.0944	ug/L	0.0944	ppb	01:32:52
2	Cu 324.752†	6449.3	-20.0	-0.0595	ug/L	-0.0595	ppb	01:32:32
2	Mn 257.610†	451.5	17.0	0.0251	ug/L	0.0251	ppb	01:32:52
2	Mo 202.031†	26.4	4.5	0.3144	ug/L	0.3144	ppb	01:32:52
2	Ni 231.604†	65.6	-2.1	-0.0531	ug/L	-0.0531	ppb	01:32:52

2	P 214.914†	216.9	-5.7	-3.3880 ug/L	-3.3880 ppb	01:32:52
2	Pb 220.353†	-59.0	3.8	0.4647 ug/L	0.4647 ppb	01:32:52
2	S 181.975 Axial†	47.1	2.7	3.7616 ug/L	3.7616 ppb	01:32:52
2	Sb 206.836†	44.6	10.7	3.6478 ug/L	3.6478 ppb	01:32:52
2	Se 196.026†	-31.7	0.7	0.4016 ug/L	0.4016 ppb	01:32:52
2	Si 251.611†	561.4	94.9	3.0013 ug/L	3.0013 ppb	01:32:52
2	Sn 189.927†	7.0	5.3	0.9198 ug/L	0.9198 ppb	01:32:52
2	Ti 334.940†	-1241.8	105.3	0.1851 ug/L	0.1851 ppb	01:32:32
2	Tl 190.801†	-30.0	4.4	1.3440 ug/L	1.3440 ppb	01:32:52
2	U 409.014†	-1938.7	-54.7	-1.6078 ug/L	-1.6078 ppb	01:32:32
2	V 292.402†	-1426.5	-52.0	-0.3525 ug/L	-0.3525 ppb	01:32:32
2	Zn 213.857†	670.4	38.8	0.3660 ug/L	0.3660 ppb	01:32:52
2	SiO2†	580.7	115.6	7.7906 ug/L	7.7906 ppb	01:33:28
3	Sc Radial	5348.5	5348.5	104 %		01:31:40
3	Y RADIAL	5688.6	5688.6	103.3 %		01:31:40
3	Al 396.153Radial†	-4.8	1.6	1.2536 ug/L	1.2536 ppb	01:31:40
3	Ca 317.933Radial†	17.3	-2.7	-4.2875 ug/L	-4.2875 ppb	01:32:00
3	Fe 238.204 Radial†	11.6	-0.4	-3.4138 ug/L	-3.4138 ppb	01:32:00
3	K 766.490 Radial†	2952.0	314.8	57.344 ug/L	57.344 ppb	01:31:40
3	Mg 279.077 IEC†	2.3	-0.8	-27.336 ug/L	-27.336 ppb	01:32:00
3	Na 589.592 Radial†	-1449.2	-78.7	-22.552 ug/L	-22.552 ppb	01:31:40
3	Sr 421.552†	11.5	1.3	0.0082 ug/L	0.0082 ppb	01:31:40
3	Sc 361.383	871427.1	871427.1	101.56 %		01:32:58
3	Y 371.029	736251.7	736251.7	101.18 %		01:32:58
3	Ag 328.068†	295.7	-65.9	-0.3013 ug/L	-0.3013 ppb	01:32:58
3	As 188.979†	-18.9	5.3	2.2852 ug/L	2.2852 ppb	01:33:18
3	B 249.677†	-452.6	169.5	3.8051 ug/L	3.8051 ppb	01:33:18
3	Ba 233.527†	-9.8	-1.1	-0.0094 ug/L	-0.0094 ppb	01:33:18
3	Be 313.107†	-4442.7	100.0	0.0381 ug/L	0.0381 ppb	01:32:58
3	Cd 226.502†	-183.5	20.9	0.2301 ug/L	0.2301 ppb	01:33:18
3	Co 228.616†	-80.5	-2.0	-0.0406 ug/L	-0.0406 ppb	01:33:18
3	Cr 267.716†	96.0	15.6	0.1744 ug/L	0.1744 ppb	01:33:18
3	Cu 324.752†	6529.7	27.2	0.0834 ug/L	0.0834 ppb	01:32:58
3	Mn 257.610†	471.7	34.7	0.0388 ug/L	0.0388 ppb	01:33:18
3	Mo 202.031†	25.0	3.0	0.2109 ug/L	0.2109 ppb	01:33:18
3	Ni 231.604†	84.8	16.5	0.4074 ug/L	0.4074 ppb	01:33:18
3	P 214.914†	230.8	6.9	4.1619 ug/L	4.1619 ppb	01:33:18
3	Pb 220.353†	-69.9	-6.7	-0.8067 ug/L	-0.8067 ppb	01:33:18
3	S 181.975 Axial†	46.7	2.1	2.9019 ug/L	2.9019 ppb	01:33:18
3	Sb 206.836†	31.7	-2.2	-0.7290 ug/L	-0.7290 ppb	01:33:18
3	Se 196.026†	-23.6	8.8	5.5393 ug/L	5.5393 ppb	01:33:18
3	Si 251.611†	564.1	94.8	2.9972 ug/L	2.9972 ppb	01:33:18
3	Sn 189.927†	8.6	6.8	1.1883 ug/L	1.1883 ppb	01:33:18
3	Ti 334.940†	-1273.5	80.1	0.1319 ug/L	0.1319 ppb	01:32:58
3	Tl 190.801†	-26.7	7.8	2.3560 ug/L	2.3560 ppb	01:33:18
3	U 409.014†	-2048.6	-153.3	-4.5133 ug/L	-4.5133 ppb	01:32:58
3	V 292.402†	-1437.7	-55.9	-0.3848 ug/L	-0.3848 ppb	01:32:58
3	Zn 213.857†	682.2	47.0	0.4392 ug/L	0.4392 ppb	01:33:18
3	SiO2†	582.1	114.2	7.6955 ug/L	7.6955 ppb	01:33:33

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	869454.3	101.33	%	0.257				0.25%
Sc Radial	5304.1	104	%	1.0				0.95%
Y 371.029	735196.1	101.04	%	0.149				0.15%
Y RADIAL	5678.5	103.1	%	1.12				1.09%
Ag 328.068†	-41.3	-0.1896	ug/L	0.11699	-0.1896	ppb	0.11699	61.70%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	5.4	4.2735	ug/L	3.69864	4.2735	ppb	3.69864	86.55%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.0	1.7259	ug/L	0.56433	1.7259	ppb	0.56433	32.70%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	157.2	3.5301	ug/L	0.35946	3.5301	ppb	0.35946	10.18%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-3.9	-0.0304	ug/L	0.02629	-0.0304	ppb	0.02629	86.46%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	153.3	0.0582	ug/L	0.01780	0.0582	ppb	0.01780	30.58%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-0.1	-0.1434	ug/L	4.47103	-0.1434	ppb	4.47103	>999.9%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              15.4      0.1692 ug/L       0.08346      0.1692 ppb        0.08346  49.34%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               0.3      0.0068 ug/L       0.11211      0.0068 ppb        0.11211 >999.9%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               7.8      0.0870 ug/L       0.09123      0.0870 ppb        0.09123 104.82%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              29.6      0.0895 ug/L       0.15206      0.0895 ppb        0.15206 169.93%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -0.5     -4.4981 ug/L       7.25936     -4.4981 ppb        7.25936 161.39%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       334.6      60.952 ug/L        5.0838      60.952 ppb         5.0838   8.34%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -2.0     -65.080 ug/L      108.0033     -65.080 ppb       108.0033 165.95%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              26.1      0.0309 ug/L       0.00709      0.0309 ppb        0.00709  22.96%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               2.7      0.1850 ug/L       0.14415      0.1850 ppb        0.14415  77.93%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -99.8     -28.604 ug/L        5.3000     -28.604 ppb         5.3000  18.53%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              12.4      0.3061 ug/L       0.32074      0.3061 ppb        0.32074 104.79%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                0.4      0.2246 ug/L       3.78544      0.2246 ppb        3.78544 >999.9%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -6.7     -0.8117 ug/L       1.27894     -0.8117 ppb        1.27894 157.56%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          1.9      2.5831 ug/L       1.36597      2.5831 ppb        1.36597  52.88%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               7.2      2.4634 ug/L       2.79522      2.4634 ppb        2.79522 113.47%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               3.7      2.3027 ug/L       2.81718      2.3027 ppb        2.81718 122.34%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              99.3      3.1420 ug/L       0.24725      3.1420 ppb        0.24725   7.87%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               4.2      0.7290 ug/L       0.57878      0.7290 ppb        0.57878  79.39%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -7.2     -0.0457 ug/L       0.05084     -0.0457 ppb        0.05084 111.24%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              84.4      0.1414 ug/L       0.03982      0.1414 ppb        0.03982  28.16%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               4.7      1.4184 ug/L       0.90271      1.4184 ppb        0.90271  63.64%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -80.3     -2.3626 ug/L       1.88995     -2.3626 ppb        1.88995  79.99%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -18.9     -0.1307 ug/L       0.41243     -0.1307 ppb        0.41243 315.52%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              46.8      0.4380 ug/L       0.07147      0.4380 ppb        0.07147  16.32%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   109.5      7.3833 ug/L       0.62493      7.3833 ppb        0.62493   8.46%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

1/13/2010 11:42:01 Hg ReAlign... Actual peak offset (nm): -0.009
Drift (nm): -0.000 Slit adjustment: 5

Analysis Begun

Start Time: 1/13/2010 11:42:46 **Plasma On Time: 1/11/2010 06:15:31**
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\011310.sif
Batch ID:
Results Data Set: 011310
Results Library: C:\pe\Optima3\Results\Results.mdb

Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 1/13/2010 11:38:22**
IEC File: 011110.iec **MSF File:**
Method Description:

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

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 1/13/2010 11:42:47**
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	5274.3	5274.3	99.3	%	11:44:40
1	Y RADIAL	5619.8	5619.8	99.07	%	11:44:40
1	Al 396.153Radial†	-8.1	-8.1	[0.00]	ug/L	11:44:40
1	Ca 317.933Radial†	20.5	20.7	[0.00]	ug/L	11:45:00
1	Fe 238.204 Radial†	9.0	9.1	[0.00]	ug/L	11:45:00
1	K 766.490 Radial†	2713.9	2732.4	[0.00]	ug/L	11:44:40
1	Mg 279.077 IEC†	0.9	0.9	[0.00]	ug/L	11:45:00
1	Na 589.592 Radial†	-1607.7	-1618.7	[0.00]	ug/L	11:44:40
1	Sr 421.552†	1.9	1.9	[0.00]	ug/L	11:44:40
1	Sc 361.383	869727.5	869727.5	99.708	%	11:45:57
1	Y 371.029	730852.6	730852.6	99.641	%	11:45:57
1	Ag 328.068†	416.5	417.7	[0.00]	ug/L	11:45:57
1	As 188.979†	-17.8	-17.9	[0.00]	ug/L	11:46:17
1	B 249.677†	-622.6	-624.4	[0.00]	ug/L	11:46:17
1	Ba 233.527†	-1.6	-1.6	[0.00]	ug/L	11:46:17
1	Be 313.107†	-4278.6	-4291.2	[0.00]	ug/L	11:45:57
1	Cd 226.502†	-209.9	-210.6	[0.00]	ug/L	11:46:17
1	Co 228.616†	-75.0	-75.2	[0.00]	ug/L	11:46:17
1	Cr 267.716†	70.4	70.6	[0.00]	ug/L	11:46:17
1	Cu 324.752†	6626.6	6646.0	[0.00]	ug/L	11:45:57
1	Mn 257.610†	469.9	471.3	[0.00]	ug/L	11:46:17
1	Mo 202.031†	14.2	14.2	[0.00]	ug/L	11:46:17
1	Ni 231.604†	98.2	98.5	[0.00]	ug/L	11:46:17
1	P 214.914†	206.5	207.1	[0.00]	ug/L	11:46:17
1	Pb 220.353†	-63.9	-64.0	[0.00]	ug/L	11:46:17
1	S 181.975 Axial†	50.7	50.9	[0.00]	ug/L	11:46:17
1	Sb 206.836†	21.9	21.9	[0.00]	ug/L	11:46:17
1	Se 196.026†	-27.1	-27.1	[0.00]	ug/L	11:46:17
1	Si 251.611†	442.2	443.5	[0.00]	ug/L	11:46:17
1	Sn 189.927†	-2.1	-2.1	[0.00]	ug/L	11:46:17
1	Ti 334.940†	-1361.2	-1365.2	[0.00]	ug/L	11:45:57
1	Tl 190.801†	-40.4	-40.6	[0.00]	ug/L	11:46:17
1	U 409.014†	-2128.5	-2134.7	[0.00]	ug/L	11:45:57
1	V 292.402†	-1383.5	-1387.5	[0.00]	ug/L	11:45:57
1	Zn 213.857†	994.2	997.2	[0.00]	ug/L	11:46:17
1	SiO2†	459.9	461.2	[0.00]	ug/L	11:47:13
2	Sc Radial	5302.3	5302.3	99.8	%	11:45:05
2	Y RADIAL	5673.6	5673.6	100.0	%	11:45:05
2	Al 396.153Radial†	-12.1	-12.2	[0.00]	ug/L	11:45:05
2	Ca 317.933Radial†	20.4	20.4	[0.00]	ug/L	11:45:25
2	Fe 238.204 Radial†	10.6	10.6	[0.00]	ug/L	11:45:25
2	K 766.490 Radial†	2617.8	2621.8	[0.00]	ug/L	11:45:05
2	Mg 279.077 IEC†	4.1	4.1	[0.00]	ug/L	11:45:25
2	Na 589.592 Radial†	-1624.2	-1626.7	[0.00]	ug/L	11:45:05
2	Sr 421.552†	24.1	24.2	[0.00]	ug/L	11:45:05
2	Sc 361.383	867710.3	867710.3	99.477	%	11:46:22
2	Y 371.029	730115.3	730115.3	99.540	%	11:46:22
2	Ag 328.068†	328.6	330.4	[0.00]	ug/L	11:46:22
2	As 188.979†	-26.4	-26.5	[0.00]	ug/L	11:46:42
2	B 249.677†	-649.7	-653.1	[0.00]	ug/L	11:46:42
2	Ba 233.527†	-12.4	-12.5	[0.00]	ug/L	11:46:42
2	Be 313.107†	-4320.4	-4343.1	[0.00]	ug/L	11:46:22
2	Cd 226.502†	-197.1	-198.1	[0.00]	ug/L	11:46:42
2	Co 228.616†	-78.4	-78.8	[0.00]	ug/L	11:46:42
2	Cr 267.716†	64.3	64.7	[0.00]	ug/L	11:46:42
2	Cu 324.752†	6470.3	6504.3	[0.00]	ug/L	11:46:22
2	Mn 257.610†	484.0	486.6	[0.00]	ug/L	11:46:42
2	Mo 202.031†	27.6	27.7	[0.00]	ug/L	11:46:42
2	Ni 231.604†	87.6	88.0	[0.00]	ug/L	11:46:42
2	P 214.914†	214.3	215.4	[0.00]	ug/L	11:46:42
2	Pb 220.353†	-70.1	-70.5	[0.00]	ug/L	11:46:42
2	S 181.975 Axial†	40.9	41.1	[0.00]	ug/L	11:46:42
2	Sb 206.836†	34.2	34.4	[0.00]	ug/L	11:46:42
2	Se 196.026†	-22.6	-22.7	[0.00]	ug/L	11:46:42
2	Si 251.611†	454.0	456.4	[0.00]	ug/L	11:46:42
2	Sn 189.927†	4.1	4.1	[0.00]	ug/L	11:46:42
2	Ti 334.940†	-1367.3	-1374.5	[0.00]	ug/L	11:46:22
2	Tl 190.801†	-38.0	-38.2	[0.00]	ug/L	11:46:42
2	U 409.014†	-2057.9	-2068.7	[0.00]	ug/L	11:46:22
2	V 292.402†	-1353.8	-1360.9	[0.00]	ug/L	11:46:22

2	Zn 213.857†	1008.8	1014.1	[0.00]	ug/L	11:46:42
2	SiO2†	429.8	432.1	[0.00]	ug/L	11:47:18
3	Sc Radial	5354.5	5354.5	101	%	11:45:30
3	Y RADIAL	5723.7	5723.7	100.9	%	11:45:30
3	Al 396.153Radial†	-30.2	-29.9	[0.00]	ug/L	11:45:30
3	Ca 317.933Radial†	23.8	23.6	[0.00]	ug/L	11:45:50
3	Fe 238.204 Radial†	10.9	10.8	[0.00]	ug/L	11:45:50
3	K 766.490 Radial†	2613.2	2591.7	[0.00]	ug/L	11:45:30
3	Mg 279.077 IEC†	4.7	4.7	[0.00]	ug/L	11:45:50
3	Na 589.592 Radial†	-1618.9	-1605.6	[0.00]	ug/L	11:45:30
3	Sr 421.552†	21.2	21.1	[0.00]	ug/L	11:45:30
3	Sc 361.383	879390.9	879390.9	100.82	%	11:46:47
3	Y 371.029	739499.2	739499.2	100.82	%	11:46:47
3	Ag 328.068†	392.9	389.7	[0.00]	ug/L	11:46:47
3	As 188.979†	-26.1	-25.8	[0.00]	ug/L	11:47:07
3	B 249.677†	-638.0	-632.8	[0.00]	ug/L	11:47:07
3	Ba 233.527†	-12.5	-12.4	[0.00]	ug/L	11:47:07
3	Be 313.107†	-4374.5	-4339.1	[0.00]	ug/L	11:46:47
3	Cd 226.502†	-200.8	-199.2	[0.00]	ug/L	11:47:07
3	Co 228.616†	-81.9	-81.2	[0.00]	ug/L	11:47:07
3	Cr 267.716†	85.0	84.4	[0.00]	ug/L	11:47:07
3	Cu 324.752†	6540.6	6487.7	[0.00]	ug/L	11:46:47
3	Mn 257.610†	487.2	483.3	[0.00]	ug/L	11:47:07
3	Mo 202.031†	19.9	19.8	[0.00]	ug/L	11:47:07
3	Ni 231.604†	97.0	96.2	[0.00]	ug/L	11:47:07
3	P 214.914†	213.7	212.0	[0.00]	ug/L	11:47:07
3	Pb 220.353†	-68.0	-67.5	[0.00]	ug/L	11:47:07
3	S 181.975 Axial†	42.0	41.6	[0.00]	ug/L	11:47:07
3	Sb 206.836†	31.5	31.3	[0.00]	ug/L	11:47:07
3	Se 196.026†	-22.8	-22.6	[0.00]	ug/L	11:47:07
3	Si 251.611†	433.9	430.4	[0.00]	ug/L	11:47:07
3	Sn 189.927†	0.3	0.3	[0.00]	ug/L	11:47:07
3	Ti 334.940†	-1322.2	-1311.5	[0.00]	ug/L	11:46:47
3	Tl 190.801†	-40.0	-39.7	[0.00]	ug/L	11:47:07
3	U 409.014†	-2045.3	-2028.8	[0.00]	ug/L	11:46:47
3	V 292.402†	-1436.0	-1424.3	[0.00]	ug/L	11:46:47
3	Zn 213.857†	986.9	978.9	[0.00]	ug/L	11:47:07
3	SiO2†	487.4	483.4	[0.00]	ug/L	11:47:23

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	872276.3	6243.49	0.72%	100.00	%
Sc Radial	5310.4	40.69	0.77%	100.0	%
Y 371.029	733489.0	5217.98	0.71%	100.00	%
Y RADIAL	5672.4	51.99	0.92%	100.0	%
Ag 328.068†	379.3	44.58	11.76%	[0.00]	ug/L
Al 396.153Radial†	-16.7	11.61	69.33%	[0.00]	ug/L
As 188.979†	-23.4	4.82	20.59%	[0.00]	ug/L
B 249.677†	-636.8	14.77	2.32%	[0.00]	ug/L
Ba 233.527†	-8.8	6.26	70.88%	[0.00]	ug/L
Be 313.107†	-4324.5	28.91	0.67%	[0.00]	ug/L
Ca 317.933Radial†	21.6	1.74	8.05%	[0.00]	ug/L
Cd 226.502†	-202.6	6.90	3.41%	[0.00]	ug/L
Co 228.616†	-78.4	3.04	3.88%	[0.00]	ug/L
Cr 267.716†	73.2	10.10	13.79%	[0.00]	ug/L
Cu 324.752†	6546.0	87.03	1.33%	[0.00]	ug/L
Fe 238.204 Radial†	10.2	0.95	9.35%	[0.00]	ug/L
K 766.490 Radial†	2648.6	74.13	2.80%	[0.00]	ug/L
Mg 279.077 IEC†	3.2	2.01	62.54%	[0.00]	ug/L
Mn 257.610†	480.4	8.05	1.68%	[0.00]	ug/L
Mo 202.031†	20.6	6.80	33.07%	[0.00]	ug/L
Na 589.592 Radial†	-1617.0	10.67	0.66%	[0.00]	ug/L
Ni 231.604†	94.2	5.48	5.81%	[0.00]	ug/L
P 214.914†	211.5	4.15	1.96%	[0.00]	ug/L
Pb 220.353†	-67.3	3.24	4.80%	[0.00]	ug/L
S 181.975 Axial†	44.5	5.50	12.34%	[0.00]	ug/L
Sb 206.836†	29.2	6.49	22.22%	[0.00]	ug/L
Se 196.026†	-24.1	2.60	10.78%	[0.00]	ug/L
Si 251.611†	443.4	13.00	2.93%	[0.00]	ug/L

Sn 189.927†	0.8	3.13	412.32%	[0.00]	ug/L
Sr 421.552†	15.7	12.07	76.83%	[0.00]	ug/L
Ti 334.940†	-1350.4	34.02	2.52%	[0.00]	ug/L
Tl 190.801†	-39.5	1.19	3.01%	[0.00]	ug/L
U 409.014†	-2077.4	53.52	2.58%	[0.00]	ug/L
V 292.402†	-1390.9	31.87	2.29%	[0.00]	ug/L
Zn 213.857†	996.7	17.62	1.77%	[0.00]	ug/L
SiO2†	458.9	25.76	5.61%	[0.00]	ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 1/13/2010 11:49:33
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	5180.3	5180.3	97.6	%	11:51:30
1	Y RADIAL	5537.1	5537.1	97.62	%	11:51:30
1	K 766.490 Radial†	8186.3	5743.2	[1000]	ug/L	11:51:25
1	Sr 421.552†	15377.8	15748.2	[100]	ug/L	11:51:30
1	Sc 361.383	870685.5	870685.5	99.818	%	11:51:57
1	Y 371.029	728777.9	728777.9	99.358	%	11:51:57
1	Ag 328.068†	22920.1	22582.7	[100]	ug/L	11:51:57
1	As 188.979†	210.6	234.4	[100]	ug/L	11:52:17
1	B 249.677†	3768.1	4411.8	[100]	ug/L	11:51:57
1	Ba 233.527†	13532.1	13565.7	[100]	ug/L	11:51:57
1	Be 313.107†	275752.6	280580.8	[100]	ug/L	11:51:57
1	Cd 226.502†	9354.7	9574.4	[100]	ug/L	11:51:57
1	Co 228.616†	4908.1	4995.5	[100]	ug/L	11:52:17
1	Cr 267.716†	9555.6	9499.8	[100]	ug/L	11:51:57
1	Cu 324.752†	41195.1	34724.3	[100]	ug/L	11:51:57
1	Mn 257.610†	96714.6	96410.9	[100]	ug/L	11:51:57
1	Mo 202.031†	1478.4	1460.5	[100]	ug/L	11:52:17
1	Ni 231.604†	4373.6	4287.3	[100]	ug/L	11:51:57
1	P 214.914†	1064.8	855.3	[500]	ug/L	11:52:17
1	Pb 220.353†	799.9	868.7	[100]	ug/L	11:52:17
1	S 181.975 Axial†	189.2	145.0	[200]	ug/L	11:52:17
1	Sb 206.836†	335.0	306.4	[100]	ug/L	11:52:17
1	Se 196.026†	130.7	155.1	[100]	ug/L	11:52:17
1	Si 251.611†	16599.9	16186.8	[500]	ug/L	11:51:57
1	Sn 189.927†	588.2	588.5	[100]	ug/L	11:52:17
1	Ti 334.940†	62801.4	64266.5	[100]	ug/L	11:51:57
1	Tl 190.801†	304.2	344.2	[100]	ug/L	11:52:17
1	U 409.014†	1433.3	3513.3	[100]	ug/L	11:51:57
1	V 292.402†	13827.7	15243.9	[100]	ug/L	11:51:57
1	Zn 213.857†	11868.9	10893.8	[100]	ug/L	11:51:57
1	SiO2†	16474.1	16045.3	[1069.5]	ug/L	11:53:14
2	Sc Radial	5253.8	5253.8	98.9	%	11:51:40
2	Y RADIAL	5595.3	5595.3	98.64	%	11:51:40
2	K 766.490 Radial†	8172.0	5611.4	[1000]	ug/L	11:51:35
2	Sr 421.552†	15632.3	15784.9	[100]	ug/L	11:51:40
2	Sc 361.383	867981.9	867981.9	99.508	%	11:52:23
2	Y 371.029	728247.0	728247.0	99.285	%	11:52:23
2	Ag 328.068†	22919.0	22653.1	[100]	ug/L	11:52:23
2	As 188.979†	226.7	251.3	[100]	ug/L	11:52:43
2	B 249.677†	3772.0	4427.5	[100]	ug/L	11:52:23
2	Ba 233.527†	13477.9	13553.4	[100]	ug/L	11:52:23
2	Be 313.107†	275418.9	281106.0	[100]	ug/L	11:52:23
2	Cd 226.502†	9350.8	9599.7	[100]	ug/L	11:52:23
2	Co 228.616†	4915.4	5018.1	[100]	ug/L	11:52:43
2	Cr 267.716†	9512.1	9486.0	[100]	ug/L	11:52:23
2	Cu 324.752†	41007.7	34664.6	[100]	ug/L	11:52:23
2	Mn 257.610†	96361.6	96357.9	[100]	ug/L	11:52:23
2	Mo 202.031†	1490.7	1477.5	[100]	ug/L	11:52:43
2	Ni 231.604†	4358.5	4285.8	[100]	ug/L	11:52:23
2	P 214.914†	1061.2	855.0	[500]	ug/L	11:52:43
2	Pb 220.353†	795.2	866.5	[100]	ug/L	11:52:43
2	S 181.975 Axial†	188.2	144.6	[200]	ug/L	11:52:43
2	Sb 206.836†	323.2	295.6	[100]	ug/L	11:52:43
2	Se 196.026†	130.1	154.8	[100]	ug/L	11:52:43
2	Si 251.611†	16600.0	16238.7	[500]	ug/L	11:52:23
2	Sn 189.927†	597.4	599.6	[100]	ug/L	11:52:43
2	Ti 334.940†	62575.3	64235.3	[100]	ug/L	11:52:23
2	Tl 190.801†	306.6	347.6	[100]	ug/L	11:52:43
2	U 409.014†	1552.6	3637.6	[100]	ug/L	11:52:23

2	V 292.402†	13842.1	15301.5	[100]	ug/L	11:52:23
2	Zn 213.857†	11777.9	10839.4	[100]	ug/L	11:52:23
2	SiO2†	16562.9	16185.9	[1069.5]	ug/L	11:53:19
3	Sc Radial	5120.0	5120.0	96.4	%	11:51:50
3	Y RADIAL	5468.9	5468.9	96.41	%	11:51:50
3	K 766.490 Radial†	8155.9	5810.6	[1000]	ug/L	11:51:45
3	Sr 421.552†	15259.5	15811.2	[100]	ug/L	11:51:50
3	Sc 361.383	867685.2	867685.2	99.474	%	11:52:48
3	Y 371.029	727161.9	727161.9	99.137	%	11:52:48
3	Ag 328.068†	23017.7	22760.2	[100]	ug/L	11:52:48
3	As 188.979†	226.3	250.9	[100]	ug/L	11:53:08
3	B 249.677†	3778.1	4434.8	[100]	ug/L	11:52:48
3	Ba 233.527†	13526.1	13606.5	[100]	ug/L	11:52:48
3	Be 313.107†	275464.4	281246.4	[100]	ug/L	11:52:48
3	Cd 226.502†	9312.0	9563.9	[100]	ug/L	11:52:48
3	Co 228.616†	4959.2	5063.8	[100]	ug/L	11:53:08
3	Cr 267.716†	9531.4	9508.6	[100]	ug/L	11:52:48
3	Cu 324.752†	41137.2	34808.8	[100]	ug/L	11:52:48
3	Mn 257.610†	96436.3	96466.1	[100]	ug/L	11:52:48
3	Mo 202.031†	1499.7	1487.0	[100]	ug/L	11:53:08
3	Ni 231.604†	4355.1	4283.9	[100]	ug/L	11:52:48
3	P 214.914†	1063.3	857.4	[500]	ug/L	11:53:08
3	Pb 220.353†	822.2	893.9	[100]	ug/L	11:53:08
3	S 181.975 Axial†	191.9	148.4	[200]	ug/L	11:53:08
3	Sb 206.836†	334.3	306.9	[100]	ug/L	11:53:08
3	Se 196.026†	130.0	154.8	[100]	ug/L	11:53:08
3	Si 251.611†	16642.9	16287.5	[500]	ug/L	11:52:48
3	Sn 189.927†	598.1	600.5	[100]	ug/L	11:53:08
3	Ti 334.940†	62707.7	64389.8	[100]	ug/L	11:52:48
3	Tl 190.801†	316.2	357.4	[100]	ug/L	11:53:08
3	U 409.014†	1418.8	3503.7	[100]	ug/L	11:52:48
3	V 292.402†	13618.3	15081.3	[100]	ug/L	11:52:48
3	Zn 213.857†	11840.8	10906.7	[100]	ug/L	11:52:48
3	SiO2†	16687.1	16316.5	[1069.5]	ug/L	11:53:24

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	868784.2	1653.24	0.19%	99.600	%
Sc Radial	5184.7	67.00	1.29%	97.6	%
Y 371.029	728062.2	823.70	0.11%	99.260	%
Y RADIAL	5533.8	63.22	1.14%	97.56	%
Ag 328.068†	22665.4	89.39	0.39%	[100]	ug/L
As 188.979†	245.5	9.61	3.92%	[100]	ug/L
B 249.677†	4424.7	11.79	0.27%	[100]	ug/L
Ba 233.527†	13575.2	27.79	0.20%	[100]	ug/L
Be 313.107†	280977.7	350.84	0.12%	[100]	ug/L
Cd 226.502†	9579.3	18.40	0.19%	[100]	ug/L
Co 228.616†	5025.8	34.82	0.69%	[100]	ug/L
Cr 267.716†	9498.1	11.41	0.12%	[100]	ug/L
Cu 324.752†	34732.6	72.50	0.21%	[100]	ug/L
K 766.490 Radial†	5721.8	101.30	1.77%	[1000]	ug/L
Mn 257.610†	96411.6	54.10	0.06%	[100]	ug/L
Mo 202.031†	1475.0	13.44	0.91%	[100]	ug/L
Ni 231.604†	4285.7	1.71	0.04%	[100]	ug/L
P 214.914†	855.9	1.34	0.16%	[500]	ug/L
Pb 220.353†	876.4	15.24	1.74%	[100]	ug/L
S 181.975 Axial†	146.0	2.09	1.43%	[200]	ug/L
Sb 206.836†	302.9	6.37	2.10%	[100]	ug/L
Se 196.026†	154.9	0.15	0.09%	[100]	ug/L
Si 251.611†	16237.7	50.35	0.31%	[500]	ug/L
Sn 189.927†	596.2	6.68	1.12%	[100]	ug/L
Sr 421.552†	15781.4	31.69	0.20%	[100]	ug/L
Ti 334.940†	64297.2	81.72	0.13%	[100]	ug/L
Tl 190.801†	349.7	6.85	1.96%	[100]	ug/L
U 409.014†	3551.6	74.71	2.10%	[100]	ug/L
V 292.402†	15208.9	114.24	0.75%	[100]	ug/L
Zn 213.857†	10880.0	35.74	0.33%	[100]	ug/L
SiO2†	16182.6	135.63	0.84%	[1069.5]	ug/L

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

Autosampler Location: 3
Date Collected: 1/13/2010 11:55:34
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	5213.8	5213.8	98.2	%	11:57:27
1	Y RADIAL	5494.5	5494.5	96.86	%	11:57:27
1	Al 396.153Radial†	6619.4	6758.7	[5000]	ug/L	11:57:27
1	Ca 317.933Radial†	3297.1	3336.6	[5000]	ug/L	11:57:47
1	K 766.490 Radial†	29724.0	27625.8	[5000]	ug/L	11:57:27
1	Mg 279.077 IEC†	170.1	170.0	[5000]	ug/L	11:57:47
1	Sr 421.552†	79287.9	80740.5	[500]	ug/L	11:57:27
1	Sc 361.383	871708.5	871708.5	99.935	%	11:58:44
1	Y 371.029	720477.0	720477.0	98.226	%	11:58:44
1	Ag 328.068†	111151.4	110844.6	[500]	ug/L	11:58:49
1	As 188.979†	1196.6	1220.8	[500]	ug/L	11:59:09
1	B 249.677†	21657.0	22307.9	[500]	ug/L	11:58:49
1	Ba 233.527†	65170.7	65221.9	[500]	ug/L	11:58:49
1	Be 313.107†	1375301.4	1380521.7	[500]	ug/L	11:58:44
1	Cd 226.502†	46139.1	46371.8	[500]	ug/L	11:58:49
1	Co 228.616†	24978.1	25072.8	[500]	ug/L	11:58:49
1	Cr 267.716†	45845.7	45802.4	[500]	ug/L	11:58:49
1	Cu 324.752†	174641.7	168209.5	[500]	ug/L	11:58:49
1	Mn 257.610†	464825.6	464647.9	[500]	ug/L	11:58:44
1	Mo 202.031†	7344.6	7328.9	[500]	ug/L	11:59:09
1	Ni 231.604†	20723.9	20643.2	[500]	ug/L	11:58:49
1	P 214.914†	4483.7	4275.1	[2500]	ug/L	11:59:09
1	Pb 220.353†	4173.5	4243.6	[500]	ug/L	11:59:09
1	S 181.975 Axial†	788.8	744.7	[1000]	ug/L	11:59:09
1	Sb 206.836†	1533.8	1505.6	[500]	ug/L	11:59:09
1	Se 196.026†	794.5	819.1	[500]	ug/L	11:59:09
1	Si 251.611†	80786.1	80395.3	[2500]	ug/L	11:58:49
1	Sn 189.927†	2957.0	2958.2	[500]	ug/L	11:59:09
1	Ti 334.940†	308376.6	309927.9	[500]	ug/L	11:58:49
1	Tl 190.801†	1665.5	1706.0	[500]	ug/L	11:59:09
1	U 409.014†	15099.2	17186.5	[500]	ug/L	11:58:49
1	V 292.402†	73290.0	74728.6	[500]	ug/L	11:58:49
1	Zn 213.857†	55400.3	54439.6	[500]	ug/L	11:58:49
1	SiO2†	82216.1	81810.7	[5347.5]	ug/L	12:00:17
2	Sc Radial	5276.7	5276.7	99.4	%	11:57:52
2	Y RADIAL	5567.1	5567.1	98.14	%	11:57:52
2	Al 396.153Radial†	6665.3	6724.6	[5000]	ug/L	11:57:52
2	Ca 317.933Radial†	3284.8	3284.2	[5000]	ug/L	11:58:12
2	K 766.490 Radial†	29877.5	27419.4	[5000]	ug/L	11:57:52
2	Mg 279.077 IEC†	170.1	168.0	[5000]	ug/L	11:58:12
2	Sr 421.552†	79654.6	80146.8	[500]	ug/L	11:57:52
2	Sc 361.383	875974.8	875974.8	100.42	%	11:59:15
2	Y 371.029	725636.4	725636.4	98.929	%	11:59:15
2	Ag 328.068†	112111.8	111259.2	[500]	ug/L	11:59:20
2	As 188.979†	1201.2	1219.6	[500]	ug/L	11:59:40
2	B 249.677†	21880.0	22424.4	[500]	ug/L	11:59:20
2	Ba 233.527†	65678.3	65409.8	[500]	ug/L	11:59:20
2	Be 313.107†	1383273.6	1381757.5	[500]	ug/L	11:59:15
2	Cd 226.502†	46586.1	46592.1	[500]	ug/L	11:59:20
2	Co 228.616†	25171.2	25143.3	[500]	ug/L	11:59:20
2	Cr 267.716†	46209.0	45940.6	[500]	ug/L	11:59:20
2	Cu 324.752†	175901.2	168612.5	[500]	ug/L	11:59:20
2	Mn 257.610†	466325.3	463876.0	[500]	ug/L	11:59:15
2	Mo 202.031†	7370.2	7318.6	[500]	ug/L	11:59:40
2	Ni 231.604†	20889.5	20707.1	[500]	ug/L	11:59:20
2	P 214.914†	4512.5	4281.9	[2500]	ug/L	11:59:40
2	Pb 220.353†	4201.1	4250.7	[500]	ug/L	11:59:40
2	S 181.975 Axial†	791.0	743.2	[1000]	ug/L	11:59:40
2	Sb 206.836†	1528.3	1492.7	[500]	ug/L	11:59:40

2	Se 196.026†	801.5	822.3	[500]	ug/L	11:59:40
2	Si 251.611†	81461.8	80674.4	[2500]	ug/L	11:59:20
2	Sn 189.927†	2967.2	2954.0	[500]	ug/L	11:59:40
2	Ti 334.940†	310650.7	310689.4	[500]	ug/L	11:59:20
2	Tl 190.801†	1670.4	1702.8	[500]	ug/L	11:59:40
2	U 409.014†	15174.0	17187.3	[500]	ug/L	11:59:20
2	V 292.402†	73842.4	74921.5	[500]	ug/L	11:59:20
2	Zn 213.857†	55968.4	54735.4	[500]	ug/L	11:59:20
2	SiO2†	81838.7	81034.2	[5347.5]	ug/L	12:00:22
3	Sc Radial	5153.2	5153.2	97.0	%	11:58:17
3	Y RADIAL	5456.3	5456.3	96.19	%	11:58:17
3	Al 396.153Radial†	6586.9	6804.4	[5000]	ug/L	11:58:17
3	Ca 317.933Radial†	3272.4	3350.6	[5000]	ug/L	11:58:37
3	K 766.490 Radial†	29538.8	27790.7	[5000]	ug/L	11:58:17
3	Mg 279.077 IEC†	168.5	170.4	[5000]	ug/L	11:58:37
3	Sr 421.552†	78479.1	80856.0	[500]	ug/L	11:58:17
3	Sc 361.383	870550.6	870550.6	99.802	%	11:59:46
3	Y 371.029	719702.7	719702.7	98.120	%	11:59:46
3	Ag 328.068†	110856.5	110696.9	[500]	ug/L	11:59:51
3	As 188.979†	1196.1	1221.9	[500]	ug/L	12:00:11
3	B 249.677†	21527.7	22207.1	[500]	ug/L	11:59:51
3	Ba 233.527†	65018.6	65156.3	[500]	ug/L	11:59:51
3	Be 313.107†	1373444.7	1380491.7	[500]	ug/L	11:59:46
3	Cd 226.502†	46183.1	46477.3	[500]	ug/L	11:59:51
3	Co 228.616†	24869.6	24997.3	[500]	ug/L	11:59:51
3	Cr 267.716†	45900.5	45918.3	[500]	ug/L	11:59:51
3	Cu 324.752†	173242.3	167039.7	[500]	ug/L	11:59:51
3	Mn 257.610†	464739.2	465180.0	[500]	ug/L	11:59:46
3	Mo 202.031†	7374.7	7368.8	[500]	ug/L	12:00:11
3	Ni 231.604†	20761.3	20708.3	[500]	ug/L	11:59:51
3	P 214.914†	4510.2	4307.6	[2500]	ug/L	12:00:11
3	Pb 220.353†	4198.9	4274.6	[500]	ug/L	12:00:11
3	S 181.975 Axial†	795.8	752.9	[1000]	ug/L	12:00:11
3	Sb 206.836†	1528.8	1502.6	[500]	ug/L	12:00:11
3	Se 196.026†	794.6	820.3	[500]	ug/L	12:00:11
3	Si 251.611†	80444.5	80160.5	[2500]	ug/L	11:59:51
3	Sn 189.927†	2967.6	2972.8	[500]	ug/L	12:00:11
3	Ti 334.940†	306842.1	308800.7	[500]	ug/L	11:59:51
3	Tl 190.801†	1663.7	1706.4	[500]	ug/L	12:00:11
3	U 409.014†	15037.5	17144.7	[500]	ug/L	11:59:51
3	V 292.402†	73044.3	74580.0	[500]	ug/L	11:59:51
3	Zn 213.857†	55321.3	54434.2	[500]	ug/L	11:59:51
3	SiO2†	80430.0	80130.5	[5347.5]	ug/L	12:00:27

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	872744.6	2856.69	0.33%	100.05	%
Sc Radial	5214.6	61.73	1.18%	98.2	%
Y 371.029	721938.7	3225.61	0.45%	98.425	%
Y RADIAL	5506.0	56.27	1.02%	97.07	%
Ag 328.068†	110933.6	291.50	0.26%	[500]	ug/L
Al 396.153Radial†	6762.6	40.07	0.59%	[5000]	ug/L
As 188.979†	1220.7	1.18	0.10%	[500]	ug/L
B 249.677†	22313.1	108.73	0.49%	[500]	ug/L
Ba 233.527†	65262.7	131.57	0.20%	[500]	ug/L
Be 313.107†	1380923.6	722.35	0.05%	[500]	ug/L
Ca 317.933Radial†	3323.8	35.01	1.05%	[5000]	ug/L
Cd 226.502†	46480.4	110.16	0.24%	[500]	ug/L
Co 228.616†	25071.2	73.03	0.29%	[500]	ug/L
Cr 267.716†	45887.1	74.22	0.16%	[500]	ug/L
Cu 324.752†	167953.9	816.97	0.49%	[500]	ug/L
K 766.490 Radial†	27612.0	186.04	0.67%	[5000]	ug/L
Mg 279.077 IEC†	169.5	1.28	0.76%	[5000]	ug/L
Mn 257.610†	464568.0	655.70	0.14%	[500]	ug/L
Mo 202.031†	7338.7	26.53	0.36%	[500]	ug/L
Ni 231.604†	20686.2	37.27	0.18%	[500]	ug/L
P 214.914†	4288.2	17.14	0.40%	[2500]	ug/L
Pb 220.353†	4256.3	16.23	0.38%	[500]	ug/L
S 181.975 Axial†	746.9	5.22	0.70%	[1000]	ug/L

Sb 206.836†	1500.3	6.77	0.45%	[500]	ug/L
Se 196.026†	820.5	1.59	0.19%	[500]	ug/L
Si 251.611†	80410.1	257.30	0.32%	[2500]	ug/L
Sn 189.927†	2961.6	9.86	0.33%	[500]	ug/L
Sr 421.552†	80581.1	380.50	0.47%	[500]	ug/L
Ti 334.940†	309806.0	950.23	0.31%	[500]	ug/L
Tl 190.801†	1705.1	1.97	0.12%	[500]	ug/L
U 409.014†	17172.8	24.39	0.14%	[500]	ug/L
V 292.402†	74743.4	171.25	0.23%	[500]	ug/L
Zn 213.857†	54536.4	172.32	0.32%	[500]	ug/L
SiO2†	80991.8	840.90	1.04%	[5347.5]	ug/L

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

Autosampler Location: 4
Date Collected: 1/13/2010 12:02:37
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	5171.9	5171.9	97.4	%	12:04:30
1	Y RADIAL	5441.9	5441.9	95.94	%	12:04:30
1	Al 396.153Radial†	13108.3	13475.9	[10000]	ug/L	12:04:30
1	Ca 317.933Radial†	6490.9	6643.1	[10000]	ug/L	12:04:30
1	Fe 238.204 Radial†	1206.7	1228.8	[10000]	ug/L	12:04:50
1	K 766.490 Radial†	56282.8	55140.5	[10000]	ug/L	12:04:30
1	Mg 279.077 IEC†	328.5	334.1	[10000]	ug/L	12:04:50
1	Na 589.592 Radial†	31307.9	33762.8	[10000]	ug/L	12:04:30
1	Sr 421.552†	153449.0	157540.3	[1000]	ug/L	12:04:30
1	Sc 361.383	855595.8	855595.8	98.088	%	12:05:54
1	Y 371.029	709257.0	709257.0	96.696	%	12:05:54
1	Ag 328.068†	221467.7	225406.1	[1000]	ug/L	12:05:54
1	As 188.979†	2387.0	2456.9	[1000]	ug/L	12:06:14
1	B 249.677†	44626.0	46132.7	[1000]	ug/L	12:05:54
1	Ba 233.527†	130771.4	133329.7	[1000]	ug/L	12:05:54
1	Be 313.107†	2732256.5	2789848.3	[1000]	ug/L	12:05:48
1	Cd 226.502†	92515.9	94522.2	[1000]	ug/L	12:05:54
1	Co 228.616†	49989.1	51042.1	[1000]	ug/L	12:05:54
1	Cr 267.716†	92149.5	93872.9	[1000]	ug/L	12:05:54
1	Cu 324.752†	347356.7	347582.7	[1000]	ug/L	12:05:54
1	Mn 257.610†	917295.3	934698.3	[1000]	ug/L	12:05:48
1	Mo 202.031†	14455.2	14716.5	[1000]	ug/L	12:06:14
1	Ni 231.604†	41399.1	42112.0	[1000]	ug/L	12:05:54
1	P 214.914†	8677.0	8634.7	[5000]	ug/L	12:06:14
1	Pb 220.353†	8273.6	8502.2	[1000]	ug/L	12:06:14
1	S 181.975 Axial†	1505.8	1490.6	[2000]	ug/L	12:06:14
1	Sb 206.836†	2982.6	3011.6	[1000]	ug/L	12:06:14
1	Se 196.026†	1570.0	1624.7	[1000]	ug/L	12:06:14
1	Si 251.611†	161188.8	163887.9	[5000]	ug/L	12:05:54
1	Sn 189.927†	5816.8	5929.5	[1000]	ug/L	12:06:14
1	Ti 334.940†	626820.7	640391.4	[1000]	ug/L	12:05:48
1	Tl 190.801†	3304.4	3408.3	[1000]	ug/L	12:06:14
1	U 409.014†	32657.5	35371.6	[1000]	ug/L	12:05:54
1	V 292.402†	149497.1	153802.6	[1000]	ug/L	12:05:54
1	Zn 213.857†	109650.6	110791.6	[1000]	ug/L	12:05:54
1	SiO2†	160774.9	163450.4	[10695]	ug/L	12:07:23
2	Sc Radial	5216.8	5216.8	98.2	%	12:04:55
2	Y RADIAL	5480.4	5480.4	96.62	%	12:04:55
2	Al 396.153Radial†	13184.1	13437.2	[10000]	ug/L	12:04:55
2	Ca 317.933Radial†	6538.0	6633.7	[10000]	ug/L	12:04:55
2	Fe 238.204 Radial†	1221.2	1233.0	[10000]	ug/L	12:05:15
2	K 766.490 Radial†	56559.5	54925.2	[10000]	ug/L	12:04:55
2	Mg 279.077 IEC†	327.2	329.9	[10000]	ug/L	12:05:15
2	Na 589.592 Radial†	31583.3	33766.6	[10000]	ug/L	12:04:55
2	Sr 421.552†	154407.2	157160.4	[1000]	ug/L	12:04:55
2	Sc 361.383	845815.4	845815.4	96.966	%	12:06:26
2	Y 371.029	701338.5	701338.5	95.617	%	12:06:26
2	Ag 328.068†	218980.3	225451.8	[1000]	ug/L	12:06:26
2	As 188.979†	2375.5	2473.2	[1000]	ug/L	12:06:46
2	B 249.677†	44165.7	46184.1	[1000]	ug/L	12:06:26
2	Ba 233.527†	129590.6	133653.6	[1000]	ug/L	12:06:26
2	Be 313.107†	2760305.4	2850984.5	[1000]	ug/L	12:06:20
2	Cd 226.502†	91741.4	94814.1	[1000]	ug/L	12:06:26
2	Co 228.616†	49590.5	51220.3	[1000]	ug/L	12:06:26
2	Cr 267.716†	91267.6	94049.6	[1000]	ug/L	12:06:26
2	Cu 324.752†	342439.5	346606.6	[1000]	ug/L	12:06:26
2	Mn 257.610†	927465.2	956000.0	[1000]	ug/L	12:06:20
2	Mo 202.031†	14465.0	14896.9	[1000]	ug/L	12:06:46
2	Ni 231.604†	40894.1	42079.2	[1000]	ug/L	12:06:26

2	P 214.914†	8701.7	8762.4	[5000]	ug/L	12:06:46
2	Pb 220.353†	8307.8	8635.0	[1000]	ug/L	12:06:46
2	S 181.975 Axial†	1513.2	1516.0	[2000]	ug/L	12:06:46
2	Sb 206.836†	2978.7	3042.7	[1000]	ug/L	12:06:46
2	Se 196.026†	1584.0	1657.6	[1000]	ug/L	12:06:46
2	Si 251.611†	159403.0	163946.4	[5000]	ug/L	12:06:26
2	Sn 189.927†	5810.8	5991.9	[1000]	ug/L	12:06:46
2	Ti 334.940†	633660.6	654834.7	[1000]	ug/L	12:06:20
2	Tl 190.801†	3312.8	3455.9	[1000]	ug/L	12:06:46
2	U 409.014†	32276.0	35363.1	[1000]	ug/L	12:06:26
2	V 292.402†	147927.5	153946.3	[1000]	ug/L	12:06:26
2	Zn 213.857†	108674.8	111077.9	[1000]	ug/L	12:06:26
2	SiO2†	158741.5	163248.8	[10695]	ug/L	12:07:28
3	Sc Radial	5230.3	5230.3	98.5	%	12:05:21
3	Y RADIAL	5523.3	5523.3	97.37	%	12:05:21
3	Al 396.153Radial†	13316.7	13537.2	[10000]	ug/L	12:05:21
3	Ca 317.933Radial†	6590.9	6670.2	[10000]	ug/L	12:05:21
3	Fe 238.204 Radial†	1203.8	1212.1	[10000]	ug/L	12:05:41
3	K 766.490 Radial†	57249.2	55476.3	[10000]	ug/L	12:05:21
3	Mg 279.077 IEC†	323.2	324.9	[10000]	ug/L	12:05:41
3	Na 589.592 Radial†	31761.5	33864.3	[10000]	ug/L	12:05:21
3	Sr 421.552†	155696.4	158062.3	[1000]	ug/L	12:05:21
3	Sc 361.383	844344.4	844344.4	96.798	%	12:06:58
3	Y 371.029	699187.7	699187.7	95.324	%	12:06:58
3	Ag 328.068†	218707.1	225562.9	[1000]	ug/L	12:06:58
3	As 188.979†	2372.4	2474.3	[1000]	ug/L	12:07:18
3	B 249.677†	44171.0	46269.0	[1000]	ug/L	12:06:58
3	Ba 233.527†	129396.0	133685.3	[1000]	ug/L	12:06:58
3	Be 313.107†	2751904.7	2847265.2	[1000]	ug/L	12:06:52
3	Cd 226.502†	91771.4	95009.9	[1000]	ug/L	12:06:58
3	Co 228.616†	49573.6	51292.0	[1000]	ug/L	12:06:58
3	Cr 267.716†	91187.3	94130.7	[1000]	ug/L	12:06:58
3	Cu 324.752†	341918.0	346683.0	[1000]	ug/L	12:06:58
3	Mn 257.610†	925797.3	955943.3	[1000]	ug/L	12:06:52
3	Mo 202.031†	14464.6	14922.5	[1000]	ug/L	12:07:18
3	Ni 231.604†	41028.2	42291.2	[1000]	ug/L	12:06:58
3	P 214.914†	8671.1	8746.4	[5000]	ug/L	12:07:18
3	Pb 220.353†	8280.6	8621.9	[1000]	ug/L	12:07:18
3	S 181.975 Axial†	1494.8	1499.7	[2000]	ug/L	12:07:18
3	Sb 206.836†	2970.6	3039.6	[1000]	ug/L	12:07:18
3	Se 196.026†	1576.4	1652.7	[1000]	ug/L	12:07:18
3	Si 251.611†	159178.1	164000.4	[5000]	ug/L	12:06:58
3	Sn 189.927†	5803.4	5994.7	[1000]	ug/L	12:07:18
3	Ti 334.940†	633223.8	655521.9	[1000]	ug/L	12:06:52
3	Tl 190.801†	3302.8	3451.6	[1000]	ug/L	12:07:18
3	U 409.014†	32318.1	35464.6	[1000]	ug/L	12:06:58
3	V 292.402†	147679.4	153955.7	[1000]	ug/L	12:06:58
3	Zn 213.857†	108573.6	111168.6	[1000]	ug/L	12:06:58
3	SiO2†	159649.1	164471.5	[10695]	ug/L	12:07:34

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	848585.2	6115.73	0.72%	97.284	%
Sc Radial	5206.4	30.58	0.59%	98.0	%
Y 371.029	703261.1	5302.83	0.75%	95.879	%
Y RADIAL	5481.9	40.71	0.74%	96.64	%
Ag 328.068†	225473.6	80.65	0.04%	[1000]	ug/L
Al 396.153Radial†	13483.4	50.41	0.37%	[10000]	ug/L
As 188.979†	2468.1	9.74	0.39%	[1000]	ug/L
B 249.677†	46195.3	68.79	0.15%	[1000]	ug/L
Ba 233.527†	133556.2	196.78	0.15%	[1000]	ug/L
Be 313.107†	2829366.0	34273.83	1.21%	[1000]	ug/L
Ca 317.933Radial†	6649.0	18.94	0.28%	[10000]	ug/L
Cd 226.502†	94782.1	245.45	0.26%	[1000]	ug/L
Co 228.616†	51184.8	128.69	0.25%	[1000]	ug/L
Cr 267.716†	94017.7	131.84	0.14%	[1000]	ug/L
Cu 324.752†	346957.4	542.84	0.16%	[1000]	ug/L
Fe 238.204 Radial†	1224.6	11.07	0.90%	[10000]	ug/L
K 766.490 Radial†	55180.7	277.76	0.50%	[10000]	ug/L

Mg 279.077 IEC†	329.6	4.58	1.39%	[10000]	ug/L
Mn 257.610†	948880.5	12282.23	1.29%	[1000]	ug/L
Mo 202.031†	14845.3	112.29	0.76%	[1000]	ug/L
Na 589.592 Radial†	33797.9	57.53	0.17%	[10000]	ug/L
Ni 231.604†	42160.8	114.12	0.27%	[1000]	ug/L
P 214.914†	8714.5	69.61	0.80%	[5000]	ug/L
Pb 220.353†	8586.4	73.16	0.85%	[1000]	ug/L
S 181.975 Axial†	1502.1	12.89	0.86%	[2000]	ug/L
Sb 206.836†	3031.3	17.14	0.57%	[1000]	ug/L
Se 196.026†	1645.0	17.74	1.08%	[1000]	ug/L
Si 251.611†	163944.9	56.27	0.03%	[5000]	ug/L
Sn 189.927†	5972.0	36.87	0.62%	[1000]	ug/L
Sr 421.552†	157587.6	452.81	0.29%	[1000]	ug/L
Ti 334.940†	650249.4	8544.14	1.31%	[1000]	ug/L
Tl 190.801†	3438.6	26.34	0.77%	[1000]	ug/L
U 409.014†	35399.8	56.31	0.16%	[1000]	ug/L
V 292.402†	153901.5	85.78	0.06%	[1000]	ug/L
Zn 213.857†	111012.7	196.82	0.18%	[1000]	ug/L
SiO2†	163723.6	655.54	0.40%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 1/13/2010 12:09:44
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	4987.4	4987.4	93.9	%	12:11:58
1	Y RADIAL	5249.3	5249.3	92.54	%	12:11:58
1	Al 396.153Radial†	65279.1	69522.7	[50000]	ug/L	12:11:38
1	Ca 317.933Radial†	31311.6	33317.5	[50000]	ug/L	12:11:38
1	Fe 238.204 Radial†	2289.2	2427.2	[20000]	ug/L	12:11:58
1	Mg 279.077 IEC†	1508.7	1603.2	[50000]	ug/L	12:11:58
1	Na 589.592 Radial†	64154.2	69925.2	[20000]	ug/L	12:11:38
1	Sc 361.383	844943.7	844943.7	96.867	%	12:12:55
1	Y 371.029	694814.8	694814.8	94.727	%	12:12:55
2	Sc Radial	5077.3	5077.3	95.6	%	12:12:23
2	Y RADIAL	5350.0	5350.0	94.32	%	12:12:23
2	Al 396.153Radial†	65696.7	68729.6	[50000]	ug/L	12:12:03
2	Ca 317.933Radial†	31471.1	32894.4	[50000]	ug/L	12:12:03
2	Fe 238.204 Radial†	2332.1	2429.0	[20000]	ug/L	12:12:23
2	Mg 279.077 IEC†	1532.2	1599.4	[50000]	ug/L	12:12:23
2	Na 589.592 Radial†	64396.0	68969.4	[20000]	ug/L	12:12:03
2	Sc 361.383	834855.9	834855.9	95.710	%	12:13:01
2	Y 371.029	686934.3	686934.3	93.653	%	12:13:01
3	Sc Radial	5033.1	5033.1	94.8	%	12:12:48
3	Y RADIAL	5297.2	5297.2	93.39	%	12:12:48
3	Al 396.153Radial†	64099.4	67647.3	[50000]	ug/L	12:12:28
3	Ca 317.933Radial†	30764.2	32437.5	[50000]	ug/L	12:12:28
3	Fe 238.204 Radial†	2288.3	2404.2	[20000]	ug/L	12:12:48
3	Mg 279.077 IEC†	1507.2	1587.0	[50000]	ug/L	12:12:48
3	Na 589.592 Radial†	62696.9	67767.9	[20000]	ug/L	12:12:28
3	Sc 361.383	839736.7	839736.7	96.270	%	12:13:07
3	Y 371.029	691027.0	691027.0	94.211	%	12:13:07

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	839845.4	5044.77	0.60%	96.282	%
Sc Radial	5032.6	44.92	0.89%	94.8	%
Y 371.029	690925.4	3941.22	0.57%	94.197	%
Y RADIAL	5298.8	50.37	0.95%	93.41	%
Al 396.153Radial†	68633.2	941.39	1.37%	[50000]	ug/L
Ca 317.933Radial†	32883.1	440.13	1.34%	[50000]	ug/L
Fe 238.204 Radial†	2420.1	13.83	0.57%	[20000]	ug/L
Mg 279.077 IEC†	1596.5	8.45	0.53%	[50000]	ug/L
Na 589.592 Radial†	68887.5	1080.99	1.57%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	224.8	0.00000	0.999979	
Al 396.153Radial	3	Lin Thru 0	0.0	1.372	0.00000	0.999993	
As 188.979	3	Lin Thru 0	0.0	2.463	0.00000	0.999991	
B 249.677	3	Lin Thru 0	0.0	45.87	0.00000	0.999902	
Ba 233.527	3	Lin Thru 0	0.0	133.0	0.00000	0.999957	
Be 313.107	3	Lin Thru 0	0.0	2816	0.00000	0.999954	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6580	0.00000	0.999997	
Cd 226.502	3	Lin Thru 0	0.0	94.43	0.00000	0.999970	
Co 228.616	3	Lin Thru 0	0.0	50.97	0.00000	0.999966	
Cr 267.716	3	Lin Thru 0	0.0	93.58	0.00000	0.999953	
Cu 324.752	3	Lin Thru 0	0.0	344.8	0.00000	0.999918	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1213	0.00000	0.999988	
K 766.490 Radial	3	Lin Thru 0	0.0	5.521	0.00000	0.999995	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0320	0.00000	0.999964
Mn 257.610	3	Lin Thru 0	0.0	945.1	0.00000	0.999964
Mo 202.031	3	Lin Thru 0	0.0	14.81	0.00000	0.999990
Na 589.592 Radia	2	Lin Thru 0	0.0	3.431	0.00000	0.999972
Ni 231.604	3	Lin Thru 0	0.0	42.01	0.00000	0.999970
P 214.914	3	Lin Thru 0	0.0	1.737	0.00000	0.999979
Pb 220.353	3	Lin Thru 0	0.0	8.573	0.00000	0.999992
S 181.975 Axial	3	Lin Thru 0	0.0	0.7501	0.00000	0.999995
Sb 206.836	3	Lin Thru 0	0.0	3.025	0.00000	0.999992
Se 196.026	3	Lin Thru 0	0.0	1.643	0.00000	0.999986
Si 251.611	3	Lin Thru 0	0.0	32.66	0.00000	0.999971
Sn 189.927	3	Lin Thru 0	0.0	5.962	0.00000	0.999995
Sr 421.552	3	Lin Thru 0	0.0	158.3	0.00000	0.999959
Ti 334.940	3	Lin Thru 0	0.0	644.1	0.00000	0.999820
Tl 190.801	3	Lin Thru 0	0.0	3.433	0.00000	0.999993
U 409.014	3	Lin Thru 0	0.0	35.19	0.00000	0.999928
V 292.402	3	Lin Thru 0	0.0	153.0	0.00000	0.999934
Zn 213.857	3	Lin Thru 0	0.0	110.6	0.00000	0.999975
SiO2	3	Lin Thru 0	0.0	15.27	0.00000	0.999991

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

Autosampler Location: 9
Date Collected: 1/13/2010 12:15:18
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	5253.8	5253.8	98.9	%			12:17:11
1	Y RADIAL	5554.0	5554.0	97.91	%			12:17:11
1	Al 396.153Radial†	6949.5	7041.1	5107.1	ug/L	5107.1	ppb	12:17:11
1	Ca 317.933Radial†	3337.5	3351.9	5094.1	ug/L	5094.1	ppb	12:17:31
1	Fe 238.204 Radial†	647.6	644.4	5328.3	ug/L	5328.3	ppb	12:17:31
1	K 766.490 Radial†	16606.4	14136.7	2557.1	ug/L	2557.1	ppb	12:17:11
1	Mg 279.077 IEC†	177.3	176.0	5502.4	ug/L	5502.4	ppb	12:17:31
1	Na 589.592 Radial†	7397.5	9094.1	2650.2	ug/L	2650.2	ppb	12:17:11
1	Sr 421.552†	85556.7	86462.6	546.16	ug/L	546.16	ppb	12:17:11
1	Sc 361.383	863908.4	863908.4	99.041	%			12:18:28
1	Y 371.029	717539.0	717539.0	97.825	%			12:18:28
1	Ag 328.068†	57867.0	58048.2	261.58	ug/L	261.58	ppb	12:18:28
1	As 188.979†	1162.2	1196.9	490.27	ug/L	490.27	ppb	12:18:48
1	B 249.677†	23037.6	23897.5	518.67	ug/L	518.67	ppb	12:18:28
1	Ba 233.527†	68279.5	68949.7	519.81	ug/L	519.81	ppb	12:18:28
1	Be 313.107†	720385.3	731687.5	260.99	ug/L	260.99	ppb	12:18:28
1	Cd 226.502†	47645.2	48309.3	511.47	ug/L	511.47	ppb	12:18:28
1	Co 228.616†	25920.0	26249.5	515.17	ug/L	515.17	ppb	12:18:48
1	Cr 267.716†	46065.8	46438.8	496.88	ug/L	496.88	ppb	12:18:28
1	Cu 324.752†	182408.4	177629.2	515.22	ug/L	515.22	ppb	12:18:28
1	Mn 257.610†	483522.1	487725.1	516.37	ug/L	516.37	ppb	12:18:28
1	Mo 202.031†	8074.4	8132.0	549.51	ug/L	549.51	ppb	12:18:48
1	Ni 231.604†	21229.1	21340.5	507.68	ug/L	507.68	ppb	12:18:48
1	P 214.914†	4653.7	4487.3	2482.9	ug/L	2482.9	ppb	12:18:48
1	Pb 220.353†	4307.6	4416.7	516.93	ug/L	516.93	ppb	12:18:48
1	S 181.975 Axial†	1949.7	1924.1	2564.2	ug/L	2564.2	ppb	12:18:48
1	Sb 206.836†	1563.1	1549.0	532.04	ug/L	532.04	ppb	12:18:48
1	Se 196.026†	4341.8	4408.0	2701.4	ug/L	2701.4	ppb	12:18:48
1	Si 251.611†	158850.7	159945.9	4890.2	ug/L	4890.2	ppb	12:18:28
1	Sn 189.927†	3255.8	3286.5	552.09	ug/L	552.09	ppb	12:18:48
1	Ti 334.940†	320352.8	324806.1	504.11	ug/L	504.11	ppb	12:18:28
1	Tl 190.801†	1787.6	1844.4	540.62	ug/L	540.62	ppb	12:18:48
1	U 409.014†	15085.2	17308.7	490.13	ug/L	490.13	ppb	12:18:28
1	V 292.402†	76062.5	78190.2	518.32	ug/L	518.32	ppb	12:18:28
1	Zn 213.857†	58392.1	57961.0	519.56	ug/L	519.56	ppb	12:18:28
1	SiO2†	158437.9	159513.6	10428	ug/L	10428	ppb	12:19:46
2	Sc Radial	5229.9	5229.9	98.5	%			12:17:36
2	Y RADIAL	5517.2	5517.2	97.26	%			12:17:36
2	Al 396.153Radial†	6899.5	7022.3	5093.9	ug/L	5093.9	ppb	12:17:36
2	Ca 317.933Radial†	3311.8	3341.1	5077.7	ug/L	5077.7	ppb	12:17:56
2	Fe 238.204 Radial†	644.0	643.7	5322.0	ug/L	5322.0	ppb	12:17:56
2	K 766.490 Radial†	16577.3	14183.6	2565.7	ug/L	2565.7	ppb	12:17:36
2	Mg 279.077 IEC†	169.6	169.0	5282.9	ug/L	5282.9	ppb	12:17:56
2	Na 589.592 Radial†	7237.9	8966.1	2612.9	ug/L	2612.9	ppb	12:17:36
2	Sr 421.552†	85037.7	86329.4	545.32	ug/L	545.32	ppb	12:17:36
2	Sc 361.383	876629.6	876629.6	100.50	%			12:18:54
2	Y 371.029	727551.7	727551.7	99.191	%			12:18:54
2	Ag 328.068†	57938.6	57271.6	258.10	ug/L	258.10	ppb	12:18:54
2	As 188.979†	1158.8	1176.4	481.96	ug/L	481.96	ppb	12:19:14
2	B 249.677†	23302.9	23823.9	517.09	ug/L	517.09	ppb	12:18:54
2	Ba 233.527†	68634.0	68302.0	514.93	ug/L	514.93	ppb	12:18:54
2	Be 313.107†	722941.5	723675.9	258.14	ug/L	258.14	ppb	12:18:54
2	Cd 226.502†	47791.9	47757.2	505.61	ug/L	505.61	ppb	12:18:54
2	Co 228.616†	25763.6	25714.1	504.65	ug/L	504.65	ppb	12:19:14
2	Cr 267.716†	46205.9	45903.2	491.15	ug/L	491.15	ppb	12:18:54
2	Cu 324.752†	183166.9	175711.3	509.66	ug/L	509.66	ppb	12:18:54
2	Mn 257.610†	486196.0	483301.2	511.69	ug/L	511.69	ppb	12:18:54
2	Mo 202.031†	8045.1	7984.5	539.56	ug/L	539.56	ppb	12:19:14
2	Ni 231.604†	21097.4	20898.4	497.16	ug/L	497.16	ppb	12:19:14

2	P 214.914†	4620.0	4385.6	2425.4 ug/L	2425.4 ppb	12:19:14
2	Pb 220.353†	4269.7	4315.9	505.15 ug/L	505.15 ppb	12:19:14
2	S 181.975 Axial†	1931.4	1877.3	2501.8 ug/L	2501.8 ppb	12:19:14
2	Sb 206.836†	1565.0	1528.0	524.71 ug/L	524.71 ppb	12:19:14
2	Se 196.026†	4342.9	4345.4	2663.3 ug/L	2663.3 ppb	12:19:14
2	Si 251.611†	159609.1	158373.1	4842.1 ug/L	4842.1 ppb	12:18:54
2	Sn 189.927†	3244.8	3227.9	542.25 ug/L	542.25 ppb	12:19:14
2	Ti 334.940†	322000.1	321751.4	499.38 ug/L	499.38 ppb	12:18:54
2	Tl 190.801†	1786.7	1817.3	532.72 ug/L	532.72 ppb	12:19:14
2	U 409.014†	15206.3	17208.2	487.28 ug/L	487.28 ppb	12:18:54
2	V 292.402†	76329.5	77341.3	512.63 ug/L	512.63 ppb	12:18:54
2	Zn 213.857†	58650.2	57362.2	514.22 ug/L	514.22 ppb	12:18:54
2	SiO2†	159020.0	157771.4	10314 ug/L	10314 ppb	12:19:51
3	Sc Radial	5204.3	5204.3	98.0 %		12:18:01
3	Y RADIAL	5567.2	5567.2	98.15 %		12:18:01
3	Al 396.153Radial†	6883.3	7040.3	5106.7 ug/L	5106.7 ppb	12:18:01
3	Ca 317.933Radial†	3312.4	3358.3	5103.8 ug/L	5103.8 ppb	12:18:21
3	Fe 238.204 Radial†	644.0	646.9	5348.6 ug/L	5348.6 ppb	12:18:21
3	K 766.490 Radial†	16517.0	14205.0	2569.5 ug/L	2569.5 ppb	12:18:01
3	Mg 279.077 IEC†	175.7	176.1	5504.7 ug/L	5504.7 ppb	12:18:21
3	Na 589.592 Radial†	7290.8	9056.4	2639.2 ug/L	2639.2 ppb	12:18:01
3	Sr 421.552†	85344.0	87067.6	549.98 ug/L	549.98 ppb	12:18:01
3	Sc 361.383	866589.5	866589.5	99.348 %		12:19:20
3	Y 371.029	719713.6	719713.6	98.122 %		12:19:20
3	Ag 328.068†	57678.5	57677.7	259.92 ug/L	259.92 ppb	12:19:20
3	As 188.979†	1151.2	1182.2	484.30 ug/L	484.30 ppb	12:19:41
3	B 249.677†	23115.9	23904.4	518.82 ug/L	518.82 ppb	12:19:20
3	Ba 233.527†	68344.8	68802.1	518.70 ug/L	518.70 ppb	12:19:20
3	Be 313.107†	719903.8	728952.4	260.02 ug/L	260.02 ppb	12:19:20
3	Cd 226.502†	47472.4	47986.5	508.04 ug/L	508.04 ppb	12:19:20
3	Co 228.616†	25797.7	26045.4	511.16 ug/L	511.16 ppb	12:19:41
3	Cr 267.716†	46058.0	46287.0	495.25 ug/L	495.25 ppb	12:19:20
3	Cu 324.752†	182403.7	177054.6	513.56 ug/L	513.56 ppb	12:19:20
3	Mn 257.610†	483781.3	486475.6	515.04 ug/L	515.04 ppb	12:19:20
3	Mo 202.031†	8041.3	8073.5	545.57 ug/L	545.57 ppb	12:19:41
3	Ni 231.604†	21096.3	21140.5	502.92 ug/L	502.92 ppb	12:19:41
3	P 214.914†	4619.2	4438.0	2454.8 ug/L	2454.8 ppb	12:19:41
3	Pb 220.353†	4297.7	4393.2	514.18 ug/L	514.18 ppb	12:19:41
3	S 181.975 Axial†	1935.0	1903.1	2536.3 ug/L	2536.3 ppb	12:19:41
3	Sb 206.836†	1540.9	1521.8	522.90 ug/L	522.90 ppb	12:19:41
3	Se 196.026†	4325.8	4378.3	2683.5 ug/L	2683.5 ppb	12:19:41
3	Si 251.611†	158714.9	159313.0	4870.8 ug/L	4870.8 ppb	12:19:20
3	Sn 189.927†	3248.2	3268.7	549.10 ug/L	549.10 ppb	12:19:41
3	Ti 334.940†	320492.2	323945.8	502.77 ug/L	502.77 ppb	12:19:20
3	Tl 190.801†	1796.8	1848.1	541.69 ug/L	541.69 ppb	12:19:41
3	U 409.014†	15253.7	17431.2	493.61 ug/L	493.61 ppb	12:19:20
3	V 292.402†	76027.9	77917.7	516.49 ug/L	516.49 ppb	12:19:20
3	Zn 213.857†	58268.0	57653.6	516.81 ug/L	516.81 ppb	12:19:20
3	SiO2†	158914.5	159498.4	10427 ug/L	10427 ppb	12:19:57

Mean Data: ICV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	869042.5	99.629	%	0.7688				0.77%
Sc Radial	5229.3	98.5	%	0.47				0.47%
Y 371.029	721601.4	98.379	%	0.7180				0.73%
Y RADIAL	5546.1	97.77	%	0.457				0.47%
Ag 328.068†	57665.8	259.87	ug/L	1.739	259.87	ppb	1.739	0.67%
QC value within limits for Ag 328.068 Recovery = 103.95%								
Al 396.153Radial†	7034.6	5102.5	ug/L	7.52	5102.5	ppb	7.52	0.15%
QC value within limits for Al 396.153Radial Recovery = 102.05%								
As 188.979†	1185.2	485.51	ug/L	4.282	485.51	ppb	4.282	0.88%
QC value within limits for As 188.979 Recovery = 97.10%								
B 249.677†	23875.3	518.19	ug/L	0.957	518.19	ppb	0.957	0.18%
QC value within limits for B 249.677 Recovery = 103.64%								
Ba 233.527†	68684.6	517.82	ug/L	2.559	517.82	ppb	2.559	0.49%
QC value within limits for Ba 233.527 Recovery = 103.56%								
Be 313.107†	728105.3	259.72	ug/L	1.452	259.72	ppb	1.452	0.56%
QC value within limits for Be 313.107 Recovery = 103.89%								
Ca 317.933Radial†	3350.5	5091.8	ug/L	13.20	5091.8	ppb	13.20	0.26%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.84%
Cd 226.502†            48017.7      508.37 ug/L         2.941      508.37 ppb          2.941   0.58%
   QC value within limits for Cd 226.502  Recovery = 101.67%
Co 228.616†            26003.0      510.33 ug/L         5.308      510.33 ppb          5.308   1.04%
   QC value within limits for Co 228.616  Recovery = 102.07%
Cr 267.716†            46209.7      494.42 ug/L         2.953      494.42 ppb          2.953   0.60%
   QC value within limits for Cr 267.716  Recovery = 98.88%
Cu 324.752†           176798.4      512.81 ug/L         2.854      512.81 ppb          2.854   0.56%
   QC value within limits for Cu 324.752  Recovery = 102.56%
Fe 238.204 Radial†       645.0      5332.9 ug/L        13.92      5332.9 ppb         13.92   0.26%
   QC value within limits for Fe 238.204 Radial  Recovery = 106.66%
K 766.490 Radial†      14175.1      2564.1 ug/L         6.34      2564.1 ppb          6.34   0.25%
   QC value within limits for K 766.490 Radial  Recovery = 102.56%
Mg 279.077 IEC†          173.7      5430.0 ug/L       127.41      5430.0 ppb        127.41   2.35%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.60%
Mn 257.610†           485833.9      514.37 ug/L         2.409      514.37 ppb          2.409   0.47%
   QC value within limits for Mn 257.610  Recovery = 102.87%
Mo 202.031†             8063.3      544.88 ug/L         5.014      544.88 ppb          5.014   0.92%
   QC value within limits for Mo 202.031  Recovery = 108.98%
Na 589.592 Radial†      9038.9      2634.1 ug/L        19.17      2634.1 ppb         19.17   0.73%
   QC value within limits for Na 589.592 Radial  Recovery = 105.36%
Ni 231.604†            21126.5      502.59 ug/L         5.266      502.59 ppb          5.266   1.05%
   QC value within limits for Ni 231.604  Recovery = 100.52%
P 214.914†              4437.0      2454.4 ug/L        28.78      2454.4 ppb         28.78   1.17%
   QC value within limits for P 214.914  Recovery = 98.18%
Pb 220.353†             4375.3      512.09 ug/L         6.165      512.09 ppb          6.165   1.20%
   QC value within limits for Pb 220.353  Recovery = 102.42%
S 181.975 Axial†        1901.5      2534.1 ug/L        31.28      2534.1 ppb         31.28   1.23%
   QC value within limits for S 181.975 Axial  Recovery = 101.36%
Sb 206.836†             1532.9      526.55 ug/L         4.837      526.55 ppb          4.837   0.92%
   QC value within limits for Sb 206.836  Recovery = 105.31%
Se 196.026†             4377.2      2682.7 ug/L        19.06      2682.7 ppb         19.06   0.71%
   QC value within limits for Se 196.026  Recovery = 107.31%
Si 251.611†           159210.6      4867.7 ug/L        24.17      4867.7 ppb         24.17   0.50%
   QC value within limits for Si 251.611  Recovery = 97.35%
Sn 189.927†             3261.1      547.82 ug/L         5.041      547.82 ppb          5.041   0.92%
   QC value within limits for Sn 189.927  Recovery = 109.56%
Sr 421.552†            86619.9      547.15 ug/L         2.485      547.15 ppb          2.485   0.45%
   QC value within limits for Sr 421.552  Recovery = 109.43%
Ti 334.940†           323501.1      502.09 ug/L         2.435      502.09 ppb          2.435   0.48%
   QC value within limits for Ti 334.940  Recovery = 100.42%
Tl 190.801†             1836.6      538.34 ug/L         4.901      538.34 ppb          4.901   0.91%
   QC value within limits for Tl 190.801  Recovery = 107.67%
U 409.014†             17316.0      490.34 ug/L         3.169      490.34 ppb          3.169   0.65%
   QC value within limits for U 409.014  Recovery = 98.07%
V 292.402†             77816.4      515.82 ug/L         2.905      515.82 ppb          2.905   0.56%
   QC value within limits for V 292.402  Recovery = 103.16%
Zn 213.857†            57658.9      516.87 ug/L         2.670      516.87 ppb          2.670   0.52%
   QC value within limits for Zn 213.857  Recovery = 103.37%
SiO2†                 158927.8       10390 ug/L        65.4       10390 ppb           65.4   0.63%
   QC value within limits for SiO2  Recovery = 97.15%
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: 1/13/2010 12:22:08
Data Type: Original
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 Radial	5273.1	5273.1	99.3	%			12:24:01
1	Y RADIAL	5597.9	5597.9	98.69	%			12:24:01
1	Al 396.153Radial†	-3.7	13.0	9.4573	ug/L	9.4573	ppb	12:24:01
1	Ca 317.933Radial†	13.6	-7.9	-11.975	ug/L	-11.975	ppb	12:24:21
1	Fe 238.204 Radial†	8.6	-1.6	-12.822	ug/L	-12.822	ppb	12:24:21
1	K 766.490 Radial†	2585.5	-44.9	-8.1355	ug/L	-8.1355	ppb	12:24:01
1	Mg 279.077 IEC†	2.1	-1.1	-34.780	ug/L	-34.780	ppb	12:24:21
1	Na 589.592 Radial†	-1538.1	68.0	19.822	ug/L	19.822	ppb	12:24:01
1	Sr 421.552†	-4.0	-19.8	-0.1247	ug/L	-0.1247	ppb	12:24:01
1	Sc 361.383	857382.9	857382.9	98.293	%			12:25:17
1	Y 371.029	720847.0	720847.0	98.276	%			12:25:17
1	Ag 328.068†	369.2	-3.6	-0.0201	ug/L	-0.0201	ppb	12:25:17
1	As 188.979†	-27.5	-4.5	-1.8414	ug/L	-1.8414	ppb	12:25:38
1	B 249.677†	-294.6	337.0	7.3495	ug/L	7.3495	ppb	12:25:38
1	Ba 233.527†	-0.1	8.7	0.0643	ug/L	0.0643	ppb	12:25:38
1	Be 313.107†	-4277.1	-27.0	-0.0100	ug/L	-0.0100	ppb	12:25:17
1	Cd 226.502†	-171.8	27.9	0.2962	ug/L	0.2962	ppb	12:25:38
1	Co 228.616†	-69.0	8.2	0.1631	ug/L	0.1631	ppb	12:25:38
1	Cr 267.716†	83.5	11.7	0.1252	ug/L	0.1252	ppb	12:25:38
1	Cu 324.752†	6458.0	24.2	0.0703	ug/L	0.0703	ppb	12:25:17
1	Mn 257.610†	425.7	-47.3	-0.0499	ug/L	-0.0499	ppb	12:25:38
1	Mo 202.031†	27.4	7.3	0.4931	ug/L	0.4931	ppb	12:25:38
1	Ni 231.604†	104.9	12.5	0.2967	ug/L	0.2967	ppb	12:25:38
1	P 214.914†	223.5	15.9	9.1567	ug/L	9.1567	ppb	12:25:38
1	Pb 220.353†	-57.4	8.9	1.0464	ug/L	1.0464	ppb	12:25:38
1	S 181.975 Axial†	46.4	2.7	3.5907	ug/L	3.5907	ppb	12:25:38
1	Sb 206.836†	37.0	8.4	2.8002	ug/L	2.8002	ppb	12:25:38
1	Se 196.026†	-27.5	-3.9	-2.3839	ug/L	-2.3839	ppb	12:25:38
1	Si 251.611†	445.2	9.5	0.2835	ug/L	0.2835	ppb	12:25:38
1	Sn 189.927†	5.9	5.2	0.8774	ug/L	0.8774	ppb	12:25:38
1	Ti 334.940†	-1435.2	-109.8	-0.1686	ug/L	-0.1686	ppb	12:25:17
1	Tl 190.801†	-39.2	-0.4	-0.1257	ug/L	-0.1257	ppb	12:25:38
1	U 409.014†	-2090.0	-48.9	-1.3874	ug/L	-1.3874	ppb	12:25:17
1	V 292.402†	-1408.9	-42.5	-0.2718	ug/L	-0.2718	ppb	12:25:17
1	Zn 213.857†	662.4	-322.8	-2.9189	ug/L	-2.9189	ppb	12:25:38
1	SiO2†	467.5	16.7	1.0800	ug/L	1.0800	ppb	12:26:33
2	Sc Radial	5173.9	5173.9	97.4	%			12:24:26
2	Y RADIAL	5519.7	5519.7	97.31	%			12:24:26
2	Al 396.153Radial†	-8.3	8.2	5.9885	ug/L	5.9885	ppb	12:24:26
2	Ca 317.933Radial†	16.2	-4.9	-7.4356	ug/L	-7.4356	ppb	12:24:46
2	Fe 238.204 Radial†	7.1	-2.9	-23.763	ug/L	-23.763	ppb	12:24:46
2	K 766.490 Radial†	2645.6	66.7	12.080	ug/L	12.080	ppb	12:24:26
2	Mg 279.077 IEC†	3.2	0.1	1.9096	ug/L	1.9096	ppb	12:24:46
2	Na 589.592 Radial†	-1533.5	43.1	12.552	ug/L	12.552	ppb	12:24:26
2	Sr 421.552†	26.3	11.3	0.0712	ug/L	0.0712	ppb	12:24:26
2	Sc 361.383	867968.0	867968.0	99.506	%			12:25:43
2	Y 371.029	728258.3	728258.3	99.287	%			12:25:43
2	Ag 328.068†	388.4	11.0	0.0417	ug/L	0.0417	ppb	12:25:43
2	As 188.979†	-23.2	0.1	0.0329	ug/L	0.0329	ppb	12:26:03
2	B 249.677†	-279.5	355.9	7.7618	ug/L	7.7618	ppb	12:26:03
2	Ba 233.527†	-6.3	2.5	0.0178	ug/L	0.0178	ppb	12:26:03
2	Be 313.107†	-4405.0	-102.4	-0.0361	ug/L	-0.0361	ppb	12:25:43
2	Cd 226.502†	-190.6	11.0	0.1192	ug/L	0.1192	ppb	12:26:03
2	Co 228.616†	-72.7	5.4	0.1061	ug/L	0.1061	ppb	12:26:03
2	Cr 267.716†	92.6	19.8	0.2115	ug/L	0.2115	ppb	12:26:03
2	Cu 324.752†	6571.6	58.3	0.1683	ug/L	0.1683	ppb	12:25:43
2	Mn 257.610†	418.4	-59.9	-0.0658	ug/L	-0.0658	ppb	12:26:03
2	Mo 202.031†	27.4	6.9	0.4671	ug/L	0.4671	ppb	12:26:03
2	Ni 231.604†	103.7	10.0	0.2379	ug/L	0.2379	ppb	12:26:03

2	P 214.914†	213.0	2.6	1.4834 ug/L	1.4834 ppb	12:26:03
2	Pb 220.353†	-78.5	-11.6	-1.3479 ug/L	-1.3479 ppb	12:26:03
2	S 181.975 Axial†	55.2	11.0	14.649 ug/L	14.649 ppb	12:26:03
2	Sb 206.836†	42.0	13.0	4.3141 ug/L	4.3141 ppb	12:26:03
2	Se 196.026†	-31.8	-7.9	-4.8611 ug/L	-4.8611 ppb	12:26:03
2	Si 251.611†	459.6	18.4	0.5589 ug/L	0.5589 ppb	12:26:03
2	Sn 189.927†	0.8	0.1	0.0069 ug/L	0.0069 ppb	12:26:03
2	Ti 334.940†	-1274.7	69.4	0.1069 ug/L	0.1069 ppb	12:25:43
2	Tl 190.801†	-29.2	10.2	2.9592 ug/L	2.9592 ppb	12:26:03
2	U 409.014†	-2101.8	-34.8	-0.9871 ug/L	-0.9871 ppb	12:25:43
2	V 292.402†	-1408.3	-24.4	-0.1512 ug/L	-0.1512 ppb	12:25:43
2	Zn 213.857†	667.6	-325.8	-2.9449 ug/L	-2.9449 ppb	12:26:03
2	SiO2†	494.1	37.6	2.4497 ug/L	2.4497 ppb	12:26:39
3	Sc Radial	5188.3	5188.3	97.7 %		12:24:51
3	Y RADIAL	5530.9	5530.9	97.51 %		12:24:51
3	Al 396.153Radial†	-18.1	-1.8	-1.3325 ug/L	-1.3325 ppb	12:24:51
3	Ca 317.933Radial†	13.6	-7.6	-11.560 ug/L	-11.560 ppb	12:25:11
3	Fe 238.204 Radial†	10.9	1.0	7.8535 ug/L	7.8535 ppb	12:25:11
3	K 766.490 Radial†	2665.7	79.8	14.466 ug/L	14.466 ppb	12:24:51
3	Mg 279.077 IEC†	2.4	-0.8	-25.148 ug/L	-25.148 ppb	12:25:11
3	Na 589.592 Radial†	-1598.0	-18.6	-5.4291 ug/L	-5.4291 ppb	12:24:51
3	Sr 421.552†	9.3	-6.2	-0.0393 ug/L	-0.0393 ppb	12:24:51
3	Sc 361.383	864175.6	864175.6	99.071 %		12:26:08
3	Y 371.029	728076.3	728076.3	99.262 %		12:26:08
3	Ag 328.068†	387.0	11.4	0.0507 ug/L	0.0507 ppb	12:26:08
3	As 188.979†	-26.8	-3.6	-1.4808 ug/L	-1.4808 ppb	12:26:28
3	B 249.677†	-280.2	354.0	7.7161 ug/L	7.7161 ppb	12:26:28
3	Ba 233.527†	-10.3	-1.6	-0.0127 ug/L	-0.0127 ppb	12:26:28
3	Be 313.107†	-4336.3	-52.5	-0.0189 ug/L	-0.0189 ppb	12:26:08
3	Cd 226.502†	-193.5	7.3	0.0770 ug/L	0.0770 ppb	12:26:28
3	Co 228.616†	-72.5	5.2	0.1030 ug/L	0.1030 ppb	12:26:28
3	Cr 267.716†	77.3	4.8	0.0501 ug/L	0.0501 ppb	12:26:28
3	Cu 324.752†	6555.4	70.9	0.2051 ug/L	0.2051 ppb	12:26:08
3	Mn 257.610†	403.4	-73.2	-0.0757 ug/L	-0.0757 ppb	12:26:28
3	Mo 202.031†	26.3	6.0	0.4029 ug/L	0.4029 ppb	12:26:28
3	Ni 231.604†	90.5	-2.9	-0.0693 ug/L	-0.0693 ppb	12:26:28
3	P 214.914†	213.6	4.1	2.3023 ug/L	2.3023 ppb	12:26:28
3	Pb 220.353†	-74.7	-8.0	-0.9377 ug/L	-0.9377 ppb	12:26:28
3	S 181.975 Axial†	50.5	6.4	8.5637 ug/L	8.5637 ppb	12:26:28
3	Sb 206.836†	41.7	12.9	4.2775 ug/L	4.2775 ppb	12:26:28
3	Se 196.026†	-36.6	-12.8	-7.7918 ug/L	-7.7918 ppb	12:26:28
3	Si 251.611†	467.3	28.2	0.8580 ug/L	0.8580 ppb	12:26:28
3	Sn 189.927†	5.4	4.7	0.7845 ug/L	0.7845 ppb	12:26:28
3	Ti 334.940†	-1403.7	-66.5	-0.1035 ug/L	-0.1035 ppb	12:26:08
3	Tl 190.801†	-33.8	5.3	1.5556 ug/L	1.5556 ppb	12:26:28
3	U 409.014†	-2002.4	56.2	1.5960 ug/L	1.5960 ppb	12:26:08
3	V 292.402†	-1429.7	-52.2	-0.3337 ug/L	-0.3337 ppb	12:26:08
3	Zn 213.857†	640.4	-350.3	-3.1674 ug/L	-3.1674 ppb	12:26:28
3	SiO2†	471.9	17.4	1.1263 ug/L	1.1263 ppb	12:26:44

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	863175.5	98.957	%	0.6148				0.62%
Sc Radial	5211.8	98.1	%	1.01				1.03%
Y 371.029	725727.2	98.942	%	0.5763				0.58%
Y RADIAL	5549.5	97.83	%	0.745				0.76%
Ag 328.068†	6.3	0.0241	ug/L	0.03855	0.0241	ppb	0.03855	159.96%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	6.5	4.7044	ug/L	5.50831	4.7044	ppb	5.50831	117.09%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.7	-1.0964	ug/L	0.99448	-1.0964	ppb	0.99448	90.70%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	349.0	7.6091	ug/L	0.22604	7.6091	ppb	0.22604	2.97%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	3.2	0.0232	ug/L	0.03878	0.0232	ppb	0.03878	167.45%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-60.6	-0.0217	ug/L	0.01330	-0.0217	ppb	0.01330	61.40%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-6.8	-10.324	ug/L	2.5097	-10.324	ppb	2.5097	24.31%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              15.4      0.1641 ug/L       0.11630      0.1641 ppb        0.11630  70.85%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               6.3      0.1241 ug/L       0.03387      0.1241 ppb        0.03387  27.30%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              12.1      0.1289 ug/L       0.08079      0.1289 ppb        0.08079  62.65%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              51.1      0.1479 ug/L       0.06966      0.1479 ppb        0.06966  47.11%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -1.2     -9.5772 ug/L      16.05606     -9.5772 ppb       16.05606 167.65%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        33.9      6.1366 ug/L      12.41748      6.1366 ppb       12.41748 202.35%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.6    -19.340 ug/L       19.0222     -19.340 ppb        19.0222  98.36%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             -60.2     -0.0638 ug/L       0.01302     -0.0638 ppb        0.01302  20.40%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               6.7      0.4544 ug/L       0.04643      0.4544 ppb        0.04643  10.22%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       30.8      8.9816 ug/L      12.99870      8.9816 ppb       12.99870 144.73%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               6.5      0.1551 ug/L       0.19657      0.1551 ppb        0.19657 126.74%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                7.5      4.3141 ug/L       4.21375      4.3141 ppb        4.21375  97.67%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -3.6     -0.4130 ug/L       1.28047     -0.4130 ppb        1.28047 310.02%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          6.7      8.9343 ug/L       5.53820      8.9343 ppb        5.53820  61.99%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              11.4      3.7973 ug/L       0.86368      3.7973 ppb        0.86368  22.74%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -8.2     -5.0123 ug/L       2.70712     -5.0123 ppb        2.70712  54.01%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              18.7      0.5668 ug/L       0.28732      0.5668 ppb        0.28732  50.69%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               3.3      0.5563 ug/L       0.47802      0.5563 ppb        0.47802  85.94%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -4.9     -0.0309 ug/L       0.09820     -0.0309 ppb        0.09820 317.71%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -35.6     -0.0550 ug/L       0.14401     -0.0550 ppb        0.14401 261.62%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               5.0      1.4630 ug/L       1.54454      1.4630 ppb        1.54454 105.57%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -9.2     -0.2595 ug/L       1.61933     -0.2595 ppb        1.61933 624.06%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -39.7     -0.2523 ug/L       0.09280     -0.2523 ppb        0.09280  36.79%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            -333.0     -3.0104 ug/L       0.13658     -3.0104 ppb        0.13658   4.54%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    23.9      1.5520 ug/L       0.77779      1.5520 ppb        0.77779  50.12%
   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: 1/13/2010 12:28:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5261.4	5261.4	99.1	%			12:30:47
1	Y RADIAL	5593.4	5593.4	98.61	%			12:30:47
1	Al 396.153Radial†	250.6	269.7	196.22	ug/L	196.22	ppb	12:30:47
1	Ca 317.933Radial†	149.3	129.1	196.23	ug/L	196.23	ppb	12:31:07
1	Fe 238.204 Radial†	23.1	13.1	108.23	ug/L	108.23	ppb	12:31:07
1	K 766.490 Radial†	3519.9	904.0	163.55	ug/L	163.55	ppb	12:30:47
1	Mg 279.077 IEC†	11.7	8.6	269.05	ug/L	269.05	ppb	12:31:07
1	Na 589.592 Radial†	-577.7	1033.9	301.31	ug/L	301.31	ppb	12:30:47
1	Sr 421.552†	734.2	725.3	4.5804	ug/L	4.5804	ppb	12:30:47
1	Sc 361.383	869801.6	869801.6	99.716	%			12:32:04
1	Y 371.029	730718.7	730718.7	99.622	%			12:32:04
1	Ag 328.068†	1431.7	1056.5	4.7088	ug/L	4.7088	ppb	12:32:04
1	As 188.979†	44.4	68.0	27.643	ug/L	27.643	ppb	12:32:24
1	B 249.677†	1759.0	2400.8	52.309	ug/L	52.309	ppb	12:32:04
1	Ba 233.527†	662.7	673.4	5.0784	ug/L	5.0784	ppb	12:32:24
1	Be 313.107†	9219.0	13569.7	4.8302	ug/L	4.8302	ppb	12:32:04
1	Cd 226.502†	264.1	467.5	4.9526	ug/L	4.9526	ppb	12:32:24
1	Co 228.616†	172.6	251.5	4.9433	ug/L	4.9433	ppb	12:32:24
1	Cr 267.716†	536.4	464.7	4.9538	ug/L	4.9538	ppb	12:32:24
1	Cu 324.752†	9905.6	3387.8	9.8025	ug/L	9.8025	ppb	12:32:04
1	Mn 257.610†	10136.1	9684.5	10.247	ug/L	10.247	ppb	12:32:04
1	Mo 202.031†	149.8	129.7	8.7659	ug/L	8.7659	ppb	12:32:24
1	Ni 231.604†	291.4	198.0	4.7099	ug/L	4.7099	ppb	12:32:24
1	P 214.914†	487.0	276.8	157.47	ug/L	157.47	ppb	12:32:24
1	Pb 220.353†	20.3	87.7	10.277	ug/L	10.277	ppb	12:32:24
1	S 181.975 Axial†	119.0	74.8	99.710	ug/L	99.710	ppb	12:32:24
1	Sb 206.836†	64.6	35.6	12.113	ug/L	12.113	ppb	12:32:24
1	Se 196.026†	13.5	37.7	23.306	ug/L	23.306	ppb	12:32:24
1	Si 251.611†	3532.5	3099.1	94.774	ug/L	94.774	ppb	12:32:24
1	Sn 189.927†	63.8	63.2	10.636	ug/L	10.636	ppb	12:32:24
1	Ti 334.940†	1805.0	3160.5	4.8859	ug/L	4.8859	ppb	12:32:04
1	Tl 190.801†	31.7	71.3	20.817	ug/L	20.817	ppb	12:32:24
1	U 409.014†	-205.5	1871.4	53.153	ug/L	53.153	ppb	12:32:04
1	V 292.402†	-653.6	735.4	5.0143	ug/L	5.0143	ppb	12:32:04
1	Zn 213.857†	1763.3	771.6	6.9221	ug/L	6.9221	ppb	12:32:24
1	SiO2†	3660.8	3212.3	210.07	ug/L	210.07	ppb	12:33:21
2	Sc Radial	5161.4	5161.4	97.2	%			12:31:13
2	Y RADIAL	5544.1	5544.1	97.74	%			12:31:13
2	Al 396.153Radial†	250.2	274.2	199.41	ug/L	199.41	ppb	12:31:13
2	Ca 317.933Radial†	149.9	132.6	201.56	ug/L	201.56	ppb	12:31:33
2	Fe 238.204 Radial†	22.0	12.5	103.05	ug/L	103.05	ppb	12:31:33
2	K 766.490 Radial†	3484.7	936.6	169.46	ug/L	169.46	ppb	12:31:13
2	Mg 279.077 IEC†	10.0	7.0	220.10	ug/L	220.10	ppb	12:31:33
2	Na 589.592 Radial†	-572.7	1027.8	299.51	ug/L	299.51	ppb	12:31:13
2	Sr 421.552†	775.2	781.8	4.9374	ug/L	4.9374	ppb	12:31:13
2	Sc 361.383	860809.8	860809.8	98.685	%			12:32:30
2	Y 371.029	723025.5	723025.5	98.573	%			12:32:30
2	Ag 328.068†	1427.5	1067.3	4.7568	ug/L	4.7568	ppb	12:32:30
2	As 188.979†	43.2	67.2	27.320	ug/L	27.320	ppb	12:32:50
2	B 249.677†	1775.8	2436.2	53.083	ug/L	53.083	ppb	12:32:30
2	Ba 233.527†	651.0	668.5	5.0407	ug/L	5.0407	ppb	12:32:50
2	Be 313.107†	9106.7	13552.4	4.8240	ug/L	4.8240	ppb	12:32:30
2	Cd 226.502†	253.2	459.1	4.8649	ug/L	4.8649	ppb	12:32:50
2	Co 228.616†	162.3	242.9	4.7767	ug/L	4.7767	ppb	12:32:50
2	Cr 267.716†	524.8	458.6	4.8893	ug/L	4.8893	ppb	12:32:50
2	Cu 324.752†	9856.5	3441.8	9.9608	ug/L	9.9608	ppb	12:32:30
2	Mn 257.610†	10038.2	9691.6	10.256	ug/L	10.256	ppb	12:32:30
2	Mo 202.031†	163.2	144.8	9.7851	ug/L	9.7851	ppb	12:32:50
2	Ni 231.604†	317.9	228.0	5.4233	ug/L	5.4233	ppb	12:32:50

2	P 214.914†	470.1	264.8	150.52 ug/L	150.52 ppb	12:32:50
2	Pb 220.353†	15.1	82.6	9.6901 ug/L	9.6901 ppb	12:32:50
2	S 181.975 Axial†	122.2	79.3	105.75 ug/L	105.75 ppb	12:32:50
2	Sb 206.836†	60.6	32.1	10.986 ug/L	10.986 ppb	12:32:50
2	Se 196.026†	23.8	48.2	29.732 ug/L	29.732 ppb	12:32:50
2	Si 251.611†	3500.2	3103.4	94.894 ug/L	94.894 ppb	12:32:50
2	Sn 189.927†	61.5	61.6	10.362 ug/L	10.362 ppb	12:32:50
2	Ti 334.940†	1751.1	3124.8	4.8366 ug/L	4.8366 ppb	12:32:30
2	Tl 190.801†	32.6	72.5	21.180 ug/L	21.180 ppb	12:32:50
2	U 409.014†	-315.0	1758.2	49.939 ug/L	49.939 ppb	12:32:30
2	V 292.402†	-681.5	700.3	4.7931 ug/L	4.7931 ppb	12:32:30
2	Zn 213.857†	1748.5	775.1	6.9490 ug/L	6.9490 ppb	12:32:50
2	SiO2†	3612.2	3201.4	209.32 ug/L	209.32 ppb	12:33:26
3	Sc Radial	5286.0	5286.0	99.5 %		12:31:38
3	Y RADIAL	5616.9	5616.9	99.02 %		12:31:38
3	Al 396.153Radial†	277.9	295.9	215.28 ug/L	215.28 ppb	12:31:38
3	Ca 317.933Radial†	146.5	125.6	190.94 ug/L	190.94 ppb	12:31:58
3	Fe 238.204 Radial†	21.3	11.2	92.767 ug/L	92.767 ppb	12:31:58
3	K 766.490 Radial†	3493.6	861.0	155.77 ug/L	155.77 ppb	12:31:38
3	Mg 279.077 IEC†	13.3	10.2	317.64 ug/L	317.64 ppb	12:31:58
3	Na 589.592 Radial†	-520.8	1093.8	318.76 ug/L	318.76 ppb	12:31:38
3	Sr 421.552†	792.9	780.8	4.9310 ug/L	4.9310 ppb	12:31:38
3	Sc 361.383	869332.4	869332.4	99.663 %		12:32:55
3	Y 371.029	731378.3	731378.3	99.712 %		12:32:55
3	Ag 328.068†	1403.8	1029.2	4.5837 ug/L	4.5837 ppb	12:32:55
3	As 188.979†	50.2	73.8	29.997 ug/L	29.997 ppb	12:33:15
3	B 249.677†	1714.8	2357.3	51.364 ug/L	51.364 ppb	12:32:55
3	Ba 233.527†	659.7	670.8	5.0576 ug/L	5.0576 ppb	12:33:15
3	Be 313.107†	9297.7	13653.6	4.8599 ug/L	4.8599 ppb	12:32:55
3	Cd 226.502†	276.5	480.0	5.0869 ug/L	5.0869 ppb	12:33:15
3	Co 228.616†	172.3	251.3	4.9423 ug/L	4.9423 ppb	12:33:15
3	Cr 267.716†	529.6	458.2	4.8842 ug/L	4.8842 ppb	12:33:15
3	Cu 324.752†	9994.5	3482.4	10.077 ug/L	10.077 ppb	12:32:55
3	Mn 257.610†	10070.9	9624.6	10.180 ug/L	10.180 ppb	12:32:55
3	Mo 202.031†	166.9	146.9	9.9290 ug/L	9.9290 ppb	12:33:15
3	Ni 231.604†	288.2	194.9	4.6375 ug/L	4.6375 ppb	12:33:15
3	P 214.914†	485.5	275.7	156.75 ug/L	156.75 ppb	12:33:15
3	Pb 220.353†	31.0	98.4	11.540 ug/L	11.540 ppb	12:33:15
3	S 181.975 Axial†	125.3	81.2	108.24 ug/L	108.24 ppb	12:33:15
3	Sb 206.836†	61.8	32.8	11.202 ug/L	11.202 ppb	12:33:15
3	Se 196.026†	20.8	45.0	27.755 ug/L	27.755 ppb	12:33:15
3	Si 251.611†	3527.9	3096.4	94.677 ug/L	94.677 ppb	12:33:15
3	Sn 189.927†	62.2	61.6	10.364 ug/L	10.364 ppb	12:33:15
3	Ti 334.940†	1754.9	3111.2	4.8056 ug/L	4.8056 ppb	12:32:55
3	Tl 190.801†	29.6	69.2	20.201 ug/L	20.201 ppb	12:33:15
3	U 409.014†	-264.8	1811.7	51.459 ug/L	51.459 ppb	12:32:55
3	V 292.402†	-663.4	725.2	4.9641 ug/L	4.9641 ppb	12:32:55
3	Zn 213.857†	1755.8	765.0	6.8638 ug/L	6.8638 ppb	12:33:15
3	SiO2†	3692.6	3246.1	212.25 ug/L	212.25 ppb	12:33:31

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	866647.9	99.355	%	0.5803				0.58%
Sc Radial	5236.3	98.6	%	1.24				1.26%
Y 371.029	728374.2	99.303	%	0.6331				0.64%
Y RADIAL	5584.8	98.46	%	0.654				0.66%
Ag 328.068†	1051.0	4.6831	ug/L	0.08935	4.6831	ppb	0.08935	1.91%
QC value within limits for Ag 328.068 Recovery = 93.66%								
Al 396.153Radial†	279.9	203.64	ug/L	10.211	203.64	ppb	10.211	5.01%
QC value within limits for Al 396.153Radial Recovery = 101.82%								
As 188.979†	69.6	28.320	ug/L	1.4614	28.320	ppb	1.4614	5.16%
QC value within limits for As 188.979 Recovery = 94.40%								
B 249.677†	2398.1	52.252	ug/L	0.8609	52.252	ppb	0.8609	1.65%
QC value within limits for B 249.677 Recovery = 104.50%								
Ba 233.527†	670.9	5.0589	ug/L	0.01888	5.0589	ppb	0.01888	0.37%
QC value within limits for Ba 233.527 Recovery = 101.18%								
Be 313.107†	13591.9	4.8380	ug/L	0.01917	4.8380	ppb	0.01917	0.40%
QC value within limits for Be 313.107 Recovery = 96.76%								
Ca 317.933Radial†	129.1	196.24	ug/L	5.309	196.24	ppb	5.309	2.71%

```
   QC value within limits for Ca 317.933Radial  Recovery = 98.12%
Cd 226.502†              468.9      4.9681 ug/L       0.11179      4.9681 ppb        0.11179   2.25%
   QC value within limits for Cd 226.502  Recovery = 99.36%
Co 228.616†              248.6      4.8874 ug/L       0.09592      4.8874 ppb        0.09592   1.96%
   QC value within limits for Co 228.616  Recovery = 97.75%
Cr 267.716†              460.5      4.9091 ug/L       0.03883      4.9091 ppb        0.03883   0.79%
   QC value within limits for Cr 267.716  Recovery = 98.18%
Cu 324.752†             3437.3      9.9468 ug/L       0.13779      9.9468 ppb        0.13779   1.39%
   QC value within limits for Cu 324.752  Recovery = 99.47%
Fe 238.204 Radial†        12.3      101.35 ug/L         7.871      101.35 ppb          7.871   7.77%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.35%
K 766.490 Radial†        900.5      162.93 ug/L         6.867      162.93 ppb          6.867   4.21%
   QC value within limits for K 766.490 Radial  Recovery = 108.62%
Mg 279.077 IEC†           8.6       268.93 ug/L        48.774      268.93 ppb         48.774  18.14%
   QC value within limits for Mg 279.077 IEC  Recovery = 89.64%
Mn 257.610†             9666.9      10.228 ug/L        0.0415      10.228 ppb         0.0415   0.41%
   QC value within limits for Mn 257.610  Recovery = 102.28%
Mo 202.031†              140.5      9.4933 ug/L       0.63407      9.4933 ppb        0.63407   6.68%
   QC value within limits for Mo 202.031  Recovery = 94.93%
Na 589.592 Radial†      1051.8      306.53 ug/L        10.630      306.53 ppb         10.630   3.47%
   QC value within limits for Na 589.592 Radial  Recovery = 102.18%
Ni 231.604†              207.0      4.9236 ug/L       0.43427      4.9236 ppb        0.43427   8.82%
   QC value within limits for Ni 231.604  Recovery = 98.47%
P 214.914†               272.4      154.92 ug/L         3.822      154.92 ppb          3.822   2.47%
   QC value within limits for P 214.914  Recovery = 103.28%
Pb 220.353†               89.6      10.502 ug/L        0.9453      10.502 ppb         0.9453   9.00%
   QC value within limits for Pb 220.353  Recovery = 105.02%
S 181.975 Axial†          78.5      104.57 ug/L         4.386      104.57 ppb          4.386   4.19%
   QC value within limits for S 181.975 Axial  Recovery = 104.57%
Sb 206.836†               33.5      11.433 ug/L        0.5980      11.433 ppb         0.5980   5.23%
   QC value within limits for Sb 206.836  Recovery = 114.33%
Se 196.026†               43.7      26.931 ug/L        3.2914      26.931 ppb         3.2914  12.22%
   QC value within limits for Se 196.026  Recovery = 89.77%
Si 251.611†             3099.6      94.782 ug/L        0.1089      94.782 ppb         0.1089   0.11%
   QC value within limits for Si 251.611  Recovery = 94.78%
Sn 189.927†               62.1      10.454 ug/L        0.1574      10.454 ppb         0.1574   1.51%
   QC value within limits for Sn 189.927  Recovery = 104.54%
Sr 421.552†              762.6      4.8163 ug/L       0.20430      4.8163 ppb        0.20430   4.24%
   QC value within limits for Sr 421.552  Recovery = 96.33%
Ti 334.940†             3132.2      4.8427 ug/L       0.04053      4.8427 ppb        0.04053   0.84%
   QC value within limits for Ti 334.940  Recovery = 96.85%
Tl 190.801†               71.0      20.733 ug/L        0.4948      20.733 ppb         0.4948   2.39%
   QC value within limits for Tl 190.801  Recovery = 103.66%
U 409.014†              1813.7      51.517 ug/L        1.6081      51.517 ppb         1.6081   3.12%
   QC value within limits for U 409.014  Recovery = 103.03%
V 292.402†               720.3      4.9238 ug/L       0.11596      4.9238 ppb        0.11596   2.36%
   QC value within limits for V 292.402  Recovery = 98.48%
Zn 213.857†              770.5      6.9116 ug/L       0.04355      6.9116 ppb        0.04355   0.63%
   QC value less than the lower limit for Zn 213.857  Recovery = 69.12%
SiO2†                   3220.0      210.55 ug/L         1.520      210.55 ppb          1.520   0.72%
   QC value within limits for SiO2  Recovery = 98.85%
QC Failed.  Continue with analysis.
```

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

Autosampler Location: 13
Date Collected: 1/13/2010 12:35:42
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	4713.5	4713.5	88.8	%			12:37:40
1	Y RADIAL	5009.0	5009.0	88.31	%			12:37:40
1	Al 396.153Radial†	620558.1	699157.7	509760	ug/L	509760	ppb	12:37:35
1	Ca 317.933Radial†	279316.9	314665.9	478210	ug/L	478210	ppb	12:37:35
1	Fe 238.204 Radial†	20081.2	22613.9	186430	ug/L	186430	ppb	12:37:40
1	K 766.490 Radial†	2175.0	-198.1	-195.84	ug/L	-195.84	ppb	12:37:35
1	Mg 279.077 IEC†	13793.6	15537.1	485510	ug/L	485510	ppb	12:37:40
1	Na 589.592 Radial†	-1400.1	39.6	11.539	ug/L	11.539	ppb	12:37:40
1	Sr 421.552†	520.7	570.9	0.0355	ug/L	0.0355	ppb	12:37:40
1	Sc 361.383	750179.1	750179.1	86.002	%			12:38:07
1	Y 371.029	613855.5	613855.5	83.690	%			12:38:07
1	Ag 328.068†	-9871.2	-11857.0	1.1665	ug/L	1.1665	ppb	12:38:07
1	As 188.979†	-83.3	-73.4	13.701	ug/L	13.701	ppb	12:38:27
1	B 249.677†	416.0	1120.4	-5.8524	ug/L	-5.8524	ppb	12:38:07
1	Ba 233.527†	-484.6	-554.6	1.5392	ug/L	1.5392	ppb	12:38:27
1	Be 313.107†	-4220.9	-583.4	-0.2617	ug/L	-0.2617	ppb	12:38:07
1	Cd 226.502†	1297.1	1710.8	-1.1315	ug/L	-1.1315	ppb	12:38:27
1	Co 228.616†	-10.4	66.3	-1.3876	ug/L	-1.3876	ppb	12:38:27
1	Cr 267.716†	-70.4	-155.1	1.9776	ug/L	1.9776	ppb	12:38:27
1	Cu 324.752†	3807.0	-2119.3	3.7031	ug/L	3.7031	ppb	12:38:07
1	Mn 257.610†	962.8	639.1	-0.7694	ug/L	-0.7694	ppb	12:38:07
1	Mo 202.031†	-226.0	-283.3	1.0333	ug/L	1.0333	ppb	12:38:27
1	Ni 231.604†	176.1	110.5	2.6307	ug/L	2.6307	ppb	12:38:27
1	P 214.914†	171.4	-12.2	-29.518	ug/L	-29.518	ppb	12:38:27
1	Pb 220.353†	-811.6	-876.4	-2.1527	ug/L	-2.1527	ppb	12:38:27
1	S 181.975 Axial†	82.6	51.5	-26.880	ug/L	-26.880	ppb	12:38:27
1	Sb 206.836†	75.7	58.8	9.0174	ug/L	9.0174	ppb	12:38:27
1	Se 196.026†	-907.1	-1030.6	9.8660	ug/L	9.8660	ppb	12:38:27
1	Si 251.611†	476.3	110.4	3.6157	ug/L	3.6157	ppb	12:38:27
1	Sn 189.927†	-364.6	-424.7	4.5832	ug/L	4.5832	ppb	12:38:27
1	Ti 334.940†	-14461.4	-15464.7	0.4462	ug/L	0.4462	ppb	12:38:07
1	Tl 190.801†	-86.8	-61.5	-18.142	ug/L	-18.142	ppb	12:38:27
1	U 409.014†	-816.7	1127.8	10.797	ug/L	10.797	ppb	12:38:07
1	V 292.402†	1079.9	2646.6	-0.6587	ug/L	-0.6587	ppb	12:38:27
1	Zn 213.857†	3015.1	2509.1	4.5904	ug/L	4.5904	ppb	12:38:27
1	SiO2†	441.0	53.8	4.0453	ug/L	4.0453	ppb	12:39:24
2	Sc Radial	4638.1	4638.1	87.3	%			12:37:50
2	Y RADIAL	4904.8	4904.8	86.47	%			12:37:50
2	Al 396.153Radial†	622505.2	712747.4	519670	ug/L	519670	ppb	12:37:45
2	Ca 317.933Radial†	279237.5	319688.5	485840	ug/L	485840	ppb	12:37:45
2	Fe 238.204 Radial†	19756.2	22609.5	186400	ug/L	186400	ppb	12:37:50
2	K 766.490 Radial†	2178.4	-154.5	-190.51	ug/L	-190.51	ppb	12:37:45
2	Mg 279.077 IEC†	13518.4	15474.5	483550	ug/L	483550	ppb	12:37:50
2	Na 589.592 Radial†	-1285.1	145.7	42.447	ug/L	42.447	ppb	12:37:50
2	Sr 421.552†	511.3	569.7	-0.0292	ug/L	-0.0292	ppb	12:37:50
2	Sc 361.383	746639.5	746639.5	85.597	%			12:38:33
2	Y 371.029	611625.4	611625.4	83.386	%			12:38:33
2	Ag 328.068†	-9727.4	-11743.5	1.5588	ug/L	1.5588	ppb	12:38:33
2	As 188.979†	-97.0	-89.9	6.9916	ug/L	6.9916	ppb	12:38:53
2	B 249.677†	439.3	1150.0	-5.2005	ug/L	-5.2005	ppb	12:38:33
2	Ba 233.527†	-465.4	-534.8	1.6877	ug/L	1.6877	ppb	12:38:53
2	Be 313.107†	-4068.2	-428.3	-0.2055	ug/L	-0.2055	ppb	12:38:33
2	Cd 226.502†	1325.1	1750.7	-0.7062	ug/L	-0.7062	ppb	12:38:53
2	Co 228.616†	-31.7	41.4	-1.8783	ug/L	-1.8783	ppb	12:38:53
2	Cr 267.716†	-104.1	-194.9	1.5531	ug/L	1.5531	ppb	12:38:53
2	Cu 324.752†	3728.1	-2190.6	3.4958	ug/L	3.4958	ppb	12:38:33
2	Mn 257.610†	1006.4	695.3	-0.6336	ug/L	-0.6336	ppb	12:38:33
2	Mo 202.031†	-231.3	-290.8	0.6166	ug/L	0.6166	ppb	12:38:53
2	Ni 231.604†	191.2	129.2	3.0744	ug/L	3.0744	ppb	12:38:53

2	P 214.914†	152.0	-33.9	-39.483	ug/L	-39.483 ppb	12:38:53
2	Pb 220.353†	-793.0	-859.1	2.1295	ug/L	2.1295 ppb	12:38:53
2	S 181.975 Axial†	97.6	69.5	-4.7203	ug/L	-4.7203 ppb	12:38:53
2	Sb 206.836†	72.5	55.4	7.5922	ug/L	7.5922 ppb	12:38:53
2	Se 196.026†	-888.8	-1014.2	20.247	ug/L	20.247 ppb	12:38:53
2	Si 251.611†	491.7	131.0	4.2538	ug/L	4.2538 ppb	12:38:53
2	Sn 189.927†	-370.7	-433.9	4.1987	ug/L	4.1987 ppb	12:38:53
2	Ti 334.940†	-14124.1	-15150.3	2.1190	ug/L	2.1190 ppb	12:38:33
2	Tl 190.801†	-85.7	-60.7	-17.904	ug/L	-17.904 ppb	12:38:53
2	U 409.014†	-880.0	1049.3	8.5719	ug/L	8.5719 ppb	12:38:33
2	V 292.402†	1108.0	2685.3	-0.4498	ug/L	-0.4498 ppb	12:38:53
2	Zn 213.857†	2993.0	2499.9	4.5084	ug/L	4.5084 ppb	12:38:53
2	SiO2†	413.2	23.8	2.0961	ug/L	2.0961 ppb	12:39:29
3	Sc Radial	4739.2	4739.2	89.2	%		12:38:01
3	Y RADIAL	5019.4	5019.4	88.49	%		12:38:01
3	Al 396.153Radial†	610043.7	683576.5	498400	ug/L	498400 ppb	12:37:56
3	Ca 317.933Radial†	274346.5	307386.3	467150	ug/L	467150 ppb	12:37:56
3	Fe 238.204 Radial†	20082.8	22492.8	185440	ug/L	185440 ppb	12:38:01
3	K 766.490 Radial†	2153.3	-235.9	-198.98	ug/L	-198.98 ppb	12:37:56
3	Mg 279.077 IEC†	13819.4	15481.6	483780	ug/L	483780 ppb	12:38:01
3	Na 589.592 Radial†	-1348.0	106.5	31.043	ug/L	31.043 ppb	12:38:01
3	Sr 421.552†	532.7	581.2	0.1834	ug/L	0.1834 ppb	12:38:01
3	Sc 361.383	735508.0	735508.0	84.321	%		12:38:58
3	Y 371.029	601955.8	601955.8	82.067	%		12:38:58
3	Ag 328.068†	-9738.4	-11928.6	0.6775	ug/L	0.6775 ppb	12:38:58
3	As 188.979†	-86.1	-78.7	11.337	ug/L	11.337 ppb	12:39:18
3	B 249.677†	399.6	1110.6	-5.9032	ug/L	-5.9032 ppb	12:38:58
3	Ba 233.527†	-485.3	-566.7	1.4186	ug/L	1.4186 ppb	12:39:18
3	Be 313.107†	-4177.4	-629.7	-0.2769	ug/L	-0.2769 ppb	12:38:58
3	Cd 226.502†	1295.2	1738.7	-0.7341	ug/L	-0.7341 ppb	12:39:18
3	Co 228.616†	-20.4	54.2	-1.6106	ug/L	-1.6106 ppb	12:39:18
3	Cr 267.716†	-76.9	-164.5	1.8592	ug/L	1.8592 ppb	12:39:18
3	Cu 324.752†	3751.0	-2097.6	3.7141	ug/L	3.7141 ppb	12:38:58
3	Mn 257.610†	1045.5	759.5	-0.6697	ug/L	-0.6697 ppb	12:38:58
3	Mo 202.031†	-219.1	-280.4	1.0213	ug/L	1.0213 ppb	12:39:18
3	Ni 231.604†	170.5	108.0	2.5701	ug/L	2.5701 ppb	12:39:18
3	P 214.914†	164.1	-16.9	-34.285	ug/L	-34.285 ppb	12:39:18
3	Pb 220.353†	-774.2	-850.9	-1.7156	ug/L	-1.7156 ppb	12:39:18
3	S 181.975 Axial†	60.0	26.6	-57.905	ug/L	-57.905 ppb	12:39:18
3	Sb 206.836†	74.7	59.3	9.4541	ug/L	9.4541 ppb	12:39:18
3	Se 196.026†	-922.1	-1069.5	-17.622	ug/L	-17.622 ppb	12:39:18
3	Si 251.611†	468.0	111.6	3.6491	ug/L	3.6491 ppb	12:39:18
3	Sn 189.927†	-361.5	-429.5	2.0728	ug/L	2.0728 ppb	12:39:18
3	Ti 334.940†	-13874.9	-15104.6	-0.3362	ug/L	-0.3362 ppb	12:38:58
3	Tl 190.801†	-85.8	-62.2	-18.355	ug/L	-18.355 ppb	12:39:18
3	U 409.014†	-835.4	1086.7	9.7439	ug/L	9.7439 ppb	12:38:58
3	V 292.402†	1098.8	2694.0	-0.2370	ug/L	-0.2370 ppb	12:39:18
3	Zn 213.857†	3025.1	2590.9	5.4271	ug/L	5.4271 ppb	12:39:18
3	SiO2†	444.7	68.5	5.0021	ug/L	5.0021 ppb	12:39:34

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	744108.9	85.307	%	0.8777				1.03%
Sc Radial	4696.9	88.4	%	0.99				1.12%
Y 371.029	609145.6	83.048	%	0.8624				1.04%
Y RADIAL	4977.7	87.75	%	1.117				1.27%
Ag 328.068†	-11843.0	1.1343	ug/L	0.44153	1.1343	ppb	0.44153	38.93%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	698493.9	509280	ug/L	10642.6	509280	ppb	10642.6	2.09%
QC value within limits for Al 396.153Radial Recovery = 101.86%								
As 188.979†	-80.7	10.676	ug/L	3.4032	10.676	ppb	3.4032	31.88%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1127.0	-5.6520	ug/L	0.39190	-5.6520	ppb	0.39190	6.93%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-552.1	1.5485	ug/L	0.13481	1.5485	ppb	0.13481	8.71%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-547.1	-0.2480	ug/L	0.03760	-0.2480	ppb	0.03760	15.16%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	313913.6	477070	ug/L	9400.4	477070	ppb	9400.4	1.97%

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   QC value within limits for Ca 317.933Radial  Recovery = 95.41%
Cd 226.502†            1733.4     -0.8573 ug/L       0.23794     -0.8573 ppb        0.23794  27.76%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              54.0     -1.6255 ug/L       0.24569     -1.6255 ppb        0.24569  15.11%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -171.5      1.7966 ug/L       0.21909      1.7966 ppb        0.21909  12.19%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -2135.8      3.6377 ug/L       0.12300      3.6377 ppb        0.12300   3.38%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    22572.1      186090 ug/L         566.4      186090 ppb          566.4   0.30%
   QC value within limits for Fe 238.204 Radial  Recovery = 93.04%
K 766.490 Radial†      -196.2     -195.11 ug/L         4.285     -195.11 ppb          4.285   2.20%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       15497.7      484280 ug/L        1071.4      484280 ppb         1071.4   0.22%
   QC value within limits for Mg 279.077 IEC  Recovery = 96.86%
Mn 257.610†             698.0     -0.6909 ug/L       0.07036     -0.6909 ppb        0.07036  10.18%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -284.8      0.8904 ug/L       0.23722      0.8904 ppb        0.23722  26.64%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      97.3      28.343 ug/L       15.6297      28.343 ppb       15.6297  55.15%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             115.9      2.7584 ug/L       0.27533      2.7584 ppb        0.27533   9.98%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -21.0     -34.429 ug/L        4.9842     -34.429 ppb         4.9842  14.48%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -862.1     -0.5796 ug/L       2.35635     -0.5796 ppb        2.35635 406.54%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†        49.2     -29.835 ug/L       26.7153     -29.835 ppb       26.7153  89.54%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†             57.9      8.6879 ug/L       0.97373      8.6879 ppb        0.97373  11.21%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†           -1038.1      4.1637 ug/L      19.56803      4.1637 ppb       19.56803 469.97%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             117.7      3.8395 ug/L       0.35915      3.8395 ppb        0.35915   9.35%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -429.3      3.6183 ug/L       1.35211      3.6183 ppb        1.35211  37.37%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             573.9      0.0632 ug/L       0.10893      0.0632 ppb        0.10893 172.25%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†          -15239.9      0.7430 ug/L       1.25425      0.7430 ppb        1.25425 168.81%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -61.5     -18.133 ug/L        0.2255     -18.133 ppb         0.2255   1.24%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             1087.9      9.7044 ug/L       1.11327      9.7044 ppb        1.11327  11.47%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             2675.3     -0.4485 ug/L       0.21087     -0.4485 ppb        0.21087  47.02%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            2533.3      4.8420 ug/L       0.50837      4.8420 ppb        0.50837  10.50%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   48.7      3.7145 ug/L       1.48096      3.7145 ppb        1.48096  39.87%
   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: 1/13/2010 12:41:45
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	4769.4	4769.4	89.8	%			12:43:43
1	Y RADIAL	5005.1	5005.1	88.24	%			12:43:43
1	Al 396.153Radial†	626251.4	697294.0	508380	ug/L	508380	ppb	12:43:38
1	Ca 317.933Radial†	280827.3	312655.6	475160	ug/L	475160	ppb	12:43:38
1	Fe 238.204 Radial†	20669.0	23002.9	189660	ug/L	189660	ppb	12:43:43
1	K 766.490 Radial†	29792.9	30523.2	5367.1	ug/L	5367.1	ppb	12:43:38
1	Mg 279.077 IEC†	14170.2	15774.0	492920	ug/L	492920	ppb	12:43:43
1	Na 589.592 Radial†	16002.8	19434.8	5663.7	ug/L	5663.7	ppb	12:43:43
1	Sr 421.552†	72772.7	81010.5	508.21	ug/L	508.21	ppb	12:43:38
1	Sc 361.383	743747.7	743747.7	85.265	%			12:44:11
1	Y 371.029	608244.1	608244.1	82.925	%			12:44:11
1	Ag 328.068†	42456.0	49413.6	276.48	ug/L	276.48	ppb	12:44:11
1	As 188.979†	1007.8	1205.3	536.93	ug/L	536.93	ppb	12:44:31
1	B 249.677†	20606.8	24804.7	508.68	ug/L	508.68	ppb	12:44:11
1	Ba 233.527†	56096.3	65799.2	501.75	ug/L	501.75	ppb	12:44:11
1	Be 313.107†	579266.1	683694.7	243.92	ug/L	243.92	ppb	12:44:11
1	Cd 226.502†	39414.7	46428.6	472.48	ug/L	472.48	ppb	12:44:11
1	Co 228.616†	19737.6	23226.9	453.08	ug/L	453.08	ppb	12:44:31
1	Cr 267.716†	38627.0	45229.1	487.53	ug/L	487.53	ppb	12:44:11
1	Cu 324.752†	167728.6	190168.1	561.33	ug/L	561.33	ppb	12:44:11
1	Mn 257.610†	390489.4	457490.2	482.64	ug/L	482.64	ppb	12:44:11
1	Mo 202.031†	6132.4	7171.6	504.58	ug/L	504.58	ppb	12:44:31
1	Ni 231.604†	16336.8	19065.8	453.56	ug/L	453.56	ppb	12:44:31
1	P 214.914†	3979.9	4456.2	2433.7	ug/L	2433.7	ppb	12:44:31
1	Pb 220.353†	2669.3	3197.9	473.36	ug/L	473.36	ppb	12:44:31
1	S 181.975 Axial†	1808.8	2076.8	2673.5	ug/L	2673.5	ppb	12:44:31
1	Sb 206.836†	1441.5	1661.4	557.07	ug/L	557.07	ppb	12:44:31
1	Se 196.026†	2703.8	3195.2	2593.1	ug/L	2593.1	ppb	12:44:31
1	Si 251.611†	148723.3	173981.0	5320.7	ug/L	5320.7	ppb	12:44:11
1	Sn 189.927†	2185.5	2562.4	505.17	ug/L	505.17	ppb	12:44:31
1	Ti 334.940†	268750.5	316544.2	514.49	ug/L	514.49	ppb	12:44:11
1	Tl 190.801†	1290.2	1552.6	455.61	ug/L	455.61	ppb	12:44:31
1	U 409.014†	13951.0	18439.4	501.27	ug/L	501.27	ppb	12:44:11
1	V 292.402†	66970.7	79934.9	511.46	ug/L	511.46	ppb	12:44:11
1	Zn 213.857†	50427.5	58145.2	503.64	ug/L	503.64	ppb	12:44:11
1	SiO2†	149363.1	174715.9	11425	ug/L	11425	ppb	12:45:28
2	Sc Radial	4698.3	4698.3	88.5	%			12:43:53
2	Y RADIAL	4942.8	4942.8	87.14	%			12:43:53
2	Al 396.153Radial†	630368.9	712507.1	519470	ug/L	519470	ppb	12:43:48
2	Ca 317.933Radial†	282101.8	318831.1	484540	ug/L	484540	ppb	12:43:48
2	Fe 238.204 Radial†	20363.3	23006.0	189680	ug/L	189680	ppb	12:43:53
2	K 766.490 Radial†	29838.7	31077.3	5464.3	ug/L	5464.3	ppb	12:43:48
2	Mg 279.077 IEC†	13991.9	15811.5	494090	ug/L	494090	ppb	12:43:53
2	Na 589.592 Radial†	15707.1	19370.3	5644.9	ug/L	5644.9	ppb	12:43:53
2	Sr 421.552†	73314.1	82849.3	519.76	ug/L	519.76	ppb	12:43:48
2	Sc 361.383	751370.5	751370.5	86.139	%			12:44:37
2	Y 371.029	613258.8	613258.8	83.608	%			12:44:37
2	Ag 328.068†	43067.3	49618.1	277.27	ug/L	277.27	ppb	12:44:37
2	As 188.979†	992.5	1175.7	524.92	ug/L	524.92	ppb	12:44:57
2	B 249.677†	20985.6	24999.3	512.94	ug/L	512.94	ppb	12:44:37
2	Ba 233.527†	56540.4	65647.3	500.61	ug/L	500.61	ppb	12:44:37
2	Be 313.107†	584741.3	683158.5	243.73	ug/L	243.73	ppb	12:44:37
2	Cd 226.502†	39730.9	46326.8	471.39	ug/L	471.39	ppb	12:44:37
2	Co 228.616†	19572.2	22800.1	444.68	ug/L	444.68	ppb	12:44:57
2	Cr 267.716†	38729.3	44888.2	483.89	ug/L	483.89	ppb	12:44:37
2	Cu 324.752†	170052.8	190870.6	563.37	ug/L	563.37	ppb	12:44:37
2	Mn 257.610†	394057.0	456985.8	482.06	ug/L	482.06	ppb	12:44:37
2	Mo 202.031†	6066.2	7021.8	494.57	ug/L	494.57	ppb	12:44:57
2	Ni 231.604†	16196.2	18708.2	445.06	ug/L	445.06	ppb	12:44:57

2	P 214.914†	3972.5	4400.3	2403.8 ug/L	2403.8 ppb	12:44:57
2	Pb 220.353†	2601.5	3087.4	462.99 ug/L	462.99 ppb	12:44:57
2	S 181.975 Axial†	1800.4	2045.6	2629.8 ug/L	2629.8 ppb	12:44:57
2	Sb 206.836†	1430.7	1631.7	546.61 ug/L	546.61 ppb	12:44:57
2	Se 196.026†	2653.1	3104.2	2538.3 ug/L	2538.3 ppb	12:44:57
2	Si 251.611†	150297.8	174039.3	5322.6 ug/L	5322.6 ppb	12:44:37
2	Sn 189.927†	2170.0	2518.5	499.23 ug/L	499.23 ppb	12:44:57
2	Ti 334.940†	271473.0	316507.0	515.60 ug/L	515.60 ppb	12:44:37
2	Tl 190.801†	1278.4	1523.5	447.18 ug/L	447.18 ppb	12:44:57
2	U 409.014†	14043.1	18380.3	499.60 ug/L	499.60 ppb	12:44:37
2	V 292.402†	67530.2	79787.7	510.37 ug/L	510.37 ppb	12:44:37
2	Zn 213.857†	50874.9	58064.6	502.96 ug/L	502.96 ppb	12:44:37
2	SiO2†	149792.9	173437.7	11342 ug/L	11342 ppb	12:45:34
3	Sc Radial	4681.4	4681.4	88.2 %		12:44:03
3	Y RADIAL	4956.8	4956.8	87.39 %		12:44:03
3	Al 396.153Radial†	623530.1	707323.5	515690 ug/L	515690 ppb	12:43:58
3	Ca 317.933Radial†	279407.4	316926.6	481650 ug/L	481650 ppb	12:43:58
3	Fe 238.204 Radial†	20462.3	23201.4	191290 ug/L	191290 ppb	12:44:03
3	K 766.490 Radial†	29657.0	30993.1	5450.1 ug/L	5450.1 ppb	12:43:58
3	Mg 279.077 IEC†	13984.2	15859.9	495600 ug/L	495600 ppb	12:44:03
3	Na 589.592 Radial†	15737.6	19469.1	5673.7 ug/L	5673.7 ppb	12:44:03
3	Sr 421.552†	72522.5	82250.8	516.00 ug/L	516.00 ppb	12:43:58
3	Sc 361.383	759115.3	759115.3	87.027 %		12:45:03
3	Y 371.029	620741.2	620741.2	84.629 %		12:45:03
3	Ag 328.068†	43416.0	49508.8	277.34 ug/L	277.34 ppb	12:45:03
3	As 188.979†	997.9	1170.1	523.01 ug/L	523.01 ppb	12:45:23
3	B 249.677†	21258.3	25064.0	514.09 ug/L	514.09 ppb	12:45:03
3	Ba 233.527†	56904.8	65396.4	498.77 ug/L	498.77 ppb	12:45:03
3	Be 313.107†	590765.6	683155.3	243.73 ug/L	243.73 ppb	12:45:03
3	Cd 226.502†	39952.5	46110.9	468.94 ug/L	468.94 ppb	12:45:03
3	Co 228.616†	19826.1	22860.0	445.84 ug/L	445.84 ppb	12:45:23
3	Cr 267.716†	39148.3	44910.9	484.16 ug/L	484.16 ppb	12:45:03
3	Cu 324.752†	172049.8	191151.2	564.27 ug/L	564.27 ppb	12:45:03
3	Mn 257.610†	397093.4	455807.5	480.91 ug/L	480.91 ppb	12:45:03
3	Mo 202.031†	6156.0	7053.1	496.78 ug/L	496.78 ppb	12:45:23
3	Ni 231.604†	16370.1	18716.2	445.25 ug/L	445.25 ppb	12:45:23
3	P 214.914†	3990.4	4373.8	2386.1 ug/L	2386.1 ppb	12:45:23
3	Pb 220.353†	2616.4	3073.8	460.39 ug/L	460.39 ppb	12:45:23
3	S 181.975 Axial†	1833.2	2062.0	2652.4 ug/L	2652.4 ppb	12:45:23
3	Sb 206.836†	1434.1	1618.6	542.45 ug/L	542.45 ppb	12:45:23
3	Se 196.026†	2725.5	3155.9	2574.9 ug/L	2574.9 ppb	12:45:23
3	Si 251.611†	151565.4	173715.8	5312.6 ug/L	5312.6 ppb	12:45:03
3	Sn 189.927†	2181.3	2505.7	496.68 ug/L	496.68 ppb	12:45:23
3	Ti 334.940†	274002.9	316198.8	514.61 ug/L	514.61 ppb	12:45:03
3	Tl 190.801†	1286.6	1517.9	445.52 ug/L	445.52 ppb	12:45:23
3	U 409.014†	14294.3	18502.5	502.89 ug/L	502.89 ppb	12:45:03
3	V 292.402†	68172.4	79725.8	509.80 ug/L	509.80 ppb	12:45:03
3	Zn 213.857†	51305.3	57956.6	501.83 ug/L	501.83 ppb	12:45:03
3	SiO2†	150995.7	173045.7	11316 ug/L	11316 ppb	12:45:39

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	751411.2	86.144	%	0.8809				1.02%
Sc Radial	4716.4	88.8	%	0.88				0.99%
Y 371.029	614081.4	83.721	%	0.8574				1.02%
Y RADIAL	4968.3	87.59	%	0.576				0.66%
Ag 328.068†	49513.5	277.03	ug/L	0.476	277.03	ppb	0.476	0.17%
QC value within limits for Ag 328.068 Recovery = 110.81%								
Al 396.153Radial†	705708.2	514510	ug/L	5639.2	514510	ppb	5639.2	1.10%
QC value within limits for Al 396.153Radial Recovery = 102.90%								
As 188.979†	1183.7	528.29	ug/L	7.549	528.29	ppb	7.549	1.43%
QC value within limits for As 188.979 Recovery = 105.66%								
B 249.677†	24956.0	511.90	ug/L	2.850	511.90	ppb	2.850	0.56%
QC value within limits for B 249.677 Recovery = 102.38%								
Ba 233.527†	65614.3	500.38	ug/L	1.505	500.38	ppb	1.505	0.30%
QC value within limits for Ba 233.527 Recovery = 100.08%								
Be 313.107†	683336.2	243.79	ug/L	0.111	243.79	ppb	0.111	0.05%
QC value within limits for Be 313.107 Recovery = 97.52%								
Ca 317.933Radial†	316137.8	480450	ug/L	4806.1	480450	ppb	4806.1	1.00%

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   QC value within limits for Ca 317.933Radial  Recovery = 96.09%
Cd 226.502†            46288.8      470.94 ug/L         1.813      470.94 ppb          1.813   0.38%
   QC value within limits for Cd 226.502  Recovery = 94.19%
Co 228.616†            22962.3      447.86 ug/L         4.551      447.86 ppb          4.551   1.02%
   QC value within limits for Co 228.616  Recovery = 89.57%
Cr 267.716†            45009.4      485.20 ug/L         2.029      485.20 ppb          2.029   0.42%
   QC value within limits for Cr 267.716  Recovery = 97.04%
Cu 324.752†           190730.0      562.99 ug/L         1.505      562.99 ppb          1.505   0.27%
   QC value within limits for Cu 324.752  Recovery = 112.60%
Fe 238.204 Radial†     23070.1      190210 ug/L         937.4      190210 ppb          937.4   0.49%
   QC value within limits for Fe 238.204 Radial  Recovery = 95.10%
K 766.490 Radial†      30864.5      5427.2 ug/L         52.51      5427.2 ppb          52.51   0.97%
   QC value within limits for K 766.490 Radial  Recovery = 108.54%
Mg 279.077 IEC†        15815.1      494200 ug/L        1344.4      494200 ppb         1344.4   0.27%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.84%
Mn 257.610†           456761.2      481.87 ug/L         0.880      481.87 ppb          0.880   0.18%
   QC value within limits for Mn 257.610  Recovery = 96.37%
Mo 202.031†             7082.2      498.64 ug/L         5.257      498.64 ppb          5.257   1.05%
   QC value within limits for Mo 202.031  Recovery = 99.73%
Na 589.592 Radial†     19424.7      5660.8 ug/L         14.61      5660.8 ppb          14.61   0.26%
   QC value within limits for Na 589.592 Radial  Recovery = 113.22%
Ni 231.604†            18830.0      447.96 ug/L         4.858      447.96 ppb          4.858   1.08%
   QC value within limits for Ni 231.604  Recovery = 89.59%
P 214.914†              4410.1      2407.9 ug/L         24.07      2407.9 ppb          24.07   1.00%
   QC value within limits for P 214.914  Recovery = 96.31%
Pb 220.353†             3119.7      465.58 ug/L         6.864      465.58 ppb          6.864   1.47%
   QC value within limits for Pb 220.353  Recovery = 93.12%
S 181.975 Axial†        2061.5      2651.9 ug/L         21.86      2651.9 ppb          21.86   0.82%
   QC value within limits for S 181.975 Axial  Recovery = 106.08%
Sb 206.836†             1637.2      548.71 ug/L         7.531      548.71 ppb          7.531   1.37%
   QC value within limits for Sb 206.836  Recovery = 109.74%
Se 196.026†             3151.8      2568.8 ug/L         27.89      2568.8 ppb          27.89   1.09%
   QC value within limits for Se 196.026  Recovery = 102.75%
Si 251.611†           173912.1      5318.6 ug/L          5.27      5318.6 ppb           5.27   0.10%
   QC value within limits for Si 251.611  Recovery = 106.37%
Sn 189.927†             2528.9      500.36 ug/L         4.361      500.36 ppb          4.361   0.87%
   QC value within limits for Sn 189.927  Recovery = 100.07%
Sr 421.552†            82036.9      514.65 ug/L         5.889      514.65 ppb          5.889   1.14%
   QC value within limits for Sr 421.552  Recovery = 102.93%
Ti 334.940†           316416.7      514.90 ug/L         0.609      514.90 ppb          0.609   0.12%
   QC value within limits for Ti 334.940  Recovery = 102.98%
Tl 190.801†             1531.3      449.44 ug/L         5.412      449.44 ppb          5.412   1.20%
   QC value within limits for Tl 190.801  Recovery = 89.89%
U 409.014†             18440.7      501.25 ug/L         1.645      501.25 ppb          1.645   0.33%
   QC value within limits for U 409.014  Recovery = 100.25%
V 292.402†             79816.1      510.54 ug/L         0.844      510.54 ppb          0.844   0.17%
   QC value within limits for V 292.402  Recovery = 102.11%
Zn 213.857†            58055.5      502.81 ug/L         0.917      502.81 ppb          0.917   0.18%
   QC value within limits for Zn 213.857  Recovery = 100.56%
SiO2†                 173733.1       11361 ug/L          57.0       11361 ppb           57.0   0.50%
   QC value within limits for SiO2  Recovery = 106.23%
All analyte(s) passed QC.
```

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

Autosampler Location: 15
Date Collected: 1/13/2010 12:47:49
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	4639.2	4639.2	87.4	%			12:49:47
1	Y RADIAL	4935.4	4935.4	87.01	%			12:49:47
1	Al 396.153Radial†	603973.6	691362.5	504080	ug/L	504080	ppb	12:49:42
1	Ca 317.933Radial†	272744.7	312178.9	474430	ug/L	474430	ppb	12:49:42
1	Fe 238.204 Radial†	46959.9	53743.0	443070	ug/L	443070	ppb	12:49:47
1	K 766.490 Radial†	2957.9	737.2	-236.55	ug/L	-236.55	ppb	12:49:42
1	Mg 279.077 IEC†	13476.4	15422.8	481670	ug/L	481670	ppb	12:49:47
1	Na 589.592 Radial†	1623451.9	1859920.8	542020	ug/L	542020	ppb	12:49:42
1	Sr 421.552†	746.3	838.6	1.7548	ug/L	1.7548	ppb	12:49:47
1	Sc 361.383	741206.2	741206.2	84.974	%			12:50:15
1	Y 371.029	607408.3	607408.3	82.811	%			12:50:15
1	Ag 328.068†	-23574.3	-28122.3	0.2053	ug/L	0.2053	ppb	12:50:15
1	As 188.979†	-211.7	-225.7	12.019	ug/L	12.019	ppb	12:50:35
1	B 249.677†	1680.1	2614.0	-14.981	ug/L	-14.981	ppb	12:50:15
1	Ba 233.527†	-1402.0	-1641.1	1.2050	ug/L	1.2050	ppb	12:50:35
1	Be 313.107†	-11106.8	-8746.4	-3.1616	ug/L	-3.1616	ppb	12:50:15
1	Cd 226.502†	3363.4	4160.8	1.1244	ug/L	1.1244	ppb	12:50:35
1	Co 228.616†	195.0	307.9	-0.4059	ug/L	-0.4059	ppb	12:50:35
1	Cr 267.716†	48.0	-16.7	2.7270	ug/L	2.7270	ppb	12:50:35
1	Cu 324.752†	952.4	-5425.2	-0.3113	ug/L	-0.3113	ppb	12:50:15
1	Mn 257.610†	-21938.1	-26297.8	-3.7786	ug/L	-3.7786	ppb	12:50:15
1	Mo 202.031†	-481.7	-587.4	0.3812	ug/L	0.3812	ppb	12:50:35
1	Ni 231.604†	285.5	241.8	5.7510	ug/L	5.7510	ppb	12:50:35
1	P 214.914†	544.1	428.8	18.086	ug/L	18.086	ppb	12:50:35
1	Pb 220.353†	-574.9	-609.2	3.1636	ug/L	3.1636	ppb	12:50:35
1	S 181.975 Axial†	112.0	87.3	21.889	ug/L	21.889	ppb	12:50:35
1	Sb 206.836†	56.1	36.7	7.8747	ug/L	7.8747	ppb	12:50:35
1	Se 196.026†	-2096.3	-2442.8	-9.2780	ug/L	-9.2780	ppb	12:50:35
1	Si 251.611†	-334.4	-836.9	-25.135	ug/L	-25.135	ppb	12:50:35
1	Sn 189.927†	-383.4	-451.9	3.7562	ug/L	3.7562	ppb	12:50:35
1	Ti 334.940†	-14504.7	-15719.2	-6.5179	ug/L	-6.5179	ppb	12:50:15
1	Tl 190.801†	-110.5	-90.6	-26.793	ug/L	-26.793	ppb	12:50:35
1	U 409.014†	431836.4	510276.9	14449	ug/L	14449	ppb	12:50:15
1	V 292.402†	2743.2	4619.2	2.1857	ug/L	2.1857	ppb	12:50:35
1	Zn 213.857†	5734.8	5752.2	9.0086	ug/L	9.0086	ppb	12:50:35
1	SiO2†	-452.2	-991.1	-63.804	ug/L	-63.804	ppb	12:51:32
2	Sc Radial	4616.1	4616.1	86.9	%			12:49:57
2	Y RADIAL	4927.3	4927.3	86.86	%			12:49:57
2	Al 396.153Radial†	595646.6	685253.6	499620	ug/L	499620	ppb	12:49:52
2	Ca 317.933Radial†	269805.1	310364.5	471670	ug/L	471670	ppb	12:49:52
2	Fe 238.204 Radial†	46730.7	53749.2	443120	ug/L	443120	ppb	12:49:57
2	K 766.490 Radial†	2847.3	627.0	-253.26	ug/L	-253.26	ppb	12:49:52
2	Mg 279.077 IEC†	13439.3	15457.5	482750	ug/L	482750	ppb	12:49:57
2	Na 589.592 Radial†	1597597.8	1839506.9	536070	ug/L	536070	ppb	12:49:52
2	Sr 421.552†	746.1	842.6	1.8012	ug/L	1.8012	ppb	12:49:57
2	Sc 361.383	735152.2	735152.2	84.280	%			12:50:41
2	Y 371.029	602226.5	602226.5	82.104	%			12:50:41
2	Ag 328.068†	-23402.0	-28146.4	0.1359	ug/L	0.1359	ppb	12:50:41
2	As 188.979†	-195.0	-208.0	19.235	ug/L	19.235	ppb	12:51:01
2	B 249.677†	1595.2	2529.5	-16.834	ug/L	-16.834	ppb	12:50:41
2	Ba 233.527†	-1446.2	-1707.2	0.7123	ug/L	0.7123	ppb	12:51:01
2	Be 313.107†	-11184.0	-8945.7	-3.2314	ug/L	-3.2314	ppb	12:50:41
2	Cd 226.502†	3355.9	4184.4	1.3742	ug/L	1.3742	ppb	12:51:01
2	Co 228.616†	226.7	347.4	0.3688	ug/L	0.3688	ppb	12:51:01
2	Cr 267.716†	-39.2	-119.7	1.6187	ug/L	1.6187	ppb	12:51:01
2	Cu 324.752†	923.3	-5450.4	-0.3959	ug/L	-0.3959	ppb	12:50:41
2	Mn 257.610†	-21525.2	-26020.6	-3.5245	ug/L	-3.5245	ppb	12:50:41
2	Mo 202.031†	-469.2	-577.2	1.0384	ug/L	1.0384	ppb	12:51:01
2	Ni 231.604†	290.1	250.0	5.9465	ug/L	5.9465	ppb	12:51:01

2	P 214.914†	538.1	427.0	15.912	ug/L	15.912 ppb	12:51:01
2	Pb 220.353†	-556.7	-593.2	4.0248	ug/L	4.0248 ppb	12:51:01
2	S 181.975 Axial†	88.8	60.9	-12.490	ug/L	-12.490 ppb	12:51:01
2	Sb 206.836†	41.2	19.7	2.3840	ug/L	2.3840 ppb	12:51:01
2	Se 196.026†	-2113.6	-2483.7	-34.194	ug/L	-34.194 ppb	12:51:01
2	Si 251.611†	-394.7	-911.7	-27.434	ug/L	-27.434 ppb	12:51:01
2	Sn 189.927†	-377.9	-449.1	3.8028	ug/L	3.8028 ppb	12:51:01
2	Ti 334.940†	-14151.2	-15440.4	-6.5543	ug/L	-6.5543 ppb	12:50:41
2	Tl 190.801†	-110.7	-91.9	-27.172	ug/L	-27.172 ppb	12:51:01
2	U 409.014†	429068.9	511178.2	14475	ug/L	14475 ppb	12:50:41
2	V 292.402†	2861.1	4785.7	3.3463	ug/L	3.3463 ppb	12:51:01
2	Zn 213.857†	5774.7	5855.1	9.9326	ug/L	9.9326 ppb	12:51:01
2	SiO2†	-386.2	-917.1	-58.980	ug/L	-58.980 ppb	12:51:37
3	Sc Radial	4753.2	4753.2	89.5	%		12:50:08
3	Y RADIAL	5039.4	5039.4	88.84	%		12:50:08
3	Al 396.153Radial†	595734.9	665581.5	485280	ug/L	485280 ppb	12:50:03
3	Ca 317.933Radial†	269644.6	301229.8	457790	ug/L	457790 ppb	12:50:03
3	Fe 238.204 Radial†	47648.1	53223.1	438780	ug/L	438780 ppb	12:50:08
3	K 766.490 Radial†	2944.5	641.0	-239.80	ug/L	-239.80 ppb	12:50:03
3	Mg 279.077 IEC†	13735.8	15342.7	479170	ug/L	479170 ppb	12:50:08
3	Na 589.592 Radial†	1595610.5	1784259.1	519970	ug/L	519970 ppb	12:50:03
3	Sr 421.552†	836.1	918.4	2.3834	ug/L	2.3834 ppb	12:50:08
3	Sc 361.383	727949.3	727949.3	83.454	%		12:51:06
3	Y 371.029	596375.6	596375.6	81.307	%		12:51:06
3	Ag 328.068†	-23271.9	-28265.2	-1.6155	ug/L	-1.6155 ppb	12:51:06
3	As 188.979†	-199.6	-215.8	15.057	ug/L	15.057 ppb	12:51:26
3	B 249.677†	1566.6	2514.0	-16.465	ug/L	-16.465 ppb	12:51:06
3	Ba 233.527†	-1431.8	-1706.8	0.5828	ug/L	0.5828 ppb	12:51:26
3	Be 313.107†	-11119.7	-8999.8	-3.2483	ug/L	-3.2483 ppb	12:51:06
3	Cd 226.502†	3358.2	4226.6	2.2703	ug/L	2.2703 ppb	12:51:26
3	Co 228.616†	202.8	321.5	-0.0822	ug/L	-0.0822 ppb	12:51:26
3	Cr 267.716†	35.0	-31.3	2.4752	ug/L	2.4752 ppb	12:51:26
3	Cu 324.752†	941.3	-5418.0	-0.5363	ug/L	-0.5363 ppb	12:51:06
3	Mn 257.610†	-21069.9	-25727.7	-3.4963	ug/L	-3.4963 ppb	12:51:06
3	Mo 202.031†	-483.2	-599.6	-0.9707	ug/L	-0.9707 ppb	12:51:26
3	Ni 231.604†	272.0	231.7	5.5105	ug/L	5.5105 ppb	12:51:26
3	P 214.914†	532.2	426.2	15.278	ug/L	15.278 ppb	12:51:26
3	Pb 220.353†	-551.9	-594.0	1.0135	ug/L	1.0135 ppb	12:51:26
3	S 181.975 Axial†	96.9	71.6	4.4622	ug/L	4.4622 ppb	12:51:26
3	Sb 206.836†	56.4	38.4	8.7407	ug/L	8.7407 ppb	12:51:26
3	Se 196.026†	-2117.6	-2513.3	-67.170	ug/L	-67.170 ppb	12:51:26
3	Si 251.611†	-431.3	-960.3	-28.903	ug/L	-28.903 ppb	12:51:26
3	Sn 189.927†	-396.9	-476.3	-2.9350	ug/L	-2.9350 ppb	12:51:26
3	Ti 334.940†	-13470.0	-14790.3	-7.1180	ug/L	-7.1180 ppb	12:51:06
3	Tl 190.801†	-128.0	-113.9	-33.577	ug/L	-33.577 ppb	12:51:26
3	U 409.014†	425117.6	511481.0	14484	ug/L	14484 ppb	12:51:06
3	V 292.402†	2834.8	4787.8	3.9160	ug/L	3.9160 ppb	12:51:26
3	Zn 213.857†	5773.3	5921.3	10.955	ug/L	10.955 ppb	12:51:26
3	SiO2†	-450.6	-998.9	-64.290	ug/L	-64.290 ppb	12:51:42

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	734769.2	84.236	%	0.7609				0.90%
Sc Radial	4669.5	87.9	%	1.38				1.57%
Y 371.029	602003.4	82.074	%	0.7525				0.92%
Y RADIAL	4967.4	87.57	%	1.102				1.26%
Ag 328.068†	-28178.0	-0.4248	ug/L	1.03180	-0.4248	ppb	1.03180	242.89%
Al 396.153Radial†	680732.5	496330	ug/L	9822.5	496330	ppb	9822.5	1.98%
QC value within limits for Al 396.153Radial Recovery = 99.27%								
As 188.979†	-216.5	15.437	ug/L	3.6230	15.437	ppb	3.6230	23.47%
B 249.677†	2552.5	-16.093	ug/L	0.9808	-16.093	ppb	0.9808	6.09%
Ba 233.527†	-1685.0	0.8334	ug/L	0.32830	0.8334	ppb	0.32830	39.39%
Be 313.107†	-8897.3	-3.2137	ug/L	0.04598	-3.2137	ppb	0.04598	1.43%
Ca 317.933Radial†	307924.4	467970	ug/L	8918.2	467970	ppb	8918.2	1.91%
QC value within limits for Ca 317.933Radial Recovery = 93.59%								
Cd 226.502†	4190.6	1.5896	ug/L	0.60254	1.5896	ppb	0.60254	37.90%
Co 228.616†	325.6	-0.0398	ug/L	0.38909	-0.0398	ppb	0.38909	978.34%
Cr 267.716†	-55.9	2.2736	ug/L	0.58102	2.2736	ppb	0.58102	25.55%
Cu 324.752†	-5431.2	-0.4145	ug/L	0.11364	-0.4145	ppb	0.11364	27.42%

Fe 238.204 Radial†	53571.7	441660	ug/L	2489.7	441660	ppb	2489.7	0.56%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 88.33%								
K 766.490 Radial†	668.4	-243.20	ug/L	8.863	-243.20	ppb	8.863	3.64%
Mg 279.077 IEC†	15407.6	481200	ug/L	1838.2	481200	ppb	1838.2	0.38%
QC value within limits for Mg 279.077 IEC Recovery = 96.24%								
Mn 257.610†	-26015.4	-3.5998	ug/L	0.15547	-3.5998	ppb	0.15547	4.32%
Mo 202.031†	-588.1	0.1496	ug/L	1.02438	0.1496	ppb	1.02438	684.72%
Na 589.592 Radial†	1827895.6	532690	ug/L	11407.5	532690	ppb	11407.5	2.14%
QC value within limits for Na 589.592 Radial Recovery = 106.54%								
Ni 231.604†	241.1	5.7360	ug/L	0.21838	5.7360	ppb	0.21838	3.81%
P 214.914†	427.3	16.425	ug/L	1.4727	16.425	ppb	1.4727	8.97%
Pb 220.353†	-598.8	2.7340	ug/L	1.55092	2.7340	ppb	1.55092	56.73%
S 181.975 Axial†	73.2	4.6204	ug/L	17.18968	4.6204	ppb	17.18968	372.04%
Sb 206.836†	31.6	6.3331	ug/L	3.44733	6.3331	ppb	3.44733	54.43%
Se 196.026†	-2480.0	-36.881	ug/L	29.0395	-36.881	ppb	29.0395	78.74%
Si 251.611†	-903.0	-27.157	ug/L	1.8989	-27.157	ppb	1.8989	6.99%
Sn 189.927†	-459.1	1.5413	ug/L	3.87666	1.5413	ppb	3.87666	251.52%
Sr 421.552†	866.5	1.9798	ug/L	0.35027	1.9798	ppb	0.35027	17.69%
Ti 334.940†	-15316.6	-6.7301	ug/L	0.33646	-6.7301	ppb	0.33646	5.00%
Tl 190.801†	-98.8	-29.181	ug/L	3.8117	-29.181	ppb	3.8117	13.06%
U 409.014†	510978.7	14470	ug/L	18.0	14470	ppb	18.0	0.12%
QC value within limits for U 409.014 Recovery = 96.46%								
V 292.402†	4730.9	3.1493	ug/L	0.88181	3.1493	ppb	0.88181	28.00%
Zn 213.857†	5842.8	9.9654	ug/L	0.97350	9.9654	ppb	0.97350	9.77%
SiO2†	-969.0	-62.358	ug/L	2.9355	-62.358	ppb	2.9355	4.71%

QC Failed. Continue with analysis.

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

Autosampler Location: 16
Date Collected: 1/13/2010 12:53:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5125.8	5125.8	96.5	%			12:55:49
1	Y RADIAL	5366.1	5366.1	94.60	%			12:55:49
1	Al 396.153Radial†	583.5	621.2	-25.020	ug/L	-25.020	ppb	12:55:49
1	Ca 317.933Radial†	34.4	14.1	21.461	ug/L	21.461	ppb	12:56:09
1	Fe 238.204 Radial†	-20.4	-31.3	26.283	ug/L	26.283	ppb	12:56:09
1	K 766.490 Radial†	1580280.5	1634538.0	296070	ug/L	296070	ppb	12:55:44
1	Mg 279.077 IEC†	-5.4	-8.8	-172.39	ug/L	-172.39	ppb	12:56:09
1	Na 589.592 Radial†	-310.9	1294.9	377.35	ug/L	377.35	ppb	12:55:49
1	Sr 421.552†	1484193.1	1537623.4	9713.4	ug/L	9713.4	ppb	12:55:44
1	Sc 361.383	828349.3	828349.3	94.964	%			12:57:27
1	Y 371.029	675727.0	675727.0	92.125	%			12:57:27
1	Ag 328.068†	-8224.7	-9040.1	0.0362	ug/L	0.0362	ppb	12:57:32
1	As 188.979†	23541.0	24812.8	10138	ug/L	10138	ppb	12:57:32
1	B 249.677†	217990.2	230186.9	4991.3	ug/L	4991.3	ppb	12:57:27
1	Ba 233.527†	1781669.8	1876159.7	14131	ug/L	14131	ppb	12:57:27
1	Be 313.107†	7741764.3	8156630.7	2919.4	ug/L	2919.4	ppb	12:57:20
1	Cd 226.502†	866197.4	912334.0	9667.9	ug/L	9667.9	ppb	12:57:27
1	Co 228.616†	460343.4	484833.6	9510.2	ug/L	9510.2	ppb	12:57:32
1	Cr 267.716†	2125298.8	2237929.1	23929	ug/L	23929	ppb	12:57:27
1	Cu 324.752†	6696312.4	7044868.5	20434	ug/L	20434	ppb	12:57:20
1	Mn 257.610†	8530670.8	8982567.7	9504.5	ug/L	9504.5	ppb	12:57:20
1	Mo 202.031†	138651.3	145983.4	9856.2	ug/L	9856.2	ppb	12:57:32
1	Ni 231.604†	389648.6	410217.3	9759.0	ug/L	9759.0	ppb	12:57:27
1	P 214.914†	31112.4	32550.8	14778	ug/L	14778	ppb	12:57:32
1	Pb 220.353†	197858.6	208418.3	24323	ug/L	24323	ppb	12:57:32
1	S 181.975 Axial†	37425.3	39365.4	52482	ug/L	52482	ppb	12:57:32
1	Sb 206.836†	30263.9	31839.5	10893	ug/L	10893	ppb	12:57:32
1	Se 196.026†	16008.8	16881.9	10301	ug/L	10301	ppb	12:57:32
1	Si 251.611†	1501492.5	1580672.5	48273	ug/L	48273	ppb	12:57:27
1	Sn 189.927†	59479.9	62633.3	10505	ug/L	10505	ppb	12:57:32
1	Ti 334.940†	6108529.2	6433811.9	9980.0	ug/L	9980.0	ppb	12:57:20
1	Tl 190.801†	31485.4	33194.5	9735.9	ug/L	9735.9	ppb	12:57:32
1	U 409.014†	-810.7	1223.7	-18.716	ug/L	-18.716	ppb	12:57:32
1	V 292.402†	1449162.4	1527401.7	10102	ug/L	10102	ppb	12:57:27
1	Zn 213.857†	1486170.8	1563985.0	14050	ug/L	14050	ppb	12:57:27
1	SiO2†	1501441.0	1580602.7	103210	ug/L	103210	ppb	12:58:19
2	Sc Radial	5076.0	5076.0	95.6	%			12:56:20
2	Y RADIAL	5347.9	5347.9	94.28	%			12:56:20
2	Al 396.153Radial†	593.0	637.1	-16.389	ug/L	-16.389	ppb	12:56:20
2	Ca 317.933Radial†	27.7	7.4	11.282	ug/L	11.282	ppb	12:56:40
2	Fe 238.204 Radial†	-22.0	-33.2	12.502	ug/L	12.502	ppb	12:56:40
2	K 766.490 Radial†	1589438.5	1660170.0	300710	ug/L	300710	ppb	12:56:15
2	Mg 279.077 IEC†	-7.5	-11.1	-242.07	ug/L	-242.07	ppb	12:56:40
2	Na 589.592 Radial†	-389.0	1210.0	352.62	ug/L	352.62	ppb	12:56:20
2	Sr 421.552†	1493468.3	1562402.0	9870.0	ug/L	9870.0	ppb	12:56:15
2	Sc 361.383	830448.0	830448.0	95.205	%			12:57:46
2	Y 371.029	677266.0	677266.0	92.335	%			12:57:46
2	Ag 328.068†	-8198.2	-8990.4	0.2680	ug/L	0.2680	ppb	12:57:52
2	As 188.979†	23848.2	25072.9	10243	ug/L	10243	ppb	12:57:52
2	B 249.677†	219355.9	231041.2	5009.8	ug/L	5009.8	ppb	12:57:46
2	Ba 233.527†	1787915.7	1877978.8	14145	ug/L	14145	ppb	12:57:46
2	Be 313.107†	7723050.2	8116371.7	2905.0	ug/L	2905.0	ppb	12:57:40
2	Cd 226.502†	869587.7	913590.0	9681.2	ug/L	9681.2	ppb	12:57:46
2	Co 228.616†	463922.1	487367.5	9560.1	ug/L	9560.1	ppb	12:57:52
2	Cr 267.716†	2132676.1	2240022.2	23951	ug/L	23951	ppb	12:57:46
2	Cu 324.752†	6695193.1	7025872.7	20379	ug/L	20379	ppb	12:57:40
2	Mn 257.610†	8532959.0	8962269.4	9483.0	ug/L	9483.0	ppb	12:57:40
2	Mo 202.031†	139847.8	146871.2	9916.2	ug/L	9916.2	ppb	12:57:52
2	Ni 231.604†	391399.1	411019.0	9778.1	ug/L	9778.1	ppb	12:57:46

2	P 214.914†	31437.5	32809.5	14938 ug/L	14938 ppb	12:57:52
2	Pb 220.353†	199631.8	209754.2	24479 ug/L	24479 ppb	12:57:52
2	S 181.975 Axial†	37682.2	39535.7	52709 ug/L	52709 ppb	12:57:52
2	Sb 206.836†	30547.2	32056.6	10967 ug/L	10967 ppb	12:57:52
2	Se 196.026†	16130.5	16967.2	10353 ug/L	10353 ppb	12:57:52
2	Si 251.611†	1508295.1	1583821.9	48368 ug/L	48368 ppb	12:57:46
2	Sn 189.927†	60008.6	63030.4	10572 ug/L	10572 ppb	12:57:52
2	Ti 334.940†	6106495.9	6415420.2	9951.5 ug/L	9951.5 ppb	12:57:40
2	Tl 190.801†	31697.1	33333.1	9775.7 ug/L	9775.7 ppb	12:57:52
2	U 409.014†	-780.0	1258.1	-17.787 ug/L	-17.787 ppb	12:57:52
2	V 292.402†	1453412.2	1528009.0	10107 ug/L	10107 ppb	12:57:46
2	Zn 213.857†	1491962.1	1566113.0	14069 ug/L	14069 ppb	12:57:46
2	SiO2†	1517416.1	1593386.9	104050 ug/L	104050 ppb	12:58:26
3	Sc Radial	5032.2	5032.2	94.8 %		12:56:50
3	Y RADIAL	5280.7	5280.7	93.09 %		12:56:50
3	Al 396.153Radial†	593.9	643.5	-2.4107 ug/L	-2.4107 ppb	12:56:50
3	Ca 317.933Radial†	30.3	10.4	15.807 ug/L	15.807 ppb	12:57:10
3	Fe 238.204 Radial†	-23.5	-34.9	-7.3577 ug/L	-7.3577 ppb	12:57:10
3	K 766.490 Radial†	1597668.6	1683342.2	304910 ug/L	304910 ppb	12:56:45
3	Mg 279.077 IEC†	-3.8	-7.2	-124.34 ug/L	-124.34 ppb	12:57:10
3	Na 589.592 Radial†	-544.1	1042.8	303.90 ug/L	303.90 ppb	12:56:50
3	Sr 421.552†	1497272.5	1580028.9	9981.3 ug/L	9981.3 ppb	12:56:45
3	Sc 361.383	841976.9	841976.9	96.526 %		12:58:06
3	Y 371.029	686373.2	686373.2	93.576 %		12:58:06
3	Ag 328.068†	-8216.3	-8891.2	0.6068 ug/L	0.6068 ppb	12:58:11
3	As 188.979†	23693.0	24569.0	10037 ug/L	10037 ppb	12:58:11
3	B 249.677†	222416.6	231057.2	5010.6 ug/L	5010.6 ppb	12:58:06
3	Ba 233.527†	1806217.7	1871225.1	14094 ug/L	14094 ppb	12:58:06
3	Be 313.107†	7673162.1	7953613.0	2846.8 ug/L	2846.8 ppb	12:58:00
3	Cd 226.502†	878867.7	910697.2	9650.5 ug/L	9650.5 ppb	12:58:06
3	Co 228.616†	461503.4	478189.5	9380.0 ug/L	9380.0 ppb	12:58:11
3	Cr 267.716†	2155839.2	2233346.1	23880 ug/L	23880 ppb	12:58:06
3	Cu 324.752†	6638941.1	6871304.0	19930 ug/L	19930 ppb	12:58:00
3	Mn 257.610†	8482624.0	8787399.3	9298.0 ug/L	9298.0 ppb	12:58:00
3	Mo 202.031†	139054.6	144038.1	9724.9 ug/L	9724.9 ppb	12:58:11
3	Ni 231.604†	395624.6	409767.3	9748.4 ug/L	9748.4 ppb	12:58:06
3	P 214.914†	31216.5	32128.3	14633 ug/L	14633 ppb	12:58:11
3	Pb 220.353†	198716.0	205934.3	24034 ug/L	24034 ppb	12:58:11
3	S 181.975 Axial†	37491.0	38795.6	51722 ug/L	51722 ppb	12:58:11
3	Sb 206.836†	30395.7	31460.3	10763 ug/L	10763 ppb	12:58:11
3	Se 196.026†	16043.6	16645.1	10157 ug/L	10157 ppb	12:58:11
3	Si 251.611†	1527645.3	1582175.7	48320 ug/L	48320 ppb	12:58:06
3	Sn 189.927†	59582.8	61726.2	10353 ug/L	10353 ppb	12:58:11
3	Ti 334.940†	6070874.6	6290691.5	9757.8 ug/L	9757.8 ppb	12:58:00
3	Tl 190.801†	31532.5	32706.7	9591.6 ug/L	9591.6 ppb	12:58:11
3	U 409.014†	-713.8	1337.9	-15.357 ug/L	-15.357 ppb	12:58:11
3	V 292.402†	1470095.9	1524389.7	10081 ug/L	10081 ppb	12:58:06
3	Zn 213.857†	1506730.4	1559954.9	14014 ug/L	14014 ppb	12:58:06
3	SiO2†	1518106.7	1572278.3	102670 ug/L	102670 ppb	12:58:33

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	833591.4	95.565	%	0.8412				0.88%
Sc Radial	5078.0	95.6	%	0.88				0.92%
Y 371.029	679788.7	92.679	%	0.7845				0.85%
Y RADIAL	5331.5	93.99	%	0.793				0.84%
Ag 328.068†	-8973.9	0.3037	ug/L	0.28701	0.3037	ppb	0.28701	94.51%
Al 396.153Radial†	633.9	-14.607	ug/L	11.4095	-14.607	ppb	11.4095	78.11%
As 188.979†	24818.2	10139	ug/L	102.9	10139	ppb	102.9	1.02%
QC value within limits for As 188.979 Recovery = 101.39%								
B 249.677†	230761.8	5003.9	ug/L	10.93	5003.9	ppb	10.93	0.22%
QC value within limits for B 249.677 Recovery = 100.08%								
Ba 233.527†	1875121.2	14124	ug/L	26.3	14124	ppb	26.3	0.19%
QC value within limits for Ba 233.527 Recovery = 94.16%								
Be 313.107†	8075538.5	2890.4	ug/L	38.45	2890.4	ppb	38.45	1.33%
QC value within limits for Be 313.107 Recovery = 96.35%								
Ca 317.933Radial†	10.6	16.183	ug/L	5.0999	16.183	ppb	5.0999	31.51%
Cd 226.502†	912207.1	9666.5	ug/L	15.37	9666.5	ppb	15.37	0.16%
QC value within limits for Cd 226.502 Recovery = 96.67%								

Co 228.616†	483463.5	9483.5 ug/L	92.98	9483.5 ppb	92.98	0.98%
QC value within limits for Co 228.616 Recovery = 94.83%						
Cr 267.716†	2237099.1	23920 ug/L	36.5	23920 ppb	36.5	0.15%
QC value within limits for Cr 267.716 Recovery = 95.68%						
Cu 324.752†	6980681.7	20247 ug/L	276.1	20247 ppb	276.1	1.36%
QC value within limits for Cu 324.752 Recovery = 101.24%						
Fe 238.204 Radial†	-33.1	10.476 ug/L	16.9117	10.476 ppb	16.9117	161.44%
K 766.490 Radial†	1659350.0	300560 ug/L	4422.2	300560 ppb	4422.2	1.47%
QC value within limits for K 766.490 Radial Recovery = 100.19%						
Mg 279.077 IEC†	-9.0	-179.60 ug/L	59.193	-179.60 ppb	59.193	32.96%
Mn 257.610†	8910745.5	9428.5 ug/L	113.54	9428.5 ppb	113.54	1.20%
QC value within limits for Mn 257.610 Recovery = 94.29%						
Mo 202.031†	145630.9	9832.4 ug/L	97.84	9832.4 ppb	97.84	1.00%
QC value within limits for Mo 202.031 Recovery = 98.32%						
Na 589.592 Radial†	1182.6	344.62 ug/L	37.375	344.62 ppb	37.375	10.85%
Ni 231.604†	410334.5	9761.8 ug/L	15.04	9761.8 ppb	15.04	0.15%
QC value within limits for Ni 231.604 Recovery = 97.62%						
P 214.914†	32496.2	14783 ug/L	152.6	14783 ppb	152.6	1.03%
QC value within limits for P 214.914 Recovery = 98.56%						
Pb 220.353†	208035.6	24279 ug/L	226.2	24279 ppb	226.2	0.93%
QC value within limits for Pb 220.353 Recovery = 97.12%						
S 181.975 Axial†	39232.2	52304 ug/L	516.7	52304 ppb	516.7	0.99%
QC value within limits for S 181.975 Axial Recovery = 104.61%						
Sb 206.836†	31785.5	10874 ug/L	103.2	10874 ppb	103.2	0.95%
QC value within limits for Sb 206.836 Recovery = 108.74%						
Se 196.026†	16831.4	10271 ug/L	101.9	10271 ppb	101.9	0.99%
QC value within limits for Se 196.026 Recovery = 102.71%						
Si 251.611†	1582223.4	48321 ug/L	47.8	48321 ppb	47.8	0.10%
QC value within limits for Si 251.611 Recovery = 96.64%						
Sn 189.927†	62463.3	10476 ug/L	112.1	10476 ppb	112.1	1.07%
QC value within limits for Sn 189.927 Recovery = 104.76%						
Sr 421.552†	1560018.1	9854.9 ug/L	134.57	9854.9 ppb	134.57	1.37%
QC value within limits for Sr 421.552 Recovery = 98.55%						
Ti 334.940†	6379974.5	9896.4 ug/L	120.88	9896.4 ppb	120.88	1.22%
QC value within limits for Ti 334.940 Recovery = 98.96%						
Tl 190.801†	33078.1	9701.1 ug/L	96.86	9701.1 ppb	96.86	1.00%
QC value within limits for Tl 190.801 Recovery = 97.01%						
U 409.014†	1273.2	-17.286 ug/L	1.7343	-17.286 ppb	1.7343	10.03%
V 292.402†	1526600.1	10097 ug/L	13.9	10097 ppb	13.9	0.14%
QC value within limits for V 292.402 Recovery = 100.97%						
Zn 213.857†	1563351.0	14044 ug/L	27.8	14044 ppb	27.8	0.20%
QC value within limits for Zn 213.857 Recovery = 93.63%						
SiO2†	1582089.3	103310 ug/L	693.6	103310 ppb	693.6	0.67%
QC value within limits for SiO2 Recovery = 96.55%						

All analyte(s) passed QC.

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Analysis Begun

Start Time: 1/13/2010 13:15:38 **Plasma On Time: 1/11/2010 06:15:31**
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\011310.sif
Batch ID:
Results Data Set: 011310
Results Library: C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 1/13/2010 11:47:24**
IEC File: 011110.iec **MSF File:**
Method Description:

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

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Sequence No.: 1 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/13/2010 13:15:39**
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	Conc.	Sample Units	Analysis Time
1	Sc Radial	5210.7	5210.7	98.1	%			13:17:32
1	Y RADIAL	5507.7	5507.7	97.10	%			13:17:32
1	Al 396.153Radial†	6602.2	6745.2	4893.9	ug/L	4893.9	ppb	13:17:32

1	Ca 317.933Radial†	3249.1	3289.7	4999.5 ug/L	4999.5 ppb	13:17:52
1	Fe 238.204 Radial†	624.7	626.5	5179.6 ug/L	5179.6 ppb	13:17:52
1	K 766.490 Radial†	30424.3	28357.4	5130.2 ug/L	5130.2 ppb	13:17:32
1	Mg 279.077 IEC†	164.5	164.5	5140.9 ug/L	5140.9 ppb	13:17:52
1	Na 589.592 Radial†	33364.5	35619.3	10380 ug/L	10380 ppb	13:17:32
1	Sr 421.552†	78956.3	80450.2	508.18 ug/L	508.18 ppb	13:17:32
1	Sc 361.383	865826.9	865826.9	99.261 %		13:18:49
1	Y 371.029	715715.2	715715.2	97.577 %		13:18:49
1	Ag 328.068†	111992.9	112447.9	503.48 ug/L	503.48 ppb	13:18:55
1	As 188.979†	1191.9	1224.2	501.33 ug/L	501.33 ppb	13:19:15
1	B 249.677†	22581.4	23386.4	507.59 ug/L	507.59 ppb	13:18:55
1	Ba 233.527†	65774.4	66273.2	499.64 ug/L	499.64 ppb	13:18:55
1	Be 313.107†	1358626.6	1373071.2	488.74 ug/L	488.74 ppb	13:18:49
1	Cd 226.502†	46563.6	47113.1	498.81 ug/L	498.81 ppb	13:18:55
1	Co 228.616†	25191.3	25457.3	499.53 ug/L	499.53 ppb	13:18:55
1	Cr 267.716†	46069.7	46339.6	495.79 ug/L	495.79 ppb	13:18:55
1	Cu 324.752†	176590.2	171359.6	497.02 ug/L	497.02 ppb	13:18:55
1	Mn 257.610†	461585.2	464543.1	491.84 ug/L	491.84 ppb	13:18:49
1	Mo 202.031†	7318.6	7352.6	496.88 ug/L	496.88 ppb	13:19:15
1	Ni 231.604†	20863.6	20924.8	497.79 ug/L	497.79 ppb	13:18:55
1	P 214.914†	4472.9	4294.8	2375.3 ug/L	2375.3 ppb	13:19:15
1	Pb 220.353†	4145.1	4243.3	496.55 ug/L	496.55 ppb	13:19:15
1	S 181.975 Axial†	794.0	755.4	1006.2 ug/L	1006.2 ppb	13:19:15
1	Sb 206.836†	1527.0	1509.1	516.92 ug/L	516.92 ppb	13:19:15
1	Se 196.026†	798.5	828.6	522.87 ug/L	522.87 ppb	13:19:15
1	Si 251.611†	81609.9	81774.4	2497.5 ug/L	2497.5 ppb	13:18:55
1	Sn 189.927†	2942.6	2963.8	497.94 ug/L	497.94 ppb	13:19:15
1	Ti 334.940†	311661.8	315333.7	489.41 ug/L	489.41 ppb	13:18:55
1	Tl 190.801†	1637.8	1689.5	495.35 ug/L	495.35 ppb	13:19:15
1	U 409.014†	15439.3	17631.7	499.32 ug/L	499.32 ppb	13:18:55
1	V 292.402†	73699.3	75639.2	500.96 ug/L	500.96 ppb	13:18:55
1	Zn 213.857†	55811.5	55230.6	494.98 ug/L	494.98 ppb	13:18:55
1	SiO2†	81047.0	81191.8	5301.9 ug/L	5301.9 ppb	13:20:22
2	Sc Radial	5226.1	5226.1	98.4 %		13:17:57
2	Y RADIAL	5542.4	5542.4	97.71 %		13:17:57
2	Al 396.153Radial†	6642.6	6766.5	4909.7 ug/L	4909.7 ppb	13:17:57
2	Ca 317.933Radial†	3242.6	3273.3	4974.5 ug/L	4974.5 ppb	13:18:17
2	Fe 238.204 Radial†	621.4	621.2	5136.3 ug/L	5136.3 ppb	13:18:17
2	K 766.490 Radial†	30526.7	28370.3	5132.5 ug/L	5132.5 ppb	13:17:57
2	Mg 279.077 IEC†	166.9	166.4	5202.3 ug/L	5202.3 ppb	13:18:17
2	Na 589.592 Radial†	33668.5	35828.3	10441 ug/L	10441 ppb	13:17:57
2	Sr 421.552†	79415.4	80680.1	509.63 ug/L	509.63 ppb	13:17:57
2	Sc 361.383	872758.4	872758.4	100.06 %		13:19:20
2	Y 371.029	720633.8	720633.8	98.247 %		13:19:20
2	Ag 328.068†	110861.0	110420.5	494.43 ug/L	494.43 ppb	13:19:26
2	As 188.979†	1173.3	1196.0	489.82 ug/L	489.82 ppb	13:19:46
2	B 249.677†	22305.1	22929.5	497.66 ug/L	497.66 ppb	13:19:26
2	Ba 233.527†	65075.8	65048.7	490.42 ug/L	490.42 ppb	13:19:26
2	Be 313.107†	1368034.7	1371603.4	488.20 ug/L	488.20 ppb	13:19:20
2	Cd 226.502†	46179.2	46356.3	490.79 ug/L	490.79 ppb	13:19:26
2	Co 228.616†	24959.3	25024.0	491.03 ug/L	491.03 ppb	13:19:26
2	Cr 267.716†	45799.3	45700.8	488.95 ug/L	488.95 ppb	13:19:26
2	Cu 324.752†	174094.5	167452.3	485.70 ug/L	485.70 ppb	13:19:26
2	Mn 257.610†	464886.0	464148.8	491.41 ug/L	491.41 ppb	13:19:20
2	Mo 202.031†	7279.8	7255.2	490.30 ug/L	490.30 ppb	13:19:46
2	Ni 231.604†	20673.9	20568.3	489.31 ug/L	489.31 ppb	13:19:26
2	P 214.914†	4452.5	4238.6	2345.1 ug/L	2345.1 ppb	13:19:46
2	Pb 220.353†	4124.8	4189.9	490.32 ug/L	490.32 ppb	13:19:46
2	S 181.975 Axial†	788.8	743.8	990.70 ug/L	990.70 ppb	13:19:46
2	Sb 206.836†	1532.6	1502.5	514.49 ug/L	514.49 ppb	13:19:46
2	Se 196.026†	791.3	815.0	514.45 ug/L	514.45 ppb	13:19:46
2	Si 251.611†	80572.5	80084.6	2445.9 ug/L	2445.9 ppb	13:19:26
2	Sn 189.927†	2919.5	2917.2	490.11 ug/L	490.11 ppb	13:19:46
2	Ti 334.940†	308086.5	309266.7	480.00 ug/L	480.00 ppb	13:19:26
2	Tl 190.801†	1640.1	1678.7	492.19 ug/L	492.19 ppb	13:19:46
2	U 409.014†	15036.0	17105.1	484.38 ug/L	484.38 ppb	13:19:26
2	V 292.402†	73019.5	74370.1	492.56 ug/L	492.56 ppb	13:19:26
2	Zn 213.857†	55255.8	54228.5	485.99 ug/L	485.99 ppb	13:19:26
2	SiO2†	80177.1	79673.9	5202.7 ug/L	5202.7 ppb	13:20:27
3	Sc Radial	5263.3	5263.3	99.1 %		13:18:22
3	Y RADIAL	5560.8	5560.8	98.03 %		13:18:22

3	Al 396.153Radial†	6679.6	6756.1	4902.1 ug/L	4902.1 ppb	13:18:22
3	Ca 317.933Radial†	3247.9	3255.4	4947.4 ug/L	4947.4 ppb	13:18:42
3	Fe 238.204 Radial†	626.9	622.3	5145.3 ug/L	5145.3 ppb	13:18:42
3	K 766.490 Radial†	30637.1	28262.6	5113.0 ug/L	5113.0 ppb	13:18:22
3	Mg 279.077 IEC†	168.4	166.7	5211.7 ug/L	5211.7 ppb	13:18:42
3	Na 589.592 Radial†	33801.3	35720.8	10410 ug/L	10410 ppb	13:18:22
3	Sr 421.552†	79951.4	80651.1	509.45 ug/L	509.45 ppb	13:18:22
3	Sc 361.383	871309.4	871309.4	99.889 %		13:19:51
3	Y 371.029	720002.3	720002.3	98.161 %		13:19:51
3	Ag 328.068†	111566.0	111310.5	498.40 ug/L	498.40 ppb	13:19:57
3	As 188.979†	1204.7	1229.4	503.42 ug/L	503.42 ppb	13:20:17
3	B 249.677†	22487.8	23149.5	502.44 ug/L	502.44 ppb	13:19:57
3	Ba 233.527†	65418.6	65500.1	493.82 ug/L	493.82 ppb	13:19:57
3	Be 313.107†	1364064.9	1369902.9	487.60 ug/L	487.60 ppb	13:19:51
3	Cd 226.502†	46384.9	46639.0	493.79 ug/L	493.79 ppb	13:19:57
3	Co 228.616†	25163.8	25270.2	495.85 ug/L	495.85 ppb	13:19:57
3	Cr 267.716†	45954.2	45932.0	491.43 ug/L	491.43 ppb	13:19:57
3	Cu 324.752†	175270.2	168918.7	489.95 ug/L	489.95 ppb	13:19:57
3	Mn 257.610†	463300.9	463334.6	490.55 ug/L	490.55 ppb	13:19:51
3	Mo 202.031†	7276.0	7263.6	490.87 ug/L	490.87 ppb	13:20:17
3	Ni 231.604†	20821.6	20750.5	493.64 ug/L	493.64 ppb	13:19:57
3	P 214.914†	4450.0	4243.5	2347.1 ug/L	2347.1 ppb	13:20:17
3	Pb 220.353†	4148.5	4220.5	493.88 ug/L	493.88 ppb	13:20:17
3	S 181.975 Axial†	785.1	741.4	987.57 ug/L	987.57 ppb	13:20:17
3	Sb 206.836†	1523.5	1495.9	512.37 ug/L	512.37 ppb	13:20:17
3	Se 196.026†	791.7	816.7	515.51 ug/L	515.51 ppb	13:20:17
3	Si 251.611†	81040.9	80687.4	2464.3 ug/L	2464.3 ppb	13:19:57
3	Sn 189.927†	2931.2	2933.7	492.88 ug/L	492.88 ppb	13:20:17
3	Ti 334.940†	310021.7	311716.0	483.79 ug/L	483.79 ppb	13:19:57
3	Tl 190.801†	1652.7	1694.0	496.66 ug/L	496.66 ppb	13:20:17
3	U 409.014†	15360.2	17454.6	494.31 ug/L	494.31 ppb	13:19:57
3	V 292.402†	73520.9	74993.4	496.66 ug/L	496.66 ppb	13:19:57
3	Zn 213.857†	55631.6	54696.6	490.19 ug/L	490.19 ppb	13:19:57
3	SiO2†	81365.9	80997.3	5289.3 ug/L	5289.3 ppb	13:20:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	869964.9	99.735	%	0.4191				0.42%
Sc Radial	5233.4	98.6	%	0.51				0.52%
Y 371.029	718783.8	97.995	%	0.3649				0.37%
Y RADIAL	5536.9	97.61	%	0.475				0.49%
Ag 328.068†	111393.0	498.77	ug/L	4.539	498.77	ppb	4.539	0.91%
QC value within limits for Ag 328.068 Recovery = 99.75%								
Al 396.153Radial†	6755.9	4901.9	ug/L	7.92	4901.9	ppb	7.92	0.16%
QC value within limits for Al 396.153Radial Recovery = 98.04%								
As 188.979†	1216.5	498.19	ug/L	7.320	498.19	ppb	7.320	1.47%
QC value within limits for As 188.979 Recovery = 99.64%								
B 249.677†	23155.1	502.57	ug/L	4.966	502.57	ppb	4.966	0.99%
QC value within limits for B 249.677 Recovery = 100.51%								
Ba 233.527†	65607.3	494.63	ug/L	4.667	494.63	ppb	4.667	0.94%
QC value within limits for Ba 233.527 Recovery = 98.93%								
Be 313.107†	1371525.9	488.18	ug/L	0.569	488.18	ppb	0.569	0.12%
QC value within limits for Be 313.107 Recovery = 97.64%								
Ca 317.933Radial†	3272.8	4973.8	ug/L	26.03	4973.8	ppb	26.03	0.52%
QC value within limits for Ca 317.933Radial Recovery = 99.48%								
Cd 226.502†	46702.8	494.46	ug/L	4.051	494.46	ppb	4.051	0.82%
QC value within limits for Cd 226.502 Recovery = 98.89%								
Co 228.616†	25250.5	495.47	ug/L	4.262	495.47	ppb	4.262	0.86%
QC value within limits for Co 228.616 Recovery = 99.09%								
Cr 267.716†	45990.8	492.05	ug/L	3.460	492.05	ppb	3.460	0.70%
QC value within limits for Cr 267.716 Recovery = 98.41%								
Cu 324.752†	169243.5	490.89	ug/L	5.722	490.89	ppb	5.722	1.17%
QC value within limits for Cu 324.752 Recovery = 98.18%								
Fe 238.204 Radial†	623.3	5153.7	ug/L	22.84	5153.7	ppb	22.84	0.44%
QC value within limits for Fe 238.204 Radial Recovery = 103.07%								
K 766.490 Radial†	28330.1	5125.3	ug/L	10.64	5125.3	ppb	10.64	0.21%
QC value within limits for K 766.490 Radial Recovery = 102.51%								
Mg 279.077 IEC†	165.9	5185.0	ug/L	38.43	5185.0	ppb	38.43	0.74%
QC value within limits for Mg 279.077 IEC Recovery = 103.70%								

Mn 257.610†	464008.8	491.27 ug/L	0.655	491.27 ppb	0.655	0.13%
QC value within limits for Mn 257.610 Recovery = 98.25%						
Mo 202.031†	7290.4	492.68 ug/L	3.646	492.68 ppb	3.646	0.74%
QC value within limits for Mo 202.031 Recovery = 98.54%						
Na 589.592 Radial†	35722.8	10410 ug/L	30.5	10410 ppb	30.5	0.29%
QC value within limits for Na 589.592 Radial Recovery = 104.10%						
Ni 231.604†	20747.8	493.58 ug/L	4.240	493.58 ppb	4.240	0.86%
QC value within limits for Ni 231.604 Recovery = 98.72%						
P 214.914†	4258.9	2355.8 ug/L	16.85	2355.8 ppb	16.85	0.72%
QC value within limits for P 214.914 Recovery = 94.23%						
Pb 220.353†	4217.9	493.58 ug/L	3.127	493.58 ppb	3.127	0.63%
QC value within limits for Pb 220.353 Recovery = 98.72%						
S 181.975 Axial†	746.9	994.83 ug/L	9.979	994.83 ppb	9.979	1.00%
QC value within limits for S 181.975 Axial Recovery = 99.48%						
Sb 206.836†	1502.5	514.59 ug/L	2.278	514.59 ppb	2.278	0.44%
QC value within limits for Sb 206.836 Recovery = 102.92%						
Se 196.026†	820.1	517.61 ug/L	4.587	517.61 ppb	4.587	0.89%
QC value within limits for Se 196.026 Recovery = 103.52%						
Si 251.611†	80848.8	2469.2 ug/L	26.18	2469.2 ppb	26.18	1.06%
QC value within limits for Si 251.611 Recovery = 98.77%						
Sn 189.927†	2938.2	493.64 ug/L	3.970	493.64 ppb	3.970	0.80%
QC value within limits for Sn 189.927 Recovery = 98.73%						
Sr 421.552†	80593.8	509.09 ug/L	0.791	509.09 ppb	0.791	0.16%
QC value within limits for Sr 421.552 Recovery = 101.82%						
Ti 334.940†	312105.5	484.40 ug/L	4.739	484.40 ppb	4.739	0.98%
QC value within limits for Ti 334.940 Recovery = 96.88%						
Tl 190.801†	1687.4	494.73 ug/L	2.295	494.73 ppb	2.295	0.46%
QC value within limits for Tl 190.801 Recovery = 98.95%						
U 409.014†	17397.2	492.67 ug/L	7.605	492.67 ppb	7.605	1.54%
QC value within limits for U 409.014 Recovery = 98.53%						
V 292.402†	75000.9	496.72 ug/L	4.198	496.72 ppb	4.198	0.85%
QC value within limits for V 292.402 Recovery = 99.34%						
Zn 213.857†	54718.6	490.39 ug/L	4.496	490.39 ppb	4.496	0.92%
QC value within limits for Zn 213.857 Recovery = 98.08%						
SiO2†	80621.0	5264.7 ug/L	54.01	5264.7 ppb	54.01	1.03%
QC value within limits for SiO2 Recovery = 98.45%						

All analyte(s) passed QC.

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/13/2010 13:22:43
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	5222.0	5222.0	98.3	%			13:24:35
1	Y RADIAL	5617.0	5617.0	99.02	%			13:24:35
1	Al 396.153Radial†	5.3	22.2	16.172	ug/L	16.172	ppb	13:24:35
1	Ca 317.933Radial†	22.7	1.5	2.2733	ug/L	2.2733	ppb	13:24:55
1	Fe 238.204 Radial†	8.8	-1.2	-9.9529	ug/L	-9.9529	ppb	13:24:55
1	K 766.490 Radial†	3026.4	429.0	77.672	ug/L	77.672	ppb	13:24:35
1	Mg 279.077 IEC†	-1.1	-4.3	-134.31	ug/L	-134.31	ppb	13:24:55
1	Na 589.592 Radial†	-1329.0	265.5	77.370	ug/L	77.370	ppb	13:24:35
1	Sr 421.552†	29.7	14.5	0.0918	ug/L	0.0918	ppb	13:24:35
1	Sc 361.383	857360.8	857360.8	98.290	%			13:25:52
1	Y 371.029	720346.3	720346.3	98.208	%			13:25:52
1	Ag 328.068†	289.7	-84.5	-0.3783	ug/L	-0.3783	ppb	13:25:52
1	As 188.979†	-9.4	13.9	5.6381	ug/L	5.6381	ppb	13:26:12
1	B 249.677†	60.1	697.9	15.217	ug/L	15.217	ppb	13:26:12
1	Ba 233.527†	-7.8	0.9	0.0070	ug/L	0.0070	ppb	13:26:12
1	Be 313.107†	-4204.1	47.2	0.0163	ug/L	0.0163	ppb	13:25:52
1	Cd 226.502†	-152.8	47.2	0.5006	ug/L	0.5006	ppb	13:26:12
1	Co 228.616†	-74.8	2.3	0.0453	ug/L	0.0453	ppb	13:26:12
1	Cr 267.716†	109.2	37.9	0.4052	ug/L	0.4052	ppb	13:26:12
1	Cu 324.752†	6504.6	71.8	0.2071	ug/L	0.2071	ppb	13:25:52
1	Mn 257.610†	423.8	-49.2	-0.0476	ug/L	-0.0476	ppb	13:26:12
1	Mo 202.031†	14.1	-6.2	-0.4214	ug/L	-0.4214	ppb	13:26:12
1	Ni 231.604†	90.7	-2.0	-0.0468	ug/L	-0.0468	ppb	13:26:12
1	P 214.914†	214.4	6.6	3.7588	ug/L	3.7588	ppb	13:26:12
1	Pb 220.353†	-62.4	3.9	0.4534	ug/L	0.4534	ppb	13:26:12
1	S 181.975 Axial†	48.4	4.8	6.3404	ug/L	6.3404	ppb	13:26:12
1	Sb 206.836†	57.9	29.7	9.8100	ug/L	9.8100	ppb	13:26:12
1	Se 196.026†	-28.9	-5.2	-3.2076	ug/L	-3.2076	ppb	13:26:12
1	Si 251.611†	489.5	54.6	1.6771	ug/L	1.6771	ppb	13:26:12
1	Sn 189.927†	0.4	-0.4	-0.0672	ug/L	-0.0672	ppb	13:26:12
1	Ti 334.940†	-1466.6	-141.7	-0.2093	ug/L	-0.2093	ppb	13:25:52
1	Tl 190.801†	-39.3	-0.5	-0.1511	ug/L	-0.1511	ppb	13:26:12
1	U 409.014†	-2009.4	33.1	0.9404	ug/L	0.9404	ppb	13:25:52
1	V 292.402†	-1303.5	64.8	0.4180	ug/L	0.4180	ppb	13:25:52
1	Zn 213.857†	700.8	-283.7	-2.5639	ug/L	-2.5639	ppb	13:26:12
1	SiO2†	482.8	32.2	2.1224	ug/L	2.1224	ppb	13:27:08
2	Sc Radial	5272.7	5272.7	99.3	%			13:25:00
2	Y RADIAL	5644.0	5644.0	99.50	%			13:25:00
2	Al 396.153Radial†	14.4	31.3	22.759	ug/L	22.759	ppb	13:25:00
2	Ca 317.933Radial†	18.8	-2.7	-4.0495	ug/L	-4.0495	ppb	13:25:20
2	Fe 238.204 Radial†	10.1	-0.0	-0.2384	ug/L	-0.2384	ppb	13:25:20
2	K 766.490 Radial†	2999.3	372.1	67.390	ug/L	67.390	ppb	13:25:00
2	Mg 279.077 IEC†	2.1	-1.1	-34.085	ug/L	-34.085	ppb	13:25:20
2	Na 589.592 Radial†	-1414.8	192.1	55.968	ug/L	55.968	ppb	13:25:00
2	Sr 421.552†	21.1	5.5	0.0351	ug/L	0.0351	ppb	13:25:00
2	Sc 361.383	868284.5	868284.5	99.542	%			13:26:17
2	Y 371.029	730478.8	730478.8	99.590	%			13:26:17
2	Ag 328.068†	311.3	-66.6	-0.2955	ug/L	-0.2955	ppb	13:26:17
2	As 188.979†	-9.4	14.0	5.6657	ug/L	5.6657	ppb	13:26:37
2	B 249.677†	70.6	707.7	15.429	ug/L	15.429	ppb	13:26:37
2	Ba 233.527†	-7.0	1.8	0.0131	ug/L	0.0131	ppb	13:26:37
2	Be 313.107†	-4305.0	-0.4	0.0000	ug/L	0.0000	ppb	13:26:17
2	Cd 226.502†	-166.9	35.0	0.3699	ug/L	0.3699	ppb	13:26:37
2	Co 228.616†	-68.2	9.9	0.1947	ug/L	0.1947	ppb	13:26:37
2	Cr 267.716†	102.0	29.3	0.3132	ug/L	0.3132	ppb	13:26:37
2	Cu 324.752†	6563.0	47.1	0.1378	ug/L	0.1378	ppb	13:26:17
2	Mn 257.610†	432.6	-45.9	-0.0472	ug/L	-0.0472	ppb	13:26:37
2	Mo 202.031†	28.4	7.9	0.5361	ug/L	0.5361	ppb	13:26:37
2	Ni 231.604†	91.0	-2.8	-0.0677	ug/L	-0.0677	ppb	13:26:37

2	P 214.914†	213.7	3.2	1.8358	ug/L	1.8358 ppb	13:26:37
2	Pb 220.353†	-66.0	1.1	0.1291	ug/L	0.1291 ppb	13:26:37
2	S 181.975 Axial†	48.1	3.8	5.0830	ug/L	5.0830 ppb	13:26:37
2	Sb 206.836†	49.3	20.3	6.7674	ug/L	6.7674 ppb	13:26:37
2	Se 196.026†	-32.3	-8.3	-5.0693	ug/L	-5.0693 ppb	13:26:37
2	Si 251.611†	479.0	37.7	1.1485	ug/L	1.1485 ppb	13:26:37
2	Sn 189.927†	12.9	12.2	2.0446	ug/L	2.0446 ppb	13:26:37
2	Ti 334.940†	-1318.3	26.0	0.0434	ug/L	0.0434 ppb	13:26:17
2	Tl 190.801†	-35.5	3.8	1.0986	ug/L	1.0986 ppb	13:26:37
2	U 409.014†	-2142.1	-74.5	-2.1180	ug/L	-2.1180 ppb	13:26:17
2	V 292.402†	-1424.2	-39.9	-0.2578	ug/L	-0.2578 ppb	13:26:17
2	Zn 213.857†	719.9	-273.5	-2.4727	ug/L	-2.4727 ppb	13:26:37
2	SiO2†	463.7	7.0	0.4419	ug/L	0.4419 ppb	13:27:13
3	Sc Radial	5291.6	5291.6	99.6	%		13:25:25
3	Y RADIAL	5651.1	5651.1	99.63	%		13:25:25
3	Al 396.153Radial†	-0.1	16.6	12.089	ug/L	12.089 ppb	13:25:25
3	Ca 317.933Radial†	20.2	-1.3	-1.9605	ug/L	-1.9605 ppb	13:25:45
3	Fe 238.204 Radial†	8.9	-1.2	-10.161	ug/L	-10.161 ppb	13:25:45
3	K 766.490 Radial†	3094.8	457.1	82.781	ug/L	82.781 ppb	13:25:25
3	Mg 279.077 IEC†	0.3	-2.9	-89.612	ug/L	-89.612 ppb	13:25:45
3	Na 589.592 Radial†	-1404.5	207.5	60.482	ug/L	60.482 ppb	13:25:25
3	Sr 421.552†	4.1	-11.6	-0.0734	ug/L	-0.0734 ppb	13:25:25
3	Sc 361.383	863046.8	863046.8	98.942	%		13:26:43
3	Y 371.029	726207.2	726207.2	99.007	%		13:26:43
3	Ag 328.068†	235.6	-141.2	-0.6326	ug/L	-0.6326 ppb	13:26:43
3	As 188.979†	-14.3	8.9	3.6232	ug/L	3.6232 ppb	13:27:03
3	B 249.677†	67.1	704.6	15.362	ug/L	15.362 ppb	13:27:03
3	Ba 233.527†	-9.6	-0.9	-0.0068	ug/L	-0.0068 ppb	13:27:03
3	Be 313.107†	-4291.7	-13.1	-0.0046	ug/L	-0.0046 ppb	13:26:43
3	Cd 226.502†	-164.1	36.7	0.3903	ug/L	0.3903 ppb	13:27:03
3	Co 228.616†	-65.3	12.4	0.2444	ug/L	0.2444 ppb	13:27:03
3	Cr 267.716†	94.0	21.8	0.2325	ug/L	0.2325 ppb	13:27:03
3	Cu 324.752†	6583.3	107.7	0.3109	ug/L	0.3109 ppb	13:26:43
3	Mn 257.610†	435.0	-40.7	-0.0404	ug/L	-0.0404 ppb	13:27:03
3	Mo 202.031†	26.1	5.8	0.3903	ug/L	0.3903 ppb	13:27:03
3	Ni 231.604†	80.9	-12.5	-0.2966	ug/L	-0.2966 ppb	13:27:03
3	P 214.914†	223.0	13.9	7.9569	ug/L	7.9569 ppb	13:27:03
3	Pb 220.353†	-50.2	16.6	1.9391	ug/L	1.9391 ppb	13:27:03
3	S 181.975 Axial†	50.6	6.7	8.8645	ug/L	8.8645 ppb	13:27:03
3	Sb 206.836†	49.2	20.5	6.8046	ug/L	6.8046 ppb	13:27:03
3	Se 196.026†	-30.8	-7.0	-4.2811	ug/L	-4.2811 ppb	13:27:03
3	Si 251.611†	476.1	37.7	1.1495	ug/L	1.1495 ppb	13:27:03
3	Sn 189.927†	9.9	9.3	1.5579	ug/L	1.5579 ppb	13:27:03
3	Ti 334.940†	-1330.8	5.3	0.0145	ug/L	0.0145 ppb	13:26:43
3	Tl 190.801†	-26.1	13.1	3.8089	ug/L	3.8089 ppb	13:27:03
3	U 409.014†	-1991.3	64.8	1.8430	ug/L	1.8430 ppb	13:26:43
3	V 292.402†	-1367.5	8.8	0.0660	ug/L	0.0660 ppb	13:26:43
3	Zn 213.857†	694.3	-295.0	-2.6645	ug/L	-2.6645 ppb	13:27:03
3	SiO2†	499.2	45.7	2.9781	ug/L	2.9781 ppb	13:27:18

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	862897.4	98.925	%	0.6263				0.63%
Sc Radial	5262.1	99.1	%	0.68				0.68%
Y 371.029	725677.4	98.935	%	0.6935				0.70%
Y RADIAL	5637.4	99.38	%	0.317				0.32%
Ag 328.068†	-97.4	-0.4355	ug/L	0.17567	-0.4355	ppb	0.17567	40.34%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	23.3	17.007	ug/L	5.3840	17.007	ppb	5.3840	31.66%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	12.3	4.9757	ug/L	1.17133	4.9757	ppb	1.17133	23.54%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	703.4	15.336	ug/L	0.1086	15.336	ppb	0.1086	0.71%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.6	0.0044	ug/L	0.01019	0.0044	ppb	0.01019	229.85%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	11.2	0.0039	ug/L	0.01099	0.0039	ppb	0.01099	284.33%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-0.8	-1.2456	ug/L	3.22149	-1.2456	ppb	3.22149	258.64%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              39.6      0.4202 ug/L       0.07031      0.4202 ppb        0.07031  16.73%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               8.2      0.1615 ug/L       0.10362      0.1615 ppb        0.10362  64.17%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              29.7      0.3170 ug/L       0.08642      0.3170 ppb        0.08642  27.26%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              75.5      0.2186 ug/L       0.08708      0.2186 ppb        0.08708  39.84%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -0.8     -6.7842 ug/L       5.66980     -6.7842 ppb        5.66980  83.57%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       419.4     75.948 ug/L        7.8389      75.948 ppb         7.8389  10.32%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -2.8    -86.003 ug/L       50.2102     -86.003 ppb        50.2102  58.38%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             -45.3     -0.0450 ug/L       0.00400     -0.0450 ppb        0.00400   8.87%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               2.5      0.1683 ug/L       0.51591      0.1683 ppb        0.51591 306.46%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      221.7     64.607 ug/L       11.2818      64.607 ppb        11.2818  17.46%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -5.8     -0.1370 ug/L       0.13857     -0.1370 ppb        0.13857 101.12%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                7.9      4.5172 ug/L       3.13019      4.5172 ppb        3.13019  69.30%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               7.2      0.8405 ug/L       0.96511      0.8405 ppb        0.96511 114.82%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          5.1      6.7626 ug/L       1.92581      6.7626 ppb        1.92581  28.48%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              23.5      7.7940 ug/L       1.74600      7.7940 ppb        1.74600  22.40%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -6.8     -4.1860 ug/L       0.93448     -4.1860 ppb        0.93448  22.32%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              43.3      1.3250 ug/L       0.30492      1.3250 ppb        0.30492  23.01%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               7.0      1.1784 ug/L       1.10587      1.1784 ppb        1.10587  93.85%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               2.8      0.0178 ug/L       0.08394      0.0178 ppb        0.08394 471.85%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -36.8     -0.0505 ug/L       0.13830     -0.0505 ppb        0.13830 273.99%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               5.4      1.5855 ug/L       2.02442      1.5855 ppb        2.02442 127.68%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                7.8      0.2218 ug/L       2.07599      0.2218 ppb        2.07599 936.05%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               11.2      0.0754 ug/L       0.33801      0.0754 ppb        0.33801 448.34%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            -284.1     -2.5670 ug/L       0.09595     -2.5670 ppb        0.09595   3.74%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    28.3      1.8475 ug/L       1.29024      1.8475 ppb        1.29024  69.84%
   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: 1/13/2010 13:29:28
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	5089.8	5089.8	95.8	%			13:31:21
1	Y RADIAL	5424.6	5424.6	95.63	%			13:31:21
1	Al 396.153Radial†	-28.8	-13.3	-8.3968	ug/L	-8.3968	ppb	13:31:21
1	Ca 317.933Radial†	10.4	-10.7	-16.240	ug/L	-16.240	ppb	13:31:41
1	Fe 238.204 Radial†	43478.2	45352.3	373900	ug/L	373900	ppb	13:31:21
1	K 766.490 Radial†	2708.9	177.7	32.212	ug/L	32.212	ppb	13:31:21
1	Mg 279.077 IEC†	14.0	11.4	-36.385	ug/L	-36.385	ppb	13:31:41
1	Na 589.592 Radial†	-1336.2	222.9	64.960	ug/L	64.960	ppb	13:31:21
1	Sr 421.552†	66.3	53.4	0.3377	ug/L	0.3377	ppb	13:31:21
1	Sc 361.383	848863.4	848863.4	97.316	%			13:32:39
1	Y 371.029	707427.5	707427.5	96.447	%			13:32:39
1	Ag 328.068†	-25950.1	-27045.1	0.9424	ug/L	0.9424	ppb	13:32:39
1	As 188.979†	-207.2	-189.5	10.693	ug/L	10.693	ppb	13:32:59
1	B 249.677†	2407.4	3110.6	7.0804	ug/L	7.0804	ppb	13:32:39
1	Ba 233.527†	-1621.2	-1657.1	-0.9581	ug/L	-0.9581	ppb	13:32:39
1	Be 313.107†	-4270.6	-64.0	-0.0229	ug/L	-0.0229	ppb	13:32:39
1	Cd 226.502†	3242.8	3534.9	-1.1721	ug/L	-1.1721	ppb	13:32:39
1	Co 228.616†	204.5	288.6	0.1967	ug/L	0.1967	ppb	13:32:59
1	Cr 267.716†	-668.1	-759.7	-0.7954	ug/L	-0.7954	ppb	13:32:39
1	Cu 324.752†	229.6	-6310.1	1.4513	ug/L	1.4513	ppb	13:32:39
1	Mn 257.610†	-33824.8	-35238.2	-0.3720	ug/L	-0.3720	ppb	13:32:39
1	Mo 202.031†	-365.8	-396.5	2.2582	ug/L	2.2582	ppb	13:32:39
1	Ni 231.604†	168.6	79.0	1.8776	ug/L	1.8776	ppb	13:32:59
1	P 214.914†	714.8	523.0	3.5180	ug/L	3.5180	ppb	13:32:59
1	Pb 220.353†	222.2	295.7	-1.2955	ug/L	-1.2955	ppb	13:32:59
1	S 181.975 Axial†	67.6	24.9	33.240	ug/L	33.240	ppb	13:32:59
1	Sb 206.836†	23.0	-5.6	7.1260	ug/L	7.1260	ppb	13:32:59
1	Se 196.026†	-1809.7	-1835.5	107.64	ug/L	107.64	ppb	13:32:59
1	Si 251.611†	-601.4	-1061.4	-32.167	ug/L	-32.167	ppb	13:32:39
1	Sn 189.927†	-16.6	-17.8	3.2994	ug/L	3.2994	ppb	13:32:59
1	Ti 334.940†	-1371.6	-59.1	-0.1490	ug/L	-0.1490	ppb	13:32:39
1	Tl 190.801†	-47.1	-8.9	-2.9148	ug/L	-2.9148	ppb	13:32:59
1	U 409.014†	245.2	2329.4	23.586	ug/L	23.586	ppb	13:32:39
1	V 292.402†	7314.4	8907.1	3.5153	ug/L	3.5153	ppb	13:32:39
1	Zn 213.857†	4541.8	3670.4	-3.0739	ug/L	-3.0739	ppb	13:32:59
1	SiO2†	-712.0	-1190.5	-77.213	ug/L	-77.213	ppb	13:33:56
2	Sc Radial	5188.1	5188.1	97.7	%			13:31:46
2	Y RADIAL	5522.1	5522.1	97.35	%			13:31:46
2	Al 396.153Radial†	-50.3	-34.7	-24.050	ug/L	-24.050	ppb	13:31:46
2	Ca 317.933Radial†	11.9	-9.4	-14.241	ug/L	-14.241	ppb	13:32:07
2	Fe 238.204 Radial†	43883.8	44907.8	370230	ug/L	370230	ppb	13:31:46
2	K 766.490 Radial†	2591.0	3.4	0.6399	ug/L	0.6399	ppb	13:31:46
2	Mg 279.077 IEC†	12.2	9.3	-97.877	ug/L	-97.877	ppb	13:32:07
2	Na 589.592 Radial†	-1351.1	234.1	68.213	ug/L	68.213	ppb	13:31:46
2	Sr 421.552†	65.3	51.1	0.3232	ug/L	0.3232	ppb	13:31:46
2	Sc 361.383	851485.5	851485.5	97.616	%			13:33:05
2	Y 371.029	710510.6	710510.6	96.867	%			13:33:05
2	Ag 328.068†	-26056.4	-27071.9	-0.3633	ug/L	-0.3633	ppb	13:33:05
2	As 188.979†	-207.9	-189.6	9.8173	ug/L	9.8173	ppb	13:33:25
2	B 249.677†	2246.7	2938.4	3.9224	ug/L	3.9224	ppb	13:33:05
2	Ba 233.527†	-1602.8	-1633.1	-0.8899	ug/L	-0.8899	ppb	13:33:05
2	Be 313.107†	-4297.9	-78.4	-0.0280	ug/L	-0.0280	ppb	13:33:05
2	Cd 226.502†	3324.2	3608.0	-0.0207	ug/L	-0.0207	ppb	13:33:05
2	Co 228.616†	181.7	264.6	-0.2200	ug/L	-0.2200	ppb	13:33:25
2	Cr 267.716†	-596.9	-684.7	-0.0643	ug/L	-0.0643	ppb	13:33:05
2	Cu 324.752†	10.7	-6535.0	0.6063	ug/L	0.6063	ppb	13:33:05
2	Mn 257.610†	-34186.6	-35501.7	-1.0102	ug/L	-1.0102	ppb	13:33:05
2	Mo 202.031†	-358.3	-387.6	2.5698	ug/L	2.5698	ppb	13:33:05
2	Ni 231.604†	140.4	49.6	1.1772	ug/L	1.1772	ppb	13:33:25

2	P 214.914†	707.5	513.2	0.9673 ug/L	0.9673 ppb	13:33:25
2	Pb 220.353†	217.4	290.0	-1.6025 ug/L	-1.6025 ppb	13:33:25
2	S 181.975 Axial†	63.7	20.7	27.625 ug/L	27.625 ppb	13:33:25
2	Sb 206.836†	44.3	16.1	14.196 ug/L	14.196 ppb	13:33:25
2	Se 196.026†	-1812.3	-1832.4	97.503 ug/L	97.503 ppb	13:33:25
2	Si 251.611†	-786.5	-1249.1	-37.922 ug/L	-37.922 ppb	13:33:05
2	Sn 189.927†	-28.6	-30.1	1.1840 ug/L	1.1840 ppb	13:33:25
2	Ti 334.940†	-1357.6	-40.4	-0.1136 ug/L	-0.1136 ppb	13:33:05
2	Tl 190.801†	-46.9	-8.6	-2.8042 ug/L	-2.8042 ppb	13:33:25
2	U 409.014†	156.2	2237.4	21.388 ug/L	21.388 ppb	13:33:05
2	V 292.402†	7274.3	8842.8	3.6308 ug/L	3.6308 ppb	13:33:05
2	Zn 213.857†	4540.1	3654.2	-2.8591 ug/L	-2.8591 ppb	13:33:25
2	SiO2†	-737.6	-1214.5	-78.800 ug/L	-78.800 ppb	13:34:01
3	Sc Radial	5173.4	5173.4	97.4 %		13:32:12
3	Y RADIAL	5514.5	5514.5	97.22 %		13:32:12
3	Al 396.153Radial†	-20.3	-4.1	-1.6599 ug/L	-1.6599 ppb	13:32:12
3	Ca 317.933Radial†	4.7	-16.7	-25.358 ug/L	-25.358 ppb	13:32:32
3	Fe 238.204 Radial†	44178.0	45337.2	373770 ug/L	373770 ppb	13:32:12
3	K 766.490 Radial†	2744.2	168.2	30.489 ug/L	30.489 ppb	13:32:12
3	Mg 279.077 IEC†	12.8	10.0	-79.739 ug/L	-79.739 ppb	13:32:32
3	Na 589.592 Radial†	-1329.4	252.4	73.550 ug/L	73.550 ppb	13:32:12
3	Sr 421.552†	80.3	66.7	0.4213 ug/L	0.4213 ppb	13:32:12
3	Sc 361.383	849383.2	849383.2	97.375 %		13:33:31
3	Y 371.029	708072.6	708072.6	96.535 %		13:33:31
3	Ag 328.068†	-25884.5	-26961.4	1.2764 ug/L	1.2764 ppb	13:33:31
3	As 188.979†	-204.5	-186.6	11.856 ug/L	11.856 ppb	13:33:51
3	B 249.677†	2168.1	2863.3	1.7117 ug/L	1.7117 ppb	13:33:31
3	Ba 233.527†	-1711.7	-1749.0	-1.6527 ug/L	-1.6527 ppb	13:33:31
3	Be 313.107†	-4351.6	-144.4	-0.0517 ug/L	-0.0517 ppb	13:33:31
3	Cd 226.502†	3319.7	3611.8	-0.3452 ug/L	-0.3452 ppb	13:33:31
3	Co 228.616†	174.1	257.2	-0.4199 ug/L	-0.4199 ppb	13:33:51
3	Cr 267.716†	-526.4	-613.8	0.7618 ug/L	0.7618 ppb	13:33:31
3	Cu 324.752†	295.3	-6242.7	1.6410 ug/L	1.6410 ppb	13:33:31
3	Mn 257.610†	-34064.7	-35463.3	-0.6208 ug/L	-0.6208 ppb	13:33:31
3	Mo 202.031†	-379.1	-409.8	1.3443 ug/L	1.3443 ppb	13:33:31
3	Ni 231.604†	144.4	54.1	1.2847 ug/L	1.2847 ppb	13:33:51
3	P 214.914†	687.5	494.5	-12.816 ug/L	-12.816 ppb	13:33:51
3	Pb 220.353†	223.4	296.8	-1.1562 ug/L	-1.1562 ppb	13:33:51
3	S 181.975 Axial†	57.4	14.4	19.153 ug/L	19.153 ppb	13:33:51
3	Sb 206.836†	23.2	-5.4	7.1251 ug/L	7.1251 ppb	13:33:51
3	Se 196.026†	-1820.2	-1845.1	101.34 ug/L	101.34 ppb	13:33:51
3	Si 251.611†	-723.0	-1185.9	-35.968 ug/L	-35.968 ppb	13:33:31
3	Sn 189.927†	-31.1	-32.7	0.8057 ug/L	0.8057 ppb	13:33:51
3	Ti 334.940†	-1428.7	-116.8	-0.2362 ug/L	-0.2362 ppb	13:33:31
3	Tl 190.801†	-45.7	-7.5	-2.4831 ug/L	-2.4831 ppb	13:33:51
3	U 409.014†	189.6	2272.1	21.968 ug/L	21.968 ppb	13:33:31
3	V 292.402†	7338.5	8927.2	3.6478 ug/L	3.6478 ppb	13:33:31
3	Zn 213.857†	4530.1	3655.5	-3.1930 ug/L	-3.1930 ppb	13:33:51
3	SiO2†	-743.0	-1221.9	-79.243 ug/L	-79.243 ppb	13:34:06

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	849910.7	97.436	%	0.1592				0.16%
Sc Radial	5150.4	97.0	%	1.00				1.03%
Y 371.029	708670.2	96.616	%	0.2217				0.23%
Y RADIAL	5487.1	96.73	%	0.956				0.99%
Ag 328.068†	-27026.2	0.6185	ug/L	0.86650	0.6185	ppb	0.86650	140.09%
Al 396.153Radial†	-17.4	-11.369	ug/L	11.4873	-11.369	ppb	11.4873	101.04%
As 188.979†	-188.6	10.789	ug/L	1.0229	10.789	ppb	1.0229	9.48%
B 249.677†	2970.8	4.2381	ug/L	2.69825	4.2381	ppb	2.69825	63.67%
Ba 233.527†	-1679.7	-1.1669	ug/L	0.42204	-1.1669	ppb	0.42204	36.17%
Be 313.107†	-95.6	-0.0342	ug/L	0.01536	-0.0342	ppb	0.01536	44.90%
Ca 317.933Radial†	-12.2	-18.613	ug/L	5.9263	-18.613	ppb	5.9263	31.84%
Cd 226.502†	3584.9	-0.5126	ug/L	0.59368	-0.5126	ppb	0.59368	115.81%
Co 228.616†	270.1	-0.1477	ug/L	0.31458	-0.1477	ppb	0.31458	212.97%
Cr 267.716†	-686.1	-0.0326	ug/L	0.77910	-0.0326	ppb	0.77910	>999.9%
Cu 324.752†	-6362.6	1.2329	ug/L	0.55085	1.2329	ppb	0.55085	44.68%
Fe 238.204 Radial†	45199.1	372630	ug/L	2080.8	372630	ppb	2080.8	0.56%
K 766.490 Radial†	116.4	21.114	ug/L	17.7517	21.114	ppb	17.7517	84.08%

Mg 279.077 IEC†	10.2	-71.334	ug/L	31.5960	-71.334	ppb	31.5960	44.29%
Mn 257.610†	-35401.0	-0.6677	ug/L	0.32166	-0.6677	ppb	0.32166	48.18%
Mo 202.031†	-398.0	2.0574	ug/L	0.63694	2.0574	ppb	0.63694	30.96%
Na 589.592 Radial†	236.5	68.908	ug/L	4.3374	68.908	ppb	4.3374	6.29%
Ni 231.604†	60.9	1.4465	ug/L	0.37717	1.4465	ppb	0.37717	26.08%
P 214.914†	510.3	-2.7771	ug/L	8.78743	-2.7771	ppb	8.78743	316.43%
Pb 220.353†	294.1	-1.3514	ug/L	0.22834	-1.3514	ppb	0.22834	16.90%
S 181.975 Axial†	20.0	26.673	ug/L	7.0918	26.673	ppb	7.0918	26.59%
Sb 206.836†	1.7	9.4824	ug/L	4.08219	9.4824	ppb	4.08219	43.05%
Se 196.026†	-1837.7	102.16	ug/L	5.116	102.16	ppb	5.116	5.01%
Si 251.611†	-1165.5	-35.352	ug/L	2.9263	-35.352	ppb	2.9263	8.28%
Sn 189.927†	-26.8	1.7630	ug/L	1.34394	1.7630	ppb	1.34394	76.23%
Sr 421.552†	57.1	0.3607	ug/L	0.05298	0.3607	ppb	0.05298	14.69%
Ti 334.940†	-72.1	-0.1662	ug/L	0.06310	-0.1662	ppb	0.06310	37.96%
Tl 190.801†	-8.3	-2.7340	ug/L	0.22424	-2.7340	ppb	0.22424	8.20%
U 409.014†	2279.7	22.314	ug/L	1.1390	22.314	ppb	1.1390	5.10%
V 292.402†	8892.4	3.5980	ug/L	0.07213	3.5980	ppb	0.07213	2.00%
Zn 213.857†	3660.0	-3.0420	ug/L	0.16921	-3.0420	ppb	0.16921	5.56%
SiO2†	-1209.0	-78.419	ug/L	1.0675	-78.419	ppb	1.0675	1.36%

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

Autosampler Location: 7
Date Collected: 1/13/2010 13:36:18
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	5235.1	5235.1	98.6	%			13:38:10
1	Y RADIAL	5532.0	5532.0	97.53	%			13:38:10
1	Al 396.153Radial†	6643.3	6755.5	4901.4	ug/L	4901.4	ppb	13:38:10
1	Ca 317.933Radial†	3221.5	3246.3	4933.5	ug/L	4933.5	ppb	13:38:30
1	Fe 238.204 Radial†	612.4	611.0	5052.5	ug/L	5052.5	ppb	13:38:30
1	K 766.490 Radial†	30215.9	28001.6	5066.0	ug/L	5066.0	ppb	13:38:10
1	Mg 279.077 IEC†	164.0	163.1	5099.5	ug/L	5099.5	ppb	13:38:30
1	Na 589.592 Radial†	31944.4	34020.5	9914.3	ug/L	9914.3	ppb	13:38:10
1	Sr 421.552†	77800.9	78903.5	498.41	ug/L	498.41	ppb	13:38:10
1	Sc 361.383	856532.4	856532.4	98.195	%			13:39:27
1	Y 371.029	706886.3	706886.3	96.373	%			13:39:27
1	Ag 328.068†	110950.4	112610.5	504.17	ug/L	504.17	ppb	13:39:32
1	As 188.979†	1178.7	1223.8	501.16	ug/L	501.16	ppb	13:39:53
1	B 249.677†	22134.1	23177.7	503.06	ug/L	503.06	ppb	13:39:32
1	Ba 233.527†	65046.2	66250.7	499.47	ug/L	499.47	ppb	13:39:32
1	Be 313.107†	1347267.8	1376356.3	489.91	ug/L	489.91	ppb	13:39:27
1	Cd 226.502†	45997.2	47045.2	498.10	ug/L	498.10	ppb	13:39:32
1	Co 228.616†	25009.7	25547.8	501.30	ug/L	501.30	ppb	13:39:32
1	Cr 267.716†	45749.6	46517.3	497.68	ug/L	497.68	ppb	13:39:32
1	Cu 324.752†	174623.0	171286.7	496.81	ug/L	496.81	ppb	13:39:32
1	Mn 257.610†	457999.7	465937.8	493.30	ug/L	493.30	ppb	13:39:27
1	Mo 202.031†	7236.2	7348.7	496.60	ug/L	496.60	ppb	13:39:53
1	Ni 231.604†	20666.3	20951.9	498.44	ug/L	498.44	ppb	13:39:32
1	P 214.914†	4412.3	4281.9	2368.0	ug/L	2368.0	ppb	13:39:53
1	Pb 220.353†	4103.0	4245.7	496.85	ug/L	496.85	ppb	13:39:53
1	S 181.975 Axial†	777.3	747.0	995.01	ug/L	995.01	ppb	13:39:53
1	Sb 206.836†	1505.0	1503.4	515.03	ug/L	515.03	ppb	13:39:53
1	Se 196.026†	782.8	821.4	518.05	ug/L	518.05	ppb	13:39:53
1	Si 251.611†	80612.7	81651.0	2493.7	ug/L	2493.7	ppb	13:39:32
1	Sn 189.927†	2913.1	2965.8	498.27	ug/L	498.27	ppb	13:39:53
1	Ti 334.940†	308672.2	315696.2	489.97	ug/L	489.97	ppb	13:39:32
1	Tl 190.801†	1630.3	1699.7	498.35	ug/L	498.35	ppb	13:39:53
1	U 409.014†	15274.2	17632.3	499.35	ug/L	499.35	ppb	13:39:32
1	V 292.402†	73063.3	75797.2	502.00	ug/L	502.00	ppb	13:39:32
1	Zn 213.857†	55187.7	55205.4	494.76	ug/L	494.76	ppb	13:39:32
1	SiO2†	81406.4	82443.8	5383.9	ug/L	5383.9	ppb	13:41:00
2	Sc Radial	5224.9	5224.9	98.4	%			13:38:35
2	Y RADIAL	5545.6	5545.6	97.77	%			13:38:35
2	Al 396.153Radial†	6629.9	6755.1	4901.3	ug/L	4901.3	ppb	13:38:35
2	Ca 317.933Radial†	3255.5	3287.2	4995.7	ug/L	4995.7	ppb	13:38:55
2	Fe 238.204 Radial†	616.7	616.6	5098.1	ug/L	5098.1	ppb	13:38:55
2	K 766.490 Radial†	30300.0	28146.9	5092.3	ug/L	5092.3	ppb	13:38:35
2	Mg 279.077 IEC†	162.5	161.9	5061.2	ug/L	5061.2	ppb	13:38:55
2	Na 589.592 Radial†	31876.3	34014.6	9912.6	ug/L	9912.6	ppb	13:38:35
2	Sr 421.552†	77896.8	79155.1	500.00	ug/L	500.00	ppb	13:38:35
2	Sc 361.383	865655.5	865655.5	99.241	%			13:39:58
2	Y 371.029	716409.1	716409.1	97.671	%			13:39:58
2	Ag 328.068†	111846.8	112322.9	502.90	ug/L	502.90	ppb	13:40:03
2	As 188.979†	1181.6	1214.1	497.20	ug/L	497.20	ppb	13:40:24
2	B 249.677†	22274.4	23081.6	500.97	ug/L	500.97	ppb	13:40:03
2	Ba 233.527†	65599.4	66109.9	498.41	ug/L	498.41	ppb	13:40:03
2	Be 313.107†	1365515.5	1380283.9	491.30	ug/L	491.30	ppb	13:39:58
2	Cd 226.502†	46275.8	46832.3	495.84	ug/L	495.84	ppb	13:40:03
2	Co 228.616†	25049.7	25319.8	496.82	ug/L	496.82	ppb	13:40:03
2	Cr 267.716†	45930.7	46208.8	494.39	ug/L	494.39	ppb	13:40:03
2	Cu 324.752†	175785.2	170583.6	494.77	ug/L	494.77	ppb	13:40:03
2	Mn 257.610†	462678.7	465737.1	493.09	ug/L	493.09	ppb	13:39:58
2	Mo 202.031†	7268.2	7303.3	493.54	ug/L	493.54	ppb	13:40:24
2	Ni 231.604†	20845.7	20910.9	497.46	ug/L	497.46	ppb	13:40:03

2	P 214.914†	4446.8	4269.3	2361.1 ug/L	2361.1 ppb	13:40:24
2	Pb 220.353†	4131.2	4230.1	495.02 ug/L	495.02 ppb	13:40:24
2	S 181.975 Axial†	783.4	744.9	992.16 ug/L	992.16 ppb	13:40:24
2	Sb 206.836†	1510.3	1492.6	511.34 ug/L	511.34 ppb	13:40:24
2	Se 196.026†	783.4	813.5	513.41 ug/L	513.41 ppb	13:40:24
2	Si 251.611†	81116.4	81293.3	2482.8 ug/L	2482.8 ppb	13:40:03
2	Sn 189.927†	2919.8	2941.3	494.17 ug/L	494.17 ppb	13:40:24
2	Ti 334.940†	310957.2	314685.9	488.42 ug/L	488.42 ppb	13:40:03
2	Tl 190.801†	1635.7	1687.6	494.84 ug/L	494.84 ppb	13:40:24
2	U 409.014†	15296.9	17491.3	495.35 ug/L	495.35 ppb	13:40:03
2	V 292.402†	73560.5	75514.1	500.10 ug/L	500.10 ppb	13:40:03
2	Zn 213.857†	55639:1	55067.9	493.52 ug/L	493.52 ppb	13:40:03
2	SiO2†	81107.2	81268.6	5307.0 ug/L	5307.0 ppb	13:41:05
3	Sc Radial	5149.7	5149.7	97.0 %		13:39:00
3	Y RADIAL	5444.6	5444.6	95.98 %		13:39:00
3	Al 396.153Radial†	6586.8	6809.1	4940.7 ug/L	4940.7 ppb	13:39:00
3	Ca 317.933Radial†	3260.2	3340.4	5076.5 ug/L	5076.5 ppb	13:39:20
3	Fe 238.204 Radial†	615.2	624.3	5161.2 ug/L	5161.2 ppb	13:39:20
3	K 766.490 Radial†	29759.4	28039.3	5072.7 ug/L	5072.7 ppb	13:39:00
3	Mg 279.077 IEC†	163.1	164.9	5155.6 ug/L	5155.6 ppb	13:39:20
3	Na 589.592 Radial†	31423.4	34020.8	9914.4 ug/L	9914.4 ppb	13:39:00
3	Sr 421.552†	76762.7	79142.0	499.92 ug/L	499.92 ppb	13:39:00
3	Sc 361.383	865396.7	865396.7	99.211 %		13:40:29
3	Y 371.029	714248.4	714248.4	97.377 %		13:40:29
3	Ag 328.068†	110742.5	111243.6	498.10 ug/L	498.10 ppb	13:40:34
3	As 188.979†	1176.0	1208.7	495.01 ug/L	495.01 ppb	13:40:55
3	B 249.677†	22090.8	22903.2	497.08 ug/L	497.08 ppb	13:40:34
3	Ba 233.527†	64918.9	65443.8	493.39 ug/L	493.39 ppb	13:40:34
3	Be 313.107†	1363641.5	1378806.4	490.76 ug/L	490.76 ppb	13:40:29
3	Cd 226.502†	45889.5	46457.0	491.86 ug/L	491.86 ppb	13:40:34
3	Co 228.616†	24907.6	25184.0	494.17 ug/L	494.17 ppb	13:40:34
3	Cr 267.716†	45530.8	45819.5	490.22 ug/L	490.22 ppb	13:40:34
3	Cu 324.752†	173891.2	168727.6	489.40 ug/L	489.40 ppb	13:40:34
3	Mn 257.610†	464064.2	467273.0	494.72 ug/L	494.72 ppb	13:40:29
3	Mo 202.031†	7259.5	7296.6	493.10 ug/L	493.10 ppb	13:40:55
3	Ni 231.604†	20640.7	20710.6	492.69 ug/L	492.69 ppb	13:40:34
3	P 214.914†	4446.8	4270.6	2362.9 ug/L	2362.9 ppb	13:40:55
3	Pb 220.353†	4097.5	4197.5	491.21 ug/L	491.21 ppb	13:40:55
3	S 181.975 Axial†	780.9	742.6	989.08 ug/L	989.08 ppb	13:40:55
3	Sb 206.836†	1520.7	1503.6	514.93 ug/L	514.93 ppb	13:40:55
3	Se 196.026†	779.8	810.1	511.55 ug/L	511.55 ppb	13:40:55
3	Si 251.611†	80457.3	80653.4	2463.2 ug/L	2463.2 ppb	13:40:34
3	Sn 189.927†	2907.0	2929.3	492.17 ug/L	492.17 ppb	13:40:55
3	Ti 334.940†	307861.5	311659.3	483.73 ug/L	483.73 ppb	13:40:34
3	Tl 190.801†	1637.0	1689.5	495.37 ug/L	495.37 ppb	13:40:55
3	U 409.014†	15082.3	17279.6	489.33 ug/L	489.33 ppb	13:40:34
3	V 292.402†	72817.1	74786.9	495.33 ug/L	495.33 ppb	13:40:34
3	Zn 213.857†	55046.4	54487.3	488.30 ug/L	488.30 ppb	13:40:34
3	SiO2†	80888.9	81073.0	5294.2 ug/L	5294.2 ppb	13:41:10

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	862528.2	98.882	%	0.5955				0.60%
Sc Radial	5203.2	98.0	%	0.88				0.90%
Y 371.029	712514.6	97.140	%	0.6807				0.70%
Y RADIAL	5507.4	97.09	%	0.967				1.00%
Ag 328.068†	112059.0	501.72	ug/L	3.200	501.72	ppb	3.200	0.64%
QC value within limits for Ag 328.068 Recovery = 100.34%								
Al 396.153Radial†	6773.3	4914.5	ug/L	22.69	4914.5	ppb	22.69	0.46%
QC value within limits for Al 396.153Radial Recovery = 98.29%								
As 188.979†	1215.5	497.79	ug/L	3.115	497.79	ppb	3.115	0.63%
QC value within limits for As 188.979 Recovery = 99.56%								
B 249.677†	23054.1	500.37	ug/L	3.036	500.37	ppb	3.036	0.61%
QC value within limits for B 249.677 Recovery = 100.07%								
Ba 233.527†	65934.8	497.09	ug/L	3.247	497.09	ppb	3.247	0.65%
QC value within limits for Ba 233.527 Recovery = 99.42%								
Be 313.107†	1378482.2	490.66	ug/L	0.702	490.66	ppb	0.702	0.14%
QC value within limits for Be 313.107 Recovery = 98.13%								
Ca 317.933Radial†	3291.3	5001.9	ug/L	71.68	5001.9	ppb	71.68	1.43%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.04%
Cd 226.502†            46778.2      495.27 ug/L         3.163      495.27 ppb          3.163   0.64%
   QC value within limits for Cd 226.502  Recovery = 99.05%
Co 228.616†            25350.5      497.43 ug/L         3.606      497.43 ppb          3.606   0.72%
   QC value within limits for Co 228.616  Recovery = 99.49%
Cr 267.716†            46181.9      494.10 ug/L         3.738      494.10 ppb          3.738   0.76%
   QC value within limits for Cr 267.716  Recovery = 98.82%
Cu 324.752†           170199.3      493.66 ug/L         3.829      493.66 ppb          3.829   0.78%
   QC value within limits for Cu 324.752  Recovery = 98.73%
Fe 238.204 Radial†       617.3      5104.0 ug/L         54.59      5104.0 ppb          54.59   1.07%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.08%
K 766.490 Radial†      28062.6      5077.0 ug/L         13.66      5077.0 ppb          13.66   0.27%
   QC value within limits for K 766.490 Radial  Recovery = 101.54%
Mg 279.077 IEC†          163.3      5105.4 ug/L         47.48      5105.4 ppb          47.48   0.93%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.11%
Mn 257.610†           466315.9      493.71 ug/L         0.886      493.71 ppb          0.886   0.18%
   QC value within limits for Mn 257.610  Recovery = 98.74%
Mo 202.031†             7316.2      494.41 ug/L         1.908      494.41 ppb          1.908   0.39%
   QC value within limits for Mo 202.031  Recovery = 98.88%
Na 589.592 Radial†     34018.7      9913.8 ug/L          1.01      9913.8 ppb           1.01   0.01%
   QC value within limits for Na 589.592 Radial  Recovery = 99.14%
Ni 231.604†            20857.8      496.20 ug/L         3.072      496.20 ppb          3.072   0.62%
   QC value within limits for Ni 231.604  Recovery = 99.24%
P 214.914†              4273.9      2364.0 ug/L          3.62      2364.0 ppb           3.62   0.15%
   QC value within limits for P 214.914  Recovery = 94.56%
Pb 220.353†             4224.4      494.36 ug/L         2.873      494.36 ppb          2.873   0.58%
   QC value within limits for Pb 220.353  Recovery = 98.87%
S 181.975 Axial†         744.8      992.08 ug/L         2.963      992.08 ppb          2.963   0.30%
   QC value within limits for S 181.975 Axial  Recovery = 99.21%
Sb 206.836†             1499.9      513.77 ug/L         2.103      513.77 ppb          2.103   0.41%
   QC value within limits for Sb 206.836  Recovery = 102.75%
Se 196.026†              815.0      514.34 ug/L         3.344      514.34 ppb          3.344   0.65%
   QC value within limits for Se 196.026  Recovery = 102.87%
Si 251.611†            81199.2      2479.9 ug/L         15.45      2479.9 ppb          15.45   0.62%
   QC value within limits for Si 251.611  Recovery = 99.20%
Sn 189.927†             2945.5      494.87 ug/L         3.109      494.87 ppb          3.109   0.63%
   QC value within limits for Sn 189.927  Recovery = 98.97%
Sr 421.552†            79066.8      499.44 ug/L         0.894      499.44 ppb          0.894   0.18%
   QC value within limits for Sr 421.552  Recovery = 99.89%
Ti 334.940†           314013.8      487.37 ug/L         3.252      487.37 ppb          3.252   0.67%
   QC value within limits for Ti 334.940  Recovery = 97.47%
Tl 190.801†             1692.3      496.19 ug/L         1.894      496.19 ppb          1.894   0.38%
   QC value within limits for Tl 190.801  Recovery = 99.24%
U 409.014†             17467.7      494.68 ug/L         5.043      494.68 ppb          5.043   1.02%
   QC value within limits for U 409.014  Recovery = 98.94%
V 292.402†             75366.1      499.14 ug/L         3.439      499.14 ppb          3.439   0.69%
   QC value within limits for V 292.402  Recovery = 99.83%
Zn 213.857†            54920.2      492.20 ug/L         3.426      492.20 ppb          3.426   0.70%
   QC value within limits for Zn 213.857  Recovery = 98.44%
SiO2†                  81595.1      5328.4 ug/L         48.49      5328.4 ppb          48.49   0.91%
   QC value within limits for SiO2  Recovery = 99.64%
All analyte(s) passed QC.
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Sequence No.: 5
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/13/2010 13:43:21
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	5285.9	5285.9	99.5	%			13:45:13
1	Y RADIAL	5624.3	5624.3	99.15	%			13:45:13
1	Al 396.153Radial†	-0.6	16.1	11.778	ug/L	11.778	ppb	13:45:13
1	Ca 317.933Radial†	18.3	-3.1	-4.7844	ug/L	-4.7844	ppb	13:45:33
1	Fe 238.204 Radial†	10.5	0.4	3.2714	ug/L	3.2714	ppb	13:45:33
1	K 766.490 Radial†	2818.0	182.4	33.019	ug/L	33.019	ppb	13:45:13
1	Mg 279.077 IEC†	1.2	-2.0	-61.804	ug/L	-61.804	ppb	13:45:33
1	Na 589.592 Radial†	-1483.6	126.6	36.882	ug/L	36.882	ppb	13:45:13
1	Sr 421.552†	7.0	-8.7	-0.0547	ug/L	-0.0547	ppb	13:45:13
1	Sc 361.383	865115.9	865115.9	99.179	%			13:46:30
1	Y 371.029	727455.6	727455.6	99.177	%			13:46:30
1	Ag 328.068†	382.0	5.9	0.0268	ug/L	0.0268	ppb	13:46:30
1	As 188.979†	-25.4	-2.2	-0.8726	ug/L	-0.8726	ppb	13:46:50
1	B 249.677†	-62.6	573.7	12.507	ug/L	12.507	ppb	13:46:50
1	Ba 233.527†	-18.7	-10.1	-0.0754	ug/L	-0.0754	ppb	13:46:50
1	Be 313.107†	-4363.3	-75.0	-0.0264	ug/L	-0.0264	ppb	13:46:30
1	Cd 226.502†	-169.0	32.2	0.3405	ug/L	0.3405	ppb	13:46:50
1	Co 228.616†	-78.6	-0.8	-0.0166	ug/L	-0.0166	ppb	13:46:50
1	Cr 267.716†	91.6	19.2	0.2047	ug/L	0.2047	ppb	13:46:50
1	Cu 324.752†	6508.1	16.0	0.0461	ug/L	0.0461	ppb	13:46:30
1	Mn 257.610†	401.5	-75.6	-0.0771	ug/L	-0.0771	ppb	13:46:50
1	Mo 202.031†	14.5	-5.9	-0.4000	ug/L	-0.4000	ppb	13:46:50
1	Ni 231.604†	84.2	-9.3	-0.2219	ug/L	-0.2219	ppb	13:46:50
1	P 214.914†	216.8	7.1	4.0821	ug/L	4.0821	ppb	13:46:50
1	Pb 220.353†	-58.9	8.0	0.9338	ug/L	0.9338	ppb	13:46:50
1	S 181.975 Axial†	42.7	-1.5	-1.9440	ug/L	-1.9440	ppb	13:46:50
1	Sb 206.836†	42.0	13.1	4.3500	ug/L	4.3500	ppb	13:46:50
1	Se 196.026†	-25.7	-1.8	-1.0718	ug/L	-1.0718	ppb	13:46:50
1	Si 251.611†	453.3	13.6	0.4217	ug/L	0.4217	ppb	13:46:50
1	Sn 189.927†	11.2	10.5	1.7680	ug/L	1.7680	ppb	13:46:50
1	Ti 334.940†	-1266.4	73.5	0.1180	ug/L	0.1180	ppb	13:46:30
1	Tl 190.801†	-34.3	4.9	1.4319	ug/L	1.4319	ppb	13:46:50
1	U 409.014†	-2025.7	35.0	0.9929	ug/L	0.9929	ppb	13:46:30
1	V 292.402†	-1372.0	7.6	0.0438	ug/L	0.0438	ppb	13:46:30
1	Zn 213.857†	675.5	-315.6	-2.8526	ug/L	-2.8526	ppb	13:46:50
1	SiO2†	462.4	7.3	0.4893	ug/L	0.4893	ppb	13:47:46
2	Sc Radial	5289.0	5289.0	99.6	%			13:45:38
2	Y RADIAL	5621.6	5621.6	99.11	%			13:45:38
2	Al 396.153Radial†	-10.8	5.9	4.2795	ug/L	4.2795	ppb	13:45:38
2	Ca 317.933Radial†	23.8	2.4	3.5865	ug/L	3.5865	ppb	13:45:58
2	Fe 238.204 Radial†	10.2	0.1	0.7733	ug/L	0.7733	ppb	13:45:58
2	K 766.490 Radial†	2967.4	330.8	59.898	ug/L	59.898	ppb	13:45:38
2	Mg 279.077 IEC†	1.6	-1.7	-51.824	ug/L	-51.824	ppb	13:45:58
2	Na 589.592 Radial†	-1430.4	180.8	52.680	ug/L	52.680	ppb	13:45:38
2	Sr 421.552†	21.9	6.3	0.0397	ug/L	0.0397	ppb	13:45:38
2	Sc 361.383	862528.4	862528.4	98.882	%			13:46:55
2	Y 371.029	724793.5	724793.5	98.814	%			13:46:55
2	Ag 328.068†	246.4	-130.1	-0.5771	ug/L	-0.5771	ppb	13:46:55
2	As 188.979†	-22.3	0.9	0.3445	ug/L	0.3445	ppb	13:47:15
2	B 249.677†	-97.5	538.2	11.732	ug/L	11.732	ppb	13:47:15
2	Ba 233.527†	-8.2	0.6	0.0057	ug/L	0.0057	ppb	13:47:15
2	Be 313.107†	-4363.4	-88.3	-0.0311	ug/L	-0.0311	ppb	13:46:55
2	Cd 226.502†	-187.1	13.4	0.1422	ug/L	0.1422	ppb	13:47:15
2	Co 228.616†	-62.9	14.8	0.2923	ug/L	0.2923	ppb	13:47:15
2	Cr 267.716†	115.1	43.1	0.4615	ug/L	0.4615	ppb	13:47:15
2	Cu 324.752†	6565.7	93.9	0.2719	ug/L	0.2719	ppb	13:46:55
2	Mn 257.610†	432.2	-43.4	-0.0437	ug/L	-0.0437	ppb	13:47:15
2	Mo 202.031†	31.8	11.6	0.7816	ug/L	0.7816	ppb	13:47:15
2	Ni 231.604†	94.4	1.3	0.0304	ug/L	0.0304	ppb	13:47:15

2	P 214.914†	212.1	3.0	1.7068 ug/L	1.7068 ppb	13:47:15
2	Pb 220.353†	-62.8	3.8	0.4504 ug/L	0.4504 ppb	13:47:15
2	S 181.975 Axial†	47.3	3.3	4.4149 ug/L	4.4149 ppb	13:47:15
2	Sb 206.836†	39.4	10.7	3.5710 ug/L	3.5710 ppb	13:47:15
2	Se 196.026†	-30.8	-7.0	-4.2555 ug/L	-4.2555 ppb	13:47:15
2	Si 251.611†	443.7	5.3	0.1528 ug/L	0.1528 ppb	13:47:15
2	Sn 189.927†	10.9	10.2	1.7147 ug/L	1.7147 ppb	13:47:15
2	Ti 334.940†	-1264.3	71.8	0.1156 ug/L	0.1156 ppb	13:46:55
2	Tl 190.801†	-36.7	2.4	0.6894 ug/L	0.6894 ppb	13:47:15
2	U 409.014†	-2020.4	34.2	0.9713 ug/L	0.9713 ppb	13:46:55
2	V 292.402†	-1286.8	89.6	0.5971 ug/L	0.5971 ppb	13:46:55
2	Zn 213.857†	698.4	-290.4	-2.6260 ug/L	-2.6260 ppb	13:47:15
2	SiO2†	487.4	34.0	2.2022 ug/L	2.2022 ppb	13:47:51
3	Sc Radial	5271.2	5271.2	99.3 %		13:46:03
3	Y RADIAL	5605.2	5605.2	98.82 %		13:46:03
3	Al 396.153Radial†	-3.0	13.7	9.9732 ug/L	9.9732 ppb	13:46:03
3	Ca 317.933Radial†	20.8	-0.6	-0.8501 ug/L	-0.8501 ppb	13:46:23
3	Fe 238.204 Radial†	8.8	-1.3	-10.985 ug/L	-10.985 ppb	13:46:23
3	K 766.490 Radial†	2917.7	290.8	52.656 ug/L	52.656 ppb	13:46:03
3	Mg 279.077 IEC†	3.8	0.6	18.443 ug/L	18.443 ppb	13:46:23
3	Na 589.592 Radial†	-1413.7	192.8	56.183 ug/L	56.183 ppb	13:46:03
3	Sr 421.552†	2.8	-12.9	-0.0813 ug/L	-0.0813 ppb	13:46:03
3	Sc 361.383	850606.1	850606.1	97.516 %		13:47:21
3	Y 371.029	715373.0	715373.0	97.530 %		13:47:21
3	Ag 328.068†	323.3	-47.7	-0.2173 ug/L	-0.2173 ppb	13:47:21
3	As 188.979†	-18.0	5.0	2.0169 ug/L	2.0169 ppb	13:47:41
3	B 249.677†	-112.4	521.5	11.371 ug/L	11.371 ppb	13:47:41
3	Ba 233.527†	-2.7	6.0	0.0445 ug/L	0.0445 ppb	13:47:41
3	Be 313.107†	-4288.2	-73.0	-0.0264 ug/L	-0.0264 ppb	13:47:21
3	Cd 226.502†	-183.6	14.4	0.1533 ug/L	0.1533 ppb	13:47:41
3	Co 228.616†	-66.5	10.2	0.2024 ug/L	0.2024 ppb	13:47:41
3	Cr 267.716†	89.2	18.3	0.1945 ug/L	0.1945 ppb	13:47:41
3	Cu 324.752†	6555.3	176.3	0.5106 ug/L	0.5106 ppb	13:47:21
3	Mn 257.610†	420.6	-49.0	-0.0537 ug/L	-0.0537 ppb	13:47:41
3	Mo 202.031†	26.6	6.8	0.4554 ug/L	0.4554 ppb	13:47:41
3	Ni 231.604†	78.7	-13.5	-0.3221 ug/L	-0.3221 ppb	13:47:41
3	P 214.914†	213.5	7.4	4.1957 ug/L	4.1957 ppb	13:47:41
3	Pb 220.353†	-84.4	-19.2	-2.2401 ug/L	-2.2401 ppb	13:47:41
3	S 181.975 Axial†	44.5	1.1	1.4285 ug/L	1.4285 ppb	13:47:41
3	Sb 206.836†	37.4	9.1	3.0483 ug/L	3.0483 ppb	13:47:41
3	Se 196.026†	-27.6	-4.1	-2.5412 ug/L	-2.5412 ppb	13:47:41
3	Si 251.611†	448.4	16.4	0.4970 ug/L	0.4970 ppb	13:47:41
3	Sn 189.927†	10.5	10.0	1.6774 ug/L	1.6774 ppb	13:47:41
3	Ti 334.940†	-1434.0	-120.2	-0.1885 ug/L	-0.1885 ppb	13:47:21
3	Tl 190.801†	-24.3	14.6	4.2471 ug/L	4.2471 ppb	13:47:41
3	U 409.014†	-2008.0	18.3	0.5196 ug/L	0.5196 ppb	13:47:21
3	V 292.402†	-1395.3	-39.9	-0.2513 ug/L	-0.2513 ppb	13:47:21
3	Zn 213.857†	679.9	-299.5	-2.7056 ug/L	-2.7056 ppb	13:47:41
3	SiO2†	498.2	52.0	3.3904 ug/L	3.3904 ppb	13:47:56

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	859416.8	98.526	%	0.8872				0.90%
Sc Radial	5282.0	99.5	%	0.18				0.18%
Y 371.029	722540.7	98.507	%	0.8655				0.88%
Y RADIAL	5617.0	99.02	%	0.182				0.18%
Ag 328.068†	-57.3	-0.2559	ug/L	0.30379	-0.2559	ppb	0.30379	118.72%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.9	8.6770	ug/L	3.91383	8.6770	ppb	3.91383	45.11%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.2	0.4963	ug/L	1.45069	0.4963	ppb	1.45069	292.33%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	544.5	11.870	ug/L	0.5804	11.870	ppb	0.5804	4.89%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.1	-0.0084	ug/L	0.06122	-0.0084	ppb	0.06122	728.06%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-78.8	-0.0279	ug/L	0.00274	-0.0279	ppb	0.00274	9.80%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-0.4	-0.6827	ug/L	4.18799	-0.6827	ppb	4.18799	613.47%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                20.0      0.2120 ug/L       0.11143      0.2120 ppb        0.11143  52.56%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 8.1      0.1594 ug/L       0.15891      0.1594 ppb        0.15891  99.71%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                26.9      0.2869 ug/L       0.15130      0.2869 ppb        0.15130  52.73%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                95.4      0.2762 ug/L       0.23229      0.2762 ppb        0.23229  84.11%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.3     -2.3133 ug/L       7.61274     -2.3133 ppb        7.61274 329.09%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         268.0      48.524 ug/L       13.9074      48.524 ppb        13.9074  28.66%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.0     -31.729 ug/L       43.7350     -31.729 ppb        43.7350 137.84%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -56.0     -0.0582 ug/L       0.01717     -0.0582 ppb        0.01717  29.51%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 4.1      0.2790 ug/L       0.61020      0.2790 ppb        0.61020 218.72%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        166.7      48.582 ug/L       10.2822      48.582 ppb        10.2822  21.16%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -7.2     -0.1712 ug/L       0.18163     -0.1712 ppb        0.18163 106.11%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  5.8      3.3282 ug/L       1.40531      3.3282 ppb        1.40531  42.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -2.5     -0.2853 ug/L       1.71011     -0.2853 ppb        1.71011 599.40%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            1.0      1.2998 ug/L       3.18138      1.2998 ppb        3.18138 244.75%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                11.0      3.6564 ug/L       0.65501      3.6564 ppb        0.65501  17.91%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -4.3     -2.6228 ug/L       1.59340     -2.6228 ppb        1.59340  60.75%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                11.8      0.3572 ug/L       0.18096      0.3572 ppb        0.18096  50.67%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.3      1.7201 ug/L       0.04553      1.7201 ppb        0.04553   2.65%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -5.1     -0.0321 ug/L       0.06356     -0.0321 ppb        0.06356 198.05%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                 8.4      0.0150 ug/L       0.17626      0.0150 ppb        0.17626 >999.9%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 7.3      2.1228 ug/L       1.87681      2.1228 ppb        1.87681  88.41%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 29.2      0.8280 ug/L       0.26723      0.8280 ppb        0.26723  32.28%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 19.1      0.1299 ug/L       0.43071      0.1299 ppb        0.43071 331.61%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -301.9     -2.7281 ug/L       0.11494     -2.7281 ppb        0.11494   4.21%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      31.1      2.0273 ug/L       1.45842      2.0273 ppb        1.45842  71.94%
   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: 1/13/2010 14:37:46
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	5117.0	5117.0	96.4	%			14:39:38
1	Y RADIAL	5441.1	5441.1	95.92	%			14:39:38
1	Al 396.153Radial†	6571.6	6836.6	4960.7	ug/L	4960.7	ppb	14:39:38
1	Ca 317.933Radial†	3255.1	3356.5	5101.1	ug/L	5101.1	ppb	14:39:58
1	Fe 238.204 Radial†	609.6	622.5	5146.7	ug/L	5146.7	ppb	14:39:58
1	K 766.490 Radial†	29652.5	28124.3	5088.1	ug/L	5088.1	ppb	14:39:38
1	Mg 279.077 IEC†	163.0	166.0	5188.6	ug/L	5188.6	ppb	14:39:58
1	Na 589.592 Radial†	31376.4	34178.9	9960.5	ug/L	9960.5	ppb	14:39:38
1	Sr 421.552†	76792.5	79678.4	503.30	ug/L	503.30	ppb	14:39:38
1	Sc 361.383	869172.0	869172.0	99.644	%			14:40:55
1	Y 371.029	717962.3	717962.3	97.883	%			14:40:55
1	Ag 328.068†	111238.9	111256.9	498.15	ug/L	498.15	ppb	14:41:00
1	As 188.979†	1171.5	1199.1	491.10	ug/L	491.10	ppb	14:41:20
1	B 249.677†	21788.7	22503.3	488.36	ug/L	488.36	ppb	14:41:00
1	Ba 233.527†	65237.5	65479.3	493.66	ug/L	493.66	ppb	14:41:00
1	Be 313.107†	1365209.9	1374410.2	489.20	ug/L	489.20	ppb	14:40:55
1	Cd 226.502†	46102.6	46469.8	491.99	ug/L	491.99	ppb	14:41:00
1	Co 228.616†	25089.4	25257.4	495.61	ug/L	495.61	ppb	14:41:00
1	Cr 267.716†	45682.9	45772.8	489.72	ug/L	489.72	ppb	14:41:00
1	Cu 324.752†	175299.1	169379.2	491.28	ug/L	491.28	ppb	14:41:00
1	Mn 257.610†	463961.7	465138.4	492.46	ug/L	492.46	ppb	14:40:55
1	Mo 202.031†	7297.2	7302.7	493.51	ug/L	493.51	ppb	14:41:20
1	Ni 231.604†	20667.0	20646.6	491.17	ug/L	491.17	ppb	14:41:00
1	P 214.914†	4463.0	4267.4	2360.7	ug/L	2360.7	ppb	14:41:20
1	Pb 220.353†	4130.3	4212.4	492.96	ug/L	492.96	ppb	14:41:20
1	S 181.975 Axial†	775.7	734.0	977.61	ug/L	977.61	ppb	14:41:20
1	Sb 206.836†	1515.5	1491.7	511.01	ug/L	511.01	ppb	14:41:20
1	Se 196.026†	777.1	804.1	507.82	ug/L	507.82	ppb	14:41:20
1	Si 251.611†	80919.5	80765.1	2466.6	ug/L	2466.6	ppb	14:41:00
1	Sn 189.927†	2917.5	2927.2	491.81	ug/L	491.81	ppb	14:41:20
1	Ti 334.940†	309479.4	311935.1	484.15	ug/L	484.15	ppb	14:41:00
1	Tl 190.801†	1646.6	1691.9	496.06	ug/L	496.06	ppb	14:41:20
1	U 409.014†	15279.9	17411.9	493.10	ug/L	493.10	ppb	14:41:00
1	V 292.402†	73026.8	74678.5	494.63	ug/L	494.63	ppb	14:41:00
1	Zn 213.857†	55303.2	54504.0	488.46	ug/L	488.46	ppb	14:41:00
1	SiO2†	80190.8	80018.3	5225.2	ug/L	5225.2	ppb	14:42:28
2	Sc Radial	5248.7	5248.7	98.8	%			14:40:03
2	Y RADIAL	5527.9	5527.9	97.45	%			14:40:03
2	Al 396.153Radial†	6697.5	6793.0	4928.8	ug/L	4928.8	ppb	14:40:03
2	Ca 317.933Radial†	3233.5	3249.9	4939.0	ug/L	4939.0	ppb	14:40:23
2	Fe 238.204 Radial†	605.0	601.9	4977.0	ug/L	4977.0	ppb	14:40:23
2	K 766.490 Radial†	30150.2	27855.9	5039.6	ug/L	5039.6	ppb	14:40:03
2	Mg 279.077 IEC†	164.5	163.2	5101.7	ug/L	5101.7	ppb	14:40:23
2	Na 589.592 Radial†	32129.3	34123.9	9944.4	ug/L	9944.4	ppb	14:40:03
2	Sr 421.552†	78376.8	79282.3	500.80	ug/L	500.80	ppb	14:40:03
2	Sc 361.383	867588.9	867588.9	99.463	%			14:41:26
2	Y 371.029	716262.1	716262.1	97.651	%			14:41:26
2	Ag 328.068†	110087.8	110303.3	493.84	ug/L	493.84	ppb	14:41:31
2	As 188.979†	1179.4	1209.2	495.10	ug/L	495.10	ppb	14:41:51
2	B 249.677†	21542.5	22295.7	483.87	ug/L	483.87	ppb	14:41:31
2	Ba 233.527†	64682.8	65041.1	490.35	ug/L	490.35	ppb	14:41:31
2	Be 313.107†	1363993.8	1375687.6	489.65	ug/L	489.65	ppb	14:41:26
2	Cd 226.502†	45822.2	46272.4	489.92	ug/L	489.92	ppb	14:41:31
2	Co 228.616†	24808.8	25021.3	490.99	ug/L	490.99	ppb	14:41:31
2	Cr 267.716†	45396.7	45568.8	487.53	ug/L	487.53	ppb	14:41:31
2	Cu 324.752†	172620.5	167007.2	484.39	ug/L	484.39	ppb	14:41:31
2	Mn 257.610†	463651.9	465676.5	493.02	ug/L	493.02	ppb	14:41:26
2	Mo 202.031†	7307.1	7326.0	495.07	ug/L	495.07	ppb	14:41:51
2	Ni 231.604†	20615.9	20633.1	490.85	ug/L	490.85	ppb	14:41:31

2	P 214.914†	4478.7	4291.4	2376.0 ug/L	2376.0 ppb	14:41:51
2	Pb 220.353†	4154.7	4244.5	496.72 ug/L	496.72 ppb	14:41:51
2	S 181.975 Axial†	782.8	742.5	989.03 ug/L	989.03 ppb	14:41:51
2	Sb 206.836†	1532.0	1511.0	517.53 ug/L	517.53 ppb	14:41:51
2	Se 196.026†	791.1	819.5	516.69 ug/L	516.69 ppb	14:41:51
2	Si 251.611†	79947.9	79936.4	2441.3 ug/L	2441.3 ppb	14:41:31
2	Sn 189.927†	2955.3	2970.5	499.05 ug/L	499.05 ppb	14:41:51
2	Ti 334.940†	306124.8	309129.1	479.78 ug/L	479.78 ppb	14:41:31
2	Tl 190.801†	1659.8	1708.3	500.82 ug/L	500.82 ppb	14:41:51
2	U 409.014†	15263.8	17423.6	493.45 ug/L	493.45 ppb	14:41:31
2	V 292.402†	72556.6	74339.5	492.47 ug/L	492.47 ppb	14:41:31
2	Zn 213.857†	54840.0	54139.6	485.20 ug/L	485.20 ppb	14:41:31
2	SiO2†	80525.8	80502.0	5256.8 ug/L	5256.8 ppb	14:42:33
3	Sc Radial	5209.9	5209.9	98.1 %		14:40:28
3	Y RADIAL	5467.1	5467.1	96.38 %		14:40:28
3	Al 396.153Radial†	6624.1	6768.7	4911.2 ug/L	4911.2 ppb	14:40:28
3	Ca 317.933Radial†	3218.9	3259.4	4953.5 ug/L	4953.5 ppb	14:40:48
3	Fe 238.204 Radial†	602.3	603.7	4991.8 ug/L	4991.8 ppb	14:40:48
3	K 766.490 Radial†	30182.3	28115.8	5086.6 ug/L	5086.6 ppb	14:40:28
3	Mg 279.077 IEC†	165.1	165.0	5158.6 ug/L	5158.6 ppb	14:40:48
3	Na 589.592 Radial†	31886.4	34118.5	9942.9 ug/L	9942.9 ppb	14:40:28
3	Sr 421.552†	78074.0	79564.3	502.58 ug/L	502.58 ppb	14:40:28
3	Sc 361.383	865228.4	865228.4	99.192 %		14:41:57
3	Y 371.029	713978.9	713978.9	97.340 %		14:41:57
3	Ag 328.068†	109952.9	110469.2	494.59 ug/L	494.59 ppb	14:42:02
3	As 188.979†	1173.2	1206.2	493.90 ug/L	493.90 ppb	14:42:22
3	B 249.677†	21549.8	22362.1	485.31 ug/L	485.31 ppb	14:42:02
3	Ba 233.527†	64722.4	65258.5	491.99 ug/L	491.99 ppb	14:42:02
3	Be 313.107†	1360426.2	1375832.3	489.70 ug/L	489.70 ppb	14:41:57
3	Cd 226.502†	45661.8	46236.4	489.54 ug/L	489.54 ppb	14:42:02
3	Co 228.616†	24863.6	25144.6	493.40 ug/L	493.40 ppb	14:42:02
3	Cr 267.716†	45296.7	45592.4	487.79 ug/L	487.79 ppb	14:42:02
3	Cu 324.752†	172205.2	167061.9	484.56 ug/L	484.56 ppb	14:42:02
3	Mn 257.610†	463401.6	466695.9	494.09 ug/L	494.09 ppb	14:41:57
3	Mo 202.031†	7251.2	7289.7	492.62 ug/L	492.62 ppb	14:42:22
3	Ni 231.604†	20508.0	20580.8	489.61 ug/L	489.61 ppb	14:42:02
3	P 214.914†	4436.7	4261.4	2358.6 ug/L	2358.6 ppb	14:42:22
3	Pb 220.353†	4119.4	4220.3	493.89 ug/L	493.89 ppb	14:42:22
3	S 181.975 Axial†	787.8	749.7	998.58 ug/L	998.58 ppb	14:42:22
3	Sb 206.836†	1512.3	1495.4	512.21 ug/L	512.21 ppb	14:42:22
3	Se 196.026†	776.9	807.4	509.33 ug/L	509.33 ppb	14:42:22
3	Si 251.611†	79831.6	80038.5	2444.4 ug/L	2444.4 ppb	14:42:02
3	Sn 189.927†	2915.1	2938.1	493.62 ug/L	493.62 ppb	14:42:22
3	Ti 334.940†	305775.5	309616.6	480.54 ug/L	480.54 ppb	14:42:02
3	Tl 190.801†	1636.1	1688.9	495.17 ug/L	495.17 ppb	14:42:22
3	U 409.014†	15019.8	17219.5	487.65 ug/L	487.65 ppb	14:42:02
3	V 292.402†	72309.3	74289.2	492.09 ug/L	492.09 ppb	14:42:02
3	Zn 213.857†	54670.9	54119.5	485.02 ug/L	485.02 ppb	14:42:02
3	SiO2†	81426.7	81631.1	5330.8 ug/L	5330.8 ppb	14:42:38

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	867329.7	99.433	%	0.2275				0.23%
Sc Radial	5191.8	97.8	%	1.27				1.30%
Y 371.029	716067.8	97.625	%	0.2725				0.28%
Y RADIAL	5478.7	96.59	%	0.785				0.81%
Ag 328.068†	110676.5	495.53	ug/L	2.300	495.53	ppb	2.300	0.46%
QC value within limits for Ag 328.068 Recovery = 99.11%								
Al 396.153Radial†	6799.4	4933.6	ug/L	25.10	4933.6	ppb	25.10	0.51%
QC value within limits for Al 396.153Radial Recovery = 98.67%								
As 188.979†	1204.8	493.37	ug/L	2.056	493.37	ppb	2.056	0.42%
QC value within limits for As 188.979 Recovery = 98.67%								
B 249.677†	22387.0	485.85	ug/L	2.290	485.85	ppb	2.290	0.47%
QC value within limits for B 249.677 Recovery = 97.17%								
Ba 233.527†	65259.6	492.00	ug/L	1.653	492.00	ppb	1.653	0.34%
QC value within limits for Ba 233.527 Recovery = 98.40%								
Be 313.107†	1375310.0	489.52	ug/L	0.273	489.52	ppb	0.273	0.06%
QC value within limits for Be 313.107 Recovery = 97.90%								
Ca 317.933Radial†	3288.6	4997.9	ug/L	89.68	4997.9	ppb	89.68	1.79%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.96%
Cd 226.502†            46326.2      490.48 ug/L         1.323      490.48 ppb          1.323   0.27%
   QC value within limits for Cd 226.502  Recovery = 98.10%
Co 228.616†            25141.1      493.33 ug/L         2.309      493.33 ppb          2.309   0.47%
   QC value within limits for Co 228.616  Recovery = 98.67%
Cr 267.716†            45644.7      488.35 ug/L         1.196      488.35 ppb          1.196   0.24%
   QC value within limits for Cr 267.716  Recovery = 97.67%
Cu 324.752†           167816.1      486.74 ug/L         3.931      486.74 ppb          3.931   0.81%
   QC value within limits for Cu 324.752  Recovery = 97.35%
Fe 238.204 Radial†       609.4      5038.5 ug/L        93.96      5038.5 ppb         93.96   1.86%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.77%
K 766.490 Radial†      28032.0      5071.4 ug/L        27.62      5071.4 ppb         27.62   0.54%
   QC value within limits for K 766.490 Radial  Recovery = 101.43%
Mg 279.077 IEC†          164.7      5149.6 ug/L        44.14      5149.6 ppb         44.14   0.86%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.99%
Mn 257.610†           465836.9      493.19 ug/L         0.831      493.19 ppb          0.831   0.17%
   QC value within limits for Mn 257.610  Recovery = 98.64%
Mo 202.031†             7306.1      493.73 ug/L         1.241      493.73 ppb          1.241   0.25%
   QC value within limits for Mo 202.031  Recovery = 98.75%
Na 589.592 Radial†     34140.4      9949.3 ug/L         9.74      9949.3 ppb          9.74   0.10%
   QC value within limits for Na 589.592 Radial  Recovery = 99.49%
Ni 231.604†            20620.2      490.54 ug/L         0.827      490.54 ppb          0.827   0.17%
   QC value within limits for Ni 231.604  Recovery = 98.11%
P 214.914†              4273.4      2365.1 ug/L         9.52      2365.1 ppb          9.52   0.40%
   QC value within limits for P 214.914  Recovery = 94.60%
Pb 220.353†             4225.7      494.52 ug/L         1.959      494.52 ppb          1.959   0.40%
   QC value within limits for Pb 220.353  Recovery = 98.90%
S 181.975 Axial†         742.1      988.41 ug/L        10.498      988.41 ppb         10.498   1.06%
   QC value within limits for S 181.975 Axial  Recovery = 98.84%
Sb 206.836†             1499.4      513.58 ug/L         3.470      513.58 ppb          3.470   0.68%
   QC value within limits for Sb 206.836  Recovery = 102.72%
Se 196.026†              810.3      511.28 ug/L         4.749      511.28 ppb          4.749   0.93%
   QC value within limits for Se 196.026  Recovery = 102.26%
Si 251.611†            80246.6      2450.8 ug/L        13.84      2450.8 ppb         13.84   0.56%
   QC value within limits for Si 251.611  Recovery = 98.03%
Sn 189.927†             2945.3      494.83 ug/L         3.768      494.83 ppb          3.768   0.76%
   QC value within limits for Sn 189.927  Recovery = 98.97%
Sr 421.552†            79508.3      502.23 ug/L         1.288      502.23 ppb          1.288   0.26%
   QC value within limits for Sr 421.552  Recovery = 100.45%
Ti 334.940†           310226.9      481.49 ug/L         2.336      481.49 ppb          2.336   0.49%
   QC value within limits for Ti 334.940  Recovery = 96.30%
Tl 190.801†             1696.4      497.35 ug/L         3.036      497.35 ppb          3.036   0.61%
   QC value within limits for Tl 190.801  Recovery = 99.47%
U 409.014†             17351.7      491.40 ug/L         3.251      491.40 ppb          3.251   0.66%
   QC value within limits for U 409.014  Recovery = 98.28%
V 292.402†             74435.7      493.06 ug/L         1.371      493.06 ppb          1.371   0.28%
   QC value within limits for V 292.402  Recovery = 98.61%
Zn 213.857†            54254.3      486.23 ug/L         1.938      486.23 ppb          1.938   0.40%
   QC value within limits for Zn 213.857  Recovery = 97.25%
SiO2†                  80717.1      5270.9 ug/L        54.20      5270.9 ppb         54.20   1.03%
   QC value within limits for SiO2  Recovery = 98.57%
All analyte(s) passed QC.
```

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

Autosampler Location: 8
Date Collected: 1/13/2010 14:44:47
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	5205.4	5205.4	98.0	%			14:46:41
1	Y RADIAL	5575.9	5575.9	98.30	%			14:46:41
1	Al 396.153Radial†	-23.5	-7.3	-5.3087	ug/L	-5.3087	ppb	14:46:41
1	Ca 317.933Radial†	17.2	-4.0	-6.1340	ug/L	-6.1340	ppb	14:47:01
1	Fe 238.204 Radial†	10.2	0.3	2.2618	ug/L	2.2618	ppb	14:47:01
1	K 766.490 Radial†	2816.5	224.6	40.669	ug/L	40.669	ppb	14:46:41
1	Mg 279.077 IEC†	0.7	-2.5	-78.470	ug/L	-78.470	ppb	14:47:01
1	Na 589.592 Radial†	-1440.5	147.4	42.970	ug/L	42.970	ppb	14:46:41
1	Sr 421.552†	-4.7	-20.5	-0.1293	ug/L	-0.1293	ppb	14:46:41
1	Sc 361.383	865091.8	865091.8	99.176	%			14:47:57
1	Y 371.029	727896.2	727896.2	99.238	%			14:47:57
1	Ag 328.068†	355.2	-21.1	-0.0922	ug/L	-0.0922	ppb	14:47:57
1	As 188.979†	-19.0	4.2	1.7228	ug/L	1.7228	ppb	14:48:17
1	B 249.677†	-338.6	295.4	6.4392	ug/L	6.4392	ppb	14:48:17
1	Ba 233.527†	-8.9	-0.2	-0.0003	ug/L	-0.0003	ppb	14:48:17
1	Be 313.107†	-4346.2	-57.9	-0.0204	ug/L	-0.0204	ppb	14:47:57
1	Cd 226.502†	-192.9	8.1	0.0860	ug/L	0.0860	ppb	14:48:17
1	Co 228.616†	-68.1	9.8	0.1922	ug/L	0.1922	ppb	14:48:17
1	Cr 267.716†	115.7	43.5	0.4648	ug/L	0.4648	ppb	14:48:17
1	Cu 324.752†	6592.6	101.4	0.2934	ug/L	0.2934	ppb	14:47:57
1	Mn 257.610†	399.2	-77.9	-0.0789	ug/L	-0.0789	ppb	14:48:17
1	Mo 202.031†	26.0	5.7	0.3835	ug/L	0.3835	ppb	14:48:17
1	Ni 231.604†	74.5	-19.1	-0.4545	ug/L	-0.4545	ppb	14:48:17
1	P 214.914†	220.2	10.5	5.9839	ug/L	5.9839	ppb	14:48:17
1	Pb 220.353†	-58.1	8.7	1.0166	ug/L	1.0166	ppb	14:48:17
1	S 181.975 Axial†	44.9	0.8	1.0507	ug/L	1.0507	ppb	14:48:17
1	Sb 206.836†	43.4	14.5	4.8304	ug/L	4.8304	ppb	14:48:17
1	Se 196.026†	-33.8	-10.0	-6.0517	ug/L	-6.0517	ppb	14:48:17
1	Si 251.611†	433.4	-6.5	-0.2024	ug/L	-0.2024	ppb	14:48:17
1	Sn 189.927†	10.7	10.0	1.6737	ug/L	1.6737	ppb	14:48:17
1	Ti 334.940†	-1300.3	39.2	0.0657	ug/L	0.0657	ppb	14:47:57
1	Tl 190.801†	-39.2	-0.0	-0.0145	ug/L	-0.0145	ppb	14:48:17
1	U 409.014†	-2012.2	48.5	1.3778	ug/L	1.3778	ppb	14:47:57
1	V 292.402†	-1309.4	70.6	0.4676	ug/L	0.4676	ppb	14:47:57
1	Zn 213.857†	686.5	-304.5	-2.7508	ug/L	-2.7508	ppb	14:48:17
1	SiO2†	413.6	-41.9	-2.7525	ug/L	-2.7525	ppb	14:49:13
2	Sc Radial	5214.6	5214.6	98.2	%			14:47:06
2	Y RADIAL	5565.0	5565.0	98.11	%			14:47:06
2	Al 396.153Radial†	-19.0	-2.6	-1.9194	ug/L	-1.9194	ppb	14:47:06
2	Ca 317.933Radial†	17.1	-4.1	-6.3033	ug/L	-6.3033	ppb	14:47:26
2	Fe 238.204 Radial†	8.5	-1.5	-12.149	ug/L	-12.149	ppb	14:47:26
2	K 766.490 Radial†	2721.0	122.3	22.139	ug/L	22.139	ppb	14:47:06
2	Mg 279.077 IEC†	0.9	-2.3	-72.919	ug/L	-72.919	ppb	14:47:26
2	Na 589.592 Radial†	-1416.5	174.5	50.841	ug/L	50.841	ppb	14:47:06
2	Sr 421.552†	31.7	16.5	0.1045	ug/L	0.1045	ppb	14:47:06
2	Sc 361.383	861669.9	861669.9	98.784	%			14:48:23
2	Y 371.029	722870.8	722870.8	98.552	%			14:48:23
2	Ag 328.068†	272.9	-103.0	-0.4653	ug/L	-0.4653	ppb	14:48:23
2	As 188.979†	-20.3	2.9	1.1600	ug/L	1.1600	ppb	14:48:43
2	B 249.677†	-365.6	266.6	5.8154	ug/L	5.8154	ppb	14:48:43
2	Ba 233.527†	-9.6	-0.9	-0.0075	ug/L	-0.0075	ppb	14:48:43
2	Be 313.107†	-4361.7	-90.9	-0.0322	ug/L	-0.0322	ppb	14:48:23
2	Cd 226.502†	-188.0	12.3	0.1325	ug/L	0.1325	ppb	14:48:43
2	Co 228.616†	-80.5	-3.1	-0.0596	ug/L	-0.0596	ppb	14:48:43
2	Cr 267.716†	92.2	20.1	0.2133	ug/L	0.2133	ppb	14:48:43
2	Cu 324.752†	6596.6	131.8	0.3798	ug/L	0.3798	ppb	14:48:23
2	Mn 257.610†	422.4	-52.8	-0.0541	ug/L	-0.0541	ppb	14:48:43
2	Mo 202.031†	23.8	3.5	0.2384	ug/L	0.2384	ppb	14:48:43
2	Ni 231.604†	94.6	1.5	0.0362	ug/L	0.0362	ppb	14:48:43

2	P 214.914†	223.2	14.5	8.2774 ug/L	8.2774 ppb	14:48:43
2	Pb 220.353†	-62.9	3.7	0.4303 ug/L	0.4303 ppb	14:48:43
2	S 181.975 Axial†	45.8	1.8	2.4439 ug/L	2.4439 ppb	14:48:43
2	Sb 206.836†	36.3	7.6	2.5153 ug/L	2.5153 ppb	14:48:43
2	Se 196.026†	-32.1	-8.4	-5.1436 ug/L	-5.1436 ppb	14:48:43
2	Si 251.611†	427.1	-11.0	-0.3412 ug/L	-0.3412 ppb	14:48:43
2	Sn 189.927†	6.3	5.6	0.9460 ug/L	0.9460 ppb	14:48:43
2	Ti 334.940†	-1302.3	32.1	0.0534 ug/L	0.0534 ppb	14:48:23
2	Tl 190.801†	-34.6	4.4	1.2914 ug/L	1.2914 ppb	14:48:43
2	U 409.014†	-1940.1	113.4	3.2232 ug/L	3.2232 ppb	14:48:23
2	V 292.402†	-1389.7	-15.9	-0.0943 ug/L	-0.0943 ppb	14:48:23
2	Zn 213.857†	654.3	-334.4	-3.0229 ug/L	-3.0229 ppb	14:48:43
2	SiO2†	445.0	-8.4	-0.5561 ug/L	-0.5561 ppb	14:49:18
3	Sc Radial	5250.4	5250.4	98.9 %		14:47:31
3	Y RADIAL	5597.4	5597.4	98.68 %		14:47:31
3	Al 396.153Radial†	0.1	16.8	12.251 ug/L	12.251 ppb	14:47:31
3	Ca 317.933Radial†	22.4	1.1	1.6053 ug/L	1.6053 ppb	14:47:51
3	Fe 238.204 Radial†	8.5	-1.6	-13.189 ug/L	-13.189 ppb	14:47:51
3	K 766.490 Radial†	2783.2	166.4	30.121 ug/L	30.121 ppb	14:47:31
3	Mg 279.077 IEC†	0.6	-2.6	-81.104 ug/L	-81.104 ppb	14:47:51
3	Na 589.592 Radial†	-1431.3	169.4	49.354 ug/L	49.354 ppb	14:47:31
3	Sr 421.552†	-13.4	-29.2	-0.1847 ug/L	-0.1847 ppb	14:47:31
3	Sc 361.383	860360.7	860360.7	98.634 %		14:48:48
3	Y 371.029	723485.5	723485.5	98.636 %		14:48:48
3	Ag 328.068†	317.2	-57.7	-0.2648 ug/L	-0.2648 ppb	14:48:48
3	As 188.979†	-18.8	4.4	1.7759 ug/L	1.7759 ppb	14:49:08
3	B 249.677†	-374.1	257.5	5.6159 ug/L	5.6159 ppb	14:49:08
3	Ba 233.527†	-3.5	5.3	0.0394 ug/L	0.0394 ppb	14:49:08
3	Be 313.107†	-4436.4	-173.4	-0.0617 ug/L	-0.0617 ppb	14:48:48
3	Cd 226.502†	-196.5	3.4	0.0379 ug/L	0.0379 ppb	14:49:08
3	Co 228.616†	-71.1	6.4	0.1258 ug/L	0.1258 ppb	14:49:08
3	Cr 267.716†	91.6	19.6	0.2075 ug/L	0.2075 ppb	14:49:08
3	Cu 324.752†	6618.9	164.6	0.4737 ug/L	0.4737 ppb	14:48:48
3	Mn 257.610†	416.4	-58.2	-0.0596 ug/L	-0.0596 ppb	14:49:08
3	Mo 202.031†	24.1	3.8	0.2580 ug/L	0.2580 ppb	14:49:08
3	Ni 231.604†	61.4	-32.0	-0.7608 ug/L	-0.7608 ppb	14:49:08
3	P 214.914†	208.6	-0.0	-0.0662 ug/L	-0.0662 ppb	14:49:08
3	Pb 220.353†	-62.7	3.8	0.4421 ug/L	0.4421 ppb	14:49:08
3	S 181.975 Axial†	52.6	8.7	11.662 ug/L	11.662 ppb	14:49:08
3	Sb 206.836†	46.2	17.6	5.8567 ug/L	5.8567 ppb	14:49:08
3	Se 196.026†	-32.4	-8.7	-5.3444 ug/L	-5.3444 ppb	14:49:08
3	Si 251.611†	427.7	-9.8	-0.3034 ug/L	-0.3034 ppb	14:49:08
3	Sn 189.927†	13.0	12.5	2.0915 ug/L	2.0915 ppb	14:49:08
3	Ti 334.940†	-1361.7	-30.1	-0.0424 ug/L	-0.0424 ppb	14:48:48
3	Tl 190.801†	-36.0	3.0	0.8721 ug/L	0.8721 ppb	14:49:08
3	U 409.014†	-1859.0	192.7	5.4765 ug/L	5.4765 ppb	14:48:48
3	V 292.402†	-1354.6	17.5	0.1291 ug/L	0.1291 ppb	14:48:48
3	Zn 213.857†	655.1	-332.5	-3.0010 ug/L	-3.0010 ppb	14:49:08
3	SiO2†	489.4	37.3	2.4339 ug/L	2.4339 ppb	14:49:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	862374.1	98.865	%	0.2801				0.28%
Sc Radial	5223.5	98.4	%	0.45				0.45%
Y 371.029	724750.8	98.809	%	0.3737				0.38%
Y RADIAL	5579.5	98.36	%	0.291				0.30%
Ag 328.068†	-60.6	-0.2741	ug/L	0.18669	-0.2741	ppb	0.18669	68.11%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2.3	1.6742	ug/L	9.31494	1.6742	ppb	9.31494	556.39%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.8	1.5529	ug/L	0.34131	1.5529	ppb	0.34131	21.98%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	273.2	5.9568	ug/L	0.42944	5.9568	ppb	0.42944	7.21%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.4	0.0105	ug/L	0.02528	0.0105	ppb	0.02528	239.66%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-107.4	-0.0381	ug/L	0.02126	-0.0381	ppb	0.02126	55.81%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-2.4	-3.6107	ug/L	4.51794	-3.6107	ppb	4.51794	125.13%

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

Cd 226.502†	8.0	0.0855 ug/L	0.04731	0.0855 ppb	0.04731	55.34%

QC value within limits for Cd 226.502 Recovery = Not calculated

Co 228.616†	4.4	0.0862 ug/L	0.13048	0.0862 ppb	0.13048	151.45%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716†	27.7	0.2952 ug/L	0.14687	0.2952 ppb	0.14687	49.75%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752†	132.6	0.3823 ug/L	0.09018	0.3823 ppb	0.09018	23.59%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 238.204 Radial†	-0.9	-7.6919 ug/L	8.63581	-7.6919 ppb	8.63581	112.27%

QC value within limits for Fe 238.204 Radial Recovery = Not calculated

K 766.490 Radial†	171.1	30.977 ug/L	9.2946	30.977 ppb	9.2946	30.01%

QC value within limits for K 766.490 Radial Recovery = Not calculated

Mg 279.077 IEC†	-2.5	-77.498 ug/L	4.1781	-77.498 ppb	4.1781	5.39%

QC value within limits for Mg 279.077 IEC Recovery = Not calculated

Mn 257.610†	-62.9	-0.0642 ug/L	0.01307	-0.0642 ppb	0.01307	20.37%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031†	4.4	0.2933 ug/L	0.07870	0.2933 ppb	0.07870	26.83%

QC value within limits for Mo 202.031 Recovery = Not calculated

Na 589.592 Radial†	163.8	47.721 ug/L	4.1815	47.721 ppb	4.1815	8.76%

QC value within limits for Na 589.592 Radial Recovery = Not calculated

Ni 231.604†	-16.5	-0.3930 ug/L	0.40202	-0.3930 ppb	0.40202	102.29%

QC value within limits for Ni 231.604 Recovery = Not calculated

P 214.914†	8.3	4.7317 ug/L	4.31045	4.7317 ppb	4.31045	91.10%

QC value within limits for P 214.914 Recovery = Not calculated

Pb 220.353†	5.4	0.6297 ug/L	0.33516	0.6297 ppb	0.33516	53.23%

QC value within limits for Pb 220.353 Recovery = Not calculated

S 181.975 Axial†	3.8	5.0523 ug/L	5.76668	5.0523 ppb	5.76668	114.14%

QC value within limits for S 181.975 Axial Recovery = Not calculated

Sb 206.836†	13.2	4.4008 ug/L	1.71161	4.4008 ppb	1.71161	38.89%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026†	-9.0	-5.5132 ug/L	0.47701	-5.5132 ppb	0.47701	8.65%

QC value within limits for Se 196.026 Recovery = Not calculated

Si 251.611†	-9.1	-0.2823 ug/L	0.07177	-0.2823 ppb	0.07177	25.42%

QC value within limits for Si 251.611 Recovery = Not calculated

Sn 189.927†	9.4	1.5704 ug/L	0.57969	1.5704 ppb	0.57969	36.91%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552†	-11.1	-0.0698 ug/L	0.15352	-0.0698 ppb	0.15352	219.91%

QC value within limits for Sr 421.552 Recovery = Not calculated

Ti 334.940†	13.7	0.0256 ug/L	0.05923	0.0256 ppb	0.05923	231.59%

QC value within limits for Ti 334.940 Recovery = Not calculated

Tl 190.801†	2.5	0.7163 ug/L	0.66675	0.7163 ppb	0.66675	93.08%

QC value within limits for Tl 190.801 Recovery = Not calculated

U 409.014†	118.2	3.3592 ug/L	2.05273	3.3592 ppb	2.05273	61.11%

QC value within limits for U 409.014 Recovery = Not calculated

V 292.402†	24.1	0.1675 ug/L	0.28292	0.1675 ppb	0.28292	168.93%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 213.857†	-323.8	-2.9249 ug/L	0.15120	-2.9249 ppb	0.15120	5.17%

QC value within limits for Zn 213.857 Recovery = Not calculated

SiO2†	-4.3	-0.2916 ug/L	2.60330	-0.2916 ppb	2.60330	892.83%

QC value within limits for SiO2 Recovery = Not calculated

All analyte(s) passed QC.

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Analysis Begun

Start Time: 1/13/2010 15:05:15 **Plasma On Time: 1/11/2010 06:15:31**
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\011310.sif
Batch ID:
Results Data Set: 011310
Results Library: C:\pe\Optima3\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/13/2010 15:05:16**
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	Conc.	Sample Units	Analysis Time
1	Sc Radial	5260.0	5260.0	99.1	%			15:07:08
1	Y RADIAL	5560.2	5560.2	98.02	%			15:07:08
1	Al 396.153Radial†	6627.4	6707.6	4866.9	ug/L	4866.9	ppb	15:07:08
1	Ca 317.933Radial†	3254.8	3264.4	4961.0	ug/L	4961.0	ppb	15:07:28
1	Fe 238.204 Radial†	610.5	606.2	5012.4	ug/L	5012.4	ppb	15:07:28
1	K 766.490 Radial†	29918.7	27556.6	4985.4	ug/L	4985.4	ppb	15:07:08
1	Mg 279.077 IEC†	164.2	162.5	5080.2	ug/L	5080.2	ppb	15:07:28
1	Na 589.592 Radial†	31644.4	33564.4	9781.4	ug/L	9781.4	ppb	15:07:08
1	Sr 421.552†	77488.5	78214.9	494.06	ug/L	494.06	ppb	15:07:08
1	Sc 361.383	877936.7	877936.7	100.65	%			15:08:26
1	Y 371.029	724712.5	724712.5	98.803	%			15:08:26
1	Ag 328.068†	110889.0	109794.8	491.59	ug/L	491.59	ppb	15:08:31
1	As 188.979†	1170.0	1185.9	485.83	ug/L	485.83	ppb	15:08:51
1	B 249.677†	21634.1	22131.4	480.29	ug/L	480.29	ppb	15:08:31
1	Ba 233.527†	65111.2	64700.2	487.79	ug/L	487.79	ppb	15:08:31
1	Be 313.107†	1377171.1	1372616.3	488.59	ug/L	488.59	ppb	15:08:26
1	Cd 226.502†	45973.6	45879.8	485.75	ug/L	485.75	ppb	15:08:31
1	Co 228.616†	24940.1	24857.7	487.73	ug/L	487.73	ppb	15:08:31
1	Cr 267.716†	45594.0	45226.8	483.88	ug/L	483.88	ppb	15:08:31
1	Cu 324.752†	174110.6	166442.0	482.76	ug/L	482.76	ppb	15:08:31
1	Mn 257.610†	467318.7	463825.3	491.06	ug/L	491.06	ppb	15:08:26
1	Mo 202.031†	7285.9	7218.3	487.80	ug/L	487.80	ppb	15:08:51
1	Ni 231.604†	20606.6	20379.5	484.82	ug/L	484.82	ppb	15:08:31
1	P 214.914†	4434.5	4194.4	2320.3	ug/L	2320.3	ppb	15:08:51
1	Pb 220.353†	4132.0	4172.7	488.31	ug/L	488.31	ppb	15:08:51
1	S 181.975 Axial†	777.4	727.8	969.43	ug/L	969.43	ppb	15:08:51
1	Sb 206.836†	1518.5	1479.5	506.71	ug/L	506.71	ppb	15:08:51
1	Se 196.026†	771.4	790.5	499.13	ug/L	499.13	ppb	15:08:51
1	Si 251.611†	80590.3	79627.2	2431.9	ug/L	2431.9	ppb	15:08:31
1	Sn 189.927†	2922.8	2903.2	487.77	ug/L	487.77	ppb	15:08:51
1	Ti 334.940†	319722.6	319011.5	495.13	ug/L	495.13	ppb	15:08:26
1	Tl 190.801†	1641.7	1670.6	489.99	ug/L	489.99	ppb	15:08:51
1	U 409.014†	15335.9	17314.5	490.36	ug/L	490.36	ppb	15:08:31
1	V 292.402†	73054.5	73974.4	489.95	ug/L	489.95	ppb	15:08:31
1	Zn 213.857†	55202.7	53850.0	482.62	ug/L	482.62	ppb	15:08:31
1	SiO2†	81820.1	80833.6	5278.7	ug/L	5278.7	ppb	15:09:59
2	Sc Radial	5175.3	5175.3	97.5	%			15:07:33
2	Y RADIAL	5483.5	5483.5	96.67	%			15:07:33
2	Al 396.153Radial†	6596.1	6785.0	4923.1	ug/L	4923.1	ppb	15:07:33
2	Ca 317.933Radial†	3247.9	3311.1	5032.0	ug/L	5032.0	ppb	15:07:53
2	Fe 238.204 Radial†	606.5	612.2	5061.6	ug/L	5061.6	ppb	15:07:53
2	K 766.490 Radial†	29980.0	28114.0	5086.3	ug/L	5086.3	ppb	15:07:33
2	Mg 279.077 IEC†	163.8	164.8	5152.5	ug/L	5152.5	ppb	15:07:53
2	Na 589.592 Radial†	31360.2	33795.8	9848.8	ug/L	9848.8	ppb	15:07:33
2	Sr 421.552†	76816.8	78806.2	497.79	ug/L	497.79	ppb	15:07:33
2	Sc 361.383	867993.0	867993.0	99.509	%			15:08:57
2	Y 371.029	716842.9	716842.9	97.731	%			15:08:57

2	Ag 328.068†	111127.7	111296.8	498.30 ug/L	498.30 ppb	15:09:02
2	As 188.979†	1181.1	1210.3	495.74 ug/L	495.74 ppb	15:09:22
2	B 249.677†	21715.2	22459.2	487.41 ug/L	487.41 ppb	15:09:02
2	Ba 233.527†	65194.5	65525.0	494.00 ug/L	494.00 ppb	15:09:02
2	Be 313.107†	1365281.1	1376342.8	489.92 ug/L	489.92 ppb	15:08:57
2	Cd 226.502†	46056.5	46486.4	492.18 ug/L	492.18 ppb	15:09:02
2	Co 228.616†	25017.8	25219.7	494.84 ug/L	494.84 ppb	15:09:02
2	Cr 267.716†	45719.9	45872.3	490.78 ug/L	490.78 ppb	15:09:02
2	Cu 324.752†	174280.2	168594.2	489.00 ug/L	489.00 ppb	15:09:02
2	Mn 257.610†	464088.1	465897.8	493.26 ug/L	493.26 ppb	15:08:57
2	Mo 202.031†	7292.1	7307.6	493.83 ug/L	493.83 ppb	15:09:22
2	Ni 231.604†	20699.9	20707.8	492.63 ug/L	492.63 ppb	15:09:02
2	P 214.914†	4442.7	4253.2	2353.0 ug/L	2353.0 ppb	15:09:22
2	Pb 220.353†	4132.6	4220.3	493.89 ug/L	493.89 ppb	15:09:22
2	S 181.975 Axial†	784.6	743.9	990.86 ug/L	990.86 ppb	15:09:22
2	Sb 206.836†	1515.5	1493.7	511.69 ug/L	511.69 ppb	15:09:22
2	Se 196.026†	787.0	815.0	514.19 ug/L	514.19 ppb	15:09:22
2	Si 251.611†	80684.8	80639.5	2462.8 ug/L	2462.8 ppb	15:09:02
2	Sn 189.927†	2933.1	2946.8	495.09 ug/L	495.09 ppb	15:09:22
2	Ti 334.940†	316905.9	319820.1	496.39 ug/L	496.39 ppb	15:08:57
2	Tl 190.801†	1661.9	1709.6	501.32 ug/L	501.32 ppb	15:09:22
2	U 409.014†	15253.3	17406.0	492.93 ug/L	492.93 ppb	15:09:02
2	V 292.402†	72995.2	74746.3	495.08 ug/L	495.08 ppb	15:09:02
2	Zn 213.857†	55222.9	54498.7	488.42 ug/L	488.42 ppb	15:09:02
2	SiO2†	80101.6	80038.0	5226.5 ug/L	5226.5 ppb	15:10:04
3	Sc Radial	5267.4	5267.4	99.2 %		15:07:58
3	Y RADIAL	5580.3	5580.3	98.38 %		15:07:58
3	Al 396.153Radial†	6732.6	6804.3	4937.1 ug/L	4937.1 ppb	15:07:58
3	Ca 317.933Radial†	3253.5	3258.5	4952.1 ug/L	4952.1 ppb	15:08:18
3	Fe 238.204 Radial†	611.7	606.5	5015.2 ug/L	5015.2 ppb	15:08:18
3	K 766.490 Radial†	30263.7	27862.0	5040.7 ug/L	5040.7 ppb	15:07:58
3	Mg 279.077 IEC†	165.0	163.2	5100.4 ug/L	5100.4 ppb	15:08:18
3	Na 589.592 Radial†	31751.8	33627.9	9799.9 ug/L	9799.9 ppb	15:07:58
3	Sr 421.552†	78374.8	78998.8	499.01 ug/L	499.01 ppb	15:07:58
3	Sc 361.383	864733.0	864733.0	99.135 %		15:09:28
3	Y 371.029	714085.1	714085.1	97.355 %		15:09:28
3	Ag 328.068†	112770.6	113375.1	507.57 ug/L	507.57 ppb	15:09:33
3	As 188.979†	1172.5	1206.1	494.06 ug/L	494.06 ppb	15:09:53
3	B 249.677†	22079.0	22908.3	497.18 ug/L	497.18 ppb	15:09:33
3	Ba 233.527†	66171.6	66757.6	503.29 ug/L	503.29 ppb	15:09:33
3	Be 313.107†	1367733.7	1383989.3	492.64 ug/L	492.64 ppb	15:09:28
3	Cd 226.502†	46530.2	47138.8	499.10 ug/L	499.10 ppb	15:09:33
3	Co 228.616†	25370.5	25670.2	503.68 ug/L	503.68 ppb	15:09:33
3	Cr 267.716†	46236.6	46566.7	498.21 ug/L	498.21 ppb	15:09:33
3	Cu 324.752†	177755.4	172760.0	501.08 ug/L	501.08 ppb	15:09:33
3	Mn 257.610†	465048.1	468624.4	496.14 ug/L	496.14 ppb	15:09:28
3	Mo 202.031†	7275.1	7318.0	494.53 ug/L	494.53 ppb	15:09:53
3	Ni 231.604†	20947.1	21035.6	500.43 ug/L	500.43 ppb	15:09:33
3	P 214.914†	4440.2	4267.4	2358.8 ug/L	2358.8 ppb	15:09:53
3	Pb 220.353†	4138.3	4241.7	496.38 ug/L	496.38 ppb	15:09:53
3	S 181.975 Axial†	787.8	750.1	999.10 ug/L	999.10 ppb	15:09:53
3	Sb 206.836†	1512.9	1496.9	512.75 ug/L	512.75 ppb	15:09:53
3	Se 196.026†	792.5	823.5	519.23 ug/L	519.23 ppb	15:09:53
3	Si 251.611†	82025.5	82297.6	2513.6 ug/L	2513.6 ppb	15:09:33
3	Sn 189.927†	2917.9	2942.6	494.38 ug/L	494.38 ppb	15:09:53
3	Ti 334.940†	318329.8	322457.0	500.47 ug/L	500.47 ppb	15:09:28
3	Tl 190.801†	1648.2	1702.0	499.10 ug/L	499.10 ppb	15:09:53
3	U 409.014†	15558.6	17771.7	503.32 ug/L	503.32 ppb	15:09:33
3	V 292.402†	74207.1	76245.3	504.90 ug/L	504.90 ppb	15:09:33
3	Zn 213.857†	55998.5	55490.2	497.32 ug/L	497.32 ppb	15:09:33
3	SiO2†	80515.1	80758.6	5273.6 ug/L	5273.6 ppb	15:10:09

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	870220.9	99.764	%	0.7885				0.79%
Sc Radial	5234.2	98.6	%	0.96				0.98%
Y 371.029	718546.8	97.963	%	0.7519				0.77%
Y RADIAL	5541.3	97.69	%	0.900				0.92%
Ag 328.068†	111488.9	499.15	ug/L	8.023	499.15	ppb	8.023	1.61%

```
   QC value within limits for Ag 328.068  Recovery = 99.83%
Al 396.153Radial†       6765.6      4909.0 ug/L        37.14      4909.0 ppb        37.14   0.76%
   QC value within limits for Al 396.153Radial  Recovery = 98.18%
As 188.979†             1200.8      491.88 ug/L        5.305      491.88 ppb        5.305   1.08%
   QC value within limits for As 188.979  Recovery = 98.38%
B 249.677†             22499.6      488.30 ug/L        8.481      488.30 ppb        8.481   1.74%
   QC value within limits for B 249.677  Recovery = 97.66%
Ba 233.527†            65660.9      495.03 ug/L        7.803      495.03 ppb        7.803   1.58%
   QC value within limits for Ba 233.527  Recovery = 99.01%
Be 313.107†          1377649.5      490.38 ug/L        2.065      490.38 ppb        2.065   0.42%
   QC value within limits for Be 313.107  Recovery = 98.08%
Ca 317.933Radial†       3278.0      4981.7 ug/L        43.81      4981.7 ppb        43.81   0.88%
   QC value within limits for Ca 317.933Radial  Recovery = 99.63%
Cd 226.502†            46501.6      492.34 ug/L        6.674      492.34 ppb        6.674   1.36%
   QC value within limits for Cd 226.502  Recovery = 98.47%
Co 228.616†            25249.2      495.42 ug/L        7.988      495.42 ppb        7.988   1.61%
   QC value within limits for Co 228.616  Recovery = 99.08%
Cr 267.716†            45888.6      490.96 ug/L        7.168      490.96 ppb        7.168   1.46%
   QC value within limits for Cr 267.716  Recovery = 98.19%
Cu 324.752†           169265.4      490.94 ug/L        9.313      490.94 ppb        9.313   1.90%
   QC value within limits for Cu 324.752  Recovery = 98.19%
Fe 238.204 Radial†       608.3      5029.7 ug/L        27.64      5029.7 ppb        27.64   0.55%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.59%
K 766.490 Radial†      27844.2      5037.5 ug/L        50.53      5037.5 ppb        50.53   1.00%
   QC value within limits for K 766.490 Radial  Recovery = 100.75%
Mg 279.077 IEC†          163.5      5111.1 ug/L        37.31      5111.1 ppb        37.31   0.73%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.22%
Mn 257.610†           466115.9      493.49 ug/L        2.546      493.49 ppb        2.546   0.52%
   QC value within limits for Mn 257.610  Recovery = 98.70%
Mo 202.031†             7281.3      492.05 ug/L        3.699      492.05 ppb        3.699   0.75%
   QC value within limits for Mo 202.031  Recovery = 98.41%
Na 589.592 Radial†     33662.7      9810.0 ug/L        34.84      9810.0 ppb        34.84   0.36%
   QC value within limits for Na 589.592 Radial  Recovery = 98.10%
Ni 231.604†            20707.6      492.62 ug/L        7.804      492.62 ppb        7.804   1.58%
   QC value within limits for Ni 231.604  Recovery = 98.52%
P 214.914†              4238.3      2344.1 ug/L        20.74      2344.1 ppb        20.74   0.88%
   QC value within limits for P 214.914  Recovery = 93.76%
Pb 220.353†             4211.6      492.86 ug/L        4.135      492.86 ppb        4.135   0.84%
   QC value within limits for Pb 220.353  Recovery = 98.57%
S 181.975 Axial†         740.6      986.46 ug/L       15.315      986.46 ppb       15.315   1.55%
   QC value within limits for S 181.975 Axial  Recovery = 98.65%
Sb 206.836†             1490.0      510.38 ug/L        3.221      510.38 ppb        3.221   0.63%
   QC value within limits for Sb 206.836  Recovery = 102.08%
Se 196.026†              809.7      510.85 ug/L       10.457      510.85 ppb       10.457   2.05%
   QC value within limits for Se 196.026  Recovery = 102.17%
Si 251.611†            80854.8      2469.4 ug/L        41.24      2469.4 ppb        41.24   1.67%
   QC value within limits for Si 251.611  Recovery = 98.78%
Sn 189.927†             2930.9      492.42 ug/L        4.036      492.42 ppb        4.036   0.82%
   QC value within limits for Sn 189.927  Recovery = 98.48%
Sr 421.552†            78673.3      496.96 ug/L        2.580      496.96 ppb        2.580   0.52%
   QC value within limits for Sr 421.552  Recovery = 99.39%
Ti 334.940†           320429.6      497.33 ug/L        2.790      497.33 ppb        2.790   0.56%
   QC value within limits for Ti 334.940  Recovery = 99.47%
Tl 190.801†             1694.1      496.80 ug/L        6.003      496.80 ppb        6.003   1.21%
   QC value within limits for Tl 190.801  Recovery = 99.36%
U 409.014†             17497.4      495.54 ug/L        6.860      495.54 ppb        6.860   1.38%
   QC value within limits for U 409.014  Recovery = 99.11%
V 292.402†             74988.7      496.64 ug/L        7.598      496.64 ppb        7.598   1.53%
   QC value within limits for V 292.402  Recovery = 99.33%
Zn 213.857†            54613.0      489.45 ug/L        7.406      489.45 ppb        7.406   1.51%
   QC value within limits for Zn 213.857  Recovery = 97.89%
SiO2†                  80543.4      5259.6 ug/L        28.81      5259.6 ppb        28.81   0.55%
   QC value within limits for SiO2  Recovery = 98.36%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/13/2010 15:12:19
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	5369.5	5369.5	101	%			15:14:11
1	Y RADIAL	5699.9	5699.9	100.5	%			15:14:11
1	Al 396.153Radial†	-29.9	-12.8	-9.3818	ug/L	-9.3818	ppb	15:14:11
1	Ca 317.933Radial†	16.3	-5.5	-8.3293	ug/L	-8.3293	ppb	15:14:31
1	Fe 238.204 Radial†	11.3	1.0	8.5998	ug/L	8.5998	ppb	15:14:31
1	K 766.490 Radial†	2715.5	37.0	6.6707	ug/L	6.6707	ppb	15:14:11
1	Mg 279.077 IEC†	0.9	-2.3	-72.057	ug/L	-72.057	ppb	15:14:31
1	Na 589.592 Radial†	-1381.5	250.7	73.045	ug/L	73.045	ppb	15:14:11
1	Sr 421.552†	8.2	-7.6	-0.0481	ug/L	-0.0481	ppb	15:14:11
1	Sc 361.383	886851.6	886851.6	101.67	%			15:15:28
1	Y 371.029	744547.3	744547.3	101.51	%			15:15:28
1	Ag 328.068†	346.9	-38.1	-0.1691	ug/L	-0.1691	ppb	15:15:33
1	As 188.979†	-12.1	11.5	4.6779	ug/L	4.6779	ppb	15:15:53
1	B 249.677†	-372.9	270.0	5.8845	ug/L	5.8845	ppb	15:15:53
1	Ba 233.527†	-18.6	-9.5	-0.0703	ug/L	-0.0703	ppb	15:15:53
1	Be 313.107†	-4399.8	-3.0	-0.0010	ug/L	-0.0010	ppb	15:15:33
1	Cd 226.502†	-181.8	23.8	0.2517	ug/L	0.2517	ppb	15:15:53
1	Co 228.616†	-70.8	8.8	0.1732	ug/L	0.1732	ppb	15:15:53
1	Cr 267.716†	98.2	23.4	0.2489	ug/L	0.2489	ppb	15:15:53
1	Cu 324.752†	6599.4	-55.0	-0.1620	ug/L	-0.1620	ppb	15:15:33
1	Mn 257.610†	416.2	-71.1	-0.0714	ug/L	-0.0714	ppb	15:15:53
1	Mo 202.031†	26.4	5.4	0.3625	ug/L	0.3625	ppb	15:15:53
1	Ni 231.604†	66.4	-28.9	-0.6891	ug/L	-0.6891	ppb	15:15:53
1	P 214.914†	217.6	2.5	1.4912	ug/L	1.4912	ppb	15:15:53
1	Pb 220.353†	-68.9	-0.5	-0.0547	ug/L	-0.0547	ppb	15:15:53
1	S 181.975 Axial†	45.3	0.1	0.0800	ug/L	0.0800	ppb	15:15:53
1	Sb 206.836†	46.2	16.2	5.3938	ug/L	5.3938	ppb	15:15:53
1	Se 196.026†	-29.2	-4.6	-2.7444	ug/L	-2.7444	ppb	15:15:53
1	Si 251.611†	429.2	-21.3	-0.6571	ug/L	-0.6571	ppb	15:15:53
1	Sn 189.927†	9.1	8.2	1.3738	ug/L	1.3738	ppb	15:15:53
1	Ti 334.940†	-1346.3	26.2	0.0431	ug/L	0.0431	ppb	15:15:33
1	Tl 190.801†	-34.2	5.8	1.6989	ug/L	1.6989	ppb	15:15:53
1	U 409.014†	-1930.8	178.4	5.0670	ug/L	5.0670	ppb	15:15:28
1	V 292.402†	-1351.6	61.5	0.4140	ug/L	0.4140	ppb	15:15:33
1	Zn 213.857†	652.5	-355.0	-3.2054	ug/L	-3.2054	ppb	15:15:53
1	SiO2†	464.2	-2.4	-0.1654	ug/L	-0.1654	ppb	15:16:59
2	Sc Radial	5352.1	5352.1	101	%			15:14:36
2	Y RADIAL	5706.4	5706.4	100.6	%			15:14:36
2	Al 396.153Radial†	-6.4	10.4	7.5460	ug/L	7.5460	ppb	15:14:36
2	Ca 317.933Radial†	17.9	-3.8	-5.7940	ug/L	-5.7940	ppb	15:14:56
2	Fe 238.204 Radial†	9.9	-0.3	-2.7821	ug/L	-2.7821	ppb	15:14:56
2	K 766.490 Radial†	2704.0	34.3	6.1894	ug/L	6.1894	ppb	15:14:36
2	Mg 279.077 IEC†	4.3	1.0	32.760	ug/L	32.760	ppb	15:14:56
2	Na 589.592 Radial†	-1432.0	196.2	57.172	ug/L	57.172	ppb	15:14:36
2	Sr 421.552†	-2.9	-18.6	-0.1172	ug/L	-0.1172	ppb	15:14:36
2	Sc 361.383	882381.0	882381.0	101.16	%			15:15:58
2	Y 371.029	740525.6	740525.6	100.96	%			15:15:58
2	Ag 328.068†	410.9	27.0	0.1203	ug/L	0.1203	ppb	15:16:03
2	As 188.979†	-21.9	1.8	0.7179	ug/L	0.7179	ppb	15:16:24
2	B 249.677†	-392.1	249.2	5.4339	ug/L	5.4339	ppb	15:16:24
2	Ba 233.527†	-8.8	0.2	0.0026	ug/L	0.0026	ppb	15:16:24
2	Be 313.107†	-4375.0	-0.4	0.0000	ug/L	0.0000	ppb	15:16:03
2	Cd 226.502†	-182.2	22.5	0.2388	ug/L	0.2388	ppb	15:16:24
2	Co 228.616†	-94.1	-14.6	-0.2862	ug/L	-0.2862	ppb	15:16:24
2	Cr 267.716†	80.6	6.5	0.0693	ug/L	0.0693	ppb	15:16:24
2	Cu 324.752†	6544.0	-77.0	-0.2246	ug/L	-0.2246	ppb	15:16:03
2	Mn 257.610†	443.0	-42.5	-0.0466	ug/L	-0.0466	ppb	15:16:24
2	Mo 202.031†	24.0	3.1	0.2122	ug/L	0.2122	ppb	15:16:24
2	Ni 231.604†	88.6	-6.6	-0.1577	ug/L	-0.1577	ppb	15:16:24

2	P 214.914†	216.2	2.2	1.3249 ug/L	1.3249 ppb	15:16:24
2	Pb 220.353†	-60.9	7.1	0.8359 ug/L	0.8359 ppb	15:16:24
2	S 181.975 Axial†	48.7	3.6	4.8013 ug/L	4.8013 ppb	15:16:24
2	Sb 206.836†	27.8	-1.8	-0.5666 ug/L	-0.5666 ppb	15:16:24
2	Se 196.026†	-22.1	2.3	1.4084 ug/L	1.4084 ppb	15:16:24
2	Si 251.611†	422.3	-26.0	-0.7975 ug/L	-0.7975 ppb	15:16:24
2	Sn 189.927†	4.1	3.3	0.5547 ug/L	0.5547 ppb	15:16:24
2	Ti 334.940†	-1326.8	38.8	0.0558 ug/L	0.0558 ppb	15:16:03
2	Tl 190.801†	-30.4	9.4	2.7454 ug/L	2.7454 ppb	15:16:24
2	U 409.014†	-2025.4	75.2	2.1381 ug/L	2.1381 ppb	15:15:58
2	V 292.402†	-1300.8	105.1	0.6946 ug/L	0.6946 ppb	15:16:03
2	Zn 213.857†	659.9	-344.4	-3.1121 ug/L	-3.1121 ppb	15:16:24
2	SiO2†	432.9	-30.9	-2.0300 ug/L	-2.0300 ppb	15:17:04
3	Sc Radial	5296.9	5296.9	99.7 %		15:15:02
3	Y RADIAL	5658.9	5658.9	99.76 %		15:15:02
3	Al 396.153Radial†	-19.2	-2.5	-1.8458 ug/L	-1.8458 ppb	15:15:02
3	Ca 317.933Radial†	15.6	-5.9	-9.0046 ug/L	-9.0046 ppb	15:15:22
3	Fe 238.204 Radial†	9.2	-0.9	-7.6656 ug/L	-7.6656 ppb	15:15:22
3	K 766.490 Radial†	2737.1	95.4	17.262 ug/L	17.262 ppb	15:15:02
3	Mg 279.077 IEC†	3.3	0.0	1.3193 ug/L	1.3193 ppb	15:15:22
3	Na 589.592 Radial†	-1467.8	145.4	42.382 ug/L	42.382 ppb	15:15:02
3	Sr 421.552†	25.8	10.1	0.0641 ug/L	0.0641 ppb	15:15:02
3	Sc 361.383	881513.7	881513.7	101.06 %		15:16:29
3	Y 371.029	740233.4	740233.4	100.92 %		15:16:29
3	Ag 328.068†	392.4	9.0	0.0331 ug/L	0.0331 ppb	15:16:34
3	As 188.979†	-26.6	-2.9	-1.1676 ug/L	-1.1676 ppb	15:16:54
3	B 249.677†	-353.1	287.4	6.2665 ug/L	6.2665 ppb	15:16:54
3	Ba 233.527†	-4.1	4.8	0.0366 ug/L	0.0366 ppb	15:16:54
3	Be 313.107†	-4371.2	-0.9	-0.0004 ug/L	-0.0004 ppb	15:16:34
3	Cd 226.502†	-178.9	25.6	0.2735 ug/L	0.2735 ppb	15:16:54
3	Co 228.616†	-77.3	1.9	0.0371 ug/L	0.0371 ppb	15:16:54
3	Cr 267.716†	100.8	26.5	0.2810 ug/L	0.2810 ppb	15:16:54
3	Cu 324.752†	6699.5	83.2	0.2372 ug/L	0.2372 ppb	15:16:34
3	Mn 257.610†	419.8	-65.0	-0.0696 ug/L	-0.0696 ppb	15:16:54
3	Mo 202.031†	19.8	-1.0	-0.0679 ug/L	-0.0679 ppb	15:16:54
3	Ni 231.604†	84.5	-10.6	-0.2514 ug/L	-0.2514 ppb	15:16:54
3	P 214.914†	221.1	7.3	4.1759 ug/L	4.1759 ppb	15:16:54
3	Pb 220.353†	-67.0	1.0	0.1178 ug/L	0.1178 ppb	15:16:54
3	S 181.975 Axial†	45.7	0.7	0.9235 ug/L	0.9235 ppb	15:16:54
3	Sb 206.836†	37.1	7.5	2.4960 ug/L	2.4960 ppb	15:16:54
3	Se 196.026†	-29.1	-4.7	-2.8554 ug/L	-2.8554 ppb	15:16:54
3	Si 251.611†	451.2	3.1	0.0945 ug/L	0.0945 ppb	15:16:54
3	Sn 189.927†	6.5	5.6	0.9423 ug/L	0.9423 ppb	15:16:54
3	Ti 334.940†	-1390.4	-25.4	-0.0440 ug/L	-0.0440 ppb	15:16:34
3	Tl 190.801†	-35.1	4.8	1.3902 ug/L	1.3902 ppb	15:16:54
3	U 409.014†	-1850.5	246.3	7.0003 ug/L	7.0003 ppb	15:16:29
3	V 292.402†	-1368.1	37.2	0.2566 ug/L	0.2566 ppb	15:16:34
3	Zn 213.857†	664.0	-339.7	-3.0693 ug/L	-3.0693 ppb	15:16:54
3	SiO2†	463.8	-0.0	0.0018 ug/L	0.0018 ppb	15:17:09

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	883582.1	101.30	%	0.328				0.32%
Sc Radial	5339.5	101	%	0.7				0.71%
Y 371.029	741768.8	101.13	%	0.329				0.32%
Y RADIAL	5688.4	100.3	%	0.45				0.45%
Ag 328.068†	-0.7	-0.0052	ug/L	0.14842	-0.0052	ppb	0.14842	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-1.7	-1.2272	ug/L	8.48085	-1.2272	ppb	8.48085	691.08%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.5	1.4094	ug/L	2.98345	1.4094	ppb	2.98345	211.68%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	268.9	5.8617	ug/L	0.41677	5.8617	ppb	0.41677	7.11%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.5	-0.0104	ug/L	0.05461	-0.0104	ppb	0.05461	525.16%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1.5	-0.0005	ug/L	0.00049	-0.0005	ppb	0.00049	102.38%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-5.1	-7.7093	ug/L	1.69275	-7.7093	ppb	1.69275	21.96%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              24.0      0.2547 ug/L       0.01751      0.2547 ppb        0.01751   6.87%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -1.3     -0.0253 ug/L       0.23595     -0.0253 ppb        0.23595 932.99%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              18.8      0.1998 ug/L       0.11408      0.1998 ppb        0.11408  57.11%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -16.3     -0.0498 ug/L       0.25050     -0.0498 ppb        0.25050 502.82%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -0.1     -0.6160 ug/L       8.34623     -0.6160 ppb        8.34623 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        55.5      10.041 ug/L        6.2586      10.041 ppb         6.2586  62.33%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.4     -12.659 ug/L       53.7887     -12.659 ppb        53.7887 424.89%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             -59.5     -0.0625 ug/L       0.01383     -0.0625 ppb        0.01383  22.12%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               2.5      0.1690 ug/L       0.21843      0.1690 ppb        0.21843 129.28%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      197.4      57.533 ug/L       15.3345      57.533 ppb        15.3345  26.65%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -15.4     -0.3661 ug/L       0.28365     -0.3661 ppb        0.28365  77.49%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                4.0      2.3307 ug/L       1.60018      2.3307 ppb        1.60018  68.66%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               2.6      0.2997 ug/L       0.47237      0.2997 ppb        0.47237 157.63%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          1.5      1.9350 ug/L       2.51791      1.9350 ppb        2.51791 130.13%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               7.3      2.4411 ug/L       2.98059      2.4411 ppb        2.98059 122.10%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -2.3     -1.3971 ug/L       2.43030     -1.3971 ppb        2.43030 173.95%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             -14.7     -0.4534 ug/L       0.47960     -0.4534 ppb        0.47960 105.79%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               5.7      0.9570 ug/L       0.40979      0.9570 ppb        0.40979  42.82%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -5.4     -0.0338 ug/L       0.09149     -0.0338 ppb        0.09149 270.97%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              13.2      0.0183 ug/L       0.05430      0.0183 ppb        0.05430 296.74%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               6.7      1.9448 ug/L       0.71033      1.9448 ppb        0.71033  36.52%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              166.7      4.7351 ug/L       2.44802      4.7351 ppb        2.44802  51.70%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               67.9      0.4551 ug/L       0.22188      0.4551 ppb        0.22188  48.76%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            -346.4     -3.1289 ug/L       0.06957     -3.1289 ppb        0.06957   2.22%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                  -11.1     -0.7312 ug/L       1.12791     -0.7312 ppb        1.12791 154.25%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

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

Autosampler Location: 1
Date Collected: 1/13/2010 16:00:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5218.9	5218.9	98.3	%			16:02:09
1	Y RADIAL	5528.1	5528.1	97.46	%			16:02:09
1	Al 396.153Radial†	6777.7	6913.2	5016.7	ug/L	5016.7	ppb	16:02:09
1	Ca 317.933Radial†	3308.1	3344.5	5082.8	ug/L	5082.8	ppb	16:02:29
1	Fe 238.204 Radial†	618.8	619.5	5121.8	ug/L	5121.8	ppb	16:02:29
1	K 766.490 Radial†	30199.5	28079.8	5080.1	ug/L	5080.1	ppb	16:02:09
1	Mg 279.077 IEC†	166.7	166.4	5201.5	ug/L	5201.5	ppb	16:02:29
1	Na 589.592 Radial†	31612.0	33782.6	9845.0	ug/L	9845.0	ppb	16:02:09
1	Sr 421.552†	77786.9	79133.6	499.86	ug/L	499.86	ppb	16:02:09
1	Sc 361.383	886406.8	886406.8	101.62	%			16:03:26
1	Y 371.029	732210.4	732210.4	99.826	%			16:03:26
1	Ag 328.068†	114602.0	112395.9	503.22	ug/L	503.22	ppb	16:03:31
1	As 188.979†	1206.1	1210.3	495.66	ug/L	495.66	ppb	16:03:51
1	B 249.677†	22502.1	22780.2	494.39	ug/L	494.39	ppb	16:03:31
1	Ba 233.527†	67077.3	66016.8	497.71	ug/L	497.71	ppb	16:03:31
1	Be 313.107†	1387326.3	1369534.8	487.48	ug/L	487.48	ppb	16:03:26
1	Cd 226.502†	47466.6	46912.6	496.69	ug/L	496.69	ppb	16:03:31
1	Co 228.616†	25754.4	25422.3	498.83	ug/L	498.83	ppb	16:03:31
1	Cr 267.716†	46911.2	46090.2	493.12	ug/L	493.12	ppb	16:03:31
1	Cu 324.752†	180279.7	170859.8	495.57	ug/L	495.57	ppb	16:03:31
1	Mn 257.610†	470562.1	462580.3	489.75	ug/L	489.75	ppb	16:03:26
1	Mo 202.031†	7401.3	7262.7	490.81	ug/L	490.81	ppb	16:03:51
1	Ni 231.604†	21275.8	20842.4	495.83	ug/L	495.83	ppb	16:03:31
1	P 214.914†	4518.8	4235.2	2341.3	ug/L	2341.3	ppb	16:03:51
1	Pb 220.353†	4208.1	4208.3	492.49	ug/L	492.49	ppb	16:03:51
1	S 181.975 Axial†	795.7	738.5	983.62	ug/L	983.62	ppb	16:03:51
1	Sb 206.836†	1537.2	1483.5	508.21	ug/L	508.21	ppb	16:03:51
1	Se 196.026†	814.1	825.2	520.60	ug/L	520.60	ppb	16:03:51
1	Si 251.611†	83362.6	81590.3	2491.9	ug/L	2491.9	ppb	16:03:31
1	Sn 189.927†	2968.6	2920.6	490.70	ug/L	490.70	ppb	16:03:51
1	Ti 334.940†	317897.5	314180.2	487.63	ug/L	487.63	ppb	16:03:31
1	Tl 190.801†	1671.5	1684.3	493.83	ug/L	493.83	ppb	16:03:51
1	U 409.014†	15954.8	17777.9	503.49	ug/L	503.49	ppb	16:03:31
1	V 292.402†	75314.4	75504.7	500.01	ug/L	500.01	ppb	16:03:31
1	Zn 213.857†	56930.7	55026.5	493.15	ug/L	493.15	ppb	16:03:31
1	SiO2†	82345.0	80573.4	5261.6	ug/L	5261.6	ppb	16:04:59
2	Sc Radial	5307.5	5307.5	99.9	%			16:02:34
2	Y RADIAL	5595.2	5595.2	98.64	%			16:02:34
2	Al 396.153Radial†	6807.9	6828.3	4954.5	ug/L	4954.5	ppb	16:02:34
2	Ca 317.933Radial†	3296.0	3276.3	4979.1	ug/L	4979.1	ppb	16:02:54
2	Fe 238.204 Radial†	615.0	605.2	5003.9	ug/L	5003.9	ppb	16:02:54
2	K 766.490 Radial†	30564.1	27931.9	5053.4	ug/L	5053.4	ppb	16:02:34
2	Mg 279.077 IEC†	166.8	163.7	5118.1	ug/L	5118.1	ppb	16:02:54
2	Na 589.592 Radial†	31876.0	33510.1	9765.6	ug/L	9765.6	ppb	16:02:34
2	Sr 421.552†	79016.3	79043.0	499.29	ug/L	499.29	ppb	16:02:34
2	Sc 361.383	872731.7	872731.7	100.05	%			16:03:57
2	Y 371.029	720933.4	720933.4	98.288	%			16:03:57
2	Ag 328.068†	112768.1	112330.0	502.89	ug/L	502.89	ppb	16:04:02
2	As 188.979†	1199.0	1221.8	500.30	ug/L	500.30	ppb	16:04:22
2	B 249.677†	22070.4	22695.7	492.57	ug/L	492.57	ppb	16:04:02
2	Ba 233.527†	66124.6	66099.0	498.33	ug/L	498.33	ppb	16:04:02
2	Be 313.107†	1377350.8	1380956.5	491.54	ug/L	491.54	ppb	16:03:57
2	Cd 226.502†	46622.6	46800.9	495.52	ug/L	495.52	ppb	16:04:02
2	Co 228.616†	25344.4	25409.6	498.60	ug/L	498.60	ppb	16:04:02
2	Cr 267.716†	46232.6	46135.2	493.60	ug/L	493.60	ppb	16:04:02
2	Cu 324.752†	177241.6	170603.1	494.82	ug/L	494.82	ppb	16:04:02
2	Mn 257.610†	468655.6	467930.7	495.40	ug/L	495.40	ppb	16:03:57
2	Mo 202.031†	7364.0	7339.6	495.99	ug/L	495.99	ppb	16:04:22
2	Ni 231.604†	20908.6	20803.5	494.90	ug/L	494.90	ppb	16:04:02

2	P 214.914†	4505.7	4291.8	2374.2 ug/L	2374.2 ppb	16:04:22
2	Pb 220.353†	4187.7	4252.9	497.70 ug/L	497.70 ppb	16:04:22
2	S 181.975 Axial†	786.4	741.4	987.56 ug/L	987.56 ppb	16:04:22
2	Sb 206.836†	1529.6	1499.6	513.73 ug/L	513.73 ppb	16:04:22
2	Se 196.026†	803.1	826.8	521.19 ug/L	521.19 ppb	16:04:22
2	Si 251.611†	82074.8	81588.5	2491.8 ug/L	2491.8 ppb	16:04:02
2	Sn 189.927†	2961.1	2958.8	497.09 ug/L	497.09 ppb	16:04:22
2	Ti 334.940†	312920.7	314107.8	487.51 ug/L	487.51 ppb	16:04:02
2	Tl 190.801†	1665.9	1704.5	499.75 ug/L	499.75 ppb	16:04:22
2	U 409.014†	15537.0	17606.3	498.63 ug/L	498.63 ppb	16:04:02
2	V 292.402†	74027.7	75380.0	499.28 ug/L	499.28 ppb	16:04:02
2	Zn 213.857†	55952.6	54926.7	492.27 ug/L	492.27 ppb	16:04:02
2	SiO2†	82220.4	81718.6	5336.4 ug/L	5336.4 ppb	16:05:04
3	Sc Radial	5295.6	5295.6	99.7 %		16:02:59
3	Y RADIAL	5617.3	5617.3	99.03 %		16:02:59
3	Al 396.153Radial†	6816.8	6852.5	4972.1 ug/L	4972.1 ppb	16:02:59
3	Ca 317.933Radial†	3289.4	3277.0	4980.2 ug/L	4980.2 ppb	16:03:19
3	Fe 238.204 Radial†	610.4	601.9	4977.4 ug/L	4977.4 ppb	16:03:19
3	K 766.490 Radial†	30591.2	28027.8	5070.8 ug/L	5070.8 ppb	16:02:59
3	Mg 279.077 IEC†	166.0	163.3	5104.3 ug/L	5104.3 ppb	16:03:19
3	Na 589.592 Radial†	31558.5	33263.3	9693.6 ug/L	9693.6 ppb	16:02:59
3	Sr 421.552†	78486.1	78688.9	497.05 ug/L	497.05 ppb	16:02:59
3	Sc 361.383	877563.2	877563.2	100.61 %		16:04:28
3	Y 371.029	725221.8	725221.8	98.873 %		16:04:28
3	Ag 328.068†	113564.4	112501.0	503.65 ug/L	503.65 ppb	16:04:33
3	As 188.979†	1211.2	1227.4	502.57 ug/L	502.57 ppb	16:04:53
3	B 249.677†	22286.1	22788.6	494.59 ug/L	494.59 ppb	16:04:33
3	Ba 233.527†	66356.9	65966.0	497.33 ug/L	497.33 ppb	16:04:33
3	Be 313.107†	1389577.0	1385529.8	493.16 ug/L	493.16 ppb	16:04:28
3	Cd 226.502†	46927.4	46847.3	496.01 ug/L	496.01 ppb	16:04:33
3	Co 228.616†	25505.9	25430.7	499.01 ug/L	499.01 ppb	16:04:33
3	Cr 267.716†	46528.8	46175.2	494.03 ug/L	494.03 ppb	16:04:33
3	Cu 324.752†	178439.3	170818.2	495.44 ug/L	495.44 ppb	16:04:33
3	Mn 257.610†	471386.6	468066.3	495.55 ug/L	495.55 ppb	16:04:28
3	Mo 202.031†	7430.5	7365.2	497.72 ug/L	497.72 ppb	16:04:53
3	Ni 231.604†	21088.6	20867.3	496.42 ug/L	496.42 ppb	16:04:33
3	P 214.914†	4547.3	4308.4	2383.6 ug/L	2383.6 ppb	16:04:53
3	Pb 220.353†	4205.5	4247.5	497.09 ug/L	497.09 ppb	16:04:53
3	S 181.975 Axial†	794.4	745.1	992.47 ug/L	992.47 ppb	16:04:53
3	Sb 206.836†	1543.8	1505.3	515.67 ug/L	515.67 ppb	16:04:53
3	Se 196.026†	799.4	818.7	516.21 ug/L	516.21 ppb	16:04:53
3	Si 251.611†	82490.9	81550.5	2490.6 ug/L	2490.6 ppb	16:04:33
3	Sn 189.927†	2978.9	2960.2	497.33 ug/L	497.33 ppb	16:04:53
3	Ti 334.940†	315580.5	315029.7	488.94 ug/L	488.94 ppb	16:04:33
3	Tl 190.801†	1669.3	1698.7	498.06 ug/L	498.06 ppb	16:04:53
3	U 409.014†	15600.5	17584.0	497.99 ug/L	497.99 ppb	16:04:33
3	V 292.402†	74718.4	75659.2	501.13 ug/L	501.13 ppb	16:04:33
3	Zn 213.857†	56340.3	55004.1	492.96 ug/L	492.96 ppb	16:04:33
3	SiO2†	83263.7	82303.2	5374.6 ug/L	5374.6 ppb	16:05:09

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	878900.6	100.76	%	0.795				0.79%
Sc Radial	5274.0	99.3	%	0.91				0.91%
Y 371.029	726121.9	98.996	%	0.7760				0.78%
Y RADIAL	5580.2	98.38	%	0.819				0.83%
Ag 328.068†	112408.9	503.26	ug/L	0.381	503.26	ppb	0.381	0.08%
QC value within limits for Ag 328.068 Recovery = 100.65%								
Al 396.153Radial†	6864.7	4981.1	ug/L	32.04	4981.1	ppb	32.04	0.64%
QC value within limits for Al 396.153Radial Recovery = 99.62%								
As 188.979†	1219.8	499.51	ug/L	3.520	499.51	ppb	3.520	0.70%
QC value within limits for As 188.979 Recovery = 99.90%								
B 249.677†	22754.8	493.85	ug/L	1.116	493.85	ppb	1.116	0.23%
QC value within limits for B 249.677 Recovery = 98.77%								
Ba 233.527†	66027.2	497.79	ug/L	0.503	497.79	ppb	0.503	0.10%
QC value within limits for Ba 233.527 Recovery = 99.56%								
Be 313.107†	1378673.7	490.73	ug/L	2.927	490.73	ppb	2.927	0.60%
QC value within limits for Be 313.107 Recovery = 98.15%								
Ca 317.933Radial†	3299.2	5014.0	ug/L	59.58	5014.0	ppb	59.58	1.19%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.28%
Cd 226.502†            46853.6      496.07 ug/L         0.588      496.07 ppb          0.588   0.12%
   QC value within limits for Cd 226.502  Recovery = 99.21%
Co 228.616†            25420.8      498.81 ug/L         0.208      498.81 ppb          0.208   0.04%
   QC value within limits for Co 228.616  Recovery = 99.76%
Cr 267.716†            46133.5      493.58 ug/L         0.455      493.58 ppb          0.455   0.09%
   QC value within limits for Cr 267.716  Recovery = 98.72%
Cu 324.752†           170760.4      495.28 ug/L         0.401      495.28 ppb          0.401   0.08%
   QC value within limits for Cu 324.752  Recovery = 99.06%
Fe 238.204 Radial†       608.8      5034.4 ug/L        76.89      5034.4 ppb          76.89   1.53%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.69%
K 766.490 Radial†      28013.2      5068.1 ug/L        13.57      5068.1 ppb          13.57   0.27%
   QC value within limits for K 766.490 Radial  Recovery = 101.36%
Mg 279.077 IEC†          164.5      5141.3 ug/L        52.56      5141.3 ppb          52.56   1.02%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.83%
Mn 257.610†           466192.4      493.57 ug/L         3.305      493.57 ppb          3.305   0.67%
   QC value within limits for Mn 257.610  Recovery = 98.71%
Mo 202.031†             7322.5      494.84 ug/L         3.594      494.84 ppb          3.594   0.73%
   QC value within limits for Mo 202.031  Recovery = 98.97%
Na 589.592 Radial†     33518.7      9768.1 ug/L        75.70      9768.1 ppb          75.70   0.77%
   QC value within limits for Na 589.592 Radial  Recovery = 97.68%
Ni 231.604†            20837.7      495.72 ug/L         0.766      495.72 ppb          0.766   0.15%
   QC value within limits for Ni 231.604  Recovery = 99.14%
P 214.914†              4278.5      2366.4 ug/L        22.20      2366.4 ppb          22.20   0.94%
   QC value within limits for P 214.914  Recovery = 94.65%
Pb 220.353†             4236.3      495.76 ug/L         2.845      495.76 ppb          2.845   0.57%
   QC value within limits for Pb 220.353  Recovery = 99.15%
S 181.975 Axial†         741.7      987.88 ug/L         4.430      987.88 ppb          4.430   0.45%
   QC value within limits for S 181.975 Axial  Recovery = 98.79%
Sb 206.836†             1496.1      512.53 ug/L         3.871      512.53 ppb          3.871   0.76%
   QC value within limits for Sb 206.836  Recovery = 102.51%
Se 196.026†              823.6      519.34 ug/L         2.724      519.34 ppb          2.724   0.52%
   QC value within limits for Se 196.026  Recovery = 103.87%
Si 251.611†            81576.4      2491.5 ug/L          0.72      2491.5 ppb           0.72   0.03%
   QC value within limits for Si 251.611  Recovery = 99.66%
Sn 189.927†             2946.5      495.04 ug/L         3.762      495.04 ppb          3.762   0.76%
   QC value within limits for Sn 189.927  Recovery = 99.01%
Sr 421.552†            78955.2      498.74 ug/L         1.484      498.74 ppb          1.484   0.30%
   QC value within limits for Sr 421.552  Recovery = 99.75%
Ti 334.940†           314439.2      488.03 ug/L         0.795      488.03 ppb          0.795   0.16%
   QC value within limits for Ti 334.940  Recovery = 97.61%
Tl 190.801†             1695.8      497.21 ug/L         3.047      497.21 ppb          3.047   0.61%
   QC value within limits for Tl 190.801  Recovery = 99.44%
U 409.014†             17656.0      500.04 ug/L         3.007      500.04 ppb          3.007   0.60%
   QC value within limits for U 409.014  Recovery = 100.01%
V 292.402†             75514.6      500.14 ug/L         0.931      500.14 ppb          0.931   0.19%
   QC value within limits for V 292.402  Recovery = 100.03%
Zn 213.857†            54985.8      492.80 ug/L         0.465      492.80 ppb          0.465   0.09%
   QC value within limits for Zn 213.857  Recovery = 98.56%
SiO2†                  81531.7      5324.2 ug/L        57.51      5324.2 ppb          57.51   1.08%
   QC value within limits for SiO2  Recovery = 99.56%
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 1/13/2010 16:07:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5300.6	5300.6	99.8	%			16:09:12
1	Y RADIAL	5608.3	5608.3	98.87	%			16:09:12
1	Al 396.153Radial†	253.3	270.6	196.77	ug/L	196.77	ppb	16:09:12
1	Ca 317.933Radial†	146.8	125.6	190.82	ug/L	190.82	ppb	16:09:32
1	Fe 238.204 Radial†	23.9	13.8	113.76	ug/L	113.76	ppb	16:09:32
1	K 766.490 Radial†	3607.8	965.8	174.73	ug/L	174.73	ppb	16:09:12
1	Mg 279.077 IEC†	12.2	9.0	281.30	ug/L	281.30	ppb	16:09:32
1	Na 589.592 Radial†	-433.6	1182.6	344.63	ug/L	344.63	ppb	16:09:12
1	Sr 421.552†	748.2	733.9	4.6347	ug/L	4.6347	ppb	16:09:12
1	Sc 361.383	854415.2	854415.2	97.952	%			16:10:28
1	Y 371.029	716776.5	716776.5	97.722	%			16:10:28
1	Ag 328.068†	1464.4	1115.7	4.9746	ug/L	4.9746	ppb	16:10:28
1	As 188.979†	39.7	64.0	26.020	ug/L	26.020	ppb	16:10:48
1	B 249.677†	1819.7	2494.5	54.351	ug/L	54.351	ppb	16:10:28
1	Ba 233.527†	640.8	663.1	4.9999	ug/L	4.9999	ppb	16:10:48
1	Be 313.107†	9094.7	13609.2	4.8446	ug/L	4.8446	ppb	16:10:28
1	Cd 226.502†	286.1	494.7	5.2403	ug/L	5.2403	ppb	16:10:48
1	Co 228.616†	181.1	263.3	5.1773	ug/L	5.1773	ppb	16:10:48
1	Cr 267.716†	530.2	468.1	4.9902	ug/L	4.9902	ppb	16:10:48
1	Cu 324.752†	9915.4	3576.6	10.352	ug/L	10.352	ppb	16:10:28
1	Mn 257.610†	9923.7	9650.7	10.211	ug/L	10.211	ppb	16:10:28
1	Mo 202.031†	170.6	153.7	10.385	ug/L	10.385	ppb	16:10:48
1	Ni 231.604†	293.0	204.9	4.8742	ug/L	4.8742	ppb	16:10:48
1	P 214.914†	482.0	280.6	159.54	ug/L	159.54	ppb	16:10:48
1	Pb 220.353†	21.8	89.6	10.504	ug/L	10.504	ppb	16:10:48
1	S 181.975 Axial†	124.6	82.7	110.25	ug/L	110.25	ppb	16:10:48
1	Sb 206.836†	66.5	38.7	13.185	ug/L	13.185	ppb	16:10:48
1	Se 196.026†	14.2	38.7	23.943	ug/L	23.943	ppb	16:10:48
1	Si 251.611†	3668.9	3302.1	100.97	ug/L	100.97	ppb	16:10:28
1	Sn 189.927†	69.3	69.9	11.762	ug/L	11.762	ppb	16:10:48
1	Ti 334.940†	1875.3	3264.9	5.0471	ug/L	5.0471	ppb	16:10:28
1	Tl 190.801†	31.3	71.4	20.864	ug/L	20.864	ppb	16:10:48
1	U 409.014†	-269.0	1802.8	51.204	ug/L	51.204	ppb	16:10:28
1	V 292.402†	-684.4	692.2	4.7502	ug/L	4.7502	ppb	16:10:28
1	Zn 213.857†	1748.8	788.7	7.0741	ug/L	7.0741	ppb	16:10:48
1	SiO2†	3692.7	3311.0	216.48	ug/L	216.48	ppb	16:11:45
2	Sc Radial	5316.7	5316.7	100	%			16:09:37
2	Y RADIAL	5662.7	5662.7	99.83	%			16:09:37
2	Al 396.153Radial†	263.7	280.1	203.77	ug/L	203.77	ppb	16:09:37
2	Ca 317.933Radial†	150.7	129.0	196.06	ug/L	196.06	ppb	16:09:57
2	Fe 238.204 Radial†	21.2	11.0	90.597	ug/L	90.597	ppb	16:09:57
2	K 766.490 Radial†	3612.8	959.8	173.65	ug/L	173.65	ppb	16:09:37
2	Mg 279.077 IEC†	13.6	10.4	325.25	ug/L	325.25	ppb	16:09:57
2	Na 589.592 Radial†	-485.5	1132.1	329.92	ug/L	329.92	ppb	16:09:37
2	Sr 421.552†	765.9	749.2	4.7317	ug/L	4.7317	ppb	16:09:37
2	Sc 361.383	855368.2	855368.2	98.062	%			16:10:54
2	Y 371.029	718042.4	718042.4	97.894	%			16:10:54
2	Ag 328.068†	1431.6	1080.7	4.8062	ug/L	4.8062	ppb	16:10:54
2	As 188.979†	52.4	76.9	31.247	ug/L	31.247	ppb	16:11:14
2	B 249.677†	1830.1	2503.1	54.542	ug/L	54.542	ppb	16:10:54
2	Ba 233.527†	657.4	679.2	5.1202	ug/L	5.1202	ppb	16:11:14
2	Be 313.107†	9046.4	13549.7	4.8232	ug/L	4.8232	ppb	16:10:54
2	Cd 226.502†	275.3	483.4	5.1236	ug/L	5.1236	ppb	16:11:14
2	Co 228.616†	177.4	259.4	5.1005	ug/L	5.1005	ppb	16:11:14
2	Cr 267.716†	543.5	481.0	5.1258	ug/L	5.1258	ppb	16:11:14
2	Cu 324.752†	9949.2	3599.8	10.415	ug/L	10.415	ppb	16:10:54
2	Mn 257.610†	10032.5	9750.4	10.313	ug/L	10.313	ppb	16:10:54
2	Mo 202.031†	164.4	147.1	9.9414	ug/L	9.9414	ppb	16:11:14
2	Ni 231.604†	276.2	187.4	4.4580	ug/L	4.4580	ppb	16:11:14

2	P 214.914†	471.3	269.1	152.92 ug/L	152.92 ppb	16:11:14
2	Pb 220.353†	13.7	81.3	9.5405 ug/L	9.5405 ppb	16:11:14
2	S 181.975 Axial†	128.4	86.4	115.12 ug/L	115.12 ppb	16:11:14
2	Sb 206.836†	63.1	35.2	11.990 ug/L	11.990 ppb	16:11:14
2	Se 196.026†	15.4	39.9	24.597 ug/L	24.597 ppb	16:11:14
2	Si 251.611†	3679.7	3309.0	101.19 ug/L	101.19 ppb	16:10:54
2	Sn 189.927†	64.3	64.8	10.902 ug/L	10.902 ppb	16:11:14
2	Ti 334.940†	1783.3	3168.9	4.8929 ug/L	4.8929 ppb	16:10:54
2	Tl 190.801†	17.8	57.6	16.848 ug/L	16.848 ppb	16:11:14
2	U 409.014†	-82.5	1993.3	56.620 ug/L	56.620 ppb	16:10:54
2	V 292.402†	-700.8	676.2	4.6542 ug/L	4.6542 ppb	16:10:54
2	Zn 213.857†	1752.4	790.3	7.0935 ug/L	7.0935 ppb	16:11:14
2	SiO2†	3712.6	3327.1	217.54 ug/L	217.54 ppb	16:11:50
3	Sc Radial	5346.1	5346.1	101 %		16:10:02
3	Y RADIAL	5689.6	5689.6	100.3 %		16:10:02
3	Al 396.153Radial†	253.9	268.9	195.61 ug/L	195.61 ppb	16:10:02
3	Ca 317.933Radial†	141.6	119.1	181.06 ug/L	181.06 ppb	16:10:22
3	Fe 238.204 Radial†	21.7	11.4	94.033 ug/L	94.033 ppb	16:10:22
3	K 766.490 Radial†	3675.6	1002.4	181.37 ug/L	181.37 ppb	16:10:02
3	Mg 279.077 IEC†	13.1	9.8	306.38 ug/L	306.38 ppb	16:10:22
3	Na 589.592 Radial†	-447.5	1172.5	341.69 ug/L	341.69 ppb	16:10:02
3	Sr 421.552†	786.5	765.6	4.8348 ug/L	4.8348 ppb	16:10:02
3	Sc 361.383	863908.8	863908.8	99.041 %		16:11:19
3	Y 371.029	726109.2	726109.2	98.994 %		16:11:19
3	Ag 328.068†	1467.3	1102.3	4.9053 ug/L	4.9053 ppb	16:11:19
3	As 188.979†	49.2	73.1	29.706 ug/L	29.706 ppb	16:11:39
3	B 249.677†	1821.5	2476.0	53.950 ug/L	53.950 ppb	16:11:19
3	Ba 233.527†	656.0	671.1	5.0610 ug/L	5.0610 ppb	16:11:39
3	Be 313.107†	9340.5	13755.4	4.8966 ug/L	4.8966 ppb	16:11:19
3	Cd 226.502†	282.2	487.5	5.1678 ug/L	5.1678 ppb	16:11:39
3	Co 228.616†	168.2	248.2	4.8802 ug/L	4.8802 ppb	16:11:39
3	Cr 267.716†	534.8	466.8	4.9744 ug/L	4.9744 ppb	16:11:39
3	Cu 324.752†	9970.9	3521.4	10.187 ug/L	10.187 ppb	16:11:19
3	Mn 257.610†	10093.4	9710.7	10.272 ug/L	10.272 ppb	16:11:19
3	Mo 202.031†	158.3	139.3	9.4120 ug/L	9.4120 ppb	16:11:39
3	Ni 231.604†	318.0	226.8	5.3968 ug/L	5.3968 ppb	16:11:39
3	P 214.914†	485.5	278.7	158.47 ug/L	158.47 ppb	16:11:39
3	Pb 220.353†	18.8	86.4	10.126 ug/L	10.126 ppb	16:11:39
3	S 181.975 Axial†	114.4	71.0	94.652 ug/L	94.652 ppb	16:11:39
3	Sb 206.836†	61.6	33.0	11.270 ug/L	11.270 ppb	16:11:39
3	Se 196.026†	17.7	42.0	25.929 ug/L	25.929 ppb	16:11:39
3	Si 251.611†	3668.9	3261.0	99.723 ug/L	99.723 ppb	16:11:19
3	Sn 189.927†	70.1	70.0	11.778 ug/L	11.778 ppb	16:11:39
3	Ti 334.940†	1889.8	3258.5	5.0312 ug/L	5.0312 ppb	16:11:19
3	Tl 190.801†	25.0	64.7	18.897 ug/L	18.897 ppb	16:11:39
3	U 409.014†	-57.8	2019.1	57.352 ug/L	57.352 ppb	16:11:19
3	V 292.402†	-623.0	761.9	5.2070 ug/L	5.2070 ppb	16:11:19
3	Zn 213.857†	1757.7	778.0	6.9761 ug/L	6.9761 ppb	16:11:39
3	SiO2†	3707.9	3284.9	214.80 ug/L	214.80 ppb	16:11:55

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	857897.4	98.352	%	0.5993				0.61%
Sc Radial	5321.1	100	%	0.4				0.43%
Y 371.029	720309.4	98.203	%	0.6902				0.70%
Y RADIAL	5653.5	99.67	%	0.731				0.73%
Ag 328.068†	1099.6	4.8954	ug/L	0.08463	4.8954	ppb	0.08463	1.73%
QC value within limits for Ag 328.068 Recovery = 97.91%								
Al 396.153Radial†	273.2	198.72	ug/L	4.416	198.72	ppb	4.416	2.22%
QC value within limits for Al 396.153Radial Recovery = 99.36%								
As 188.979†	71.3	28.991	ug/L	2.6859	28.991	ppb	2.6859	9.26%
QC value within limits for As 188.979 Recovery = 96.64%								
B 249.677†	2491.2	54.281	ug/L	0.3019	54.281	ppb	0.3019	0.56%
QC value within limits for B 249.677 Recovery = 108.56%								
Ba 233.527†	671.1	5.0604	ug/L	0.06014	5.0604	ppb	0.06014	1.19%
QC value within limits for Ba 233.527 Recovery = 101.21%								
Be 313.107†	13638.1	4.8548	ug/L	0.03773	4.8548	ppb	0.03773	0.78%
QC value within limits for Be 313.107 Recovery = 97.10%								
Ca 317.933Radial†	124.6	189.31	ug/L	7.610	189.31	ppb	7.610	4.02%

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   QC value within limits for Ca 317.933Radial  Recovery = 94.66%
Cd 226.502†              488.5      5.1772 ug/L       0.05897      5.1772 ppb        0.05897   1.14%
   QC value within limits for Cd 226.502  Recovery = 103.54%
Co 228.616†              257.0      5.0527 ug/L       0.15421      5.0527 ppb        0.15421   3.05%
   QC value within limits for Co 228.616  Recovery = 101.05%
Cr 267.716†              472.0      5.0301 ug/L       0.08321      5.0301 ppb        0.08321   1.65%
   QC value within limits for Cr 267.716  Recovery = 100.60%
Cu 324.752†             3566.0      10.318 ug/L        0.1175      10.318 ppb         0.1175   1.14%
   QC value within limits for Cu 324.752  Recovery = 103.18%
Fe 238.204 Radial†        12.0      99.464 ug/L       12.5003      99.464 ppb        12.5003  12.57%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.46%
K 766.490 Radial†        976.0      176.58 ug/L         4.178      176.58 ppb          4.178   2.37%
   QC value within limits for K 766.490 Radial  Recovery = 117.72%
Mg 279.077 IEC†           9.7      304.31 ug/L        22.044      304.31 ppb         22.044   7.24%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.44%
Mn 257.610†             9704.0      10.265 ug/L        0.0510      10.265 ppb         0.0510   0.50%
   QC value within limits for Mn 257.610  Recovery = 102.65%
Mo 202.031†              146.7      9.9129 ug/L       0.48725      9.9129 ppb        0.48725   4.92%
   QC value within limits for Mo 202.031  Recovery = 99.13%
Na 589.592 Radial†      1162.4      338.74 ug/L         7.784      338.74 ppb          7.784   2.30%
   QC value within limits for Na 589.592 Radial  Recovery = 112.91%
Ni 231.604†              206.4      4.9097 ug/L       0.47040      4.9097 ppb        0.47040   9.58%
   QC value within limits for Ni 231.604  Recovery = 98.19%
P 214.914†               276.1      156.98 ug/L         3.552      156.98 ppb          3.552   2.26%
   QC value within limits for P 214.914  Recovery = 104.65%
Pb 220.353†               85.7      10.057 ug/L        0.4857      10.057 ppb         0.4857   4.83%
   QC value within limits for Pb 220.353  Recovery = 100.57%
S 181.975 Axial†          80.0      106.67 ug/L        10.693      106.67 ppb         10.693  10.02%
   QC value within limits for S 181.975 Axial  Recovery = 106.67%
Sb 206.836†               35.6      12.148 ug/L        0.9675      12.148 ppb         0.9675   7.96%
   QC value within limits for Sb 206.836  Recovery = 121.48%
Se 196.026†               40.2      24.823 ug/L        1.0120      24.823 ppb         1.0120   4.08%
   QC value within limits for Se 196.026  Recovery = 82.74%
Si 251.611†             3290.7      100.63 ug/L         0.789      100.63 ppb          0.789   0.78%
   QC value within limits for Si 251.611  Recovery = 100.63%
Sn 189.927†               68.3      11.480 ug/L        0.5009      11.480 ppb         0.5009   4.36%
   QC value within limits for Sn 189.927  Recovery = 114.80%
Sr 421.552†              749.6      4.7337 ug/L       0.10008      4.7337 ppb        0.10008   2.11%
   QC value within limits for Sr 421.552  Recovery = 94.67%
Ti 334.940†             3230.8      4.9904 ug/L       0.08483      4.9904 ppb        0.08483   1.70%
   QC value within limits for Ti 334.940  Recovery = 99.81%
Tl 190.801†               64.6      18.870 ug/L        2.0082      18.870 ppb         2.0082  10.64%
   QC value within limits for Tl 190.801  Recovery = 94.35%
U 409.014†              1938.4      55.058 ug/L        3.3583      55.058 ppb         3.3583   6.10%
   QC value within limits for U 409.014  Recovery = 110.12%
V 292.402†               710.1      4.8705 ug/L       0.29538      4.8705 ppb        0.29538   6.06%
   QC value within limits for V 292.402  Recovery = 97.41%
Zn 213.857†              785.6      7.0479 ug/L       0.06291      7.0479 ppb        0.06291   0.89%
   QC value within limits for Zn 213.857  Recovery = 70.48%
SiO2†                   3307.6      216.27 ug/L         1.385      216.27 ppb          1.385   0.64%
   QC value within limits for SiO2  Recovery = 101.54%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 1/13/2010 16:14:05
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	5332.3	5332.3	100	%			16:15:57
1	Y RADIAL	5680.7	5680.7	100.1	%			16:15:57
1	Al 396.153Radial†	8.6	25.3	18.479	ug/L	18.479	ppb	16:15:57
1	Ca 317.933Radial†	20.9	-0.8	-1.1911	ug/L	-1.1911	ppb	16:16:17
1	Fe 238.204 Radial†	9.3	-0.9	-7.6048	ug/L	-7.6048	ppb	16:16:17
1	K 766.490 Radial†	2705.4	45.7	8.2511	ug/L	8.2511	ppb	16:15:57
1	Mg 279.077 IEC†	4.1	0.8	26.107	ug/L	26.107	ppb	16:16:17
1	Na 589.592 Radial†	-1439.0	183.9	53.602	ug/L	53.602	ppb	16:15:57
1	Sr 421.552†	38.7	22.9	0.1444	ug/L	0.1444	ppb	16:15:57
1	Sc 361.383	860935.9	860935.9	98.700	%			16:17:14
1	Y 371.029	723573.4	723573.4	98.648	%			16:17:14
1	Ag 328.068†	370.2	-4.2	-0.0211	ug/L	-0.0211	ppb	16:17:14
1	As 188.979†	-26.6	-3.5	-1.4202	ug/L	-1.4202	ppb	16:17:34
1	B 249.677†	-375.8	256.1	5.5835	ug/L	5.5835	ppb	16:17:34
1	Ba 233.527†	-10.8	-2.1	-0.0161	ug/L	-0.0161	ppb	16:17:34
1	Be 313.107†	-4396.5	-130.0	-0.0462	ug/L	-0.0462	ppb	16:17:14
1	Cd 226.502†	-181.7	18.6	0.1972	ug/L	0.1972	ppb	16:17:34
1	Co 228.616†	-66.8	10.7	0.2091	ug/L	0.2091	ppb	16:17:34
1	Cr 267.716†	58.2	-14.3	-0.1528	ug/L	-0.1528	ppb	16:17:34
1	Cu 324.752†	6528.7	68.7	0.1990	ug/L	0.1990	ppb	16:17:14
1	Mn 257.610†	386.1	-89.2	-0.0962	ug/L	-0.0962	ppb	16:17:34
1	Mo 202.031†	9.6	-10.8	-0.7320	ug/L	-0.7320	ppb	16:17:34
1	Ni 231.604†	81.9	-11.3	-0.2682	ug/L	-0.2682	ppb	16:17:34
1	P 214.914†	216.4	7.8	4.4672	ug/L	4.4672	ppb	16:17:34
1	Pb 220.353†	-72.2	-5.8	-0.6717	ug/L	-0.6717	ppb	16:17:34
1	S 181.975 Axial†	42.8	-1.1	-1.5136	ug/L	-1.5136	ppb	16:17:34
1	Sb 206.836†	21.5	-7.4	-2.4289	ug/L	-2.4289	ppb	16:17:34
1	Se 196.026†	-35.7	-12.0	-7.3549	ug/L	-7.3549	ppb	16:17:34
1	Si 251.611†	419.3	-18.6	-0.5598	ug/L	-0.5598	ppb	16:17:34
1	Sn 189.927†	12.5	12.0	2.0045	ug/L	2.0045	ppb	16:17:34
1	Ti 334.940†	-1329.6	3.3	0.0028	ug/L	0.0028	ppb	16:17:14
1	Tl 190.801†	-37.6	1.4	0.4122	ug/L	0.4122	ppb	16:17:34
1	U 409.014†	-2052.9	-2.5	-0.0706	ug/L	-0.0706	ppb	16:17:14
1	V 292.402†	-1373.0	-0.1	-0.0097	ug/L	-0.0097	ppb	16:17:14
1	Zn 213.857†	970.4	-13.6	-0.1204	ug/L	-0.1204	ppb	16:17:34
1	SiO2†	453.7	0.8	0.0734	ug/L	0.0734	ppb	16:18:30
2	Sc Radial	5227.3	5227.3	98.4	%			16:16:22
2	Y RADIAL	5579.0	5579.0	98.35	%			16:16:22
2	Al 396.153Radial†	-4.7	12.0	8.7450	ug/L	8.7450	ppb	16:16:22
2	Ca 317.933Radial†	16.3	-5.0	-7.5627	ug/L	-7.5627	ppb	16:16:42
2	Fe 238.204 Radial†	12.4	2.4	19.992	ug/L	19.992	ppb	16:16:42
2	K 766.490 Radial†	2774.8	170.3	30.829	ug/L	30.829	ppb	16:16:22
2	Mg 279.077 IEC†	2.9	-0.3	-8.4422	ug/L	-8.4422	ppb	16:16:42
2	Na 589.592 Radial†	-1390.1	204.8	59.693	ug/L	59.693	ppb	16:16:22
2	Sr 421.552†	13.0	-2.5	-0.0159	ug/L	-0.0159	ppb	16:16:22
2	Sc 361.383	855471.7	855471.7	98.073	%			16:17:39
2	Y 371.029	718340.7	718340.7	97.935	%			16:17:39
2	Ag 328.068†	370.6	-1.4	-0.0055	ug/L	-0.0055	ppb	16:17:39
2	As 188.979†	-21.7	1.3	0.5436	ug/L	0.5436	ppb	16:17:59
2	B 249.677†	-409.6	219.1	4.7741	ug/L	4.7741	ppb	16:17:59
2	Ba 233.527†	-2.9	5.9	0.0447	ug/L	0.0447	ppb	16:17:59
2	Be 313.107†	-4434.6	-197.3	-0.0704	ug/L	-0.0704	ppb	16:17:39
2	Cd 226.502†	-183.6	15.4	0.1619	ug/L	0.1619	ppb	16:17:59
2	Co 228.616†	-74.5	2.5	0.0489	ug/L	0.0489	ppb	16:17:59
2	Cr 267.716†	76.6	4.9	0.0502	ug/L	0.0502	ppb	16:17:59
2	Cu 324.752†	6407.1	-13.0	-0.0401	ug/L	-0.0401	ppb	16:17:39
2	Mn 257.610†	375.6	-97.4	-0.1008	ug/L	-0.1008	ppb	16:17:59
2	Mo 202.031†	22.4	2.3	0.1558	ug/L	0.1558	ppb	16:17:59
2	Ni 231.604†	87.8	-4.7	-0.1108	ug/L	-0.1108	ppb	16:17:59

2	P 214.914†	225.8	18.7	10.793	ug/L	10.793 ppb	16:17:59
2	Pb 220.353†	-73.1	-7.2	-0.8358	ug/L	-0.8358 ppb	16:17:59
2	S 181.975 Axial†	45.8	2.2	2.9492	ug/L	2.9492 ppb	16:17:59
2	Sb 206.836†	32.2	3.6	1.2063	ug/L	1.2063 ppb	16:17:59
2	Se 196.026†	-24.8	-1.1	-0.6302	ug/L	-0.6302 ppb	16:17:59
2	Si 251.611†	444.1	9.4	0.2858	ug/L	0.2858 ppb	16:17:59
2	Sn 189.927†	6.1	5.4	0.9104	ug/L	0.9104 ppb	16:17:59
2	Ti 334.940†	-1422.0	-99.5	-0.1576	ug/L	-0.1576 ppb	16:17:39
2	Tl 190.801†	-20.0	19.1	5.5664	ug/L	5.5664 ppb	16:17:59
2	U 409.014†	-1823.2	218.4	6.2024	ug/L	6.2024 ppb	16:17:39
2	V 292.402†	-1388.4	-24.7	-0.1505	ug/L	-0.1505 ppb	16:17:39
2	Zn 213.857†	947.9	-30.2	-0.2742	ug/L	-0.2742 ppb	16:17:59
2	SiO2†	428.8	-21.7	-1.4256	ug/L	-1.4256 ppb	16:18:35
3	Sc Radial	5219.6	5219.6	98.3	%		16:16:47
3	Y RADIAL	5587.0	5587.0	98.50	%		16:16:47
3	Al 396.153Radial†	-29.8	-13.6	-9.9255	ug/L	-9.9255 ppb	16:16:47
3	Ca 317.933Radial†	14.3	-7.0	-10.658	ug/L	-10.658 ppb	16:17:07
3	Fe 238.204 Radial†	11.5	1.5	12.781	ug/L	12.781 ppb	16:17:07
3	K 766.490 Radial†	2684.0	82.1	14.862	ug/L	14.862 ppb	16:16:47
3	Mg 279.077 IEC†	-1.0	-4.2	-132.08	ug/L	-132.08 ppb	16:17:07
3	Na 589.592 Radial†	-1461.9	129.6	37.776	ug/L	37.776 ppb	16:16:47
3	Sr 421.552†	3.7	-11.9	-0.0751	ug/L	-0.0751 ppb	16:16:47
3	Sc 361.383	859970.4	859970.4	98.589	%		16:18:05
3	Y 371.029	722278.3	722278.3	98.472	%		16:18:05
3	Ag 328.068†	322.2	-52.4	-0.2343	ug/L	-0.2343 ppb	16:18:05
3	As 188.979†	-27.0	-3.9	-1.5953	ug/L	-1.5953 ppb	16:18:25
3	B 249.677†	-395.5	235.6	5.1341	ug/L	5.1341 ppb	16:18:25
3	Ba 233.527†	-9.5	-0.8	-0.0064	ug/L	-0.0064 ppb	16:18:25
3	Be 313.107†	-4372.9	-111.0	-0.0394	ug/L	-0.0394 ppb	16:18:05
3	Cd 226.502†	-179.1	21.0	0.2215	ug/L	0.2215 ppb	16:18:25
3	Co 228.616†	-71.2	6.2	0.1218	ug/L	0.1218 ppb	16:18:25
3	Cr 267.716†	51.0	-21.5	-0.2320	ug/L	-0.2320 ppb	16:18:25
3	Cu 324.752†	6449.3	-4.4	-0.0147	ug/L	-0.0147 ppb	16:18:05
3	Mn 257.610†	402.3	-72.4	-0.0699	ug/L	-0.0699 ppb	16:18:25
3	Mo 202.031†	18.7	-1.6	-0.1092	ug/L	-0.1092 ppb	16:18:25
3	Ni 231.604†	83.9	-9.1	-0.2169	ug/L	-0.2169 ppb	16:18:25
3	P 214.914†	211.2	2.7	1.5397	ug/L	1.5397 ppb	16:18:25
3	Pb 220.353†	-56.1	10.4	1.2082	ug/L	1.2082 ppb	16:18:25
3	S 181.975 Axial†	50.5	6.7	8.9171	ug/L	8.9171 ppb	16:18:25
3	Sb 206.836†	27.4	-1.5	-0.4912	ug/L	-0.4912 ppb	16:18:25
3	Se 196.026†	-25.0	-1.2	-0.7004	ug/L	-0.7004 ppb	16:18:25
3	Si 251.611†	423.0	-14.4	-0.4381	ug/L	-0.4381 ppb	16:18:25
3	Sn 189.927†	0.9	0.2	0.0256	ug/L	0.0256 ppb	16:18:25
3	Ti 334.940†	-1325.2	6.3	0.0171	ug/L	0.0171 ppb	16:18:05
3	Tl 190.801†	-39.1	-0.2	-0.0510	ug/L	-0.0510 ppb	16:18:25
3	U 409.014†	-1888.3	162.1	4.6056	ug/L	4.6056 ppb	16:18:05
3	V 292.402†	-1435.2	-64.8	-0.4205	ug/L	-0.4205 ppb	16:18:05
3	Zn 213.857†	952.6	-30.5	-0.2752	ug/L	-0.2752 ppb	16:18:25
3	SiO2†	447.8	-4.7	-0.3076	ug/L	-0.3076 ppb	16:18:40

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	858792.7	98.454	%	0.3343				0.34%
Sc Radial	5259.7	99.0	%	1.19				1.20%
Y 371.029	721397.5	98.351	%	0.3716				0.38%
Y RADIAL	5615.6	99.00	%	0.997				1.01%
Ag 328.068†	-19.3	-0.0870	ug/L	0.12785	-0.0870	ppb	0.12785	146.99%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.9	5.7661	ug/L	14.43457	5.7661	ppb	14.43457	250.33%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.0	-0.8240	ug/L	1.18762	-0.8240	ppb	1.18762	144.13%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	236.9	5.1639	ug/L	0.40549	5.1639	ppb	0.40549	7.85%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.0	0.0074	ug/L	0.03265	0.0074	ppb	0.03265	440.09%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-146.1	-0.0520	ug/L	0.01631	-0.0520	ppb	0.01631	31.37%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-4.3	-6.4706	ug/L	4.82696	-6.4706	ppb	4.82696	74.60%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              18.3      0.1935 ug/L       0.02999      0.1935 ppb        0.02999  15.50%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               6.5      0.1266 ug/L       0.08025      0.1266 ppb        0.08025  63.38%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -10.3     -0.1115 ug/L       0.14553     -0.1115 ppb        0.14553 130.49%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              17.1      0.0481 ug/L       0.13134      0.0481 ppb        0.13134 273.34%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        1.0      8.3892 ug/L      14.31278      8.3892 ppb       14.31278 170.61%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        99.4      17.981 ug/L       11.6074      17.981 ppb        11.6074  64.56%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -1.2     -38.139 ug/L       83.1701     -38.139 ppb        83.1701 218.07%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             -86.3     -0.0890 ug/L       0.01665     -0.0890 ppb        0.01665  18.71%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -3.4     -0.2285 ug/L       0.45575     -0.2285 ppb        0.45575 199.46%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      172.8      50.357 ug/L       11.3132      50.357 ppb        11.3132  22.47%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -8.3     -0.1986 ug/L       0.08030     -0.1986 ppb        0.08030  40.42%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                9.7      5.5998 ug/L       4.72926      5.5998 ppb        4.72926  84.45%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -0.9     -0.0998 ug/L       1.13572     -0.0998 ppb        1.13572 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          2.6      3.4509 ug/L       5.23343      3.4509 ppb        5.23343 151.65%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -1.8     -0.5713 ug/L       1.81890     -0.5713 ppb        1.81890 318.38%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -4.8     -2.8952 ug/L       3.86240     -2.8952 ppb        3.86240 133.41%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              -7.8     -0.2374 ug/L       0.45714     -0.2374 ppb        0.45714 192.60%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               5.8      0.9801 ug/L       0.99132      0.9801 ppb        0.99132 101.14%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               2.8      0.0178 ug/L       0.11359      0.0178 ppb        0.11359 637.96%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -30.0     -0.0459 ug/L       0.09703     -0.0459 ppb        0.09703 211.50%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               6.8      1.9759 ug/L       3.11812      1.9759 ppb        3.11812 157.81%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              126.0      3.5792 ug/L       3.26004      3.5792 ppb        3.26004  91.08%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -29.9     -0.1936 ug/L       0.20875     -0.1936 ppb        0.20875 107.83%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -24.7     -0.2233 ug/L       0.08906     -0.2233 ppb        0.08906  39.89%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    -8.5     -0.5532 ug/L       0.77910     -0.5532 ppb        0.77910 140.83%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 22
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 1/13/2010 17:31:13
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	5232.3	5232.3	98.5	%			17:33:05
1	Y RADIAL	5526.4	5526.4	97.43	%			17:33:05
1	Al 396.153Radial†	6788.0	6906.1	5010.5	ug/L	5010.5	ppb	17:33:05
1	Ca 317.933Radial†	3320.2	3348.2	5088.4	ug/L	5088.4	ppb	17:33:25
1	Fe 238.204 Radial†	622.1	621.3	5137.1	ug/L	5137.1	ppb	17:33:25
1	K 766.490 Radial†	30456.8	28262.9	5113.1	ug/L	5113.1	ppb	17:33:05
1	Mg 279.077 IEC†	164.0	163.2	5102.2	ug/L	5102.2	ppb	17:33:25
1	Na 589.592 Radial†	32602.6	34706.3	10114	ug/L	10114	ppb	17:33:05
1	Sr 421.552†	79183.3	80349.6	507.54	ug/L	507.54	ppb	17:33:05
1	Sc 361.383	855207.0	855207.0	98.043	%			17:34:22
1	Y 371.029	705391.9	705391.9	96.169	%			17:34:22
1	Ag 328.068†	114268.6	116170.0	520.08	ug/L	520.08	ppb	17:34:28
1	As 188.979†	1215.3	1263.0	517.22	ug/L	517.22	ppb	17:34:48
1	B 249.677†	22388.4	23472.0	509.42	ug/L	509.42	ppb	17:34:28
1	Ba 233.527†	66887.8	68231.7	514.41	ug/L	514.41	ppb	17:34:28
1	Be 313.107†	1383982.5	1415930.2	504.01	ug/L	504.01	ppb	17:34:22
1	Cd 226.502†	47364.9	48512.9	513.65	ug/L	513.65	ppb	17:34:28
1	Co 228.616†	25658.0	26248.5	515.04	ug/L	515.04	ppb	17:34:28
1	Cr 267.716†	46948.6	47812.5	511.54	ug/L	511.54	ppb	17:34:28
1	Cu 324.752†	179827.2	176870.4	513.00	ug/L	513.00	ppb	17:34:28
1	Mn 257.610†	469918.8	478817.6	506.94	ug/L	506.94	ppb	17:34:22
1	Mo 202.031†	7428.2	7555.9	510.60	ug/L	510.60	ppb	17:34:48
1	Ni 231.604†	21255.1	21585.1	513.50	ug/L	513.50	ppb	17:34:28
1	P 214.914†	4544.0	4423.2	2446.2	ug/L	2446.2	ppb	17:34:48
1	Pb 220.353†	4218.0	4369.6	511.34	ug/L	511.34	ppb	17:34:48
1	S 181.975 Axial†	800.1	771.5	1027.6	ug/L	1027.6	ppb	17:34:48
1	Sb 206.836†	1539.1	1540.6	527.81	ug/L	527.81	ppb	17:34:48
1	Se 196.026†	800.8	840.9	530.25	ug/L	530.25	ppb	17:34:48
1	Si 251.611†	83050.3	84264.5	2573.6	ug/L	2573.6	ppb	17:34:28
1	Sn 189.927†	2985.7	3044.6	511.50	ug/L	511.50	ppb	17:34:48
1	Ti 334.940†	321538.6	329306.7	511.11	ug/L	511.11	ppb	17:34:22
1	Tl 190.801†	1670.6	1743.5	511.23	ug/L	511.23	ppb	17:34:48
1	U 409.014†	15666.2	18056.3	511.36	ug/L	511.36	ppb	17:34:28
1	V 292.402†	75323.2	78217.5	518.00	ug/L	518.00	ppb	17:34:28
1	Zn 213.857†	56764.4	56900.6	509.96	ug/L	509.96	ppb	17:34:28
1	SiO2†	83625.5	84835.7	5540.1	ug/L	5540.1	ppb	17:35:56
2	Sc Radial	5178.9	5178.9	97.5	%			17:33:30
2	Y RADIAL	5472.3	5472.3	96.47	%			17:33:30
2	Al 396.153Radial†	6808.6	6998.2	5077.5	ug/L	5077.5	ppb	17:33:30
2	Ca 317.933Radial†	3337.9	3401.0	5168.7	ug/L	5168.7	ppb	17:33:50
2	Fe 238.204 Radial†	626.6	632.3	5228.6	ug/L	5228.6	ppb	17:33:50
2	K 766.490 Radial†	30382.5	28504.9	5156.9	ug/L	5156.9	ppb	17:33:30
2	Mg 279.077 IEC†	173.9	175.0	5472.1	ug/L	5472.1	ppb	17:33:50
2	Na 589.592 Radial†	32347.0	34784.9	10137	ug/L	10137	ppb	17:33:30
2	Sr 421.552†	79097.4	81089.1	512.22	ug/L	512.22	ppb	17:33:30
2	Sc 361.383	857351.9	857351.9	98.289	%			17:34:54
2	Y 371.029	708856.5	708856.5	96.642	%			17:34:54
2	Ag 328.068†	113731.0	115331.5	516.37	ug/L	516.37	ppb	17:34:59
2	As 188.979†	1215.3	1259.9	515.97	ug/L	515.97	ppb	17:35:19
2	B 249.677†	22336.1	23361.7	507.01	ug/L	507.01	ppb	17:34:59
2	Ba 233.527†	66620.2	67788.7	511.07	ug/L	511.07	ppb	17:34:59
2	Be 313.107†	1388631.0	1417128.1	504.43	ug/L	504.43	ppb	17:34:54
2	Cd 226.502†	47251.0	48276.1	511.13	ug/L	511.13	ppb	17:34:59
2	Co 228.616†	25644.1	26168.9	513.48	ug/L	513.48	ppb	17:34:59
2	Cr 267.716†	46695.5	47435.1	507.51	ug/L	507.51	ppb	17:34:59
2	Cu 324.752†	178904.1	175472.4	508.95	ug/L	508.95	ppb	17:34:59
2	Mn 257.610†	470199.6	477904.3	505.97	ug/L	505.97	ppb	17:34:54
2	Mo 202.031†	7482.1	7591.8	513.04	ug/L	513.04	ppb	17:35:19
2	Ni 231.604†	21203.1	21477.9	510.95	ug/L	510.95	ppb	17:34:59

2	P 214.914†	4588.5	4456.8	2466.4 ug/L	2466.4 ppb	17:35:19
2	Pb 220.353†	4237.6	4378.7	512.42 ug/L	512.42 ppb	17:35:19
2	S 181.975 Axial†	820.4	790.2	1052.5 ug/L	1052.5 ppb	17:35:19
2	Sb 206.836†	1565.7	1563.7	535.50 ug/L	535.50 ppb	17:35:19
2	Se 196.026†	806.2	844.4	532.71 ug/L	532.71 ppb	17:35:19
2	Si 251.611†	82755.2	83752.4	2557.9 ug/L	2557.9 ppb	17:34:59
2	Sn 189.927†	3000.0	3051.4	512.66 ug/L	512.66 ppb	17:35:19
2	Ti 334.940†	321736.6	328687.7	510.14 ug/L	510.14 ppb	17:34:54
2	Tl 190.801†	1690.5	1759.5	515.90 ug/L	515.90 ppb	17:35:19
2	U 409.014†	15515.0	17862.5	505.85 ug/L	505.85 ppb	17:34:59
2	V 292.402†	74827.0	77520.5	513.47 ug/L	513.47 ppb	17:34:59
2	Zn 213.857†	56681.7	56671.7	507.90 ug/L	507.90 ppb	17:34:59
2	SiO2†	82444.0	83420.2	5447.4 ug/L	5447.4 ppb	17:36:01
3	Sc Radial	5134.8	5134.8	96.7 %		17:33:55
3	Y RADIAL	5453.7	5453.7	96.14 %		17:33:55
3	Al 396.153Radial†	6781.7	7030.3	5101.2 ug/L	5101.2 ppb	17:33:55
3	Ca 317.933Radial†	3322.8	3414.8	5189.7 ug/L	5189.7 ppb	17:34:15
3	Fe 238.204 Radial†	626.6	637.9	5274.1 ug/L	5274.1 ppb	17:34:15
3	K 766.490 Radial†	30391.7	28782.3	5207.1 ug/L	5207.1 ppb	17:33:55
3	Mg 279.077 IEC†	165.2	167.6	5239.7 ug/L	5239.7 ppb	17:34:15
3	Na 589.592 Radial†	32367.1	35090.9	10226 ug/L	10226 ppb	17:33:55
3	Sr 421.552†	79050.4	81737.9	516.31 ug/L	516.31 ppb	17:33:55
3	Sc 361.383	864600.4	864600.4	99.120 %		17:35:25
3	Y 371.029	713747.9	713747.9	97.309 %		17:35:25
3	Ag 328.068†	115729.7	116377.9	521.05 ug/L	521.05 ppb	17:35:30
3	As 188.979†	1206.6	1240.7	508.23 ug/L	508.23 ppb	17:35:50
3	B 249.677†	22741.6	23580.3	511.75 ug/L	511.75 ppb	17:35:30
3	Ba 233.527†	67811.5	68422.4	515.85 ug/L	515.85 ppb	17:35:30
3	Be 313.107†	1408382.7	1425210.7	507.31 ug/L	507.31 ppb	17:35:25
3	Cd 226.502†	48073.5	48702.9	515.65 ug/L	515.65 ppb	17:35:30
3	Co 228.616†	26125.1	26435.5	518.70 ug/L	518.70 ppb	17:35:30
3	Cr 267.716†	47616.8	47966.4	513.19 ug/L	513.19 ppb	17:35:30
3	Cu 324.752†	181903.3	176972.3	513.30 ug/L	513.30 ppb	17:35:30
3	Mn 257.610†	477462.0	481220.5	509.49 ug/L	509.49 ppb	17:35:25
3	Mo 202.031†	7487.0	7533.0	509.07 ug/L	509.07 ppb	17:35:50
3	Ni 231.604†	21573.6	21670.9	515.54 ug/L	515.54 ppb	17:35:30
3	P 214.914†	4602.2	4431.6	2450.9 ug/L	2450.9 ppb	17:35:50
3	Pb 220.353†	4243.7	4348.7	508.91 ug/L	508.91 ppb	17:35:50
3	S 181.975 Axial†	804.2	766.8	1021.4 ug/L	1021.4 ppb	17:35:50
3	Sb 206.836†	1566.6	1551.3	531.27 ug/L	531.27 ppb	17:35:50
3	Se 196.026†	810.2	841.5	531.09 ug/L	531.09 ppb	17:35:50
3	Si 251.611†	84208.8	84512.9	2581.2 ug/L	2581.2 ppb	17:35:30
3	Sn 189.927†	3004.5	3030.4	509.14 ug/L	509.14 ppb	17:35:50
3	Ti 334.940†	326478.5	330727.3	513.32 ug/L	513.32 ppb	17:35:25
3	Tl 190.801†	1694.9	1749.4	512.99 ug/L	512.99 ppb	17:35:50
3	U 409.014†	16093.4	18313.7	518.65 ug/L	518.65 ppb	17:35:30
3	V 292.402†	76205.8	78273.2	518.34 ug/L	518.34 ppb	17:35:30
3	Zn 213.857†	57691.8	57207.3	512.71 ug/L	512.71 ppb	17:35:30
3	SiO2†	82841.4	83118.0	5427.7 ug/L	5427.7 ppb	17:36:06

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	859053.1	98.484	%	0.5643				0.57%
Sc Radial	5182.0	97.6	%	0.92				0.94%
Y 371.029	709332.1	96.707	%	0.5724				0.59%
Y RADIAL	5484.1	96.68	%	0.666				0.69%
Ag 328.068†	115959.8	519.17	ug/L	2.471	519.17	ppb	2.471	0.48%
QC value within limits for Ag 328.068 Recovery = 103.83%								
Al 396.153Radial†	6978.2	5063.1	ug/L	47.01	5063.1	ppb	47.01	0.93%
QC value within limits for Al 396.153Radial Recovery = 101.26%								
As 188.979†	1254.5	513.81	ug/L	4.869	513.81	ppb	4.869	0.95%
QC value within limits for As 188.979 Recovery = 102.76%								
B 249.677†	23471.3	509.39	ug/L	2.372	509.39	ppb	2.372	0.47%
QC value within limits for B 249.677 Recovery = 101.88%								
Ba 233.527†	68147.6	513.78	ug/L	2.451	513.78	ppb	2.451	0.48%
QC value within limits for Ba 233.527 Recovery = 102.76%								
Be 313.107†	1419423.0	505.25	ug/L	1.796	505.25	ppb	1.796	0.36%
QC value within limits for Be 313.107 Recovery = 101.05%								
Ca 317.933Radial†	3388.0	5148.9	ug/L	53.45	5148.9	ppb	53.45	1.04%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.98%
Cd 226.502†            48497.3      513.48 ug/L        2.265      513.48 ppb        2.265   0.44%
   QC value within limits for Cd 226.502  Recovery = 102.70%
Co 228.616†            26284.3      515.74 ug/L        2.676      515.74 ppb        2.676   0.52%
   QC value within limits for Co 228.616  Recovery = 103.15%
Cr 267.716†            47738.0      510.75 ug/L        2.922      510.75 ppb        2.922   0.57%
   QC value within limits for Cr 267.716  Recovery = 102.15%
Cu 324.752†           176438.3      511.75 ug/L        2.427      511.75 ppb        2.427   0.47%
   QC value within limits for Cu 324.752  Recovery = 102.35%
Fe 238.204 Radial†       630.5      5213.3 ug/L       69.75      5213.3 ppb       69.75   1.34%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.27%
K 766.490 Radial†      28516.7      5159.1 ug/L       47.05      5159.1 ppb       47.05   0.91%
   QC value within limits for K 766.490 Radial  Recovery = 103.18%
Mg 279.077 IEC†          168.6      5271.3 ug/L      187.00      5271.3 ppb      187.00   3.55%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.43%
Mn 257.610†           479314.1      507.46 ug/L        1.819      507.46 ppb        1.819   0.36%
   QC value within limits for Mn 257.610  Recovery = 101.49%
Mo 202.031†             7560.2      510.90 ug/L        2.001      510.90 ppb        2.001   0.39%
   QC value within limits for Mo 202.031  Recovery = 102.18%
Na 589.592 Radial†     34860.7       10159 ug/L         59.2       10159 ppb         59.2   0.58%
   QC value within limits for Na 589.592 Radial  Recovery = 101.59%
Ni 231.604†            21578.0      513.33 ug/L        2.300      513.33 ppb        2.300   0.45%
   QC value within limits for Ni 231.604  Recovery = 102.67%
P 214.914†              4437.2      2454.5 ug/L       10.55      2454.5 ppb       10.55   0.43%
   QC value within limits for P 214.914  Recovery = 98.18%
Pb 220.353†             4365.6      510.89 ug/L        1.798      510.89 ppb        1.798   0.35%
   QC value within limits for Pb 220.353  Recovery = 102.18%
S 181.975 Axial†         776.2      1033.8 ug/L       16.48      1033.8 ppb       16.48   1.59%
   QC value within limits for S 181.975 Axial  Recovery = 103.38%
Sb 206.836†             1551.9      531.53 ug/L        3.849      531.53 ppb        3.849   0.72%
   QC value within limits for Sb 206.836  Recovery = 106.31%
Se 196.026†              842.3      531.35 ug/L        1.249      531.35 ppb        1.249   0.24%
   QC value within limits for Se 196.026  Recovery = 106.27%
Si 251.611†            84176.6      2570.9 ug/L       11.90      2570.9 ppb       11.90   0.46%
   QC value within limits for Si 251.611  Recovery = 102.84%
Sn 189.927†             3042.1      511.10 ug/L        1.797      511.10 ppb        1.797   0.35%
   QC value within limits for Sn 189.927  Recovery = 102.22%
Sr 421.552†            81058.9      512.02 ug/L        4.388      512.02 ppb        4.388   0.86%
   QC value within limits for Sr 421.552  Recovery = 102.40%
Ti 334.940†           329573.9      511.52 ug/L        1.629      511.52 ppb        1.629   0.32%
   QC value within limits for Ti 334.940  Recovery = 102.30%
Tl 190.801†             1750.8      513.37 ug/L        2.354      513.37 ppb        2.354   0.46%
   QC value within limits for Tl 190.801  Recovery = 102.67%
U 409.014†             18077.5      511.95 ug/L        6.422      511.95 ppb        6.422   1.25%
   QC value within limits for U 409.014  Recovery = 102.39%
V 292.402†             78003.8      516.60 ug/L        2.721      516.60 ppb        2.721   0.53%
   QC value within limits for V 292.402  Recovery = 103.32%
Zn 213.857†            56926.5      510.19 ug/L        2.410      510.19 ppb        2.410   0.47%
   QC value within limits for Zn 213.857  Recovery = 102.04%
SiO2†                  83791.3      5471.7 ug/L       60.03      5471.7 ppb       60.03   1.10%
   QC value within limits for SiO2  Recovery = 102.32%
All analyte(s) passed QC.
```

Sequence No.: 23
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 1/13/2010 17:38:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5340.1	5340.1	101	%			17:40:09
1	Y RADIAL	5695.4	5695.4	100.4	%			17:40:09
1	Al 396.153Radial†	261.0	276.3	200.97	ug/L	200.97	ppb	17:40:09
1	Ca 317.933Radial†	154.7	132.2	200.96	ug/L	200.96	ppb	17:40:29
1	Fe 238.204 Radial†	25.1	14.8	122.11	ug/L	122.11	ppb	17:40:29
1	K 766.490 Radial†	3780.3	1110.6	200.96	ug/L	200.96	ppb	17:40:09
1	Mg 279.077 IEC†	12.6	9.4	292.53	ug/L	292.53	ppb	17:40:29
1	Na 589.592 Radial†	-433.2	1186.2	345.67	ug/L	345.67	ppb	17:40:09
1	Sr 421.552†	810.6	790.4	4.9914	ug/L	4.9914	ppb	17:40:09
1	Sc 361.383	849219.9	849219.9	97.357	%			17:41:26
1	Y 371.029	713292.8	713292.8	97.247	%			17:41:26
1	Ag 328.068†	1448.4	1108.5	4.9460	ug/L	4.9460	ppb	17:41:26
1	As 188.979†	49.0	73.7	29.976	ug/L	29.976	ppb	17:41:46
1	B 249.677†	1930.5	2619.7	57.079	ug/L	57.079	ppb	17:41:26
1	Ba 233.527†	657.6	684.3	5.1601	ug/L	5.1601	ppb	17:41:46
1	Be 313.107†	9273.8	13850.0	4.9303	ug/L	4.9303	ppb	17:41:26
1	Cd 226.502†	281.2	491.4	5.2047	ug/L	5.2047	ppb	17:41:46
1	Co 228.616†	185.4	268.9	5.2854	ug/L	5.2854	ppb	17:41:46
1	Cr 267.716†	535.9	477.2	5.0885	ug/L	5.0885	ppb	17:41:46
1	Cu 324.752†	9934.8	3658.6	10.590	ug/L	10.590	ppb	17:41:26
1	Mn 257.610†	10101.3	9895.1	10.470	ug/L	10.470	ppb	17:41:26
1	Mo 202.031†	162.8	146.7	9.9137	ug/L	9.9137	ppb	17:41:46
1	Ni 231.604†	297.9	211.7	5.0372	ug/L	5.0372	ppb	17:41:46
1	P 214.914†	471.1	272.4	154.75	ug/L	154.75	ppb	17:41:46
1	Pb 220.353†	43.3	111.9	13.102	ug/L	13.102	ppb	17:41:46
1	S 181.975 Axial†	121.7	80.5	107.30	ug/L	107.30	ppb	17:41:46
1	Sb 206.836†	67.9	40.6	13.780	ug/L	13.780	ppb	17:41:46
1	Se 196.026†	17.7	42.3	26.201	ug/L	26.201	ppb	17:41:46
1	Si 251.611†	3768.4	3427.3	104.81	ug/L	104.81	ppb	17:41:26
1	Sn 189.927†	65.5	66.5	11.183	ug/L	11.183	ppb	17:41:46
1	Ti 334.940†	1901.5	3303.5	5.1077	ug/L	5.1077	ppb	17:41:26
1	Tl 190.801†	33.7	74.1	21.647	ug/L	21.647	ppb	17:41:46
1	U 409.014†	-292.2	1777.3	50.477	ug/L	50.477	ppb	17:41:26
1	V 292.402†	-661.4	711.6	4.8678	ug/L	4.8678	ppb	17:41:26
1	Zn 213.857†	1775.6	827.1	7.4192	ug/L	7.4192	ppb	17:41:46
1	SiO2†	3742.7	3385.4	221.36	ug/L	221.36	ppb	17:42:42
2	Sc Radial	5300.7	5300.7	99.8	%			17:40:34
2	Y RADIAL	5627.9	5627.9	99.22	%			17:40:34
2	Al 396.153Radial†	261.2	278.4	202.54	ug/L	202.54	ppb	17:40:34
2	Ca 317.933Radial†	154.4	133.1	202.31	ug/L	202.31	ppb	17:40:54
2	Fe 238.204 Radial†	24.4	14.2	117.55	ug/L	117.55	ppb	17:40:54
2	K 766.490 Radial†	3613.8	971.8	175.80	ug/L	175.80	ppb	17:40:34
2	Mg 279.077 IEC†	12.6	9.4	295.02	ug/L	295.02	ppb	17:40:54
2	Na 589.592 Radial†	-363.6	1252.7	365.08	ug/L	365.08	ppb	17:40:34
2	Sr 421.552†	826.2	812.0	5.1278	ug/L	5.1278	ppb	17:40:34
2	Sc 361.383	851499.6	851499.6	97.618	%			17:41:51
2	Y 371.029	716328.6	716328.6	97.660	%			17:41:51
2	Ag 328.068†	1471.1	1127.7	5.0252	ug/L	5.0252	ppb	17:41:51
2	As 188.979†	47.6	72.2	29.375	ug/L	29.375	ppb	17:42:11
2	B 249.677†	1864.9	2547.2	55.500	ug/L	55.500	ppb	17:41:51
2	Ba 233.527†	648.3	673.0	5.0751	ug/L	5.0751	ppb	17:42:11
2	Be 313.107†	9231.0	13780.7	4.9054	ug/L	4.9054	ppb	17:41:51
2	Cd 226.502†	291.4	501.1	5.3087	ug/L	5.3087	ppb	17:42:11
2	Co 228.616†	161.8	244.2	4.8018	ug/L	4.8018	ppb	17:42:11
2	Cr 267.716†	500.0	439.0	4.6775	ug/L	4.6775	ppb	17:42:11
2	Cu 324.752†	9966.8	3664.0	10.602	ug/L	10.602	ppb	17:41:51
2	Mn 257.610†	10070.2	9835.5	10.407	ug/L	10.407	ppb	17:41:51
2	Mo 202.031†	161.5	144.9	9.7920	ug/L	9.7920	ppb	17:42:11
2	Ni 231.604†	299.6	212.7	5.0598	ug/L	5.0598	ppb	17:42:11

2	P 214.914†	469.5	269.5	153.07 ug/L	153.07 ppb	17:42:11
2	Pb 220.353†	42.6	110.9	12.993 ug/L	12.993 ppb	17:42:11
2	S 181.975 Axial†	120.0	78.4	104.44 ug/L	104.44 ppb	17:42:11
2	Sb 206.836†	65.5	37.9	12.877 ug/L	12.877 ppb	17:42:11
2	Se 196.026†	24.6	49.3	30.415 ug/L	30.415 ppb	17:42:11
2	Si 251.611†	3720.7	3368.1	103.00 ug/L	103.00 ppb	17:41:51
2	Sn 189.927†	55.9	56.5	9.5124 ug/L	9.5124 ppb	17:42:11
2	Ti 334.940†	1822.7	3217.6	4.9716 ug/L	4.9716 ppb	17:41:51
2	Tl 190.801†	31.7	72.0	21.031 ug/L	21.031 ppb	17:42:11
2	U 409.014†	-67.3	2008.5	57.050 ug/L	57.050 ppb	17:41:51
2	V 292.402†	-645.4	729.8	4.9986 ug/L	4.9986 ppb	17:41:51
2	Zn 213.857†	1763.7	810.0	7.2652 ug/L	7.2652 ppb	17:42:11
2	SiO2†	3660.3	3290.7	215.17 ug/L	215.17 ppb	17:42:47
3	Sc Radial	5252.1	5252.1	98.9 %		17:40:59
3	Y RADIAL	5585.1	5585.1	98.46 %		17:40:59
3	Al 396.153Radial†	284.4	304.3	221.39 ug/L	221.39 ppb	17:40:59
3	Ca 317.933Radial†	152.7	132.9	201.94 ug/L	201.94 ppb	17:41:19
3	Fe 238.204 Radial†	21.6	11.7	96.386 ug/L	96.386 ppb	17:41:19
3	K 766.490 Radial†	3708.3	1100.8	199.19 ug/L	199.19 ppb	17:40:59
3	Mg 279.077 IEC†	10.8	7.7	239.98 ug/L	239.98 ppb	17:41:19
3	Na 589.592 Radial†	-386.6	1226.1	357.30 ug/L	357.30 ppb	17:40:59
3	Sr 421.552†	831.5	825.0	5.2104 ug/L	5.2104 ppb	17:40:59
3	Sc 361.383	862891.7	862891.7	98.924 %		17:42:17
3	Y 371.029	723997.3	723997.3	98.706 %		17:42:17
3	Ag 328.068†	1443.0	1079.4	4.8032 ug/L	4.8032 ppb	17:42:17
3	As 188.979†	42.5	66.4	27.004 ug/L	27.004 ppb	17:42:37
3	B 249.677†	1908.0	2565.5	55.903 ug/L	55.903 ppb	17:42:17
3	Ba 233.527†	659.0	675.0	5.0888 ug/L	5.0888 ppb	17:42:37
3	Be 313.107†	9367.1	13793.5	4.9105 ug/L	4.9105 ppb	17:42:17
3	Cd 226.502†	290.6	496.4	5.2602 ug/L	5.2602 ppb	17:42:37
3	Co 228.616†	167.5	247.8	4.8724 ug/L	4.8724 ppb	17:42:37
3	Cr 267.716†	510.6	443.0	4.7198 ug/L	4.7198 ppb	17:42:37
3	Cu 324.752†	10077.6	3641.1	10.536 ug/L	10.536 ppb	17:42:17
3	Mn 257.610†	10143.7	9773.6	10.341 ug/L	10.341 ppb	17:42:17
3	Mo 202.031†	165.0	146.3	9.8859 ug/L	9.8859 ppb	17:42:37
3	Ni 231.604†	263.7	172.3	4.0987 ug/L	4.0987 ppb	17:42:37
3	P 214.914†	466.0	259.5	147.36 ug/L	147.36 ppb	17:42:37
3	Pb 220.353†	15.0	82.5	9.6844 ug/L	9.6844 ppb	17:42:37
3	S 181.975 Axial†	123.5	80.3	106.99 ug/L	106.99 ppb	17:42:37
3	Sb 206.836†	61.2	32.6	11.124 ug/L	11.124 ppb	17:42:37
3	Se 196.026†	15.9	40.2	24.819 ug/L	24.819 ppb	17:42:37
3	Si 251.611†	3785.4	3383.1	103.46 ug/L	103.46 ppb	17:42:17
3	Sn 189.927†	58.1	58.0	9.7625 ug/L	9.7625 ppb	17:42:37
3	Ti 334.940†	1998.7	3370.8	5.2149 ug/L	5.2149 ppb	17:42:17
3	Tl 190.801†	39.2	79.1	23.102 ug/L	23.102 ppb	17:42:37
3	U 409.014†	-136.5	1939.4	55.089 ug/L	55.089 ppb	17:42:17
3	V 292.402†	-724.1	659.0	4.5350 ug/L	4.5350 ppb	17:42:17
3	Zn 213.857†	1777.6	800.2	7.1849 ug/L	7.1849 ppb	17:42:37
3	SiO2†	3733.3	3315.0	216.75 ug/L	216.75 ppb	17:42:52

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	854537.1	97.966	%	0.8397				0.86%
Sc Radial	5297.6	99.8	%	0.83				0.83%
Y 371.029	717872.9	97.871	%	0.7521				0.77%
Y RADIAL	5636.2	99.36	%	0.981				0.99%
Ag 328.068†	1105.2	4.9248	ug/L	0.11250	4.9248	ppb	0.11250	2.28%
QC value within limits for Ag 328.068 Recovery = 98.50%								
Al 396.153Radial†	286.3	208.30	ug/L	11.361	208.30	ppb	11.361	5.45%
QC value within limits for Al 396.153Radial Recovery = 104.15%								
As 188.979†	70.8	28.785	ug/L	1.5716	28.785	ppb	1.5716	5.46%
QC value within limits for As 188.979 Recovery = 95.95%								
B 249.677†	2577.5	56.161	ug/L	0.8206	56.161	ppb	0.8206	1.46%
QC value within limits for B 249.677 Recovery = 112.32%								
Ba 233.527†	677.4	5.1080	ug/L	0.04565	5.1080	ppb	0.04565	0.89%
QC value within limits for Ba 233.527 Recovery = 102.16%								
Be 313.107†	13808.0	4.9154	ug/L	0.01317	4.9154	ppb	0.01317	0.27%
QC value within limits for Be 313.107 Recovery = 98.31%								
Ca 317.933Radial†	132.7	201.74	ug/L	0.699	201.74	ppb	0.699	0.35%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.87%
Cd 226.502†              496.3      5.2579 ug/L       0.05204      5.2579 ppb        0.05204   0.99%
   QC value within limits for Cd 226.502  Recovery = 105.16%
Co 228.616†              253.6      4.9865 ug/L       0.26126      4.9865 ppb        0.26126   5.24%
   QC value within limits for Co 228.616  Recovery = 99.73%
Cr 267.716†              453.1      4.8286 ug/L       0.22607      4.8286 ppb        0.22607   4.68%
   QC value within limits for Cr 267.716  Recovery = 96.57%
Cu 324.752†             3654.6      10.576 ug/L        0.0353      10.576 ppb         0.0353   0.33%
   QC value within limits for Cu 324.752  Recovery = 105.76%
Fe 238.204 Radial†        13.6      112.02 ug/L        13.726      112.02 ppb         13.726  12.25%
   QC value within limits for Fe 238.204 Radial  Recovery = 112.02%
K 766.490 Radial†       1061.1      191.98 ug/L        14.042      191.98 ppb         14.042   7.31%
   QC value within limits for K 766.490 Radial  Recovery = 127.99%
Mg 279.077 IEC†           8.8      275.85 ug/L        31.082      275.85 ppb         31.082  11.27%
   QC value within limits for Mg 279.077 IEC  Recovery = 91.95%
Mn 257.610†             9834.7      10.406 ug/L        0.0645      10.406 ppb         0.0645   0.62%
   QC value within limits for Mn 257.610  Recovery = 104.06%
Mo 202.031†              145.9      9.8639 ug/L       0.06381      9.8639 ppb        0.06381   0.65%
   QC value within limits for Mo 202.031  Recovery = 98.64%
Na 589.592 Radial†      1221.7      356.02 ug/L         9.764      356.02 ppb          9.764   2.74%
   QC value within limits for Na 589.592 Radial  Recovery = 118.67%
Ni 231.604†              198.9      4.7319 ug/L       0.54850      4.7319 ppb        0.54850  11.59%
   QC value within limits for Ni 231.604  Recovery = 94.64%
P 214.914†               267.1      151.72 ug/L         3.872      151.72 ppb          3.872   2.55%
   QC value within limits for P 214.914  Recovery = 101.15%
Pb 220.353†              101.8      11.927 ug/L        1.9425      11.927 ppb         1.9425  16.29%
   QC value within limits for Pb 220.353  Recovery = 119.27%
S 181.975 Axial†          79.7      106.24 ug/L         1.570      106.24 ppb          1.570   1.48%
   QC value within limits for S 181.975 Axial  Recovery = 106.24%
Sb 206.836†               37.0      12.593 ug/L        1.3505      12.593 ppb         1.3505  10.72%
   QC value within limits for Sb 206.836  Recovery = 125.93%
Se 196.026†               43.9      27.145 ug/L        2.9152      27.145 ppb         2.9152  10.74%
   QC value within limits for Se 196.026  Recovery = 90.48%
Si 251.611†             3392.8      103.75 ug/L         0.942      103.75 ppb          0.942   0.91%
   QC value within limits for Si 251.611  Recovery = 103.75%
Sn 189.927†               60.3      10.153 ug/L        0.9009      10.153 ppb         0.9009   8.87%
   QC value within limits for Sn 189.927  Recovery = 101.53%
Sr 421.552†              809.1      5.1099 ug/L       0.11059      5.1099 ppb        0.11059   2.16%
   QC value within limits for Sr 421.552  Recovery = 102.20%
Ti 334.940†             3297.3      5.0981 ug/L       0.12191      5.0981 ppb        0.12191   2.39%
   QC value within limits for Ti 334.940  Recovery = 101.96%
Tl 190.801†               75.1      21.927 ug/L        1.0633      21.927 ppb         1.0633   4.85%
   QC value within limits for Tl 190.801  Recovery = 109.63%
U 409.014†              1908.4      54.205 ug/L        3.3741      54.205 ppb         3.3741   6.22%
   QC value within limits for U 409.014  Recovery = 108.41%
V 292.402†               700.1      4.8005 ug/L       0.23900      4.8005 ppb        0.23900   4.98%
   QC value within limits for V 292.402  Recovery = 96.01%
Zn 213.857†              812.4      7.2898 ug/L       0.11909      7.2898 ppb        0.11909   1.63%
   QC value within limits for Zn 213.857  Recovery = 72.90%
SiO2†                   3330.3      217.76 ug/L         3.220      217.76 ppb          3.220   1.48%
   QC value within limits for SiO2  Recovery = 102.24%
All analyte(s) passed QC.
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Sequence No.: 24
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 1/13/2010 17:45:02
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	5385.4	5385.4	101	%			17:46:54
1	Y RADIAL	5758.3	5758.3	101.5	%			17:46:54
1	Al 396.153Radial†	18.5	35.0	25.500	ug/L	25.500	ppb	17:46:54
1	Ca 317.933Radial†	19.5	-2.3	-3.4937	ug/L	-3.4937	ppb	17:47:14
1	Fe 238.204 Radial†	11.0	0.7	5.7550	ug/L	5.7550	ppb	17:47:14
1	K 766.490 Radial†	2786.8	99.3	17.979	ug/L	17.979	ppb	17:46:54
1	Mg 279.077 IEC†	1.9	-1.4	-42.707	ug/L	-42.707	ppb	17:47:14
1	Na 589.592 Radial†	-1520.1	118.0	34.401	ug/L	34.401	ppb	17:46:54
1	Sr 421.552†	-11.3	-26.9	-0.1698	ug/L	-0.1698	ppb	17:46:54
1	Sc 361.383	860434.7	860434.7	98.642	%			17:48:11
1	Y 371.029	723502.6	723502.6	98.638	%			17:48:11
1	Ag 328.068†	334.8	-39.9	-0.1775	ug/L	-0.1775	ppb	17:48:11
1	As 188.979†	-27.9	-4.9	-1.9919	ug/L	-1.9919	ppb	17:48:31
1	B 249.677†	-365.6	266.2	5.8022	ug/L	5.8022	ppb	17:48:31
1	Ba 233.527†	-3.6	5.2	0.0389	ug/L	0.0389	ppb	17:48:31
1	Be 313.107†	-4403.5	-139.6	-0.0495	ug/L	-0.0495	ppb	17:48:11
1	Cd 226.502†	-176.4	23.8	0.2512	ug/L	0.2512	ppb	17:48:31
1	Co 228.616†	-77.9	-0.6	-0.0115	ug/L	-0.0115	ppb	17:48:31
1	Cr 267.716†	75.6	3.4	0.0355	ug/L	0.0355	ppb	17:48:31
1	Cu 324.752†	6525.5	69.3	0.2008	ug/L	0.2008	ppb	17:48:11
1	Mn 257.610†	419.5	-55.1	-0.0560	ug/L	-0.0560	ppb	17:48:31
1	Mo 202.031†	19.1	-1.2	-0.0790	ug/L	-0.0790	ppb	17:48:31
1	Ni 231.604†	93.7	0.7	0.0179	ug/L	0.0179	ppb	17:48:31
1	P 214.914†	220.8	12.3	7.0532	ug/L	7.0532	ppb	17:48:31
1	Pb 220.353†	-54.3	12.3	1.4421	ug/L	1.4421	ppb	17:48:31
1	S 181.975 Axial†	50.3	6.5	8.6185	ug/L	8.6185	ppb	17:48:31
1	Sb 206.836†	27.8	-1.0	-0.3345	ug/L	-0.3345	ppb	17:48:31
1	Se 196.026†	-23.1	0.7	0.4295	ug/L	0.4295	ppb	17:48:31
1	Si 251.611†	457.6	20.5	0.6285	ug/L	0.6285	ppb	17:48:31
1	Sn 189.927†	3.8	3.1	0.5116	ug/L	0.5116	ppb	17:48:31
1	Ti 334.940†	-1309.0	23.3	0.0387	ug/L	0.0387	ppb	17:48:11
1	Tl 190.801†	-32.0	7.1	2.0588	ug/L	2.0588	ppb	17:48:31
1	U 409.014†	-2011.0	38.8	1.1008	ug/L	1.1008	ppb	17:48:11
1	V 292.402†	-1408.9	-37.3	-0.2447	ug/L	-0.2447	ppb	17:48:11
1	Zn 213.857†	971.9	-11.4	-0.1042	ug/L	-0.1042	ppb	17:48:31
1	SiO2†	494.3	42.2	2.7657	ug/L	2.7657	ppb	17:49:27
2	Sc Radial	5182.8	5182.8	97.6	%			17:47:19
2	Y RADIAL	5540.2	5540.2	97.67	%			17:47:19
2	Al 396.153Radial†	-0.2	16.6	12.083	ug/L	12.083	ppb	17:47:19
2	Ca 317.933Radial†	20.6	-0.4	-0.6239	ug/L	-0.6239	ppb	17:47:39
2	Fe 238.204 Radial†	8.0	-1.9	-15.973	ug/L	-15.973	ppb	17:47:39
2	K 766.490 Radial†	2836.1	257.3	46.590	ug/L	46.590	ppb	17:47:19
2	Mg 279.077 IEC†	3.1	-0.1	-1.9770	ug/L	-1.9770	ppb	17:47:39
2	Na 589.592 Radial†	-1482.3	98.2	28.614	ug/L	28.614	ppb	17:47:19
2	Sr 421.552†	20.2	5.0	0.0315	ug/L	0.0315	ppb	17:47:19
2	Sc 361.383	862740.7	862740.7	98.907	%			17:48:36
2	Y 371.029	724865.5	724865.5	98.824	%			17:48:36
2	Ag 328.068†	389.0	14.1	0.0546	ug/L	0.0546	ppb	17:48:36
2	As 188.979†	-23.3	-0.1	-0.0486	ug/L	-0.0486	ppb	17:48:56
2	B 249.677†	-384.3	248.2	5.4137	ug/L	5.4137	ppb	17:48:56
2	Ba 233.527†	-17.4	-8.8	-0.0665	ug/L	-0.0665	ppb	17:48:56
2	Be 313.107†	-4287.5	-10.5	-0.0037	ug/L	-0.0037	ppb	17:48:36
2	Cd 226.502†	-177.3	23.4	0.2498	ug/L	0.2498	ppb	17:48:56
2	Co 228.616†	-70.9	6.7	0.1332	ug/L	0.1332	ppb	17:48:56
2	Cr 267.716†	78.4	6.1	0.0632	ug/L	0.0632	ppb	17:48:56
2	Cu 324.752†	6552.2	78.7	0.2254	ug/L	0.2254	ppb	17:48:36
2	Mn 257.610†	413.1	-62.7	-0.0679	ug/L	-0.0679	ppb	17:48:56
2	Mo 202.031†	24.6	4.3	0.2891	ug/L	0.2891	ppb	17:48:56
2	Ni 231.604†	80.2	-13.1	-0.3127	ug/L	-0.3127	ppb	17:48:56

2	P 214.914†	237.0	28.1	16.171 ug/L	16.171 ppb	17:48:56
2	Pb 220.353†	-64.9	1.7	0.2010 ug/L	0.2010 ppb	17:48:56
2	S 181.975 Axial†	50.0	6.1	8.0709 ug/L	8.0709 ppb	17:48:56
2	Sb 206.836†	33.9	5.0	1.7176 ug/L	1.7176 ppb	17:48:56
2	Se 196.026†	-19.8	4.1	2.4724 ug/L	2.4724 ppb	17:48:56
2	Si 251.611†	477.8	39.6	1.2096 ug/L	1.2096 ppb	17:48:56
2	Sn 189.927†	18.4	17.9	2.9985 ug/L	2.9985 ppb	17:48:56
2	Ti 334.940†	-1339.9	-4.3	-0.0081 ug/L	-0.0081 ppb	17:48:36
2	Tl 190.801†	-37.3	1.8	0.5262 ug/L	0.5262 ppb	17:48:56
2	U 409.014†	-1935.2	120.8	3.4340 ug/L	3.4340 ppb	17:48:36
2	V 292.402†	-1375.6	0.1	0.0135 ug/L	0.0135 ppb	17:48:36
2	Zn 213.857†	975.4	-10.5	-0.0921 ug/L	-0.0921 ppb	17:48:56
2	SiO2†	465.5	11.7	0.7583 ug/L	0.7583 ppb	17:49:32
3	Sc Radial	5322.3	5322.3	100 %		17:47:44
3	Y RADIAL	5664.6	5664.6	99.86 %		17:47:44
3	Al 396.153Radial†	13.6	30.3	22.082 ug/L	22.082 ppb	17:47:44
3	Ca 317.933Radial†	19.4	-2.2	-3.3787 ug/L	-3.3787 ppb	17:48:04
3	Fe 238.204 Radial†	9.3	-0.8	-6.9550 ug/L	-6.9550 ppb	17:48:04
3	K 766.490 Radial†	2825.9	170.9	30.942 ug/L	30.942 ppb	17:47:44
3	Mg 279.077 IEC†	3.3	0.1	3.8549 ug/L	3.8549 ppb	17:48:04
3	Na 589.592 Radial†	-1455.9	164.3	47.881 ug/L	47.881 ppb	17:47:44
3	Sr 421.552†	-24.8	-40.5	-0.2555 ug/L	-0.2555 ppb	17:47:44
3	Sc 361.383	855457.0	855457.0	98.072 %		17:49:02
3	Y 371.029	718459.8	718459.8	97.951 %		17:49:02
3	Ag 328.068†	333.9	-38.8	-0.1782 ug/L	-0.1782 ppb	17:49:02
3	As 188.979†	-21.1	1.9	0.7659 ug/L	0.7659 ppb	17:49:22
3	B 249.677†	-378.5	250.8	5.4690 ug/L	5.4690 ppb	17:49:22
3	Ba 233.527†	-5.6	3.1	0.0227 ug/L	0.0227 ppb	17:49:22
3	Be 313.107†	-4332.0	-92.7	-0.0330 ug/L	-0.0330 ppb	17:49:02
3	Cd 226.502†	-175.3	23.9	0.2545 ug/L	0.2545 ppb	17:49:22
3	Co 228.616†	-81.6	-4.8	-0.0938 ug/L	-0.0938 ppb	17:49:22
3	Cr 267.716†	73.6	1.8	0.0177 ug/L	0.0177 ppb	17:49:22
3	Cu 324.752†	6408.7	-11.3	-0.0347 ug/L	-0.0347 ppb	17:49:02
3	Mn 257.610†	424.7	-47.4	-0.0510 ug/L	-0.0510 ppb	17:49:22
3	Mo 202.031†	19.2	-1.0	-0.0696 ug/L	-0.0696 ppb	17:49:22
3	Ni 231.604†	97.8	5.5	0.1302 ug/L	0.1302 ppb	17:49:22
3	P 214.914†	222.7	15.6	9.0127 ug/L	9.0127 ppb	17:49:22
3	Pb 220.353†	-58.3	7.9	0.9224 ug/L	0.9224 ppb	17:49:22
3	S 181.975 Axial†	44.5	0.8	1.1167 ug/L	1.1167 ppb	17:49:22
3	Sb 206.836†	35.0	6.4	2.1395 ug/L	2.1395 ppb	17:49:22
3	Se 196.026†	-26.8	-3.2	-1.9913 ug/L	-1.9913 ppb	17:49:22
3	Si 251.611†	465.9	31.7	0.9702 ug/L	0.9702 ppb	17:49:22
3	Sn 189.927†	7.6	7.0	1.1749 ug/L	1.1749 ppb	17:49:22
3	Ti 334.940†	-1336.8	-12.7	-0.0217 ug/L	-0.0217 ppb	17:49:02
3	Tl 190.801†	-36.2	2.5	0.7332 ug/L	0.7332 ppb	17:49:22
3	U 409.014†	-1944.9	94.2	2.6785 ug/L	2.6785 ppb	17:49:02
3	V 292.402†	-1409.8	-46.6	-0.2996 ug/L	-0.2996 ppb	17:49:02
3	Zn 213.857†	973.5	-4.1	-0.0368 ug/L	-0.0368 ppb	17:49:22
3	SiO2†	496.1	46.9	3.0727 ug/L	3.0727 ppb	17:49:37

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	859544.1	98.540	%	0.4268				0.43%
Sc Radial	5296.8	99.7	%	1.95				1.96%
Y 371.029	722276.0	98.471	%	0.4600				0.47%
Y RADIAL	5654.3	99.68	%	1.929				1.93%
Ag 328.068†	-21.5	-0.1003	ug/L	0.13423	-0.1003	ppb	0.13423	133.77%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	27.3	19.888	ug/L	6.9725	19.888	ppb	6.9725	35.06%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.0	-0.4249	ug/L	1.41688	-0.4249	ppb	1.41688	333.47%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	255.1	5.5616	ug/L	0.21014	5.5616	ppb	0.21014	3.78%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.1	-0.0016	ug/L	0.05673	-0.0016	ppb	0.05673	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-80.9	-0.0287	ug/L	0.02318	-0.0287	ppb	0.02318	80.69%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.6	-2.4987	ug/L	1.62471	-2.4987	ppb	1.62471	65.02%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              23.7      0.2518 ug/L       0.00239      0.2518 ppb        0.00239   0.95%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               0.5      0.0093 ug/L       0.11492      0.0093 ppb        0.11492 >999.9%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               3.8      0.0388 ug/L       0.02290      0.0388 ppb        0.02290  59.01%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              45.6      0.1305 ug/L       0.14358      0.1305 ppb        0.14358 110.02%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -0.7     -5.7245 ug/L      10.91634     -5.7245 ppb       10.91634 190.70%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       175.8      31.837 ug/L       14.3264      31.837 ppb        14.3264  45.00%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.4     -13.610 ug/L       25.3671     -13.610 ppb        25.3671 186.39%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             -55.1     -0.0583 ug/L       0.00866     -0.0583 ppb        0.00866  14.87%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               0.7      0.0468 ug/L       0.20988      0.0468 ppb        0.20988 448.14%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      126.8      36.965 ug/L        9.8865      36.965 ppb         9.8865  26.75%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -2.3     -0.0549 ug/L       0.23023     -0.0549 ppb        0.23023 419.56%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               18.7      10.745 ug/L        4.7993      10.745 ppb         4.7993  44.66%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               7.3      0.8551 ug/L       0.62326      0.8551 ppb        0.62326  72.88%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          4.5      5.9354 ug/L       4.18207      5.9354 ppb        4.18207  70.46%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               3.5      1.1742 ug/L       1.32347      1.1742 ppb        1.32347 112.71%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               0.5      0.3036 ug/L       2.23448      0.3036 ppb        2.23448 736.10%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              30.6      0.9361 ug/L       0.29205      0.9361 ppb        0.29205  31.20%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               9.3      1.5616 ug/L       1.28775      1.5616 ppb        1.28775  82.46%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -20.8     -0.1313 ug/L       0.14735     -0.1313 ppb        0.14735 112.25%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               2.1      0.0030 ug/L       0.03171      0.0030 ppb        0.03171 >999.9%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               3.8      1.1061 ug/L       0.83156      1.1061 ppb        0.83156  75.18%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               84.6      2.4044 ug/L       1.19052      2.4044 ppb        1.19052  49.51%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -28.0     -0.1769 ug/L       0.16719     -0.1769 ppb        0.16719  94.50%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -8.7     -0.0777 ug/L       0.03594     -0.0777 ppb        0.03594  46.26%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    33.6      2.1989 ug/L       1.25702      2.1989 ppb        1.25702  57.16%
   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: 1/13/2010 18:32:31
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	5381.2	5381.2	101	%			18:34:23
1	Y RADIAL	5679.1	5679.1	100.1	%			18:34:23
1	Al 396.153Radial†	6883.9	6810.0	4940.2	ug/L	4940.2	ppb	18:34:23
1	Ca 317.933Radial†	3329.6	3264.2	4960.7	ug/L	4960.7	ppb	18:34:43
1	Fe 238.204 Radial†	627.6	609.1	5037.3	ug/L	5037.3	ppb	18:34:43
1	K 766.490 Radial†	30833.0	27778.5	5025.4	ug/L	5025.4	ppb	18:34:23
1	Mg 279.077 IEC†	167.5	162.1	5067.9	ug/L	5067.9	ppb	18:34:43
1	Na 589.592 Radial†	33614.5	34789.1	10138	ug/L	10138	ppb	18:34:23
1	Sr 421.552†	80952.3	79871.1	504.52	ug/L	504.52	ppb	18:34:23
1	Sc 361.383	848422.2	848422.2	97.265	%			18:35:41
1	Y 371.029	700044.9	700044.9	95.440	%			18:35:41
1	Ag 328.068†	113139.9	115941.7	519.03	ug/L	519.03	ppb	18:35:46
1	As 188.979†	1210.0	1267.5	519.09	ug/L	519.09	ppb	18:36:06
1	B 249.677†	22145.9	23405.4	507.99	ug/L	507.99	ppb	18:35:46
1	Ba 233.527†	66443.1	68320.0	515.07	ug/L	515.07	ppb	18:35:46
1	Be 313.107†	1397130.3	1440736.2	512.84	ug/L	512.84	ppb	18:35:41
1	Cd 226.502†	47014.0	48538.5	513.93	ug/L	513.93	ppb	18:35:46
1	Co 228.616†	25422.0	26215.2	514.38	ug/L	514.38	ppb	18:35:46
1	Cr 267.716†	46669.3	47908.3	512.56	ug/L	512.56	ppb	18:35:46
1	Cu 324.752†	177574.0	176020.6	510.53	ug/L	510.53	ppb	18:35:46
1	Mn 257.610†	473543.9	486377.6	514.93	ug/L	514.93	ppb	18:35:41
1	Mo 202.031†	7438.1	7626.7	515.37	ug/L	515.37	ppb	18:36:06
1	Ni 231.604†	21081.6	21580.2	513.38	ug/L	513.38	ppb	18:35:46
1	P 214.914†	4536.6	4452.6	2463.8	ug/L	2463.8	ppb	18:36:06
1	Pb 220.353†	4197.4	4382.8	512.88	ug/L	512.88	ppb	18:36:06
1	S 181.975 Axial†	798.0	775.9	1033.5	ug/L	1033.5	ppb	18:36:06
1	Sb 206.836†	1554.8	1569.3	537.44	ug/L	537.44	ppb	18:36:06
1	Se 196.026†	801.0	847.6	534.05	ug/L	534.05	ppb	18:36:06
1	Si 251.611†	82328.4	84199.7	2571.5	ug/L	2571.5	ppb	18:35:46
1	Sn 189.927†	2987.8	3071.1	515.92	ug/L	515.92	ppb	18:36:06
1	Ti 334.940†	323553.2	334000.5	518.38	ug/L	518.38	ppb	18:35:41
1	Tl 190.801†	1681.8	1768.5	518.64	ug/L	518.64	ppb	18:36:06
1	U 409.014†	15585.2	18100.8	512.63	ug/L	512.63	ppb	18:35:46
1	V 292.402†	74612.3	78101.0	517.32	ug/L	517.32	ppb	18:35:46
1	Zn 213.857†	56335.1	56922.3	510.17	ug/L	510.17	ppb	18:35:46
1	SiO2†	82696.6	84562.7	5522.1	ug/L	5522.1	ppb	18:37:14
2	Sc Radial	5252.0	5252.0	98.9	%			18:34:48
2	Y RADIAL	5543.1	5543.1	97.72	%			18:34:48
2	Al 396.153Radial†	6740.8	6832.6	4957.2	ug/L	4957.2	ppb	18:34:48
2	Ca 317.933Radial†	3324.5	3339.9	5075.9	ug/L	5075.9	ppb	18:35:08
2	Fe 238.204 Radial†	627.8	624.6	5164.5	ug/L	5164.5	ppb	18:35:08
2	K 766.490 Radial†	30220.1	27907.6	5048.8	ug/L	5048.8	ppb	18:34:48
2	Mg 279.077 IEC†	170.8	169.5	5299.2	ug/L	5299.2	ppb	18:35:08
2	Na 589.592 Radial†	32845.9	34828.1	10150	ug/L	10150	ppb	18:34:48
2	Sr 421.552†	78951.5	79813.7	504.16	ug/L	504.16	ppb	18:34:48
2	Sc 361.383	864550.3	864550.3	99.114	%			18:36:12
2	Y 371.029	714378.2	714378.2	97.395	%			18:36:12
2	Ag 328.068†	113353.8	113987.5	510.35	ug/L	510.35	ppb	18:36:17
2	As 188.979†	1204.5	1238.7	507.38	ug/L	507.38	ppb	18:36:37
2	B 249.677†	22273.0	23108.8	501.52	ug/L	501.52	ppb	18:36:17
2	Ba 233.527†	66493.4	67096.5	505.85	ug/L	505.85	ppb	18:36:17
2	Be 313.107†	1401715.4	1418566.0	504.94	ug/L	504.94	ppb	18:36:12
2	Cd 226.502†	47026.5	47649.3	504.49	ug/L	504.49	ppb	18:36:17
2	Co 228.616†	25495.4	25801.7	506.26	ug/L	506.26	ppb	18:36:17
2	Cr 267.716†	46660.0	47003.8	502.89	ug/L	502.89	ppb	18:36:17
2	Cu 324.752†	178342.5	173390.2	502.91	ug/L	502.91	ppb	18:36:17
2	Mn 257.610†	474267.2	478025.0	506.09	ug/L	506.09	ppb	18:36:12
2	Mo 202.031†	7434.0	7479.9	505.47	ug/L	505.47	ppb	18:36:37
2	Ni 231.604†	21097.9	21192.2	504.15	ug/L	504.15	ppb	18:36:17

2	P 214.914†	4540.7	4369.7	2417.4 ug/L	2417.4 ppb	18:36:37
2	Pb 220.353†	4212.5	4317.5	505.24 ug/L	505.24 ppb	18:36:37
2	S 181.975 Axial†	809.0	771.7	1027.9 ug/L	1027.9 ppb	18:36:37
2	Sb 206.836†	1540.8	1525.3	522.54 ug/L	522.54 ppb	18:36:37
2	Se 196.026†	801.4	832.7	525.33 ug/L	525.33 ppb	18:36:37
2	Si 251.611†	82493.1	82786.9	2528.4 ug/L	2528.4 ppb	18:36:17
2	Sn 189.927†	2987.8	3013.7	506.32 ug/L	506.32 ppb	18:36:37
2	Ti 334.940†	324580.4	328831.3	510.36 ug/L	510.36 ppb	18:36:12
2	Tl 190.801†	1681.0	1735.5	508.97 ug/L	508.97 ppb	18:36:37
2	U 409.014†	15636.9	17854.1	505.63 ug/L	505.63 ppb	18:36:17
2	V 292.402†	74822.1	76881.6	509.19 ug/L	509.19 ppb	18:36:17
2	Zn 213.857†	56449.4	55957.1	501.50 ug/L	501.50 ppb	18:36:17
2	SiO2†	81310.6	81578.3	5327.0 ug/L	5327.0 ppb	18:37:19
3	Sc Radial	5151.0	5151.0	97.0 %		18:35:14
3	Y RADIAL	5425.1	5425.1	95.64 %		18:35:14
3	Al 396.153Radial†	6748.8	6974.3	5060.6 ug/L	5060.6 ppb	18:35:14
3	Ca 317.933Radial†	3261.7	3341.1	5077.6 ug/L	5077.6 ppb	18:35:34
3	Fe 238.204 Radial†	616.7	625.6	5172.9 ug/L	5172.9 ppb	18:35:34
3	K 766.490 Radial†	30147.7	28431.9	5143.7 ug/L	5143.7 ppb	18:35:14
3	Mg 279.077 IEC†	167.5	169.5	5298.5 ug/L	5298.5 ppb	18:35:34
3	Na 589.592 Radial†	32406.9	35026.5	10207 ug/L	10207 ppb	18:35:14
3	Sr 421.552†	78675.0	81093.5	512.24 ug/L	512.24 ppb	18:35:14
3	Sc 361.383	867481.8	867481.8	99.450 %		18:36:43
3	Y 371.029	716356.6	716356.6	97.664 %		18:36:43
3	Ag 328.068†	113522.9	113771.1	509.38 ug/L	509.38 ppb	18:36:49
3	As 188.979†	1212.5	1242.6	508.94 ug/L	508.94 ppb	18:37:09
3	B 249.677†	22360.9	23121.2	501.80 ug/L	501.80 ppb	18:36:49
3	Ba 233.527†	66332.6	66708.0	502.93 ug/L	502.93 ppb	18:36:49
3	Be 313.107†	1392910.0	1404932.8	500.09 ug/L	500.09 ppb	18:36:43
3	Cd 226.502†	46969.2	47431.4	502.18 ug/L	502.18 ppb	18:36:49
3	Co 228.616†	25473.5	25692.7	504.13 ug/L	504.13 ppb	18:36:49
3	Cr 267.716†	46643.2	46827.8	501.01 ug/L	501.01 ppb	18:36:49
3	Cu 324.752†	178602.1	173043.2	501.90 ug/L	501.90 ppb	18:36:49
3	Mn 257.610†	472116.3	474245.2	502.09 ug/L	502.09 ppb	18:36:43
3	Mo 202.031†	7440.5	7461.1	504.20 ug/L	504.20 ppb	18:37:09
3	Ni 231.604†	21091.2	21113.6	502.28 ug/L	502.28 ppb	18:36:49
3	P 214.914†	4568.2	4382.0	2424.6 ug/L	2424.6 ppb	18:37:09
3	Pb 220.353†	4231.8	4322.5	505.85 ug/L	505.85 ppb	18:37:09
3	S 181.975 Axial†	801.1	761.0	1013.7 ug/L	1013.7 ppb	18:37:09
3	Sb 206.836†	1565.2	1544.6	528.89 ug/L	528.89 ppb	18:37:09
3	Se 196.026†	799.6	828.2	522.63 ug/L	522.63 ppb	18:37:09
3	Si 251.611†	82734.0	82747.8	2527.2 ug/L	2527.2 ppb	18:36:49
3	Sn 189.927†	2991.5	3007.3	505.25 ug/L	505.25 ppb	18:37:09
3	Ti 334.940†	322709.8	325843.8	505.72 ug/L	505.72 ppb	18:36:43
3	Tl 190.801†	1686.2	1735.0	508.78 ug/L	508.78 ppb	18:37:09
3	U 409.014†	15682.4	17846.5	505.42 ug/L	505.42 ppb	18:36:49
3	V 292.402†	74764.0	76568.1	507.13 ug/L	507.13 ppb	18:36:49
3	Zn 213.857†	56443.1	55758.3	499.72 ug/L	499.72 ppb	18:36:49
3	SiO2†	82114.6	82109.5	5361.8 ug/L	5361.8 ppb	18:37:24

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	860151.5	98.610	%	1.1766				1.19%
Sc Radial	5261.4	99.1	%	2.17				2.19%
Y 371.029	710259.9	96.833	%	1.2136				1.25%
Y RADIAL	5549.1	97.83	%	2.241				2.29%
Ag 328.068†	114566.8	512.92	ug/L	5.314	512.92	ppb	5.314	1.04%
QC value within limits for Ag 328.068 Recovery = 102.58%								
Al 396.153Radial†	6872.3	4986.0	ug/L	65.15	4986.0	ppb	65.15	1.31%
QC value within limits for Al 396.153Radial Recovery = 99.72%								
As 188.979†	1249.6	511.80	ug/L	6.358	511.80	ppb	6.358	1.24%
QC value within limits for As 188.979 Recovery = 102.36%								
B 249.677†	23211.8	503.77	ug/L	3.655	503.77	ppb	3.655	0.73%
QC value within limits for B 249.677 Recovery = 100.75%								
Ba 233.527†	67374.8	507.95	ug/L	6.336	507.95	ppb	6.336	1.25%
QC value within limits for Ba 233.527 Recovery = 101.59%								
Be 313.107†	1421411.7	505.96	ug/L	6.432	505.96	ppb	6.432	1.27%
QC value within limits for Be 313.107 Recovery = 101.19%								
Ca 317.933Radial†	3315.1	5038.1	ug/L	66.96	5038.1	ppb	66.96	1.33%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.76%
Cd 226.502†            47873.1      506.87 ug/L         6.223      506.87 ppb          6.223   1.23%
   QC value within limits for Cd 226.502  Recovery = 101.37%
Co 228.616†            25903.2      508.26 ug/L         5.410      508.26 ppb          5.410   1.06%
   QC value within limits for Co 228.616  Recovery = 101.65%
Cr 267.716†            47246.6      505.49 ug/L         6.199      505.49 ppb          6.199   1.23%
   QC value within limits for Cr 267.716  Recovery = 101.10%
Cu 324.752†           174151.3      505.11 ug/L         4.716      505.11 ppb          4.716   0.93%
   QC value within limits for Cu 324.752  Recovery = 101.02%
Fe 238.204 Radial†       619.8      5124.9 ug/L        76.02      5124.9 ppb         76.02   1.48%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.50%
K 766.490 Radial†      28039.3      5072.6 ug/L        62.66      5072.6 ppb         62.66   1.24%
   QC value within limits for K 766.490 Radial  Recovery = 101.45%
Mg 279.077 IEC†          167.0      5221.8 ug/L       133.35      5221.8 ppb        133.35   2.55%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.44%
Mn 257.610†           479549.3      507.71 ug/L         6.567      507.71 ppb          6.567   1.29%
   QC value within limits for Mn 257.610  Recovery = 101.54%
Mo 202.031†             7522.5      508.35 ug/L         6.115      508.35 ppb          6.115   1.20%
   QC value within limits for Mo 202.031  Recovery = 101.67%
Na 589.592 Radial†     34881.2       10165 ug/L          37.1       10165 ppb           37.1   0.37%
   QC value within limits for Na 589.592 Radial  Recovery = 101.65%
Ni 231.604†            21295.3      506.60 ug/L         5.943      506.60 ppb          5.943   1.17%
   QC value within limits for Ni 231.604  Recovery = 101.32%
P 214.914†              4401.4      2435.2 ug/L        24.95      2435.2 ppb         24.95   1.02%
   QC value within limits for P 214.914  Recovery = 97.41%
Pb 220.353†             4340.9      507.99 ug/L         4.249      507.99 ppb          4.249   0.84%
   QC value within limits for Pb 220.353  Recovery = 101.60%
S 181.975 Axial†         769.5      1025.0 ug/L        10.20      1025.0 ppb         10.20   1.00%
   QC value within limits for S 181.975 Axial  Recovery = 102.50%
Sb 206.836†             1546.4      529.62 ug/L         7.478      529.62 ppb          7.478   1.41%
   QC value within limits for Sb 206.836  Recovery = 105.92%
Se 196.026†              836.2      527.33 ug/L         5.967      527.33 ppb          5.967   1.13%
   QC value within limits for Se 196.026  Recovery = 105.47%
Si 251.611†            83244.8      2542.4 ug/L        25.25      2542.4 ppb         25.25   0.99%
   QC value within limits for Si 251.611  Recovery = 101.70%
Sn 189.927†             3030.7      509.16 ug/L         5.879      509.16 ppb          5.879   1.15%
   QC value within limits for Sn 189.927  Recovery = 101.83%
Sr 421.552†            80259.4      506.97 ug/L         4.566      506.97 ppb          4.566   0.90%
   QC value within limits for Sr 421.552  Recovery = 101.39%
Ti 334.940†           329558.5      511.49 ug/L         6.405      511.49 ppb          6.405   1.25%
   QC value within limits for Ti 334.940  Recovery = 102.30%
Tl 190.801†             1746.4      512.13 ug/L         5.640      512.13 ppb          5.640   1.10%
   QC value within limits for Tl 190.801  Recovery = 102.43%
U 409.014†             17933.8      507.89 ug/L         4.106      507.89 ppb          4.106   0.81%
   QC value within limits for U 409.014  Recovery = 101.58%
V 292.402†             77183.6      511.21 ug/L         5.386      511.21 ppb          5.386   1.05%
   QC value within limits for V 292.402  Recovery = 102.24%
Zn 213.857†            56212.6      503.80 ug/L         5.592      503.80 ppb          5.592   1.11%
   QC value within limits for Zn 213.857  Recovery = 100.76%
SiO2†                  82750.2      5403.6 ug/L       104.07      5403.6 ppb        104.07   1.93%
   QC value within limits for SiO2  Recovery = 101.05%
All analyte(s) passed QC.
```

Sequence No.: 32
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 17
Date Collected: 1/13/2010 18:39:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5080.0	5080.0	95.7	%			18:41:26
1	Y RADIAL	5437.4	5437.4	95.86	%			18:41:26
1	Al 396.153Radial†	269.7	298.7	217.36	ug/L	217.36	ppb	18:41:26
1	Ca 317.933Radial†	151.0	136.3	207.19	ug/L	207.19	ppb	18:41:46
1	Fe 238.204 Radial†	22.1	12.9	106.83	ug/L	106.83	ppb	18:41:46
1	K 766.490 Radial†	3586.3	1100.3	199.09	ug/L	199.09	ppb	18:41:26
1	Mg 279.077 IEC†	12.9	10.3	322.11	ug/L	322.11	ppb	18:41:46
1	Na 589.592 Radial†	-420.1	1177.9	343.26	ug/L	343.26	ppb	18:41:26
1	Sr 421.552†	786.5	806.4	5.0928	ug/L	5.0928	ppb	18:41:26
1	Sc 361.383	867291.3	867291.3	99.429	%			18:42:43
1	Y 371.029	728509.0	728509.0	99.321	%			18:42:43
1	Ag 328.068†	1520.9	1150.4	5.1281	ug/L	5.1281	ppb	18:42:48
1	As 188.979†	44.9	68.5	27.880	ug/L	27.880	ppb	18:43:08
1	B 249.677†	1867.7	2515.2	54.805	ug/L	54.805	ppb	18:42:48
1	Ba 233.527†	664.7	677.3	5.1078	ug/L	5.1078	ppb	18:43:08
1	Be 313.107†	9334.2	13712.3	4.8812	ug/L	4.8812	ppb	18:42:48
1	Cd 226.502†	286.2	490.5	5.1960	ug/L	5.1960	ppb	18:43:08
1	Co 228.616†	169.9	249.3	4.9003	ug/L	4.9003	ppb	18:43:08
1	Cr 267.716†	526.0	455.8	4.8597	ug/L	4.8597	ppb	18:43:08
1	Cu 324.752†	10036.5	3548.2	10.269	ug/L	10.269	ppb	18:42:48
1	Mn 257.610†	10087.6	9665.1	10.224	ug/L	10.224	ppb	18:42:48
1	Mo 202.031†	154.2	134.6	9.0962	ug/L	9.0962	ppb	18:43:08
1	Ni 231.604†	276.5	183.8	4.3729	ug/L	4.3729	ppb	18:43:08
1	P 214.914†	461.3	252.4	143.35	ug/L	143.35	ppb	18:43:08
1	Pb 220.353†	22.8	90.2	10.582	ug/L	10.582	ppb	18:43:08
1	S 181.975 Axial†	119.2	75.3	100.40	ug/L	100.40	ppb	18:43:08
1	Sb 206.836†	68.1	39.2	13.344	ug/L	13.344	ppb	18:43:08
1	Se 196.026†	21.5	45.8	28.245	ug/L	28.245	ppb	18:43:08
1	Si 251.611†	3704.6	3282.5	100.38	ug/L	100.38	ppb	18:42:48
1	Sn 189.927†	72.4	72.0	12.114	ug/L	12.114	ppb	18:43:08
1	Ti 334.940†	1897.0	3258.3	5.0361	ug/L	5.0361	ppb	18:42:48
1	Tl 190.801†	38.3	78.0	22.778	ug/L	22.778	ppb	18:43:08
1	U 409.014†	-294.8	1780.9	50.583	ug/L	50.583	ppb	18:42:43
1	V 292.402†	-644.0	743.2	5.0659	ug/L	5.0659	ppb	18:42:48
1	Zn 213.857†	1755.2	768.6	6.8965	ug/L	6.8965	ppb	18:43:08
1	SiO2†	3745.6	3308.3	216.34	ug/L	216.34	ppb	18:44:14
2	Sc Radial	5391.4	5391.4	102	%			18:41:51
2	Y RADIAL	5758.2	5758.2	101.5	%			18:41:51
2	Al 396.153Radial†	247.2	260.2	189.27	ug/L	189.27	ppb	18:41:51
2	Ca 317.933Radial†	154.3	130.4	198.22	ug/L	198.22	ppb	18:42:11
2	Fe 238.204 Radial†	21.5	11.0	90.838	ug/L	90.838	ppb	18:42:11
2	K 766.490 Radial†	3712.1	1007.6	182.31	ug/L	182.31	ppb	18:41:51
2	Mg 279.077 IEC†	11.2	7.8	243.99	ug/L	243.99	ppb	18:42:11
2	Na 589.592 Radial†	-462.2	1161.7	338.56	ug/L	338.56	ppb	18:41:51
2	Sr 421.552†	795.5	767.8	4.8490	ug/L	4.8490	ppb	18:41:51
2	Sc 361.383	862115.4	862115.4	98.835	%			18:43:13
2	Y 371.029	724667.3	724667.3	98.797	%			18:43:13
2	Ag 328.068†	1493.4	1131.7	5.0393	ug/L	5.0393	ppb	18:43:18
2	As 188.979†	52.2	76.2	31.000	ug/L	31.000	ppb	18:43:38
2	B 249.677†	1872.4	2531.3	55.156	ug/L	55.156	ppb	18:43:18
2	Ba 233.527†	667.0	683.7	5.1564	ug/L	5.1564	ppb	18:43:38
2	Be 313.107†	9399.6	13834.8	4.9251	ug/L	4.9251	ppb	18:43:18
2	Cd 226.502†	302.1	508.3	5.3869	ug/L	5.3869	ppb	18:43:38
2	Co 228.616†	192.0	272.7	5.3600	ug/L	5.3600	ppb	18:43:38
2	Cr 267.716†	522.5	455.4	4.8549	ug/L	4.8549	ppb	18:43:38
2	Cu 324.752†	9973.9	3545.4	10.258	ug/L	10.258	ppb	18:43:18
2	Mn 257.610†	10134.6	9773.6	10.341	ug/L	10.341	ppb	18:43:18
2	Mo 202.031†	162.7	144.1	9.7375	ug/L	9.7375	ppb	18:43:38
2	Ni 231.604†	289.6	198.8	4.7285	ug/L	4.7285	ppb	18:43:38

2	P 214.914†	471.9	266.0	151.15 ug/L	151.15 ppb	18:43:38
2	Pb 220.353†	17.7	85.3	10.001 ug/L	10.001 ppb	18:43:38
2	S 181.975 Axial†	120.6	77.4	103.22 ug/L	103.22 ppb	18:43:38
2	Sb 206.836†	67.4	39.0	13.259 ug/L	13.259 ppb	18:43:38
2	Se 196.026†	11.3	35.6	21.975 ug/L	21.975 ppb	18:43:38
2	Si 251.611†	3748.4	3349.1	102.42 ug/L	102.42 ppb	18:43:18
2	Sn 189.927†	65.3	65.3	10.982 ug/L	10.982 ppb	18:43:38
2	Ti 334.940†	1984.8	3358.5	5.1954 ug/L	5.1954 ppb	18:43:18
2	Tl 190.801†	24.9	64.7	18.892 ug/L	18.892 ppb	18:43:38
2	U 409.014†	-179.8	1895.5	53.840 ug/L	53.840 ppb	18:43:13
2	V 292.402†	-566.6	817.6	5.5684 ug/L	5.5684 ppb	18:43:18
2	Zn 213.857†	1769.6	793.7	7.1229 ug/L	7.1229 ppb	18:43:38
2	SiO2†	3714.9	3299.8	215.76 ug/L	215.76 ppb	18:44:19
3	Sc Radial	5231.6	5231.6	98.5 %		18:42:16
3	Y RADIAL	5581.4	5581.4	98.40 %		18:42:16
3	Al 396.153Radial†	276.5	297.4	216.34 ug/L	216.34 ppb	18:42:16
3	Ca 317.933Radial†	154.0	134.8	204.81 ug/L	204.81 ppb	18:42:36
3	Fe 238.204 Radial†	22.8	13.0	107.29 ug/L	107.29 ppb	18:42:36
3	K 766.490 Radial†	3502.3	906.4	163.97 ug/L	163.97 ppb	18:42:16
3	Mg 279.077 IEC†	9.2	6.1	192.16 ug/L	192.16 ppb	18:42:36
3	Na 589.592 Radial†	-454.3	1155.9	336.84 ug/L	336.84 ppb	18:42:16
3	Sr 421.552†	821.6	818.3	5.1677 ug/L	5.1677 ppb	18:42:16
3	Sc 361.383	863356.2	863356.2	98.977 %		18:43:44
3	Y 371.029	724213.3	724213.3	98.735 %		18:43:44
3	Ag 328.068†	1458.4	1094.2	4.8709 ug/L	4.8709 ppb	18:43:49
3	As 188.979†	50.1	74.1	30.124 ug/L	30.124 ppb	18:44:09
3	B 249.677†	1802.2	2457.6	53.547 ug/L	53.547 ppb	18:43:49
3	Ba 233.527†	664.4	680.1	5.1284 ug/L	5.1284 ppb	18:44:09
3	Be 313.107†	9292.1	13712.6	4.8815 ug/L	4.8815 ppb	18:43:49
3	Cd 226.502†	280.8	486.3	5.1534 ug/L	5.1534 ppb	18:44:09
3	Co 228.616†	174.3	254.5	5.0050 ug/L	5.0050 ppb	18:44:09
3	Cr 267.716†	536.1	468.4	4.9907 ug/L	4.9907 ppb	18:44:09
3	Cu 324.752†	10002.7	3560.1	10.299 ug/L	10.299 ppb	18:43:49
3	Mn 257.610†	10100.2	9724.1	10.292 ug/L	10.292 ppb	18:43:49
3	Mo 202.031†	167.7	148.9	10.065 ug/L	10.065 ppb	18:44:09
3	Ni 231.604†	299.6	208.5	4.9605 ug/L	4.9605 ppb	18:44:09
3	P 214.914†	469.6	263.0	149.40 ug/L	149.40 ppb	18:44:09
3	Pb 220.353†	15.5	83.0	9.7365 ug/L	9.7365 ppb	18:44:09
3	S 181.975 Axial†	117.4	74.1	98.696 ug/L	98.696 ppb	18:44:09
3	Sb 206.836†	57.8	29.2	10.036 ug/L	10.036 ppb	18:44:09
3	Se 196.026†	24.3	48.7	30.024 ug/L	30.024 ppb	18:44:09
3	Si 251.611†	3720.4	3315.4	101.38 ug/L	101.38 ppb	18:43:49
3	Sn 189.927†	69.1	69.0	11.610 ug/L	11.610 ppb	18:44:09
3	Ti 334.940†	1934.9	3305.3	5.1156 ug/L	5.1156 ppb	18:43:49
3	Tl 190.801†	24.5	64.2	18.774 ug/L	18.774 ppb	18:44:09
3	U 409.014†	-1.6	2075.8	58.961 ug/L	58.961 ppb	18:43:44
3	V 292.402†	-672.9	711.1	4.8831 ug/L	4.8831 ppb	18:43:49
3	Zn 213.857†	1771.4	792.9	7.1127 ug/L	7.1127 ppb	18:44:09
3	SiO2†	3716.4	3295.9	215.50 ug/L	215.50 ppb	18:44:24

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	864254.3	99.080	%	0.3098				0.31%
Sc Radial	5234.3	98.6	%	2.93				2.98%
Y 371.029	725796.5	98.951	%	0.3218				0.33%
Y RADIAL	5592.3	98.59	%	2.833				2.87%
Ag 328.068†	1125.4	5.0128	ug/L	0.13065	5.0128	ppb	0.13065	2.61%
QC value within limits for Ag 328.068 Recovery = 100.26%								
Al 396.153Radial†	285.4	207.66	ug/L	15.934	207.66	ppb	15.934	7.67%
QC value within limits for Al 396.153Radial Recovery = 103.83%								
As 188.979†	73.0	29.668	ug/L	1.6092	29.668	ppb	1.6092	5.42%
QC value within limits for As 188.979 Recovery = 98.89%								
B 249.677†	2501.4	54.503	ug/L	0.8456	54.503	ppb	0.8456	1.55%
QC value within limits for B 249.677 Recovery = 109.01%								
Ba 233.527†	680.4	5.1309	ug/L	0.02442	5.1309	ppb	0.02442	0.48%
QC value within limits for Ba 233.527 Recovery = 102.62%								
Be 313.107†	13753.2	4.8959	ug/L	0.02524	4.8959	ppb	0.02524	0.52%
QC value within limits for Be 313.107 Recovery = 97.92%								
Ca 317.933Radial†	133.8	203.41	ug/L	4.644	203.41	ppb	4.644	2.28%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.70%
Cd 226.502†              495.0      5.2454 ug/L       0.12437      5.2454 ppb        0.12437   2.37%
   QC value within limits for Cd 226.502  Recovery = 104.91%
Co 228.616†              258.8      5.0884 ug/L       0.24098      5.0884 ppb        0.24098   4.74%
   QC value within limits for Co 228.616  Recovery = 101.77%
Cr 267.716†              459.9      4.9018 ug/L       0.07707      4.9018 ppb        0.07707   1.57%
   QC value within limits for Cr 267.716  Recovery = 98.04%
Cu 324.752†             3551.2      10.276 ug/L        0.0210      10.276 ppb         0.0210   0.20%
   QC value within limits for Cu 324.752  Recovery = 102.76%
Fe 238.204 Radial†        12.3      101.65 ug/L         9.368      101.65 ppb          9.368   9.22%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.65%
K 766.490 Radial†       1004.8      181.79 ug/L        17.565      181.79 ppb         17.565   9.66%
   QC value within limits for K 766.490 Radial  Recovery = 121.19%
Mg 279.077 IEC†           8.1      252.75 ug/L        65.416      252.75 ppb         65.416  25.88%
   QC value within limits for Mg 279.077 IEC  Recovery = 84.25%
Mn 257.610†             9721.0      10.286 ug/L        0.0585      10.286 ppb         0.0585   0.57%
   QC value within limits for Mn 257.610  Recovery = 102.86%
Mo 202.031†              142.5      9.6329 ug/L       0.49284      9.6329 ppb        0.49284   5.12%
   QC value within limits for Mo 202.031  Recovery = 96.33%
Na 589.592 Radial†      1165.2      339.55 ug/L         3.321      339.55 ppb          3.321   0.98%
   QC value within limits for Na 589.592 Radial  Recovery = 113.18%
Ni 231.604†              197.0      4.6873 ug/L       0.29599      4.6873 ppb        0.29599   6.31%
   QC value within limits for Ni 231.604  Recovery = 93.75%
P 214.914†               260.5      147.97 ug/L         4.091      147.97 ppb          4.091   2.76%
   QC value within limits for P 214.914  Recovery = 98.64%
Pb 220.353†               86.2      10.107 ug/L        0.4324      10.107 ppb         0.4324   4.28%
   QC value within limits for Pb 220.353  Recovery = 101.07%
S 181.975 Axial†          75.6      100.77 ug/L         2.284      100.77 ppb          2.284   2.27%
   QC value within limits for S 181.975 Axial  Recovery = 100.77%
Sb 206.836†               35.8      12.213 ug/L        1.8861      12.213 ppb         1.8861  15.44%
   QC value within limits for Sb 206.836  Recovery = 122.13%
Se 196.026†               43.3      26.748 ug/L        4.2281      26.748 ppb         4.2281  15.81%
   QC value within limits for Se 196.026  Recovery = 89.16%
Si 251.611†             3315.7      101.39 ug/L         1.016      101.39 ppb          1.016   1.00%
   QC value within limits for Si 251.611  Recovery = 101.39%
Sn 189.927†               68.8      11.569 ug/L        0.5671      11.569 ppb         0.5671   4.90%
   QC value within limits for Sn 189.927  Recovery = 115.69%
Sr 421.552†              797.5      5.0365 ug/L       0.16664      5.0365 ppb        0.16664   3.31%
   QC value within limits for Sr 421.552  Recovery = 100.73%
Ti 334.940†             3307.4      5.1157 ug/L       0.07967      5.1157 ppb        0.07967   1.56%
   QC value within limits for Ti 334.940  Recovery = 102.31%
Tl 190.801†               69.0      20.148 ug/L        2.2786      20.148 ppb         2.2786  11.31%
   QC value within limits for Tl 190.801  Recovery = 100.74%
U 409.014†              1917.4      54.461 ug/L        4.2235      54.461 ppb         4.2235   7.75%
   QC value within limits for U 409.014  Recovery = 108.92%
V 292.402†               757.3      5.1724 ug/L       0.35488      5.1724 ppb        0.35488   6.86%
   QC value within limits for V 292.402  Recovery = 103.45%
Zn 213.857†              785.1      7.0441 ug/L       0.12785      7.0441 ppb        0.12785   1.82%
   QC value within limits for Zn 213.857  Recovery = 70.44%
SiO2†                   3301.3      215.87 ug/L         0.428      215.87 ppb          0.428   0.20%
   QC value within limits for SiO2  Recovery = 101.35%
All analyte(s) passed QC.
```

Sequence No.: 33
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 1/13/2010 18:46:35
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	5183.9	5183.9	97.6	%			18:48:26
1	Y RADIAL	5523.7	5523.7	97.38	%			18:48:26
1	Al 396.153Radial†	-3.6	13.1	9.5565	ug/L	9.5565	ppb	18:48:26
1	Ca 317.933Radial†	19.7	-1.4	-2.0901	ug/L	-2.0901	ppb	18:48:46
1	Fe 238.204 Radial†	10.4	0.5	4.3767	ug/L	4.3767	ppb	18:48:46
1	K 766.490 Radial†	2664.8	81.2	14.700	ug/L	14.700	ppb	18:48:26
1	Mg 279.077 IEC†	0.9	-2.3	-70.638	ug/L	-70.638	ppb	18:48:46
1	Na 589.592 Radial†	-1504.2	76.1	22.171	ug/L	22.171	ppb	18:48:26
1	Sr 421.552†	31.6	16.7	0.1053	ug/L	0.1053	ppb	18:48:26
1	Sc 361.383	844152.6	844152.6	96.776	%			18:49:43
1	Y 371.029	711006.3	711006.3	96.935	%			18:49:43
1	Ag 328.068†	322.8	-45.7	-0.2040	ug/L	-0.2040	ppb	18:49:43
1	As 188.979†	-21.6	1.1	0.4548	ug/L	0.4548	ppb	18:50:03
1	B 249.677†	-450.3	171.5	3.7372	ug/L	3.7372	ppb	18:50:03
1	Ba 233.527†	10.6	19.8	0.1478	ug/L	0.1478	ppb	18:50:03
1	Be 313.107†	-4309.3	-128.4	-0.0457	ug/L	-0.0457	ppb	18:49:43
1	Cd 226.502†	-187.8	8.5	0.0894	ug/L	0.0894	ppb	18:50:03
1	Co 228.616†	-73.6	2.4	0.0467	ug/L	0.0467	ppb	18:50:03
1	Cr 267.716†	60.4	-10.8	-0.1162	ug/L	-0.1162	ppb	18:50:03
1	Cu 324.752†	6617.7	292.2	0.8478	ug/L	0.8478	ppb	18:49:43
1	Mn 257.610†	393.6	-73.7	-0.0746	ug/L	-0.0746	ppb	18:50:03
1	Mo 202.031†	20.4	0.5	0.0331	ug/L	0.0331	ppb	18:50:03
1	Ni 231.604†	79.5	-12.0	-0.2868	ug/L	-0.2868	ppb	18:50:03
1	P 214.914†	220.3	16.2	9.1571	ug/L	9.1571	ppb	18:50:03
1	Pb 220.353†	-63.1	2.1	0.2488	ug/L	0.2488	ppb	18:50:03
1	S 181.975 Axial†	50.0	7.1	9.4987	ug/L	9.4987	ppb	18:50:03
1	Sb 206.836†	35.7	7.7	2.5650	ug/L	2.5650	ppb	18:50:03
1	Se 196.026†	-27.1	-3.9	-2.3385	ug/L	-2.3385	ppb	18:50:03
1	Si 251.611†	424.3	-5.0	-0.1538	ug/L	-0.1538	ppb	18:50:03
1	Sn 189.927†	9.5	9.1	1.5181	ug/L	1.5181	ppb	18:50:03
1	Ti 334.940†	-1321.7	-15.3	-0.0182	ug/L	-0.0182	ppb	18:49:43
1	Tl 190.801†	-38.9	-0.7	-0.1951	ug/L	-0.1951	ppb	18:50:03
1	U 409.014†	-2017.9	-7.7	-0.2193	ug/L	-0.2193	ppb	18:49:43
1	V 292.402†	-1427.2	-83.8	-0.5499	ug/L	-0.5499	ppb	18:49:43
1	Zn 213.857†	964.0	-0.6	-0.0056	ug/L	-0.0056	ppb	18:50:03
1	SiO2†	458.0	14.3	0.9374	ug/L	0.9374	ppb	18:50:59
2	Sc Radial	5187.2	5187.2	97.7	%			18:48:51
2	Y RADIAL	5520.9	5520.9	97.33	%			18:48:51
2	Al 396.153Radial†	-6.6	10.0	7.2996	ug/L	7.2996	ppb	18:48:51
2	Ca 317.933Radial†	13.4	-7.9	-11.977	ug/L	-11.977	ppb	18:49:11
2	Fe 238.204 Radial†	9.1	-0.8	-6.7957	ug/L	-6.7957	ppb	18:49:11
2	K 766.490 Radial†	2753.3	170.0	30.792	ug/L	30.792	ppb	18:48:51
2	Mg 279.077 IEC†	-0.3	-3.6	-111.55	ug/L	-111.55	ppb	18:49:11
2	Na 589.592 Radial†	-1511.6	69.5	20.258	ug/L	20.258	ppb	18:48:51
2	Sr 421.552†	-40.4	-57.1	-0.3607	ug/L	-0.3607	ppb	18:48:51
2	Sc 361.383	846456.8	846456.8	97.040	%			18:50:09
2	Y 371.029	712849.6	712849.6	97.186	%			18:50:09
2	Ag 328.068†	259.7	-111.6	-0.4992	ug/L	-0.4992	ppb	18:50:09
2	As 188.979†	-29.7	-7.2	-2.9094	ug/L	-2.9094	ppb	18:50:29
2	B 249.677†	-444.7	178.5	3.8918	ug/L	3.8918	ppb	18:50:29
2	Ba 233.527†	-21.2	-13.0	-0.0977	ug/L	-0.0977	ppb	18:50:29
2	Be 313.107†	-4371.8	-180.7	-0.0641	ug/L	-0.0641	ppb	18:50:09
2	Cd 226.502†	-190.2	6.6	0.0707	ug/L	0.0707	ppb	18:50:29
2	Co 228.616†	-60.7	15.8	0.3100	ug/L	0.3100	ppb	18:50:29
2	Cr 267.716†	59.4	-12.0	-0.1283	ug/L	-0.1283	ppb	18:50:29
2	Cu 324.752†	6529.1	182.3	0.5278	ug/L	0.5278	ppb	18:50:09
2	Mn 257.610†	391.2	-77.2	-0.0778	ug/L	-0.0778	ppb	18:50:29
2	Mo 202.031†	16.8	-3.3	-0.2210	ug/L	-0.2210	ppb	18:50:29
2	Ni 231.604†	82.2	-9.5	-0.2261	ug/L	-0.2261	ppb	18:50:29

2	P 214.914†	226.3	21.7	12.400	ug/L	12.400 ppb	18:50:29
2	Pb 220.353†	-64.0	1.4	0.1683	ug/L	0.1683 ppb	18:50:29
2	S 181.975 Axial†	44.9	1.7	2.3265	ug/L	2.3265 ppb	18:50:29
2	Sb 206.836†	25.5	-2.9	-0.9717	ug/L	-0.9717 ppb	18:50:29
2	Se 196.026†	-30.6	-7.4	-4.5100	ug/L	-4.5100 ppb	18:50:29
2	Si 251.611†	430.0	-0.3	-0.0077	ug/L	-0.0077 ppb	18:50:29
2	Sn 189.927†	3.6	2.9	0.4869	ug/L	0.4869 ppb	18:50:29
2	Ti 334.940†	-1276.2	35.2	0.0618	ug/L	0.0618 ppb	18:50:09
2	Tl 190.801†	-36.9	1.4	0.4150	ug/L	0.4150 ppb	18:50:29
2	U 409.014†	-1986.9	29.9	0.8517	ug/L	0.8517 ppb	18:50:09
2	V 292.402†	-1345.3	4.6	0.0273	ug/L	0.0273 ppb	18:50:09
2	Zn 213.857†	969.2	2.0	0.0194	ug/L	0.0194 ppb	18:50:29
2	SiO2†	436.6	-9.0	-0.5845	ug/L	-0.5845 ppb	18:51:04
3	Sc Radial	5125.8	5125.8	96.5	%		18:49:17
3	Y RADIAL	5484.4	5484.4	96.69	%		18:49:17
3	Al 396.153Radial†	-2.2	14.5	10.521	ug/L	10.521 ppb	18:49:17
3	Ca 317.933Radial†	15.6	-5.4	-8.1369	ug/L	-8.1369 ppb	18:49:37
3	Fe 238.204 Radial†	11.8	2.1	16.942	ug/L	16.942 ppb	18:49:37
3	K 766.490 Radial†	2759.0	209.7	37.983	ug/L	37.983 ppb	18:49:17
3	Mg 279.077 IEC†	2.5	-0.6	-18.146	ug/L	-18.146 ppb	18:49:37
3	Na 589.592 Radial†	-1471.8	92.1	26.853	ug/L	26.853 ppb	18:49:17
3	Sr 421.552†	46.8	32.8	0.2070	ug/L	0.2070 ppb	18:49:17
3	Sc 361.383	839807.1	839807.1	96.278	%		18:50:34
3	Y 371.029	707031.6	707031.6	96.393	%		18:50:34
3	Ag 328.068†	207.3	-164.0	-0.7196	ug/L	-0.7196 ppb	18:50:34
3	As 188.979†	-20.4	2.2	0.9120	ug/L	0.9120 ppb	18:50:54
3	B 249.677†	-458.9	160.1	3.4873	ug/L	3.4873 ppb	18:50:54
3	Ba 233.527†	-12.8	-4.5	-0.0336	ug/L	-0.0336 ppb	18:50:54
3	Be 313.107†	-4431.4	-278.3	-0.0990	ug/L	-0.0990 ppb	18:50:34
3	Cd 226.502†	-164.9	31.3	0.3288	ug/L	0.3288 ppb	18:50:54
3	Co 228.616†	-70.3	5.4	0.1074	ug/L	0.1074 ppb	18:50:54
3	Cr 267.716†	86.9	17.0	0.1844	ug/L	0.1844 ppb	18:50:54
3	Cu 324.752†	6448.1	151.4	0.4433	ug/L	0.4433 ppb	18:50:34
3	Mn 257.610†	373.5	-92.4	-0.0954	ug/L	-0.0954 ppb	18:50:54
3	Mo 202.031†	27.2	7.7	0.5190	ug/L	0.5190 ppb	18:50:54
3	Ni 231.604†	97.1	6.7	0.1583	ug/L	0.1583 ppb	18:50:54
3	P 214.914†	216.4	13.3	7.5525	ug/L	7.5525 ppb	18:50:54
3	Pb 220.353†	-56.2	9.0	1.0528	ug/L	1.0528 ppb	18:50:54
3	S 181.975 Axial†	44.8	2.0	2.6592	ug/L	2.6592 ppb	18:50:54
3	Sb 206.836†	33.0	5.1	1.6900	ug/L	1.6900 ppb	18:50:54
3	Se 196.026†	-23.7	-0.5	-0.2163	ug/L	-0.2163 ppb	18:50:54
3	Si 251.611†	437.6	11.1	0.3335	ug/L	0.3335 ppb	18:50:54
3	Sn 189.927†	3.5	2.8	0.4752	ug/L	0.4752 ppb	18:50:54
3	Ti 334.940†	-1343.1	-44.6	-0.0664	ug/L	-0.0664 ppb	18:50:34
3	Tl 190.801†	-29.9	8.4	2.4393	ug/L	2.4393 ppb	18:50:54
3	U 409.014†	-2196.7	-204.2	-5.8057	ug/L	-5.8057 ppb	18:50:34
3	V 292.402†	-1350.3	-11.5	-0.0821	ug/L	-0.0821 ppb	18:50:34
3	Zn 213.857†	974.7	15.7	0.1386	ug/L	0.1386 ppb	18:50:54
3	SiO2†	459.7	18.5	1.1997	ug/L	1.1997 ppb	18:51:09

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	843472.2	96.698	%	0.3871				0.40%
Sc Radial	5165.6	97.3	%	0.65				0.67%
Y 371.029	710295.8	96.838	%	0.4054				0.42%
Y RADIAL	5509.7	97.13	%	0.386				0.40%
Ag 328.068†	-107.1	-0.4743	ug/L	0.25869	-0.4743	ppb	0.25869	54.54%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	12.5	9.1258	ug/L	1.65353	9.1258	ppb	1.65353	18.12%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.3	-0.5142	ug/L	2.08688	-0.5142	ppb	2.08688	405.85%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	170.0	3.7054	ug/L	0.20408	3.7054	ppb	0.20408	5.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.8	0.0055	ug/L	0.12735	0.0055	ppb	0.12735	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-195.8	-0.0696	ug/L	0.02709	-0.0696	ppb	0.02709	38.94%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-4.9	-7.4013	ug/L	4.98435	-7.4013	ppb	4.98435	67.34%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                15.5      0.1630 ug/L       0.14392      0.1630 ppb        0.14392  88.29%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 7.9      0.1547 ug/L       0.13785      0.1547 ppb        0.13785  89.10%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -1.9     -0.0200 ug/L       0.17718     -0.0200 ppb        0.17718 884.73%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               208.6      0.6063 ug/L       0.21337      0.6063 ppb        0.21337  35.19%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.6      4.8411 ug/L      11.87582      4.8411 ppb       11.87582 245.31%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         153.6      27.825 ug/L       11.9216      27.825 ppb        11.9216  42.84%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -2.1     -66.778 ug/L       46.8212     -66.778 ppb        46.8212  70.11%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -81.1     -0.0826 ug/L       0.01117     -0.0826 ppb        0.01117  13.52%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 1.6      0.1104 ug/L       0.37601      0.1104 ppb        0.37601 340.63%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         79.2      23.094 ug/L        3.3928      23.094 ppb         3.3928  14.69%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -5.0     -0.1182 ug/L       0.24139     -0.1182 ppb        0.24139 204.27%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 17.1      9.7033 ug/L       2.46961      9.7033 ppb        2.46961  25.45%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 4.2      0.4899 ug/L       0.48907      0.4899 ppb        0.48907  99.82%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            3.6      4.8281 ug/L       4.04822      4.8281 ppb        4.04822  83.85%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 3.3      1.0945 ug/L       1.84201      1.0945 ppb        1.84201 168.30%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -3.9     -2.3549 ug/L       2.14687     -2.3549 ppb        2.14687  91.17%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                 1.9      0.0573 ug/L       0.25007      0.0573 ppb        0.25007 436.18%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 4.9      0.8267 ug/L       0.59880      0.8267 ppb        0.59880  72.43%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -2.6     -0.0161 ug/L       0.30271     -0.0161 ppb        0.30271 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                -8.2     -0.0076 ug/L       0.06475     -0.0076 ppb        0.06475 855.18%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 3.0      0.8864 ug/L       1.37900      0.8864 ppb        1.37900 155.57%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -60.7     -1.7244 ug/L       3.57482     -1.7244 ppb        3.57482 207.31%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -30.3     -0.2015 ug/L       0.30657     -0.2015 ppb        0.30657 152.12%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 5.7      0.0508 ug/L       0.07704      0.0508 ppb        0.07704 151.65%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                       8.0      0.5175 ug/L       0.96336      0.5175 ppb        0.96336 186.15%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 34
Sample ID: 243628004|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 60
Date Collected: 1/13/2010 18:53:19
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243628004|937486|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5338.2	5338.2	101	%			18:55:32
1	Y RADIAL	6247.5	6247.5	110.1	%			18:55:32
1	Al 396.153Radial†	164059.0	163221.2	119010	ug/L	119010	ppb	18:55:12
1	Ca 317.933Radial†	13484.3	13392.5	20353	ug/L	20353	ppb	18:55:12
1	Fe 238.204 Radial†	15558.2	15467.0	127520	ug/L	127520	ppb	18:55:12
1	K 766.490 Radial†	99090.2	95925.5	17367	ug/L	17367	ppb	18:55:12
1	Mg 279.077 IEC†	622.6	616.2	19129	ug/L	19129	ppb	18:55:32
1	Na 589.592 Radial†	1597.0	3205.7	934.20	ug/L	934.20	ppb	18:55:12
1	Sr 421.552†	41666.6	41433.9	261.59	ug/L	261.59	ppb	18:55:12
1	Sc 361.383	873168.5	873168.5	100.10	%			18:56:31
1	Y 371.029	804330.8	804330.8	109.66	%			18:56:31
1	Ag 328.068†	-8070.0	-8441.0	4.6422	ug/L	4.6422	ppb	18:56:36
1	As 188.979†	-70.9	-47.4	52.404	ug/L	52.404	ppb	18:56:56
1	B 249.677†	1251.6	1887.1	20.224	ug/L	20.224	ppb	18:56:36
1	Ba 233.527†	226082.6	225860.4	1703.0	ug/L	1703.0	ppb	18:56:36
1	Be 313.107†	-6986.4	-2654.8	10.003	ug/L	10.003	ppb	18:56:36
1	Cd 226.502†	1027.6	1229.1	-0.1485	ug/L	-0.1485	ppb	18:56:56
1	Co 228.616†	3673.9	3748.6	62.370	ug/L	62.370	ppb	18:56:56
1	Cr 267.716†	8452.5	8370.7	92.361	ug/L	92.361	ppb	18:56:36
1	Cu 324.752†	31327.3	24749.3	78.642	ug/L	78.642	ppb	18:56:36
1	Mn 257.610†	3688522.9	3684273.2	3910.2	ug/L	3910.2	ppb	18:56:31
1	Mo 202.031†	-42.5	-63.0	5.8847	ug/L	5.8847	ppb	18:56:56
1	Ni 231.604†	2986.1	2888.8	68.720	ug/L	68.720	ppb	18:56:56
1	P 214.914†	1853.4	1640.0	856.62	ug/L	856.62	ppb	18:56:56
1	Pb 220.353†	764.1	830.6	110.45	ug/L	110.45	ppb	18:56:56
1	S 181.975 Axial†	385.5	340.5	431.71	ug/L	431.71	ppb	18:56:56
1	Sb 206.836†	64.3	35.0	-3.9782	ug/L	-3.9782	ppb	18:56:56
1	Se 196.026†	-609.9	-585.2	67.713	ug/L	67.713	ppb	18:56:56
1	Si 251.611†	986754.9	985303.1	30166	ug/L	30166	ppb	18:56:31
1	Sn 189.927†	-114.0	-114.6	-13.982	ug/L	-13.982	ppb	18:56:56
1	Ti 334.940†	3107296.4	3105471.5	4822.5	ug/L	4822.5	ppb	18:56:31
1	Tl 190.801†	-240.8	-201.0	-0.7134	ug/L	-0.7134	ppb	18:56:56
1	U 409.014†	-8892.4	-6805.9	-208.13	ug/L	-208.13	ppb	18:56:31
1	V 292.402†	37249.5	38602.4	228.51	ug/L	228.51	ppb	18:56:36
1	Zn 213.857†	28517.8	27491.9	235.64	ug/L	235.64	ppb	18:56:36
1	SiO2†	977744.1	976286.0	63915	ug/L	63915	ppb	18:58:06
2	Sc Radial	5342.4	5342.4	101	%			18:55:58
2	Y RADIAL	6274.7	6274.7	110.6	%			18:55:58
2	Al 396.153Radial†	161858.4	160905.0	117320	ug/L	117320	ppb	18:55:38
2	Ca 317.933Radial†	13322.6	13221.2	20093	ug/L	20093	ppb	18:55:38
2	Fe 238.204 Radial†	15318.0	15216.0	125450	ug/L	125450	ppb	18:55:38
2	K 766.490 Radial†	97819.8	94584.9	17125	ug/L	17125	ppb	18:55:38
2	Mg 279.077 IEC†	621.7	614.7	19085	ug/L	19085	ppb	18:55:58
2	Na 589.592 Radial†	1581.7	3189.2	929.39	ug/L	929.39	ppb	18:55:38
2	Sr 421.552†	40972.2	40710.9	257.03	ug/L	257.03	ppb	18:55:38
2	Sc 361.383	877108.1	877108.1	100.55	%			18:57:03
2	Y 371.029	805969.4	805969.4	109.88	%			18:57:03
2	Ag 328.068†	-8108.5	-8443.1	3.9597	ug/L	3.9597	ppb	18:57:08
2	As 188.979†	-78.0	-54.2	48.698	ug/L	48.698	ppb	18:57:28
2	B 249.677†	1306.6	1936.2	21.632	ug/L	21.632	ppb	18:57:08
2	Ba 233.527†	226737.1	225496.9	1700.2	ug/L	1700.2	ppb	18:57:08
2	Be 313.107†	-7013.1	-2650.0	9.8807	ug/L	9.8807	ppb	18:57:08
2	Cd 226.502†	1012.5	1209.5	-0.1426	ug/L	-0.1426	ppb	18:57:28
2	Co 228.616†	3647.3	3705.6	61.669	ug/L	61.669	ppb	18:57:28
2	Cr 267.716†	8415.6	8296.1	91.520	ug/L	91.520	ppb	18:57:08
2	Cu 324.752†	31321.9	24603.3	78.105	ug/L	78.105	ppb	18:57:08
2	Mn 257.610†	3666850.8	3646170.2	3869.6	ug/L	3869.6	ppb	18:57:03
2	Mo 202.031†	-48.5	-68.8	5.3334	ug/L	5.3334	ppb	18:57:28
2	Ni 231.604†	2943.4	2832.9	67.391	ug/L	67.391	ppb	18:57:28

2	P 214.914†	1837.8	1616.2	844.21	ug/L	844.21 ppb	18:57:28
2	Pb 220.353†	738.3	801.5	106.89	ug/L	106.89 ppb	18:57:28
2	S 181.975 Axial†	393.5	346.8	440.32	ug/L	440.32 ppb	18:57:28
2	Sb 206.836†	95.4	65.7	6.3510	ug/L	6.3510 ppb	18:57:28
2	Se 196.026†	-627.4	-599.8	51.940	ug/L	51.940 ppb	18:57:28
2	Si 251.611†	980872.0	975025.1	29852	ug/L	29852 ppb	18:57:03
2	Sn 189.927†	-104.2	-104.3	-12.336	ug/L	-12.336 ppb	18:57:28
2	Ti 334.940†	3085975.0	3070325.1	4767.9	ug/L	4767.9 ppb	18:57:03
2	Tl 190.801†	-236.5	-195.7	0.2002	ug/L	0.2002 ppb	18:57:28
2	U 409.014†	-8710.7	-6585.3	-201.63	ug/L	-201.63 ppb	18:57:03
2	V 292.402†	37357.6	38542.7	228.49	ug/L	228.49 ppb	18:57:08
2	Zn 213.857†	28584.3	27430.1	235.29	ug/L	235.29 ppb	18:57:08
2	SiO2†	986847.3	980951.9	64221	ug/L	64221 ppb	18:58:12
3	Sc Radial	5309.7	5309.7	100.0	%		18:56:23
3	Y RADIAL	6223.2	6223.2	109.7	%		18:56:23
3	Al 396.153Radial†	161635.0	161672.2	117880	ug/L	117880 ppb	18:56:03
3	Ca 317.933Radial†	13236.8	13216.9	20086	ug/L	20086 ppb	18:56:03
3	Fe 238.204 Radial†	15270.6	15262.4	125830	ug/L	125830 ppb	18:56:03
3	K 766.490 Radial†	97919.3	95283.1	17251	ug/L	17251 ppb	18:56:03
3	Mg 279.077 IEC†	621.4	618.3	19197	ug/L	19197 ppb	18:56:23
3	Na 589.592 Radial†	1562.3	3179.5	926.58	ug/L	926.58 ppb	18:56:03
3	Sr 421.552†	41088.3	41077.8	259.35	ug/L	259.35 ppb	18:56:03
3	Sc 361.383	880874.6	880874.6	100.99	%		18:57:35
3	Y 371.029	809400.9	809400.9	110.35	%		18:57:35
3	Ag 328.068†	-8019.9	-8320.9	4.6217	ug/L	4.6217 ppb	18:57:40
3	As 188.979†	-75.3	-51.1	50.052	ug/L	50.052 ppb	18:58:00
3	B 249.677†	1335.4	1959.1	22.070	ug/L	22.070 ppb	18:57:40
3	Ba 233.527†	224985.3	222798.0	1679.9	ug/L	1679.9 ppb	18:57:40
3	Be 313.107†	-6767.9	-2377.3	9.9866	ug/L	9.9866 ppb	18:57:40
3	Cd 226.502†	1023.4	1216.0	-0.1129	ug/L	-0.1129 ppb	18:58:00
3	Co 228.616†	3684.6	3727.1	62.066	ug/L	62.066 ppb	18:58:00
3	Cr 267.716†	8341.9	8187.2	90.363	ug/L	90.363 ppb	18:57:40
3	Cu 324.752†	31249.1	24398.1	77.532	ug/L	77.532 ppb	18:57:40
3	Mn 257.610†	3682702.5	3646274.9	3869.8	ug/L	3869.8 ppb	18:57:35
3	Mo 202.031†	-55.8	-75.8	4.8859	ug/L	4.8859 ppb	18:58:00
3	Ni 231.604†	2995.5	2872.0	68.322	ug/L	68.322 ppb	18:58:00
3	P 214.914†	1843.0	1613.5	842.62	ug/L	842.62 ppb	18:58:00
3	Pb 220.353†	731.6	791.8	105.83	ug/L	105.83 ppb	18:58:00
3	S 181.975 Axial†	404.3	355.8	452.31	ug/L	452.31 ppb	18:58:00
3	Sb 206.836†	73.7	43.7	-0.9467	ug/L	-0.9467 ppb	18:58:00
3	Se 196.026†	-621.8	-591.6	58.209	ug/L	58.209 ppb	18:58:00
3	Si 251.611†	985149.3	975089.7	29854	ug/L	29854 ppb	18:57:35
3	Sn 189.927†	-105.7	-105.4	-12.508	ug/L	-12.508 ppb	18:58:00
3	Ti 334.940†	3101838.4	3072911.4	4771.9	ug/L	4771.9 ppb	18:57:35
3	Tl 190.801†	-246.7	-204.8	-2.4221	ug/L	-2.4221 ppb	18:58:00
3	U 409.014†	-8875.5	-6711.4	-205.25	ug/L	-205.25 ppb	18:57:35
3	V 292.402†	37186.8	38214.7	226.27	ug/L	226.27 ppb	18:57:40
3	Zn 213.857†	28436.9	27162.6	232.83	ug/L	232.83 ppb	18:57:40
3	SiO2†	979261.0	969243.4	63454	ug/L	63454 ppb	18:58:18

Mean Data: 243628004|937486|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	877050.4	100.55	%	0.442				0.44%
Sc Radial	5330.1	100	%	0.3				0.33%
Y 371.029	806567.0	109.96	%	0.353				0.32%
Y RADIAL	6248.5	110.2	%	0.45				0.41%
Ag 328.068†	-8401.6	4.4079	ug/L	0.38824	4.4079	ppb	0.38824	8.81%
Al 396.153Radial†	161932.8	118070	ug/L	860.3	118070	ppb	860.3	0.73%
As 188.979†	-50.9	50.385	ug/L	1.8755	50.385	ppb	1.8755	3.72%
B 249.677†	1927.5	21.309	ug/L	0.9647	21.309	ppb	0.9647	4.53%
Ba 233.527†	224718.4	1694.4	ug/L	12.60	1694.4	ppb	12.60	0.74%
Be 313.107†	-2560.7	9.9567	ug/L	0.06635	9.9567	ppb	0.06635	0.67%
Ca 317.933Radial†	13276.9	20177	ug/L	152.3	20177	ppb	152.3	0.75%
Cd 226.502†	1218.2	-0.1347	ug/L	0.01910	-0.1347	ppb	0.01910	14.19%
Co 228.616†	3727.1	62.035	ug/L	0.3515	62.035	ppb	0.3515	0.57%
Cr 267.716†	8284.7	91.415	ug/L	1.0031	91.415	ppb	1.0031	1.10%
Cu 324.752†	24583.6	78.093	ug/L	0.5547	78.093	ppb	0.5547	0.71%
Fe 238.204 Radial†	15315.1	126260	ug/L	1100.8	126260	ppb	1100.8	0.87%
K 766.490 Radial†	95264.5	17248	ug/L	121.4	17248	ppb	121.4	0.70%

Mg 279.077 IEC†	616.4	19137	ug/L	56.5	19137	ppb	56.5	0.30%
Mn 257.610†	3658906.1	3883.2	ug/L	23.35	3883.2	ppb	23.35	0.60%
Mo 202.031†	-69.2	5.3680	ug/L	0.50034	5.3680	ppb	0.50034	9.32%
Na 589.592 Radial†	3191.5	930.06	ug/L	3.850	930.06	ppb	3.850	0.41%
Ni 231.604†	2864.6	68.144	ug/L	0.6821	68.144	ppb	0.6821	1.00%
P 214.914†	1623.2	847.82	ug/L	7.662	847.82	ppb	7.662	0.90%
Pb 220.353†	808.0	107.73	ug/L	2.421	107.73	ppb	2.421	2.25%
S 181.975 Axial†	347.7	441.45	ug/L	10.347	441.45	ppb	10.347	2.34%
Sb 206.836†	48.1	0.4753	ug/L	5.30942	0.4753	ppb	5.30942	>999.9%
Se 196.026†	-592.2	59.287	ug/L	7.9417	59.287	ppb	7.9417	13.40%
Si 251.611†	978472.6	29957	ug/L	181.1	29957	ppb	181.1	0.60%
Sn 189.927†	-108.1	-12.942	ug/L	0.9045	-12.942	ppb	0.9045	6.99%
Sr 421.552†	41074.2	259.32	ug/L	2.283	259.32	ppb	2.283	0.88%
Ti 334.940†	3082902.7	4787.5	ug/L	30.43	4787.5	ppb	30.43	0.64%
Tl 190.801†	-200.5	-0.9784	ug/L	1.33110	-0.9784	ppb	1.33110	136.05%
U 409.014†	-6700.9	-205.00	ug/L	3.260	-205.00	ppb	3.260	1.59%
V 292.402†	38453.3	227.76	ug/L	1.286	227.76	ppb	1.286	0.56%
Zn 213.857†	27361.5	234.59	ug/L	1.531	234.59	ppb	1.531	0.65%
SiO2†	975493.8	63863	ug/L	385.9	63863	ppb	385.9	0.60%

Sequence No.: 35
Sample ID: 243628005|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 61
Date Collected: 1/13/2010 19:00:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243628005|937486|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5326.8	5326.8	100	%			19:02:43
1	Y RADIAL	6161.8	6161.8	108.6	%			19:02:43
1	Al 396.153Radial†	129372.4	128989.3	94046	ug/L	94046	ppb	19:02:23
1	Ca 317.933Radial†	12155.7	12096.5	18384	ug/L	18384	ppb	19:02:23
1	Fe 238.204 Radial†	12918.3	12868.2	106090	ug/L	106090	ppb	19:02:23
1	K 766.490 Radial†	92036.4	89103.3	16133	ug/L	16133	ppb	19:02:23
1	Mg 279.077 IEC†	537.0	532.1	16525	ug/L	16525	ppb	19:02:43
1	Na 589.592 Radial†	720.2	2335.0	680.47	ug/L	680.47	ppb	19:02:23
1	Sr 421.552†	34543.0	34420.5	217.30	ug/L	217.30	ppb	19:02:23
1	Sc 361.383	869274.1	869274.1	99.656	%			19:03:46
1	Y 371.029	788649.8	788649.8	107.52	%			19:03:46
1	Ag 328.068†	-7002.3	-7405.7	2.2359	ug/L	2.2359	ppb	19:03:46
1	As 188.979†	-95.9	-72.8	38.879	ug/L	38.879	ppb	19:04:06
1	B 249.677†	1065.9	1706.3	19.798	ug/L	19.798	ppb	19:03:46
1	Ba 233.527†	211964.5	212705.4	1603.4	ug/L	1603.4	ppb	19:03:46
1	Be 313.107†	-14275.8	-10000.7	7.8732	ug/L	7.8732	ppb	19:03:46
1	Cd 226.502†	1179.2	1385.9	3.7939	ug/L	3.7939	ppb	19:04:06
1	Co 228.616†	3023.3	3112.2	49.665	ug/L	49.665	ppb	19:04:06
1	Cr 267.716†	23183.8	23190.7	250.27	ug/L	250.27	ppb	19:04:06
1	Cu 324.752†	28976.6	22530.7	71.038	ug/L	71.038	ppb	19:03:46
1	Mn 257.610†	3279493.9	3290339.6	3491.3	ug/L	3491.3	ppb	19:03:41
1	Mo 202.031†	156.7	136.7	17.682	ug/L	17.682	ppb	19:04:06
1	Ni 231.604†	6748.4	6677.5	158.91	ug/L	158.91	ppb	19:04:06
1	P 214.914†	2135.6	1931.4	1036.7	ug/L	1036.7	ppb	19:04:06
1	Pb 220.353†	1125.2	1196.4	149.83	ug/L	149.83	ppb	19:04:06
1	S 181.975 Axial†	612.3	569.9	742.13	ug/L	742.13	ppb	19:04:06
1	Sb 206.836†	94.6	65.7	5.8968	ug/L	5.8968	ppb	19:04:06
1	Se 196.026†	-539.1	-516.8	37.868	ug/L	37.868	ppb	19:04:06
1	Si 251.611†	1099651.3	1103005.7	33770	ug/L	33770	ppb	19:03:41
1	Sn 189.927†	-120.0	-121.2	-15.750	ug/L	-15.750	ppb	19:04:06
1	Ti 334.940†	3228918.1	3241419.9	5033.5	ug/L	5033.5	ppb	19:03:41
1	Tl 190.801†	-237.5	-198.8	-0.2355	ug/L	-0.2355	ppb	19:04:06
1	U 409.014†	-6662.3	-4607.9	-143.59	ug/L	-143.59	ppb	19:03:46
1	V 292.402†	35214.2	36726.7	219.35	ug/L	219.35	ppb	19:03:46
1	Zn 213.857†	32693.6	31809.8	276.19	ug/L	276.19	ppb	19:03:46
1	SiO2†	1115648.6	1119042.7	73261	ug/L	73261	ppb	19:05:16
2	Sc Radial	5305.9	5305.9	99.9	%			19:03:08
2	Y RADIAL	6158.7	6158.7	108.6	%			19:03:08
2	Al 396.153Radial†	128362.5	128485.8	93679	ug/L	93679	ppb	19:02:48
2	Ca 317.933Radial†	12046.7	12035.2	18290	ug/L	18290	ppb	19:02:48
2	Fe 238.204 Radial†	12807.0	12807.4	105590	ug/L	105590	ppb	19:02:48
2	K 766.490 Radial†	91381.7	88808.9	16079	ug/L	16079	ppb	19:02:48
2	Mg 279.077 IEC†	534.1	531.4	16500	ug/L	16500	ppb	19:03:08
2	Na 589.592 Radial†	750.1	2367.7	690.01	ug/L	690.01	ppb	19:02:48
2	Sr 421.552†	34314.2	34326.9	216.71	ug/L	216.71	ppb	19:02:48
2	Sc 361.383	868375.4	868375.4	99.553	%			19:04:18
2	Y 371.029	787357.7	787357.7	107.34	%			19:04:18
2	Ag 328.068†	-6931.7	-7342.1	2.3546	ug/L	2.3546	ppb	19:04:18
2	As 188.979†	-85.8	-62.8	42.431	ug/L	42.431	ppb	19:04:38
2	B 249.677†	1077.9	1719.5	20.168	ug/L	20.168	ppb	19:04:18
2	Ba 233.527†	211806.8	212767.1	1603.8	ug/L	1603.8	ppb	19:04:18
2	Be 313.107†	-14248.3	-9987.8	7.7794	ug/L	7.7794	ppb	19:04:18
2	Cd 226.502†	1200.2	1408.2	4.0823	ug/L	4.0823	ppb	19:04:38
2	Co 228.616†	3002.9	3094.8	49.422	ug/L	49.422	ppb	19:04:38
2	Cr 267.716†	23178.6	23209.5	250.46	ug/L	250.46	ppb	19:04:38
2	Cu 324.752†	29094.9	22679.6	71.442	ug/L	71.442	ppb	19:04:18
2	Mn 257.610†	3251587.4	3265713.4	3465.2	ug/L	3465.2	ppb	19:04:13
2	Mo 202.031†	159.3	139.4	17.828	ug/L	17.828	ppb	19:04:38
2	Ni 231.604†	6721.6	6657.6	158.44	ug/L	158.44	ppb	19:04:38

2	P 214.914†	2131.6	1929.7	1035.9	ug/L	1035.9 ppb	19:04:38
2	Pb 220.353†	1136.2	1208.6	151.23	ug/L	151.23 ppb	19:04:38
2	S 181.975 Axial†	595.7	553.9	720.86	ug/L	720.86 ppb	19:04:38
2	Sb 206.836†	100.7	72.0	8.1502	ug/L	8.1502 ppb	19:04:38
2	Se 196.026†	-530.4	-508.7	41.185	ug/L	41.185 ppb	19:04:38
2	Si 251.611†	1089039.4	1093488.0	33478	ug/L	33478 ppb	19:04:13
2	Sn 189.927†	-108.1	-109.3	-13.776	ug/L	-13.776 ppb	19:04:38
2	Ti 334.940†	3197801.2	3213516.4	4990.1	ug/L	4990.1 ppb	19:04:13
2	Tl 190.801†	-235.0	-196.6	-0.0692	ug/L	-0.0692 ppb	19:04:38
2	U 409.014†	-6545.2	-4497.1	-140.38	ug/L	-140.38 ppb	19:04:18
2	V 292.402†	35138.4	36687.1	219.22	ug/L	219.22 ppb	19:04:18
2	Zn 213.857†	32676.2	31826.3	276.39	ug/L	276.39 ppb	19:04:18
2	SiO2†	1095647.3	1100110.2	72021	ug/L	72021 ppb	19:05:22
3	Sc Radial	5381.6	5381.6	101	%		19:03:33
3	Y RADIAL	6244.3	6244.3	110.1	%		19:03:33
3	Al 396.153Radial†	129635.2	127935.6	93278	ug/L	93278 ppb	19:03:13
3	Ca 317.933Radial†	12155.7	11973.2	18196	ug/L	18196 ppb	19:03:13
3	Fe 238.204 Radial†	12896.8	12715.8	104830	ug/L	104830 ppb	19:03:13
3	K 766.490 Radial†	91999.5	88132.8	15957	ug/L	15957 ppb	19:03:13
3	Mg 279.077 IEC†	544.1	533.7	16574	ug/L	16574 ppb	19:03:33
3	Na 589.592 Radial†	710.9	2318.4	675.64	ug/L	675.64 ppb	19:03:13
3	Sr 421.552†	34603.1	34129.3	215.46	ug/L	215.46 ppb	19:03:13
3	Sc 361.383	860462.3	860462.3	98.646	%		19:04:50
3	Y 371.029	781219.7	781219.7	106.51	%		19:04:50
3	Ag 328.068†	-6903.0	-7377.0	1.9549	ug/L	1.9549 ppb	19:04:50
3	As 188.979†	-70.0	-47.5	49.340	ug/L	49.340 ppb	19:05:10
3	B 249.677†	1203.1	1856.4	23.272	ug/L	23.272 ppb	19:04:50
3	Ba 233.527†	209588.2	212474.6	1601.6	ug/L	1601.6 ppb	19:04:50
3	Be 313.107†	-14268.5	-10140.0	7.9588	ug/L	7.9588 ppb	19:04:50
3	Cd 226.502†	1193.7	1412.7	4.2080	ug/L	4.2080 ppb	19:05:10
3	Co 228.616†	3008.3	3128.0	49.868	ug/L	49.868 ppb	19:05:10
3	Cr 267.716†	23096.1	23340.0	251.84	ug/L	251.84 ppb	19:05:10
3	Cu 324.752†	28870.7	22721.1	71.523	ug/L	71.523 ppb	19:04:50
3	Mn 257.610†	3283336.0	3327935.1	3531.0	ug/L	3531.0 ppb	19:04:44
3	Mo 202.031†	155.6	137.2	17.618	ug/L	17.618 ppb	19:05:10
3	Ni 231.604†	6697.7	6695.5	159.34	ug/L	159.34 ppb	19:05:10
3	P 214.914†	2131.1	1948.8	1047.4	ug/L	1047.4 ppb	19:05:10
3	Pb 220.353†	1119.4	1202.1	150.46	ug/L	150.46 ppb	19:05:10
3	S 181.975 Axial†	613.4	577.3	752.15	ug/L	752.15 ppb	19:05:10
3	Sb 206.836†	88.1	60.1	3.8411	ug/L	3.8411 ppb	19:05:10
3	Se 196.026†	-539.3	-522.6	30.245	ug/L	30.245 ppb	19:05:10
3	Si 251.611†	1101869.1	1116554.1	34184	ug/L	34184 ppb	19:04:44
3	Sn 189.927†	-124.2	-126.7	-16.718	ug/L	-16.718 ppb	19:05:10
3	Ti 334.940†	3233976.8	3279729.0	5092.9	ug/L	5092.9 ppb	19:04:44
3	Tl 190.801†	-240.0	-203.8	-0.9907	ug/L	-0.9907 ppb	19:05:10
3	U 409.014†	-6546.5	-4558.9	-142.06	ug/L	-142.06 ppb	19:04:50
3	V 292.402†	34732.1	36599.9	218.65	ug/L	218.65 ppb	19:04:50
3	Zn 213.857†	32302.8	31749.6	275.77	ug/L	275.77 ppb	19:04:50
3	SiO2†	1107656.6	1122405.6	73481	ug/L	73481 ppb	19:05:28

Mean Data: 243628005|937486|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	866037.3	99.285	%	0.5559				0.56%
Sc Radial	5338.1	101	%	0.7				0.73%
Y 371.029	785742.4	107.12	%	0.541				0.51%
Y RADIAL	6188.3	109.1	%	0.86				0.78%
Ag 328.068†	-7374.9	2.1818	ug/L	0.20527	2.1818	ppb	0.20527	9.41%
Al 396.153Radial†	128470.2	93668	ug/L	384.3	93668	ppb	384.3	0.41%
As 188.979†	-61.0	43.550	ug/L	5.3196	43.550	ppb	5.3196	12.21%
B 249.677†	1760.7	21.079	ug/L	1.9080	21.079	ppb	1.9080	9.05%
Ba 233.527†	212649.0	1602.9	ug/L	1.18	1602.9	ppb	1.18	0.07%
Be 313.107†	-10042.8	7.8705	ug/L	0.08970	7.8705	ppb	0.08970	1.14%
Ca 317.933Radial†	12035.0	18290	ug/L	93.7	18290	ppb	93.7	0.51%
Cd 226.502†	1402.3	4.0281	ug/L	0.21230	4.0281	ppb	0.21230	5.27%
Co 228.616†	3111.7	49.652	ug/L	0.2230	49.652	ppb	0.2230	0.45%
Cr 267.716†	23246.7	250.86	ug/L	0.857	250.86	ppb	0.857	0.34%
Cu 324.752†	22643.8	71.334	ug/L	0.2597	71.334	ppb	0.2597	0.36%
Fe 238.204 Radial†	12797.1	105500	ug/L	632.2	105500	ppb	632.2	0.60%
K 766.490 Radial†	88681.7	16056	ug/L	90.1	16056	ppb	90.1	0.56%

Mg 279.077 IEC†	532.4	16533	ug/L	37.4	16533	ppb	37.4	0.23%
Mn 257.610†	3294662.7	3495.8	ug/L	33.11	3495.8	ppb	33.11	0.95%
Mo 202.031†	137.8	17.709	ug/L	0.1078	17.709	ppb	0.1078	0.61%
Na 589.592 Radial†	2340.4	682.04	ug/L	7.314	682.04	ppb	7.314	1.07%
Ni 231.604†	6676.8	158.90	ug/L	0.450	158.90	ppb	0.450	0.28%
P 214.914†	1936.6	1040.0	ug/L	6.42	1040.0	ppb	6.42	0.62%
Pb 220.353†	1202.4	150.51	ug/L	0.700	150.51	ppb	0.700	0.46%
S 181.975 Axial†	567.0	738.38	ug/L	15.976	738.38	ppb	15.976	2.16%
Sb 206.836†	65.9	5.9627	ug/L	2.15533	5.9627	ppb	2.15533	36.15%
Se 196.026†	-516.0	36.432	ug/L	5.6096	36.432	ppb	5.6096	15.40%
Si 251.611†	1104349.3	33811	ug/L	354.9	33811	ppb	354.9	1.05%
Sn 189.927†	-119.1	-15.415	ug/L	1.4996	-15.415	ppb	1.4996	9.73%
Sr 421.552†	34292.2	216.49	ug/L	0.939	216.49	ppb	0.939	0.43%
Ti 334.940†	3244888.4	5038.8	ug/L	51.60	5038.8	ppb	51.60	1.02%
Tl 190.801†	-199.7	-0.4318	ug/L	0.49112	-0.4318	ppb	0.49112	113.73%
U 409.014†	-4554.7	-142.01	ug/L	1.603	-142.01	ppb	1.603	1.13%
V 292.402†	36671.2	219.07	ug/L	0.375	219.07	ppb	0.375	0.17%
Zn 213.857†	31795.2	276.12	ug/L	0.320	276.12	ppb	0.320	0.12%
SiO2†	1113852.8	72921	ug/L	786.9	72921	ppb	786.9	1.08%

Sequence No.: 36
Sample ID: 243628006|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 62
Date Collected: 1/13/2010 19:07:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243628006|937486|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5370.4	5370.4	101	%			19:09:52
1	Y RADIAL	6375.3	6375.3	112.4	%			19:09:52
1	Al 396.153Radial†	229251.0	226706.3	165290	ug/L	165290	ppb	19:09:32
1	Ca 317.933Radial†	15653.5	15457.1	23491	ug/L	23491	ppb	19:09:32
1	Fe 238.204 Radial†	18163.8	17950.7	147990	ug/L	147990	ppb	19:09:32
1	K 766.490 Radial†	119989.5	116000.2	21003	ug/L	21003	ppb	19:09:32
1	Mg 279.077 IEC†	779.8	767.9	23850	ug/L	23850	ppb	19:09:52
1	Na 589.592 Radial†	2641.6	4229.1	1232.4	ug/L	1232.4	ppb	19:09:32
1	Sr 421.552†	50089.4	49514.0	312.61	ug/L	312.61	ppb	19:09:32
1	Sc 361.383	860117.7	860117.7	98.606	%			19:10:55
1	Y 371.029	793912.7	793912.7	108.24	%			19:10:55
1	Ag 328.068†	-9740.6	-10257.6	3.4142	ug/L	3.4142	ppb	19:10:55
1	As 188.979†	-110.4	-88.5	54.646	ug/L	54.646	ppb	19:11:15
1	B 249.677†	1562.3	2221.2	24.194	ug/L	24.194	ppb	19:10:55
1	Ba 233.527†	256023.9	259651.8	1957.9	ug/L	1957.9	ppb	19:10:55
1	Be 313.107†	-11785.1	-7627.3	11.940	ug/L	11.940	ppb	19:10:55
1	Cd 226.502†	1245.2	1465.4	0.2560	ug/L	0.2560	ppb	19:11:15
1	Co 228.616†	3416.6	3543.3	54.733	ug/L	54.733	ppb	19:11:15
1	Cr 267.716†	10876.2	10956.7	120.48	ug/L	120.48	ppb	19:11:15
1	Cu 324.752†	29229.4	23096.5	74.925	ug/L	74.925	ppb	19:10:55
1	Mn 257.610†	3148814.7	3192845.6	3392.0	ug/L	3392.0	ppb	19:10:50
1	Mo 202.031†	-76.9	-98.6	5.1124	ug/L	5.1124	ppb	19:11:15
1	Ni 231.604†	3916.6	3877.8	92.264	ug/L	92.264	ppb	19:11:15
1	P 214.914†	2279.4	2100.1	1117.5	ug/L	1117.5	ppb	19:11:15
1	Pb 220.353†	823.6	902.6	126.83	ug/L	126.83	ppb	19:11:15
1	S 181.975 Axial†	423.6	385.0	482.34	ug/L	482.34	ppb	19:11:15
1	Sb 206.836†	89.2	61.2	-1.1927	ug/L	-1.1927	ppb	19:11:15
1	Se 196.026†	-738.6	-724.9	52.153	ug/L	52.153	ppb	19:11:15
1	Si 251.611†	1074889.9	1089641.0	33361	ug/L	33361	ppb	19:10:50
1	Sn 189.927†	-84.4	-86.3	-8.4169	ug/L	-8.4169	ppb	19:11:15
1	Ti 334.940†	4096915.1	4156178.9	6453.8	ug/L	6453.8	ppb	19:10:50
1	Tl 190.801†	-265.8	-230.1	1.7597	ug/L	1.7597	ppb	19:11:15
1	U 409.014†	-8308.4	-6348.5	-197.53	ug/L	-197.53	ppb	19:10:55
1	V 292.402†	46991.5	49046.7	292.13	ug/L	292.13	ppb	19:10:55
1	Zn 213.857†	31105.3	30548.3	261.15	ug/L	261.15	ppb	19:11:15
1	SiO2†	1084786.5	1099662.0	71992	ug/L	71992	ppb	19:12:25
2	Sc Radial	5332.9	5332.9	100	%			19:10:17
2	Y RADIAL	6346.2	6346.2	111.9	%			19:10:17
2	Al 396.153Radial†	225292.0	224356.6	163580	ug/L	163580	ppb	19:09:57
2	Ca 317.933Radial†	15425.9	15339.2	23312	ug/L	23312	ppb	19:09:57
2	Fe 238.204 Radial†	17723.2	17638.1	145410	ug/L	145410	ppb	19:09:57
2	K 766.490 Radial†	118082.3	114934.7	20810	ug/L	20810	ppb	19:09:57
2	Mg 279.077 IEC†	777.8	771.3	23959	ug/L	23959	ppb	19:10:17
2	Na 589.592 Radial†	2567.7	4173.8	1216.3	ug/L	1216.3	ppb	19:09:57
2	Sr 421.552†	48836.5	48614.4	306.93	ug/L	306.93	ppb	19:09:57
2	Sc 361.383	862492.0	862492.0	98.878	%			19:11:27
2	Y 371.029	797513.6	797513.6	108.73	%			19:11:27
2	Ag 328.068†	-9725.7	-10215.3	2.7848	ug/L	2.7848	ppb	19:11:27
2	As 188.979†	-100.6	-78.3	57.990	ug/L	57.990	ppb	19:11:47
2	B 249.677†	1484.1	2137.7	22.793	ug/L	22.793	ppb	19:11:27
2	Ba 233.527†	256496.9	259415.5	1956.0	ug/L	1956.0	ppb	19:11:27
2	Be 313.107†	-12045.2	-7857.4	11.808	ug/L	11.808	ppb	19:11:27
2	Cd 226.502†	1273.0	1490.0	0.7806	ug/L	0.7806	ppb	19:11:47
2	Co 228.616†	3415.8	3533.0	54.614	ug/L	54.614	ppb	19:11:47
2	Cr 267.716†	10875.4	10925.6	120.11	ug/L	120.11	ppb	19:11:47
2	Cu 324.752†	29024.6	22807.9	73.957	ug/L	73.957	ppb	19:11:27
2	Mn 257.610†	3143344.6	3178522.9	3376.6	ug/L	3376.6	ppb	19:11:22
2	Mo 202.031†	-84.2	-105.7	4.4296	ug/L	4.4296	ppb	19:11:47
2	Ni 231.604†	3918.8	3869.1	92.057	ug/L	92.057	ppb	19:11:47

2	P 214.914†	2256.5	2070.5	1102.3	ug/L	1102.3 ppb	19:11:47
2	Pb 220.353†	847.6	924.6	129.27	ug/L	129.27 ppb	19:11:47
2	S 181.975 Axial†	419.0	379.3	474.97	ug/L	474.97 ppb	19:11:47
2	Sb 206.836†	84.2	55.9	-2.9100	ug/L	-2.9100 ppb	19:11:47
2	Se 196.026†	-744.4	-728.7	41.298	ug/L	41.298 ppb	19:11:47
2	Si 251.611†	1071710.8	1083425.1	33170	ug/L	33170 ppb	19:11:22
2	Sn 189.927†	-87.1	-88.8	-8.9044	ug/L	-8.9044 ppb	19:11:47
2	Ti 334.940†	4094086.3	4141880.8	6431.6	ug/L	6431.6 ppb	19:11:22
2	Tl 190.801†	-271.8	-235.4	-0.0395	ug/L	-0.0395 ppb	19:11:47
2	U 409.014†	-8688.7	-6709.8	-207.50	ug/L	-207.50 ppb	19:11:27
2	V 292.402†	47362.1	49290.3	294.10	ug/L	294.10 ppb	19:11:27
2	Zn 213.857†	31129.8	30486.2	260.84	ug/L	260.84 ppb	19:11:47
2	SiO2†	1075404.8	1087145.5	71173	ug/L	71173 ppb	19:12:31
3	Sc Radial	5327.2	5327.2	100	%		19:10:42
3	Y RADIAL	6318.2	6318.2	111.4	%		19:10:42
3	Al 396.153Radial†	229473.3	228763.6	166790	ug/L	166790 ppb	19:10:22
3	Ca 317.933Radial†	15658.1	15586.9	23688	ug/L	23688 ppb	19:10:22
3	Fe 238.204 Radial†	18035.4	17968.1	148140	ug/L	148140 ppb	19:10:22
3	K 766.490 Radial†	119662.0	116634.5	21118	ug/L	21118 ppb	19:10:22
3	Mg 279.077 IEC†	776.1	770.5	23931	ug/L	23931 ppb	19:10:42
3	Na 589.592 Radial†	2548.0	4156.9	1211.4	ug/L	1211.4 ppb	19:10:22
3	Sr 421.552†	49658.4	49485.4	312.43	ug/L	312.43 ppb	19:10:22
3	Sc 361.383	864491.8	864491.8	99.108	%		19:11:59
3	Y 371.029	799043.8	799043.8	108.94	%		19:11:59
3	Ag 328.068†	-9692.7	-10159.2	3.9036	ug/L	3.9036 ppb	19:11:59
3	As 188.979†	-111.6	-89.2	54.904	ug/L	54.904 ppb	19:12:19
3	B 249.677†	1548.6	2199.3	23.694	ug/L	23.694 ppb	19:11:59
3	Ba 233.527†	256659.3	258979.2	1952.8	ug/L	1952.8 ppb	19:11:59
3	Be 313.107†	-11854.6	-7636.9	12.072	ug/L	12.072 ppb	19:11:59
3	Cd 226.502†	1256.8	1470.7	0.2961	ug/L	0.2961 ppb	19:12:19
3	Co 228.616†	3427.2	3536.5	54.469	ug/L	54.469 ppb	19:12:19
3	Cr 267.716†	10901.0	10926.0	120.16	ug/L	120.16 ppb	19:12:19
3	Cu 324.752†	29156.1	22872.7	74.284	ug/L	74.284 ppb	19:11:59
3	Mn 257.610†	3191747.0	3220007.2	3420.8	ug/L	3420.8 ppb	19:11:53
3	Mo 202.031†	-85.5	-106.9	4.5661	ug/L	4.5661 ppb	19:12:19
3	Ni 231.604†	3914.5	3855.5	91.734	ug/L	91.734 ppb	19:12:19
3	P 214.914†	2261.6	2070.5	1100.8	ug/L	1100.8 ppb	19:12:19
3	Pb 220.353†	849.9	924.9	129.74	ug/L	129.74 ppb	19:12:19
3	S 181.975 Axial†	425.5	384.8	481.79	ug/L	481.79 ppb	19:12:19
3	Sb 206.836†	105.5	77.3	3.8797	ug/L	3.8797 ppb	19:12:19
3	Se 196.026†	-750.4	-733.0	47.760	ug/L	47.760 ppb	19:12:19
3	Si 251.611†	1088935.6	1098297.6	33626	ug/L	33626 ppb	19:11:53
3	Sn 189.927†	-76.6	-78.0	-6.9975	ug/L	-6.9975 ppb	19:12:19
3	Ti 334.940†	4155730.1	4194501.3	6513.3	ug/L	6513.3 ppb	19:11:53
3	Tl 190.801†	-250.8	-213.6	7.2102	ug/L	7.2102 ppb	19:12:19
3	U 409.014†	-8437.9	-6436.5	-200.05	ug/L	-200.05 ppb	19:11:59
3	V 292.402†	47458.8	49277.0	293.54	ug/L	293.54 ppb	19:11:59
3	Zn 213.857†	31166.4	30450.3	260.25	ug/L	260.25 ppb	19:12:19
3	SiO2†	1081687.5	1090968.8	71423	ug/L	71423 ppb	19:12:37

Mean Data: 243628006|937486|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	862367.2	98.864	%	0.2510				0.25%
Sc Radial	5343.5	101	%	0.4				0.44%
Y 371.029	796823.4	108.63	%	0.359				0.33%
Y RADIAL	6346.6	111.9	%	0.50				0.45%
Ag 328.068†	-10210.7	3.3676	ug/L	0.56087	3.3676	ppb	0.56087	16.65%
Al 396.153Radial†	226608.8	165220	ug/L	1607.7	165220	ppb	1607.7	0.97%
As 188.979†	-85.3	55.847	ug/L	1.8603	55.847	ppb	1.8603	3.33%
B 249.677†	2186.1	23.560	ug/L	0.7099	23.560	ppb	0.7099	3.01%
Ba 233.527†	259348.8	1955.6	ug/L	2.56	1955.6	ppb	2.56	0.13%
Be 313.107†	-7707.2	11.940	ug/L	0.1319	11.940	ppb	0.1319	1.10%
Ca 317.933Radial†	15461.1	23497	ug/L	188.4	23497	ppb	188.4	0.80%
Cd 226.502†	1475.4	0.4443	ug/L	0.29199	0.4443	ppb	0.29199	65.73%
Co 228.616†	3537.6	54.605	ug/L	0.1323	54.605	ppb	0.1323	0.24%
Cr 267.716†	10936.1	120.25	ug/L	0.204	120.25	ppb	0.204	0.17%
Cu 324.752†	22925.7	74.388	ug/L	0.4924	74.388	ppb	0.4924	0.66%
Fe 238.204 Radial†	17852.3	147180	ug/L	1531.1	147180	ppb	1531.1	1.04%
K 766.490 Radial†	115856.5	20977	ug/L	155.5	20977	ppb	155.5	0.74%

Mg 279.077 IEC†	769.9	23913	ug/L	56.2	23913	ppb	56.2	0.23%
Mn 257.610†	3197125.2	3396.5	ug/L	22.42	3396.5	ppb	22.42	0.66%
Mo 202.031†	-103.7	4.7027	ug/L	0.36134	4.7027	ppb	0.36134	7.68%
Na 589.592 Radial†	4186.6	1220.1	ug/L	11.00	1220.1	ppb	11.00	0.90%
Ni 231.604†	3867.4	92.018	ug/L	0.2672	92.018	ppb	0.2672	0.29%
P 214.914†	2080.4	1106.9	ug/L	9.24	1106.9	ppb	9.24	0.83%
Pb 220.353†	917.3	128.61	ug/L	1.561	128.61	ppb	1.561	1.21%
S 181.975 Axial†	383.0	479.70	ug/L	4.108	479.70	ppb	4.108	0.86%
Sb 206.836†	64.8	-0.0743	ug/L	3.53030	-0.0743	ppb	3.53030	>999.9%
Se 196.026†	-728.9	47.070	ug/L	5.4603	47.070	ppb	5.4603	11.60%
Si 251.611†	1090454.6	33386	ug/L	228.7	33386	ppb	228.7	0.68%
Sn 189.927†	-84.4	-8.1063	ug/L	0.99069	-8.1063	ppb	0.99069	12.22%
Sr 421.552†	49204.6	310.66	ug/L	3.229	310.66	ppb	3.229	1.04%
Ti 334.940†	4164187.0	6466.2	ug/L	42.27	6466.2	ppb	42.27	0.65%
Tl 190.801†	-226.4	2.9768	ug/L	3.77499	2.9768	ppb	3.77499	126.81%
U 409.014†	-6498.3	-201.69	ug/L	5.187	-201.69	ppb	5.187	2.57%
V 292.402†	49204.7	293.26	ug/L	1.014	293.26	ppb	1.014	0.35%
Zn 213.857†	30494.9	260.74	ug/L	0.455	260.74	ppb	0.455	0.17%
SiO2†	1092592.1	71530	ug/L	419.9	71530	ppb	419.9	0.59%

Sequence No.: 37
Sample ID: 243628007|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 63
Date Collected: 1/13/2010 19:14:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243628007|937486|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5371.9	5371.9	101	%			19:17:00
1	Y RADIAL	6315.6	6315.6	111.3	%			19:17:00
1	Al 396.153Radial†	177578.9	175562.2	128000	ug/L	128000	ppb	19:16:40
1	Ca 317.933Radial†	15329.8	15132.7	22998	ug/L	22998	ppb	19:16:40
1	Fe 238.204 Radial†	15808.7	15617.5	128760	ug/L	128760	ppb	19:16:40
1	K 766.490 Radial†	121077.7	117042.6	21192	ug/L	21192	ppb	19:16:40
1	Mg 279.077 IEC†	657.9	647.1	20094	ug/L	20094	ppb	19:17:00
1	Na 589.592 Radial†	871.4	2478.4	722.27	ug/L	722.27	ppb	19:16:40
1	Sr 421.552†	44844.6	44315.4	279.78	ug/L	279.78	ppb	19:16:40
1	Sc 361.383	856403.1	856403.1	98.180	%			19:18:03
1	Y 371.029	797519.6	797519.6	108.73	%			19:18:03
1	Ag 328.068†	-8435.4	-8971.1	2.7794	ug/L	2.7794	ppb	19:18:03
1	As 188.979†	-91.8	-70.1	54.411	ug/L	54.411	ppb	19:18:23
1	B 249.677†	1528.0	2193.1	26.691	ug/L	26.691	ppb	19:18:03
1	Ba 233.527†	264680.9	269595.5	2032.0	ug/L	2032.0	ppb	19:18:03
1	Be 313.107†	-13897.8	-9830.9	10.320	ug/L	10.320	ppb	19:18:03
1	Cd 226.502†	1131.4	1354.9	1.0764	ug/L	1.0764	ppb	19:18:23
1	Co 228.616†	3651.5	3797.6	60.804	ug/L	60.804	ppb	19:18:23
1	Cr 267.716†	12506.6	12665.2	138.32	ug/L	138.32	ppb	19:18:23
1	Cu 324.752†	29493.6	23494.2	75.056	ug/L	75.056	ppb	19:18:03
1	Mn 257.610†	4135295.3	4211461.1	4468.1	ug/L	4468.1	ppb	19:17:58
1	Mo 202.031†	-56.2	-77.8	5.0194	ug/L	5.0194	ppb	19:18:23
1	Ni 231.604†	4025.3	4005.7	95.305	ug/L	95.305	ppb	19:18:23
1	P 214.914†	2580.6	2416.9	1305.8	ug/L	1305.8	ppb	19:18:23
1	Pb 220.353†	1002.4	1088.3	142.36	ug/L	142.36	ppb	19:18:23
1	S 181.975 Axial†	854.0	825.3	1076.3	ug/L	1076.3	ppb	19:18:23
1	Sb 206.836†	96.8	69.4	3.1748	ug/L	3.1748	ppb	19:18:23
1	Se 196.026†	-656.5	-644.5	36.124	ug/L	36.124	ppb	19:18:23
1	Si 251.611†	1151823.2	1172728.4	35905	ug/L	35905	ppb	19:17:58
1	Sn 189.927†	-84.1	-86.4	-8.8362	ug/L	-8.8362	ppb	19:18:23
1	Ti 334.940†	3845992.9	3918627.4	6085.2	ug/L	6085.2	ppb	19:17:58
1	Tl 190.801†	-288.4	-254.3	-3.1425	ug/L	-3.1425	ppb	19:18:23
1	U 409.014†	-8003.3	-6074.2	-187.59	ug/L	-187.59	ppb	19:18:03
1	V 292.402†	41976.2	44145.1	263.25	ug/L	263.25	ppb	19:18:03
1	Zn 213.857†	29716.1	29270.1	251.43	ug/L	251.43	ppb	19:18:23
1	SiO2†	1142077.3	1162786.4	76125	ug/L	76125	ppb	19:19:33
2	Sc Radial	5357.5	5357.5	101	%			19:17:25
2	Y RADIAL	6323.8	6323.8	111.5	%			19:17:25
2	Al 396.153Radial†	180251.5	178682.2	130280	ug/L	130280	ppb	19:17:05
2	Ca 317.933Radial†	15492.1	15334.2	23304	ug/L	23304	ppb	19:17:05
2	Fe 238.204 Radial†	15984.5	15833.6	130540	ug/L	130540	ppb	19:17:05
2	K 766.490 Radial†	122652.1	118924.3	21532	ug/L	21532	ppb	19:17:05
2	Mg 279.077 IEC†	659.6	650.6	20203	ug/L	20203	ppb	19:17:25
2	Na 589.592 Radial†	872.0	2481.3	723.11	ug/L	723.11	ppb	19:17:05
2	Sr 421.552†	45389.0	44973.9	283.93	ug/L	283.93	ppb	19:17:05
2	Sc 361.383	852704.2	852704.2	97.756	%			19:18:35
2	Y 371.029	795488.4	795488.4	108.45	%			19:18:35
2	Ag 328.068†	-8343.5	-8914.3	3.6009	ug/L	3.6009	ppb	19:18:35
2	As 188.979†	-84.3	-62.9	57.920	ug/L	57.920	ppb	19:18:55
2	B 249.677†	1489.0	2159.9	25.678	ug/L	25.678	ppb	19:18:35
2	Ba 233.527†	263491.5	269548.2	2031.7	ug/L	2031.7	ppb	19:18:35
2	Be 313.107†	-14197.6	-10199.0	10.229	ug/L	10.229	ppb	19:18:35
2	Cd 226.502†	1129.7	1358.3	0.9281	ug/L	0.9281	ppb	19:18:55
2	Co 228.616†	3640.6	3802.6	60.840	ug/L	60.840	ppb	19:18:55
2	Cr 267.716†	12516.9	12731.0	139.06	ug/L	139.06	ppb	19:18:55
2	Cu 324.752†	29307.0	23433.7	74.973	ug/L	74.973	ppb	19:18:35
2	Mn 257.610†	4132260.3	4226627.1	4484.3	ug/L	4484.3	ppb	19:18:30
2	Mo 202.031†	-58.6	-80.5	4.9783	ug/L	4.9783	ppb	19:18:55
2	Ni 231.604†	4018.0	4016.0	95.552	ug/L	95.552	ppb	19:18:55

2	P 214.914†	2569.8	2417.3	1305.2	ug/L	1305.2 ppb	19:18:55
2	Pb 220.353†	1012.4	1103.0	144.40	ug/L	144.40 ppb	19:18:55
2	S 181.975 Axial†	849.0	823.9	1074.0	ug/L	1074.0 ppb	19:18:55
2	Sb 206.836†	101.3	74.4	4.7076	ug/L	4.7076 ppb	19:18:55
2	Se 196.026†	-667.9	-659.1	33.196	ug/L	33.196 ppb	19:18:55
2	Si 251.611†	1149144.0	1175076.7	35976	ug/L	35976 ppb	19:18:30
2	Sn 189.927†	-100.5	-103.5	-11.627	ug/L	-11.627 ppb	19:18:55
2	Ti 334.940†	3840222.0	3929716.5	6102.5	ug/L	6102.5 ppb	19:18:30
2	Tl 190.801†	-274.2	-241.0	0.9464	ug/L	0.9464 ppb	19:18:55
2	U 409.014†	-7911.0	-6015.2	-186.11	ug/L	-186.11 ppb	19:18:35
2	V 292.402†	41694.0	44041.9	262.30	ug/L	262.30 ppb	19:18:35
2	Zn 213.857†	29700.3	29385.3	252.30	ug/L	252.30 ppb	19:18:55
2	SiO2†	1154622.1	1180665.1	77295	ug/L	77295 ppb	19:19:39
3	Sc Radial	5379.3	5379.3	101	%		19:17:50
3	Y RADIAL	6350.2	6350.2	112.0	%		19:17:50
3	Al 396.153Radial†	183985.9	181644.2	132440	ug/L	132440 ppb	19:17:30
3	Ca 317.933Radial†	15791.6	15567.6	23659	ug/L	23659 ppb	19:17:30
3	Fe 238.204 Radial†	16274.1	16055.3	132370	ug/L	132370 ppb	19:17:30
3	K 766.490 Radial†	124926.7	120676.7	21850	ug/L	21850 ppb	19:17:30
3	Mg 279.077 IEC†	653.9	642.3	19941	ug/L	19941 ppb	19:17:50
3	Na 589.592 Radial†	976.6	2581.1	752.19	ug/L	752.19 ppb	19:17:30
3	Sr 421.552†	46414.0	45803.4	289.17	ug/L	289.17 ppb	19:17:30
3	Sc 361.383	862753.0	862753.0	98.908	%		19:19:07
3	Y 371.029	803783.3	803783.3	109.58	%		19:19:07
3	Ag 328.068†	-8469.5	-8942.2	4.0729	ug/L	4.0729 ppb	19:19:07
3	As 188.979†	-101.0	-78.7	50.921	ug/L	50.921 ppb	19:19:27
3	B 249.677†	1496.0	2149.2	25.151	ug/L	25.151 ppb	19:19:07
3	Ba 233.527†	267536.3	270498.2	2038.9	ug/L	2038.9 ppb	19:19:07
3	Be 313.107†	-13735.1	-9562.3	10.198	ug/L	10.198 ppb	19:19:07
3	Cd 226.502†	1112.5	1327.3	0.4108	ug/L	0.4108 ppb	19:19:27
3	Co 228.616†	3636.4	3755.0	60.120	ug/L	60.120 ppb	19:19:27
3	Cr 267.716†	12454.5	12518.8	136.83	ug/L	136.83 ppb	19:19:27
3	Cu 324.752†	30030.0	23815.4	76.178	ug/L	76.178 ppb	19:19:07
3	Mn 257.610†	4107000.7	4151854.3	4405.4	ug/L	4405.4 ppb	19:19:01
3	Mo 202.031†	-62.0	-83.2	4.9369	ug/L	4.9369 ppb	19:19:27
3	Ni 231.604†	4018.8	3969.0	94.432	ug/L	94.432 ppb	19:19:27
3	P 214.914†	2559.9	2376.7	1280.6	ug/L	1280.6 ppb	19:19:27
3	Pb 220.353†	991.8	1070.0	140.85	ug/L	140.85 ppb	19:19:27
3	S 181.975 Axial†	841.5	806.3	1050.1	ug/L	1050.1 ppb	19:19:27
3	Sb 206.836†	93.0	64.8	1.8980	ug/L	1.8980 ppb	19:19:27
3	Se 196.026†	-664.0	-647.2	46.548	ug/L	46.548 ppb	19:19:27
3	Si 251.611†	1142677.2	1154846.9	35357	ug/L	35357 ppb	19:19:01
3	Sn 189.927†	-100.8	-102.7	-11.395	ug/L	-11.395 ppb	19:19:27
3	Ti 334.940†	3813509.4	3856954.2	5989.6	ug/L	5989.6 ppb	19:19:01
3	Tl 190.801†	-275.0	-238.6	0.3239	ug/L	0.3239 ppb	19:19:27
3	U 409.014†	-8069.6	-6081.3	-188.19	ug/L	-188.19 ppb	19:19:07
3	V 292.402†	42481.3	44341.2	264.10	ug/L	264.10 ppb	19:19:07
3	Zn 213.857†	29636.5	28966.9	248.35	ug/L	248.35 ppb	19:19:27
3	SiO2†	1147063.5	1159266.1	75895	ug/L	75895 ppb	19:19:45

Mean Data: 243628007|937486|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	857286.8	98.282	%	0.5826				0.59%
Sc Radial	5369.6	101	%	0.2				0.21%
Y 371.029	798930.4	108.92	%	0.589				0.54%
Y RADIAL	6329.9	111.6	%	0.32				0.29%
Ag 328.068†	-8942.5	3.4844	ug/L	0.65455	3.4844	ppb	0.65455	18.79%
Al 396.153Radial†	178629.5	130240	ug/L	2217.5	130240	ppb	2217.5	1.70%
As 188.979†	-70.6	54.417	ug/L	3.4995	54.417	ppb	3.4995	6.43%
B 249.677†	2167.4	25.840	ug/L	0.7824	25.840	ppb	0.7824	3.03%
Ba 233.527†	269880.7	2034.2	ug/L	4.07	2034.2	ppb	4.07	0.20%
Be 313.107†	-9864.1	10.249	ug/L	0.0635	10.249	ppb	0.0635	0.62%
Ca 317.933Radial†	15344.8	23320	ug/L	330.8	23320	ppb	330.8	1.42%
Cd 226.502†	1346.9	0.8051	ug/L	0.34941	0.8051	ppb	0.34941	43.40%
Co 228.616†	3785.1	60.588	ug/L	0.4054	60.588	ppb	0.4054	0.67%
Cr 267.716†	12638.3	138.07	ug/L	1.135	138.07	ppb	1.135	0.82%
Cu 324.752†	23581.1	75.402	ug/L	0.6733	75.402	ppb	0.6733	0.89%
Fe 238.204 Radial†	15835.5	130550	ug/L	1804.6	130550	ppb	1804.6	1.38%
K 766.490 Radial†	118881.2	21525	ug/L	329.1	21525	ppb	329.1	1.53%

Mg 279.077 IEC†	646.7	20079	ug/L	131.4	20079	ppb	131.4	0.65%
Mn 257.610†	4196647.5	4452.6	ug/L	41.68	4452.6	ppb	41.68	0.94%
Mo 202.031†	-80.5	4.9782	ug/L	0.04127	4.9782	ppb	0.04127	0.83%
Na 589.592 Radial†	2513.6	732.52	ug/L	17.038	732.52	ppb	17.038	2.33%
Ni 231.604†	3996.9	95.096	ug/L	0.5884	95.096	ppb	0.5884	0.62%
P 214.914†	2403.6	1297.2	ug/L	14.35	1297.2	ppb	14.35	1.11%
Pb 220.353†	1087.1	142.53	ug/L	1.783	142.53	ppb	1.783	1.25%
S 181.975 Axial†	818.5	1066.8	ug/L	14.52	1066.8	ppb	14.52	1.36%
Sb 206.836†	69.5	3.2601	ug/L	1.40677	3.2601	ppb	1.40677	43.15%
Se 196.026†	-650.3	38.623	ug/L	7.0179	38.623	ppb	7.0179	18.17%
Si 251.611†	1167550.7	35746	ug/L	338.7	35746	ppb	338.7	0.95%
Sn 189.927†	-97.5	-10.619	ug/L	1.5486	-10.619	ppb	1.5486	14.58%
Sr 421.552†	45030.9	284.29	ug/L	4.708	284.29	ppb	4.708	1.66%
Ti 334.940†	3901766.0	6059.1	ug/L	60.82	6059.1	ppb	60.82	1.00%
Tl 190.801†	-244.6	-0.6241	ug/L	2.20309	-0.6241	ppb	2.20309	353.03%
U 409.014†	-6056.9	-187.30	ug/L	1.070	-187.30	ppb	1.070	0.57%
V 292.402†	44176.1	263.21	ug/L	0.900	263.21	ppb	0.900	0.34%
Zn 213.857†	29207.4	250.69	ug/L	2.078	250.69	ppb	2.078	0.83%
SiO2†	1167572.5	76438	ug/L	751.2	76438	ppb	751.2	0.98%

Sequence No.: 38
Sample ID: 243628008|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 64
Date Collected: 1/13/2010 19:21:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243628008|937486|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5373.9	5373.9	101	%			19:24:08
1	Y RADIAL	6453.3	6453.3	113.8	%			19:24:08
1	Al 396.153Radial†	224853.9	222213.6	162020	ug/L	162020	ppb	19:23:48
1	Ca 317.933Radial†	14896.8	14699.2	22339	ug/L	22339	ppb	19:23:48
1	Fe 238.204 Radial†	16987.6	16776.7	138310	ug/L	138310	ppb	19:23:48
1	K 766.490 Radial†	119984.2	115917.7	20988	ug/L	20988	ppb	19:23:48
1	Mg 279.077 IEC†	755.2	743.1	23085	ug/L	23085	ppb	19:24:08
1	Na 589.592 Radial†	3096.6	4676.9	1363.0	ug/L	1363.0	ppb	19:23:48
1	Sr 421.552†	47672.3	47093.2	297.33	ug/L	297.33	ppb	19:23:48
1	Sc 361.383	862074.1	862074.1	98.830	%			19:25:12
1	Y 371.029	801941.1	801941.1	109.33	%			19:25:12
1	Ag 328.068†	-9040.3	-9526.5	3.4683	ug/L	3.4683	ppb	19:25:12
1	As 188.979†	-108.0	-85.9	53.391	ug/L	53.391	ppb	19:25:32
1	B 249.677†	1376.5	2029.6	21.587	ug/L	21.587	ppb	19:25:12
1	Ba 233.527†	259729.7	262812.3	1981.3	ug/L	1981.3	ppb	19:25:12
1	Be 313.107†	-11684.8	-7498.6	11.974	ug/L	11.974	ppb	19:25:12
1	Cd 226.502†	1147.2	1363.4	0.1660	ug/L	0.1660	ppb	19:25:32
1	Co 228.616†	3442.4	3561.6	55.264	ug/L	55.264	ppb	19:25:32
1	Cr 267.716†	9343.9	9381.3	103.43	ug/L	103.43	ppb	19:25:32
1	Cu 324.752†	29353.0	23154.3	74.585	ug/L	74.585	ppb	19:25:12
1	Mn 257.610†	3513407.7	3554506.4	3773.8	ug/L	3773.8	ppb	19:25:06
1	Mo 202.031†	-66.0	-87.4	5.1040	ug/L	5.1040	ppb	19:25:32
1	Ni 231.604†	3462.0	3408.7	81.099	ug/L	81.099	ppb	19:25:32
1	P 214.914†	2129.1	1942.8	1033.9	ug/L	1033.9	ppb	19:25:32
1	Pb 220.353†	888.5	966.4	134.48	ug/L	134.48	ppb	19:25:32
1	S 181.975 Axial†	564.3	526.4	671.48	ug/L	671.48	ppb	19:25:32
1	Sb 206.836†	100.1	72.1	2.1514	ug/L	2.1514	ppb	19:25:32
1	Se 196.026†	-706.4	-690.6	41.162	ug/L	41.162	ppb	19:25:32
1	Si 251.611†	1067247.8	1079434.6	33048	ug/L	33048	ppb	19:25:06
1	Sn 189.927†	-98.7	-100.7	-11.164	ug/L	-11.164	ppb	19:25:32
1	Ti 334.940†	4102911.5	4152817.4	6448.5	ug/L	6448.5	ppb	19:25:06
1	Tl 190.801†	-278.5	-242.3	0.0288	ug/L	0.0288	ppb	19:25:32
1	U 409.014†	-8670.2	-6695.4	-206.25	ug/L	-206.25	ppb	19:25:12
1	V 292.402†	43820.5	45730.0	271.86	ug/L	271.86	ppb	19:25:12
1	Zn 213.857†	30664.6	30030.8	257.48	ug/L	257.48	ppb	19:25:32
1	SiO2†	1063765.3	1075895.4	70436	ug/L	70436	ppb	19:26:41
2	Sc Radial	5340.4	5340.4	101	%			19:24:33
2	Y RADIAL	6406.4	6406.4	112.9	%			19:24:33
2	Al 396.153Radial†	226084.7	224829.4	163920	ug/L	163920	ppb	19:24:13
2	Ca 317.933Radial†	14967.8	14862.0	22586	ug/L	22586	ppb	19:24:13
2	Fe 238.204 Radial†	17087.8	16981.5	140000	ug/L	140000	ppb	19:24:13
2	K 766.490 Radial†	120448.3	117122.0	21206	ug/L	21206	ppb	19:24:13
2	Mg 279.077 IEC†	748.1	740.7	23007	ug/L	23007	ppb	19:24:33
2	Na 589.592 Radial†	3121.2	4720.7	1375.7	ug/L	1375.7	ppb	19:24:13
2	Sr 421.552†	47946.0	47660.5	300.91	ug/L	300.91	ppb	19:24:13
2	Sc 361.383	862183.2	862183.2	98.843	%			19:25:43
2	Y 371.029	800888.6	800888.6	109.19	%			19:25:43
2	Ag 328.068†	-9063.2	-9548.6	3.9133	ug/L	3.9133	ppb	19:25:43
2	As 188.979†	-105.0	-82.8	54.481	ug/L	54.481	ppb	19:26:03
2	B 249.677†	1392.1	2045.1	21.651	ug/L	21.651	ppb	19:25:43
2	Ba 233.527†	260729.7	263790.7	1988.7	ug/L	1988.7	ppb	19:25:43
2	Be 313.107†	-11593.4	-7404.7	11.858	ug/L	11.858	ppb	19:25:43
2	Cd 226.502†	1164.2	1380.4	0.1725	ug/L	0.1725	ppb	19:26:03
2	Co 228.616†	3468.6	3587.6	55.890	ug/L	55.890	ppb	19:26:03
2	Cr 267.716†	9348.3	9384.5	103.50	ug/L	103.50	ppb	19:26:03
2	Cu 324.752†	29446.5	23245.2	74.937	ug/L	74.937	ppb	19:25:43
2	Mn 257.610†	3478133.3	3518369.4	3735.7	ug/L	3735.7	ppb	19:25:38
2	Mo 202.031†	-83.1	-104.7	4.0704	ug/L	4.0704	ppb	19:26:03
2	Ni 231.604†	3463.7	3410.0	81.129	ug/L	81.129	ppb	19:26:03

2	P 214.914†	2118.9	1932.2	1026.8	ug/L	1026.8 ppb	19:26:03
2	Pb 220.353†	888.6	966.4	134.72	ug/L	134.72 ppb	19:26:03
2	S 181.975 Axial†	574.1	536.3	684.28	ug/L	684.28 ppb	19:26:03
2	Sb 206.836†	101.2	73.1	2.6380	ug/L	2.6380 ppb	19:26:03
2	Se 196.026†	-694.5	-678.5	54.164	ug/L	54.164 ppb	19:26:03
2	Si 251.611†	1055701.0	1067616.0	32686	ug/L	32686 ppb	19:25:38
2	Sn 189.927†	-117.0	-119.2	-14.197	ug/L	-14.197 ppb	19:26:03
2	Ti 334.940†	4061367.9	4110262.4	6382.5	ug/L	6382.5 ppb	19:25:38
2	Tl 190.801†	-274.0	-237.7	0.6445	ug/L	0.6445 ppb	19:26:03
2	U 409.014†	-8586.5	-6609.6	-204.00	ug/L	-204.00 ppb	19:25:43
2	V 292.402†	43887.3	45792.0	272.07	ug/L	272.07 ppb	19:25:43
2	Zn 213.857†	30782.3	30145.9	258.35	ug/L	258.35 ppb	19:26:03
2	SiO2†	1051692.3	1063545.0	69628	ug/L	69628 ppb	19:26:47
3	Sc Radial	5396.6	5396.6	102	%		19:24:59
3	Y RADIAL	6451.1	6451.1	113.7	%		19:24:59
3	Al 396.153Radial†	227764.7	224141.7	163420	ug/L	163420 ppb	19:24:39
3	Ca 317.933Radial†	15018.7	14757.2	22427	ug/L	22427 ppb	19:24:39
3	Fe 238.204 Radial†	17186.6	16901.8	139340	ug/L	139340 ppb	19:24:39
3	K 766.490 Radial†	121089.8	116506.2	21095	ug/L	21095 ppb	19:24:39
3	Mg 279.077 IEC†	748.9	733.7	22790	ug/L	22790 ppb	19:24:59
3	Na 589.592 Radial†	3143.1	4709.9	1372.6	ug/L	1372.6 ppb	19:24:39
3	Sr 421.552†	48238.9	47452.4	299.60	ug/L	299.60 ppb	19:24:39
3	Sc 361.383	863283.8	863283.8	98.969	%		19:26:15
3	Y 371.029	802434.6	802434.6	109.40	%		19:26:15
3	Ag 328.068†	-9115.1	-9589.3	3.5252	ug/L	3.5252 ppb	19:26:15
3	As 188.979†	-96.5	-74.1	58.177	ug/L	58.177 ppb	19:26:35
3	B 249.677†	1467.3	2119.4	23.377	ug/L	23.377 ppb	19:26:15
3	Ba 233.527†	260275.1	262995.1	1982.7	ug/L	1982.7 ppb	19:26:15
3	Be 313.107†	-11336.0	-7129.6	12.038	ug/L	12.038 ppb	19:26:15
3	Cd 226.502†	1177.8	1392.6	0.3687	ug/L	0.3687 ppb	19:26:35
3	Co 228.616†	3443.9	3558.2	55.244	ug/L	55.244 ppb	19:26:35
3	Cr 267.716†	9276.4	9299.8	102.59	ug/L	102.59 ppb	19:26:35
3	Cu 324.752†	29636.5	23399.2	75.352	ug/L	75.352 ppb	19:26:15
3	Mn 257.610†	3507110.3	3543162.1	3761.9	ug/L	3761.9 ppb	19:26:10
3	Mo 202.031†	-74.5	-95.8	4.6144	ug/L	4.6144 ppb	19:26:35
3	Ni 231.604†	3453.0	3394.8	80.766	ug/L	80.766 ppb	19:26:35
3	P 214.914†	2119.4	1930.0	1025.9	ug/L	1025.9 ppb	19:26:35
3	Pb 220.353†	885.7	962.2	134.20	ug/L	134.20 ppb	19:26:35
3	S 181.975 Axial†	572.7	534.2	681.53	ug/L	681.53 ppb	19:26:35
3	Sb 206.836†	97.0	68.8	1.1342	ug/L	1.1342 ppb	19:26:35
3	Se 196.026†	-710.0	-693.2	43.005	ug/L	43.005 ppb	19:26:35
3	Si 251.611†	1064199.1	1074841.0	32908	ug/L	32908 ppb	19:26:10
3	Sn 189.927†	-106.9	-108.8	-12.498	ug/L	-12.498 ppb	19:26:35
3	Ti 334.940†	4089763.0	4133714.9	6418.9	ug/L	6418.9 ppb	19:26:10
3	Tl 190.801†	-279.3	-242.7	-0.3938	ug/L	-0.3938 ppb	19:26:35
3	U 409.014†	-8808.3	-6822.6	-209.98	ug/L	-209.98 ppb	19:26:15
3	V 292.402†	43897.9	45746.0	271.82	ug/L	271.82 ppb	19:26:15
3	Zn 213.857†	30591.6	29913.6	256.32	ug/L	256.32 ppb	19:26:35
3	SiO2†	1065459.4	1076099.0	70450	ug/L	70450 ppb	19:26:53

Mean Data: 243628008|937486|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	862513.7	98.881	%	0.0767				0.08%
Sc Radial	5370.3	101	%	0.5				0.53%
Y 371.029	801754.7	109.31	%	0.108				0.10%
Y RADIAL	6436.9	113.5	%	0.47				0.41%
Ag 328.068†	-9554.8	3.6356	ug/L	0.24219	3.6356	ppb	0.24219	6.66%
Al 396.153Radial†	223728.2	163120	ug/L	988.7	163120	ppb	988.7	0.61%
As 188.979†	-80.9	55.350	ug/L	2.5086	55.350	ppb	2.5086	4.53%
B 249.677†	2064.7	22.205	ug/L	1.0157	22.205	ppb	1.0157	4.57%
Ba 233.527†	263199.4	1984.2	ug/L	3.94	1984.2	ppb	3.94	0.20%
Be 313.107†	-7344.3	11.957	ug/L	0.0915	11.957	ppb	0.0915	0.76%
Ca 317.933Radial†	14772.8	22451	ug/L	125.4	22451	ppb	125.4	0.56%
Cd 226.502†	1378.8	0.2357	ug/L	0.11518	0.2357	ppb	0.11518	48.86%
Co 228.616†	3569.1	55.466	ug/L	0.3671	55.466	ppb	0.3671	0.66%
Cr 267.716†	9355.2	103.17	ug/L	0.511	103.17	ppb	0.511	0.49%
Cu 324.752†	23266.2	74.958	ug/L	0.3838	74.958	ppb	0.3838	0.51%
Fe 238.204 Radial†	16886.7	139220	ug/L	850.9	139220	ppb	850.9	0.61%
K 766.490 Radial†	116515.3	21096	ug/L	109.0	21096	ppb	109.0	0.52%

Mg 279.077 IEC†	739.2	22961	ug/L	153.0	22961	ppb	153.0	0.67%
Mn 257.610†	3538679.3	3757.1	ug/L	19.48	3757.1	ppb	19.48	0.52%
Mo 202.031†	-96.0	4.5963	ug/L	0.51704	4.5963	ppb	0.51704	11.25%
Na 589.592 Radial†	4702.5	1370.4	ug/L	6.64	1370.4	ppb	6.64	0.48%
Ni 231.604†	3404.5	80.998	ug/L	0.2013	80.998	ppb	0.2013	0.25%
P 214.914†	1935.0	1028.8	ug/L	4.37	1028.8	ppb	4.37	0.43%
Pb 220.353†	965.0	134.47	ug/L	0.263	134.47	ppb	0.263	0.20%
S 181.975 Axial†	532.3	679.10	ug/L	6.738	679.10	ppb	6.738	0.99%
Sb 206.836†	71.3	1.9745	ug/L	0.76733	1.9745	ppb	0.76733	38.86%
Se 196.026†	-687.4	46.111	ug/L	7.0353	46.111	ppb	7.0353	15.26%
Si 251.611†	1073963.9	32881	ug/L	182.4	32881	ppb	182.4	0.55%
Sn 189.927†	-109.5	-12.620	ug/L	1.5200	-12.620	ppb	1.5200	12.04%
Sr 421.552†	47402.0	299.28	ug/L	1.812	299.28	ppb	1.812	0.61%
Ti 334.940†	4132264.9	6416.6	ug/L	33.07	6416.6	ppb	33.07	0.52%
Tl 190.801†	-240.9	0.0932	ug/L	0.52211	0.0932	ppb	0.52211	560.31%
U 409.014†	-6709.2	-206.74	ug/L	3.019	-206.74	ppb	3.019	1.46%
V 292.402†	45756.0	271.92	ug/L	0.136	271.92	ppb	0.136	0.05%
Zn 213.857†	30030.1	257.38	ug/L	1.021	257.38	ppb	1.021	0.40%
SiO2†	1071846.5	70171	ug/L	470.7	70171	ppb	470.7	0.67%

Sequence No.: 39
Sample ID: 243628009|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 65
Date Collected: 1/13/2010 19:29:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243628009|937486|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5341.7	5341.7	101	%			19:31:16
1	Y RADIAL	6360.4	6360.4	112.1	%			19:31:16
1	Al 396.153Radial†	225598.0	224291.8	163530	ug/L	163530	ppb	19:30:56
1	Ca 317.933Radial†	14636.5	14529.1	22081	ug/L	22081	ppb	19:30:56
1	Fe 238.204 Radial†	16753.3	16644.9	137230	ug/L	137230	ppb	19:30:56
1	K 766.490 Radial†	120238.0	116884.3	21163	ug/L	21163	ppb	19:30:56
1	Mg 279.077 IEC†	746.4	738.8	22952	ug/L	22952	ppb	19:31:16
1	Na 589.592 Radial†	2899.8	4499.8	1311.3	ug/L	1311.3	ppb	19:30:56
1	Sr 421.552†	47052.2	46760.6	295.23	ug/L	295.23	ppb	19:30:56
1	Sc 361.383	857169.8	857169.8	98.268	%			19:32:20
1	Y 371.029	807050.7	807050.7	110.03	%			19:32:20
1	Ag 328.068†	-9054.2	-9593.0	2.8097	ug/L	2.8097	ppb	19:32:20
1	As 188.979†	-98.5	-76.8	56.987	ug/L	56.987	ppb	19:32:40
1	B 249.677†	1412.2	2073.8	22.717	ug/L	22.717	ppb	19:32:20
1	Ba 233.527†	268205.8	272941.4	2057.4	ug/L	2057.4	ppb	19:32:20
1	Be 313.107†	-11254.1	-7128.0	12.148	ug/L	12.148	ppb	19:32:20
1	Cd 226.502†	1170.0	1393.2	0.5955	ug/L	0.5955	ppb	19:32:40
1	Co 228.616†	3629.9	3772.3	59.410	ug/L	59.410	ppb	19:32:40
1	Cr 267.716†	9714.0	9812.0	108.01	ug/L	108.01	ppb	19:32:40
1	Cu 324.752†	29014.6	22979.9	74.020	ug/L	74.020	ppb	19:32:20
1	Mn 257.610†	3541250.2	3603179.6	3825.2	ug/L	3825.2	ppb	19:32:15
1	Mo 202.031†	-68.0	-89.8	4.8536	ug/L	4.8536	ppb	19:32:40
1	Ni 231.604†	3452.4	3419.0	81.342	ug/L	81.342	ppb	19:32:40
1	P 214.914†	2163.4	1990.1	1062.4	ug/L	1062.4	ppb	19:32:40
1	Pb 220.353†	831.9	913.9	128.77	ug/L	128.77	ppb	19:32:40
1	S 181.975 Axial†	579.2	544.9	695.81	ug/L	695.81	ppb	19:32:40
1	Sb 206.836†	91.2	63.6	-0.8722	ug/L	-0.8722	ppb	19:32:40
1	Se 196.026†	-709.9	-698.3	32.976	ug/L	32.976	ppb	19:32:40
1	Si 251.611†	1104374.2	1123393.8	34394	ug/L	34394	ppb	19:32:15
1	Sn 189.927†	-127.6	-130.6	-16.244	ug/L	-16.244	ppb	19:32:40
1	Ti 334.940†	4091203.7	4164656.0	6466.8	ug/L	6466.8	ppb	19:32:15
1	Tl 190.801†	-286.1	-251.7	-2.3120	ug/L	-2.3120	ppb	19:32:40
1	U 409.014†	-8486.3	-6558.4	-202.24	ug/L	-202.24	ppb	19:32:20
1	V 292.402†	43153.4	45304.9	269.22	ug/L	269.22	ppb	19:32:20
1	Zn 213.857†	30251.7	29788.1	255.39	ug/L	255.39	ppb	19:32:40
1	SiO2†	1087709.4	1106419.9	72435	ug/L	72435	ppb	19:33:50
2	Sc Radial	5343.8	5343.8	101	%			19:31:42
2	Y RADIAL	6377.1	6377.1	112.4	%			19:31:42
2	Al 396.153Radial†	225533.7	224138.4	163420	ug/L	163420	ppb	19:31:22
2	Ca 317.933Radial†	14647.8	14534.5	22089	ug/L	22089	ppb	19:31:22
2	Fe 238.204 Radial†	16731.6	16616.7	136990	ug/L	136990	ppb	19:31:22
2	K 766.490 Radial†	119933.1	116533.6	21100	ug/L	21100	ppb	19:31:22
2	Mg 279.077 IEC†	736.5	728.7	22636	ug/L	22636	ppb	19:31:42
2	Na 589.592 Radial†	2901.8	4500.6	1311.6	ug/L	1311.6	ppb	19:31:22
2	Sr 421.552†	46992.3	46682.4	294.74	ug/L	294.74	ppb	19:31:22
2	Sc 361.383	863511.0	863511.0	98.995	%			19:32:52
2	Y 371.029	812659.2	812659.2	110.79	%			19:32:52
2	Ag 328.068†	-9156.1	-9628.3	2.5821	ug/L	2.5821	ppb	19:32:52
2	As 188.979†	-90.1	-67.6	59.623	ug/L	59.623	ppb	19:33:12
2	B 249.677†	1515.5	2167.6	24.801	ug/L	24.801	ppb	19:32:52
2	Ba 233.527†	270622.4	273378.2	2060.7	ug/L	2060.7	ppb	19:32:52
2	Be 313.107†	-10981.1	-6768.1	11.996	ug/L	11.996	ppb	19:32:52
2	Cd 226.502†	1164.3	1378.7	0.4636	ug/L	0.4636	ppb	19:33:12
2	Co 228.616†	3617.2	3732.3	58.887	ug/L	58.887	ppb	19:33:12
2	Cr 267.716†	9647.1	9671.8	106.51	ug/L	106.51	ppb	19:33:12
2	Cu 324.752†	29561.9	23315.9	74.987	ug/L	74.987	ppb	19:32:52
2	Mn 257.610†	3501710.1	3536774.6	3754.9	ug/L	3754.9	ppb	19:32:46
2	Mo 202.031†	-80.1	-101.4	4.0497	ug/L	4.0497	ppb	19:33:12
2	Ni 231.604†	3449.2	3390.0	80.652	ug/L	80.652	ppb	19:33:12

2	P 214.914†	2135.6	1945.8	1036.9 ug/L	1036.9 ppb	19:33:12
2	Pb 220.353†	856.7	932.7	130.97 ug/L	130.97 ppb	19:33:12
2	S 181.975 Axial†	579.1	540.5	689.95 ug/L	689.95 ppb	19:33:12
2	Sb 206.836†	100.0	71.8	2.2487 ug/L	2.2487 ppb	19:33:12
2	Se 196.026†	-692.4	-675.3	46.203 ug/L	46.203 ppb	19:33:12
2	Si 251.611†	1090660.7	1101288.3	33717 ug/L	33717 ppb	19:32:46
2	Sn 189.927†	-119.5	-121.5	-14.713 ug/L	-14.713 ppb	19:33:12
2	Ti 334.940†	4042901.6	4085290.3	6343.7 ug/L	6343.7 ppb	19:32:46
2	Tl 190.801†	-259.2	-222.3	4.8770 ug/L	4.8770 ppb	19:33:12
2	U 409.014†	-8840.4	-6852.7	-210.57 ug/L	-210.57 ppb	19:32:52
2	V 292.402†	43405.3	45236.8	268.90 ug/L	268.90 ppb	19:32:52
2	Zn 213.857†	30167.5	29477.0	252.60 ug/L	252.60 ppb	19:33:12
2	SiO2†	1086704.3	1097276.2	71836 ug/L	71836 ppb	19:33:55
3	Sc Radial	5366.1	5366.1	101 %		19:32:07
3	Y RADIAL	6404.3	6404.3	112.9 %		19:32:07
3	Al 396.153Radial†	226830.9	224491.1	163680 ug/L	163680 ppb	19:31:47
3	Ca 317.933Radial†	14720.3	14545.8	22106 ug/L	22106 ppb	19:31:47
3	Fe 238.204 Radial†	16787.2	16602.7	136880 ug/L	136880 ppb	19:31:47
3	K 766.490 Radial†	120897.7	116993.1	21183 ug/L	21183 ppb	19:31:47
3	Mg 279.077 IEC†	738.3	727.4	22596 ug/L	22596 ppb	19:32:07
3	Na 589.592 Radial†	2919.1	4505.7	1313.1 ug/L	1313.1 ppb	19:31:47
3	Sr 421.552†	47276.5	46769.6	295.29 ug/L	295.29 ppb	19:31:47
3	Sc 361.383	849098.8	849098.8	97.343 %		19:33:23
3	Y 371.029	796764.3	796764.3	108.63 %		19:33:23
3	Ag 328.068†	-8880.1	-9501.7	3.1010 ug/L	3.1010 ppb	19:33:23
3	As 188.979†	-99.4	-78.7	55.756 ug/L	55.756 ppb	19:33:43
3	B 249.677†	1427.5	2103.3	23.415 ug/L	23.415 ppb	19:33:23
3	Ba 233.527†	265078.8	272323.3	2052.8 ug/L	2052.8 ppb	19:33:23
3	Be 313.107†	-10947.4	-6921.7	12.123 ug/L	12.123 ppb	19:33:23
3	Cd 226.502†	1144.6	1378.4	0.4745 ug/L	0.4745 ppb	19:33:43
3	Co 228.616†	3586.2	3762.6	59.308 ug/L	59.308 ppb	19:33:43
3	Cr 267.716†	9641.3	9831.3	108.21 ug/L	108.21 ppb	19:33:43
3	Cu 324.752†	28962.6	23207.1	74.662 ug/L	74.662 ppb	19:33:23
3	Mn 257.610†	3490250.6	3585041.8	3805.9 ug/L	3805.9 ppb	19:33:18
3	Mo 202.031†	-85.5	-108.4	3.5719 ug/L	3.5719 ppb	19:33:43
3	Ni 231.604†	3423.0	3422.2	81.418 ug/L	81.418 ppb	19:33:43
3	P 214.914†	2133.2	1979.9	1056.7 ug/L	1056.7 ppb	19:33:43
3	Pb 220.353†	840.8	931.1	130.85 ug/L	130.85 ppb	19:33:43
3	S 181.975 Axial†	578.1	549.4	701.76 ug/L	701.76 ppb	19:33:43
3	Sb 206.836†	103.8	77.4	3.8063 ug/L	3.8063 ppb	19:33:43
3	Se 196.026†	-695.7	-690.5	36.586 ug/L	36.586 ppb	19:33:43
3	Si 251.611†	1085961.7	1115161.2	34142 ug/L	34142 ppb	19:33:18
3	Sn 189.927†	-129.0	-133.3	-16.687 ug/L	-16.687 ppb	19:33:43
3	Ti 334.940†	4025630.1	4136866.1	6423.7 ug/L	6423.7 ppb	19:33:18
3	Tl 190.801†	-284.1	-252.4	-2.9763 ug/L	-2.9763 ppb	19:33:43
3	U 409.014†	-8474.7	-6628.6	-204.20 ug/L	-204.20 ppb	19:33:23
3	V 292.402†	42622.6	45177.0	268.45 ug/L	268.45 ppb	19:33:23
3	Zn 213.857†	29928.5	29748.7	255.06 ug/L	255.06 ppb	19:33:43
3	SiO2†	1096632.0	1126107.3	73724 ug/L	73724 ppb	19:34:01

Mean Data: 243628009|937486|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	856593.2	98.202	%	0.8281				0.84%
Sc Radial	5350.5	101	%	0.3				0.25%
Y 371.029	805491.4	109.82	%	1.099				1.00%
Y RADIAL	6380.6	112.5	%	0.39				0.35%
Ag 328.068†	-9574.3	2.8309	ug/L	0.26012	2.8309	ppb	0.26012	9.19%
Al 396.153Radial†	224307.1	163540	ug/L	129.0	163540	ppb	129.0	0.08%
As 188.979†	-74.4	57.455	ug/L	1.9754	57.455	ppb	1.9754	3.44%
B 249.677†	2114.9	23.644	ug/L	1.0610	23.644	ppb	1.0610	4.49%
Ba 233.527†	272881.0	2057.0	ug/L	3.99	2057.0	ppb	3.99	0.19%
Be 313.107†	-6939.3	12.089	ug/L	0.0815	12.089	ppb	0.0815	0.67%
Ca 317.933Radial†	14536.5	22092	ug/L	12.9	22092	ppb	12.9	0.06%
Cd 226.502†	1383.5	0.5112	ug/L	0.07318	0.5112	ppb	0.07318	14.32%
Co 228.616†	3755.7	59.202	ug/L	0.2772	59.202	ppb	0.2772	0.47%
Cr 267.716†	9771.7	107.58	ug/L	0.929	107.58	ppb	0.929	0.86%
Cu 324.752†	23167.7	74.556	ug/L	0.4920	74.556	ppb	0.4920	0.66%
Fe 238.204 Radial†	16621.4	137030	ug/L	177.3	137030	ppb	177.3	0.13%
K 766.490 Radial†	116803.6	21149	ug/L	43.5	21149	ppb	43.5	0.21%

Mg 279.077 IEC†	731.6	22728	ug/L	194.8	22728	ppb	194.8	0.86%
Mn 257.610†	3574998.6	3795.3	ug/L	36.32	3795.3	ppb	36.32	0.96%
Mo 202.031†	-99.9	4.1584	ug/L	0.64769	4.1584	ppb	0.64769	15.58%
Na 589.592 Radial†	4502.0	1312.0	ug/L	0.94	1312.0	ppb	0.94	0.07%
Ni 231.604†	3410.4	81.137	ug/L	0.4221	81.137	ppb	0.4221	0.52%
P 214.914†	1971.9	1052.0	ug/L	13.39	1052.0	ppb	13.39	1.27%
Pb 220.353†	925.9	130.20	ug/L	1.234	130.20	ppb	1.234	0.95%
S 181.975 Axial†	544.9	695.84	ug/L	5.908	695.84	ppb	5.908	0.85%
Sb 206.836†	70.9	1.7276	ug/L	2.38241	1.7276	ppb	2.38241	137.90%
Se 196.026†	-688.1	38.588	ug/L	6.8368	38.588	ppb	6.8368	17.72%
Si 251.611†	1113281.1	34084	ug/L	342.0	34084	ppb	342.0	1.00%
Sn 189.927†	-128.5	-15.882	ug/L	1.0356	-15.882	ppb	1.0356	6.52%
Sr 421.552†	46737.5	295.08	ug/L	0.303	295.08	ppb	0.303	0.10%
Ti 334.940†	4128937.5	6411.4	ug/L	62.51	6411.4	ppb	62.51	0.97%
Tl 190.801†	-242.2	-0.1371	ug/L	4.35504	-0.1371	ppb	4.35504	>999.9%
U 409.014†	-6679.9	-205.67	ug/L	4.357	-205.67	ppb	4.357	2.12%
V 292.402†	45239.6	268.86	ug/L	0.386	268.86	ppb	0.386	0.14%
Zn 213.857†	29671.3	254.35	ug/L	1.524	254.35	ppb	1.524	0.60%
SiO2†	1109934.5	72665	ug/L	964.6	72665	ppb	964.6	1.33%

Sequence No.: 40
Sample ID: 243628010|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 66
Date Collected: 1/13/2010 19:36:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243628010|937486|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5372.7	5372.7	101	%			19:38:25
1	Y RADIAL	6361.8	6361.8	112.2	%			19:38:25
1	Al 396.153Radial†	197090.7	194821.6	142050	ug/L	142050	ppb	19:38:05
1	Ca 317.933Radial†	12908.2	12736.9	19357	ug/L	19357	ppb	19:38:05
1	Fe 238.204 Radial†	15528.9	15338.6	126460	ug/L	126460	ppb	19:38:05
1	K 766.490 Radial†	106036.9	102158.4	18497	ug/L	18497	ppb	19:38:05
1	Mg 279.077 IEC†	675.3	664.2	20633	ug/L	20633	ppb	19:38:25
1	Na 589.592 Radial†	2433.8	4022.5	1172.3	ug/L	1172.3	ppb	19:38:05
1	Sr 421.552†	41518.8	41021.6	259.00	ug/L	259.00	ppb	19:38:05
1	Sc 361.383	859102.1	859102.1	98.490	%			19:39:29
1	Y 371.029	802084.9	802084.9	109.35	%			19:39:29
1	Ag 328.068†	-8376.8	-8884.6	2.4245	ug/L	2.4245	ppb	19:39:29
1	As 188.979†	-98.4	-76.5	52.608	ug/L	52.608	ppb	19:39:49
1	B 249.677†	1216.8	1872.2	20.108	ug/L	20.108	ppb	19:39:29
1	Ba 233.527†	240096.7	243787.4	1837.8	ug/L	1837.8	ppb	19:39:29
1	Be 313.107†	-12908.0	-8781.5	11.045	ug/L	11.045	ppb	19:39:29
1	Cd 226.502†	1058.2	1277.0	0.4753	ug/L	0.4753	ppb	19:39:49
1	Co 228.616†	2975.0	3099.1	46.732	ug/L	46.732	ppb	19:39:49
1	Cr 267.716†	8531.2	8588.8	94.697	ug/L	94.697	ppb	19:39:49
1	Cu 324.752†	26963.7	20831.2	67.206	ug/L	67.206	ppb	19:39:29
1	Mn 257.610†	2925924.7	2970312.7	3154.5	ug/L	3154.5	ppb	19:39:24
1	Mo 202.031†	-71.8	-93.5	3.7337	ug/L	3.7337	ppb	19:39:49
1	Ni 231.604†	3067.7	3020.5	71.863	ug/L	71.863	ppb	19:39:49
1	P 214.914†	1898.2	1715.8	909.07	ug/L	909.07	ppb	19:39:49
1	Pb 220.353†	816.1	895.9	123.07	ug/L	123.07	ppb	19:39:49
1	S 181.975 Axial†	512.7	476.0	607.98	ug/L	607.98	ppb	19:39:49
1	Sb 206.836†	90.6	62.8	-0.1048	ug/L	-0.1048	ppb	19:39:49
1	Se 196.026†	-660.1	-646.1	28.396	ug/L	28.396	ppb	19:39:49
1	Si 251.611†	1134664.1	1151620.5	35258	ug/L	35258	ppb	19:39:24
1	Sn 189.927†	-120.0	-122.6	-15.495	ug/L	-15.495	ppb	19:39:49
1	Ti 334.940†	3956378.7	4018399.2	6239.6	ug/L	6239.6	ppb	19:39:24
1	Tl 190.801†	-270.9	-235.6	-2.6186	ug/L	-2.6186	ppb	19:39:49
1	U 409.014†	-7812.8	-5855.2	-181.00	ug/L	-181.00	ppb	19:39:29
1	V 292.402†	40630.7	42644.7	253.64	ug/L	253.64	ppb	19:39:29
1	Zn 213.857†	27615.1	27041.8	231.67	ug/L	231.67	ppb	19:39:49
1	SiO2†	1125854.1	1142659.9	74807	ug/L	74807	ppb	19:40:58
2	Sc Radial	5374.6	5374.6	101	%			19:38:51
2	Y RADIAL	6357.9	6357.9	112.1	%			19:38:51
2	Al 396.153Radial†	198109.0	195757.9	142730	ug/L	142730	ppb	19:38:31
2	Ca 317.933Radial†	12901.4	12725.7	19340	ug/L	19340	ppb	19:38:31
2	Fe 238.204 Radial†	15481.0	15285.8	126020	ug/L	126020	ppb	19:38:31
2	K 766.490 Radial†	105832.0	101918.5	18454	ug/L	18454	ppb	19:38:31
2	Mg 279.077 IEC†	676.4	665.1	20660	ug/L	20660	ppb	19:38:51
2	Na 589.592 Radial†	2442.6	4030.3	1174.5	ug/L	1174.5	ppb	19:38:31
2	Sr 421.552†	41532.4	41020.3	258.99	ug/L	258.99	ppb	19:38:31
2	Sc 361.383	849233.9	849233.9	97.358	%			19:40:00
2	Y 371.029	790276.6	790276.6	107.74	%			19:40:00
2	Ag 328.068†	-8151.3	-8751.7	2.8751	ug/L	2.8751	ppb	19:40:00
2	As 188.979†	-101.4	-80.8	51.265	ug/L	51.265	ppb	19:40:21
2	B 249.677†	1131.1	1798.6	18.572	ug/L	18.572	ppb	19:40:00
2	Ba 233.527†	236301.0	242721.5	1829.8	ug/L	1829.8	ppb	19:40:00
2	Be 313.107†	-12483.7	-8498.0	11.269	ug/L	11.269	ppb	19:40:00
2	Cd 226.502†	1058.5	1289.9	0.6552	ug/L	0.6552	ppb	19:40:21
2	Co 228.616†	2954.8	3113.4	46.900	ug/L	46.900	ppb	19:40:21
2	Cr 267.716†	8476.8	8633.6	95.169	ug/L	95.169	ppb	19:40:21
2	Cu 324.752†	26648.4	20825.5	67.171	ug/L	67.171	ppb	19:40:00
2	Mn 257.610†	2919412.7	2998145.1	3184.0	ug/L	3184.0	ppb	19:39:55
2	Mo 202.031†	-81.3	-104.0	2.9905	ug/L	2.9905	ppb	19:40:21
2	Ni 231.604†	3065.5	3054.5	72.672	ug/L	72.672	ppb	19:40:21

2	P 214.914†	1880.1	1719.6	911.78	ug/L	911.78 ppb	19:40:21
2	Pb 220.353†	815.6	905.1	124.32	ug/L	124.32 ppb	19:40:21
2	S 181.975 Axial†	506.5	475.7	607.49	ug/L	607.49 ppb	19:40:21
2	Sb 206.836†	97.8	71.3	2.4419	ug/L	2.4419 ppb	19:40:21
2	Se 196.026†	-648.7	-642.1	29.390	ug/L	29.390 ppb	19:40:21
2	Si 251.611†	1130654.2	1160889.0	35542	ug/L	35542 ppb	19:39:55
2	Sn 189.927†	-125.2	-129.4	-16.643	ug/L	-16.643 ppb	19:40:21
2	Ti 334.940†	3945143.5	4053538.0	6294.2	ug/L	6294.2 ppb	19:39:55
2	Tl 190.801†	-248.7	-216.0	3.6834	ug/L	3.6834 ppb	19:40:21
2	U 409.014†	-7979.5	-6118.6	-188.44	ug/L	-188.44 ppb	19:40:00
2	V 292.402†	39955.4	42430.5	252.22	ug/L	252.22 ppb	19:40:00
2	Zn 213.857†	27620.4	27373.1	234.70	ug/L	234.70 ppb	19:40:21
2	SiO2†	1132419.5	1162686.7	76118	ug/L	76118 ppb	19:41:04
3	Sc Radial	5357.3	5357.3	101	%		19:39:16
3	Y RADIAL	6337.6	6337.6	111.7	%		19:39:16
3	Al 396.153Radial†	197769.3	196051.6	142940	ug/L	142940 ppb	19:38:56
3	Ca 317.933Radial†	12898.9	12764.2	19398	ug/L	19398 ppb	19:38:56
3	Fe 238.204 Radial†	15471.4	15325.6	126350	ug/L	126350 ppb	19:38:56
3	K 766.490 Radial†	105795.6	102219.2	18508	ug/L	18508 ppb	19:38:56
3	Mg 279.077 IEC†	672.6	663.4	20608	ug/L	20608 ppb	19:39:16
3	Na 589.592 Radial†	2311.3	3908.0	1138.9	ug/L	1138.9 ppb	19:38:56
3	Sr 421.552†	41500.4	41120.7	259.62	ug/L	259.62 ppb	19:38:56
3	Sc 361.383	848855.7	848855.7	97.315	%		19:40:32
3	Y 371.029	791015.2	791015.2	107.84	%		19:40:32
3	Ag 328.068†	-8247.3	-8854.1	2.5171	ug/L	2.5171 ppb	19:40:32
3	As 188.979†	-108.6	-88.1	47.764	ug/L	47.764 ppb	19:40:52
3	B 249.677†	1195.8	1865.5	19.978	ug/L	19.978 ppb	19:40:32
3	Ba 233.527†	235837.2	242352.9	1827.0	ug/L	1827.0 ppb	19:40:32
3	Be 313.107†	-12869.1	-8899.7	10.974	ug/L	10.974 ppb	19:40:32
3	Cd 226.502†	1070.6	1302.8	0.7600	ug/L	0.7600 ppb	19:40:52
3	Co 228.616†	2963.8	3124.0	47.243	ug/L	47.243 ppb	19:40:52
3	Cr 267.716†	8492.5	8653.6	95.385	ug/L	95.385 ppb	19:40:52
3	Cu 324.752†	26497.8	20682.9	66.770	ug/L	66.770 ppb	19:40:32
3	Mn 257.610†	2885096.7	2964218.1	3148.1	ug/L	3148.1 ppb	19:40:27
3	Mo 202.031†	-71.6	-94.1	3.6836	ug/L	3.6836 ppb	19:40:52
3	Ni 231.604†	3100.7	3092.1	73.566	ug/L	73.566 ppb	19:40:52
3	P 214.914†	1900.7	1741.6	924.31	ug/L	924.31 ppb	19:40:52
3	Pb 220.353†	842.3	932.8	127.58	ug/L	127.58 ppb	19:40:52
3	S 181.975 Axial†	514.0	483.7	618.07	ug/L	618.07 ppb	19:40:52
3	Sb 206.836†	95.2	68.6	1.7742	ug/L	1.7742 ppb	19:40:52
3	Se 196.026†	-653.3	-647.2	27.412	ug/L	27.412 ppb	19:40:52
3	Si 251.611†	1117251.5	1147633.8	35136	ug/L	35136 ppb	19:40:27
3	Sn 189.927†	-130.5	-134.9	-17.550	ug/L	-17.550 ppb	19:40:52
3	Ti 334.940†	3901287.8	4010277.4	6227.0	ug/L	6227.0 ppb	19:40:27
3	Tl 190.801†	-256.2	-223.8	0.6895	ug/L	0.6895 ppb	19:40:52
3	U 409.014†	-7695.1	-5830.0	-180.28	ug/L	-180.28 ppb	19:40:32
3	V 292.402†	39890.2	42381.8	251.95	ug/L	251.95 ppb	19:40:32
3	Zn 213.857†	27572.6	27336.6	234.34	ug/L	234.34 ppb	19:40:52
3	SiO2†	1120888.5	1151355.7	75377	ug/L	75377 ppb	19:41:10

Mean Data: 243628010|937486|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	852397.2	97.721	%	0.6660				0.68%
Sc Radial	5368.2	101	%	0.2				0.18%
Y 371.029	794458.9	108.31	%	0.902				0.83%
Y RADIAL	6352.4	112.0	%	0.23				0.20%
Ag 328.068†	-8830.1	2.6056	ug/L	0.23796	2.6056	ppb	0.23796	9.13%
Al 396.153Radial†	195543.7	142570	ug/L	468.4	142570	ppb	468.4	0.33%
As 188.979†	-81.8	50.545	ug/L	2.5005	50.545	ppb	2.5005	4.95%
B 249.677†	1845.5	19.553	ug/L	0.8518	19.553	ppb	0.8518	4.36%
Ba 233.527†	242953.9	1831.6	ug/L	5.61	1831.6	ppb	5.61	0.31%
Be 313.107†	-8726.4	11.096	ug/L	0.1541	11.096	ppb	0.1541	1.39%
Ca 317.933Radial†	12742.3	19365	ug/L	30.1	19365	ppb	30.1	0.16%
Cd 226.502†	1289.9	0.6302	ug/L	0.14401	0.6302	ppb	0.14401	22.85%
Co 228.616†	3112.1	46.958	ug/L	0.2603	46.958	ppb	0.2603	0.55%
Cr 267.716†	8625.3	95.084	ug/L	0.3518	95.084	ppb	0.3518	0.37%
Cu 324.752†	20779.9	67.049	ug/L	0.2423	67.049	ppb	0.2423	0.36%
Fe 238.204 Radial†	15316.7	126280	ug/L	226.9	126280	ppb	226.9	0.18%
K 766.490 Radial†	102098.7	18486	ug/L	28.8	18486	ppb	28.8	0.16%

Mg 279.077 IEC†	664.3	20633	ug/L	25.9	20633	ppb	25.9	0.13%
Mn 257.610†	2977558.6	3162.2	ug/L	19.12	3162.2	ppb	19.12	0.60%
Mo 202.031†	-97.2	3.4692	ug/L	0.41539	3.4692	ppb	0.41539	11.97%
Na 589.592 Radial†	3987.0	1161.9	ug/L	19.97	1161.9	ppb	19.97	1.72%
Ni 231.604†	3055.7	72.700	ug/L	0.8523	72.700	ppb	0.8523	1.17%
P 214.914†	1725.7	915.05	ug/L	8.129	915.05	ppb	8.129	0.89%
Pb 220.353†	911.3	124.99	ug/L	2.328	124.99	ppb	2.328	1.86%
S 181.975 Axial†	478.5	611.18	ug/L	5.970	611.18	ppb	5.970	0.98%
Sb 206.836†	67.5	1.3704	ug/L	1.32049	1.3704	ppb	1.32049	96.36%
Se 196.026†	-645.1	28.399	ug/L	0.9891	28.399	ppb	0.9891	3.48%
Si 251.611†	1153381.1	35312	ug/L	208.2	35312	ppb	208.2	0.59%
Sn 189.927†	-129.0	-16.563	ug/L	1.0298	-16.563	ppb	1.0298	6.22%
Sr 421.552†	41054.2	259.20	ug/L	0.364	259.20	ppb	0.364	0.14%
Ti 334.940†	4027404.9	6253.6	ug/L	35.69	6253.6	ppb	35.69	0.57%
Tl 190.801†	-225.1	0.5848	ug/L	3.15229	0.5848	ppb	3.15229	539.05%
U 409.014†	-5934.6	-183.24	ug/L	4.518	-183.24	ppb	4.518	2.47%
V 292.402†	42485.6	252.60	ug/L	0.907	252.60	ppb	0.907	0.36%
Zn 213.857†	27250.5	233.57	ug/L	1.655	233.57	ppb	1.655	0.71%
SiO2†	1152234.1	75434	ug/L	657.4	75434	ppb	657.4	0.87%

Sequence No.: 41
Sample ID: 243628011|937486|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 67
Date Collected: 1/13/2010 19:43:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243628011|937486|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5362.4	5362.4	101	%			19:45:34
1	Y RADIAL	6207.0	6207.0	109.4	%			19:45:34
1	Al 396.153Radial†	133233.9	131956.8	96210	ug/L	96210	ppb	19:45:14
1	Ca 317.933Radial†	14571.6	14408.5	21897	ug/L	21897	ppb	19:45:14
1	Fe 238.204 Radial†	12525.9	12394.1	102180	ug/L	102180	ppb	19:45:14
1	K 766.490 Radial†	115753.3	111980.6	20275	ug/L	20275	ppb	19:45:14
1	Mg 279.077 IEC†	531.3	523.0	16242	ug/L	16242	ppb	19:45:34
1	Na 589.592 Radial†	461.5	2074.0	604.42	ug/L	604.42	ppb	19:45:14
1	Sr 421.552†	37591.5	37210.8	234.90	ug/L	234.90	ppb	19:45:14
1	Sc 361.383	852301.8	852301.8	97.710	%			19:46:37
1	Y 371.029	769153.2	769153.2	104.86	%			19:46:37
1	Ag 328.068†	-6527.7	-7059.9	2.4220	ug/L	2.4220	ppb	19:46:37
1	As 188.979†	-80.7	-59.1	43.597	ug/L	43.597	ppb	19:46:58
1	B 249.677†	1244.0	1910.0	24.880	ug/L	24.880	ppb	19:46:37
1	Ba 233.527†	206437.0	211283.9	1592.5	ug/L	1592.5	ppb	19:46:37
1	Be 313.107†	-14585.6	-10603.0	7.6794	ug/L	7.6794	ppb	19:46:37
1	Cd 226.502†	851.0	1073.5	0.8952	ug/L	0.8952	ppb	19:46:58
1	Co 228.616†	2825.8	2970.5	46.879	ug/L	46.879	ppb	19:46:58
1	Cr 267.716†	26981.1	27540.2	296.66	ug/L	296.66	ppb	19:46:58
1	Cu 324.752†	25954.4	20016.7	63.540	ug/L	63.540	ppb	19:46:37
1	Mn 257.610†	3165466.8	3239172.0	3436.8	ug/L	3436.8	ppb	19:46:32
1	Mo 202.031†	44.5	25.0	9.8779	ug/L	9.8779	ppb	19:46:58
1	Ni 231.604†	6981.4	7050.8	167.80	ug/L	167.80	ppb	19:46:58
1	P 214.914†	2731.3	2583.8	1417.5	ug/L	1417.5	ppb	19:46:58
1	Pb 220.353†	803.6	889.8	114.96	ug/L	114.96	ppb	19:46:58
1	S 181.975 Axial†	845.4	820.7	1076.1	ug/L	1076.1	ppb	19:46:58
1	Sb 206.836†	89.2	62.1	4.6303	ug/L	4.6303	ppb	19:46:58
1	Se 196.026†	-515.2	-503.1	33.518	ug/L	33.518	ppb	19:46:58
1	Si 251.611†	1135770.8	1161945.2	35574	ug/L	35574	ppb	19:46:32
1	Sn 189.927†	-14.8	-15.9	2.3874	ug/L	2.3874	ppb	19:46:58
1	Ti 334.940†	3171449.2	3247125.3	5042.8	ug/L	5042.8	ppb	19:46:32
1	Tl 190.801†	-246.2	-212.5	-4.3806	ug/L	-4.3806	ppb	19:46:58
1	U 409.014†	-6590.5	-4667.6	-144.94	ug/L	-144.94	ppb	19:46:37
1	V 292.402†	33045.2	35210.6	209.87	ug/L	209.87	ppb	19:46:37
1	Zn 213.857†	25472.4	25072.7	215.62	ug/L	215.62	ppb	19:46:58
1	SiO2†	1138697.3	1164924.8	76265	ug/L	76265	ppb	19:48:07
2	Sc Radial	5389.7	5389.7	101	%			19:45:59
2	Y RADIAL	6239.2	6239.2	110.0	%			19:45:59
2	Al 396.153Radial†	135343.5	133368.3	97239	ug/L	97239	ppb	19:45:39
2	Ca 317.933Radial†	14719.6	14481.4	22008	ug/L	22008	ppb	19:45:39
2	Fe 238.204 Radial†	12642.2	12445.9	102610	ug/L	102610	ppb	19:45:39
2	K 766.490 Radial†	117048.8	112677.5	20402	ug/L	20402	ppb	19:45:39
2	Mg 279.077 IEC†	525.0	514.1	15963	ug/L	15963	ppb	19:45:59
2	Na 589.592 Radial†	432.5	2043.2	595.42	ug/L	595.42	ppb	19:45:39
2	Sr 421.552†	38036.3	37460.7	236.48	ug/L	236.48	ppb	19:45:39
2	Sc 361.383	872454.7	872454.7	100.02	%			19:47:09
2	Y 371.029	785444.3	785444.3	107.08	%			19:47:09
2	Ag 328.068†	-6524.2	-6902.1	3.2574	ug/L	3.2574	ppb	19:47:09
2	As 188.979†	-75.5	-52.1	46.043	ug/L	46.043	ppb	19:47:29
2	B 249.677†	1246.2	1882.7	24.221	ug/L	24.221	ppb	19:47:09
2	Ba 233.527†	209988.7	209954.6	1582.6	ug/L	1582.6	ppb	19:47:09
2	Be 313.107†	-14938.7	-10611.2	7.5405	ug/L	7.5405	ppb	19:47:09
2	Cd 226.502†	858.6	1061.1	0.7166	ug/L	0.7166	ppb	19:47:29
2	Co 228.616†	2813.0	2890.8	45.434	ug/L	45.434	ppb	19:47:29
2	Cr 267.716†	26970.2	26891.5	289.73	ug/L	289.73	ppb	19:47:29
2	Cu 324.752†	26515.5	19964.1	63.408	ug/L	63.408	ppb	19:47:09
2	Mn 257.610†	3196622.1	3195488.1	3390.6	ug/L	3390.6	ppb	19:47:04
2	Mo 202.031†	43.9	23.3	9.7993	ug/L	9.7993	ppb	19:47:29
2	Ni 231.604†	6945.7	6850.1	163.02	ug/L	163.02	ppb	19:47:29

2	P 214.914†	2702.9	2490.8	1363.9	ug/L	1363.9 ppb	19:47:29
2	Pb 220.353†	783.6	850.8	110.59	ug/L	110.59 ppb	19:47:29
2	S 181.975 Axial†	862.0	817.3	1071.4	ug/L	1071.4 ppb	19:47:29
2	Sb 206.836†	88.6	59.4	3.8543	ug/L	3.8543 ppb	19:47:29
2	Se 196.026†	-523.5	-499.3	37.306	ug/L	37.306 ppb	19:47:29
2	Si 251.611†	1148974.6	1148296.2	35156	ug/L	35156 ppb	19:47:04
2	Sn 189.927†	-34.6	-35.3	-0.8576	ug/L	-0.8576 ppb	19:47:29
2	Ti 334.940†	3207849.5	3208543.9	4982.9	ug/L	4982.9 ppb	19:47:04
2	Tl 190.801†	-235.1	-195.6	-0.1434	ug/L	-0.1434 ppb	19:47:29
2	U 409.014†	-6629.1	-4550.3	-141.64	ug/L	-141.64 ppb	19:47:09
2	V 292.402†	33784.2	35168.2	209.60	ug/L	209.60 ppb	19:47:09
2	Zn 213.857†	25410.8	24408.8	209.60	ug/L	209.60 ppb	19:47:29
2	SiO2†	1133875.2	1133184.4	74187	ug/L	74187 ppb	19:48:13
3	Sc Radial	5417.7	5417.7	102	%		19:46:24
3	Y RADIAL	6266.8	6266.8	110.5	%		19:46:24
3	Al 396.153Radial†	135089.1	132428.5	96554	ug/L	96554 ppb	19:46:04
3	Ca 317.933Radial†	14690.5	14377.8	21850	ug/L	21850 ppb	19:46:04
3	Fe 238.204 Radial†	12563.3	12304.1	101440	ug/L	101440 ppb	19:46:04
3	K 766.490 Radial†	116188.2	111236.8	20141	ug/L	20141 ppb	19:46:04
3	Mg 279.077 IEC†	531.2	517.4	16070	ug/L	16070 ppb	19:46:24
3	Na 589.592 Radial†	375.0	1984.5	578.33	ug/L	578.33 ppb	19:46:04
3	Sr 421.552†	37750.0	36986.1	233.48	ug/L	233.48 ppb	19:46:04
3	Sc 361.383	859611.7	859611.7	98.548	%		19:47:41
3	Y 371.029	777777.3	777777.3	106.04	%		19:47:41
3	Ag 328.068†	-6477.3	-6952.0	2.6646	ug/L	2.6646 ppb	19:47:41
3	As 188.979†	-74.9	-52.6	46.318	ug/L	46.318 ppb	19:48:01
3	B 249.677†	1242.3	1897.3	24.728	ug/L	24.728 ppb	19:47:41
3	Ba 233.527†	207715.1	210784.1	1588.8	ug/L	1588.8 ppb	19:47:41
3	Be 313.107†	-15041.6	-10938.8	7.6204	ug/L	7.6204 ppb	19:47:41
3	Cd 226.502†	848.0	1063.1	0.8595	ug/L	0.8595 ppb	19:48:01
3	Co 228.616†	2806.8	2926.6	45.974	ug/L	45.974 ppb	19:48:01
3	Cr 267.716†	26909.7	27232.9	293.36	ug/L	293.36 ppb	19:48:01
3	Cu 324.752†	26070.7	19908.8	63.188	ug/L	63.188 ppb	19:47:41
3	Mn 257.610†	3198723.6	3245369.5	3443.3	ug/L	3443.3 ppb	19:47:35
3	Mo 202.031†	51.8	32.0	10.295	ug/L	10.295 ppb	19:48:01
3	Ni 231.604†	6935.3	6943.2	165.24	ug/L	165.24 ppb	19:48:01
3	P 214.914†	2687.2	2515.3	1378.8	ug/L	1378.8 ppb	19:48:01
3	Pb 220.353†	770.5	849.2	110.37	ug/L	110.37 ppb	19:48:01
3	S 181.975 Axial†	847.9	815.9	1069.6	ug/L	1069.6 ppb	19:48:01
3	Sb 206.836†	93.5	65.6	5.6349	ug/L	5.6349 ppb	19:48:01
3	Se 196.026†	-509.3	-492.7	37.463	ug/L	37.463 ppb	19:48:01
3	Si 251.611†	1150444.0	1166949.8	35727	ug/L	35727 ppb	19:47:35
3	Sn 189.927†	-37.0	-38.3	-1.3969	ug/L	-1.3969 ppb	19:48:01
3	Ti 334.940†	3215476.4	3264199.8	5069.3	ug/L	5069.3 ppb	19:47:35
3	Tl 190.801†	-221.1	-184.9	3.9359	ug/L	3.9359 ppb	19:48:01
3	U 409.014†	-6673.9	-4694.9	-145.62	ug/L	-145.62 ppb	19:47:41
3	V 292.402†	33373.3	35255.9	210.25	ug/L	210.25 ppb	19:47:41
3	Zn 213.857†	25381.4	24758.6	212.87	ug/L	212.87 ppb	19:48:01
3	SiO2†	1135825.3	1152100.3	75425	ug/L	75425 ppb	19:48:19

Mean Data: 243628011|937486|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	861456.1	98.760	%	1.1696				1.18%
Sc Radial	5389.9	101	%	0.5				0.51%
Y 371.029	777458.3	105.99	%	1.111				1.05%
Y RADIAL	6237.7	110.0	%	0.53				0.48%
Ag 328.068†	-6971.3	2.7814	ug/L	0.42977	2.7814	ppb	0.42977	15.45%
Al 396.153Radial†	132584.5	96668	ug/L	523.9	96668	ppb	523.9	0.54%
As 188.979†	-54.6	45.320	ug/L	1.4977	45.320	ppb	1.4977	3.30%
B 249.677†	1896.7	24.610	ug/L	0.3449	24.610	ppb	0.3449	1.40%
Ba 233.527†	210674.2	1588.0	ug/L	5.04	1588.0	ppb	5.04	0.32%
Be 313.107†	-10717.6	7.6134	ug/L	0.06971	7.6134	ppb	0.06971	0.92%
Ca 317.933Radial†	14422.5	21919	ug/L	80.9	21919	ppb	80.9	0.37%
Cd 226.502†	1065.9	0.8238	ug/L	0.09450	0.8238	ppb	0.09450	11.47%
Co 228.616†	2929.3	46.096	ug/L	0.7301	46.096	ppb	0.7301	1.58%
Cr 267.716†	27221.5	293.25	ug/L	3.464	293.25	ppb	3.464	1.18%
Cu 324.752†	19963.2	63.379	ug/L	0.1777	63.379	ppb	0.1777	0.28%
Fe 238.204 Radial†	12381.4	102080	ug/L	591.6	102080	ppb	591.6	0.58%
K 766.490 Radial†	111965.0	20273	ug/L	130.5	20273	ppb	130.5	0.64%

Mg 279.077 IEC†	518.2	16091	ug/L	140.8	16091	ppb	140.8	0.87%
Mn 257.610†	3226676.5	3423.6	ug/L	28.71	3423.6	ppb	28.71	0.84%
Mo 202.031†	26.7	9.9907	ug/L	0.26643	9.9907	ppb	0.26643	2.67%
Na 589.592 Radial†	2033.9	592.72	ug/L	13.252	592.72	ppb	13.252	2.24%
Ni 231.604†	6948.0	165.36	ug/L	2.391	165.36	ppb	2.391	1.45%
P 214.914†	2530.0	1386.7	ug/L	27.67	1386.7	ppb	27.67	2.00%
Pb 220.353†	863.3	111.97	ug/L	2.588	111.97	ppb	2.588	2.31%
S 181.975 Axial†	817.9	1072.4	ug/L	3.33	1072.4	ppb	3.33	0.31%
Sb 206.836†	62.4	4.7065	ug/L	0.89274	4.7065	ppb	0.89274	18.97%
Se 196.026†	-498.3	36.096	ug/L	2.2338	36.096	ppb	2.2338	6.19%
Si 251.611†	1159063.7	35486	ug/L	295.6	35486	ppb	295.6	0.83%
Sn 189.927†	-29.8	0.0443	ug/L	2.04702	0.0443	ppb	2.04702	>999.9%
Sr 421.552†	37219.2	234.96	ug/L	1.499	234.96	ppb	1.499	0.64%
Ti 334.940†	3239956.3	5031.7	ug/L	44.25	5031.7	ppb	44.25	0.88%
Tl 190.801†	-197.7	-0.1961	ug/L	4.15852	-0.1961	ppb	4.15852	>999.9%
U 409.014†	-4637.6	-144.07	ug/L	2.130	-144.07	ppb	2.130	1.48%
V 292.402†	35211.5	209.91	ug/L	0.328	209.91	ppb	0.328	0.16%
Zn 213.857†	24746.7	212.70	ug/L	3.010	212.70	ppb	3.010	1.42%
SiO2†	1150069.8	75292	ug/L	1045.3	75292	ppb	1045.3	1.39%

Sequence No.: 42
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 1/13/2010 19:50:29
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	5338.9	5338.9	101	%			19:52:21
1	Y RADIAL	5664.4	5664.4	99.86	%			19:52:21
1	Al 396.153Radial†	6907.7	6887.5	4997.7	ug/L	4997.7	ppb	19:52:21
1	Ca 317.933Radial†	3382.5	3342.8	5080.3	ug/L	5080.3	ppb	19:52:41
1	Fe 238.204 Radial†	638.9	625.4	5170.6	ug/L	5170.6	ppb	19:52:41
1	K 766.490 Radial†	31203.5	28388.3	5135.8	ug/L	5135.8	ppb	19:52:21
1	Mg 279.077 IEC†	169.8	165.6	5177.9	ug/L	5177.9	ppb	19:52:41
1	Na 589.592 Radial†	33946.3	35382.0	10311	ug/L	10311	ppb	19:52:21
1	Sr 421.552†	81781.1	81328.7	513.73	ug/L	513.73	ppb	19:52:21
1	Sc 361.383	888455.8	888455.8	101.85	%			19:53:38
1	Y 371.029	733750.7	733750.7	100.04	%			19:53:38
1	Ag 328.068†	115377.8	112897.5	505.48	ug/L	505.48	ppb	19:53:44
1	As 188.979†	1212.8	1214.1	497.26	ug/L	497.26	ppb	19:54:04
1	B 249.677†	22387.5	22616.5	490.81	ug/L	490.81	ppb	19:53:44
1	Ba 233.527†	67473.5	66253.6	499.50	ug/L	499.50	ppb	19:53:44
1	Be 313.107†	1427279.8	1405612.3	500.30	ug/L	500.30	ppb	19:53:38
1	Cd 226.502†	47641.2	46976.2	497.36	ug/L	497.36	ppb	19:53:44
1	Co 228.616†	25846.5	25454.3	499.46	ug/L	499.46	ppb	19:53:44
1	Cr 267.716†	47250.6	46316.9	495.54	ug/L	495.54	ppb	19:53:44
1	Cu 324.752†	181240.4	171393.9	497.12	ug/L	497.12	ppb	19:53:44
1	Mn 257.610†	482229.5	472967.3	500.75	ug/L	500.75	ppb	19:53:38
1	Mo 202.031†	7484.2	7327.3	495.18	ug/L	495.18	ppb	19:54:04
1	Ni 231.604†	21372.1	20888.7	496.93	ug/L	496.93	ppb	19:53:44
1	P 214.914†	4565.0	4270.3	2361.2	ug/L	2361.2	ppb	19:54:04
1	Pb 220.353†	4241.2	4231.3	495.18	ug/L	495.18	ppb	19:54:04
1	S 181.975 Axial†	804.7	745.5	992.96	ug/L	992.96	ppb	19:54:04
1	Sb 206.836†	1567.8	1510.1	517.12	ug/L	517.12	ppb	19:54:04
1	Se 196.026†	803.5	813.0	513.32	ug/L	513.32	ppb	19:54:04
1	Si 251.611†	83884.3	81913.2	2501.8	ug/L	2501.8	ppb	19:53:44
1	Sn 189.927†	2988.2	2933.0	492.79	ug/L	492.79	ppb	19:54:04
1	Ti 334.940†	320268.9	315787.0	490.13	ug/L	490.13	ppb	19:53:44
1	Tl 190.801†	1695.1	1703.7	499.54	ug/L	499.54	ppb	19:54:04
1	U 409.014†	15808.6	17598.1	498.37	ug/L	498.37	ppb	19:53:44
1	V 292.402†	75824.8	75834.9	502.21	ug/L	502.21	ppb	19:53:44
1	Zn 213.857†	57169.2	55131.4	494.09	ug/L	494.09	ppb	19:53:44
1	SiO2†	83605.2	81623.8	5330.2	ug/L	5330.2	ppb	19:55:11
2	Sc Radial	5241.7	5241.7	98.7	%			19:52:46
2	Y RADIAL	5567.7	5567.7	98.16	%			19:52:46
2	Al 396.153Radial†	6847.1	6953.5	5045.1	ug/L	5045.1	ppb	19:52:46
2	Ca 317.933Radial†	3363.0	3385.4	5145.0	ug/L	5145.0	ppb	19:53:06
2	Fe 238.204 Radial†	633.5	631.6	5222.5	ug/L	5222.5	ppb	19:53:06
2	K 766.490 Radial†	30836.2	28591.4	5172.5	ug/L	5172.5	ppb	19:52:46
2	Mg 279.077 IEC†	172.1	171.2	5350.8	ug/L	5350.8	ppb	19:53:06
2	Na 589.592 Radial†	33333.4	35386.9	10313	ug/L	10313	ppb	19:52:46
2	Sr 421.552†	80548.2	81587.4	515.36	ug/L	515.36	ppb	19:52:46
2	Sc 361.383	866281.9	866281.9	99.313	%			19:54:09
2	Y 371.029	717438.6	717438.6	97.812	%			19:54:09
2	Ag 328.068†	115671.8	116092.9	519.76	ug/L	519.76	ppb	19:54:15
2	As 188.979†	1217.7	1249.6	511.75	ug/L	511.75	ppb	19:54:35
2	B 249.677†	22550.2	23343.1	506.60	ug/L	506.60	ppb	19:54:15
2	Ba 233.527†	67486.9	67962.7	512.39	ug/L	512.39	ppb	19:54:15
2	Be 313.107†	1397786.4	1411783.1	502.52	ug/L	502.52	ppb	19:54:09
2	Cd 226.502†	47689.2	48221.8	510.56	ug/L	510.56	ppb	19:54:15
2	Co 228.616†	25874.5	26132.0	512.76	ug/L	512.76	ppb	19:54:15
2	Cr 267.716†	47466.4	47721.6	510.57	ug/L	510.57	ppb	19:54:15
2	Cu 324.752†	182133.2	176847.5	512.93	ug/L	512.93	ppb	19:54:15
2	Mn 257.610†	471531.6	474314.0	502.17	ug/L	502.17	ppb	19:54:09
2	Mo 202.031†	7502.8	7534.2	509.15	ug/L	509.15	ppb	19:54:35
2	Ni 231.604†	21439.3	21493.4	511.32	ug/L	511.32	ppb	19:54:15

2	P 214.914†	4568.0	4388.1	2426.0	ug/L	2426.0 ppb	19:54:35
2	Pb 220.353†	4265.0	4361.9	510.44	ug/L	510.44 ppb	19:54:35
2	S 181.975 Axial†	807.7	768.7	1023.9	ug/L	1023.9 ppb	19:54:35
2	Sb 206.836†	1548.9	1530.4	524.37	ug/L	524.37 ppb	19:54:35
2	Se 196.026†	818.9	848.7	535.27	ug/L	535.27 ppb	19:54:35
2	Si 251.611†	83969.5	84107.1	2568.8	ug/L	2568.8 ppb	19:54:15
2	Sn 189.927†	3005.1	3025.1	508.25	ug/L	508.25 ppb	19:54:35
2	Ti 334.940†	321221.7	324794.8	504.09	ug/L	504.09 ppb	19:54:15
2	Tl 190.801†	1696.6	1747.8	512.44	ug/L	512.44 ppb	19:54:35
2	U 409.014†	16070.5	18259.1	517.11	ug/L	517.11 ppb	19:54:15
2	V 292.402†	76107.4	78024.9	516.73	ug/L	516.73 ppb	19:54:15
2	Zn 213.857†	57335.4	56735.4	508.47	ug/L	508.47 ppb	19:54:15
2	SiO2†	83596.7	83716.2	5466.8	ug/L	5466.8 ppb	19:55:16
3	Sc Radial	5295.4	5295.4	99.7	%		19:53:11
3	Y RADIAL	5614.4	5614.4	98.98	%		19:53:11
3	Al 396.153Radial†	6878.4	6914.6	5017.1	ug/L	5017.1 ppb	19:53:11
3	Ca 317.933Radial†	3375.4	3363.4	5111.5	ug/L	5111.5 ppb	19:53:31
3	Fe 238.204 Radial†	635.1	626.7	5182.2	ug/L	5182.2 ppb	19:53:31
3	K 766.490 Radial†	30981.0	28419.8	5141.5	ug/L	5141.5 ppb	19:53:11
3	Mg 279.077 IEC†	170.5	167.8	5245.6	ug/L	5245.6 ppb	19:53:31
3	Na 589.592 Radial†	33457.3	35168.7	10249	ug/L	10249 ppb	19:53:11
3	Sr 421.552†	80815.6	81028.0	511.83	ug/L	511.83 ppb	19:53:11
3	Sc 361.383	875752.2	875752.2	100.40	%		19:54:40
3	Y 371.029	724868.1	724868.1	98.825	%		19:54:40
3	Ag 328.068†	116253.4	115412.7	516.72	ug/L	516.72 ppb	19:54:46
3	As 188.979†	1217.8	1236.4	506.36	ug/L	506.36 ppb	19:55:06
3	B 249.677†	22765.8	23312.2	505.95	ug/L	505.95 ppb	19:54:46
3	Ba 233.527†	67952.6	67691.7	510.34	ug/L	510.34 ppb	19:54:46
3	Be 313.107†	1417250.5	1415949.8	503.99	ug/L	503.99 ppb	19:54:40
3	Cd 226.502†	48109.9	48121.5	509.50	ug/L	509.50 ppb	19:54:46
3	Co 228.616†	25974.6	25949.9	509.18	ug/L	509.18 ppb	19:54:46
3	Cr 267.716†	47741.8	47479.0	507.98	ug/L	507.98 ppb	19:54:46
3	Cu 324.752†	182728.5	175457.3	508.91	ug/L	508.91 ppb	19:54:46
3	Mn 257.610†	477841.8	475464.8	503.39	ug/L	503.39 ppb	19:54:40
3	Mo 202.031†	7498.1	7447.8	503.31	ug/L	503.31 ppb	19:55:06
3	Ni 231.604†	21587.7	21407.8	509.28	ug/L	509.28 ppb	19:54:46
3	P 214.914†	4571.2	4341.6	2399.9	ug/L	2399.9 ppb	19:55:06
3	Pb 220.353†	4235.1	4285.6	501.53	ug/L	501.53 ppb	19:55:06
3	S 181.975 Axial†	800.4	752.7	1002.6	ug/L	1002.6 ppb	19:55:06
3	Sb 206.836†	1557.2	1521.8	521.34	ug/L	521.34 ppb	19:55:06
3	Se 196.026†	805.4	826.4	521.54	ug/L	521.54 ppb	19:55:06
3	Si 251.611†	84547.6	83768.5	2558.5	ug/L	2558.5 ppb	19:54:46
3	Sn 189.927†	3002.8	2990.2	502.38	ug/L	502.38 ppb	19:55:06
3	Ti 334.940†	322837.7	322906.6	501.17	ug/L	501.17 ppb	19:54:46
3	Tl 190.801†	1698.6	1731.4	507.65	ug/L	507.65 ppb	19:55:06
3	U 409.014†	15855.7	17870.2	506.07	ug/L	506.07 ppb	19:54:46
3	V 292.402†	76634.4	77721.1	514.65	ug/L	514.65 ppb	19:54:46
3	Zn 213.857†	57721.2	56495.3	506.32	ug/L	506.32 ppb	19:54:46
3	SiO2†	83014.4	82226.0	5369.4	ug/L	5369.4 ppb	19:55:21

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	876830.0	100.52	%	1.276				1.27%
Sc Radial	5292.0	99.7	%	0.92				0.92%
Y 371.029	725352.5	98.891	%	1.1134				1.13%
Y RADIAL	5615.5	99.00	%	0.853				0.86%
Ag 328.068†	114801.0	513.99	ug/L	7.520	513.99	ppb	7.520	1.46%
QC value within limits for Ag 328.068 Recovery = 102.80%								
Al 396.153Radial†	6918.5	5020.0	ug/L	23.83	5020.0	ppb	23.83	0.47%
QC value within limits for Al 396.153Radial Recovery = 100.40%								
As 188.979†	1233.4	505.12	ug/L	7.325	505.12	ppb	7.325	1.45%
QC value within limits for As 188.979 Recovery = 101.02%								
B 249.677†	23090.6	501.12	ug/L	8.935	501.12	ppb	8.935	1.78%
QC value within limits for B 249.677 Recovery = 100.22%								
Ba 233.527†	67302.7	507.41	ug/L	6.926	507.41	ppb	6.926	1.36%
QC value within limits for Ba 233.527 Recovery = 101.48%								
Be 313.107†	1411115.1	502.27	ug/L	1.861	502.27	ppb	1.861	0.37%
QC value within limits for Be 313.107 Recovery = 100.45%								
Ca 317.933Radial†	3363.9	5112.3	ug/L	32.37	5112.3	ppb	32.37	0.63%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.25%
Cd 226.502†            47773.2      505.80 ug/L         7.333      505.80 ppb          7.333   1.45%
   QC value within limits for Cd 226.502  Recovery = 101.16%
Co 228.616†            25845.4      507.13 ug/L         6.881      507.13 ppb          6.881   1.36%
   QC value within limits for Co 228.616  Recovery = 101.43%
Cr 267.716†            47172.5      504.70 ug/L         8.032      504.70 ppb          8.032   1.59%
   QC value within limits for Cr 267.716  Recovery = 100.94%
Cu 324.752†           174566.2      506.32 ug/L         8.216      506.32 ppb          8.216   1.62%
   QC value within limits for Cu 324.752  Recovery = 101.26%
Fe 238.204 Radial†       627.9      5191.8 ug/L        27.22      5191.8 ppb          27.22   0.52%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.84%
K 766.490 Radial†      28466.5      5149.9 ug/L        19.77      5149.9 ppb          19.77   0.38%
   QC value within limits for K 766.490 Radial  Recovery = 103.00%
Mg 279.077 IEC†          168.2      5258.1 ug/L        87.09      5258.1 ppb          87.09   1.66%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.16%
Mn 257.610†           474248.7      502.10 ug/L         1.322      502.10 ppb          1.322   0.26%
   QC value within limits for Mn 257.610  Recovery = 100.42%
Mo 202.031†             7436.4      502.54 ug/L         7.017      502.54 ppb          7.017   1.40%
   QC value within limits for Mo 202.031  Recovery = 100.51%
Na 589.592 Radial†     35312.6       10291 ug/L          36.3       10291 ppb           36.3   0.35%
   QC value within limits for Na 589.592 Radial  Recovery = 102.91%
Ni 231.604†            21263.3      505.84 ug/L         7.786      505.84 ppb          7.786   1.54%
   QC value within limits for Ni 231.604  Recovery = 101.17%
P 214.914†              4333.3      2395.7 ug/L        32.60      2395.7 ppb          32.60   1.36%
   QC value within limits for P 214.914  Recovery = 95.83%
Pb 220.353†             4292.9      502.38 ug/L         7.667      502.38 ppb          7.667   1.53%
   QC value within limits for Pb 220.353  Recovery = 100.48%
S 181.975 Axial†         755.6      1006.5 ug/L        15.84      1006.5 ppb          15.84   1.57%
   QC value within limits for S 181.975 Axial  Recovery = 100.65%
Sb 206.836†             1520.8      520.94 ug/L         3.640      520.94 ppb          3.640   0.70%
   QC value within limits for Sb 206.836  Recovery = 104.19%
Se 196.026†              829.3      523.38 ug/L        11.085      523.38 ppb         11.085   2.12%
   QC value within limits for Se 196.026  Recovery = 104.68%
Si 251.611†            83262.9      2543.0 ug/L        36.08      2543.0 ppb          36.08   1.42%
   QC value within limits for Si 251.611  Recovery = 101.72%
Sn 189.927†             2982.8      501.14 ug/L         7.801      501.14 ppb          7.801   1.56%
   QC value within limits for Sn 189.927  Recovery = 100.23%
Sr 421.552†            81314.7      513.64 ug/L         1.769      513.64 ppb          1.769   0.34%
   QC value within limits for Sr 421.552  Recovery = 102.73%
Ti 334.940†           321162.8      498.46 ug/L         7.366      498.46 ppb          7.366   1.48%
   QC value within limits for Ti 334.940  Recovery = 99.69%
Tl 190.801†             1727.6      506.54 ug/L         6.522      506.54 ppb          6.522   1.29%
   QC value within limits for Tl 190.801  Recovery = 101.31%
U 409.014†             17909.1      507.19 ug/L         9.420      507.19 ppb          9.420   1.86%
   QC value within limits for U 409.014  Recovery = 101.44%
V 292.402†             77193.6      511.20 ug/L         7.853      511.20 ppb          7.853   1.54%
   QC value within limits for V 292.402  Recovery = 102.24%
Zn 213.857†            56120.7      502.96 ug/L         7.759      502.96 ppb          7.759   1.54%
   QC value within limits for Zn 213.857  Recovery = 100.59%
SiO2†                  82522.0      5388.8 ug/L        70.34      5388.8 ppb          70.34   1.31%
   QC value within limits for SiO2  Recovery = 100.77%
All analyte(s) passed QC.
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Sequence No.: 43
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 1/13/2010 19:57:31
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	5338.9	5338.9	101	%			19:59:23
1	Y RADIAL	5703.6	5703.6	100.6	%			19:59:23
1	Al 396.153Radial†	2.8	19.5	14.218	ug/L	14.218	ppb	19:59:23
1	Ca 317.933Radial†	20.0	-1.7	-2.5650	ug/L	-2.5650	ppb	19:59:43
1	Fe 238.204 Radial†	9.2	-1.1	-8.8012	ug/L	-8.8012	ppb	19:59:43
1	K 766.490 Radial†	3010.4	345.6	62.592	ug/L	62.592	ppb	19:59:23
1	Mg 279.077 IEC†	1.4	-1.8	-56.623	ug/L	-56.623	ppb	19:59:43
1	Na 589.592 Radial†	-1484.4	140.5	40.947	ug/L	40.947	ppb	19:59:23
1	Sr 421.552†	20.3	4.5	0.0283	ug/L	0.0283	ppb	19:59:23
1	Sc 361.383	858516.5	858516.5	98.423	%			20:00:40
1	Y 371.029	721928.7	721928.7	98.424	%			20:00:40
1	Ag 328.068†	311.1	-63.2	-0.2831	ug/L	-0.2831	ppb	20:00:40
1	As 188.979†	-20.8	2.3	0.9350	ug/L	0.9350	ppb	20:01:00
1	B 249.677†	-427.4	202.5	4.4170	ug/L	4.4170	ppb	20:01:00
1	Ba 233.527†	-6.8	1.9	0.0136	ug/L	0.0136	ppb	20:01:00
1	Be 313.107†	-4264.1	-8.0	-0.0029	ug/L	-0.0029	ppb	20:00:40
1	Cd 226.502†	-184.7	15.0	0.1589	ug/L	0.1589	ppb	20:01:00
1	Co 228.616†	-76.6	0.6	0.0117	ug/L	0.0117	ppb	20:01:00
1	Cr 267.716†	71.4	-0.6	-0.0065	ug/L	-0.0065	ppb	20:01:00
1	Cu 324.752†	6539.7	98.5	0.2863	ug/L	0.2863	ppb	20:00:40
1	Mn 257.610†	440.3	-33.0	-0.0335	ug/L	-0.0335	ppb	20:01:00
1	Mo 202.031†	19.9	-0.4	-0.0265	ug/L	-0.0265	ppb	20:01:00
1	Ni 231.604†	90.4	-2.4	-0.0563	ug/L	-0.0563	ppb	20:01:00
1	P 214.914†	223.6	15.7	9.0122	ug/L	9.0122	ppb	20:01:00
1	Pb 220.353†	-70.9	-4.7	-0.5401	ug/L	-0.5401	ppb	20:01:00
1	S 181.975 Axial†	46.0	2.2	2.9238	ug/L	2.9238	ppb	20:01:00
1	Sb 206.836†	41.2	12.7	4.2014	ug/L	4.2014	ppb	20:01:00
1	Se 196.026†	-29.2	-5.5	-3.3843	ug/L	-3.3843	ppb	20:01:00
1	Si 251.611†	470.5	34.6	1.0588	ug/L	1.0588	ppb	20:01:00
1	Sn 189.927†	7.2	6.5	1.0916	ug/L	1.0916	ppb	20:01:00
1	Ti 334.940†	-1357.2	-28.5	-0.0393	ug/L	-0.0393	ppb	20:00:40
1	Tl 190.801†	-31.6	7.3	2.1397	ug/L	2.1397	ppb	20:01:00
1	U 409.014†	-2101.7	-58.0	-1.6468	ug/L	-1.6468	ppb	20:00:40
1	V 292.402†	-1389.2	-20.6	-0.1376	ug/L	-0.1376	ppb	20:00:40
1	Zn 213.857†	951.5	-30.0	-0.2704	ug/L	-0.2704	ppb	20:01:00
1	SiO2†	474.7	23.4	1.5358	ug/L	1.5358	ppb	20:01:56
2	Sc Radial	5293.6	5293.6	99.7	%			19:59:48
2	Y RADIAL	5642.3	5642.3	99.47	%			19:59:48
2	Al 396.153Radial†	-3.0	13.7	9.9849	ug/L	9.9849	ppb	19:59:48
2	Ca 317.933Radial†	18.2	-3.3	-4.9744	ug/L	-4.9744	ppb	20:00:08
2	Fe 238.204 Radial†	9.7	-0.4	-3.5307	ug/L	-3.5307	ppb	20:00:08
2	K 766.490 Radial†	2929.6	290.3	52.577	ug/L	52.577	ppb	19:59:48
2	Mg 279.077 IEC†	1.9	-1.3	-39.854	ug/L	-39.854	ppb	20:00:08
2	Na 589.592 Radial†	-1566.1	45.9	13.368	ug/L	13.368	ppb	19:59:48
2	Sr 421.552†	17.3	1.6	0.0102	ug/L	0.0102	ppb	19:59:48
2	Sc 361.383	867052.3	867052.3	99.401	%			20:01:05
2	Y 371.029	730445.6	730445.6	99.585	%			20:01:05
2	Ag 328.068†	349.2	-27.9	-0.1248	ug/L	-0.1248	ppb	20:01:05
2	As 188.979†	-27.3	-4.0	-1.6263	ug/L	-1.6263	ppb	20:01:25
2	B 249.677†	-438.9	195.2	4.2558	ug/L	4.2558	ppb	20:01:25
2	Ba 233.527†	-9.8	-1.0	-0.0065	ug/L	-0.0065	ppb	20:01:25
2	Be 313.107†	-4352.9	-54.7	-0.0190	ug/L	-0.0190	ppb	20:01:05
2	Cd 226.502†	-200.5	0.9	0.0103	ug/L	0.0103	ppb	20:01:25
2	Co 228.616†	-66.6	11.4	0.2232	ug/L	0.2232	ppb	20:01:25
2	Cr 267.716†	109.7	37.2	0.3973	ug/L	0.3973	ppb	20:01:25
2	Cu 324.752†	6555.1	48.5	0.1397	ug/L	0.1397	ppb	20:01:05
2	Mn 257.610†	431.5	-46.3	-0.0477	ug/L	-0.0477	ppb	20:01:25
2	Mo 202.031†	22.7	2.3	0.1568	ug/L	0.1568	ppb	20:01:25
2	Ni 231.604†	89.2	-4.5	-0.1069	ug/L	-0.1069	ppb	20:01:25

2	P 214.914†	205.8	-4.4	-2.5659 ug/L	-2.5659 ppb	20:01:25
2	Pb 220.353†	-59.4	7.5	0.8830 ug/L	0.8830 ppb	20:01:25
2	S 181.975 Axial†	45.2	1.0	1.3128 ug/L	1.3128 ppb	20:01:25
2	Sb 206.836†	32.6	3.5	1.1845 ug/L	1.1845 ppb	20:01:25
2	Se 196.026†	-29.1	-5.2	-3.1591 ug/L	-3.1591 ppb	20:01:25
2	Si 251.611†	479.4	38.8	1.1859 ug/L	1.1859 ppb	20:01:25
2	Sn 189.927†	5.9	5.2	0.8673 ug/L	0.8673 ppb	20:01:25
2	Ti 334.940†	-1223.4	119.6	0.1874 ug/L	0.1874 ppb	20:01:05
2	Tl 190.801†	-29.2	10.1	2.9499 ug/L	2.9499 ppb	20:01:25
2	U 409.014†	-2010.9	54.4	1.5440 ug/L	1.5440 ppb	20:01:05
2	V 292.402†	-1317.1	65.9	0.4351 ug/L	0.4351 ppb	20:01:05
2	Zn 213.857†	973.8	-17.1	-0.1538 ug/L	-0.1538 ppb	20:01:25
2	SiO2†	493.2	37.2	2.4333 ug/L	2.4333 ppb	20:02:01
3	Sc Radial	5313.8	5313.8	100 %		20:00:13
3	Y RADIAL	5673.0	5673.0	100.0 %		20:00:13
3	Al 396.153Radial†	3.4	20.1	14.685 ug/L	14.685 ppb	20:00:13
3	Ca 317.933Radial†	15.5	-6.1	-9.2569 ug/L	-9.2569 ppb	20:00:33
3	Fe 238.204 Radial†	8.7	-1.4	-11.923 ug/L	-11.923 ppb	20:00:33
3	K 766.490 Radial†	2979.9	329.4	59.657 ug/L	59.657 ppb	20:00:13
3	Mg 279.077 IEC†	2.6	-0.6	-19.740 ug/L	-19.740 ppb	20:00:33
3	Na 589.592 Radial†	-1542.4	75.6	22.035 ug/L	22.035 ppb	20:00:13
3	Sr 421.552†	10.8	-4.9	-0.0309 ug/L	-0.0309 ppb	20:00:13
3	Sc 361.383	860824.5	860824.5	98.687 %		20:01:30
3	Y 371.029	723824.1	723824.1	98.682 %		20:01:30
3	Ag 328.068†	390.2	16.2	0.0657 ug/L	0.0657 ppb	20:01:30
3	As 188.979†	-23.1	0.0	0.0122 ug/L	0.0122 ppb	20:01:50
3	B 249.677†	-445.4	185.4	4.0440 ug/L	4.0440 ppb	20:01:50
3	Ba 233.527†	-7.2	1.5	0.0093 ug/L	0.0093 ppb	20:01:50
3	Be 313.107†	-4403.5	-137.6	-0.0488 ug/L	-0.0488 ppb	20:01:30
3	Cd 226.502†	-195.2	4.8	0.0518 ug/L	0.0518 ppb	20:01:50
3	Co 228.616†	-74.1	3.4	0.0662 ug/L	0.0662 ppb	20:01:50
3	Cr 267.716†	90.8	18.8	0.2001 ug/L	0.2001 ppb	20:01:50
3	Cu 324.752†	6605.0	146.8	0.4257 ug/L	0.4257 ppb	20:01:30
3	Mn 257.610†	427.7	-47.0	-0.0501 ug/L	-0.0501 ppb	20:01:50
3	Mo 202.031†	21.8	1.6	0.1047 ug/L	0.1047 ppb	20:01:50
3	Ni 231.604†	81.9	-11.2	-0.2663 ug/L	-0.2663 ppb	20:01:50
3	P 214.914†	207.7	-1.0	-0.6296 ug/L	-0.6296 ppb	20:01:50
3	Pb 220.353†	-71.3	-4.9	-0.5683 ug/L	-0.5683 ppb	20:01:50
3	S 181.975 Axial†	49.0	5.2	6.8679 ug/L	6.8679 ppb	20:01:50
3	Sb 206.836†	34.5	5.7	1.9197 ug/L	1.9197 ppb	20:01:50
3	Se 196.026†	-33.4	-9.7	-5.9163 ug/L	-5.9163 ppb	20:01:50
3	Si 251.611†	458.9	21.5	0.6573 ug/L	0.6573 ppb	20:01:50
3	Sn 189.927†	9.3	8.6	1.4486 ug/L	1.4486 ppb	20:01:50
3	Ti 334.940†	-1319.8	13.1	0.0209 ug/L	0.0209 ppb	20:01:30
3	Tl 190.801†	-30.7	8.4	2.4379 ug/L	2.4379 ppb	20:01:50
3	U 409.014†	-2077.5	-27.8	-0.7877 ug/L	-0.7877 ppb	20:01:30
3	V 292.402†	-1490.6	-119.5	-0.7795 ug/L	-0.7795 ppb	20:01:30
3	Zn 213.857†	966.5	-17.4	-0.1548 ug/L	-0.1548 ppb	20:01:50
3	SiO2†	481.9	29.4	1.9204 ug/L	1.9204 ppb	20:02:06

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	862131.1	98.837	%	0.5062				0.51%
Sc Radial	5315.4	100	%	0.4				0.43%
Y 371.029	725399.5	98.897	%	0.6096				0.62%
Y RADIAL	5673.0	100.0	%	0.54				0.54%
Ag 328.068†	-25.0	-0.1141	ug/L	0.17462	-0.1141	ppb	0.17462	153.07%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	17.8	12.962	ug/L	2.5893	12.962	ppb	2.5893	19.98%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.6	-0.2264	ug/L	1.29721	-0.2264	ppb	1.29721	573.07%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	194.4	4.2389	ug/L	0.18705	4.2389	ppb	0.18705	4.41%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.8	0.0055	ug/L	0.01062	0.0055	ppb	0.01062	193.95%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-66.8	-0.0236	ug/L	0.02329	-0.0236	ppb	0.02329	98.74%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-3.7	-5.5988	ug/L	3.38934	-5.5988	ppb	3.38934	60.54%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 6.9      0.0737 ug/L       0.07668      0.0737 ppb        0.07668 104.07%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 5.1      0.1004 ug/L       0.10979      0.1004 ppb        0.10979 109.37%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                18.5      0.1970 ug/L       0.20192      0.1970 ppb        0.20192 102.51%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                98.0      0.2839 ug/L       0.14299      0.2839 ppb        0.14299  50.37%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.0     -8.0850 ug/L       4.24179     -8.0850 ppb        4.24179  52.46%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         321.8     58.275 ug/L        5.1488     58.275 ppb         5.1488   8.84%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.2    -38.739 ug/L       18.4668    -38.739 ppb        18.4668  47.67%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -42.1     -0.0438 ug/L       0.00895     -0.0438 ppb        0.00895  20.46%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 1.2      0.0784 ug/L       0.09443      0.0784 ppb        0.09443 120.52%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         87.3     25.450 ug/L       14.1032     25.450 ppb        14.1032  55.42%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -6.0     -0.1432 ug/L       0.10959     -0.1432 ppb        0.10959  76.54%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  3.4      1.9389 ug/L       6.20171      1.9389 ppb        6.20171 319.85%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -0.7     -0.0751 ug/L       0.82991     -0.0751 ppb        0.82991 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            2.8      3.7015 ug/L       2.85803      3.7015 ppb        2.85803  77.21%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 7.3      2.4352 ug/L       1.57314      2.4352 ppb        1.57314  64.60%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -6.8     -4.1533 ug/L       1.53103     -4.1533 ppb        1.53103  36.86%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                31.6      0.9673 ug/L       0.27591      0.9673 ppb        0.27591  28.52%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 6.8      1.1359 ug/L       0.29317      1.1359 ppb        0.29317  25.81%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 0.4      0.0025 ug/L       0.03036      0.0025 ppb        0.03036 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                34.7      0.0563 ug/L       0.11742      0.0563 ppb        0.11742 208.44%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 8.6      2.5092 ug/L       0.40974      2.5092 ppb        0.40974  16.33%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -10.5     -0.2968 ug/L       1.65107     -0.2968 ppb        1.65107 556.25%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -24.7     -0.1607 ug/L       0.60762     -0.1607 ppb        0.60762 378.13%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -21.5     -0.1930 ug/L       0.06702     -0.1930 ppb        0.06702  34.73%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      30.0      1.9631 ug/L       0.45030      1.9631 ppb        0.45030  22.94%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Tuesday, January 12, 2010 12:24:10
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\090811\Sample.353
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	1051.2	1051.239	35.453	3.4
	Mg	24.0	18904.9	18904.902	185.370	1.0
	Co	58.9	47490.4	47490.409	341.590	0.7
	Rh	102.9	85416.4	85416.398	115.652	0.1
	In	114.9	113193.7	113193.724	1278.379	1.1
	Pb	208.0	40445.6	40445.585	638.544	1.6
⌈>	Ba	137.9	92298.6	92298.566	995.814	1.1
⌊	Ba++	69.0	1839.6	0.020	0.001	3.0
⌈>	Ce	139.9	109676.8	109676.817	656.521	0.6
⌊	CeO	155.9	2520.3	0.023	0.000	1.6
	Bkgd	220.0	6.9	6.900	1.140	16.5

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	7.0	1030.0
Co	59	17	7.8	34014.1
In	115	17	9.3	81131.4

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	609	2060	0.638
Be	9.0	9.0	2045	2045	0.664
Mg	24.0	24.0	5679	2075	0.602
Mg	25.0	25.0	5941	2080	0.623
Mg	26.0	26.0	6146	2085	0.606
Co	58.9	58.9	14170	2140	0.622
Rh	102.9	102.9	24867	2230	0.641
In	114.9	115.0	27788	2255	0.638
Ce	139.9	139.9	33853	2310	0.615
Pb	206.0	206.0	49932	2500	0.644
Pb	207.0	207.0	50101	2380	0.626
Pb	208.0	208.0	50448	2570	0.605
U	238.1	238.1	57704	2510	0.666

ICPMS#4 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, January 12, 2010 19:34:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\Blank.080

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		24	
	Be	9		ug/L		4	
	B	11		ug/L		82	
	Na	23		ug/L		74871	
	Mg	24		ug/L		2667	
	Al	27		ug/L		3668	
	P	31		ug/L		3279	
	K	39		ug/L		508917	
	Ca	43		ug/L		741	
>	Sc	45		ug/L		212614	
	Ti	47		ug/L		277	
	V	51		ug/L		-4301	
	Cr	52		ug/L		1072	
	Cr	53		ug/L		280173	
	Mn	55		ug/L		1384	
	Fe	57		ug/L		4097	
	Co	59		ug/L		152	
	Ni	60		ug/L		78	
	Cu	63		ug/L		204	
	Cu	65		ug/L		120	
	Zn	66		ug/L		107	
	Zn	67		ug/L		14734	
	Zn	68		ug/L		1387	
>	Ge	74		ug/L		153711	
	As	75		ug/L		407	
	Se	77		ug/L		10443	
	Se	82		ug/L		-26	
	Kr	83		ug/L		76	
	Sr	88		ug/L		143	
	Y	89		ug/L		22	
	Zr	90		ug/L		268	
	Mo	98		ug/L		41	
	Ag	107		ug/L		72	
	Cd	111		ug/L		18	
	Cd	114		ug/L		26	
>	In	115		ug/L		92515	
	Sn	120		ug/L		186	
	Sb	121		ug/L		243	
	Sb	123		ug/L		231	
	Ba	135		ug/L		19	
	Ba	137		ug/L		24	
	Ho	165		ug/L		9	
>	Lu	175		ug/L		78385	
	Tl	205		ug/L		312	
	Pb	208		ug/L		312	
	Bi	209		ug/L		31	
	Th	232		ug/L		380	
	U	238		ug/L		152	

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	0.9993
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	Simple Linear	
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 1
Sample Date/Time: Tuesday, January 12, 2010 19:40:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\Standard 1.081

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	3.439	2081	0.010
	Be	9	10.000	ug/L	5.272	708	0.003
	B	11	20.000	ug/L	1.822	1458	0.006
	Na	23	1000.000	ug/L	4.813	1594763	7.175
	Mg	24	1000.000	ug/L	3.725	1107713	5.216
	Al	27	1000.000	ug/L	2.364	1553837	7.318
	P	31	1000.000	ug/L	0.904	83293	0.378
	K	39	1000.000	ug/L	4.754	3245195	12.925
	Ca	43	1000.000	ug/L	2.584	6162	0.026
>	Sc	45		ug/L		211851	211850.756
	Ti	47	10.000	ug/L	1.948	2831	0.012
	V	51	10.000	ug/L	39.675	22430	0.126
	Cr	52	10.000	ug/L	1.367	25165	0.114
	Cr	53		ug/L		261987	-0.081
	Mn	55	10.000	ug/L	1.316	41332	0.189
	Fe	57	1000.000	ug/L	1.582	83323	0.374
	Co	59	10.000	ug/L	0.317	29451	0.138
	Ni	60	10.000	ug/L	1.650	6156	0.029
	Cu	63		ug/L		13942	0.065
	Cu	65	10.000	ug/L	2.663	6666	0.031
	Zn	66	10.000	ug/L	1.625	3708	0.023
	Zn	67		ug/L		14164	-0.004
	Zn	68		ug/L		3741	0.015
>	Ge	74		ug/L		154058	154058.178
	As	75	10.000	ug/L	14.805	4901	0.029
	Se	77		ug/L		9749	-0.005
	Se	82	10.000	ug/L	4.828	381	0.003
	Kr	83		ug/L		74	-0.000
	Sr	88	10.000	ug/L	1.041	60761	0.654
	Y	89		ug/L		17	-0.000
	Zr	90	10.000	ug/L	0.397	32311	0.346
	Mo	98	10.000	ug/L	0.905	13867	0.149
	Ag	107	10.000	ug/L	1.507	22367	0.241
	Cd	111	10.000	ug/L	2.109	5188	0.056
	Cd	114		ug/L		11983	0.129
>	In	115		ug/L		92658	92658.276
	Sn	120	10.000	ug/L	0.448	23412	0.251
	Sb	121	10.000	ug/L	6.544	16878	0.179
	Sb	123		ug/L		13056	0.138
	Ba	135		ug/L		5323	0.068
	Ba	137	10.000	ug/L	0.478	9222	0.117
	Ho	165		ug/L		11	0.000
>	Lu	175		ug/L		78560	78559.902
	Tl	205	10.000	ug/L	1.386	16509	0.206
	Pb	208	10.000	ug/L	0.276	48528	0.614
	Bi	209		ug/L		44	0.000
	Th	232	10.000	ug/L	1.048	60813	0.769
	U	238	10.000	ug/L	0.756	64989	0.825

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: Tuesday, January 12, 2010 19:46:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\Standard 2.082

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**100.020**	ug/L	2.719	20665	0.099
	Be	9	**100.002**	ug/L	0.461	6946	0.033
	B	11	**200.023**	ug/L	2.941	13774	0.066
	Na	23	**10007.619**	ug/L	2.190	16267610	77.726
	Mg	24	**9997.169**	ug/L	2.513	10566180	50.712
	Al	27	**10002.742**	ug/L	3.856	15680139	75.259
	P	31	**9997.645**	ug/L	1.293	771905	3.690
	K	39	**9993.113**	ug/L	1.002	25676267	120.835
	Ca	43	**10000.141**	ug/L	0.893	54136	0.256
>	Sc	45		ug/L		208347	208346.513
	Ti	47	**100.014**	ug/L	0.575	25762	0.122
	V	51	**99.846**	ug/L	2.701	222648	1.089
	Cr	52	**99.986**	ug/L	1.301	234705	1.122
	Cr	53		ug/L		301357	0.129
	Mn	55	**99.974**	ug/L	1.706	384211	1.838
	Fe	57	**9998.552**	ug/L	1.705	772031	3.687
	Co	59	**99.973**	ug/L	1.617	280523	1.346
	Ni	60	**99.977**	ug/L	1.104	58505	0.280
	Cu	63		ug/L		131001	0.628
	Cu	65	**99.983**	ug/L	0.498	63415	0.304
	Zn	66	**99.952**	ug/L	2.127	33467	0.223
	Zn	67		ug/L		20527	0.041
	Zn	68		ug/L		25337	0.160
>	Ge	74		ug/L		149654	149654.480
	As	75	**99.921**	ug/L	0.934	40825	0.270
	Se	77		ug/L		12661	0.017
	Se	82	**99.980**	ug/L	2.608	3852	0.026
	Kr	83		ug/L		83	0.000
	Sr	88	**100.004**	ug/L	0.516	589834	6.570
	Y	89		ug/L		72	0.001
	Zr	90	**100.021**	ug/L	0.550	317364	3.533
	Mo	98	**100.028**	ug/L	0.346	137882	1.536
	Ag	107	**99.981**	ug/L	0.861	211992	2.361
	Cd	111	**100.009**	ug/L	0.681	50554	0.563
	Cd	114		ug/L		116672	1.300
>	In	115		ug/L		89756	89756.399
	Sn	120	**100.009**	ug/L	0.934	227195	2.529
	Sb	121	**100.101**	ug/L	2.144	179582	1.998
	Sb	123		ug/L		137684	1.532
	Ba	135		ug/L		52486	0.669
	Ba	137	**99.979**	ug/L	1.739	89959	1.146
	Ho	165		ug/L		11	0.000
>	Lu	175		ug/L		78473	78473.077
	Tl	205	**99.971**	ug/L	1.025	157453	2.003
	Pb	208	**99.982**	ug/L	1.448	473284	6.028
	Bi	209		ug/L		154	0.002
	Th	232	**100.010**	ug/L	1.812	610126	7.771
	U	238	**99.985**	ug/L	2.482	637879	8.128

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	0.9999
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	0.9999
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: Tuesday, January 12, 2010 19:52:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\QC Std 1.083

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.087**	**ug/L**	1.838	10678	0.051
	Be	9	**50.233**	**ug/L**	2.702	3527	0.017
	B	11	**102.788**	**ug/L**	0.536	7192	0.034
	Na	23	**5025.590**	**ug/L**	5.431	8295928	39.032
	Mg	24	**5043.354**	**ug/L**	3.298	5387809	25.583
	Al	27	**5177.163**	**ug/L**	6.446	8207944	38.952
	P	31	**4995.787**	**ug/L**	1.422	391449	1.844
	K	39	**5230.757**	**ug/L**	2.055	13818824	63.249
	Ca	43	**4916.069**	**ug/L**	1.821	27272	0.126
>	Sc	45		**ug/L**		210539	210539.362
	Ti	47	**50.040**	**ug/L**	0.276	13163	0.061
	V	51	**48.523**	**ug/L**	3.031	107158	0.529
	Cr	52	**50.492**	**ug/L**	0.397	120302	0.566
	Cr	53		**ug/L**		296209	0.090
	Mn	55	**51.333**	**ug/L**	0.962	200039	0.944
	Fe	57	**4942.137**	**ug/L**	1.390	387679	1.822
	Co	59	**49.893**	**ug/L**	1.250	141550	0.672
	Ni	60	**51.153**	**ug/L**	0.463	30290	0.144
	Cu	63		**ug/L**		67046	0.317
	Cu	65	**49.844**	**ug/L**	1.254	32006	0.151
	Zn	66	**51.940**	**ug/L**	0.549	17588	0.116
	Zn	67		**ug/L**		18103	0.024
	Zn	68		**ug/L**		13970	0.084
>	Ge	74		**ug/L**		150866	150865.725
	As	75	**48.058**	**ug/L**	1.041	20003	0.130
	Se	77		**ug/L**		11467	0.008
	Se	82	**49.910**	**ug/L**	3.693	1927	0.013
	Kr	83		**ug/L**		73	-0.000
	Sr	88	**51.046**	**ug/L**	0.597	303275	3.354
	Y	89		**ug/L**		58	0.000
	Zr	90	**49.016**	**ug/L**	0.246	156769	1.731
	Mo	98	**48.486**	**ug/L**	0.459	67331	0.744
	Ag	107	**52.172**	**ug/L**	0.890	111447	1.232
	Cd	111	**50.240**	**ug/L**	1.478	25584	0.283
	Cd	114		**ug/L**		58820	0.650
>	In	115		**ug/L**		90395	90395.021
	Sn	120	**50.447**	**ug/L**	0.669	115509	1.276
	Sb	121	**49.441**	**ug/L**	2.062	89462	0.987
	Sb	123		**ug/L**		68483	0.755
	Ba	135		**ug/L**		26355	0.339
	Ba	137	**50.887**	**ug/L**	0.535	45368	0.583
	Ho	165		**ug/L**		14	0.000
>	Lu	175		**ug/L**		77723	77722.642
	Tl	205	**49.229**	**ug/L**	0.394	76955	0.986
	Pb	208	**51.411**	**ug/L**	0.973	241198	3.100
	Bi	209		**ug/L**		65	0.000
	Th	232	**52.303**	**ug/L**	0.821	316244	4.064
	U	238	**53.426**	**ug/L**	1.996	337679	4.343

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	0.9999
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	0.9999
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	102.173				
	Be	9	100.467				
	B	11	102.788				
	Na	23	100.512				
	Mg	24	100.867				
	Al	27	102.518				
	P	31	99.916				
	K	39	104.615				
	Ca	43	98.321				
>	Sc	45			99.0		
	Ti	47	100.079				
	V	51	97.046				
	Cr	52	100.984				
	Cr	53					
	Mn	55	102.666				
	Fe	57	98.843				
	Co	59	99.786				
	Ni	60	102.305				
	Cu	63					
	Cu	65	99.688				
	Zn	66	103.879				
	Zn	67					
	Zn	68					
>	Ge	74			98.1		
	As	75	96.115				
	Se	77					
	Se	82	99.820				
	Kr	83					
	Sr	88	102.092				
	Y	89					
	Zr	90	98.032				
	Mo	98	96.971				
	Ag	107	104.344				
	Cd	111	100.479				
	Cd	114					
>	In	115			97.7		
	Sn	120	100.895				
	Sb	121	98.883				
	Sb	123					
	Ba	135					
	Ba	137	101.774				
	Ho	165					
>	Lu	175			99.2		
	Tl	205	98.457				
	Pb	208	102.822				
	Bi	209					
	Th	232	104.605				
	U	238	106.852				

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: QC Std 2
Sample Date/Time: Tuesday, January 12, 2010 19:59:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\QC Std 2.084

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.005**	**ug/L**	601.999	24	0.000
	Be	9	**0.010**	**ug/L**	399.728	5	0.000
	B	11	**3.786**	**ug/L**	16.332	341	0.001
	Na	23	**-6.314**	**ug/L**	91.659	63476	-0.049
	Mg	24	**-0.905**	**ug/L**	59.736	1667	-0.005
	Al	27	**-0.175**	**ug/L**	558.505	3334	-0.001
	P	31	**3.401**	**ug/L**	52.103	3494	0.001
	K	39	**3.687**	**ug/L**	423.844	510661	0.045
	Ca	43	**5.344**	**ug/L**	31.574	759	0.000
>	Sc	45		**ug/L**		209530	209529.891
	Ti	47	**0.040**	**ug/L**	142.133	284	0.000
	V	51	**-3.344**	**ug/L**	66.393	-11860	-0.036
	Cr	52	**-0.273**	**ug/L**	46.352	414	-0.003
	Cr	53		**ug/L**		266889	-0.044
	Mn	55	**-0.004**	**ug/L**	281.471	1347	-0.000
	Fe	57	**1.369**	**ug/L**	80.381	4143	0.001
	Co	59	**0.013**	**ug/L**	44.095	186	0.000
	Ni	60	**-0.015**	**ug/L**	33.404	68	-0.000
	Cu	63		**ug/L**		210	0.000
	Cu	65	**-0.010**	**ug/L**	227.380	111	-0.000
	Zn	66	**0.004**	**ug/L**	359.290	107	0.000
	Zn	67		**ug/L**		14288	-0.002
	Zn	68		**ug/L**		1306	-0.000
>	Ge	74		**ug/L**		152204	152204.399
	As	75	**-0.274**	**ug/L**	293.126	292	-0.001
	Se	77		**ug/L**		9260	-0.007
	Se	82	**0.123**	**ug/L**	494.887	-21	0.000
	Kr	83		**ug/L**		77	0.000
	Sr	88	**0.003**	**ug/L**	59.143	160	0.000
	Y	89		**ug/L**		21	-0.000
	Zr	90	**0.154**	**ug/L**	19.483	767	0.005
	Mo	98	**0.048**	**ug/L**	26.068	108	0.001
	Ag	107	**0.020**	**ug/L**	28.921	116	0.000
	Cd	111	**0.007**	**ug/L**	38.521	21	0.000
	Cd	114		**ug/L**		31	0.000
>	In	115		**ug/L**		92020	92020.191
	Sn	120	**0.142**	**ug/L**	10.905	516	0.004
	Sb	121	**0.702**	**ug/L**	15.268	1532	0.014
	Sb	123		**ug/L**		1246	0.011
	Ba	135		**ug/L**		20	0.000
	Ba	137	**0.004**	**ug/L**	116.145	27	0.000
	Ho	165		**ug/L**		7	-0.000
>	Lu	175		**ug/L**		78247	78246.837
	Tl	205	**0.268**	**ug/L**	25.255	731	0.005
	Pb	208	**0.005**	**ug/L**	102.924	336	0.000
	Bi	209		**ug/L**		29	-0.000
	Th	232	**0.197**	**ug/L**	25.061	1577	0.015
	U	238	**0.009**	**ug/L**	36.481	211	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	0.9999
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	0.9999
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			98.5		
	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			99.0		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			99.5		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			99.8		
	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: QC Std 3
Sample Date/Time: Tuesday, January 12, 2010 20:05:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\QC Std 3.085

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**11.159**	ug/L	4.292	2325	0.011
	Be	9	**0.568**	ug/L	11.411	43	0.000
	B	11	**16.749**	ug/L	1.152	1226	0.006
	Na	23	**256.415**	ug/L	6.036	487870	1.991
	Mg	24	**13.937**	ug/L	39.330	17345	0.071
	Al	27	**37.170**	ug/L	8.193	61801	0.280
	P	31	**58.962**	ug/L	2.235	7741	0.022
	K	39	**348.846**	ug/L	10.755	1376440	4.218
	Ca	43	**210.140**	ug/L	1.407	1847	0.005
>	Sc	45		ug/L		208187	208186.736
	Ti	47	**9.152**	ug/L	2.197	2603	0.011
	V	51	**11.033**	ug/L	24.482	20822	0.120
	Cr	52	**10.525**	ug/L	1.942	25627	0.118
	Cr	53		ug/L		272577	-0.009
	Mn	55	**5.717**	ug/L	0.819	23237	0.105
	Fe	57	**112.034**	ug/L	1.671	12612	0.041
	Co	59	**1.097**	ug/L	1.771	3222	0.015
	Ni	60	**2.218**	ug/L	2.023	1371	0.006
	Cu	63		ug/L		1660	0.007
	Cu	65	**1.149**	ug/L	4.021	844	0.003
	Zn	66	**11.085**	ug/L	2.891	3830	0.025
	Zn	67		ug/L		14964	0.004
	Zn	68		ug/L		3958	0.017
>	Ge	74		ug/L		150662	150662.244
	As	75	**5.179**	ug/L	14.897	2506	0.014
	Se	77		ug/L		9466	-0.005
	Se	82	**5.147**	ug/L	13.017	176	0.001
	Kr	83		ug/L		73	-0.000
	Sr	88	**10.868**	ug/L	0.405	65315	0.714
	Y	89		ug/L		62	0.000
	Zr	90	**1.968**	ug/L	4.794	6610	0.070
	Mo	98	**0.546**	ug/L	1.754	805	0.008
	Ag	107	**1.044**	ug/L	1.139	2321	0.025
	Cd	111	**1.096**	ug/L	5.189	581	0.006
	Cd	114		ug/L		1278	0.014
>	In	115		ug/L		91278	91278.451
	Sn	120	**5.361**	ug/L	1.478	12557	0.136
	Sb	121	**3.049**	ug/L	4.314	5795	0.061
	Sb	123		ug/L		4376	0.045
	Ba	135		ug/L		1098	0.014
	Ba	137	**2.181**	ug/L	4.530	1937	0.025
	Ho	165		ug/L		12	0.000
>	Lu	175		ug/L		76568	76568.077
	Tl	205	**1.112**	ug/L	2.424	2011	0.022
	Pb	208	**2.214**	ug/L	1.775	10523	0.133
	Bi	209		ug/L		29	-0.000
	Th	232	**1.105**	ug/L	1.906	6947	0.086
	U	238	**0.228**	ug/L	3.355	1569	0.019

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	0.9999
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	0.9999
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	111.588				
	Be	9	113.622				
	B	11	111.663				
	Na	23	102.566				
	Mg	24	92.912				
	Al	27	123.900				
	P	31	117.923				
	K	39	116.282				
	Ca	43	105.070				
>	Sc	45		97.9			
	Ti	47	91.525				
	V	51	110.326				
	Cr	52	105.249				
	Cr	53					
	Mn	55	114.350				
	Fe	57	112.034				
	Co	59	109.680				
	Ni	60	110.895				
	Cu	63					
	Cu	65	114.884				
	Zn	66	110.852				
	Zn	67					
	Zn	68					
>	Ge	74		98.0			
	As	75	103.579				
	Se	77					
	Se	82	102.935				
	Kr	83					
	Sr	88	108.682				
	Y	89					
	Zr	90	98.407				
	Mo	98	109.175				
	Ag	107	104.377				
	Cd	111	109.650				
	Cd	114					
>	In	115		98.7			
	Sn	120	107.214				
	Sb	121	101.630				
	Sb	123					
	Ba	135					
	Ba	137	109.029				
	Ho	165					
>	Lu	175		97.7			
	Tl	205	111.248				
	Pb	208	110.679				
	Bi	209					
	Th	232	110.532				
	U	238	114.124				

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: QC Std 4
Sample Date/Time: Tuesday, January 12, 2010 20:11:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\QC Std 4.086

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.160**	**ug/L**	32.472	55	0.000
	Be	9	**0.056**	**ug/L**	67.174	8	0.000
	B	11	**1.679**	**ug/L**	4.914	192	0.001
	Na	23	**97668.875**	**ug/L**	4.963	155408152	758.563
	Mg	24	**97746.255**	**ug/L**	2.160	101535854	495.830
	Al	27	**95169.274**	**ug/L**	2.945	146635178	716.042
	P	31	**99647.533**	**ug/L**	1.567	7534376	36.774
	K	39	**100664.816**	**ug/L**	4.489	249725469	1217.219
	Ca	43	**96770.254**	**ug/L**	1.765	508782	2.481
>	Sc	45		**ug/L**		204800	204799.997
	Ti	47	**1464.975**	**ug/L**	1.141	367299	1.792
	V	51	**0.385**	**ug/L**	1053.698	-3301	0.004
	Cr	52	**3.104**	**ug/L**	1.877	8163	0.035
	Cr	53		**ug/L**		233966	-0.175
	Mn	55	**5.646**	**ug/L**	0.744	22591	0.104
	Fe	57	**97733.857**	**ug/L**	0.776	7384095	36.037
	Co	59	**0.325**	**ug/L**	5.492	1042	0.004
	Ni	60	**3.168**	**ug/L**	1.069	1895	0.009
	Cu	63		**ug/L**		2790	0.013
	Cu	65	**2.737**	**ug/L**	4.271	1818	0.008
	Zn	66	**4.430**	**ug/L**	3.505	1513	0.010
	Zn	67		**ug/L**		12671	-0.007
	Zn	68		**ug/L**		1302	0.000
>	Ge	74		**ug/L**		143054	143054.451
	As	75	**-0.780**	**ug/L**	56.848	77	-0.002
	Se	77		**ug/L**		8432	-0.009
	Se	82	**-0.345**	**ug/L**	78.078	-37	-0.000
	Kr	83		**ug/L**		116	0.000
	Sr	88	**1.165**	**ug/L**	2.573	6652	0.077
	Y	89		**ug/L**		186	0.002
	Zr	90	**0.628**	**ug/L**	48.069	2128	0.022
	Mo	98	**2067.573**	**ug/L**	0.908	2705436	31.744
	Ag	107	**0.076**	**ug/L**	4.708	219	0.002
	Cd	111	**0.425**	**ug/L**	31.777	220	0.002
	Cd	114		**ug/L**		3199	0.037
>	In	115		**ug/L**		85229	85229.265
	Sn	120	**0.244**	**ug/L**	16.632	696	0.006
	Sb	121	**0.248**	**ug/L**	7.343	646	0.005
	Sb	123		**ug/L**		539	0.004
	Ba	135		**ug/L**		359	0.004
	Ba	137	**0.663**	**ug/L**	3.246	610	0.008
	Ho	165		**ug/L**		243	0.003
>	Lu	175		**ug/L**		77257	77257.113
	Tl	205	**0.001**	**ug/L**	1388.759	309	0.000
	Pb	208	**0.158**	**ug/L**	3.075	1045	0.010
	Bi	209		**ug/L**		169	0.002
	Th	232	**0.182**	**ug/L**	35.727	1469	0.014
	U	238	**-0.017**	**ug/L**	1.244	40	-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	0.9999
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	0.9999
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	97.669				
	Mg	24	97.746				
	Al	27	95.169				
	P	31	99.648				
	K	39	100.665				
	Ca	43	96.770				
>	Sc	45			96.3		
	Ti	47	73.249				
	V	51					
	Cr	52	83.886				
	Cr	53					
	Mn	55	97.353				
	Fe	57	97.734				
	Co	59	129.973				
	Ni	60	117.349				
	Cu	63					
	Cu	65	94.378				
	Zn	66	123.060				
	Zn	67					
	Zn	68					
>	Ge	74			93.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	97.045				
	Y	89					
	Zr	90					
	Mo	98	103.379				
	Ag	107					
	Cd	111	106.205				
	Cd	114					
>	In	115			92.1		
	Sn	120					
	Sb	121	247.975				
	Sb	123					
	Ba	135					
	Ba	137	98.914				
	Ho	165					
>	Lu	175			98.6		
	Tl	205					
	Pb	208	79.209				
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 4	Ti	47ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, January 12, 2010 20:17:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\QC Std 5.087

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**19.670**	ug/L	2.958	3964	0.019
	Be	9	**19.493**	ug/L	1.139	1317	0.006
	B	11	**20.079**	ug/L	2.057	1412	0.007
	Na	23	**98980.825**	ug/L	1.365	155561869	768.752
	Mg	24	**96692.270**	ug/L	2.559	99190141	490.483
	Al	27	**94937.249**	ug/L	2.460	144486678	714.296
	P	31	**99846.316**	ug/L	0.924	7455793	36.847
	K	39	**104134.949**	ug/L	6.509	255241112	1259.179
	Ca	43	**94933.397**	ug/L	0.739	492945	2.434
>	Sc	45		ug/L		202249	202248.670
	Ti	47	**1432.711**	ug/L	1.079	354724	1.753
	V	51	**19.596**	ug/L	10.640	39109	0.214
	Cr	52	**23.349**	ug/L	1.665	53988	0.262
	Cr	53		ug/L		234159	-0.160
	Mn	55	**25.474**	ug/L	0.752	96028	0.468
	Fe	57	**97875.892**	ug/L	0.599	7303048	36.089
	Co	59	**19.340**	ug/L	0.047	52803	0.260
	Ni	60	**22.423**	ug/L	0.222	12796	0.063
	Cu	63		ug/L		26504	0.130
	Cu	65	**21.381**	ug/L	1.325	13253	0.065
	Zn	66	**23.571**	ug/L	1.370	7649	0.053
	Zn	67		ug/L		13064	-0.005
	Zn	68		ug/L		5675	0.030
>	Ge	74		ug/L		143564	143563.895
	As	75	**20.334**	ug/L	5.481	8271	0.055
	Se	77		ug/L		8716	-0.007
	Se	82	**-21.930**	ug/L	4.338	792	0.006
	Kr	83		ug/L		103	0.000
	Sr	88	**21.939**	ug/L	0.827	122108	1.441
	Y	89		ug/L		183	0.002
	Zr	90	**21.500**	ug/L	2.558	64503	0.759
	Mo	98	**2075.373**	ug/L	2.011	2696323	31.863
	Ag	107	**19.410**	ug/L	2.235	38854	0.458
	Cd	111	**20.060**	ug/L	3.262	9572	0.113
	Cd	114		ug/L		24415	0.288
>	In	115		ug/L		84637	84636.915
	Sn	120	**20.457**	ug/L	2.252	43949	0.517
	Sb	121	**21.543**	ug/L	2.046	36612	0.430
	Sb	123		ug/L		27976	0.328
	Ba	135		ug/L		10193	0.133
	Ba	137	**19.921**	ug/L	1.698	17444	0.228
	Ho	165		ug/L		235	0.003
>	Lu	175		ug/L		76281	76280.541
	Tl	205	**17.766**	ug/L	2.440	27451	0.356
	Pb	208	**18.869**	ug/L	0.764	87079	1.138
	Bi	209		ug/L		231	0.003
	Th	232	**20.269**	ug/L	0.676	120504	1.575
	U	238	**20.472**	ug/L	0.465	127099	1.664

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	0.9999
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	0.9999
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	98.352				
	Be	9	97.467				
	B	11	100.394				
	Na	23	98.981				
	Mg	24	96.692				
	Al	27	94.937				
	P	31	99.846				
	K	39	104.135				
	Ca	43	94.933				
>	Sc	45		95.1			
	Ti	47	71.636				
	V	51	97.979				
	Cr	52	98.520				
	Cr	53					
	Mn	55	98.736				
	Fe	57	97.876				
	Co	59	95.507				
	Ni	60	98.778				
	Cu	63					
	Cu	65	93.365				
	Zn	66	99.876				
	Zn	67					
	Zn	68					
>	Ge	74		93.4			
	As	75	101.668				
	Se	77					
	Se	82	109.651				
	Kr	83					
	Sr	88	103.485				
	Y	89					
	Zr	90	107.499				
	Mo	98	103.769				
	Ag	107	97.052				
	Cd	111	98.332				
	Cd	114					
>	In	115		91.5			
	Sn	120	102.286				
	Sb	121	107.180				
	Sb	123					
	Ba	135					
	Ba	137	96.375				
	Ho	165					
>	Lu	175		97.3			
	Tl	205	88.831				
	Pb	208	93.411				
	Bi	209					
	Th	232	101.344				
	U	238	102.362				

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#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, January 12, 2010 20:23:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\QC Std 6.088

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.949**	ug/L	1.785	10598	0.050
	Be	9	**50.167**	ug/L	2.931	3506	0.017
	B	11	**98.394**	ug/L	3.828	6853	0.032
	Na	23	**4876.489**	ug/L	3.042	8007709	37.874
	Mg	24	**5041.892**	ug/L	4.358	5364247	25.576
	Al	27	**5003.453**	ug/L	2.822	7889026	37.645
	P	31	**5044.353**	ug/L	1.971	393207	1.862
	K	39	**5387.745**	ug/L	5.081	14157608	65.148
	Ca	43	**4996.329**	ug/L	0.254	27569	0.128
>	Sc	45		ug/L		209534	209533.509
	Ti	47	**52.129**	ug/L	0.940	13636	0.064
	V	51	**49.112**	ug/L	10.111	107898	0.536
	Cr	52	**50.671**	ug/L	1.950	120124	0.568
	Cr	53		ug/L		284623	0.041
	Mn	55	**51.997**	ug/L	1.431	201616	0.956
	Fe	57	**4993.616**	ug/L	1.470	389795	1.841
	Co	59	**50.188**	ug/L	2.528	141687	0.676
	Ni	60	**52.108**	ug/L	1.753	30703	0.146
	Cu	63		ug/L		67981	0.324
	Cu	65	**50.784**	ug/L	1.710	32447	0.154
	Zn	66	**51.003**	ug/L	1.748	17470	0.114
	Zn	67		ug/L		16217	0.010
	Zn	68		ug/L		13542	0.080
>	Ge	74		ug/L		152606	152606.394
	As	75	**48.019**	ug/L	2.255	20216	0.130
	Se	77		ug/L		11217	0.006
	Se	82	**48.908**	ug/L	2.176	1909	0.013
	Kr	83		ug/L		68	-0.000
	Sr	88	**51.349**	ug/L	0.581	306052	3.373
	Y	89		ug/L		29	0.000
	Zr	90	**49.066**	ug/L	1.601	157424	1.733
	Mo	98	**49.741**	ug/L	1.969	69293	0.764
	Ag	107	**49.775**	ug/L	0.797	106665	1.175
	Cd	111	**49.485**	ug/L	1.871	25283	0.279
	Cd	114		ug/L		58756	0.648
>	In	115		ug/L		90683	90683.387
	Sn	120	**50.137**	ug/L	1.279	115165	1.268
	Sb	121	**48.629**	ug/L	4.418	88265	0.971
	Sb	123		ug/L		67659	0.744
	Ba	135		ug/L		26811	0.342
	Ba	137	**50.806**	ug/L	2.561	45615	0.582
	Ho	165		ug/L		16	0.000
>	Lu	175		ug/L		78303	78303.210
	Tl	205	**48.560**	ug/L	1.539	76465	0.973
	Pb	208	**50.619**	ug/L	1.674	239214	3.052
	Bi	209		ug/L		65	0.000
	Th	232	**52.290**	ug/L	2.610	318404	4.063
	U	238	**52.293**	ug/L	2.120	332932	4.251

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	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	0.9999
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	0.9999
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	101.897				
	Be	9	100.335				
	B	11	98.394				
	Na	23	97.530				
	Mg	24	100.838				
	Al	27	99.078				
	P	31	100.887				
	K	39	107.755				
	Ca	43	99.927				
>	Sc	45			98.6		
	Ti	47	104.258				
	V	51	98.224				
	Cr	52	101.342				
	Cr	53					
	Mn	55	103.993				
	Fe	57	99.872				
	Co	59	100.377				
	Ni	60	104.215				
	Cu	63					
	Cu	65	101.568				
	Zn	66	102.005				
	Zn	67					
	Zn	68					
>	Ge	74			99.3		
	As	75	96.038				
	Se	77					
	Se	82	97.817				
	Kr	83					
	Sr	88	102.697				
	Y	89					
	Zr	90	98.131				
	Mo	98	99.482				
	Ag	107	99.550				
	Cd	111	98.970				
	Cd	114					
>	In	115			98.0		
	Sn	120	100.274				
	Sb	121	97.259				
	Sb	123					
	Ba	135					
	Ba	137	101.612				
	Ho	165					
>	Lu	175			99.9		
	Tl	205	97.120				
	Pb	208	101.238				
	Bi	209					
	Th	232	104.581				
	U	238	104.586				

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: Tuesday, January 12, 2010 20:30:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\QC Std 7.089

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.016**	**ug/L**	163.633	27	0.000
	Be	9	**0.014**	**ug/L**	201.373	5	0.000
	B	11	**2.106**	**ug/L**	14.471	229	0.001
	Na	23	**-11.229**	**ug/L**	22.254	56445	-0.087
	Mg	24	**1.855**	**ug/L**	60.248	4667	0.009
	Al	27	**-0.212**	**ug/L**	338.890	3334	-0.002
	P	31	**0.376**	**ug/L**	850.107	3313	0.000
	K	39	**-3.328**	**ug/L**	300.855	501332	-0.040
	Ca	43	**-2.610**	**ug/L**	286.177	728	-0.000
>	Sc	45		**ug/L**		212964	212964.230
	Ti	47	**0.466**	**ug/L**	17.256	399	0.001
	V	51	**-3.587**	**ug/L**	201.748	-12508	-0.039
	Cr	52	**-0.708**	**ug/L**	19.745	-617	-0.008
	Cr	53		**ug/L**		269947	-0.050
	Mn	55	**-0.025**	**ug/L**	99.060	1286	-0.000
	Fe	57	**1.544**	**ug/L**	12.526	4225	0.001
	Co	59	**0.011**	**ug/L**	25.289	183	0.000
	Ni	60	**-0.005**	**ug/L**	217.392	75	-0.000
	Cu	63		**ug/L**		209	0.000
	Cu	65	**0.010**	**ug/L**	82.836	126	0.000
	Zn	66	**-0.003**	**ug/L**	600.548	107	-0.000
	Zn	67		**ug/L**		13433	-0.009
	Zn	68		**ug/L**		1188	-0.001
>	Ge	74		**ug/L**		154541	154540.701
	As	75	**0.739**	**ug/L**	149.437	720	0.002
	Se	77		**ug/L**		9308	-0.008
	Se	82	**0.235**	**ug/L**	95.245	-16	0.000
	Kr	83		**ug/L**		75	-0.000
	Sr	88	**0.002**	**ug/L**	160.026	154	0.000
	Y	89		**ug/L**		20	-0.000
	Zr	90	**0.131**	**ug/L**	26.307	693	0.005
	Mo	98	**0.138**	**ug/L**	6.493	236	0.002
	Ag	107	**0.013**	**ug/L**	54.657	100	0.000
	Cd	111	**-0.009**	**ug/L**	68.054	13	-0.000
	Cd	114		**ug/L**		32	0.000
>	In	115		**ug/L**		92035	92034.605
	Sn	120	**0.119**	**ug/L**	14.517	462	0.003
	Sb	121	**0.502**	**ug/L**	17.798	1163	0.010
	Sb	123		**ug/L**		948	0.008
	Ba	135		**ug/L**		24	0.000
	Ba	137	**0.009**	**ug/L**	30.785	32	0.000
	Ho	165		**ug/L**		9	0.000
>	Lu	175		**ug/L**		77709	77708.556
	Tl	205	**0.216**	**ug/L**	19.763	646	0.004
	Pb	208	**0.011**	**ug/L**	79.158	360	0.001
	Bi	209		**ug/L**		23	-0.000
	Th	232	**0.110**	**ug/L**	35.945	1039	0.009
	U	238	**0.007**	**ug/L**	47.341	192	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	0.9999
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	0.9999
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		100.2			
	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		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		99.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.1			
	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: QC Std 10
Sample Date/Time: Tuesday, January 12, 2010 20:36:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\QC Std 10.090

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**966.407**	**ug/L**	2.150	195328	0.957
	Be	9	**961.782**	**ug/L**	0.951	65376	0.320
	B	11	**1.059**	**ug/L**	25.054	149	0.000
	Na	23	**46903.937**	**ug/L**	2.690	74399155	364.288
	Mg	24	**49216.339**	**ug/L**	2.828	50935478	249.656
	Al	27	**47115.624**	**ug/L**	2.823	72332860	354.492
	P	31	**23704.577**	**ug/L**	1.025	1787842	8.748
	K	39	**52608.023**	**ug/L**	4.184	130283280	636.126
	Ca	43	**48617.355**	**ug/L**	1.247	254992	1.246
>	Sc	45		**ug/L**		204004	204003.715
	Ti	47	**34.692**	**ug/L**	1.771	8924	0.042
	V	51	**1056.678**	**ug/L**	0.595	2346782	11.523
	Cr	52	**990.027**	**ug/L**	0.762	2266621	11.105
	Cr	53		**ug/L**		483858	1.054
	Mn	55	**991.611**	**ug/L**	0.547	3719993	18.229
	Fe	57	**49328.970**	**ug/L**	0.648	3714506	18.189
	Co	59	**953.824**	**ug/L**	0.484	2619751	12.841
	Ni	60	**928.426**	**ug/L**	0.472	531397	2.605
	Cu	63		**ug/L**		1158525	5.678
	Cu	65	**911.553**	**ug/L**	0.547	565208	2.770
	Zn	66	**2365.848**	**ug/L**	1.409	763540	5.278
	Zn	67		**ug/L**		131248	0.812
	Zn	68		**ug/L**		541602	3.736
>	Ge	74		**ug/L**		144654	144654.181
	As	75	**924.254**	**ug/L**	1.082	361831	2.499
	Se	77		**ug/L**		20771	0.076
	Se	82	**471.008**	**ug/L**	1.828	17631	0.122
	Kr	83		**ug/L**		81	0.000
	Sr	88	**1018.151**	**ug/L**	0.727	5742647	66.889
	Y	89		**ug/L**		187	0.002
	Zr	90	**494.730**	**ug/L**	0.758	1500425	17.475
	Mo	98	**974.393**	**ug/L**	0.304	1284302	14.960
	Ag	107	**240.133**	**ug/L**	1.745	486832	5.671
	Cd	111	**965.160**	**ug/L**	0.693	466489	5.434
	Cd	114		**ug/L**		1076299	12.537
>	In	115		**ug/L**		85849	85848.771
	Sn	120	**1050.384**	**ug/L**	0.601	2280632	26.564
	Sb	121	**241.931**	**ug/L**	3.086	414937	4.829
	Sb	123		**ug/L**		318769	3.710
	Ba	135		**ug/L**		491678	6.386
	Ba	137	**945.090**	**ug/L**	0.591	834282	10.835
	Ho	165		**ug/L**		89	0.001
>	Lu	175		**ug/L**		76998	76998.056
	Tl	205	**466.734**	**ug/L**	0.801	720213	9.349
	Pb	208	**4895.392**	**ug/L**	0.960	22726300	295.137
	Bi	209		**ug/L**		510	0.006
	Th	232	**2518.401**	**ug/L**	0.857	15067618	195.681
	U	238	**5196.215**	**ug/L**	2.633	32526172	422.412

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	0.9999
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	0.9999
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	96.641				
	Be	9	96.178				
	B	11					
	Na	23	93.808				
	Mg	24	98.433				
	Al	27	94.231				
	P	31	94.818				
	K	39	105.216				
	Ca	43	97.235				
>	Sc	45			96.0		
	Ti	47					
	V	51	105.668				
	Cr	52	99.003				
	Cr	53					
	Mn	55	99.161				
	Fe	57	98.658				
	Co	59	95.382				
	Ni	60	92.843				
	Cu	63					
	Cu	65	91.155				
	Zn	66	94.634				
	Zn	67					
	Zn	68					
>	Ge	74			94.1		
	As	75	92.425				
	Se	77					
	Se	82	94.202				
	Kr	83					
	Sr	88	101.815				
	Y	89					
	Zr	90	98.946				
	Mo	98	97.439				
	Ag	107	96.053				
	Cd	111	96.516				
	Cd	114					
>	In	115			92.8		
	Sn	120	105.038				
	Sb	121	96.773				
	Sb	123					
	Ba	135					
	Ba	137	94.509				
	Ho	165					
>	Lu	175			98.2		
	Tl	205	93.347				
	Pb	208	97.908				
	Bi	209					
	Th	232	100.736				
	U	238	103.924				

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: Tuesday, January 12, 2010 20:42:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\QC Std 11.091

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.220**	**ug/L**	1.548	10474	0.050
	Be	9	**50.556**	**ug/L**	1.708	3541	0.017
	B	11	**99.783**	**ug/L**	1.720	6966	0.033
	Na	23	**5081.387**	**ug/L**	3.981	8360778	39.465
	Mg	24	**4991.572**	**ug/L**	2.514	5319742	25.320
	Al	27	**5128.455**	**ug/L**	6.824	8107233	38.586
	P	31	**4994.185**	**ug/L**	0.386	390328	1.843
	K	39	**5179.157**	**ug/L**	5.915	13661319	62.625
	Ca	43	**4939.242**	**ug/L**	1.630	27324	0.127
>	Sc	45		**ug/L**		210030	210029.530
	Ti	47	**50.211**	**ug/L**	3.604	13173	0.061
	V	51	**50.160**	**ug/L**	6.610	110668	0.547
	Cr	52	**51.391**	**ug/L**	2.042	122117	0.576
	Cr	53		**ug/L**		288932	0.058
	Mn	55	**52.062**	**ug/L**	1.824	202352	0.957
	Fe	57	**5041.645**	**ug/L**	2.108	394435	1.859
	Co	59	**50.765**	**ug/L**	1.690	143674	0.683
	Ni	60	**52.525**	**ug/L**	0.850	31025	0.147
	Cu	63		**ug/L**		68555	0.325
	Cu	65	**51.585**	**ug/L**	0.803	33039	0.157
	Zn	66	**52.032**	**ug/L**	0.632	17837	0.116
	Zn	67		**ug/L**		16913	0.015
	Zn	68		**ug/L**		14099	0.083
>	Ge	74		**ug/L**		152737	152737.026
	As	75	**48.274**	**ug/L**	4.553	20336	0.131
	Se	77		**ug/L**		10853	0.003
	Se	82	**49.652**	**ug/L**	1.956	1940	0.013
	Kr	83		**ug/L**		79	0.000
	Sr	88	**50.820**	**ug/L**	0.667	305212	3.339
	Y	89		**ug/L**		56	0.000
	Zr	90	**51.976**	**ug/L**	4.517	167960	1.836
	Mo	98	**49.060**	**ug/L**	2.806	68850	0.753
	Ag	107	**52.442**	**ug/L**	0.748	113228	1.238
	Cd	111	**50.105**	**ug/L**	2.118	25789	0.282
	Cd	114		**ug/L**		59630	0.652
>	In	115		**ug/L**		91376	91375.868
	Sn	120	**54.593**	**ug/L**	2.154	126322	1.381
	Sb	121	**52.170**	**ug/L**	2.730	95386	1.041
	Sb	123		**ug/L**		72683	0.793
	Ba	135		**ug/L**		26950	0.346
	Ba	137	**51.908**	**ug/L**	1.943	46352	0.595
	Ho	165		**ug/L**		12	0.000
>	Lu	175		**ug/L**		77862	77862.081
	Tl	205	**49.745**	**ug/L**	1.641	77886	0.996
	Pb	208	**52.568**	**ug/L**	2.426	247019	3.169
	Bi	209		**ug/L**		53	0.000
	Th	232	**53.923**	**ug/L**	2.308	326542	4.190
	U	238	**54.108**	**ug/L**	2.299	342560	4.399

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	0.9999
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	0.9999
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	100.440				
	Be	9	101.111				
	B	11	99.783				
	Na	23	101.628				
	Mg	24	99.831				
	Al	27	101.554				
	P	31	99.884				
	K	39	103.583				
	Ca	43	98.785				
>	Sc	45		98.8			
	Ti	47	100.422				
	V	51	100.321				
	Cr	52	102.782				
	Cr	53					
	Mn	55	104.124				
	Fe	57	100.833				
	Co	59	101.531				
	Ni	60	105.050				
	Cu	63					
	Cu	65	103.170				
	Zn	66	104.064				
	Zn	67					
	Zn	68					
>	Ge	74		99.4			
	As	75	96.547				
	Se	77					
	Se	82	99.305				
	Kr	83					
	Sr	88	101.641				
	Y	89					
	Zr	90	103.951				
	Mo	98	98.121				
	Ag	107	104.884				
	Cd	111	100.210				
	Cd	114					
>	In	115		98.8			
	Sn	120	109.187				
	Sb	121	104.339				
	Sb	123					
	Ba	135					
	Ba	137	103.816				
	Ho	165					
>	Lu	175		99.3			
	Tl	205	99.490				
	Pb	208	105.136				
	Bi	209					
	Th	232	107.846				
	U	238	108.216				

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 12
Sample Date/Time: Tuesday, January 12, 2010 20:48:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\QC Std 12.092

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.093**	**ug/L**	31.704	43	0.000
	Be	9	**0.030**	**ug/L**	131.074	6	0.000
	B	11	**2.311**	**ug/L**	22.764	239	0.001
	Na	23	**-4.693**	**ug/L**	48.592	66153	-0.036
	Mg	24	**1.281**	**ug/L**	124.937	4001	0.006
	Al	27	**0.250**	**ug/L**	264.249	4001	0.002
	P	31	**-1.116**	**ug/L**	156.251	3145	-0.000
	K	39	**4.748**	**ug/L**	100.901	513400	0.057
	Ca	43	**-4.630**	**ug/L**	98.411	705	-0.000
>	Sc	45		**ug/L**		209464	209463.642
	Ti	47	**0.130**	**ug/L**	100.432	306	0.000
	V	51	**-1.937**	**ug/L**	141.736	-8692	-0.021
	Cr	52	**-0.686**	**ug/L**	12.892	-556	-0.008
	Cr	53		**ug/L**		265304	-0.051
	Mn	55	**-0.023**	**ug/L**	24.320	1273	-0.000
	Fe	57	**1.269**	**ug/L**	127.568	4134	0.000
	Co	59	**0.015**	**ug/L**	26.925	193	0.000
	Ni	60	**0.001**	**ug/L**	849.052	77	0.000
	Cu	63		**ug/L**		269	0.000
	Cu	65	**0.068**	**ug/L**	24.703	161	0.000
	Zn	66	**0.039**	**ug/L**	48.864	120	0.000
	Zn	67		**ug/L**		13434	-0.008
	Zn	68		**ug/L**		1234	-0.001
>	Ge	74		**ug/L**		152936	152936.134
	As	75	**-0.318**	**ug/L**	589.339	272	-0.001
	Se	77		**ug/L**		8882	-0.010
	Se	82	**0.325**	**ug/L**	109.447	-13	0.000
	Kr	83		**ug/L**		74	-0.000
	Sr	88	**0.008**	**ug/L**	42.607	186	0.000
	Y	89		**ug/L**		22	0.000
	Zr	90	**0.231**	**ug/L**	13.335	1003	0.008
	Mo	98	**0.129**	**ug/L**	24.713	219	0.002
	Ag	107	**0.035**	**ug/L**	9.022	145	0.001
	Cd	111	**0.013**	**ug/L**	130.162	24	0.000
	Cd	114		**ug/L**		50	0.000
>	In	115		**ug/L**		90846	90845.742
	Sn	120	**0.730**	**ug/L**	9.275	1858	0.018
	Sb	121	**1.213**	**ug/L**	14.804	2434	0.024
	Sb	123		**ug/L**		1892	0.018
	Ba	135		**ug/L**		19	0.000
	Ba	137	**0.013**	**ug/L**	28.745	35	0.000
	Ho	165		**ug/L**		8	-0.000
>	Lu	175		**ug/L**		77150	77149.537
	Tl	205	**0.373**	**ug/L**	28.258	883	0.007
	Pb	208	**0.175**	**ug/L**	2.347	1121	0.011
	Bi	209		**ug/L**		19	-0.000
	Th	232	**0.291**	**ug/L**	22.370	2117	0.023
	U	238	**0.062**	**ug/L**	16.388	536	0.005

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	0.9999
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	0.9999
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			98.5		
	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			99.5		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			98.2		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			98.4		
	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: QC Std 6
Sample Date/Time: Tuesday, January 12, 2010 21:26:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\QC Std 6.098

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**48.510**	ug/L	1.337	10190	0.048
	Be	9	**49.893**	ug/L	1.835	3520	0.017
	B	11	**100.321**	ug/L	0.574	7055	0.033
	Na	23	**5227.254**	ug/L	1.135	8663409	40.598
	Mg	24	**4925.915**	ug/L	7.321	5288326	24.987
	Al	27	**4917.136**	ug/L	0.799	7830278	36.996
	P	31	**5029.269**	ug/L	2.007	395896	1.856
	K	39	**5249.874**	ug/L	1.963	13934724	63.480
	Ca	43	**4975.768**	ug/L	1.509	27725	0.128
>	Sc	45		ug/L		211554	211553.770
	Ti	47	**51.528**	ug/L	0.833	13611	0.063
	V	51	**49.750**	ug/L	6.898	110448	0.543
	Cr	52	**51.621**	ug/L	1.784	123553	0.579
	Cr	53		ug/L		276208	-0.012
	Mn	55	**51.828**	ug/L	0.966	202941	0.953
	Fe	57	**5014.071**	ug/L	1.835	395168	1.849
	Co	59	**50.535**	ug/L	1.984	144072	0.680
	Ni	60	**52.321**	ug/L	2.117	31127	0.147
	Cu	63		ug/L		68306	0.322
	Cu	65	**50.768**	ug/L	1.485	32753	0.154
	Zn	66	**51.523**	ug/L	0.396	17613	0.115
	Zn	67		ug/L		15625	0.007
	Zn	68		ug/L		13517	0.080
>	Ge	74		ug/L		152301	152300.743
	As	75	**47.685**	ug/L	2.519	20040	0.129
	Se	77		ug/L		11261	0.006
	Se	82	**49.379**	ug/L	2.798	1924	0.013
	Kr	83		ug/L		73	-0.000
	Sr	88	**50.803**	ug/L	0.516	302443	3.338
	Y	89		ug/L		65	0.000
	Zr	90	**50.666**	ug/L	1.172	162358	1.790
	Mo	98	**49.776**	ug/L	1.276	69258	0.764
	Ag	107	**49.928**	ug/L	0.349	106865	1.179
	Cd	111	**49.562**	ug/L	0.356	25291	0.279
	Cd	114		ug/L		59019	0.651
>	In	115		ug/L		90574	90574.377
	Sn	120	**49.745**	ug/L	0.749	114131	1.258
	Sb	121	**48.652**	ug/L	3.294	88199	0.971
	Sb	123		ug/L		67736	0.745
	Ba	135		ug/L		26824	0.346
	Ba	137	**51.221**	ug/L	1.546	45572	0.587
	Ho	165		ug/L		11	0.000
>	Lu	175		ug/L		77569	77569.132
	Tl	205	**48.622**	ug/L	1.086	75856	0.974
	Pb	208	**51.326**	ug/L	0.610	240338	3.094
	Bi	209		ug/L		66	0.000
	Th	232	**52.334**	ug/L	2.196	315784	4.066
	U	238	**53.016**	ug/L	1.949	334445	4.310

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	0.9999
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	0.9999
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	97.021				
	Be	9	99.785				
	B	11	100.321				
	Na	23	104.545				
	Mg	24	98.518				
	Al	27	97.369				
	P	31	100.585				
	K	39	104.997				
	Ca	43	99.515				
>	Sc	45		99.5			
	Ti	47	103.057				
	V	51	99.500				
	Cr	52	103.242				
	Cr	53					
	Mn	55	103.656				
	Fe	57	100.281				
	Co	59	101.070				
	Ni	60	104.642				
	Cu	63					
	Cu	65	101.537				
	Zn	66	103.046				
	Zn	67					
	Zn	68					
>	Ge	74		99.1			
	As	75	95.371				
	Se	77					
	Se	82	98.758				
	Kr	83					
	Sr	88	101.607				
	Y	89					
	Zr	90	101.332				
	Mo	98	99.551				
	Ag	107	99.856				
	Cd	111	99.124				
	Cd	114					
>	In	115		97.9			
	Sn	120	99.491				
	Sb	121	97.303				
	Sb	123					
	Ba	135					
	Ba	137	102.441				
	Ho	165					
>	Lu	175		99.0			
	Tl	205	97.243				
	Pb	208	102.652				
	Bi	209					
	Th	232	104.667				
	U	238	106.033				

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: Tuesday, January 12, 2010 21:32:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\QC Std 7.099

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.142**	ug/L	32.701	52	0.000
	Be	9	**-0.009**	ug/L	530.192	3	-0.000
	B	11	**2.749**	ug/L	21.125	268	0.001
	Na	23	**-12.262**	ug/L	15.208	53433	-0.095
	Mg	24	**0.367**	ug/L	444.217	3000	0.002
	Al	27	**1.737**	ug/L	178.961	6335	0.013
	P	31	**-3.620**	ug/L	54.393	2932	-0.001
	K	39	**-12.506**	ug/L	36.112	466496	-0.151
	Ca	43	**-0.456**	ug/L	2084.513	723	-0.000
>	Sc	45		ug/L		208058	208058.315
	Ti	47	**0.308**	ug/L	6.622	350	0.000
	V	51	**-1.008**	ug/L	120.630	-6517	-0.011
	Cr	52	**-0.250**	ug/L	9.628	465	-0.003
	Cr	53		ug/L		248818	-0.122
	Mn	55	**-0.000**	ug/L	35402.573	1354	-0.000
	Fe	57	**5.821**	ug/L	43.561	4455	0.002
	Co	59	**0.011**	ug/L	40.313	179	0.000
	Ni	60	**-0.017**	ug/L	62.828	66	-0.000
	Cu	63		ug/L		230	0.000
	Cu	65	**0.026**	ug/L	59.734	134	0.000
	Zn	66	**0.028**	ug/L	89.728	115	0.000
	Zn	67		ug/L		12261	-0.015
	Zn	68		ug/L		934	-0.003
>	Ge	74		ug/L		151492	151491.863
	As	75	**-0.108**	ug/L	1162.931	358	-0.000
	Se	77		ug/L		8889	-0.009
	Se	82	**0.231**	ug/L	79.586	-16	0.000
	Kr	83		ug/L		68	-0.000
	Sr	88	**0.006**	ug/L	15.577	176	0.000
	Y	89		ug/L		30	0.000
	Zr	90	**0.181**	ug/L	14.280	840	0.006
	Mo	98	**0.038**	ug/L	23.083	93	0.001
	Ag	107	**0.011**	ug/L	30.010	93	0.000
	Cd	111	**0.006**	ug/L	329.058	21	0.000
	Cd	114		ug/L		37	0.000
>	In	115		ug/L		90482	90481.533
	Sn	120	**0.140**	ug/L	7.004	501	0.004
	Sb	121	**0.534**	ug/L	19.671	1200	0.011
	Sb	123		ug/L		963	0.008
	Ba	135		ug/L		23	0.000
	Ba	137	**0.020**	ug/L	31.228	40	0.000
	Ho	165		ug/L		7	-0.000
>	Lu	175		ug/L		75949	75949.144
	Tl	205	**0.170**	ug/L	21.987	560	0.003
	Pb	208	**0.052**	ug/L	15.849	540	0.003
	Bi	209		ug/L		17	-0.000
	Th	232	**0.122**	ug/L	32.642	1087	0.009
	U	238	**0.014**	ug/L	19.128	233	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	0.9999
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	0.9999
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			97.9		
	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			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			97.8		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			96.9		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, January 12, 2010 22:16:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\QC Std 6.106

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.423**	**ug/L**	4.393	10020	0.049
	Be	9	**49.997**	**ug/L**	0.779	3406	0.017
	B	11	**96.754**	**ug/L**	1.226	6572	0.032
	Na	23	**5082.584**	**ug/L**	3.184	8135006	39.475
	Mg	24	**5179.156**	**ug/L**	3.295	5369483	26.272
	Al	27	**4834.281**	**ug/L**	4.291	7435827	36.373
	P	31	**4930.785**	**ug/L**	0.857	374855	1.820
	K	39	**5455.344**	**ug/L**	5.969	13955527	65.965
	Ca	43	**4930.937**	**ug/L**	1.606	26536	0.126
>	Sc	45		**ug/L**		204252	204251.794
	Ti	47	**50.086**	**ug/L**	0.871	12782	0.061
	V	51	**48.858**	**ug/L**	3.758	104729	0.533
	Cr	52	**50.982**	**ug/L**	1.056	117830	0.572
	Cr	53		**ug/L**		258825	-0.050
	Mn	55	**51.884**	**ug/L**	0.408	196143	0.954
	Fe	57	**4983.293**	**ug/L**	0.413	379258	1.837
	Co	59	**50.241**	**ug/L**	0.301	138300	0.676
	Ni	60	**52.090**	**ug/L**	0.537	29922	0.146
	Cu	63		**ug/L**		66441	0.324
	Cu	65	**50.913**	**ug/L**	0.383	31716	0.155
	Zn	66	**51.203**	**ug/L**	1.397	16954	0.114
	Zn	67		**ug/L**		14517	0.003
	Zn	68		**ug/L**		12950	0.079
>	Ge	74		**ug/L**		147522	147521.956
	As	75	**47.920**	**ug/L**	1.070	19504	0.130
	Se	77		**ug/L**		10291	0.002
	Se	82	**47.748**	**ug/L**	4.799	1801	0.012
	Kr	83		**ug/L**		70	-0.000
	Sr	88	**50.402**	**ug/L**	2.170	292650	3.311
	Y	89		**ug/L**		80	0.001
	Zr	90	**49.377**	**ug/L**	1.631	154352	1.744
	Mo	98	**49.227**	**ug/L**	1.035	66818	0.756
	Ag	107	**49.474**	**ug/L**	1.449	103300	1.168
	Cd	111	**49.063**	**ug/L**	1.059	24423	0.276
	Cd	114		**ug/L**		57106	0.646
>	In	115		**ug/L**		88370	88370.412
	Sn	120	**49.327**	**ug/L**	2.019	110390	1.247
	Sb	121	**48.148**	**ug/L**	1.595	85154	0.961
	Sb	123		**ug/L**		65166	0.735
	Ba	135		**ug/L**		25335	0.335
	Ba	137	**49.953**	**ug/L**	1.738	43246	0.573
	Ho	165		**ug/L**		14	0.000
>	Lu	175		**ug/L**		75478	75478.296
	Tl	205	**48.545**	**ug/L**	0.605	73698	0.972
	Pb	208	**50.798**	**ug/L**	0.595	231456	3.063
	Bi	209		**ug/L**		56	0.000
	Th	232	**52.017**	**ug/L**	0.888	305421	4.042
	U	238	**53.336**	**ug/L**	0.279	327403	4.336

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	0.9999
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	0.9999
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	98.846				
	Be	9	99.993				
	B	11	96.754				
	Na	23	101.652				
	Mg	24	103.583				
	Al	27	95.728				
	P	31	98.616				
	K	39	109.107				
	Ca	43	98.619				
>	Sc	45			96.1		
	Ti	47	100.173				
	V	51	97.716				
	Cr	52	101.965				
	Cr	53					
	Mn	55	103.768				
	Fe	57	99.666				
	Co	59	100.482				
	Ni	60	104.180				
	Cu	63					
	Cu	65	101.827				
	Zn	66	102.406				
	Zn	67					
	Zn	68					
>	Ge	74			96.0		
	As	75	95.840				
	Se	77					
	Se	82	95.496				
	Kr	83					
	Sr	88	100.803				
	Y	89					
	Zr	90	98.753				
	Mo	98	98.454				
	Ag	107	98.949				
	Cd	111	98.125				
	Cd	114					
>	In	115			95.5		
	Sn	120	98.654				
	Sb	121	96.295				
	Sb	123					
	Ba	135					
	Ba	137	99.906				
	Ho	165					
>	Lu	175			96.3		
	Tl	205	97.089				
	Pb	208	101.596				
	Bi	209					
	Th	232	104.034				
	U	238	106.673				

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: Tuesday, January 12, 2010 22:22:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\QC Std 7.107

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.107**	ug/L	45.928	44	0.000
	Be	9	**0.002**	ug/L	609.010	4	0.000
	B	11	**2.070**	ug/L	11.111	217	0.001
	Na	23	**-22.149**	ug/L	21.323	36715	-0.172
	Mg	24	**-0.537**	ug/L	313.359	2000	-0.003
	Al	27	**0.315**	ug/L	1.811	4001	0.002
	P	31	**-5.087**	ug/L	38.356	2762	-0.002
	K	39	**-18.659**	ug/L	55.352	442085	-0.226
	Ca	43	**-6.561**	ug/L	34.621	677	-0.000
>	Sc	45		ug/L		203897	203897.143
	Ti	47	**0.326**	ug/L	22.027	347	0.000
	V	51	**2.328**	ug/L	13.728	1052	0.025
	Cr	52	**-0.380**	ug/L	12.311	159	-0.004
	Cr	53		ug/L		235318	-0.164
	Mn	55	**0.012**	ug/L	57.136	1372	0.000
	Fe	57	**4.755**	ug/L	30.361	4287	0.002
	Co	59	**0.006**	ug/L	47.418	163	0.000
	Ni	60	**0.003**	ug/L	438.083	76	0.000
	Cu	63		ug/L		223	0.000
	Cu	65	**0.019**	ug/L	107.238	127	0.000
	Zn	66	**-0.005**	ug/L	412.785	101	-0.000
	Zn	67		ug/L		11461	-0.018
	Zn	68		ug/L		819	-0.003
>	Ge	74		ug/L		147591	147590.712
	As	75	**-0.514**	ug/L	173.081	182	-0.001
	Se	77		ug/L		8225	-0.012
	Se	82	**0.132**	ug/L	178.930	-20	0.000
	Kr	83		ug/L		62	-0.000
	Sr	88	**0.007**	ug/L	20.045	177	0.000
	Y	89		ug/L		24	0.000
	Zr	90	**0.156**	ug/L	17.448	735	0.005
	Mo	98	**0.038**	ug/L	45.334	90	0.001
	Ag	107	**0.013**	ug/L	55.848	96	0.000
	Cd	111	**0.016**	ug/L	104.850	25	0.000
	Cd	114		ug/L		36	0.000
>	In	115		ug/L		87613	87613.171
	Sn	120	**0.110**	ug/L	7.861	420	0.003
	Sb	121	**0.498**	ug/L	20.682	1101	0.010
	Sb	123		ug/L		875	0.008
	Ba	135		ug/L		21	0.000
	Ba	137	**0.021**	ug/L	19.684	41	0.000
	Ho	165		ug/L		8	-0.000
>	Lu	175		ug/L		75434	75433.730
	Tl	205	**0.086**	ug/L	52.313	429	0.002
	Pb	208	**0.039**	ug/L	13.779	476	0.002
	Bi	209		ug/L		18	-0.000
	Th	232	**0.111**	ug/L	33.794	1014	0.009
	U	238	**0.013**	ug/L	13.643	225	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	0.9999
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	0.9999
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		95.9			
	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		96.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		96.2			
	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 6
Sample Date/Time: Tuesday, January 12, 2010 23:05:53
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\QC Std 6.114

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**47.928**	**ug/L**	5.303	9361	0.047
	Be	9	**49.224**	**ug/L**	1.506	3232	0.016
	B	11	**98.779**	**ug/L**	1.896	6463	0.032
	Na	23	**5085.948**	**ug/L**	3.416	7846786	39.501
	Mg	24	**5684.804**	**ug/L**	5.105	5675787	28.837
	Al	27	**4914.469**	**ug/L**	0.401	7281963	36.976
	P	31	**5147.026**	**ug/L**	1.121	376923	1.899
	K	39	**5350.277**	**ug/L**	1.212	13206635	64.694
	Ca	43	**4901.198**	**ug/L**	2.289	25430	0.126
>	Sc	45		**ug/L**		196852	196852.221
	Ti	47	**50.021**	**ug/L**	1.260	12301	0.061
	V	51	**48.779**	**ug/L**	7.552	100717	0.532
	Cr	52	**51.070**	**ug/L**	1.275	113740	0.573
	Cr	53		**ug/L**		249197	-0.051
	Mn	55	**51.993**	**ug/L**	1.805	189392	0.956
	Fe	57	**4999.561**	**ug/L**	1.414	366600	1.843
	Co	59	**50.365**	**ug/L**	1.407	133588	0.678
	Ni	60	**52.842**	**ug/L**	2.693	29242	0.148
	Cu	63		**ug/L**		64056	0.325
	Cu	65	**51.086**	**ug/L**	1.726	30660	0.155
	Zn	66	**51.103**	**ug/L**	0.139	16465	0.114
	Zn	67		**ug/L**		13687	-0.000
	Zn	68		**ug/L**		12491	0.078
>	Ge	74		**ug/L**		143540	143539.726
	As	75	**48.296**	**ug/L**	0.939	19122	0.131
	Se	77		**ug/L**		9762	0.000
	Se	82	**47.820**	**ug/L**	1.944	1755	0.012
	Kr	83		**ug/L**		64	-0.000
	Sr	88	**50.559**	**ug/L**	0.243	283114	3.322
	Y	89		**ug/L**		107	0.001
	Zr	90	**50.862**	**ug/L**	1.949	153279	1.797
	Mo	98	**49.370**	**ug/L**	1.171	64618	0.758
	Ag	107	**49.848**	**ug/L**	0.553	100354	1.177
	Cd	111	**50.266**	**ug/L**	2.425	24122	0.283
	Cd	114		**ug/L**		56155	0.659
>	In	115		**ug/L**		85194	85193.542
	Sn	120	**49.658**	**ug/L**	0.576	107167	1.256
	Sb	121	**47.799**	**ug/L**	2.584	81527	0.954
	Sb	123		**ug/L**		62770	0.734
	Ba	135		**ug/L**		25056	0.338
	Ba	137	**50.005**	**ug/L**	1.115	42463	0.573
	Ho	165		**ug/L**		11	0.000
>	Lu	175		**ug/L**		74028	74027.723
	Tl	205	**48.387**	**ug/L**	1.516	72051	0.969
	Pb	208	**51.121**	**ug/L**	0.247	228449	3.082
	Bi	209		**ug/L**		57	0.000
	Th	232	**52.118**	**ug/L**	3.005	300103	4.050
	U	238	**53.331**	**ug/L**	0.350	321078	4.335

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	0.9999
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	0.9999
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	95.855				
	Be	9	98.448				
	B	11	98.779				
	Na	23	101.719				
	Mg	24	113.696				
	Al	27	97.316				
	P	31	102.941				
	K	39	107.006				
	Ca	43	98.024				
>	Sc	45			92.6		
	Ti	47	100.043				
	V	51	97.558				
	Cr	52	102.139				
	Cr	53					
	Mn	55	103.987				
	Fe	57	99.991				
	Co	59	100.731				
	Ni	60	105.685				
	Cu	63					
	Cu	65	102.172				
	Zn	66	102.207				
	Zn	67					
	Zn	68					
>	Ge	74			93.4		
	As	75	96.591				
	Se	77					
	Se	82	95.641				
	Kr	83					
	Sr	88	101.118				
	Y	89					
	Zr	90	101.724				
	Mo	98	98.739				
	Ag	107	99.696				
	Cd	111	100.532				
	Cd	114					
>	In	115			92.1		
	Sn	120	99.316				
	Sb	121	95.599				
	Sb	123					
	Ba	135					
	Ba	137	100.009				
	Ho	165					
>	Lu	175			94.4		
	Tl	205	96.775				
	Pb	208	102.241				
	Bi	209					
	Th	232	104.237				
	U	238	106.662				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Mg	24	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, January 12, 2010 23:12:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\QC Std 7.115

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.126**	**ug/L**	23.883	46	0.000
	Be	9	**-0.005**	**ug/L**	466.515	3	-0.000
	B	11	**2.077**	**ug/L**	37.164	208	0.001
	Na	23	**-29.489**	**ug/L**	9.592	24021	-0.229
	Mg	24	**-0.118**	**ug/L**	984.455	2334	-0.001
	Al	27	**1.106**	**ug/L**	182.457	5001	0.008
	P	31	**-6.782**	**ug/L**	26.778	2520	-0.003
	K	39	**-16.012**	**ug/L**	94.604	429041	-0.194
	Ca	43	**-19.873**	**ug/L**	36.076	581	-0.001
>	Sc	45		**ug/L**		195036	195035.658
	Ti	47	**0.290**	**ug/L**	35.889	324	0.000
	V	51	**-0.853**	**ug/L**	203.772	-5772	-0.009
	Cr	52	**-0.404**	**ug/L**	34.045	101	-0.005
	Cr	53		**ug/L**		222154	-0.179
	Mn	55	**0.019**	**ug/L**	32.998	1338	0.000
	Fe	57	**6.167**	**ug/L**	31.124	4201	0.002
	Co	59	**0.005**	**ug/L**	108.825	152	0.000
	Ni	60	**-0.001**	**ug/L**	1020.042	71	-0.000
	Cu	63		**ug/L**		203	0.000
	Cu	65	**0.005**	**ug/L**	237.279	113	0.000
	Zn	66	**-0.002**	**ug/L**	1981.020	99	-0.000
	Zn	67		**ug/L**		10344	-0.023
	Zn	68		**ug/L**		728	-0.004
>	Ge	74		**ug/L**		142475	142474.799
	As	75	**-0.041**	**ug/L**	2020.091	359	-0.000
	Se	77		**ug/L**		7616	-0.014
	Se	82	**0.111**	**ug/L**	349.622	-20	0.000
	Kr	83		**ug/L**		65	-0.000
	Sr	88	**0.005**	**ug/L**	85.547	158	0.000
	Y	89		**ug/L**		33	0.000
	Zr	90	**0.168**	**ug/L**	13.218	743	0.006
	Mo	98	**0.029**	**ug/L**	22.175	75	0.000
	Ag	107	**0.010**	**ug/L**	43.058	85	0.000
	Cd	111	**0.008**	**ug/L**	227.721	21	0.000
	Cd	114		**ug/L**		37	0.000
>	In	115		**ug/L**		84129	84128.881
	Sn	120	**0.098**	**ug/L**	9.995	377	0.002
	Sb	121	**0.423**	**ug/L**	22.134	932	0.008
	Sb	123		**ug/L**		775	0.007
	Ba	135		**ug/L**		23	0.000
	Ba	137	**0.022**	**ug/L**	38.273	40	0.000
	Ho	165		**ug/L**		9	0.000
>	Lu	175		**ug/L**		72372	72372.251
	Tl	205	**0.029**	**ug/L**	134.160	329	0.001
	Pb	208	**0.036**	**ug/L**	14.856	445	0.002
	Bi	209		**ug/L**		14	-0.000
	Th	232	**0.102**	**ug/L**	24.188	925	0.008
	U	238	**0.015**	**ug/L**	24.377	230	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	0.9999
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	0.9999
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			91.7		
	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			92.7		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			90.9		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			92.3		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202006079
Sample Date/Time: Tuesday, January 12, 2010 23:18:21
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 937510|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\1202006079.116

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.046**	ug/L	48.963	31	0.000
	Be	9	**-0.011**	ug/L	140.568	3	-0.000
	B	11	**0.399**	ug/L	48.354	102	0.000
	Na	23	**-20.076**	ug/L	6.459	38719	-0.156
	Mg	24	**-1.474**	ug/L	67.625	1000	-0.007
	Al	27	**0.404**	ug/L	169.067	4001	0.003
	P	31	**14.803**	ug/L	17.641	4121	0.005
	K	39	**-34.786**	ug/L	35.110	389250	-0.421
	Ca	43	**-36.092**	ug/L	22.640	505	-0.001
>	Sc	45		ug/L		197304	197304.136
	Ti	47	**0.736**	ug/L	11.290	435	0.001
	V	51	**0.780**	ug/L	368.609	-2303	0.009
	Cr	52	**0.117**	ug/L	113.243	1254	0.001
	Cr	53		ug/L		150065	-0.557
	Mn	55	**0.147**	ug/L	8.744	1816	0.003
	Fe	57	**28.148**	ug/L	4.089	5850	0.010
	Co	59	**-0.007**	ug/L	74.570	121	-0.000
	Ni	60	**0.050**	ug/L	26.451	100	0.000
	Cu	63		ug/L		521	0.002
	Cu	65	**0.250**	ug/L	16.401	261	0.001
	Zn	66	**0.798**	ug/L	13.238	351	0.002
	Zn	67		ug/L		7297	-0.044
	Zn	68		ug/L		709	-0.004
>	Ge	74		ug/L		141758	141758.302
	As	75	**-0.558**	ug/L	45.205	161	-0.002
	Se	77		ug/L		4395	-0.037
	Se	82	**0.486**	ug/L	47.820	-6	0.000
	Kr	83		ug/L		52	-0.000
	Sr	88	**0.012**	ug/L	24.418	204	0.001
	Y	89		ug/L		35	0.000
	Zr	90	**0.267**	ug/L	10.212	1073	0.009
	Mo	98	**0.484**	ug/L	1.845	686	0.007
	Ag	107	**-0.010**	ug/L	14.230	47	-0.000
	Cd	111	**-0.015**	ug/L	47.883	10	-0.000
	Cd	114		ug/L		20	-0.000
>	In	115		ug/L		87100	87099.695
	Sn	120	**0.102**	ug/L	7.871	400	0.003
	Sb	121	**0.052**	ug/L	7.431	318	0.001
	Sb	123		ug/L		278	0.001
	Ba	135		ug/L		236	0.003
	Ba	137	**0.485**	ug/L	0.968	438	0.006
	Ho	165		ug/L		8	0.000
>	Lu	175		ug/L		74734	74734.397
	Tl	205	**-0.057**	ug/L	22.827	212	-0.001
	Pb	208	**0.013**	ug/L	32.150	355	0.001
	Bi	209		ug/L		25	-0.000
	Th	232	**0.036**	ug/L	28.549	573	0.003
	U	238	**-0.017**	ug/L	2.941	44	-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	0.9999
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	0.9999
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			92.8		
	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			92.2		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			94.1		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			95.3		
	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: 1202006080
Sample Date/Time: Tuesday, January 12, 2010 23:24:36
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 937510|40|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\1202006080.117

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**2.628**	ug/L	4.309	551	0.003
	Be	9	**18.116**	ug/L	2.707	1228	0.006
	B	11	**34.407**	ug/L	2.879	2371	0.011
	Na	23	**226.419**	ug/L	5.868	427988	1.759
	Mg	24	**1076.542**	ug/L	4.899	1109868	5.461
	Al	27	**3368.459**	ug/L	6.509	5141855	25.344
	P	31	**186.080**	ug/L	4.330	17056	0.069
	K	39	**1247.302**	ug/L	1.286	3545346	15.082
	Ca	43	**2542.606**	ug/L	1.913	13928	0.065
>	Sc	45		ug/L		202859	202859.336
	Ti	47	**132.558**	ug/L	0.409	33160	0.162
	V	51	**23.942**	ug/L	16.529	48809	0.261
	Cr	52	**59.113**	ug/L	1.813	135514	0.663
	Cr	53		ug/L		190207	-0.380
	Mn	55	**141.172**	ug/L	0.827	527736	2.595
	Fe	57	**4516.705**	ug/L	1.757	341713	1.665
	Co	59	**23.523**	ug/L	1.397	64377	0.317
	Ni	60	**34.586**	ug/L	1.746	19756	0.097
	Cu	63		ug/L		56095	0.276
	Cu	65	**43.217**	ug/L	2.354	26750	0.131
	Zn	66	**150.936**	ug/L	1.674	49473	0.337
	Zn	67		ug/L		15787	0.012
	Zn	68		ug/L		35493	0.233
>	Ge	74		ug/L		146629	146629.165
	As	75	**26.340**	ug/L	5.518	10827	0.071
	Se	77		ug/L		7700	-0.015
	Se	82	**69.240**	ug/L	2.723	2606	0.018
	Kr	83		ug/L		65	-0.000
	Sr	88	**57.873**	ug/L	1.862	329441	3.802
	Y	89		ug/L		16919	0.195
	Zr	90	**2.411**	ug/L	1.827	7627	0.085
	Mo	98	**12.251**	ug/L	1.447	16330	0.188
	Ag	107	**5.781**	ug/L	0.722	11893	0.137
	Cd	111	**14.703**	ug/L	1.014	7187	0.083
	Cd	114		ug/L		16678	0.192
>	In	115		ug/L		86616	86616.484
	Sn	120	**8.869**	ug/L	1.354	19602	0.224
	Sb	121	**14.211**	ug/L	0.814	24798	0.284
	Sb	123		ug/L		18957	0.216
	Ba	135		ug/L		25875	0.345
	Ba	137	**51.975**	ug/L	1.458	44718	0.596
	Ho	165		ug/L		653	0.009
>	Lu	175		ug/L		75017	75017.239
	Tl	205	**30.704**	ug/L	0.528	46436	0.615
	Pb	208	**21.819**	ug/L	1.842	98959	1.315
	Bi	209		ug/L		790	0.010
	Th	232	**2.417**	ug/L	1.135	14453	0.188
	U	238	**0.461**	ug/L	4.072	2952	0.037

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	0.9999
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	0.9999
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			95.4		
	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			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			93.6		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			95.7		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	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: 243628001
Sample Date/Time: Tuesday, January 12, 2010 23:30:50
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 937510|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\243628001.118

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**74.471**	ug/L	1.184	18226	0.074
	Be	9	**4.689**	ug/L	0.820	390	0.002
	B	11	**18.320**	ug/L	1.547	1579	0.006
	Na	23	**582.736**	ug/L	9.937	1203994	4.526
	Mg	24	**12336.609**	ug/L	1.323	15440864	62.579
	Al	27	**101323.305**	ug/L	4.340	187993819	762.344
	P	31	**484.423**	ug/L	1.601	47897	0.179
	K	39	**11984.900**	ug/L	6.981	36327163	144.919
	Ca	43	**9642.530**	ug/L	1.355	61838	0.247
>	Sc	45		ug/L		246669	246668.979
	Ti	47	**1789.642**	ug/L	1.102	540356	2.189
	V	51	**109.625**	ug/L	1.007	289897	1.196
	Cr	52	**47.132**	ug/L	2.643	131635	0.529
	Cr	53		ug/L		148140	-0.717
	Mn	55	**1270.440**	ug/L	0.526	5762299	23.355
	Fe	57	**57260.044**	ug/L	1.359	5212244	21.113
	Co	59	**20.744**	ug/L	1.492	69056	0.279
	Ni	60	**35.356**	ug/L	1.800	24554	0.099
	Cu	63		ug/L		47060	0.190
	Cu	65	**30.663**	ug/L	1.373	23123	0.093
	Zn	66	**158.633**	ug/L	0.469	48141	0.354
	Zn	67		ug/L		15612	0.019
	Zn	68		ug/L		38693	0.276
>	Ge	74		ug/L		135757	135757.372
	As	75	**9.600**	ug/L	5.113	3883	0.026
	Se	77		ug/L		3938	-0.039
	Se	82	**0.262**	ug/L	226.304	-13	0.000
	Kr	83		ug/L		132	0.000
	Sr	88	**161.829**	ug/L	0.213	879260	10.632
	Y	89		ug/L		366991	4.438
	Zr	90	**116.472**	ug/L	1.890	340409	4.114
	Mo	98	**1.539**	ug/L	1.223	1991	0.024
	Ag	107	**0.602**	ug/L	4.008	1239	0.014
	Cd	111	**1.808**	ug/L	6.852	858	0.010
	Cd	114		ug/L		284	0.003
>	In	115		ug/L		82689	82688.923
	Sn	120	**1.000**	ug/L	3.865	2256	0.025
	Sb	121	**0.239**	ug/L	13.559	611	0.005
	Sb	123		ug/L		494	0.003
	Ba	135		ug/L		465643	5.946
	Ba	137	**881.929**	ug/L	2.198	791799	10.111
	Ho	165		ug/L		13172	0.168
>	Lu	175		ug/L		78329	78328.979
	Tl	205	**1.079**	ug/L	4.670	2003	0.022
	Pb	208	**57.975**	ug/L	1.431	274049	3.495
	Bi	209		ug/L		3401	0.043
	Th	232	**42.026**	ug/L	1.085	256128	3.265
	U	238	**4.293**	ug/L	2.210	27483	0.349

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	0.9999
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	0.9999
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		116.0			
	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		88.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		89.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Kr 83 Upper, S, EEEAl		27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1202006081
Sample Date/Time: Tuesday, January 12, 2010 23:37:04
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 937510|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\1202006081.119

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**72.074**	ug/L	2.563	17683	0.071
	Be	9	**4.536**	ug/L	2.881	378	0.002
	B	11	**18.786**	ug/L	2.780	1621	0.006
	Na	23	**504.762**	ug/L	1.295	1056333	3.920
	Mg	24	**12394.407**	ug/L	2.957	15548201	62.872
	Al	27	**100200.765**	ug/L	5.970	186382443	753.898
	P	31	**471.282**	ug/L	1.667	46812	0.174
	K	39	**12143.807**	ug/L	6.262	36897746	146.840
	Ca	43	**9600.113**	ug/L	0.100	61710	0.246
>	Sc	45		ug/L		247240	247239.562
	Ti	47	**1832.824**	ug/L	0.761	554670	2.242
	V	51	**111.617**	ug/L	0.257	295944	1.217
	Cr	52	**47.081**	ug/L	1.005	131816	0.528
	Cr	53		ug/L		146485	-0.725
	Mn	55	**1399.880**	ug/L	1.470	6363992	25.734
	Fe	57	**57503.724**	ug/L	2.285	5246865	21.203
	Co	59	**20.750**	ug/L	0.853	69240	0.279
	Ni	60	**37.011**	ug/L	0.961	25761	0.104
	Cu	63		ug/L		45252	0.182
	Cu	65	**29.027**	ug/L	0.767	21947	0.088
	Zn	66	**153.032**	ug/L	1.309	46972	0.341
	Zn	67		ug/L		15151	0.015
	Zn	68		ug/L		38264	0.270
>	Ge	74		ug/L		137305	137305.470
	As	75	**10.033**	ug/L	6.563	4087	0.027
	Se	77		ug/L		3920	-0.039
	Se	82	**-0.125**	ug/L	238.670	-27	-0.000
	Kr	83		ug/L		132	0.000
	Sr	88	**157.894**	ug/L	0.926	858903	10.373
	Y	89		ug/L		342129	4.132
	Zr	90	**116.260**	ug/L	0.561	340189	4.107
	Mo	98	**1.550**	ug/L	2.853	2007	0.024
	Ag	107	**0.590**	ug/L	1.041	1218	0.014
	Cd	111	**1.869**	ug/L	5.627	888	0.011
	Cd	114		ug/L		288	0.003
>	In	115		ug/L		82785	82784.751
	Sn	120	**1.008**	ug/L	2.844	2276	0.025
	Sb	121	**0.132**	ug/L	16.479	435	0.003
	Sb	123		ug/L		365	0.002
	Ba	135		ug/L		484747	6.187
	Ba	137	**915.709**	ug/L	0.965	822523	10.498
	Ho	165		ug/L		12511	0.160
>	Lu	175		ug/L		78353	78353.093
	Tl	205	**0.919**	ug/L	2.586	1754	0.018
	Pb	208	**58.893**	ug/L	0.752	278490	3.551
	Bi	209		ug/L		3386	0.043
	Th	232	**41.572**	ug/L	1.541	253445	3.230
	U	238	**4.132**	ug/L	1.926	26465	0.336

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	0.9999
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	0.9999
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		116.3			
	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		89.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		89.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Kr 83 Upper, S, EEEAl		27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1202006082
Sample Date/Time: Tuesday, January 12, 2010 23:43:19
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 937510|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\1202006082.120

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**94.863**	ug/L	2.400	23335	0.094
	Be	9	**22.704**	ug/L	1.996	1881	0.008
	B	11	**56.292**	ug/L	2.594	4682	0.018
	Na	23	**1524.156**	ug/L	8.737	3021505	11.838
	Mg	24	**12866.172**	ug/L	3.020	16192225	65.265
	Al	27	**107035.814**	ug/L	3.112	199810573	805.324
	P	31	**1219.562**	ug/L	1.526	115456	0.450
	K	39	**13810.160**	ug/L	7.279	42033000	166.990
	Ca	43	**10156.016**	ug/L	1.290	65447	0.260
>	Sc	45		ug/L		248038	248037.808
	Ti	47	**2020.541**	ug/L	0.412	613411	2.472
	V	51	**136.482**	ug/L	1.541	364142	1.488
	Cr	52	**69.481**	ug/L	1.053	194551	0.779
	Cr	53		ug/L		151214	-0.708
	Mn	55	**1288.353**	ug/L	0.391	5875924	23.684
	Fe	57	**58273.646**	ug/L	1.323	5333756	21.487
	Co	59	**40.284**	ug/L	1.362	134682	0.542
	Ni	60	**55.556**	ug/L	1.930	38743	0.156
	Cu	63		ug/L		74513	0.299
	Cu	65	**48.278**	ug/L	0.472	36527	0.147
	Zn	66	**179.456**	ug/L	0.448	54889	0.400
	Zn	67		ug/L		16551	0.025
	Zn	68		ug/L		44363	0.315
>	Ge	74		ug/L		136859	136859.136
	As	75	**46.689**	ug/L	0.855	17639	0.126
	Se	77		ug/L		4102	-0.038
	Se	82	**8.197**	ug/L	9.959	268	0.002
	Kr	83		ug/L		131	0.000
	Sr	88	**193.982**	ug/L	0.602	1045352	12.744
	Y	89		ug/L		351567	4.286
	Zr	90	**155.259**	ug/L	0.425	450037	5.484
	Mo	98	**22.186**	ug/L	0.636	27973	0.341
	Ag	107	**23.958**	ug/L	1.617	46466	0.566
	Cd	111	**7.184**	ug/L	2.430	3333	0.040
	Cd	114		ug/L		5397	0.066
>	In	115		ug/L		82018	82017.760
	Sn	120	**8.337**	ug/L	1.024	17457	0.211
	Sb	121	**19.947**	ug/L	1.112	32872	0.398
	Sb	123		ug/L		25244	0.305
	Ba	135		ug/L		500804	6.465
	Ba	137	**954.203**	ug/L	2.321	847354	10.940
	Ho	165		ug/L		12493	0.161
>	Lu	175		ug/L		77470	77469.612
	Tl	205	**44.307**	ug/L	0.524	69066	0.888
	Pb	208	**150.262**	ug/L	1.465	702039	9.059
	Bi	209		ug/L		3362	0.043
	Th	232	**67.041**	ug/L	0.852	403921	5.209
	U	238	**29.034**	ug/L	1.494	182977	2.360

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	0.9999
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	0.9999
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		116.7			
	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		89.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		88.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Kr 83 Upper, S, EEEAl		27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	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: Tuesday, January 12, 2010 23:49:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\QC Std 6.121

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**46.234**	ug/L	2.405	8910	0.046
	Be	9	**48.255**	ug/L	0.999	3124	0.016
	B	11	**95.652**	ug/L	3.285	6175	0.031
	Na	23	**5228.152**	ug/L	1.594	7950065	40.605
	Mg	24	**5587.465**	ug/L	6.508	5500382	28.343
	Al	27	**5163.533**	ug/L	3.254	7542133	38.850
	P	31	**5046.009**	ug/L	1.717	364409	1.862
	K	39	**5463.795**	ug/L	4.728	13292817	66.067
	Ca	43	**4858.932**	ug/L	0.292	24854	0.125
>	Sc	45		ug/L		194090	194090.370
	Ti	47	**50.598**	ug/L	1.387	12266	0.062
	V	51	**49.177**	ug/L	9.953	100176	0.536
	Cr	52	**51.569**	ug/L	0.867	113247	0.578
	Cr	53		ug/L		241769	-0.072
	Mn	55	**52.139**	ug/L	1.344	187279	0.958
	Fe	57	**5021.432**	ug/L	2.102	363040	1.852
	Co	59	**50.745**	ug/L	2.619	132702	0.683
	Ni	60	**52.988**	ug/L	3.460	28914	0.149
	Cu	63		ug/L		64091	0.329
	Cu	65	**51.492**	ug/L	1.142	30480	0.156
	Zn	66	**51.154**	ug/L	1.908	16314	0.114
	Zn	67		ug/L		13194	-0.003
	Zn	68		ug/L		12391	0.078
>	Ge	74		ug/L		142081	142081.143
	As	75	**48.755**	ug/L	2.172	19105	0.132
	Se	77		ug/L		9698	0.000
	Se	82	**48.136**	ug/L	3.379	1749	0.012
	Kr	83		ug/L		67	-0.000
	Sr	88	**51.140**	ug/L	1.265	280635	3.360
	Y	89		ug/L		107	0.001
	Zr	90	**50.555**	ug/L	2.303	149281	1.786
	Mo	98	**49.162**	ug/L	1.273	63040	0.755
	Ag	107	**50.729**	ug/L	1.414	100067	1.198
	Cd	111	**50.417**	ug/L	1.623	23709	0.284
	Cd	114		ug/L		54823	0.656
>	In	115		ug/L		83485	83484.687
	Sn	120	**49.357**	ug/L	0.140	104379	1.248
	Sb	121	**48.668**	ug/L	2.576	81313	0.971
	Sb	123		ug/L		62759	0.749
	Ba	135		ug/L		24600	0.339
	Ba	137	**50.075**	ug/L	2.054	41661	0.574
	Ho	165		ug/L		18	0.000
>	Lu	175		ug/L		72541	72540.781
	Tl	205	**48.540**	ug/L	1.529	70814	0.972
	Pb	208	**51.645**	ug/L	2.173	226115	3.114
	Bi	209		ug/L		58	0.000
	Th	232	**53.071**	ug/L	1.316	299459	4.124
	U	238	**53.450**	ug/L	1.653	315298	4.345

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	0.9999
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	0.9999
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	92.468				
	Be	9	96.510				
	B	11	95.652				
	Na	23	104.563				
	Mg	24	111.749				
	Al	27	102.248				
	P	31	100.920				
	K	39	109.276				
	Ca	43	97.179				
>	Sc	45			91.3		
	Ti	47	101.197				
	V	51	98.353				
	Cr	52	103.139				
	Cr	53					
	Mn	55	104.278				
	Fe	57	100.429				
	Co	59	101.490				
	Ni	60	105.975				
	Cu	63					
	Cu	65	102.984				
	Zn	66	102.308				
	Zn	67					
	Zn	68					
>	Ge	74			92.4		
	As	75	97.511				
	Se	77					
	Se	82	96.273				
	Kr	83					
	Sr	88	102.280				
	Y	89					
	Zr	90	101.110				
	Mo	98	98.324				
	Ag	107	101.459				
	Cd	111	100.834				
	Cd	114					
>	In	115			90.2		
	Sn	120	98.714				
	Sb	121	97.335				
	Sb	123					
	Ba	135					
	Ba	137	100.150				
	Ho	165					
>	Lu	175			92.5		
	Tl	205	97.080				
	Pb	208	103.290				
	Bi	209					
	Th	232	106.141				
	U	238	106.900				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Mg	24	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, January 12, 2010 23:55:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\QC Std 7.122

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.132**	**ug/L**	27.512	47	0.000
	Be	9	**0.027**	**ug/L**	70.791	5	0.000
	B	11	**2.513**	**ug/L**	19.346	233	0.001
	Na	23	**-29.515**	**ug/L**	8.417	23687	-0.229
	Mg	24	**-0.090**	**ug/L**	1313.318	2334	-0.000
	Al	27	**2.557**	**ug/L**	142.891	7002	0.019
	P	31	**-4.911**	**ug/L**	19.105	2625	-0.002
	K	39	**-12.068**	**ug/L**	57.800	433481	-0.146
	Ca	43	**-9.416**	**ug/L**	48.582	626	-0.000
>	Sc	45		**ug/L**		192911	192910.506
	Ti	47	**0.351**	**ug/L**	9.554	334	0.000
	V	51	**-2.814**	**ug/L**	76.076	-9793	-0.031
	Cr	52	**-0.276**	**ug/L**	50.095	376	-0.003
	Cr	53		**ug/L**		213971	-0.208
	Mn	55	**-0.004**	**ug/L**	541.334	1242	-0.000
	Fe	57	**6.120**	**ug/L**	45.832	4151	0.002
	Co	59	**0.011**	**ug/L**	23.819	166	0.000
	Ni	60	**-0.027**	**ug/L**	65.281	56	-0.000
	Cu	63		**ug/L**		203	0.000
	Cu	65	**-0.005**	**ug/L**	498.935	106	-0.000
	Zn	66	**0.034**	**ug/L**	59.081	109	0.000
	Zn	67		**ug/L**		9975	-0.025
	Zn	68		**ug/L**		672	-0.004
>	Ge	74		**ug/L**		141187	141187.348
	As	75	**-0.351**	**ug/L**	155.373	240	-0.001
	Se	77		**ug/L**		7483	-0.015
	Se	82	**-0.219**	**ug/L**	106.771	-32	-0.000
	Kr	83		**ug/L**		68	-0.000
	Sr	88	**0.005**	**ug/L**	12.063	157	0.000
	Y	89		**ug/L**		30	0.000
	Zr	90	**0.171**	**ug/L**	22.266	749	0.006
	Mo	98	**0.036**	**ug/L**	14.797	84	0.001
	Ag	107	**0.013**	**ug/L**	43.407	90	0.000
	Cd	111	**0.009**	**ug/L**	90.276	21	0.000
	Cd	114		**ug/L**		31	0.000
>	In	115		**ug/L**		83884	83883.750
	Sn	120	**0.095**	**ug/L**	15.996	369	0.002
	Sb	121	**0.451**	**ug/L**	16.709	974	0.009
	Sb	123		**ug/L**		750	0.006
	Ba	135		**ug/L**		22	0.000
	Ba	137	**0.017**	**ug/L**	53.590	35	0.000
	Ho	165		**ug/L**		10	0.000
>	Lu	175		**ug/L**		71772	71771.599
	Tl	205	**0.070**	**ug/L**	62.575	386	0.001
	Pb	208	**0.041**	**ug/L**	10.392	461	0.002
	Bi	209		**ug/L**		15	-0.000
	Th	232	**0.104**	**ug/L**	30.227	926	0.008
	U	238	**0.012**	**ug/L**	47.856	208	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	0.9999
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	0.9999
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			90.7		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			91.9		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			90.7		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			91.6		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202006084
Sample Date/Time: Wednesday, January 13, 2010 00:02:01
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 937510|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\1202006084.123

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**100.036**	ug/L	2.664	24616	0.099
	Be	9	**23.296**	ug/L	3.197	1931	0.008
	B	11	**58.325**	ug/L	2.797	4851	0.019
	Na	23	**1568.444**	ug/L	6.250	3110373	12.182
	Mg	24	**13379.391**	ug/L	4.459	16846721	67.869
	Al	27	**112107.682**	ug/L	1.364	209299785	843.484
	P	31	**1216.507**	ug/L	1.505	115225	0.449
	K	39	**14001.974**	ug/L	1.226	42603583	169.309
	Ca	43	**10362.816**	ug/L	0.556	66782	0.266
>	Sc	45		ug/L		248122	248122.094
	Ti	47	**2155.792**	ug/L	1.210	654727	2.637
	V	51	**144.571**	ug/L	1.321	386197	1.577
	Cr	52	**71.215**	ug/L	0.874	199456	0.799
	Cr	53		ug/L		154244	-0.696
	Mn	55	**1839.909**	ug/L	1.121	8393376	33.823
	Fe	57	**61273.537**	ug/L	0.184	5610639	22.593
	Co	59	**47.310**	ug/L	0.951	158218	0.637
	Ni	60	**58.033**	ug/L	0.753	40486	0.163
	Cu	63		ug/L		76482	0.307
	Cu	65	**49.334**	ug/L	0.839	37334	0.150
	Zn	66	**190.931**	ug/L	1.449	56608	0.426
	Zn	67		ug/L		17064	0.033
	Zn	68		ug/L		45515	0.334
>	Ge	74		ug/L		132682	132681.645
	As	75	**48.815**	ug/L	1.459	17863	0.132
	Se	77		ug/L		4194	-0.036
	Se	82	**8.217**	ug/L	4.324	260	0.002
	Kr	83		ug/L		116	0.000
	Sr	88	**203.063**	ug/L	1.422	1086255	13.341
	Y	89		ug/L		357331	4.388
	Zr	90	**164.512**	ug/L	1.661	473386	5.811
	Mo	98	**22.357**	ug/L	1.508	27981	0.343
	Ag	107	**23.917**	ug/L	1.161	46051	0.565
	Cd	111	**7.278**	ug/L	1.307	3353	0.041
	Cd	114		ug/L		5567	0.068
>	In	115		ug/L		81428	81427.955
	Sn	120	**8.572**	ug/L	2.426	17811	0.217
	Sb	121	**19.417**	ug/L	1.155	31771	0.388
	Sb	123		ug/L		24457	0.298
	Ba	135		ug/L		546702	7.104
	Ba	137	**1054.809**	ug/L	1.105	930566	12.093
	Ho	165		ug/L		12927	0.168
>	Lu	175		ug/L		76958	76957.527
	Tl	205	**45.954**	ug/L	2.054	71155	0.921
	Pb	208	**164.283**	ug/L	0.814	762461	9.904
	Bi	209		ug/L		3631	0.047
	Th	232	**70.187**	ug/L	0.660	420066	5.454
	U	238	**30.559**	ug/L	1.557	191301	2.484

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	0.9999
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	0.9999
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		116.7			
	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		86.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		88.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Kr 83 Upper, S, EEEAl		27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

Ba	137	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1202006083
Sample Date/Time: Wednesday, January 13, 2010 00:08:17
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 937510|10|sk|
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\1202006083.124

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**17.356**	ug/L	3.515	3455	0.017
	Be	9	**1.146**	ug/L	9.801	80	0.000
	B	11	**5.871**	ug/L	8.158	462	0.002
	Na	23	**94.779**	ug/L	5.773	217309	0.736
	Mg	24	**2988.112**	ug/L	5.518	3029006	15.158
	Al	27	**24660.283**	ug/L	6.074	37061639	185.541
	P	31	**110.983**	ug/L	1.385	11258	0.041
	K	39	**2798.897**	ug/L	1.068	7236309	33.844
	Ca	43	**2323.531**	ug/L	1.346	12592	0.060
>	Sc	45		ug/L		199689	199689.049
	Ti	47	**444.644**	ug/L	1.042	108880	0.544
	V	51	**25.319**	ug/L	13.675	51084	0.276
	Cr	52	**11.082**	ug/L	1.271	25829	0.124
	Cr	53		ug/L		154060	-0.546
	Mn	55	**296.698**	ug/L	1.301	1090348	5.454
	Fe	57	**13512.352**	ug/L	1.434	998690	4.982
	Co	59	**5.216**	ug/L	0.512	14163	0.070
	Ni	60	**8.907**	ug/L	1.613	5063	0.025
	Cu	63		ug/L		9998	0.049
	Cu	65	**7.962**	ug/L	0.650	4944	0.024
	Zn	66	**33.273**	ug/L	2.010	10284	0.074
	Zn	67		ug/L		8934	-0.031
	Zn	68		ug/L		8586	0.054
>	Ge	74		ug/L		137257	137256.595
	As	75	**2.029**	ug/L	31.353	1116	0.005
	Se	77		ug/L		4753	-0.033
	Se	82	**0.357**	ug/L	148.974	-10	0.000
	Kr	83		ug/L		65	-0.000
	Sr	88	**32.530**	ug/L	0.956	176478	2.137
	Y	89		ug/L		71493	0.866
	Zr	90	**21.436**	ug/L	4.012	62705	0.757
	Mo	98	**0.306**	ug/L	2.698	424	0.005
	Ag	107	**0.100**	ug/L	8.647	259	0.002
	Cd	111	**0.300**	ug/L	19.845	156	0.002
	Cd	114		ug/L		61	0.000
>	In	115		ug/L		82524	82523.920
	Sn	120	**0.205**	ug/L	2.739	594	0.005
	Sb	121	**0.105**	ug/L	28.859	389	0.002
	Sb	123		ug/L		328	0.001
	Ba	135		ug/L		92875	1.273
	Ba	137	**189.282**	ug/L	1.459	158348	2.170
	Ho	165		ug/L		2571	0.035
>	Lu	175		ug/L		72969	72969.305
	Tl	205	**0.295**	ug/L	4.762	721	0.006
	Pb	208	**12.573**	ug/L	1.461	55595	0.758
	Bi	209		ug/L		687	0.009
	Th	232	**8.906**	ug/L	2.215	50838	0.692
	U	238	**0.878**	ug/L	2.581	5348	0.071

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	0.9999
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	0.9999
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			93.9		
	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			89.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			89.2		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			93.1		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	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: 243628002
Sample Date/Time: Wednesday, January 13, 2010 00:14:33
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 937510|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\243628002.125

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**42.534**	ug/L	3.589	8812	0.042
	Be	9	**2.059**	ug/L	6.890	147	0.001
	B	11	**9.489**	ug/L	0.710	731	0.003
	Na	23	**493.901**	ug/L	4.355	874355	3.836
	Mg	24	**10852.063**	ug/L	0.892	11490328	55.048
	Al	27	**42063.835**	ug/L	5.731	66066399	316.483
	P	31	**1263.857**	ug/L	1.481	100545	0.466
	K	39	**5414.593**	ug/L	3.247	14157608	65.472
	Ca	43	**9922.177**	ug/L	1.223	53807	0.254
>	Sc	45		ug/L		208659	208658.962
	Ti	47	**1054.534**	ug/L	0.494	269442	1.290
	V	51	**63.475**	ug/L	3.621	140165	0.692
	Cr	52	**94.415**	ug/L	1.299	222001	1.059
	Cr	53		ug/L		151534	-0.591
	Mn	55	**1202.269**	ug/L	1.289	4612194	22.101
	Fe	57	**34376.814**	ug/L	1.039	2648584	12.676
	Co	59	**16.566**	ug/L	2.710	46669	0.223
	Ni	60	**44.531**	ug/L	0.730	26141	0.125
	Cu	63		ug/L		39452	0.188
	Cu	65	**30.282**	ug/L	2.709	19313	0.092
	Zn	66	**153.325**	ug/L	2.879	45495	0.342
	Zn	67		ug/L		13690	0.007
	Zn	68		ug/L		34908	0.254
>	Ge	74		ug/L		132775	132775.289
	As	75	**4.227**	ug/L	33.065	1867	0.011
	Se	77		ug/L		3695	-0.040
	Se	82	**0.164**	ug/L	424.015	-17	0.000
	Kr	83		ug/L		92	0.000
	Sr	88	**83.057**	ug/L	1.689	443283	5.457
	Y	89		ug/L		194890	2.399
	Zr	90	**53.700**	ug/L	1.540	154295	1.897
	Mo	98	**1.625**	ug/L	3.041	2062	0.025
	Ag	107	**0.309**	ug/L	1.730	655	0.007
	Cd	111	**1.041**	ug/L	9.747	492	0.006
	Cd	114		ug/L		385	0.004
>	In	115		ug/L		81221	81221.001
	Sn	120	**0.926**	ug/L	2.267	2064	0.023
	Sb	121	**0.195**	ug/L	3.625	529	0.004
	Sb	123		ug/L		444	0.003
	Ba	135		ug/L		216729	2.886
	Ba	137	**432.785**	ug/L	1.108	372617	4.962
	Ho	165		ug/L		7222	0.096
>	Lu	175		ug/L		75097	75096.619
	Tl	205	**0.407**	ug/L	8.593	910	0.008
	Pb	208	**193.191**	ug/L	1.167	874923	11.647
	Bi	209		ug/L		1556	0.020
	Th	232	**18.967**	ug/L	1.090	111031	1.474
	U	238	**6.075**	ug/L	0.891	37231	0.494

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	0.9999
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	0.9999
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		98.1			
	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		86.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		87.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 243628003
Sample Date/Time: Wednesday, January 13, 2010 00:20:49
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 937510|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\243628003.126

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**70.208**	**ug/L**	2.413	16145	0.070
	Be	9	**4.209**	**ug/L**	4.941	329	0.001
	B	11	**18.827**	**ug/L**	1.202	1523	0.006
	Na	23	**618.087**	**ug/L**	5.738	1193568	4.800
	Mg	24	**11006.381**	**ug/L**	1.636	12945926	55.831
	Al	27	**99073.583**	**ug/L**	4.307	172775271	745.418
	P	31	**560.511**	**ug/L**	1.198	51518	0.207
	K	39	**11256.055**	**ug/L**	11.773	32142882	136.106
	Ca	43	**9159.307**	**ug/L**	0.658	55234	0.235
>	Sc	45		**ug/L**		231786	231785.573
	Ti	47	**1942.885**	**ug/L**	0.858	551220	2.377
	V	51	**115.066**	**ug/L**	0.524	286166	1.255
	Cr	52	**45.958**	**ug/L**	1.061	120642	0.516
	Cr	53		**ug/L**		131602	-0.749
	Mn	55	**1695.912**	**ug/L**	1.246	7228230	31.176
	Fe	57	**56289.286**	**ug/L**	1.570	4815371	20.755
	Co	59	**31.725**	**ug/L**	1.519	99152	0.427
	Ni	60	**35.329**	**ug/L**	2.012	23053	0.099
	Cu	63		**ug/L**		42469	0.182
	Cu	65	**29.454**	**ug/L**	1.579	20875	0.090
	Zn	66	**163.785**	**ug/L**	1.701	48086	0.365
	Zn	67		**ug/L**		14482	0.014
	Zn	68		**ug/L**		38712	0.286
>	Ge	74		**ug/L**		131351	131350.773
	As	75	**9.802**	**ug/L**	9.088	3829	0.027
	Se	77		**ug/L**		3573	-0.041
	Se	82	**0.822**	**ug/L**	119.743	6	0.000
	Kr	83		**ug/L**		101	0.000
	Sr	88	**139.982**	**ug/L**	0.482	741617	9.196
	Y	89		**ug/L**		302031	3.746
	Zr	90	**118.162**	**ug/L**	1.126	336744	4.174
	Mo	98	**1.888**	**ug/L**	1.993	2373	0.029
	Ag	107	**0.530**	**ug/L**	4.521	1072	0.013
	Cd	111	**1.878**	**ug/L**	2.352	868	0.011
	Cd	114		**ug/L**		365	0.004
>	In	115		**ug/L**		80632	80632.149
	Sn	120	**1.199**	**ug/L**	2.584	2606	0.030
	Sb	121	**0.176**	**ug/L**	5.675	495	0.004
	Sb	123		**ug/L**		424	0.003
	Ba	135		**ug/L**		438702	5.822
	Ba	137	**864.098**	**ug/L**	0.567	746529	9.907
	Ho	165		**ug/L**		11327	0.150
>	Lu	175		**ug/L**		75359	75359.047
	Tl	205	**0.919**	**ug/L**	3.389	1686	0.018
	Pb	208	**66.077**	**ug/L**	1.715	300438	3.984
	Bi	209		**ug/L**		3216	0.042
	Th	232	**42.848**	**ug/L**	1.900	251200	3.329
	U	238	**6.375**	**ug/L**	2.010	39188	0.518

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	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	0.9999
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	0.9999
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		109.0			
|	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		85.5			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		87.2			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175		96.1			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Kr 83 Upper, S, EEEAl		27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 243628004
Sample Date/Time: Wednesday, January 13, 2010 00:27:04
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 937510|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\243628004.127

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**56.572**	ug/L	1.124	12946	0.056
	Be	9	**4.067**	ug/L	5.558	317	0.001
	B	11	**16.424**	ug/L	2.772	1333	0.005
	Na	23	**548.242**	ug/L	4.879	1062840	4.258
	Mg	24	**10821.888**	ug/L	4.692	12660566	54.895
	Al	27	**76491.986**	ug/L	2.100	132669923	575.516
	P	31	**466.915**	ug/L	0.975	43276	0.172
	K	39	**10446.489**	ug/L	5.899	29670353	126.317
	Ca	43	**8764.471**	ug/L	0.711	52601	0.225
>	Sc	45		ug/L		230528	230527.800
	Ti	47	**1552.692**	ug/L	0.684	438174	1.899
	V	51	**103.866**	ug/L	0.622	256452	1.133
	Cr	52	**41.695**	ug/L	0.917	108979	0.468
	Cr	53		ug/L		131704	-0.746
	Mn	55	**1516.735**	ug/L	0.187	6429167	27.882
	Fe	57	**53201.889**	ug/L	0.308	4526759	19.617
	Co	59	**25.085**	ug/L	1.251	78016	0.338
	Ni	60	**32.457**	ug/L	1.028	21075	0.091
	Cu	63		ug/L		47864	0.207
	Cu	65	**33.360**	ug/L	1.818	23500	0.101
	Zn	66	**137.872**	ug/L	0.648	40575	0.308
	Zn	67		ug/L		13169	0.004
	Zn	68		ug/L		32735	0.240
>	Ge	74		ug/L		131617	131616.509
	As	75	**9.659**	ug/L	6.822	3786	0.026
	Se	77		ug/L		3633	-0.040
	Se	82	**0.460**	ug/L	101.036	-6	0.000
	Kr	83		ug/L		104	0.000
	Sr	88	**138.676**	ug/L	1.803	745247	9.111
	Y	89		ug/L		315347	3.855
	Zr	90	**99.165**	ug/L	1.115	286724	3.503
	Mo	98	**1.821**	ug/L	1.729	2323	0.028
	Ag	107	**0.475**	ug/L	6.299	982	0.011
	Cd	111	**1.670**	ug/L	5.240	785	0.009
	Cd	114		ug/L		259	0.003
>	In	115		ug/L		81789	81788.726
	Sn	120	**0.994**	ug/L	2.787	2220	0.025
	Sb	121	**0.115**	ug/L	18.487	403	0.002
	Sb	123		ug/L		381	0.002
	Ba	135		ug/L		419753	5.463
	Ba	137	**811.515**	ug/L	1.046	714880	9.304
	Ho	165		ug/L		11722	0.152
>	Lu	175		ug/L		76842	76841.894
	Tl	205	**0.951**	ug/L	2.507	1769	0.019
	Pb	208	**51.973**	ug/L	1.024	241063	3.133
	Bi	209		ug/L		2843	0.037
	Th	232	**37.473**	ug/L	1.777	224084	2.912
	U	238	**3.731**	ug/L	0.844	23456	0.303

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	0.9999
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	0.9999
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			108.4		
	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			85.6		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			88.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			98.0		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Kr 83 Upper, S, EEEA	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 243628005
Sample Date/Time: Wednesday, January 13, 2010 00:33:19
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 937510|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\243628005.128

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**62.805**	ug/L	4.171	14239	0.062
	Be	9	**3.704**	ug/L	3.381	286	0.001
	B	11	**16.900**	ug/L	4.268	1356	0.006
	Na	23	**494.556**	ug/L	7.210	958558	3.841
	Mg	24	**10577.548**	ug/L	5.851	12257397	53.656
	Al	27	**86086.659**	ug/L	8.182	148067512	647.705
	P	31	**490.403**	ug/L	2.304	44875	0.181
	K	39	**11357.204**	ug/L	12.143	31952688	137.329
	Ca	43	**8474.074**	ug/L	0.806	50438	0.217
>	Sc	45		ug/L		228525	228524.552
	Ti	47	**1818.966**	ug/L	0.965	508817	2.225
	V	51	**99.028**	ug/L	1.147	242143	1.080
	Cr	52	**46.215**	ug/L	0.717	119615	0.518
	Cr	53		ug/L		130837	-0.745
	Mn	55	**1562.418**	ug/L	1.227	6564313	28.722
	Fe	57	**49654.449**	ug/L	0.378	4188281	18.309
	Co	59	**22.265**	ug/L	1.829	68649	0.300
	Ni	60	**34.935**	ug/L	1.649	22477	0.098
	Cu	63		ug/L		42646	0.186
	Cu	65	**30.160**	ug/L	0.620	21073	0.092
	Zn	66	**173.127**	ug/L	0.572	50945	0.386
	Zn	67		ug/L		14530	0.015
	Zn	68		ug/L		40144	0.296
>	Ge	74		ug/L		131656	131655.874
	As	75	**8.488**	ug/L	6.610	3369	0.023
	Se	77		ug/L		3554	-0.041
	Se	82	**-0.048**	ug/L	840.098	-24	-0.000
	Kr	83		ug/L		111	0.000
	Sr	88	**129.591**	ug/L	0.257	686151	8.514
	Y	89		ug/L		280544	3.481
	Zr	90	**114.445**	ug/L	1.076	325977	4.042
	Mo	98	**1.740**	ug/L	3.970	2189	0.027
	Ag	107	**0.509**	ug/L	3.092	1032	0.012
	Cd	111	**3.799**	ug/L	8.934	1740	0.021
	Cd	114		ug/L		2262	0.028
>	In	115		ug/L		80579	80578.742
	Sn	120	**1.099**	ug/L	1.694	2401	0.028
	Sb	121	**0.195**	ug/L	11.658	525	0.004
	Sb	123		ug/L		419	0.003
	Ba	135		ug/L		409945	5.445
	Ba	137	**809.758**	ug/L	1.253	698993	9.284
	Ho	165		ug/L		10351	0.137
>	Lu	175		ug/L		75290	75289.964
	Tl	205	**0.851**	ug/L	3.647	1583	0.017
	Pb	208	**71.893**	ug/L	0.497	326633	4.334
	Bi	209		ug/L		3339	0.044
	Th	232	**39.404**	ug/L	0.668	230878	3.062
	U	238	**12.044**	ug/L	1.367	73859	0.979

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	0.9999
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	0.9999
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		107.5			
	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		85.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		87.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		96.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Kr 83 Upper, S, EEEAl		27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	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 13, 2010 00:39:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\QC Std 6.129

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**47.052**	**ug/L**	1.809	8797	0.047
	Be	9	**49.079**	**ug/L**	1.788	3082	0.016
	B	11	**94.322**	**ug/L**	2.718	5909	0.031
	Na	23	**5082.436**	**ug/L**	4.082	7498520	39.474
	Mg	24	**5460.358**	**ug/L**	3.103	5217640	27.698
	Al	27	**4956.352**	**ug/L**	1.925	7024590	37.291
	P	31	**5030.729**	**ug/L**	0.913	352466	1.857
	K	39	**5374.443**	**ug/L**	0.325	12686572	64.987
	Ca	43	**4907.195**	**ug/L**	2.829	24339	0.126
>	Sc	45		**ug/L**		188286	188286.318
	Ti	47	**49.874**	**ug/L**	1.124	11734	0.061
	V	51	**47.032**	**ug/L**	5.008	92741	0.513
	Cr	52	**50.972**	**ug/L**	0.644	108598	0.572
	Cr	53		**ug/L**		225097	-0.122
	Mn	55	**51.390**	**ug/L**	1.685	179106	0.945
	Fe	57	**4938.842**	**ug/L**	0.820	346524	1.821
	Co	59	**50.167**	**ug/L**	0.367	127302	0.675
	Ni	60	**52.841**	**ug/L**	0.591	27980	0.148
	Cu	63		**ug/L**		61044	0.323
	Cu	65	**51.332**	**ug/L**	0.703	29477	0.156
	Zn	66	**51.066**	**ug/L**	1.362	15672	0.114
	Zn	67		**ug/L**		12128	-0.007
	Zn	68		**ug/L**		11972	0.079
>	Ge	74		**ug/L**		136737	136736.725
	As	75	**48.455**	**ug/L**	0.939	18274	0.131
	Se	77		**ug/L**		9080	-0.002
	Se	82	**50.357**	**ug/L**	0.967	1762	0.013
	Kr	83		**ug/L**		53	-0.000
	Sr	88	**49.668**	**ug/L**	1.572	265363	3.263
	Y	89		**ug/L**		111	0.001
	Zr	90	**49.937**	**ug/L**	1.922	143595	1.764
	Mo	98	**49.355**	**ug/L**	0.661	61626	0.758
	Ag	107	**49.812**	**ug/L**	0.096	95681	1.176
	Cd	111	**49.260**	**ug/L**	1.366	22557	0.277
	Cd	114		**ug/L**		53241	0.655
>	In	115		**ug/L**		81284	81283.636
	Sn	120	**49.425**	**ug/L**	1.618	101754	1.250
	Sb	121	**48.338**	**ug/L**	2.130	78647	0.965
	Sb	123		**ug/L**		60268	0.739
	Ba	135		**ug/L**		23590	0.333
	Ba	137	**49.976**	**ug/L**	1.067	40585	0.573
	Ho	165		**ug/L**		19	0.000
>	Lu	175		**ug/L**		70795	70795.026
	Tl	205	**48.746**	**ug/L**	0.354	69410	0.976
	Pb	208	**52.146**	**ug/L**	0.988	222841	3.144
	Bi	209		**ug/L**		50	0.000
	Th	232	**53.553**	**ug/L**	1.143	294925	4.161
	U	238	**54.918**	**ug/L**	1.309	316197	4.464

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	0.9999
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	0.9999
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	94.103				
	Be	9	98.157				
	B	11	94.322				
	Na	23	101.649				
	Mg	24	109.207				
	Al	27	98.146				
	P	31	100.615				
	K	39	107.489				
	Ca	43	98.144				
>	Sc	45		88.6			
	Ti	47	99.748				
	V	51	94.064				
	Cr	52	101.943				
	Cr	53					
	Mn	55	102.780				
	Fe	57	98.777				
	Co	59	100.335				
	Ni	60	105.682				
	Cu	63					
	Cu	65	102.664				
	Zn	66	102.132				
	Zn	67					
	Zn	68					
>	Ge	74		89.0			
	As	75	96.911				
	Se	77					
	Se	82	100.715				
	Kr	83					
	Sr	88	99.336				
	Y	89					
	Zr	90	99.875				
	Mo	98	98.709				
	Ag	107	99.624				
	Cd	111	98.520				
	Cd	114					
>	In	115		87.9			
	Sn	120	98.849				
	Sb	121	96.675				
	Sb	123					
	Ba	135					
	Ba	137	99.952				
	Ho	165					
>	Lu	175		90.3			
	Tl	205	97.493				
	Pb	208	104.292				
	Bi	209					
	Th	232	107.105				
	U	238	109.837				

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 13, 2010 00:45:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\QC Std 7.130

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.097	ug/L	13.035	39	0.000
	Be	9	0.050	ug/L	97.462	7	0.000
	B	11	1.951	ug/L	11.514	193	0.001
	Na	23	-28.646	ug/L	11.578	24355	-0.222
	Mg	24	0.321	ug/L	182.624	2667	0.002
	Al	27	1.015	ug/L	162.487	4668	0.008
	P	31	-6.477	ug/L	36.051	2450	-0.002
	K	39	-17.062	ug/L	9.110	411167	-0.206
	Ca	43	-22.394	ug/L	29.870	547	-0.001
>	Sc	45		ug/L		187972	187971.507
	Ti	47	0.352	ug/L	30.720	326	0.000
	V	51	-0.902	ug/L	132.691	-5659	-0.010
	Cr	52	-0.217	ug/L	55.246	491	-0.002
	Cr	53		ug/L		197085	-0.269
	Mn	55	-0.021	ug/L	20.999	1150	-0.000
	Fe	57	1.385	ug/L	99.262	3718	0.001
	Co	59	0.005	ug/L	73.391	147	0.000
	Ni	60	-0.014	ug/L	45.017	61	-0.000
	Cu	63		ug/L		199	0.000
	Cu	65	0.017	ug/L	164.583	115	0.000
	Zn	66	-0.029	ug/L	187.851	86	-0.000
	Zn	67		ug/L		9062	-0.029
	Zn	68		ug/L		588	-0.005
>	Ge	74		ug/L		136410	136409.967
	As	75	-0.560	ug/L	140.341	156	-0.002
	Se	77		ug/L		6954	-0.017
	Se	82	0.338	ug/L	107.604	-11	0.000
	Kr	83		ug/L		56	-0.000
	Sr	88	0.007	ug/L	22.196	164	0.000
	Y	89		ug/L		34	0.000
	Zr	90	0.150	ug/L	14.280	673	0.005
	Mo	98	0.044	ug/L	17.453	92	0.001
	Ag	107	0.011	ug/L	29.622	85	0.000
	Cd	111	0.001	ug/L	1640.921	17	0.000
	Cd	114		ug/L		23	-0.000
>	In	115		ug/L		82423	82423.157
	Sn	120	0.103	ug/L	14.126	380	0.003
	Sb	121	0.503	ug/L	26.698	1043	0.010
	Sb	123		ug/L		800	0.007
	Ba	135		ug/L		28	0.000
	Ba	137	0.022	ug/L	53.198	39	0.000
	Ho	165		ug/L		7	-0.000
>	Lu	175		ug/L		70773	70773.268
	Tl	205	0.083	ug/L	40.043	398	0.002
	Pb	208	0.039	ug/L	26.436	447	0.002
	Bi	209		ug/L		17	-0.000
	Th	232	0.114	ug/L	32.505	971	0.009
	U	238	0.019	ug/L	11.155	247	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	0.9999
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	0.9999
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		88.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		88.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		89.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		90.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 243628006
Sample Date/Time: Wednesday, January 13, 2010 00:52:00
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 937510|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\243628006.131

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**76.101**	**ug/L**	1.715	18003	0.075
	Be	9	**4.509**	**ug/L**	1.193	363	0.002
	B	11	**19.598**	**ug/L**	2.616	1627	0.006
	Na	23	**603.834**	**ug/L**	4.702	1201892	4.690
	Mg	24	**12560.760**	**ug/L**	1.170	15194774	63.716
	Al	27	**96903.592**	**ug/L**	1.289	173849522	729.091
	P	31	**502.492**	**ug/L**	0.918	47890	0.185
	K	39	**11873.644**	**ug/L**	4.049	34805606	143.574
	Ca	43	**9548.540**	**ug/L**	0.856	59196	0.245
>	Sc	45		**ug/L**		238427	238427.294
	Ti	47	**1939.290**	**ug/L**	0.987	565968	2.372
	V	51	**115.833**	**ug/L**	2.887	296374	1.263
	Cr	52	**47.951**	**ug/L**	1.926	129450	0.538
	Cr	53		**ug/L**		140056	-0.730
	Mn	55	**1686.633**	**ug/L**	1.149	7394053	31.005
	Fe	57	**58743.064**	**ug/L**	1.917	5168799	21.660
	Co	59	**27.804**	**ug/L**	1.247	89419	0.374
	Ni	60	**38.617**	**ug/L**	0.642	25918	0.108
	Cu	63		**ug/L**		44681	0.186
	Cu	65	**30.292**	**ug/L**	0.733	22082	0.092
	Zn	66	**162.258**	**ug/L**	0.513	46978	0.362
	Zn	67		**ug/L**		14765	0.018
	Zn	68		**ug/L**		37285	0.279
>	Ge	74		**ug/L**		129526	129526.198
	As	75	**11.045**	**ug/L**	6.204	4212	0.030
	Se	77		**ug/L**		3820	-0.038
	Se	82	**-0.248**	**ug/L**	254.020	-30	-0.000
	Kr	83		**ug/L**		123	0.000
	Sr	88	**166.244**	**ug/L**	1.158	861615	10.922
	Y	89		**ug/L**		350292	4.440
	Zr	90	**121.133**	**ug/L**	1.852	337766	4.279
	Mo	98	**1.594**	**ug/L**	1.637	1965	0.024
	Ag	107	**0.616**	**ug/L**	0.760	1209	0.015
	Cd	111	**1.928**	**ug/L**	15.085	873	0.011
	Cd	114		**ug/L**		294	0.003
>	In	115		**ug/L**		78886	78886.304
	Sn	120	**1.102**	**ug/L**	3.732	2357	0.028
	Sb	121	**0.241**	**ug/L**	6.177	586	0.005
	Sb	123		**ug/L**		495	0.004
	Ba	135		**ug/L**		487739	6.442
	Ba	137	**953.297**	**ug/L**	1.541	827427	10.929
	Ho	165		**ug/L**		12642	0.167
>	Lu	175		**ug/L**		75705	75705.488
	Tl	205	**1.168**	**ug/L**	2.356	2072	0.023
	Pb	208	**64.205**	**ug/L**	1.405	293339	3.871
	Bi	209		**ug/L**		3404	0.045
	Th	232	**44.175**	**ug/L**	0.933	260217	3.432
	U	238	**4.611**	**ug/L**	1.756	28527	0.375

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	0.9999
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	0.9999
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		112.1			
	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		84.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		85.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		96.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Kr 83 Upper, S, EEEAl		27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 243628007
Sample Date/Time: Wednesday, January 13, 2010 00:58:17
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 937510|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\243628007.132

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**64.764**	**ug/L**	1.222	14692	0.064
	Be	9	**3.861**	**ug/L**	1.711	298	0.001
	B	11	**19.573**	**ug/L**	4.056	1558	0.006
	Na	23	**477.903**	**ug/L**	15.359	928564	3.712
	Mg	24	**10749.706**	**ug/L**	7.414	12469453	54.529
	Al	27	**86301.981**	**ug/L**	3.231	148425596	649.326
	P	31	**640.851**	**ug/L**	1.829	57582	0.236
	K	39	**12462.439**	**ug/L**	1.989	34995801	150.693
	Ca	43	**9974.376**	**ug/L**	3.191	59245	0.256
>	Sc	45		**ug/L**		228586	228586.279
	Ti	47	**1892.879**	**ug/L**	0.806	529611	2.316
	V	51	**103.534**	**ug/L**	0.335	253470	1.129
	Cr	52	**43.004**	**ug/L**	0.485	111419	0.482
	Cr	53		**ug/L**		131835	-0.741
	Mn	55	**1669.726**	**ug/L**	1.420	7017874	30.695
	Fe	57	**52271.202**	**ug/L**	1.724	4409941	19.274
	Co	59	**22.006**	**ug/L**	1.168	67883	0.296
	Ni	60	**33.852**	**ug/L**	0.387	21791	0.095
	Cu	63		**ug/L**		44030	0.192
	Cu	65	**30.976**	**ug/L**	0.526	21645	0.094
	Zn	66	**150.925**	**ug/L**	1.352	43699	0.337
	Zn	67		**ug/L**		13845	0.011
	Zn	68		**ug/L**		35677	0.266
>	Ge	74		**ug/L**		129524	129523.524
	As	75	**10.752**	**ug/L**	12.584	4105	0.029
	Se	77		**ug/L**		3642	-0.040
	Se	82	**0.834**	**ug/L**	18.045	6	0.000
	Kr	83		**ug/L**		110	0.000
	Sr	88	**149.238**	**ug/L**	1.404	776357	9.804
	Y	89		**ug/L**		310293	3.919
	Zr	90	**115.250**	**ug/L**	0.866	322511	4.071
	Mo	98	**1.728**	**ug/L**	0.974	2135	0.027
	Ag	107	**0.566**	**ug/L**	6.451	1119	0.013
	Cd	111	**2.207**	**ug/L**	4.767	999	0.012
	Cd	114		**ug/L**		575	0.007
>	In	115		**ug/L**		79169	79169.088
	Sn	120	**1.187**	**ug/L**	1.205	2535	0.030
	Sb	121	**0.289**	**ug/L**	10.493	665	0.006
	Sb	123		**ug/L**		491	0.004
	Ba	135		**ug/L**		451847	5.962
	Ba	137	**881.915**	**ug/L**	2.080	766353	10.111
	Ho	165		**ug/L**		11297	0.149
>	Lu	175		**ug/L**		75820	75819.511
	Tl	205	**0.881**	**ug/L**	0.857	1639	0.018
	Pb	208	**67.213**	**ug/L**	2.998	307379	4.052
	Bi	209		**ug/L**		3406	0.045
	Th	232	**40.795**	**ug/L**	2.257	240610	3.170
	U	238	**7.279**	**ug/L**	2.429	44999	0.592

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	0.9999
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	0.9999
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		107.5			
	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		84.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		85.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		96.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Kr 83 Upper, S, EEEAl		27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 243628008
Sample Date/Time: Wednesday, January 13, 2010 01:04:33
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 937510|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\243628008.133

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**84.866**	ug/L	1.657	21013	0.084
	Be	9	**4.971**	ug/L	7.109	418	0.002
	B	11	**20.572**	ug/L	2.282	1783	0.007
	Na	23	**684.941**	ug/L	7.206	1416100	5.320
	Mg	24	**12900.542**	ug/L	5.875	16330978	65.440
	Al	27	**112700.998**	ug/L	4.185	211627327	847.949
	P	31	**465.882**	ug/L	0.633	46760	0.172
	K	39	**12973.575**	ug/L	6.106	39750665	156.874
	Ca	43	**9144.319**	ug/L	0.504	59380	0.234
>	Sc	45		ug/L		249592	249591.719
	Ti	47	**2115.645**	ug/L	1.037	646323	2.588
	V	51	**120.753**	ug/L	0.243	323631	1.317
	Cr	52	**48.125**	ug/L	1.297	135992	0.540
	Cr	53		ug/L		127382	-0.807
	Mn	55	**1568.398**	ug/L	2.217	7197086	28.832
	Fe	57	**61153.119**	ug/L	1.959	5632378	22.549
	Co	59	**24.231**	ug/L	1.420	81590	0.326
	Ni	60	**38.323**	ug/L	0.704	26926	0.108
	Cu	63		ug/L		47730	0.190
	Cu	65	**30.805**	ug/L	0.845	23503	0.094
	Zn	66	**170.639**	ug/L	1.760	51491	0.381
	Zn	67		ug/L		14867	0.014
	Zn	68		ug/L		41524	0.299
>	Ge	74		ug/L		135025	135025.193
	As	75	**11.576**	ug/L	5.857	4582	0.031
	Se	77		ug/L		3637	-0.041
	Se	82	**-0.231**	ug/L	209.037	-30	-0.000
	Kr	83		ug/L		132	0.000
	Sr	88	**160.342**	ug/L	0.459	875073	10.534
	Y	89		ug/L		379256	4.566
	Zr	90	**130.783**	ug/L	2.018	383890	4.620
	Mo	98	**1.609**	ug/L	4.223	2088	0.025
	Ag	107	**0.623**	ug/L	4.714	1285	0.015
	Cd	111	**2.127**	ug/L	4.678	1011	0.012
	Cd	114		ug/L		305	0.003
>	In	115		ug/L		83063	83062.874
	Sn	120	**1.108**	ug/L	3.718	2493	0.028
	Sb	121	**0.115**	ug/L	14.142	409	0.002
	Sb	123		ug/L		377	0.002
	Ba	135		ug/L		516637	6.433
	Ba	137	**947.088**	ug/L	0.607	871993	10.858
	Ho	165		ug/L		13624	0.170
>	Lu	175		ug/L		80308	80308.235
	Tl	205	**1.014**	ug/L	0.220	1951	0.020
	Pb	208	**67.354**	ug/L	1.262	326414	4.061
	Bi	209		ug/L		3952	0.049
	Th	232	**48.508**	ug/L	1.040	303071	3.769
	U	238	**4.992**	ug/L	2.061	32740	0.406

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	0.9999
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	0.9999
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		117.4			
	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		87.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		89.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		102.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Kr 83 Upper, S, EEEAl		27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 243628009
Sample Date/Time: Wednesday, January 13, 2010 01:10:51
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 937510|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\243628009.134

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**80.835**	ug/L	1.983	19487	0.080
	Be	9	**5.027**	ug/L	2.436	412	0.002
	B	11	**18.549**	ug/L	2.011	1574	0.006
	Na	23	**655.757**	ug/L	0.951	1323245	5.093
	Mg	24	**12332.319**	ug/L	3.465	15207863	62.557
	Al	27	**107533.851**	ug/L	6.194	196587822	809.072
	P	31	**468.728**	ug/L	0.729	45781	0.173
	K	39	**12807.401**	ug/L	7.019	38229108	154.865
	Ca	43	**8871.059**	ug/L	0.296	56113	0.227
>	Sc	45		ug/L		243007	243007.247
	Ti	47	**2024.675**	ug/L	1.042	602242	2.477
	V	51	**115.881**	ug/L	1.515	302186	1.264
	Cr	52	**46.793**	ug/L	0.825	128773	0.525
	Cr	53		ug/L		123944	-0.808
	Mn	55	**1558.296**	ug/L	0.235	6962721	28.646
	Fe	57	**58933.246**	ug/L	0.825	5285172	21.730
	Co	59	**24.014**	ug/L	1.270	78729	0.323
	Ni	60	**38.242**	ug/L	0.976	26158	0.107
	Cu	63		ug/L		45440	0.186
	Cu	65	**30.517**	ug/L	0.507	22672	0.093
	Zn	66	**157.209**	ug/L	1.227	46603	0.351
	Zn	67		ug/L		13846	0.009
	Zn	68		ug/L		38072	0.278
>	Ge	74		ug/L		132613	132613.005
	As	75	**9.806**	ug/L	5.458	3868	0.027
	Se	77		ug/L		3518	-0.041
	Se	82	**-0.398**	ug/L	131.857	-36	-0.000
	Kr	83		ug/L		128	0.000
	Sr	88	**156.481**	ug/L	0.717	834359	10.280
	Y	89		ug/L		353611	4.357
	Zr	90	**127.173**	ug/L	0.752	364749	4.492
	Mo	98	**1.494**	ug/L	2.700	1897	0.023
	Ag	107	**0.585**	ug/L	3.055	1185	0.014
	Cd	111	**2.041**	ug/L	12.598	948	0.011
	Cd	114		ug/L		301	0.003
>	In	115		ug/L		81146	81146.381
	Sn	120	**0.974**	ug/L	2.335	2162	0.025
	Sb	121	**0.115**	ug/L	6.484	399	0.002
	Sb	123		ug/L		360	0.002
	Ba	135		ug/L		493652	6.257
	Ba	137	**928.742**	ug/L	2.691	840052	10.648
	Ho	165		ug/L		12863	0.163
>	Lu	175		ug/L		78902	78902.423
	Tl	205	**0.954**	ug/L	1.888	1821	0.019
	Pb	208	**63.154**	ug/L	0.583	300724	3.807
	Bi	209		ug/L		3675	0.046
	Th	232	**45.793**	ug/L	1.011	281135	3.558
	U	238	**4.797**	ug/L	1.105	30919	0.390

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	0.9999
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	0.9999
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		114.3			
	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		86.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		87.7			
	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
Kr 83 Upper, S, EEEAl		27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 243628010
Sample Date/Time: Wednesday, January 13, 2010 01:17:07
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 937510|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\243628010.135

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**79.154**	ug/L	9.282	18388	0.078
	Be	9	**4.644**	ug/L	3.416	367	0.002
	B	11	**18.501**	ug/L	6.419	1515	0.006
	Na	23	**664.949**	ug/L	3.988	1295705	5.164
	Mg	24	**12218.497**	ug/L	1.467	14548132	61.980
	Al	27	**114060.077**	ug/L	4.054	201242907	858.174
	P	31	**465.287**	ug/L	5.120	43873	0.172
	K	39	**12009.415**	ug/L	4.313	34615412	145.215
	Ca	43	**8783.915**	ug/L	5.385	53605	0.225
>	Sc	45		ug/L		234775	234775.225
	Ti	47	**1938.803**	ug/L	4.720	556379	2.372
	V	51	**112.550**	ug/L	6.709	282885	1.227
	Cr	52	**45.794**	ug/L	4.895	121610	0.514
	Cr	53		ug/L		124188	-0.787
	Mn	55	**1430.299**	ug/L	5.546	6164663	26.293
	Fe	57	**58919.956**	ug/L	7.298	5094357	21.725
	Co	59	**22.362**	ug/L	5.513	70732	0.301
	Ni	60	**36.050**	ug/L	5.145	23793	0.101
	Cu	63		ug/L		42219	0.179
	Cu	65	**29.024**	ug/L	5.451	20805	0.088
	Zn	66	**154.612**	ug/L	4.586	44492	0.345
	Zn	67		ug/L		13546	0.009
	Zn	68		ug/L		36130	0.272
>	Ge	74		ug/L		128863	128863.398
	As	75	**10.684**	ug/L	9.565	4055	0.029
	Se	77		ug/L		3571	-0.040
	Se	82	**0.170**	ug/L	56.993	-16	0.000
	Kr	83		ug/L		124	0.000
	Sr	88	**152.970**	ug/L	4.110	802961	10.050
	Y	89		ug/L		343152	4.295
	Zr	90	**128.161**	ug/L	3.127	361924	4.527
	Mo	98	**1.438**	ug/L	3.163	1799	0.022
	Ag	107	**0.596**	ug/L	8.533	1185	0.014
	Cd	111	**2.071**	ug/L	6.554	947	0.012
	Cd	114		ug/L		280	0.003
>	In	115		ug/L		79942	79942.178
	Sn	120	**1.002**	ug/L	5.707	2186	0.025
	Sb	121	**0.111**	ug/L	9.552	386	0.002
	Sb	123		ug/L		325	0.002
	Ba	135		ug/L		491897	6.402
	Ba	137	**952.169**	ug/L	5.192	838823	10.916
	Ho	165		ug/L		12402	0.161
>	Lu	175		ug/L		76948	76947.671
	Tl	205	**0.908**	ug/L	6.332	1703	0.018
	Pb	208	**66.429**	ug/L	6.385	307952	4.005
	Bi	209		ug/L		3587	0.046
	Th	232	**44.758**	ug/L	6.547	267517	3.478
	U	238	**4.823**	ug/L	6.603	30268	0.392

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	0.9999
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	0.9999
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		110.4			
	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		83.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		86.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Kr 83 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 243628011
Sample Date/Time: Wednesday, January 13, 2010 01:23:23
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 937510|2|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\243628011.136

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.708**	ug/L	1.052	11173	0.050
	Be	9	**2.956**	ug/L	4.088	223	0.001
	B	11	**17.974**	ug/L	7.787	1395	0.006
	Na	23	**375.510**	ug/L	9.134	725004	2.916
	Mg	24	**8605.039**	ug/L	2.536	9691773	43.650
	Al	27	**77258.622**	ug/L	11.520	129089089	581.284
	P	31	**828.469**	ug/L	1.046	71267	0.306
	K	39	**10999.134**	ug/L	1.404	30050742	132.999
	Ca	43	**8396.905**	ug/L	1.150	48545	0.215
>	Sc	45		ug/L		221923	221923.298
	Ti	47	**1526.744**	ug/L	0.696	414812	1.868
	V	51	**80.414**	ug/L	3.252	190094	0.877
	Cr	52	**43.018**	ug/L	0.337	108204	0.483
	Cr	53		ug/L		126417	-0.748
	Mn	55	**1337.028**	ug/L	1.327	5455230	24.579
	Fe	57	**41048.193**	ug/L	1.261	3362757	15.136
	Co	59	**18.697**	ug/L	1.183	56012	0.252
	Ni	60	**32.155**	ug/L	1.179	20097	0.090
	Cu	63		ug/L		34908	0.156
	Cu	65	**25.416**	ug/L	2.003	17262	0.077
	Zn	66	**116.264**	ug/L	0.708	34831	0.259
	Zn	67		ug/L		11530	-0.010
	Zn	68		ug/L		27909	0.199
>	Ge	74		ug/L		133929	133928.905
	As	75	**7.266**	ug/L	12.819	2985	0.020
	Se	77		ug/L		3489	-0.042
	Se	82	**0.450**	ug/L	106.122	-7	0.000
	Kr	83		ug/L		98	0.000
	Sr	88	**110.121**	ug/L	0.617	596450	7.235
	Y	89		ug/L		235099	2.852
	Zr	90	**92.823**	ug/L	2.001	270459	3.279
	Mo	98	**1.642**	ug/L	3.284	2114	0.025
	Ag	107	**0.427**	ug/L	4.886	895	0.010
	Cd	111	**1.695**	ug/L	10.860	803	0.010
	Cd	114		ug/L		423	0.005
>	In	115		ug/L		82427	82427.489
	Sn	120	**0.865**	ug/L	2.317	1968	0.022
	Sb	121	**0.152**	ug/L	5.211	467	0.003
	Sb	123		ug/L		387	0.002
	Ba	135		ug/L		336057	4.325
	Ba	137	**642.015**	ug/L	1.024	571837	7.360
	Ho	165		ug/L		8546	0.110
>	Lu	175		ug/L		77689	77688.784
	Tl	205	**0.615**	ug/L	4.595	1266	0.012
	Pb	208	**49.973**	ug/L	1.118	234370	3.013
	Bi	209		ug/L		2674	0.034
	Th	232	**31.707**	ug/L	0.986	191767	2.464
	U	238	**8.473**	ug/L	2.122	53659	0.689

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	0.9999
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	0.9999
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		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		87.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		89.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Kr 83 Upper, S, EEEAl		27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	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 13, 2010 01:29:36
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\QC Std 6.137

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**42.751**	**ug/L**	4.408	8259	0.042
	Be	9	**45.852**	**ug/L**	2.549	2976	0.015
	B	11	**90.205**	**ug/L**	3.745	5840	0.030
	Na	23	**4606.475**	**ug/L**	1.665	7032565	35.777
	Mg	24	**5034.544**	**ug/L**	5.416	4968932	25.538
	Al	27	**4594.407**	**ug/L**	2.744	6728053	34.568
	P	31	**4755.675**	**ug/L**	1.279	344469	1.755
	K	39	**5046.595**	**ug/L**	4.159	12335901	61.022
	Ca	43	**4566.969**	**ug/L**	1.017	23459	0.117
>	Sc	45		**ug/L**		194603	194602.542
	Ti	47	**47.019**	**ug/L**	1.146	11446	0.058
	V	51	**45.012**	**ug/L**	5.594	91625	0.491
	Cr	52	**47.935**	**ug/L**	2.881	105580	0.538
	Cr	53		**ug/L**		215212	-0.212
	Mn	55	**48.142**	**ug/L**	2.716	173420	0.885
	Fe	57	**4659.427**	**ug/L**	2.521	337962	1.718
	Co	59	**46.676**	**ug/L**	3.008	122366	0.628
	Ni	60	**48.629**	**ug/L**	2.742	26608	0.136
	Cu	63		**ug/L**		58731	0.301
	Cu	65	**47.465**	**ug/L**	1.500	28171	0.144
	Zn	66	**48.624**	**ug/L**	1.977	15249	0.108
	Zn	67		**ug/L**		11440	-0.014
	Zn	68		**ug/L**		11572	0.074
>	Ge	74		**ug/L**		139692	139692.140
	As	75	**44.301**	**ug/L**	3.036	17098	0.120
	Se	77		**ug/L**		8932	-0.004
	Se	82	**46.331**	**ug/L**	1.348	1654	0.012
	Kr	83		**ug/L**		59	-0.000
	Sr	88	**46.893**	**ug/L**	0.504	258445	3.081
	Y	89		**ug/L**		111	0.001
	Zr	90	**45.829**	**ug/L**	0.222	135977	1.619
	Mo	98	**45.702**	**ug/L**	0.697	58869	0.702
	Ag	107	**46.946**	**ug/L**	1.859	93028	1.109
	Cd	111	**46.682**	**ug/L**	1.177	22053	0.263
	Cd	114		**ug/L**		51245	0.611
>	In	115		**ug/L**		83848	83847.938
	Sn	120	**46.028**	**ug/L**	0.043	97772	1.164
	Sb	121	**45.442**	**ug/L**	2.359	76286	0.907
	Sb	123		**ug/L**		58273	0.692
	Ba	135		**ug/L**		22891	0.314
	Ba	137	**46.304**	**ug/L**	2.299	38720	0.531
	Ho	165		**ug/L**		20	0.000
>	Lu	175		**ug/L**		72913	72912.689
	Tl	205	**46.831**	**ug/L**	1.666	68682	0.938
	Pb	208	**49.895**	**ug/L**	1.300	219588	3.008
	Bi	209		**ug/L**		45	0.000
	Th	232	**51.096**	**ug/L**	1.056	289806	3.970
	U	238	**51.517**	**ug/L**	1.955	305436	4.188

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	0.9999
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	0.9999
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	85.503				
	Be	9	91.705				
	B	11	90.205				
	Na	23	92.130				
	Mg	24	100.691				
	Al	27	90.978				
	P	31	95.113				
	K	39	100.932				
	Ca	43	91.339				
>	Sc	45		91.5			
	Ti	47	94.038				
	V	51	90.025				
	Cr	52	95.870				
	Cr	53					
	Mn	55	96.285				
	Fe	57	93.189				
	Co	59	93.352				
	Ni	60	97.257				
	Cu	63					
	Cu	65	94.930				
	Zn	66	97.248				
	Zn	67					
	Zn	68					
>	Ge	74		90.9			
	As	75	88.601				
	Se	77					
	Se	82	92.662				
	Kr	83					
	Sr	88	93.785				
	Y	89					
	Zr	90	91.659				
	Mo	98	91.404				
	Ag	107	93.892				
	Cd	111	93.365				
	Cd	114					
>	In	115		90.6			
	Sn	120	92.056				
	Sb	121	90.885				
	Sb	123					
	Ba	135					
	Ba	137	92.608				
	Ho	165					
>	Lu	175		93.0			
	Tl	205	93.663				
	Pb	208	99.790				
	Bi	209					
	Th	232	102.193				
	U	238	103.035				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	CCV is out of limits (+/- 10%)
QC Std 6	As	75	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, January 13, 2010 01:35:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\dataset\100112\QC Std 7.138

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.095**	ug/L	49.807	41	0.000
	Be	9	**-0.011**	ug/L	345.589	3	-0.000
	B	11	**1.547**	ug/L	36.906	176	0.001
	Na	23	**-27.541**	ug/L	20.975	27361	-0.214
	Mg	24	**2.172**	ug/L	67.365	4667	0.011
	Al	27	**-0.727**	ug/L	49.441	2334	-0.005
	P	31	**-6.224**	ug/L	36.684	2595	-0.002
	K	39	**-16.590**	ug/L	168.673	432883	-0.201
	Ca	43	**-40.822**	ug/L	9.014	482	-0.001
>	Sc	45		ug/L		197568	197568.320
	Ti	47	**0.196**	ug/L	38.297	305	0.000
	V	51	**-2.272**	ug/L	36.965	-8879	-0.025
	Cr	52	**-0.164**	ug/L	34.514	632	-0.002
	Cr	53		ug/L		189695	-0.357
	Mn	55	**-0.039**	ug/L	29.198	1145	-0.001
	Fe	57	**-0.827**	ug/L	84.085	3746	-0.000
	Co	59	**0.002**	ug/L	197.250	146	0.000
	Ni	60	**-0.011**	ug/L	168.535	66	-0.000
	Cu	63		ug/L		200	0.000
	Cu	65	**-0.026**	ug/L	142.145	96	-0.000
	Zn	66	**-0.036**	ug/L	36.501	88	-0.000
	Zn	67		ug/L		8425	-0.037
	Zn	68		ug/L		562	-0.005
>	Ge	74		ug/L		143646	143646.221
	As	75	**-0.164**	ug/L	367.248	313	-0.000
	Se	77		ug/L		6820	-0.020
	Se	82	**0.408**	ug/L	27.549	-9	0.000
	Kr	83		ug/L		49	-0.000
	Sr	88	**0.005**	ug/L	69.632	163	0.000
	Y	89		ug/L		30	0.000
	Zr	90	**0.136**	ug/L	14.152	669	0.005
	Mo	98	**0.032**	ug/L	39.536	81	0.000
	Ag	107	**0.008**	ug/L	72.020	84	0.000
	Cd	111	**0.006**	ug/L	266.247	20	0.000
	Cd	114		ug/L		34	0.000
>	In	115		ug/L		86849	86848.935
	Sn	120	**0.085**	ug/L	26.438	362	0.002
	Sb	121	**0.428**	ug/L	29.227	969	0.009
	Sb	123		ug/L		747	0.006
	Ba	135		ug/L		21	0.000
	Ba	137	**0.015**	ug/L	59.693	36	0.000
	Ho	165		ug/L		9	0.000
>	Lu	175		ug/L		74949	74948.520
	Tl	205	**0.022**	ug/L	202.211	330	0.000
	Pb	208	**0.026**	ug/L	20.280	417	0.002
	Bi	209		ug/L		19	-0.000
	Th	232	**0.090**	ug/L	35.186	887	0.007
	U	238	**0.014**	ug/L	12.948	230	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	0.9999
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	0.9999
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			92.9		
	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			93.5		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			93.9		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			95.6		
	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: Blank
Sample Date/Time: Wednesday, January 13, 2010 01:48:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\Blank.140

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9		ug/L		5	
>	Sc	45		ug/L		199979	
	Ni	60		ug/L		57	
>	Ge	74		ug/L		141000	
	As	75		ug/L		324	
	Se	77		ug/L		6682	
	Se	82		ug/L		-15	
	Kr	83		ug/L		56	
>	Lu	175		ug/L		75365	
	Tl	205		ug/L		133	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45					
	Ni	60					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175					
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Wednesday, January 13, 2010 01:52:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\Standard 1.141

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	10.000	ug/L	6.075	530	0.003
|>	Sc	45		ug/L		201080	201079.628
⌊	Ni	60	10.000	ug/L	1.425	5315	0.026
⌈>	Ge	74		ug/L		142180	142180.114
|	As	75	10.000	ug/L	2.501	3486	0.022
|	Se	77		ug/L		6768	0.000
|	Se	82	10.000	ug/L	9.356	283	0.002
⌊	Kr	83		ug/L		62	0.000
⌈>	Lu	175		ug/L		75354	75353.647
⌊	Tl	205	10.000	ug/L	1.333	14607	0.192

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
|>	Sc	45					
⌊	Ni	60					
⌈>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈>	Lu	175					
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Wednesday, January 13, 2010 01:56:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\Standard 2.142

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**99.992**	**ug/L**	3.078	5257	0.026
>	Sc	45		**ug/L**		202892	202892.063
	Ni	60	**99.988**	**ug/L**	0.816	52479	0.258
>	Ge	74		**ug/L**		142466	142465.940
	As	75	**100.114**	**ug/L**	1.199	36095	0.251
	Se	77		**ug/L**		10748	0.028
	Se	82	**100.135**	**ug/L**	1.949	3438	0.024
	Kr	83		**ug/L**		56	-0.000
>	Lu	175		**ug/L**		75909	75909.299
	Tl	205	**99.988**	**ug/L**	3.443	144168	1.898

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45					
	Ni	60					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175					
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Wednesday, January 13, 2010 02:00:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\QC Std 1.143

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**51.484**	**ug/L**	3.489	2761	0.013
>	Sc	45		**ug/L**		206760	206759.694
	Ni	60	**51.373**	**ug/L**	0.368	27508	0.133
>	Ge	74		**ug/L**		144955	144954.543
	As	75	**50.201**	**ug/L**	3.342	18579	0.126
	Se	77		**ug/L**		10141	0.023
	Se	82	**50.181**	**ug/L**	1.814	1746	0.012
	Kr	83		**ug/L**		58	0.000
>	Lu	175		**ug/L**		75685	75685.058
	Tl	205	**47.824**	**ug/L**	1.052	68851	0.908

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	102.969				
>	Sc	45		103.4			
	Ni	60	102.745				
>	Ge	74		102.8			
	As	75	100.403				
	Se	77					
	Se	82	100.362				
	Kr	83					
>	Lu	175		100.4			
	Tl	205	95.647				

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 13, 2010 02:04:25
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\QC Std 2.144

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	-0.035	ug/L	119.913	3	-0.000
>	Sc	45		ug/L		190598	190597.946
	Ni	60	0.018	ug/L	110.126	64	0.000
>	Ge	74		ug/L		134509	134509.351
	As	75	0.117	ug/L	904.643	352	0.000
	Se	77		ug/L		7560	0.009
	Se	82	-0.165	ug/L	265.415	-20	-0.000
	Kr	83		ug/L		61	0.000
>	Lu	175		ug/L		68404	68403.732
	Tl	205	0.293	ug/L	3.531	501	0.006

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		95.3			
	Ni	60					
>	Ge	74		95.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		90.8			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Wednesday, January 13, 2010 02:08:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\QC Std 3.145

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.629**	**ug/L**	1.785	36	0.000
>	Sc	45		**ug/L**		189810	189809.686
	Ni	60	**2.424**	**ug/L**	2.419	1243	0.006
>	Ge	74		**ug/L**		134652	134651.649
	As	75	**5.789**	**ug/L**	24.069	2267	0.015
	Se	77		**ug/L**		7821	0.011
	Se	82	**5.171**	**ug/L**	8.045	154	0.001
	Kr	83		**ug/L**		61	0.000
>	Lu	175		**ug/L**		68453	68453.297
	Tl	205	**1.236**	**ug/L**	4.037	1727	0.023

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	125.872				
>	Sc	45			94.9		
	Ni	60	121.217				
>	Ge	74			95.5		
	As	75	115.785				
	Se	77					
	Se	82	103.417				
	Kr	83					
>	Lu	175			90.8		
	Tl	205	123.578				

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 13, 2010 02:12:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\QC Std 4.146

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.092**	ug/L	63.042	9	0.000
>	Sc	45		ug/L		183974	183974.238
	Ni	60	**3.678**	ug/L	2.112	1801	0.010
>	Ge	74		ug/L		127283	127282.786
	As	75	**-0.030**	ug/L	3022.196	283	-0.000
	Se	77		ug/L		9835	0.030
	Se	82	**-0.807**	ug/L	62.144	-38	-0.000
	Kr	83		ug/L		106	0.000
>	Lu	175		ug/L		66930	66930.444
	Tl	205	**0.046**	ug/L	9.360	177	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45			92.0		
	Ni	60	136.218				
>	Ge	74			90.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175			88.8		
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Wednesday, January 13, 2010 02:16:36
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\QC Std 5.147

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**22.001**	**ug/L**	2.243	1031	0.006
>	Sc	45		**ug/L**		180082	180082.141
	Ni	60	**23.884**	**ug/L**	1.768	11165	0.062
>	Ge	74		**ug/L**		125375	125374.673
	As	75	**21.143**	**ug/L**	7.015	6937	0.053
	Se	77		**ug/L**		9301	0.027
	Se	82	**21.628**	**ug/L**	4.163	643	0.005
	Kr	83		**ug/L**		100	0.000
>	Lu	175		**ug/L**		67359	67359.449
	Tl	205	**18.790**	**ug/L**	1.782	24148	0.357

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	110.007				
>	Sc	45			90.1		
	Ni	60	105.214				
>	Ge	74			88.9		
	As	75	105.717				
	Se	77					
	Se	82	108.138				
	Kr	83					
>	Lu	175			89.4		
	Tl	205	93.951				

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: Wednesday, January 13, 2010 02:20:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\QC Std 6.148

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**54.279**	**ug/L**	1.638	2638	0.014
>	Sc	45		**ug/L**		187337	187336.598
	Ni	60	**55.398**	**ug/L**	0.701	26872	0.143
>	Ge	74		**ug/L**		133181	133180.948
	As	75	**52.129**	**ug/L**	2.362	17716	0.131
	Se	77		**ug/L**		11782	0.041
	Se	82	**50.405**	**ug/L**	2.080	1611	0.012
	Kr	83		**ug/L**		63	0.000
>	Lu	175		**ug/L**		68227	68227.224
	Tl	205	**50.592**	**ug/L**	1.454	65651	0.961

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	108.558				
>	Sc	45		93.7			
	Ni	60	110.796				
>	Ge	74		94.5			
	As	75	104.259				
	Se	77					
	Se	82	100.811				
	Kr	83					
>	Lu	175		90.5			
	Tl	205	101.184				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Ni	60	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, January 13, 2010 02:24:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\QC Std 7.149

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**-0.021**	**ug/L**	94.698	4	-0.000
>	Sc	45		**ug/L**		186941	186940.883
	Ni	60	**0.032**	**ug/L**	67.440	69	0.000
>	Ge	74		**ug/L**		132576	132575.986
	As	75	**-0.029**	**ug/L**	2034.706	295	-0.000
	Se	77		**ug/L**		9462	0.024
	Se	82	**-0.092**	**ug/L**	120.234	-17	-0.000
	Kr	83		**ug/L**		62	0.000
>	Lu	175		**ug/L**		67273	67273.366
	Tl	205	**0.318**	**ug/L**	2.243	524	0.006

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		93.5			
	Ni	60					
>	Ge	74		94.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		89.3			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Wednesday, January 13, 2010 02:28:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\QC Std 10.150

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**1055.752**	**ug/L**	1.450	49302	0.273
|>	Sc	45		**ug/L**		180339	180339.353
⌊	Ni	60	**988.973**	**ug/L**	1.055	460922	2.556
⌈>	Ge	74		**ug/L**		126635	126635.076
|	As	75	**991.624**	**ug/L**	0.469	315200	2.487
|	Se	77		**ug/L**		19502	0.107
|	Se	82	**492.505**	**ug/L**	0.797	15084	0.119
⌊	Kr	83		**ug/L**		73	0.000
⌈>	Lu	175		**ug/L**		66450	66450.194
⌊	Tl	205	**493.165**	**ug/L**	1.094	622338	9.363

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9	105.575				
|>	Sc	45			90.2		
⌊	Ni	60	98.897				
⌈>	Ge	74			89.8		
|	As	75	99.162				
|	Se	77					
|	Se	82	98.501				
⌊	Kr	83					
⌈>	Lu	175			88.2		
⌊	Tl	205	98.633				

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 13, 2010 02:32:53
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\QC Std 11.151

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**54.014**	**ug/L**	1.907	2591	0.014
>	Sc	45		**ug/L**		184935	184934.588
	Ni	60	**55.166**	**ug/L**	1.276	26417	0.143
>	Ge	74		**ug/L**		129998	129998.488
	As	75	**51.331**	**ug/L**	2.307	17035	0.129
	Se	77		**ug/L**		10799	0.036
	Se	82	**52.708**	**ug/L**	1.875	1645	0.013
	Kr	83		**ug/L**		69	0.000
>	Lu	175		**ug/L**		67383	67382.882
	Tl	205	**51.630**	**ug/L**	1.336	66170	0.980

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	108.027				
>	Sc	45		92.5			
	Ni	60	110.332				
>	Ge	74		92.2			
	As	75	102.662				
	Se	77					
	Se	82	105.415				
	Kr	83					
>	Lu	175		89.4			
	Tl	205	103.259				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Ni	60	CCV 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 13, 2010 02:36:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\QC Std 12.152

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.008**	**ug/L**	908.005	5	0.000
>	Sc	45		**ug/L**		186073	186072.549
	Ni	60	**0.018**	**ug/L**	25.859	62	0.000
>	Ge	74		**ug/L**		131735	131734.948
	As	75	**0.350**	**ug/L**	188.932	419	0.001
	Se	77		**ug/L**		8689	0.019
	Se	82	**-0.346**	**ug/L**	50.096	-25	-0.000
	Kr	83		**ug/L**		64	0.000
>	Lu	175		**ug/L**		68109	68108.999
	Tl	205	**0.489**	**ug/L**	6.750	752	0.009

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		93.0			
	Ni	60					
>	Ge	74		93.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		90.4			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, January 13, 2010 03:01:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\QC Std 6.158

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**54.165**	**ug/L**	3.245	2531	0.014
>	Sc	45		**ug/L**		180147	180146.961
	Ni	60	**55.091**	**ug/L**	1.037	25699	0.142
>	Ge	74		**ug/L**		127253	127252.518
	As	75	**52.965**	**ug/L**	1.279	17194	0.133
	Se	77		**ug/L**		9112	0.024
	Se	82	**51.030**	**ug/L**	1.660	1559	0.012
	Kr	83		**ug/L**		60	0.000
>	Lu	175		**ug/L**		67269	67269.027
	Tl	205	**50.882**	**ug/L**	0.883	65103	0.966

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	108.329				
>	Sc	45		90.1			
	Ni	60	110.181				
>	Ge	74		90.3			
	As	75	105.930				
	Se	77					
	Se	82	102.060				
	Kr	83					
>	Lu	175		89.3			
	Tl	205	101.764				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Ni	60	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, January 13, 2010 03:05:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\QC Std 7.159

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.004**	**ug/L**	1592.616	5	0.000
>	Sc	45		**ug/L**		181777	181776.742
	Ni	60	**0.015**	**ug/L**	124.878	59	0.000
>	Ge	74		**ug/L**		129989	129988.699
	As	75	**-0.124**	**ug/L**	1068.999	261	-0.000
	Se	77		**ug/L**		7211	0.008
	Se	82	**0.154**	**ug/L**	102.629	-9	0.000
	Kr	83		**ug/L**		57	0.000
>	Lu	175		**ug/L**		67661	67660.867
	Tl	205	**0.339**	**ug/L**	2.606	555	0.006

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		90.9			
	Ni	60					
>	Ge	74		92.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		89.8			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, January 13, 2010 03:34:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\QC Std 6.166

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**54.791**	**ug/L**	0.866	2537	0.014
>	Sc	45		**ug/L**		178447	178446.737
	Ni	60	**54.024**	**ug/L**	0.879	24963	0.140
>	Ge	74		**ug/L**		126952	126952.205
	As	75	**51.030**	**ug/L**	1.717	16537	0.128
	Se	77		**ug/L**		8709	0.021
	Se	82	**52.621**	**ug/L**	1.653	1604	0.013
	Kr	83		**ug/L**		65	0.000
>	Lu	175		**ug/L**		67068	67067.774
	Tl	205	**49.716**	**ug/L**	1.169	63425	0.944

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	109.582				
>	Sc	45		89.2			
	Ni	60	108.047				
>	Ge	74		90.0			
	As	75	102.059				
	Se	77					
	Se	82	105.242				
	Kr	83					
>	Lu	175		89.0			
	Tl	205	99.431				

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 13, 2010 03:38:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\QC Std 7.167

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**-0.046**	**ug/L**	54.138	3	-0.000
>	Sc	45		**ug/L**		179048	179048.179
	Ni	60	**0.016**	**ug/L**	113.527	59	0.000
>	Ge	74		**ug/L**		128022	128022.063
	As	75	**0.265**	**ug/L**	170.138	379	0.001
	Se	77		**ug/L**		6712	0.005
	Se	82	**-0.047**	**ug/L**	560.608	-15	-0.000
	Kr	83		**ug/L**		61	0.000
>	Lu	175		**ug/L**		66089	66088.876
	Tl	205	**0.256**	**ug/L**	3.819	437	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
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		89.5			
	Ni	60					
>	Ge	74		90.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		87.7			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, January 13, 2010 04:07:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\QC Std 6.174

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**55.735**	ug/L	1.819	2549	0.014
>	Sc	45		ug/L		176319	176319.403
	Ni	60	**54.536**	ug/L	2.220	24894	0.141
>	Ge	74		ug/L		126857	126857.385
	As	75	**52.261**	ug/L	2.958	16919	0.131
	Se	77		ug/L		8514	0.020
	Se	82	**50.289**	ug/L	1.475	1531	0.012
	Kr	83		ug/L		61	0.000
>	Lu	175		ug/L		65603	65602.944
	Tl	205	**50.581**	ug/L	1.817	63121	0.960

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	111.471				
>	Sc	45		88.2			
	Ni	60	109.072				
>	Ge	74		90.0			
	As	75	104.523				
	Se	77					
	Se	82	100.579				
	Kr	83					
>	Lu	175		87.0			
	Tl	205	101.161				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be	9	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, January 13, 2010 04:11:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\QC Std 7.175

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	-0.022	ug/L	154.098	4	-0.000
>	Sc	45		ug/L		175571	175571.442
	Ni	60	0.021	ug/L	155.235	60	0.000
>	Ge	74		ug/L		126407	126407.082
	As	75	-0.420	ug/L	309.122	160	-0.001
	Se	77		ug/L		6659	0.005
	Se	82	-0.070	ug/L	544.496	-15	-0.000
	Kr	83		ug/L		57	0.000
>	Lu	175		ug/L		66173	66173.239
	Tl	205	0.256	ug/L	11.380	438	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
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		87.8			
	Ni	60					
>	Ge	74		89.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		87.8			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, January 13, 2010 04:36:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\QC Std 6.181

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**56.559**	**ug/L**	1.717	2559	0.015
>	Sc	45		**ug/L**		174372	174371.741
	Ni	60	**54.511**	**ug/L**	0.959	24612	0.141
>	Ge	74		**ug/L**		123559	123558.963
	As	75	**51.907**	**ug/L**	2.134	16366	0.130
	Se	77		**ug/L**		8410	0.021
	Se	82	**48.460**	**ug/L**	2.457	1436	0.012
	Kr	83		**ug/L**		57	0.000
>	Lu	175		**ug/L**		66152	66152.152
	Tl	205	**50.067**	**ug/L**	2.388	62989	0.951

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	113.119				
>	Sc	45		87.2			
	Ni	60	109.021				
>	Ge	74		87.6			
	As	75	103.813				
	Se	77					
	Se	82	96.921				
	Kr	83					
>	Lu	175		87.8			
	Tl	205	100.133				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be	9	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, January 13, 2010 04:40:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\QC Std 7.182

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**-0.024**	**ug/L**	289.955	4	-0.000
>	Sc	45		**ug/L**		178449	178448.770
	Ni	60	**0.027**	**ug/L**	85.851	63	0.000
>	Ge	74		**ug/L**		125164	125164.238
	As	75	**0.881**	**ug/L**	67.566	563	0.002
	Se	77		**ug/L**		6646	0.006
	Se	82	**-0.078**	**ug/L**	367.528	-15	-0.000
	Kr	83		**ug/L**		54	0.000
>	Lu	175		**ug/L**		66558	66558.031
	Tl	205	**0.271**	**ug/L**	12.019	459	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
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		89.2			
	Ni	60					
>	Ge	74		88.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		88.3			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, January 13, 2010 05:09:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\QC Std 6.189

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**55.505**	**ug/L**	2.065	2483	0.014
>	Sc	45		**ug/L**		172450	172449.777
	Ni	60	**55.238**	**ug/L**	0.313	24666	0.143
>	Ge	74		**ug/L**		122635	122634.706
	As	75	**52.680**	**ug/L**	2.580	16485	0.132
	Se	77		**ug/L**		8175	0.019
	Se	82	**50.787**	**ug/L**	2.215	1495	0.012
	Kr	83		**ug/L**		54	0.000
>	Lu	175		**ug/L**		65359	65359.498
	Tl	205	**49.800**	**ug/L**	0.591	61916	0.946

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	111.009				
>	Sc	45			86.2		
	Ni	60	110.476				
>	Ge	74			87.0		
	As	75	105.360				
	Se	77					
	Se	82	101.573				
	Kr	83					
>	Lu	175			86.7		
	Tl	205	99.600				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be	9	CCV is out of limits (+/- 10%)
QC Std 6	Ni	60	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, January 13, 2010 05:13:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\QC Std 7.190

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.023**	**ug/L**	117.236	6	0.000
>	Sc	45		**ug/L**		174160	174160.361
	Ni	60	**0.033**	**ug/L**	111.735	65	0.000
>	Ge	74		**ug/L**		123899	123898.527
	As	75	**-0.656**	**ug/L**	45.407	81	-0.002
	Se	77		**ug/L**		6331	0.004
	Se	82	**0.152**	**ug/L**	321.721	-8	0.000
	Kr	83		**ug/L**		53	0.000
>	Lu	175		**ug/L**		64904	64904.429
	Tl	205	**0.234**	**ug/L**	2.492	403	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		87.1			
	Ni	60					
>	Ge	74		87.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		86.1			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 243628006
Sample Date/Time: Wednesday, January 13, 2010 05:17:24
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 937510|2|skj
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\243628006.191

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**5.703**	**ug/L**	4.298	328	0.001
|>	Sc	45		**ug/L**		218231	218230.720
⌊	Ni	60	**40.883**	**ug/L**	1.292	23117	0.106
⌈>	Ge	74		**ug/L**		116110	116110.451
|	As	75	**11.337**	**ug/L**	4.414	3568	0.028
|	Se	77		**ug/L**		3830	-0.014
|	Se	82	**-0.502**	**ug/L**	106.226	-26	-0.000
⌊	Kr	83		**ug/L**		112	0.001
⌈>	Lu	175		**ug/L**		69738	69738.188
⌊	Tl	205	**1.307**	**ug/L**	2.542	1854	0.025

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
|>	Sc	45		109.1			
⌊	Ni	60					
⌈>	Ge	74		82.3			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈>	Lu	175		92.5			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 243628007
Sample Date/Time: Wednesday, January 13, 2010 05:21:33
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 937510|2|skj
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\243628007.192

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**4.820**	**ug/L**	8.421	270	0.001
>	Sc	45		**ug/L**		211832	211831.663
	Ni	60	**35.279**	**ug/L**	0.898	19375	0.091
>	Ge	74		**ug/L**		117886	117885.584
	As	75	**11.356**	**ug/L**	6.567	3628	0.028
	Se	77		**ug/L**		3590	-0.017
	Se	82	**0.251**	**ug/L**	83.989	-5	0.000
	Kr	83		**ug/L**		106	0.001
>	Lu	175		**ug/L**		70310	70310.304
	Tl	205	**1.078**	**ug/L**	0.293	1563	0.020

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		105.9			
	Ni	60					
>	Ge	74		83.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		93.3			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 243628008
Sample Date/Time: Wednesday, January 13, 2010 05:25:42
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 937510|2|skj
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\243628008.193

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**6.435**	**ug/L**	5.796	378	0.002
|>	Sc	45		**ug/L**		223526	223526.113
⌊	Ni	60	**42.310**	**ug/L**	0.816	24504	0.109
⌈>	Ge	74		**ug/L**		119381	119381.291
|	As	75	**13.747**	**ug/L**	11.454	4389	0.034
|	Se	77		**ug/L**		3687	-0.017
|	Se	82	**0.275**	**ug/L**	215.887	-5	0.000
⌊	Kr	83		**ug/L**		119	0.001
⌈>	Lu	175		**ug/L**		71463	71462.680
⌊	Tl	205	**1.276**	**ug/L**	5.493	1857	0.024

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
|>	Sc	45		111.8			
⌊	Ni	60					
⌈>	Ge	74		84.7			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈>	Lu	175		94.8			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 243628009
Sample Date/Time: Wednesday, January 13, 2010 05:29:52
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 937510|2|skj
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\243628009.194

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**5.915**	**ug/L**	9.355	349	0.002
|>	Sc	45		**ug/L**		223807	223806.531
⌊	Ni	60	**42.990**	**ug/L**	1.127	24928	0.111
⌈>	Ge	74		**ug/L**		119615	119615.318
|	As	75	**11.861**	**ug/L**	3.791	3833	0.030
|	Se	77		**ug/L**		3648	-0.017
|	Se	82	**-0.626**	**ug/L**	49.129	-31	-0.000
⌊	Kr	83		**ug/L**		125	0.001
⌈>	Lu	175		**ug/L**		70486	70485.841
⌊	Tl	205	**1.195**	**ug/L**	2.642	1724	0.023

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
|>	Sc	45		111.9			
⌊	Ni	60					
⌈>	Ge	74		84.8			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈>	Lu	175		93.5			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 243628010
Sample Date/Time: Wednesday, January 13, 2010 05:34:01
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 937510|2|skj
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\243628010.195

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**5.906**	**ug/L**	6.836	338	0.002
>	Sc	45		**ug/L**		217119	217119.115
	Ni	60	**38.923**	**ug/L**	1.400	21901	0.101
>	Ge	74		**ug/L**		118778	118777.613
	As	75	**11.149**	**ug/L**	6.945	3595	0.028
	Se	77		**ug/L**		3706	-0.016
	Se	82	**-0.212**	**ug/L**	181.012	-19	-0.000
	Kr	83		**ug/L**		110	0.001
>	Lu	175		**ug/L**		70577	70576.965
	Tl	205	**1.075**	**ug/L**	3.635	1566	0.020

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		108.6			
	Ni	60					
>	Ge	74		84.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		93.6			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 243628011
Sample Date/Time: Wednesday, January 13, 2010 05:38:09
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 937510|2|skj
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\243628011.196

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**3.902**	**ug/L**	4.110	208	0.001
>	Sc	45		**ug/L**		200253	200253.134
	Ni	60	**35.257**	**ug/L**	1.477	18304	0.091
>	Ge	74		**ug/L**		117473	117472.609
	As	75	**8.406**	**ug/L**	5.292	2748	0.021
	Se	77		**ug/L**		3680	-0.016
	Se	82	**-0.148**	**ug/L**	207.244	-16	-0.000
	Kr	83		**ug/L**		95	0.000
>	Lu	175		**ug/L**		68121	68121.381
	Tl	205	**0.824**	**ug/L**	0.494	1186	0.016

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		100.1			
	Ni	60					
>	Ge	74		83.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		90.4			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, January 13, 2010 05:42:15
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\QC Std 6.197

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**58.053**	**ug/L**	2.531	2586	0.015
>	Sc	45		**ug/L**		171751	171750.549
	Ni	60	**54.265**	**ug/L**	1.340	24131	0.140
>	Ge	74		**ug/L**		121610	121609.660
	As	75	**51.580**	**ug/L**	1.301	16010	0.129
	Se	77		**ug/L**		8027	0.019
	Se	82	**50.698**	**ug/L**	0.643	1480	0.012
	Kr	83		**ug/L**		53	0.000
>	Lu	175		**ug/L**		64987	64987.132
	Tl	205	**49.969**	**ug/L**	2.173	61767	0.949

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	116.107				
>	Sc	45			85.9		
	Ni	60	108.529				
>	Ge	74			86.2		
	As	75	103.160				
	Se	77					
	Se	82	101.395				
	Kr	83					
>	Lu	175			86.2		
	Tl	205	99.938				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be	9	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, January 13, 2010 05:46:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100112\QC Std 7.198

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**-0.006**	**ug/L**	605.733	4	-0.000
>	Sc	45		**ug/L**		173389	173389.234
	Ni	60	**0.025**	**ug/L**	62.205	61	0.000
>	Ge	74		**ug/L**		123086	123086.238
	As	75	**0.095**	**ug/L**	957.681	313	0.000
	Se	77		**ug/L**		6119	0.002
	Se	82	**0.386**	**ug/L**	17.279	-1	0.000
	Kr	83		**ug/L**		47	-0.000
>	Lu	175		**ug/L**		64705	64705.189
	Tl	205	**0.221**	**ug/L**	4.492	386	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		86.7			
	Ni	60					
>	Ge	74		87.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		85.9			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

==========
Method Name: SOIL
Method Description: 7471A, ILM04 ANALYST JXL1
Element: Hg

Date: 01/13/2010
Technique:FI-MHS
Calibration Type:
Hg, Calc. Intercept : Linear
Wavelength: 253.7 nm
Sample Info Name: 011310S1.SIF Results Data Set Name: 011310S1

==========
Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 01/13/2010
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0044	0.0044	09:44:09	No
2			0.0045	0.0045	09:44:44	No
Mean:			0.0044			
SD :			0.0000			
%RSD:			0.9333			

Auto-zero performed.

==========
Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 01/13/2010
Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0025	0.0069	09:46:06	No
2			0.0023	0.0068	09:46:41	No
Mean:			0.0024			
SD :			0.0001			
%RSD:			4.5998			

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.01208
Intercept : 0.00000

==========
Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 01/13/2010
Sample ID: S0.5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0049	0.0093	09:48:05	No
2			0.0049	0.0094	09:48:40	No
Mean:			0.0049			
SD :			0.0000			
%RSD:			0.1993			

[Hg] Standard number 2 applied. [0.500]
Correlation Coefficient: 0.99456 Slope: 0.00973
Intercept : 0.00018

==========
Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 01/13/2010
Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0188	0.0232	09:50:05	No
2			0.0193	0.0237	09:50:39	No
Mean:			0.0190			
SD :			0.0004			
%RSD:			1.8677			

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99967 Slope: 0.00940
Intercept : 0.00025

==========

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 01/13/2010
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0464	0.0508	09:52:04	No
2			0.0477	0.0522	09:52:40	No
Mean:			0.0471			
SD :			0.0009			
%RSD:			1.9792			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99995 Slope: 0.00937
Intercept : 0.00026

==========

Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 01/13/2010
Sample ID: S10

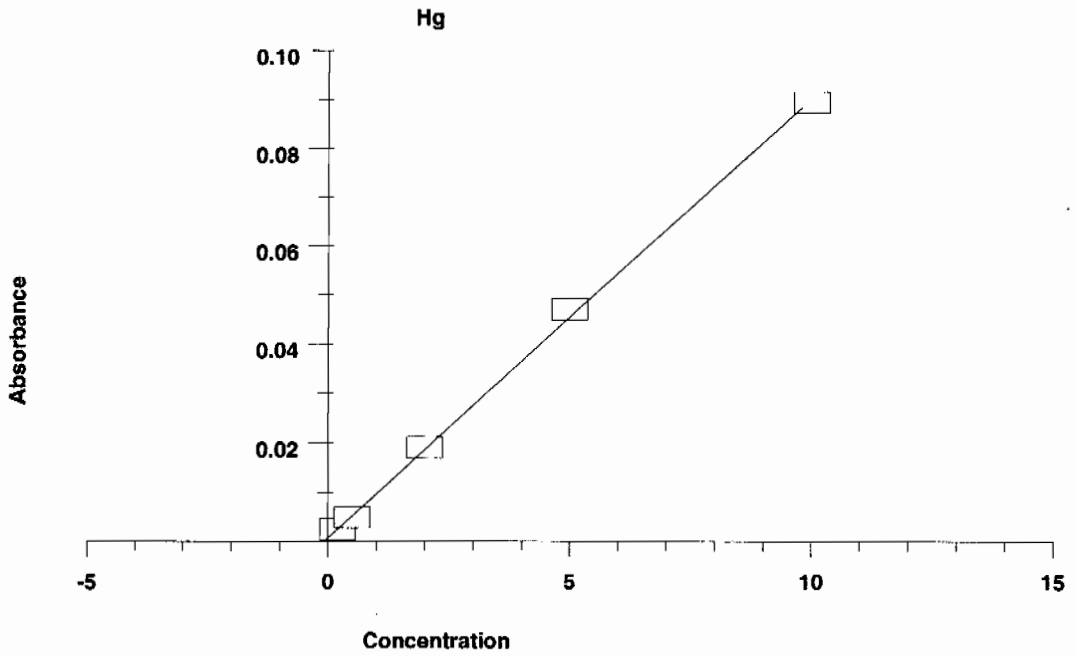
Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0888	0.0932	09:54:06	No
2			0.0901	0.0946	09:54:41	No
Mean:			0.0895			
SD :			0.0009			
%RSD:			1.0502			

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99968 Slope: 0.00896
Intercept : 0.00072

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0044	---	----	----	----
S0.2	0.0024	0.200	0.189	0.0001	4.6
S0.5	0.0049	0.500	0.469	0.0000	0.2
S2.0	0.0190	2.000	2.042	0.0004	1.9
S5.0	0.0471	5.000	5.175	0.0009	2.0
S10	0.0895	10.000	9.906	0.0009	1.1

Correlation Coefficient: 0.99968 Slope: 0.00896 Intercept: 0.0007



==========

Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 01/13/2010
Sample ID: ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.015	5.015	0.0456	0.0501	09:56:09	No
2	5.229	5.229	0.0476	0.0520	09:56:44	No
Mean:	5.122	5.122	0.0466			
SD :	0.1518	0.1518	0.0014			
%RSD:	3.0	3.0	2.9173			

QC value within specified limits.

==========

Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 01/13/2010
Sample ID: ICB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.113	-0.113	-0.0003	0.0041	09:58:06	No
2	-0.098	-0.098	-0.0002	0.0043	09:58:41	No
Mean:	-0.105	-0.105	-0.0002			
SD :	0.0110	0.0110	0.0001			
%RSD:	10.5	10.5	44.7675			

QC value within specified limits.

==========

Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 01/13/2010
Sample ID: CRDL

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.132	0.132	0.0019	0.0063	10:00:03	No
2	0.142	0.142	0.0020	0.0064	10:00:38	No
Mean:	0.137	0.137	0.0020			
SD :	0.0069	0.0069	0.0001			
%RSD:	5.1	5.1	3.1880			

QC value within specified limits.

==========

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 01/13/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.068	5.068	0.0461	0.0506	10:02:03	No
2	5.051	5.051	0.0460	0.0504	10:02:38	No
Mean:	5.060	5.060	0.0461			
SD :	0.0123	0.0123	0.0001			
%RSD:	0.2	0.2	0.2391			

QC value within specified limits.

==========

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 01/13/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.074	-0.074	0.0001	0.0045	10:04:06	No
2	-0.082	-0.082	0.0000	0.0044	10:04:41	No
Mean:	-0.078	-0.078	0.0000			
SD :	0.0057	0.0057	0.0001			
%RSD:	7.3	7.3	185.5036			

QC value within specified limits.

==========

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 01/13/2010
Sample ID: LDR

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	9.831	9.831	0.0888	0.0932	10:06:07	No
2	9.916	9.916	0.0896	0.0940	10:06:41	No
Mean:	9.873	9.873	0.0892			
SD :	0.0599	0.0599	0.0005			
%RSD:	0.6	0.6	0.6022			

==========

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 01/13/2010
Sample ID: IDL1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.150	-0.150	-0.0006	0.0038	10:08:06	No
2	-0.156	-0.156	-0.0007	0.0037	10:08:41	No
Mean:	-0.153	-0.153	-0.0006			
SD :	0.0042	0.0042	0.0000			
%RSD:	2.8	2.8	5.8385			

==========

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 01/13/2010
Sample ID: IDL2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.168	-0.168	-0.0008	0.0036	10:10:07	No
2	-0.184	-0.184	-0.0009	0.0035	10:10:41	No
Mean:	-0.176	-0.176	-0.0009			
SD :	0.0115	0.0115	0.0001			
%RSD:	6.5	6.5	12.0192			

==========

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 01/13/2010
Sample ID: IDL3

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.163	-0.163	-0.0007	0.0037	10:12:07	No
2	-0.195	-0.195	-0.0010	0.0034	10:12:42	No
Mean:	-0.179	-0.179	-0.0009			
SD :	0.0228	0.0228	0.0002			
%RSD:	12.8	12.8	23.3195			

Element: Hg Seq. No.: 16 AS Loc.: 16 Date: 01/13/2010
Sample ID: IDL4

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.139	-0.139	-0.0005	0.0039	10:14:10	No
2	-0.157	-0.157	-0.0007	0.0037	10:14:45	No
Mean:	-0.148	-0.148	-0.0006			
SD :	0.0125	0.0125	0.0001			
%RSD:	8.4	8.4	18.6243			

Element: Hg Seq. No.: 17 AS Loc.: 17 Date: 01/13/2010
Sample ID: IDL5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.163	-0.163	-0.0007	0.0037	10:16:09	No
2	-0.172	-0.172	-0.0008	0.0036	10:16:44	No
Mean:	-0.168	-0.168	-0.0008			
SD :	0.0070	0.0070	0.0001			
%RSD:	4.2	4.2	8.0207			

Element: Hg Seq. No.: 18 AS Loc.: 18 Date: 01/13/2010
Sample ID: IDL6

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.168	-0.168	-0.0008	0.0036	10:18:05	No
2	-0.177	-0.177	-0.0009	0.0036	10:18:40	No
Mean:	-0.172	-0.172	-0.0008			
SD :	0.0061	0.0061	0.0001			
%RSD:	3.6	3.6	6.6926			

Element: Hg Seq. No.: 19 AS Loc.: 19 Date: 01/13/2010
Sample ID: IDL7

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.191	-0.191	-0.0010	0.0034	10:20:01	No
2	-0.207	-0.207	-0.0011	0.0033	10:20:36	No
Mean:	-0.199	-0.199	-0.0011			
SD :	0.0112	0.0112	0.0001			
%RSD:	5.6	5.6	9.4719			

Element: Hg Seq. No.: 20 AS Loc.: 20 Date: 01/13/2010
Sample ID: 1202012342|i||940329|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.185	-0.185	-0.0009	0.0035	10:21:58	No
2	-0.186	-0.186	-0.0009	0.0035	10:22:33	No
Mean:	-0.185	-0.185	-0.0009			
SD :	0.0007	0.0007	0.0000			

```
%RSD:        0.4         0.4     0.6832

==========================================================================================
Element: Hg    Seq. No.: 21       AS Loc.: 21   Date: 01/13/2010
Sample ID: 1202012343|i|10||LCS
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        3.724     3.724    0.0341     0.0385   10:23:55  No
 2        3.733     3.733    0.0342     0.0386   10:24:30  No
Mean:     3.728     3.728    0.0341
SD  :    0.0063    0.0063    0.0001
%RSD:       0.2       0.2    0.1661

==========================================================================================
Element: Hg    Seq. No.: 22       AS Loc.: 7    Date: 01/13/2010
Sample ID: CCV
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        4.911     4.911    0.0447     0.0491   10:25:55  No
 2        5.042     5.042    0.0459     0.0503   10:26:29  No
Mean:     4.977     4.977    0.0453
SD  :    0.0924    0.0924    0.0008
%RSD:       1.9       1.9    1.8260
QC value within specified limits.

==========================================================================================
Element: Hg    Seq. No.: 23       AS Loc.: 8    Date: 01/13/2010
Sample ID: CCB
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1      -0.110    -0.110    -0.0003     0.0042   10:27:57  No
 2      -0.138    -0.138    -0.0005     0.0039   10:28:31  No
Mean:   -0.124    -0.124    -0.0004
SD  :    0.0194    0.0194    0.0002
%RSD:      15.6      15.6   44.7622
QC value within specified limits.

==========================================================================================
Element: Hg    Seq. No.: 24       AS Loc.: 22   Date: 01/13/2010
Sample ID: 243628001|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.151     0.151    0.0021     0.0065   10:29:56  No
 2        0.129     0.129    0.0019     0.0063   10:30:31  No
Mean:     0.140     0.140    0.0020
SD  :    0.0155    0.0155    0.0001
%RSD:      11.1      11.1    7.0311

==========================================================================================
Element: Hg    Seq. No.: 25       AS Loc.: 23   Date: 01/13/2010
Sample ID: 1202012344|i|||DUP
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.153     0.153    0.0021     0.0065   10:31:55  No
 2        0.156     0.156    0.0021     0.0065   10:32:30  No
Mean:     0.154     0.154    0.0021
SD  :    0.0023    0.0023    0.0000
%RSD:       1.5       1.5    0.9855

==========================================================================================
Element: Hg    Seq. No.: 26       AS Loc.: 24   Date: 01/13/2010
Sample ID: 1202012345|i|||MS
```

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.266	2.266	0.0210	0.0254	10:33:54	No
2	2.250	2.250	0.0209	0.0253	10:34:29	No
Mean:	2.258	2.258	0.0210			
SD :	0.0111	0.0111	0.0001			
%RSD:	0.5	0.5	0.4735			

Element: Hg Seq. No.: 27 AS Loc.: 25 Date: 01/13/2010
Sample ID: 1202012347|i|||MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.237	2.237	0.0208	0.0252	10:35:53	No
2	2.276	2.276	0.0211	0.0255	10:36:28	No
Mean:	2.256	2.256	0.0209			
SD :	0.0276	0.0276	0.0002			
%RSD:	1.2	1.2	1.1808			

Element: Hg Seq. No.: 28 AS Loc.: 26 Date: 01/13/2010
Sample ID: 1202012346|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.147	-0.147	-0.0006	0.0038	10:37:53	No
2	-0.185	-0.185	-0.0009	0.0035	10:38:28	No
Mean:	-0.166	-0.166	-0.0008			
SD :	0.0269	0.0269	0.0002			
%RSD:	16.1	16.1	31.4008			

Element: Hg Seq. No.: 29 AS Loc.: 27 Date: 01/13/2010
Sample ID: 243628002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.070	-0.070	0.0001	0.0045	10:39:53	No
2	-0.082	-0.082	0.0000	0.0044	10:40:29	No
Mean:	-0.076	-0.076	0.0000			
SD :	0.0089	0.0089	0.0001			
%RSD:	11.6	11.6	192.9106			

Element: Hg Seq. No.: 30 AS Loc.: 28 Date: 01/13/2010
Sample ID: 243628003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0007	0.0051	10:41:55	No
2	-0.012	-0.012	0.0006	0.0050	10:42:30	No
Mean:	-0.006	-0.006	0.0007			
SD :	0.0080	0.0080	0.0001			
%RSD:	127.4	127.4	10.7700			

Element: Hg Seq. No.: 31 AS Loc.: 29 Date: 01/13/2010
Sample ID: 243628004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.144	0.144	0.0020	0.0064	10:43:56	No
2	0.124	0.124	0.0018	0.0063	10:44:30	No
Mean:	0.134	0.134	0.0019			
SD :	0.0138	0.0138	0.0001			

%RSD: 10.3 10.3 6.4331

==========

Element: Hg Seq. No.: 32 AS Loc.: 30 Date: 01/13/2010
Sample ID: 243628005|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.088	0.088	0.0015	0.0059	10:45:56	No
2	0.068	0.068	0.0013	0.0058	10:46:30	No
Mean:	0.078	0.078	0.0014			
SD :	0.0141	0.0141	0.0001			
%RSD:	18.1	18.1	8.8863			

==========

Element: Hg Seq. No.: 33 AS Loc.: 31 Date: 01/13/2010
Sample ID: 243628006|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.147	0.147	0.0020	0.0065	10:47:57	No
2	0.134	0.134	0.0019	0.0063	10:48:31	No
Mean:	0.141	0.141	0.0020			
SD :	0.0092	0.0092	0.0001			
%RSD:	6.5	6.5	4.1427			

==========

Element: Hg Seq. No.: 34 AS Loc.: 7 Date: 01/13/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.262	5.262	0.0479	0.0523	10:49:58	No
2	5.179	5.179	0.0471	0.0515	10:50:32	No
Mean:	5.220	5.220	0.0475			
SD :	0.0584	0.0584	0.0005			
%RSD:	1.1	1.1	1.1008			

QC value within specified limits.

==========

Element: Hg Seq. No.: 35 AS Loc.: 8 Date: 01/13/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.152	-0.152	-0.0006	0.0038	10:52:01	No
2	-0.175	-0.175	-0.0008	0.0036	10:52:36	No
Mean:	-0.163	-0.163	-0.0007			
SD :	0.0163	0.0163	0.0001			
%RSD:	10.0	10.0	19.8082			

QC value within specified limits.

==========

Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 01/13/2010
Sample ID: 243628007|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.100	0.100	0.0016	0.0060	10:54:00	No
2	0.055	0.055	0.0012	0.0056	10:54:35	No
Mean:	0.077	0.077	0.0014			
SD :	0.0318	0.0318	0.0003			
%RSD:	41.2	41.2	20.1140			

==========

Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 01/13/2010
Sample ID: 243628008|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.139	0.139	0.0020	0.0064	10:55:55	No
2	0.118	0.118	0.0018	0.0062	10:56:30	No
Mean:	0.128	0.128	0.0019			
SD :	0.0146	0.0146	0.0001			
%RSD:	11.4	11.4	6.9845			

Element: Hg Seq. No.: 38 AS Loc.: 34 Date: 01/13/2010
Sample ID: 243628009|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.103	0.103	0.0016	0.0061	10:57:51	No
2	0.120	0.120	0.0018	0.0062	10:58:26	No
Mean:	0.111	0.111	0.0017			
SD :	0.0121	0.0121	0.0001			
%RSD:	10.9	10.9	6.3122			

Element: Hg Seq. No.: 39 AS Loc.: 35 Date: 01/13/2010
Sample ID: 243628010|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.094	0.094	0.0016	0.0060	10:59:47	No
2	0.073	0.073	0.0014	0.0058	11:00:21	No
Mean:	0.083	0.083	0.0015			
SD :	0.0152	0.0152	0.0001			
%RSD:	18.2	18.2	9.2432			

Element: Hg Seq. No.: 40 AS Loc.: 36 Date: 01/13/2010
Sample ID: 243628011|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.022	0.022	0.0009	0.0053	11:01:43	No
2	0.013	0.013	0.0008	0.0053	11:02:18	No
Mean:	0.017	0.017	0.0009			
SD :	0.0060	0.0060	0.0001			
%RSD:	34.6	34.6	6.1313			

Element: Hg Seq. No.: 41 AS Loc.: 37 Date: 01/13/2010
Sample ID: 1202012330|i||940322|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.179	-0.179	-0.0009	0.0035	11:03:40	No
2	-0.196	-0.196	-0.0010	0.0034	11:04:15	No
Mean:	-0.187	-0.187	-0.0010			
SD :	0.0122	0.0122	0.0001			
%RSD:	6.5	6.5	11.4869			

Element: Hg Seq. No.: 42 AS Loc.: 38 Date: 01/13/2010
Sample ID: 1202012331|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.692	3.692	0.0338	0.0382	11:05:37	No
2	3.819	3.819	0.0349	0.0394	11:06:12	No
Mean:	3.756	3.756	0.0344			
SD :	0.0895	0.0895	0.0008			

%RSD: 2.4 2.4 2.3330

==========

Element: Hg Seq. No.: 43 AS Loc.: 39 Date: 01/13/2010
Sample ID: 243626001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.030	0.030	0.0010	0.0054	11:07:35	No
2	0.015	0.015	0.0009	0.0053	11:08:10	No
Mean:	0.023	0.023	0.0009			
SD :	0.0102	0.0102	0.0001			
%RSD:	45.3	45.3	9.8819			

==========

Element: Hg Seq. No.: 44 AS Loc.: 40 Date: 01/13/2010
Sample ID: 1202012332|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.035	0.035	0.0010	0.0055	11:09:34	No
2	0.018	0.018	0.0009	0.0053	11:10:09	No
Mean:	0.027	0.027	0.0010			
SD :	0.0118	0.0118	0.0001			
%RSD:	44.3	44.3	11.0112			

==========

Element: Hg Seq. No.: 45 AS Loc.: 41 Date: 01/13/2010
Sample ID: 1202012333|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.156	2.156	0.0200	0.0245	11:11:33	No
2	2.145	2.145	0.0199	0.0244	11:12:08	No
Mean:	2.150	2.150	0.0200			
SD :	0.0080	0.0080	0.0001			
%RSD:	0.4	0.4	0.3567			

==========

Element: Hg Seq. No.: 46 AS Loc.: 7 Date: 01/13/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.374	5.374	0.0489	0.0533	11:13:33	No
2	5.386	5.386	0.0490	0.0534	11:14:09	No
Mean:	5.380	5.380	0.0489			
SD :	0.0090	0.0090	0.0001			
%RSD:	0.2	0.2	0.1641			

QC value within specified limits.

==========

Element: Hg Seq. No.: 47 AS Loc.: 8 Date: 01/13/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.002	-0.002	0.0007	0.0051	11:15:37	No
2	-0.023	-0.023	0.0005	0.0049	11:16:12	No
Mean:	-0.012	-0.012	0.0006			
SD :	0.0149	0.0149	0.0001			
%RSD:	123.6	123.6	21.5952			

QC value within specified limits.

==========

Element: Hg Seq. No.: 48 AS Loc.: 42 Date: 01/13/2010
Sample ID: 1202012335|i|||MSD

Miscellaneous

Prep LogBook

Analyst: BXA1 Verified by:_____

Batch: 937509

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202006080	UI062540-MS	.502	g
MS	1202006082	UI091015-A	.5	mL
MS	1202006082	UI091015-B	.5	mL
MSD	1202006084	UI091015-A	.5	mL
MSD	1202006084	UI091015-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202006079		SW846 3050B	30-DEC-2009 16:23	0.508 g	50 mL	98.4252	SOIL
LCS	1202006080		SW846 3050B	30-DEC-2009 16:23	0.502 g	50 mL	99.60159	SOIL
SAMPLE	243628001		SW846 3050B	30-DEC-2009 16:23	0.515 g	50 mL	97.08738	SOIL
DUP	1202006081	243628001	SW846 3050B	30-DEC-2009 16:23	0.503 g	50 mL	99.40358	SOIL
MS	1202006082	243628001	SW846 3050B	30-DEC-2009 16:23	0.506 g	50 mL	98.81423	SOIL
MSD	1202006084	243628001	SW846 3050B	30-DEC-2009 16:23	0.52 g	50 mL	96.15385	SOIL
SDILT	1202006083	243628001	SW846 3050B	30-DEC-2009 16:23	0.515 g	50 mL	97.08738	SOIL
SAMPLE	243628002		SW846 3050B	30-DEC-2009 16:23	0.5 g	50 mL	100	SOIL
SAMPLE	243628003		SW846 3050B	30-DEC-2009 16:23	0.516 g	50 mL	96.89922	SOIL
SAMPLE	243628004		SW846 3050B	30-DEC-2009 16:23	0.51 g	50 mL	98.03922	SOIL
SAMPLE	243628005		SW846 3050B	30-DEC-2009 16:23	0.525 g	50 mL	95.2381	SOIL
SAMPLE	243628006		SW846 3050B	30-DEC-2009 16:23	0.519 g	50 mL	96.33911	SOIL
SAMPLE	243628007		SW846 3050B	30-DEC-2009 16:23	0.515 g	50 mL	97.08738	SOIL
SAMPLE	243628008		SW846 3050B	30-DEC-2009 16:23	0.505 g	50 mL	99.0099	SOIL
SAMPLE	243628009		SW846 3050B	30-DEC-2009 16:23	0.516 g	50 mL	96.89922	SOIL
SAMPLE	243628010		SW846 3050B	30-DEC-2009 16:23	0.518 g	50 mL	96.5251	SOIL
SAMPLE	243628011		SW846 3050B	30-DEC-2009 16:23	0.523 g	50 mL	95.60229	SOIL

Reagent/Solvent Lot ID	Amount	Description
1203655-02	1.5 mL	Hydrogen Peroxide 30%
1234886	5 mL	Nitric Acid CONC.

Comments sample#243628001 is a brown, dry soil.

Prep LogBook

Analyst: BXA1 Verified by:_____

Batch: 937485

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202006037	UI062540-I	.509	g
MS	1202006039	UI091124-01	.25	mL
MS	1202006039	UI091124-06	.25	mL
MSD	1202006041	UI091124-01	.25	mL
MSD	1202006041	UI091124-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202006036		SW846 3050B	30-DEC-2009 16:27	0.525 g	50 mL	95.2381	SOIL
LCS	1202006037		SW846 3050B	30-DEC-2009 16:27	0.509 g	50 mL	98.23183	SOIL
SAMPLE	243628001		SW846 3050B	30-DEC-2009 16:27	0.508 g	50 mL	98.4252	SOIL
DUP	1202006038	243628001	SW846 3050B	30-DEC-2009 16:27	0.514 g	50 mL	97.27626	SOIL
MS	1202006039	243628001	SW846 3050B	30-DEC-2009 16:27	0.506 g	50 mL	98.81423	SOIL
MSD	1202006041	243628001	SW846 3050B	30-DEC-2009 16:27	0.519 g	50 mL	96.33911	SOIL
SDILT	1202006040	243628001	SW846 3050B	30-DEC-2009 16:27	0.508 g	50 mL	98.4252	SOIL
SAMPLE	243628002		SW846 3050B	30-DEC-2009 16:27	0.524 g	50 mL	95.41985	SOIL
SAMPLE	243628003		SW846 3050B	30-DEC-2009 16:27	0.513 g	50 mL	97.46589	SOIL
SAMPLE	243628004		SW846 3050B	30-DEC-2009 16:27	0.502 g	50 mL	99.60159	SOIL
SAMPLE	243628005		SW846 3050B	30-DEC-2009 16:27	0.502 g	50 mL	99.60159	SOIL
SAMPLE	243628006		SW846 3050B	30-DEC-2009 16:27	0.517 g	50 mL	96.7118	SOIL
SAMPLE	243628007		SW846 3050B	30-DEC-2009 16:27	0.525 g	50 mL	95.2381	SOIL
SAMPLE	243628008		SW846 3050B	30-DEC-2009 16:27	0.511 g	50 mL	97.84736	SOIL
SAMPLE	243628009		SW846 3050B	30-DEC-2009 16:27	0.503 g	50 mL	99.40358	SOIL
SAMPLE	243628010		SW846 3050B	30-DEC-2009 16:27	0.505 g	50 mL	99.0099	SOIL
SAMPLE	243628011		SW846 3050B	30-DEC-2009 16:27	0.503 g	50 mL	99.40358	SOIL

Reagent/Solvent Lot ID	Amount	Description
1244970	10 mL	HYDROCHLORIC ACID
1234886	1.25 mL	Nitric Acid CONC.

Comments sample#243628001 is a brown, dry soil.

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 940327

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202012343	UI031809A	.2	g
MS	1202012345	WHG100112-14	.3	mL
MSD	1202012347	WHG100112-14	.3	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202012342		SW846 7471A Prep	12-JAN-2010 13:25	0.6 g	30 mL	50	SOIL
LCS	1202012343		SW846 7471A Prep	12-JAN-2010 13:25	0.2 g	30 mL	150	SOIL
SAMPLE	243628001		SW846 7471A Prep	12-JAN-2010 13:25	0.51 g	30 mL	58.82353	SOIL
DUP	1202012344	243628001	SW846 7471A Prep	12-JAN-2010 13:25	0.524 g	30 mL	57.25191	SOIL
MS	1202012345	243628001	SW846 7471A Prep	12-JAN-2010 13:25	0.56 g	30 mL	53.57143	SOIL
MSD	1202012347	243628001	SW846 7471A Prep	12-JAN-2010 13:25	0.504 g	30 mL	59.52381	SOIL
SDILT	1202012346	243628001	SW846 7471A Prep	12-JAN-2010 13:25	0.51 g	30 mL	58.82353	SOIL
SAMPLE	243628002		SW846 7471A Prep	12-JAN-2010 13:25	0.505 g	30 mL	59.40594	SOIL
SAMPLE	243628003		SW846 7471A Prep	12-JAN-2010 13:25	0.571 g	30 mL	52.5394	SOIL
SAMPLE	243628004		SW846 7471A Prep	12-JAN-2010 13:25	0.549 g	30 mL	54.64481	SOIL
SAMPLE	243628005		SW846 7471A Prep	12-JAN-2010 13:25	0.538 g	30 mL	55.76208	SOIL
SAMPLE	243628006		SW846 7471A Prep	12-JAN-2010 13:25	0.525 g	30 mL	57.14286	SOIL
SAMPLE	243628007		SW846 7471A Prep	12-JAN-2010 13:25	0.526 g	30 mL	57.03422	SOIL
SAMPLE	243628008		SW846 7471A Prep	12-JAN-2010 13:25	0.519 g	30 mL	57.80347	SOIL
SAMPLE	243628009		SW846 7471A Prep	12-JAN-2010 13:25	0.582 g	30 mL	51.54639	SOIL
SAMPLE	243628010		SW846 7471A Prep	12-JAN-2010 13:25	0.536 g	30 mL	55.97015	SOIL
SAMPLE	243628011		SW846 7471A Prep	12-JAN-2010 13:25	0.553 g	30 mL	54.24955	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
WHG100112-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG100112-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG100112-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG100112-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG100112-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG100112-12	750 uL	Mercury Working 2nd Source S 5.0/ICV

Comments: Sample 243628001 is a dry rocky brown soil.
Digestion Start Date: 12-JAN-10 13:25
Digestion End Date: 12-JAN-10 13:55

DATA EXCEPTION REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
13-JAN-10	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP/MS	SW846 3050B/6020	Solid	LANL
Batch ID:	**Sample Numbers:**		
937510	See Below		

Potentially affected work order(s)(SDG): 243628(10-1103)

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for MSD/PSD

Specification and Requirements Exception Description:	DER Disposition:
1. Failed Recovery for MS/PS: QC 1202006082MS 2. Failed Recovery for MSD/PSD: QC 1202006084MSD	The matrix spike and matrix spike duplicate recovery failed outside of the control limits for Be 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:

Samantha Jacobs 14-JAN-10

Data Validator/Group Leader:

Rose Jenkins 20-JAN-10

DATA EXCEPTION REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
14-JAN-10	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
937486	See Below		

Potentially affected work order(s)(SDG): 243628(10-1103)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed RPD for DUP

Failed Recovery for MSD/PSD

Specification and Requirements Exception Description:	DER Disposition:
1. Failed Recovery for MS/PS: QC 1202006039MS 2. Failed RPD for DUP: QC 1202006038DUP 3. Failed RPD for MS/MSD, or PS/PSD: QC 1202006041MSD 4. Failed Recovery for MSD/PSD: QC 1202006041MSD	1./4. The matrix spike and matrix spike duplicate recovery failed outside of the control limits for barium and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The sample and sample duplicate % RPD failed outside the control limits for cobalt,lead and manganese due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 3. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for manganese due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:
Helen Camello 15-JAN-10

Data Validator/Group Leader:
Louise Smith 15-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: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091015-A **Opened:** 15-OCT-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 15-OCT-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI091015-B **Opened:** 15-OCT-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 15-OCT-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L

Analyte	Concentration	Analyte	Concentration
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** 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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
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: 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		

Standard Logbook

Serial ID:	UI091212-61	**Opened:**	12-DEC-09	**Amount :**	.5 mL
Name:	ICPMS High Range Standa	**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
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

Standard Logbook

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: IHG100112-01 **Opened:** 12-JAN-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 12-JAN-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 13-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: IHG100112-02 **Opened:** 12-JAN-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 12-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Intermediate **Expires:** 13-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: WHG100112-07 **Opened:** 12-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 12-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 19-JAN-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100112-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG100112-08 **Opened:** 12-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 12-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 19-JAN-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100112-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG100112-09 **Opened:** 12-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 12-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 19-JAN-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100112-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG100112-10 **Opened:** 12-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 12-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 19-JAN-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100112-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100112-11 **Opened:** 12-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 12-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 19-JAN-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL S 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100112-01	Mercury	200 ug/L	1.5 mL	30 mL	10 ug/L

Serial ID: WHG100112-12 **Opened:** 12-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 12-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 19-JAN-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 2nd Source S 5.0/ICV
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100112-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100112-14 **Opened:** 12-JAN-10 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 12-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 19-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: WI100112-42 **Opened:** 12-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 13-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1253514
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.
WI100112-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100112-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100112-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100112-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100112-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100112-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100112-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100112-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100112-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100112-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100112-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100112-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100112-43 **Opened:** 12-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 13-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1253514
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP O.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: WI100112-44 **Opened:** 12-JAN-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 13-JAN-10 **Solvent :** 3%HCL and 1 %HNO3-1253514
Employee: Helen Carnello
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: WI100112-45 **Opened:** 12-JAN-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 13-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1253514
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: WI100112-46 **Opened:** 12-JAN-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 13-JAN-10 **Solvent :** 3%HCL AND 1%HNO3-1253514
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: WI100112-47 **Opened:** 12-JAN-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 13-JAN-10 **Solvent :** 3%HCL &1%HNO3-1253514
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: WI100113-42 **Opened:** 13-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 14-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1253514
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.
WI100113-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100113-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100113-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100113-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100113-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100113-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100113-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100113-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100113-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100113-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100113-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100113-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100113-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100113-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100113-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100113-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100113-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100113-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100113-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100113-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100113-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100113-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100113-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100113-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100113-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100113-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100113-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100113-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100113-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100113-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100113-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100113-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100113-43 **Opened:** 13-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 14-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1253514
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: WI100113-44 **Opened:** 13-JAN-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 14-JAN-10 **Solvent :** 3%HCL and 1 %HNO3-1253514
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: WI100113-45 **Opened:** 13-JAN-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 14-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1253514
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: WI100113-46 **Opened:** 13-JAN-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 14-JAN-10 **Solvent :** 3%HCL AND 1%HNO3-1253514
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: WI100113-47 **Opened:** 13-JAN-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 14-JAN-10 **Solvent :** 3%HCL &1%HNO3-1253514
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: WMS100112-04 **Opened:** 12-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 12-JAN-10 **Balance Id :** 4025216
Type: Working **Expires:** 13-JAN-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1253206
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100112-04A **Opened:** 12-JAN-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 12-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 13-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1253206
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100112-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100112-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100112-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100112-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100112-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100112-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100112-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100112-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100112-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100112-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100112-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100112-05 **Opened:** 12-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 12-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 13-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1253206
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100112-06 **Opened:** 12-JAN-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 12-JAN-10 **Pipet Id :** 3820544
Type: Working **Expires:** 13-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1253206
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100112-07 **Opened:** 12-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 12-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 13-JAN-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1253206
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: WMS100112-08 **Opened:** 12-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 12-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 13-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1253206
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100112-70 **Opened:** 12-JAN-10 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 12-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 13-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1253206
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

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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
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: 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

Standard Logbook

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:** 15-JAN-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

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

Standard Logbook

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: 1253206 **Opened:** 11-JAN-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 11-JAN-10
Type: Reagent/Solvent **Expires:** 18-JAN-10
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: 1253514 **Opened:** 11-JAN-10 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 11-JAN-10 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 17-JAN-10 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL

Standard Logbook

Description: 3%HCL+1%HNO3 RINSE SOLN.

Comments: None

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1103-1

Sample Analysis

Sample ID	Client ID
243629001	RE12-10-7677
1202006002	Method Blank (MB) **ICP**
1202006003	Laboratory Control Sample (LCS)
1202006006	243632001(RE12-10-7610L) Serial Dilution (SD)
1202006004	243632001(RE12-10-7610D) Sample Duplicate (DUP)
1202006005	243632001(RE12-10-7610S) Matrix Spike (MS)
1202006053	Method Blank (MB) **ICP-MS**
1202006054	Laboratory Control Sample (LCS)
1202006057	243608001(RE16-10-372L) Serial Dilution (SD)
1202006055	243608001(RE16-10-372D) Sample Duplicate (DUP)
1202006056	243608001(RE16-10-372S) Matrix Spike (MS)
1202006475	Method Blank (MB) **CVAA**
1202006479	Laboratory Control Sample (LCS)
1202006477	243627001(RE12-10-7860L) Serial Dilution (SD)
1202006476	243627001(RE12-10-7860D) Sample Duplicate (DUP)
1202006478	243627001(RE12-10-7860S) Matrix Spike (MS)

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

Method/Analysis Information

Analytical Batch:	937469, 937496 and 937647
Prep Batch :	937468, 937495 and 937646
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 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

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

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

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

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

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

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 243632001 (RE12-10-7610)-ICP, 243608001 (RE16-10-372)-ICP-MS and 243627001 (RE12-10-7860)-CVAA.

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

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

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

Technical Information

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

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

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

Miscellaneous Information

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

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

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

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

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

Review Validation:

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

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

Reviewer: Nick-Cole A Elmore **Date:** 1-21-10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1103-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 243629001 **BASIS:** As Received **DATE COLLECTED** 22-DEC-09

CLIENT ID: RE12-10-7677 **LEVEL:** Low **DATE RECEIVED** 29-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	01/12/10 16:51	011210-1	937469
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	01/03/10 21:48	100103-2	937496
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	01/12/10 16:51	011210-1	937469
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	01/12/10 16:51	011210-1	937469
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	01/03/10 21:48	100103-2	937496
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	01/03/10 21:48	100103-2	937496
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	01/12/10 16:51	011210-1	937469
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	01/12/10 16:51	011210-1	937469
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	01/12/10 16:51	011210-1	937469
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	01/12/10 16:51	011210-1	937469
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	01/12/10 16:51	011210-1	937469
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	01/03/10 21:48	100103-2	937496
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	01/12/10 16:51	011210-1	937469
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	01/03/10 21:48	100103-2	937496
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	01/08/10 10:08	010810W1-6	937647
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	01/12/10 16:51	011210-1	937469
7440-09-7	Potassium	129	ug/L	J	50	150	150	1	P	HSC	01/12/10 16:51	011210-1	937469
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	01/12/10 16:51	011210-1	937469
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	01/12/10 16:51	011210-1	937469
7440-23-5	Sodium	117	ug/L	J	100	300	300	1	P	HSC	01/12/10 16:51	011210-1	937469
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	01/04/10 05:16	100103-4	937496
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	01/04/10 16:58	100104-5	937496
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	01/12/10 16:51	011210-1	937469
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	01/12/10 16:51	011210-1	937469

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
937469	937468	SW846 3005A	50	mL	50	mL	12/31/09	BXA1
937496	937495	SW846 3005A	50	mL	50	mL	12/31/09	BXA1
937647	937646	SW846 7470A Prep	20	mL	20	mL	01/07/10	AXG2

Quality Control Summary

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–1103–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Antimony	49.7	ug/L	50	ug/L	99.4	90.0 – 110.0	MS	03–JAN–10 18:44	100103–2
	Beryllium	49.9	ug/L	50	ug/L	99.8	90.0 – 110.0	MS	03–JAN–10 18:44	100103–2
	Cadmium	49.2	ug/L	50	ug/L	98.4	90.0 – 110.0	MS	03–JAN–10 18:44	100103–2
	Lead	53	ug/L	50	ug/L	106	90.0 – 110.0	MS	03–JAN–10 18:44	100103–2
	Manganese	51.2	ug/L	50	ug/L	102.3	90.0 – 110.0	MS	03–JAN–10 18:44	100103–2
	Thallium	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	04–JAN–10 03:14	100103–4
	Uranium	53.6	ug/L	50	ug/L	107.2	90.0 – 110.0	MS	04–JAN–10 16:28	100104–5
	Mercury	5.24	ug/L	5	ug/L	104.7	90.0 – 110.0	AV	08–JAN–10 09:18	010810W1–6
	Aluminum	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Arsenic	470	ug/L	500	ug/L	94	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Barium	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Calcium	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Chromium	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Cobalt	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Copper	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Iron	5130	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Magnesium	5260	ug/L	5000	ug/L	105.3	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Nickel	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Potassium	2450	ug/L	2500	ug/L	98	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Selenium	2540	ug/L	2500	ug/L	101.6	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Silver	259	ug/L	250	ug/L	103.6	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Sodium	2480	ug/L	2500	ug/L	99.1	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Vanadium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
	Zinc	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	12–JAN–10 13:01	011210–1
CCV01										
	Antimony	51	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	03–JAN–10 19:14	100103–2
	Beryllium	52.2	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	03–JAN–10 19:14	100103–2
	Cadmium	50.5	ug/L	50	ug/L	101	90.0 – 110.0	MS	03–JAN–10 19:14	100103–2
	Lead	52.7	ug/L	50	ug/L	105.4	90.0 – 110.0	MS	03–JAN–10 19:14	100103–2
	Manganese	53.7	ug/L	50	ug/L	107.4	90.0 – 110.0	MS	03–JAN–10 19:14	100103–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1103-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Thallium	49.9	ug/L	50	ug/L	99.9	90.0 – 110.0	MS	04-JAN-10 03:36	100103-4
	Uranium	52.7	ug/L	50	ug/L	105.4	90.0 – 110.0	MS	04-JAN-10 16:36	100104-5
	Mercury	5.21	ug/L	5	ug/L	104.1	80.0 – 120.0	AV	08-JAN-10 09:23	010810W1-6
	Aluminum	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	12-JAN-10 13:47	011210-1
	Arsenic	520	ug/L	500	ug/L	104	90.0 – 110.0	P	12-JAN-10 13:47	011210-1
	Barium	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	12-JAN-10 13:47	011210-1
	Calcium	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	12-JAN-10 13:47	011210-1
	Chromium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	12-JAN-10 13:47	011210-1
	Cobalt	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	12-JAN-10 13:47	011210-1
	Copper	495	ug/L	500	ug/L	99	90.0 – 110.0	P	12-JAN-10 13:47	011210-1
	Iron	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	12-JAN-10 13:47	011210-1
	Magnesium	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	12-JAN-10 13:47	011210-1
	Nickel	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	12-JAN-10 13:47	011210-1
	Potassium	5330	ug/L	5000	ug/L	106.5	90.0 – 110.0	P	12-JAN-10 13:47	011210-1
	Selenium	525	ug/L	500	ug/L	105	90.0 – 110.0	P	12-JAN-10 13:47	011210-1
	Silver	505	ug/L	500	ug/L	101	90.0 – 110.0	P	12-JAN-10 13:47	011210-1
	Sodium	9680	ug/L	10000	ug/L	96.8	90.0 – 110.0	P	12-JAN-10 13:47	011210-1
	Vanadium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	12-JAN-10 13:47	011210-1
	Zinc	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	12-JAN-10 13:47	011210-1
CCV02										
	Antimony	51.9	ug/L	50	ug/L	103.8	90.0 – 110.0	MS	03-JAN-10 19:33	100103-2
	Beryllium	51.2	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	03-JAN-10 19:33	100103-2
	Cadmium	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	03-JAN-10 19:33	100103-2
	Lead	53.2	ug/L	50	ug/L	106.4	90.0 – 110.0	MS	03-JAN-10 19:33	100103-2
	Manganese	52.5	ug/L	50	ug/L	105	90.0 – 110.0	MS	03-JAN-10 19:33	100103-2
	Thallium	47.4	ug/L	50	ug/L	94.7	90.0 – 110.0	MS	04-JAN-10 04:17	100103-4
	Uranium	54	ug/L	50	ug/L	108.1	90.0 – 110.0	MS	04-JAN-10 16:51	100104-5
	Mercury	5.2	ug/L	5	ug/L	104.1	80.0 – 120.0	AV	08-JAN-10 09:47	010810W1-6
	Aluminum	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	12-JAN-10 14:19	011210-1
	Arsenic	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	12-JAN-10 14:19	011210-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–1103–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Barium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	12–JAN–10 14:19	011210–1
	Calcium	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	12–JAN–10 14:19	011210–1
	Chromium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	12–JAN–10 14:19	011210–1
	Cobalt	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	12–JAN–10 14:19	011210–1
	Copper	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	12–JAN–10 14:19	011210–1
	Iron	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	12–JAN–10 14:19	011210–1
	Magnesium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	12–JAN–10 14:19	011210–1
	Nickel	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	12–JAN–10 14:19	011210–1
	Potassium	4990	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	12–JAN–10 14:19	011210–1
	Selenium	523	ug/L	500	ug/L	104.6	90.0 – 110.0	P	12–JAN–10 14:19	011210–1
	Silver	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	12–JAN–10 14:19	011210–1
	Sodium	9800	ug/L	10000	ug/L	98	90.0 – 110.0	P	12–JAN–10 14:19	011210–1
	Vanadium	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	12–JAN–10 14:19	011210–1
	Zinc	505	ug/L	500	ug/L	101	90.0 – 110.0	P	12–JAN–10 14:19	011210–1
CCV03										
	Antimony	49.9	ug/L	50	ug/L	99.8	90.0 – 110.0	MS	03–JAN–10 20:28	100103–2
	Beryllium	50.3	ug/L	50	ug/L	100.5	90.0 – 110.0	MS	03–JAN–10 20:28	100103–2
	Cadmium	49.4	ug/L	50	ug/L	98.8	90.0 – 110.0	MS	03–JAN–10 20:28	100103–2
	Lead	52.5	ug/L	50	ug/L	105.1	90.0 – 110.0	MS	03–JAN–10 20:28	100103–2
	Manganese	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	03–JAN–10 20:28	100103–2
	Thallium	47.2	ug/L	50	ug/L	94.4	90.0 – 110.0	MS	04–JAN–10 04:58	100103–4
	Uranium	53.9	ug/L	50	ug/L	107.7	90.0 – 110.0	MS	04–JAN–10 17:04	100104–5
	Mercury	5.26	ug/L	5	ug/L	105.2	80.0 – 120.0	AV	08–JAN–10 10:10	010810W1–6
	Aluminum	5120	ug/L	5000	ug/L	102.4	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Arsenic	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Barium	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Calcium	5090	ug/L	5000	ug/L	101.9	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Chromium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Cobalt	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Copper	500	ug/L	500	ug/L	100	90.0 – 110.0	P	12–JAN–10 15:14	011210–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–1103–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Iron	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Magnesium	5080	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Nickel	505	ug/L	500	ug/L	101	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Potassium	4970	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Selenium	523	ug/L	500	ug/L	104.5	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Silver	510	ug/L	500	ug/L	102	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Sodium	9310	ug/L	10000	ug/L	93.1	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Vanadium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
	Zinc	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	12–JAN–10 15:14	011210–1
CCV04										
	Antimony	50.2	ug/L	50	ug/L	100.3	90.0 – 110.0	MS	03–JAN–10 21:23	100103–2
	Beryllium	52.5	ug/L	50	ug/L	105.1	90.0 – 110.0	MS	03–JAN–10 21:23	100103–2
	Cadmium	49.5	ug/L	50	ug/L	98.9	90.0 – 110.0	MS	03–JAN–10 21:23	100103–2
	Lead	51.4	ug/L	50	ug/L	102.8	90.0 – 110.0	MS	03–JAN–10 21:23	100103–2
	Manganese	52.3	ug/L	50	ug/L	104.5	90.0 – 110.0	MS	03–JAN–10 21:23	100103–2
	Thallium	45.1	ug/L	50	ug/L	90.2	90.0 – 110.0	MS	04–JAN–10 05:30	100103–4
	Aluminum	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Arsenic	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Barium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Calcium	5130	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Chromium	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Cobalt	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Copper	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Iron	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Magnesium	5250	ug/L	5000	ug/L	105	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Nickel	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Potassium	5010	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Selenium	522	ug/L	500	ug/L	104.5	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Silver	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	12–JAN–10 16:37	011210–1
	Sodium	9530	ug/L	10000	ug/L	95.3	90.0 – 110.0	P	12–JAN–10 16:37	011210–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1103-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Vanadium	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	12-JAN-10 16:37	011210-1
	Zinc	506	ug/L	500	ug/L	101.1	90.0 - 110.0	P	12-JAN-10 16:37	011210-1
CCV05										
	Antimony	50.7	ug/L	50	ug/L	101.4	90.0 - 110.0	MS	03-JAN-10 22:07	100103-2
	Beryllium	52.3	ug/L	50	ug/L	104.5	90.0 - 110.0	MS	03-JAN-10 22:07	100103-2
	Cadmium	50.1	ug/L	50	ug/L	100.2	90.0 - 110.0	MS	03-JAN-10 22:07	100103-2
	Lead	52.3	ug/L	50	ug/L	104.5	90.0 - 110.0	MS	03-JAN-10 22:07	100103-2
	Manganese	52.9	ug/L	50	ug/L	105.7	90.0 - 110.0	MS	03-JAN-10 22:07	100103-2
	Aluminum	5180	ug/L	5000	ug/L	103.7	90.0 - 110.0	P	12-JAN-10 17:33	011210-1
	Arsenic	516	ug/L	500	ug/L	103.3	90.0 - 110.0	P	12-JAN-10 17:33	011210-1
	Barium	509	ug/L	500	ug/L	101.9	90.0 - 110.0	P	12-JAN-10 17:33	011210-1
	Calcium	5220	ug/L	5000	ug/L	104.5	90.0 - 110.0	P	12-JAN-10 17:33	011210-1
	Chromium	508	ug/L	500	ug/L	101.7	90.0 - 110.0	P	12-JAN-10 17:33	011210-1
	Cobalt	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	12-JAN-10 17:33	011210-1
	Copper	510	ug/L	500	ug/L	101.9	90.0 - 110.0	P	12-JAN-10 17:33	011210-1
	Iron	5210	ug/L	5000	ug/L	104.2	90.0 - 110.0	P	12-JAN-10 17:33	011210-1
	Magnesium	5340	ug/L	5000	ug/L	106.7	90.0 - 110.0	P	12-JAN-10 17:33	011210-1
	Nickel	507	ug/L	500	ug/L	101.5	90.0 - 110.0	P	12-JAN-10 17:33	011210-1
	Potassium	4990	ug/L	5000	ug/L	99.8	90.0 - 110.0	P	12-JAN-10 17:33	011210-1
	Selenium	532	ug/L	500	ug/L	106.4	90.0 - 110.0	P	12-JAN-10 17:33	011210-1
	Silver	513	ug/L	500	ug/L	102.7	90.0 - 110.0	P	12-JAN-10 17:33	011210-1
	Sodium	9710	ug/L	10000	ug/L	97.1	90.0 - 110.0	P	12-JAN-10 17:33	011210-1
	Vanadium	514	ug/L	500	ug/L	102.8	90.0 - 110.0	P	12-JAN-10 17:33	011210-1
	Zinc	509	ug/L	500	ug/L	101.7	90.0 - 110.0	P	12-JAN-10 17:33	011210-1

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–1103–1

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Lead	2.42	ug/L	2	ug/L	121	70.0 – 130.0	MS	03–JAN–10 18:56	100103–2
	Manganese	5.87	ug/L	5	ug/L	117.4	70.0 – 130.0	MS	03–JAN–10 18:56	100103–2
	Antimony	3.33	ug/L	3	ug/L	111.1	70.0 – 130.0	MS	03–JAN–10 18:56	100103–2
	Beryllium	.526	ug/L	.5	ug/L	105.2	70.0 – 130.0	MS	03–JAN–10 18:56	100103–2
	Cadmium	1.08	ug/L	1	ug/L	107.5	70.0 – 130.0	MS	03–JAN–10 18:56	100103–2
	Thallium	1.08	ug/L	1	ug/L	107.9	70.0 – 130.0	MS	04–JAN–10 03:23	100103–4
	Uranium	.257	ug/L	.2	ug/L	128.5	70.0 – 130.0	MS	04–JAN–10 16:31	100104–5
	Mercury	.209	ug/L	.2	ug/L	104.5	70.0 – 130.0	AV	08–JAN–10 09:22	010810W1–6
PQL01										
	Aluminum	207	ug/L	200	ug/L	103.5	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Iron	92.8	ug/L	100	ug/L	92.8	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Magnesium	267	ug/L	300	ug/L	89	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Nickel	4.92	ug/L	5	ug/L	98.4	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Potassium	150	ug/L	150	ug/L	99.8	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Silver	4.91	ug/L	5	ug/L	98.2	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Sodium	320	ug/L	300	ug/L	106.6	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Arsenic	30.2	ug/L	30	ug/L	100.7	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Barium	4.95	ug/L	5	ug/L	99	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Chromium	4.69	ug/L	5	ug/L	93.9	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Cobalt	4.88	ug/L	5	ug/L	97.6	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Copper	9.97	ug/L	10	ug/L	99.7	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Vanadium	5.26	ug/L	5	ug/L	105.2	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Zinc	10.5	ug/L	10	ug/L	105.2	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Calcium	204	ug/L	200	ug/L	102.2	70.0 – 130.0	P	12–JAN–10 13:15	011210–1
	Selenium	29.4	ug/L	30	ug/L	97.9	70.0 – 130.0	P	12–JAN–10 13:15	011210–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–1103–1

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	03–JAN–10 18:50	100103–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	03–JAN–10 18:50	100103–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	03–JAN–10 18:50	100103–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	03–JAN–10 18:50	100103–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	03–JAN–10 18:50	100103–2
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	04–JAN–10 03:18	100103–4
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	04–JAN–10 16:29	100104–5
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	08–JAN–10 09:20	010810W1–6
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	12–JAN–10 13:08	011210–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	12–JAN–10 13:08	011210–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 13:08	011210–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	12–JAN–10 13:08	011210–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 13:08	011210–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 13:08	011210–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	12–JAN–10 13:08	011210–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	12–JAN–10 13:08	011210–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	12–JAN–10 13:08	011210–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	12–JAN–10 13:08	011210–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	12–JAN–10 13:08	011210–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	12–JAN–10 13:08	011210–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 13:08	011210–1
	Sodium	100	+/–300	U	100	300	LIQ	P	12–JAN–10 13:08	011210–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 13:08	011210–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	12–JAN–10 13:08	011210–1
CCB01										
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	03–JAN–10 19:20	100103–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	03–JAN–10 19:20	100103–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	03–JAN–10 19:20	100103–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	03–JAN–10 19:20	100103–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	03–JAN–10 19:20	100103–2
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	04–JAN–10 03:41	100103–4

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1103-1

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	04-JAN-10 16:38	100104-5
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	08-JAN-10 09:25	010810W1-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	12-JAN-10 13:54	011210-1
	Arsenic	12.26	+/-30	J	5.0	30.0	LIQ	P	12-JAN-10 13:54	011210-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	12-JAN-10 13:54	011210-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	12-JAN-10 13:54	011210-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	12-JAN-10 13:54	011210-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	12-JAN-10 13:54	011210-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	12-JAN-10 13:54	011210-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	12-JAN-10 13:54	011210-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	12-JAN-10 13:54	011210-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	12-JAN-10 13:54	011210-1
	Potassium	129.14	+/-150	J	50.0	150	LIQ	P	12-JAN-10 13:54	011210-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	12-JAN-10 13:54	011210-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	12-JAN-10 13:54	011210-1
	Sodium	100	+/-300	U	100	300	LIQ	P	12-JAN-10 13:54	011210-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	12-JAN-10 13:54	011210-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	12-JAN-10 13:54	011210-1
CCB02										
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	03-JAN-10 19:39	100103-2
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	03-JAN-10 19:39	100103-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	03-JAN-10 19:39	100103-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	03-JAN-10 19:39	100103-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	03-JAN-10 19:39	100103-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	04-JAN-10 04:21	100103-4
	Uranium	0.05	+/-.2	U	0.05	0.2	LIQ	MS	04-JAN-10 16:53	100104-5
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	08-JAN-10 09:49	010810W1-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	12-JAN-10 14:26	011210-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	12-JAN-10 14:26	011210-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	12-JAN-10 14:26	011210-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	12-JAN-10 14:26	011210-1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–1103–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 14:26	011210–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 14:26	011210–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	12–JAN–10 14:26	011210–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	12–JAN–10 14:26	011210–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	12–JAN–10 14:26	011210–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	12–JAN–10 14:26	011210–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	12–JAN–10 14:26	011210–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	12–JAN–10 14:26	011210–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 14:26	011210–1
	Sodium	100	+/–300	U	100	300	LIQ	P	12–JAN–10 14:26	011210–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 14:26	011210–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	12–JAN–10 14:26	011210–1
CCB03										
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	03–JAN–10 20:34	100103–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	03–JAN–10 20:34	100103–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	03–JAN–10 20:34	100103–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	03–JAN–10 20:34	100103–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	03–JAN–10 20:34	100103–2
	Thallium	0.327	+/–1	J	0.3	1.0	LIQ	MS	04–JAN–10 05:02	100103–4
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	04–JAN–10 17:05	100104–5
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	08–JAN–10 10:12	010810W1–6
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	12–JAN–10 15:21	011210–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	12–JAN–10 15:21	011210–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 15:21	011210–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	12–JAN–10 15:21	011210–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 15:21	011210–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 15:21	011210–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	12–JAN–10 15:21	011210–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	12–JAN–10 15:21	011210–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	12–JAN–10 15:21	011210–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	12–JAN–10 15:21	011210–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–1103–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	12–JAN–10 15:21	011210–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	12–JAN–10 15:21	011210–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 15:21	011210–1
	Sodium	100	+/–300	U	100	300	LIQ	P	12–JAN–10 15:21	011210–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 15:21	011210–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	12–JAN–10 15:21	011210–1
CCB04										
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	03–JAN–10 21:30	100103–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	03–JAN–10 21:30	100103–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	03–JAN–10 21:30	100103–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	03–JAN–10 21:30	100103–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	03–JAN–10 21:30	100103–2
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	04–JAN–10 05:34	100103–4
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	12–JAN–10 16:44	011210–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	12–JAN–10 16:44	011210–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 16:44	011210–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	12–JAN–10 16:44	011210–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 16:44	011210–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 16:44	011210–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	12–JAN–10 16:44	011210–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	12–JAN–10 16:44	011210–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	12–JAN–10 16:44	011210–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	12–JAN–10 16:44	011210–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	12–JAN–10 16:44	011210–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	12–JAN–10 16:44	011210–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 16:44	011210–1
	Sodium	100	+/–300	U	100	300	LIQ	P	12–JAN–10 16:44	011210–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 16:44	011210–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	12–JAN–10 16:44	011210–1
CCB05										
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	03–JAN–10 22:13	100103–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–1103–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	03–JAN–10 22:13	100103–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	03–JAN–10 22:13	100103–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	03–JAN–10 22:13	100103–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	03–JAN–10 22:13	100103–2
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	12–JAN–10 17:40	011210–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	12–JAN–10 17:40	011210–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 17:40	011210–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	12–JAN–10 17:40	011210–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 17:40	011210–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 17:40	011210–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	12–JAN–10 17:40	011210–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	12–JAN–10 17:40	011210–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	12–JAN–10 17:40	011210–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	12–JAN–10 17:40	011210–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	12–JAN–10 17:40	011210–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	12–JAN–10 17:40	011210–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 17:40	011210–1
	Sodium	100	+/–300	U	100	300	LIQ	P	12–JAN–10 17:40	011210–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	12–JAN–10 17:40	011210–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	12–JAN–10 17:40	011210–1

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-1103-1

Contract: LANL01004

Matrix: WATER

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1202006002								
	Aluminum	68	ug/L	+/-200	U	P	68	200
	Arsenic	5.83	ug/L	+/-30	J	P	5	30
	Barium	1	ug/L	+/-5	U	P	1	5
	Calcium	50	ug/L	+/-200	U	P	50	200
	Chromium	1	ug/L	+/-5	U	P	1	5
	Cobalt	1	ug/L	+/-5	U	P	1	5
	Copper	3	ug/L	+/-10	U	P	3	10
	Iron	30	ug/L	+/-100	U	P	30	100
	Magnesium	85	ug/L	+/-300	U	P	85	300
	Nickel	1.5	ug/L	+/-5	U	P	1.5	5
	Potassium	50	ug/L	+/-150	U	P	50	150
	Selenium	5.29	ug/L	+/-30	J	P	5	30
	Silver	1	ug/L	+/-5	U	P	1	5
	Sodium	100	ug/L	+/-300	U	P	100	300
	Vanadium	1	ug/L	+/-5	U	P	1	5
	Zinc	3.3	ug/L	+/-10	U	P	3.3	10
1202006053								
	Antimony	1	ug/L	+/-3	U	MS	1	3
	Beryllium	0.1	ug/L	+/-0.5	U	MS	0.1	0.5
	Cadmium	0.11	ug/L	+/-1	U	MS	0.11	1
	Lead	0.5	ug/L	+/-2	U	MS	0.5	2
	Manganese	1	ug/L	+/-5	U	MS	1	5
	Thallium	0.3	ug/L	+/-1	U	MS	0.3	1
	Uranium	0.05	ug/L	+/-0.2	U	MS	0.05	0.2
1202006475								
	Mercury	0.066	ug/L	+/-0.2	U	AV	0.066	0.2

METALS
–4–
Interference Check Sample

SDG No: 10–1103–1

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	506000	ug/L	500000	ug/L	101	80.0 – 120.0	12–JAN–10 13:22	011210–1
	Arsenic	6.81	ug/L					12–JAN–10 13:22	011210–1
	Barium	1.73	ug/L					12–JAN–10 13:22	011210–1
	Calcium	468000	ug/L	500000	ug/L	93.7	80.0 – 120.0	12–JAN–10 13:22	011210–1
	Chromium	1.44	ug/L					12–JAN–10 13:22	011210–1
	Cobalt	–1.47	ug/L					12–JAN–10 13:22	011210–1
	Copper	4.79	ug/L					12–JAN–10 13:22	011210–1
	Iron	183000	ug/L	200000	ug/L	91.5	80.0 – 120.0	12–JAN–10 13:22	011210–1
	Magnesium	479000	ug/L	500000	ug/L	95.7	80.0 – 120.0	12–JAN–10 13:22	011210–1
	Nickel	3.71	ug/L					12–JAN–10 13:22	011210–1
	Potassium	–151.0	ug/L					12–JAN–10 13:22	011210–1
	Selenium	–8.93	ug/L					12–JAN–10 13:22	011210–1
	Silver	–1.92	ug/L					12–JAN–10 13:22	011210–1
	Sodium	47.0	ug/L					12–JAN–10 13:22	011210–1
	Vanadium	–0.846	ug/L					12–JAN–10 13:22	011210–1
	Zinc	8.33	ug/L					12–JAN–10 13:22	011210–1
ICSAB01									
	Aluminum	536000	ug/L	500000	ug/L	107	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Arsenic	537	ug/L	500	ug/L	107	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Barium	506	ug/L	500	ug/L	101	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Calcium	493000	ug/L	500000	ug/L	98.6	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Chromium	491	ug/L	500	ug/L	98.1	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Cobalt	455	ug/L	500	ug/L	91	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Copper	568	ug/L	500	ug/L	114	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Iron	189000	ug/L	200000	ug/L	94.7	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Magnesium	498000	ug/L	500000	ug/L	99.6	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Nickel	456	ug/L	500	ug/L	91.2	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Potassium	5430	ug/L	5000	ug/L	109	80.0 – 120.0	12–JAN–10 13:28	011210–1
	Selenium	2580	ug/L	2500	ug/L	103	80.0 – 120.0	12–JAN–10 13:28	011210–1

METALS
-4-
Interference Check Sample

SDG No: 10-1103-1

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Silver	278	ug/L	250	ug/L	111	80.0 – 120.0	12-JAN-10 13:28	011210-1
	Sodium	5500	ug/L	5000	ug/L	110	80.0 – 120.0	12-JAN-10 13:28	011210-1
	Vanadium	516	ug/L	500	ug/L	103	80.0 – 120.0	12-JAN-10 13:28	011210-1
	Zinc	509	ug/L	500	ug/L	102	80.0 – 120.0	12-JAN-10 13:28	011210-1

METALS
–4–
Interference Check Sample

SDG No: 10–1103–1

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									
	Antimony	0.065	ug/L					03–JAN–10 19:02	100103–2
	Beryllium	0.077	ug/L					03–JAN–10 19:02	100103–2
	Cadmium	0.395	ug/L					03–JAN–10 19:02	100103–2
	Lead	0.194	ug/L					03–JAN–10 19:02	100103–2
	Manganese	6.26	ug/L					03–JAN–10 19:02	100103–2
ICSAB01									
	Antimony	21.2	ug/L	20.1	ug/L	105	80.0 – 120.0	03–JAN–10 19:08	100103–2
	Beryllium	19.2	ug/L	20	ug/L	96	80.0 – 120.0	03–JAN–10 19:08	100103–2
	Cadmium	19.7	ug/L	20.4	ug/L	96.7	80.0 – 120.0	03–JAN–10 19:08	100103–2
	Lead	21.2	ug/L	20.5	ug/L	103	80.0 – 120.0	03–JAN–10 19:08	100103–2
	Manganese	27.4	ug/L	25.8	ug/L	106	80.0 – 120.0	03–JAN–10 19:08	100103–2

METALS
-4-
Interference Check Sample

SDG No: 10-1103-1

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									
	Thallium	0.001	ug/L					04-JAN-10 03:27	100103-4
ICSAB01									
	Thallium	19.9	ug/L	20	ug/L	99.4	80.0 - 120.0	04-JAN-10 03:32	100103-4

METALS
–4–
Interference Check Sample

SDG No: 10–1103–1

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									
	Uranium	–0.017	ug/L					04–JAN–10 16:33	100104–5
ICSAB01									
	Uranium	23.9	ug/L	20	ug/L	119	80.0 – 120.0	04–JAN–10 16:34	100104–5

METALS
–5a–
Matrix Spike Summary

SDG NO. 10–1103–1 **Client ID** RE12–10–7610S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 243632001 **Spike ID:** 1202006005

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75–125	5200		68	U	5000	104		P
Arsenic	ug/L	75–125	506		5	U	500	101		P
Barium	ug/L	75–125	516		1	U	500	103		P
Calcium	ug/L	75–125	5180		50	U	5000	103		P
Chromium	ug/L	75–125	504		1	U	500	101		P
Cobalt	ug/L	75–125	498		1	U	500	99.6		P
Copper	ug/L	75–125	515		3	U	500	103		P
Iron	ug/L	75–125	5140		30	U	5000	103		P
Magnesium	ug/L	75–125	5270		85	U	5000	105		P
Nickel	ug/L	75–125	505		1.5	U	500	101		P
Potassium	ug/L	75–125	5090		108	J	5000	99.6		P
Selenium	ug/L	75–125	507		5	U	500	101		P
Silver	ug/L	75–125	506		1	U	500	101		P
Sodium	ug/L	75–125	4930		207	J	5000	94.4		P
Vanadium	ug/L	75–125	515		1	U	500	103		P
Zinc	ug/L	75–125	491		3.3	U	500	98		P

METALS
–5a–
Matrix Spike Summary

SDG NO. 10–1103–1 **Client ID** RE16–10–372S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 243608001 **Spike ID:** 1202006056

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75–125	195		1	U	200	97.4		MS
Beryllium	ug/L	75–125	51.6		0.1	U	50	103		MS
Cadmium	ug/L	75–125	10.7		0.11	U	10	107		MS
Lead	ug/L	75–125	43		0.5	U	40	107		MS
Manganese	ug/L	75–125	52.3		2.56	J	50	99.5		MS
Thallium	ug/L	75–125	81.7		0.3	U	100	81.7		MS
Uranium	ug/L	75–125	55.4		0.05	U	50	111		MS

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–1103–1 **Client ID** RE12–10–7860S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 243627001 **Spike ID:** 1202006478

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75–125	2.04		0.066	U	2	101		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1103–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE12–10–7610D

Sample ID: 243632001 **Duplicate ID:** 1202006004 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L		68	U	68	U			P
Arsenic	ug/L		5	U	5	U			P
Barium	ug/L		1	U	1	U			P
Calcium	ug/L		50	U	50	U			P
Chromium	ug/L		1	U	1	U			P
Cobalt	ug/L		1	U	1	U			P
Copper	ug/L		3	U	3	U			P
Iron	ug/L		30	U	30	U			P
Magnesium	ug/L		85	U	85	U			P
Nickel	ug/L		1.5	U	1.5	U			P
Potassium	ug/L	+/–150	108	J	99.8	J	7.69		P
Selenium	ug/L		5	U	5	U			P
Silver	ug/L		1	U	1	U			P
Sodium	ug/L	+/–300	207	J	146	J	34.2		P
Vanadium	ug/L		1	U	1	U			P
Zinc	ug/L		3.3	U	3.3	U			P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1103–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE16–10–372D

Sample ID: 243608001 **Duplicate ID:** 1202006055 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		1	U	1	U			MS
Beryllium	ug/L		0.1	U	0.1	U			MS
Cadmium	ug/L		0.11	U	0.11	U			MS
Lead	ug/L		0.5	U	0.5	U			MS
Manganese	ug/L	+/–5	2.56	J	3.17	J	21.1		MS
Thallium	ug/L		0.3	U	0.3	U			MS
Uranium	ug/L		0.05	U	0.05	U			MS

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-1103-1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE12-10-7860D

Sample ID: 243627001 **Duplicate ID:** 1202006476 **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. 10–1103–1

Contract: LANL01004

Aqueous LCS Source:OS2I **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202006003								
	Aluminum	ug/L	5000	5140		103	80–120	P
	Arsenic	ug/L	500	505		101	80–120	P
	Barium	ug/L	500	515		103	80–120	P
	Calcium	ug/L	5000	5130		103	80–120	P
	Chromium	ug/L	500	501		100	80–120	P
	Cobalt	ug/L	500	495		98.9	80–120	P
	Copper	ug/L	500	512		102	80–120	P
	Iron	ug/L	5000	5220		104	80–120	P
	Magnesium	ug/L	5000	5260		105	80–120	P
	Nickel	ug/L	500	501		100	80–120	P
	Potassium	ug/L	5000	4990		99.8	80–120	P
	Selenium	ug/L	500	507		101	80–120	P
	Silver	ug/L	500	506		101	80–120	P
	Sodium	ug/L	5000	5160		103	80–120	P
	Vanadium	ug/L	500	512		102	80–120	P
	Zinc	ug/L	500	491		98.2	80–120	P

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–1103–1

Contract: LANL01004

Aqueous LCS Source: O2si **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202006054								
	Antimony	ug/L	50	50		99.9	80–120	MS
	Beryllium	ug/L	50	51.9		104	80–120	MS
	Cadmium	ug/L	50	49.3		98.6	80–120	MS
	Lead	ug/L	50	51.9		104	80–120	MS
	Manganese	ug/L	50	49.7		99.4	80–120	MS
	Thallium	ug/L	50	43.7		87.4	80–120	MS
	Uranium	ug/L	50	54.4		109	80–120	MS

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–1103–1

Contract: LANL01004

Aqueous LCS Source:GEL **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202006479								
	Mercury	ug/L	2	2.03		101	80–120	AV

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-1103-1 **Client ID** RE12-10-7610L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 243632001 **Serial Dilution ID:** 1202006006

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	68	U	340	U				P
Arsenic	5	U	25	U				P
Barium	1	U	5	U				P
Calcium	50	U	250	U				P
Chromium	1	U	5	U				P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	30	U	150	U				P
Magnesium	85	U	425	U				P
Nickel	1.5	U	7.5	U				P
Potassium	108	J	250	U	100			P
Selenium	5	U	25	U				P
Silver	1	U	5	U				P
Sodium	207	J	500	U	100			P
Vanadium	1	U	5	U				P
Zinc	3.3	U	16.5	U				P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-1103-1 **Client ID** RE16-10-372L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 243608001 **Serial Dilution ID:** 1202006057

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	1	U	5	U				MS
Beryllium	.1	U	.5	U				MS
Cadmium	.11	U	.55	U				MS
Lead	.5	U	2.5	U				MS
Manganese	2.56	J	5	U	100			MS
Thallium	.3	U	3.25	J				MS
Uranium	.05	U	.25	U				MS

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 10–1103–1 **Client ID** RE12–10–7860L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 243627001 **Serial Dilution ID:** 1202006477

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: 10–1103–1 **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	937468						
1202006002	MB for batch 937468	MB	W	31–DEC–09	50mL	50mL	
1202006003	LCS for batch 937468	LCS	W	31–DEC–09	50mL	50mL	
1202006005	RE12–10–7610S	MS	W	31–DEC–09	50mL	50mL	
1202006004	RE12–10–7610D	DUP	W	31–DEC–09	50mL	50mL	
243629001	RE12–10–7677	SAMPLE	W	31–DEC–09	50mL	50mL	

METALS
–13–
SAMPLE PREPARATION SUMMARY

SDG No: 10–1103–1 **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	937495						
1202006053	MB for batch 937495	MB	W	31–DEC–09	50mL	50mL	
1202006054	LCS for batch 937495	LCS	W	31–DEC–09	50mL	50mL	
1202006056	RE16–10–372S	MS	W	31–DEC–09	50mL	50mL	
1202006055	RE16–10–372D	DUP	W	31–DEC–09	50mL	50mL	
243629001	RE12–10–7677	SAMPLE	W	31–DEC–09	50mL	50mL	

METALS
–13–
SAMPLE PREPARATION SUMMARY

SDG No: 10–1103–1 **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 937646							
1202006475	MB for batch 937646	MB	W	07–JAN–10	20mL	20mL	
1202006479	LCS for batch 937646	LCS	W	07–JAN–10	20mL	20mL	
1202006478	RE12–10–7860S	MS	W	07–JAN–10	20mL	20mL	
1202006476	RE12–10–7860D	DUP	W	07–JAN–10	20mL	20mL	
243629001	RE12–10–7677	SAMPLE	W	07–JAN–10	20mL	20mL	

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 03–JAN–10 **End Date:** 04–JAN–10

Client Sdg: 10–1103–1
Method MS
Data File: 100103–2

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	18:25		X			X	X						X		X										
S10	1	18:32		X			X	X						X		X										
S100	1	18:38		X			X	X						X		X										
ICV01	1	18:44		X			X	X						X		X										
ICB01	1	18:50		X			X	X						X		X										
CRDL01	1	18:56		X			X	X						X		X										
ICSA01	1	19:02		X			X	X						X		X										
ICSAB01	1	19:08		X			X	X						X		X										
CCV01	1	19:14		X			X	X						X		X										
CCB01	1	19:20		X			X	X						X		X										
LR01	1	19:27		X			X	X						X		X										
CCV02	1	19:33		X			X	X						X		X										
CCB02	1	19:39		X			X	X						X		X										
ZZZZZZ	1	19:45																								
ZZZZZZ	1	19:51																								
ZZZZZZ	1	19:57																								
ZZZZZZ	1	20:03																								
ZZZZZZ	1	20:09																								
ZZZZZZ	5	20:16																								
ZZZZZZ	1	20:22																								
CCV03	1	20:28		X			X	X						X		X										
CCB03	1	20:34		X			X	X						X		X										
1202006053	1	20:40		X			X	X						X		X										
1202006054	1	20:46		X			X	X						X		X										
ZZZZZZ	1	20:53																								
ZZZZZZ	1	20:59																								
1202006055	1	21:05		X			X	X						X		X										
1202006056	1	21:11		X			X	X						X		X										
1202006057	5	21:17		X			X	X						X		X										
CCV04	1	21:23		X			X	X						X		X										
CCB04	1	21:30		X			X	X						X		X										
ZZZZZZ	1	21:36																								
ZZZZZZ	1	21:42																								
243629001	1	21:48		X			X	X						X		X										
ZZZZZZ	1	21:54																								
ZZZZZZ	1	22:01																								
CCV05	1	22:07		X			X	X						X		X										
CCB05	1	22:13		X			X	X						X		X										

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 03-JAN-10 **End Date:** 04-JAN-10

Client Sdg: 10-1103-1
Method MS
Data File: 100103-4

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	03:00																					X			
S10	1	03:05																					X			
S100	1	03:09																					X			
ICV01	1	03:14																					X			
ICB01	1	03:18																					X			
CRDL01	1	03:23																					X			
ICSA01	1	03:27																					X			
ICSAB01	1	03:32																					X			
CCV01	1	03:36																					X			
CCB01	1	03:41																					X			
ZZZZZZ	1	03:45																								
ZZZZZZ	1	03:50																								
ZZZZZZ	1	03:54																								
ZZZZZZ	1	03:59																								
ZZZZZZ	1	04:03																								
ZZZZZZ	5	04:08																								
ZZZZZZ	1	04:12																								
CCV02	1	04:17																					X			
CCB02	1	04:21																					X			
1202006053	1	04:26																					X			
1202006054	1	04:30																					X			
ZZZZZZ	1	04:35																								
ZZZZZZ	1	04:40																								
1202006055	1	04:44																					X			
1202006056	1	04:49																					X			
1202006057	5	04:53																					X			
CCV03	1	04:58																					X			
CCB03	1	05:02																					X			
ZZZZZZ	1	05:07																								
ZZZZZZ	1	05:12																								
243629001	1	05:16																					X			
ZZZZZZ	1	05:21																								
ZZZZZZ	1	05:25																								
CCV04	1	05:30																					X			
CCB04	1	05:34																					X			

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 04–JAN–10 **End Date:** 04–JAN–10

Client Sdg: 10–1103–1
Method MS
Data File: 100104–5

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	16:23																						X		
S10	1	16:24																						X		
S100	1	16:26																						X		
ICV01	1	16:28																						X		
ICB01	1	16:29																						X		
CRDL01	1	16:31																						X		
ICSA01	1	16:33																						X		
ICSAB01	1	16:34																						X		
CCV01	1	16:36																						X		
CCB01	1	16:38																						X		
1202006053	1	16:39																						X		
1202006054	1	16:41																						X		
ZZZZZZ	1	16:43																								
ZZZZZZ	1	16:45																								
1202006055	1	16:46																						X		
1202006056	1	16:48																						X		
1202006057	5	16:50																						X		
CCV02	1	16:51																						X		
CCB02	1	16:53																						X		
ZZZZZZ	1	16:55																								
ZZZZZZ	1	16:57																								
243629001	1	16:58																						X		
ZZZZZZ	1	17:00																								
ZZZZZZ	1	17:02																								
CCV03	1	17:04																						X		
CCB03	1	17:05																						X		

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 12–JAN–10 **End Date:** 12–JAN–10

Client Sdg: 10–1103–1
Method P
Data File: 011210–1

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	12:29	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S0.1	1	12:36			X	X				X	X	X						X	X	X	X				X	X
S0.5	1	12:42	X		X	X			X	X	X	X			X			X	X	X	X				X	X
SCAL	1	12:49	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S10	1	12:56	X						X				X		X							X				
ICV01	1	13:01	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICB01	1	13:08	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
PQL01	1	13:15	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSA01	1	13:22	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSAB01	1	13:28	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR01	1	13:34	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR02	1	13:40	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV01	1	13:47	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB01	1	13:54	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR03	1	14:12	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV02	1	14:19	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB02	1	14:26	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202006002	1	14:33	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202006003	1	14:40	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	14:47																								
ZZZZZZ	1	14:54																								
ZZZZZZ	1	15:00																								
ZZZZZZ	1	15:07																								
CCV03	1	15:14	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB03	1	15:21	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	15:28																								
ZZZZZZ	1	15:35																								
ZZZZZZ	1	15:42																								
ZZZZZZ	1	15:49																								
ZZZZZZ	1	15:56																								
ZZZZZZ	5	16:02																								
ZZZZZZ	1	16:09																								
ZZZZZZ	1	16:16																								
ZZZZZZ	1	16:23																								
CCV04	1	16:37	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB04	1	16:44	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
243629001	1	16:51	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	16:58																								
ZZZZZZ	1	17:05																								
1202006004	1	17:12	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																								
1202006005	1	17:19	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202006006	5	17:26	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV05	1	17:33	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB05	1	17:40	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: HG3
Start Date: 08-JAN-10 **End Date:** 08-JAN-10

Client Sdg: 10-1103-1
Method AV
Data File: 010810W1-6

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	09:06															X									
S0.2	1	09:08															X									
S0.5	1	09:10															X									
S2.0	1	09:12															X									
S5.0	1	09:14															X									
S10.0	1	09:16															X									
ICV01	1	09:18															X									
ICB01	1	09:20															X									
CRDL01	1	09:22															X									
CCV01	1	09:23															X									
CCB01	1	09:25															X									
ZZZZZZ	1	09:28																								
ZZZZZZ	1	09:30																								
ZZZZZZ	1	09:32																								
ZZZZZZ	1	09:34																								
ZZZZZZ	1	09:36																								
ZZZZZZ	5	09:38																								
ZZZZZZ	1	09:40																								
ZZZZZZ	1	09:42																								
ZZZZZZ	1	09:43																								
ZZZZZZ	1	09:45																								
CCV02	1	09:47															X									
CCB02	1	09:49															X									
ZZZZZZ	1	09:51																								
ZZZZZZ	5	09:53																								
ZZZZZZ	1	09:55																								
1202006475	1	09:57															X									
1202006479	1	09:59															X									
ZZZZZZ	1	10:01																								
1202006476	1	10:03															X									
1202006478	1	10:05															X									
1202006477	5	10:07															X									
243629001	1	10:08															X									
CCV03	1	10:10															X									
CCB03	1	10:12															X									

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1103-1

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. 10–1103–1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
MERCURY				
LIQUID	Mercury		0.066	.2

METALS
–10–
Instrument Detection Limits

SDG NO. 10–1103–1

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
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1103-1
Effective Dates: 01-NOV-09

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
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1103-1
Effective Dates: 01-NOV-09

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
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1103-1
Effective Dates: 01-NOV-09

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: 10-1103-1
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
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1103-1
Effective Dates: 01-NOV-09

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
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1103-1
Effective Dates: 01-NOV-09

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. 10–1103–1

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. 10-1103-1

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

Raw Data

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Analysis Begun

Start Time: 1/12/2010 12:29:17 **Plasma On Time: 1/11/2010 06:15:31**
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\011210.sif
Batch ID:
Results Data Set: 011210
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 1/12/2010 12:29:19**
Analyst: **Data Type: Original**
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 Radial	5152.3	5152.3	101	%	12:31:11
1	Y RADIAL	5561.8	5561.8	101.0	%	12:31:11
1	Al 396.153Radial†	-17.4	-17.3	[0.00]	ug/L	12:31:11
1	Ca 317.933Radial†	15.9	15.8	[0.00]	ug/L	12:31:31
1	Fe 238.204 Radial†	13.1	13.0	[0.00]	ug/L	12:31:31
1	K 766.490 Radial†	2487.0	2471.8	[0.00]	ug/L	12:31:11
1	Mg 279.077 IEC†	3.5	3.5	[0.00]	ug/L	12:31:31
1	Na 589.592 Radial†	-1340.5	-1332.4	[0.00]	ug/L	12:31:11
1	Sr 421.552†	43.2	42.9	[0.00]	ug/L	12:31:11
1	Sc 361.383	853292.3	853292.3	99.443	%	12:32:28
1	Y 371.029	722139.2	722139.2	99.241	%	12:32:28
1	Ag 328.068†	372.1	374.2	[0.00]	ug/L	12:32:28
1	As 188.979†	-22.2	-22.4	[0.00]	ug/L	12:32:48
1	B 249.677†	-606.5	-609.9	[0.00]	ug/L	12:32:48
1	Ba 233.527†	-17.0	-17.1	[0.00]	ug/L	12:32:48
1	Be 313.107†	-4487.2	-4512.3	[0.00]	ug/L	12:32:28
1	Cd 226.502†	-210.7	-211.8	[0.00]	ug/L	12:32:48
1	Co 228.616†	-79.2	-79.6	[0.00]	ug/L	12:32:48
1	Cr 267.716†	79.2	79.7	[0.00]	ug/L	12:32:48
1	Cu 324.752†	6369.9	6405.6	[0.00]	ug/L	12:32:28
1	Mn 257.610†	444.3	446.8	[0.00]	ug/L	12:32:48
1	Mo 202.031†	23.5	23.7	[0.00]	ug/L	12:32:48
1	Ni 231.604†	61.4	61.7	[0.00]	ug/L	12:32:48
1	P 214.914†	223.8	225.0	[0.00]	ug/L	12:32:48
1	Pb 220.353†	-75.1	-75.6	[0.00]	ug/L	12:32:48
1	S 181.975 Axial†	44.9	45.2	[0.00]	ug/L	12:32:48
1	Sb 206.836†	32.0	32.2	[0.00]	ug/L	12:32:48
1	Se 196.026†	-41.9	-42.1	[0.00]	ug/L	12:32:48
1	Si 251.611†	467.0	469.6	[0.00]	ug/L	12:32:48
1	Sn 189.927†	5.0	5.0	[0.00]	ug/L	12:32:48
1	Ti 334.940†	-1279.5	-1286.7	[0.00]	ug/L	12:32:28
1	Tl 190.801†	-34.2	-34.4	[0.00]	ug/L	12:32:48
1	U 409.014†	-1915.4	-1926.1	[0.00]	ug/L	12:32:28
1	V 292.402†	-1335.8	-1343.3	[0.00]	ug/L	12:32:28
1	Zn 213.857†	614.5	618.0	[0.00]	ug/L	12:32:48
1	SiO2†	454.9	457.5	[0.00]	ug/L	12:33:44
2	Sc Radial	5085.0	5085.0	99.3	%	12:31:36
2	Y RADIAL	5464.8	5464.8	99.26	%	12:31:36
2	Al 396.153Radial†	-1.6	-1.6	[0.00]	ug/L	12:31:36
2	Ca 317.933Radial†	19.1	19.2	[0.00]	ug/L	12:31:56
2	Fe 238.204 Radial†	11.7	11.8	[0.00]	ug/L	12:31:56
2	K 766.490 Radial†	2621.8	2640.3	[0.00]	ug/L	12:31:36
2	Mg 279.077 IEC†	1.2	1.2	[0.00]	ug/L	12:31:56
2	Na 589.592 Radial†	-1287.3	-1296.4	[0.00]	ug/L	12:31:36
2	Sr 421.552†	-4.5	-4.5	[0.00]	ug/L	12:31:36
2	Sc 361.383	864012.3	864012.3	100.69	%	12:32:53
2	Y 371.029	733392.9	733392.9	100.79	%	12:32:53

2	Ag 328.068†	342.6	340.2	[0.00] ug/L	12:32:53
2	As 188.979†	-24.3	-24.1	[0.00] ug/L	12:33:13
2	B 249.677†	-619.9	-615.7	[0.00] ug/L	12:33:13
2	Ba 233.527†	-8.0	-8.0	[0.00] ug/L	12:33:13
2	Be 313.107†	-4468.0	-4437.2	[0.00] ug/L	12:32:53
2	Cd 226.502†	-192.1	-190.8	[0.00] ug/L	12:33:13
2	Co 228.616†	-76.4	-75.8	[0.00] ug/L	12:33:13
2	Cr 267.716†	91.9	91.3	[0.00] ug/L	12:33:13
2	Cu 324.752†	6472.0	6427.5	[0.00] ug/L	12:32:53
2	Mn 257.610†	426.6	423.7	[0.00] ug/L	12:33:13
2	Mo 202.031†	19.1	18.9	[0.00] ug/L	12:33:13
2	Ni 231.604†	65.0	64.5	[0.00] ug/L	12:33:13
2	P 214.914†	211.9	210.4	[0.00] ug/L	12:33:13
2	Pb 220.353†	-49.4	-49.0	[0.00] ug/L	12:33:13
2	S 181.975 Axial†	47.5	47.1	[0.00] ug/L	12:33:13
2	Sb 206.836†	33.9	33.6	[0.00] ug/L	12:33:13
2	Se 196.026†	-28.5	-28.3	[0.00] ug/L	12:33:13
2	Si 251.611†	462.9	459.7	[0.00] ug/L	12:33:13
2	Sn 189.927†	-2.3	-2.3	[0.00] ug/L	12:33:13
2	Ti 334.940†	-1341.3	-1332.0	[0.00] ug/L	12:32:53
2	Tl 190.801†	-36.4	-36.2	[0.00] ug/L	12:33:13
2	U 409.014†	-1655.6	-1644.2	[0.00] ug/L	12:32:53
2	V 292.402†	-1351.5	-1342.2	[0.00] ug/L	12:32:53
2	Zn 213.857†	635.0	630.6	[0.00] ug/L	12:33:13
2	SiO2†	442.7	439.7	[0.00] ug/L	12:33:49
3	Sc Radial	5125.5	5125.5	100 %	12:32:01
3	Y RADIAL	5489.7	5489.7	99.71 %	12:32:01
3	Al 396.153Radial†	0.4	0.4	[0.00] ug/L	12:32:01
3	Ca 317.933Radial†	22.6	22.6	[0.00] ug/L	12:32:21
3	Fe 238.204 Radial†	9.9	9.9	[0.00] ug/L	12:32:21
3	K 766.490 Radial†	2424.7	2422.5	[0.00] ug/L	12:32:01
3	Mg 279.077 IEC†	4.5	4.5	[0.00] ug/L	12:32:21
3	Na 589.592 Radial†	-1299.1	-1297.9	[0.00] ug/L	12:32:01
3	Sr 421.552†	-9.2	-9.2	[0.00] ug/L	12:32:01
3	Sc 361.383	856910.1	856910.1	99.865 %	12:33:19
3	Y 371.029	727459.0	727459.0	99.972 %	12:33:19
3	Ag 328.068†	356.3	356.8	[0.00] ug/L	12:33:19
3	As 188.979†	-25.3	-25.4	[0.00] ug/L	12:33:39
3	B 249.677†	-618.9	-619.8	[0.00] ug/L	12:33:39
3	Ba 233.527†	-0.6	-0.6	[0.00] ug/L	12:33:39
3	Be 313.107†	-4468.4	-4474.4	[0.00] ug/L	12:33:19
3	Cd 226.502†	-202.0	-202.3	[0.00] ug/L	12:33:39
3	Co 228.616†	-76.2	-76.3	[0.00] ug/L	12:33:39
3	Cr 267.716†	65.8	65.9	[0.00] ug/L	12:33:39
3	Cu 324.752†	6365.6	6374.2	[0.00] ug/L	12:33:19
3	Mn 257.610†	418.4	418.9	[0.00] ug/L	12:33:39
3	Mo 202.031†	22.3	22.3	[0.00] ug/L	12:33:39
3	Ni 231.604†	74.7	74.8	[0.00] ug/L	12:33:39
3	P 214.914†	225.2	225.5	[0.00] ug/L	12:33:39
3	Pb 220.353†	-61.9	-62.0	[0.00] ug/L	12:33:39
3	S 181.975 Axial†	39.2	39.3	[0.00] ug/L	12:33:39
3	Sb 206.836†	34.4	34.5	[0.00] ug/L	12:33:39
3	Se 196.026†	-25.7	-25.7	[0.00] ug/L	12:33:39
3	Si 251.611†	452.0	452.6	[0.00] ug/L	12:33:39
3	Sn 189.927†	2.3	2.3	[0.00] ug/L	12:33:39
3	Ti 334.940†	-1381.8	-1383.7	[0.00] ug/L	12:33:19
3	Tl 190.801†	-31.6	-31.7	[0.00] ug/L	12:33:39
3	U 409.014†	-2018.6	-2021.4	[0.00] ug/L	12:33:19
3	V 292.402†	-1391.8	-1393.7	[0.00] ug/L	12:33:19
3	Zn 213.857†	624.5	625.4	[0.00] ug/L	12:33:39
3	SiO2†	479.3	479.9	[0.00] ug/L	12:33:54

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	858071.5	5453.55	0.64%	100.00	%
Sc Radial	5120.9	33.88	0.66%	100	%
Y 371.029	727663.7	5629.65	0.77%	100.00	%
Y RADIAL	5505.4	50.37	0.91%	100.0	%
Ag 328.068†	357.1	17.00	4.76%	[0.00]	ug/L

Al 396.153Radial†	-6.2	9.68	156.59%	[0.00]	ug/L
As 188.979†	-23.9	1.50	6.28%	[0.00]	ug/L
B 249.677†	-615.1	4.97	0.81%	[0.00]	ug/L
Ba 233.527†	-8.6	8.28	96.48%	[0.00]	ug/L
Be 313.107†	-4474.7	37.53	0.84%	[0.00]	ug/L
Ca 317.933Radial†	19.2	3.41	17.76%	[0.00]	ug/L
Cd 226.502†	-201.6	10.55	5.23%	[0.00]	ug/L
Co 228.616†	-77.2	2.06	2.67%	[0.00]	ug/L
Cr 267.716†	79.0	12.72	16.11%	[0.00]	ug/L
Cu 324.752†	6402.4	26.77	0.42%	[0.00]	ug/L
Fe 238.204 Radial†	11.6	1.59	13.77%	[0.00]	ug/L
K 766.490 Radial†	2511.5	114.19	4.55%	[0.00]	ug/L
Mg 279.077 IEC†	3.0	1.70	55.71%	[0.00]	ug/L
Mn 257.610†	429.8	14.89	3.47%	[0.00]	ug/L
Mo 202.031†	21.6	2.44	11.30%	[0.00]	ug/L
Na 589.592 Radial†	-1308.9	20.34	1.55%	[0.00]	ug/L
Ni 231.604†	67.0	6.91	10.31%	[0.00]	ug/L
P 214.914†	220.3	8.56	3.89%	[0.00]	ug/L
Pb 220.353†	-62.2	13.27	21.33%	[0.00]	ug/L
S 181.975 Axial†	43.9	4.08	9.30%	[0.00]	ug/L
Sb 206.836†	33.4	1.15	3.43%	[0.00]	ug/L
Se 196.026†	-32.0	8.83	27.55%	[0.00]	ug/L
Si 251.611†	460.7	8.52	1.85%	[0.00]	ug/L
Sn 189.927†	1.7	3.70	222.98%	[0.00]	ug/L
Sr 421.552†	9.7	28.80	295.48%	[0.00]	ug/L
Ti 334.940†	-1334.1	48.54	3.64%	[0.00]	ug/L
Tl 190.801†	-34.1	2.28	6.69%	[0.00]	ug/L
U 409.014†	-1863.9	196.15	10.52%	[0.00]	ug/L
V 292.402†	-1359.7	29.45	2.17%	[0.00]	ug/L
Zn 213.857†	624.7	6.34	1.01%	[0.00]	ug/L
SiO2†	459.0	20.15	4.39%	[0.00]	ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 1/12/2010 12:36:04
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	4965.9	4965.9	97.0	%	12:38:02
1	Y RADIAL	5335.2	5335.2	96.91	%	12:38:02
1	K 766.490 Radial†	7941.2	5677.6	[1000]	ug/L	12:37:57
1	Sr 421.552†	14775.2	15226.8	[100]	ug/L	12:38:02
1	Sc 361.383	830675.3	830675.3	96.807	%	12:38:29
1	Y 371.029	701666.3	701666.3	96.427	%	12:38:29
1	Ag 328.068†	21871.2	22235.5	[100]	ug/L	12:38:29
1	As 188.979†	203.3	233.9	[100]	ug/L	12:38:49
1	B 249.677†	3660.8	4396.6	[100]	ug/L	12:38:29
1	Ba 233.527†	12920.1	13354.8	[100]	ug/L	12:38:29
1	Be 313.107†	257874.4	270853.9	[100]	ug/L	12:38:29
1	Cd 226.502†	8881.5	9376.0	[100]	ug/L	12:38:29
1	Co 228.616†	4770.5	5005.1	[100]	ug/L	12:38:49
1	Cr 267.716†	9051.6	9271.1	[100]	ug/L	12:38:29
1	Cu 324.752†	39056.8	33942.5	[100]	ug/L	12:38:29
1	Mn 257.610†	92061.8	94668.3	[100]	ug/L	12:38:29
1	Mo 202.031†	1430.8	1456.4	[100]	ug/L	12:38:49
1	Ni 231.604†	4043.9	4110.2	[100]	ug/L	12:38:49
1	P 214.914†	1031.3	845.0	[500]	ug/L	12:38:49
1	Pb 220.353†	748.0	834.8	[100]	ug/L	12:38:49
1	S 181.975 Axial†	189.8	152.2	[200]	ug/L	12:38:49
1	Sb 206.836†	312.2	289.1	[100]	ug/L	12:38:49
1	Se 196.026†	137.0	173.6	[100]	ug/L	12:38:49
1	Si 251.611†	15797.3	15857.7	[500]	ug/L	12:38:29
1	Sn 189.927†	561.7	578.6	[100]	ug/L	12:38:49
1	Ti 334.940†	59873.1	63181.9	[100]	ug/L	12:38:29
1	Tl 190.801†	292.2	335.9	[100]	ug/L	12:38:49
1	U 409.014†	1586.9	3503.1	[100]	ug/L	12:38:29
1	V 292.402†	13179.8	14974.2	[100]	ug/L	12:38:29
1	Zn 213.857†	11228.2	10973.9	[100]	ug/L	12:38:29
1	SiO2†	16145.6	16219.0	[1069.5]	ug/L	12:39:45
2	Sc Radial	5017.1	5017.1	98.0	%	12:38:12
2	Y RADIAL	5393.8	5393.8	97.97	%	12:38:12
2	K 766.490 Radial†	7968.7	5621.9	[1000]	ug/L	12:38:07
2	Sr 421.552†	14907.3	15205.9	[100]	ug/L	12:38:12
2	Sc 361.383	847146.2	847146.2	98.727	%	12:38:54
2	Y 371.029	713989.1	713989.1	98.121	%	12:38:54
2	Ag 328.068†	22274.2	22204.4	[100]	ug/L	12:38:54
2	As 188.979†	207.4	234.0	[100]	ug/L	12:39:14
2	B 249.677†	3703.9	4366.8	[100]	ug/L	12:38:54
2	Ba 233.527†	13155.6	13333.9	[100]	ug/L	12:38:54
2	Be 313.107†	262797.3	270661.2	[100]	ug/L	12:38:54
2	Cd 226.502†	9031.6	9349.8	[100]	ug/L	12:38:54
2	Co 228.616†	4791.3	4930.3	[100]	ug/L	12:39:14
2	Cr 267.716†	9227.6	9267.6	[100]	ug/L	12:38:54
2	Cu 324.752†	40059.8	34174.0	[100]	ug/L	12:38:54
2	Mn 257.610†	94098.4	94882.2	[100]	ug/L	12:38:54
2	Mo 202.031†	1441.8	1438.8	[100]	ug/L	12:39:14
2	Ni 231.604†	4052.0	4037.2	[100]	ug/L	12:39:14
2	P 214.914†	1038.8	831.9	[500]	ug/L	12:39:14
2	Pb 220.353†	781.5	853.8	[100]	ug/L	12:39:14
2	S 181.975 Axial†	183.5	142.0	[200]	ug/L	12:39:14
2	Sb 206.836†	325.7	296.5	[100]	ug/L	12:39:14
2	Se 196.026†	121.5	155.1	[100]	ug/L	12:39:14
2	Si 251.611†	16155.0	15902.7	[500]	ug/L	12:38:54
2	Sn 189.927†	583.6	589.5	[100]	ug/L	12:39:14
2	Ti 334.940†	61190.2	63313.5	[100]	ug/L	12:38:54
2	Tl 190.801†	288.7	326.5	[100]	ug/L	12:39:14
2	U 409.014†	1747.5	3634.0	[100]	ug/L	12:38:54

2	V 292.402†	13335.0	14866.7	[100]	ug/L	12:38:54
2	Zn 213.857†	11395.6	10917.9	[100]	ug/L	12:38:54
2	SiO2†	16023.8	15771.4	[1069.5]	ug/L	12:39:50
3	Sc Radial	5038.6	5038.6	98.4	%	12:38:22
3	Y RADIAL	5396.6	5396.6	98.02	%	12:38:22
3	K 766.490 Radial†	7896.9	5514.4	[1000]	ug/L	12:38:17
3	Sr 421.552†	15115.8	15353.1	[100]	ug/L	12:38:22
3	Sc 361.383	839954.8	839954.8	97.889	%	12:39:20
3	Y 371.029	708260.3	708260.3	97.333	%	12:39:20
3	Ag 328.068†	22077.1	22196.2	[100]	ug/L	12:39:20
3	As 188.979†	210.6	239.1	[100]	ug/L	12:39:40
3	B 249.677†	3716.3	4411.6	[100]	ug/L	12:39:20
3	Ba 233.527†	13010.8	13300.0	[100]	ug/L	12:39:20
3	Be 313.107†	261053.3	271158.6	[100]	ug/L	12:39:20
3	Cd 226.502†	8913.5	9307.4	[100]	ug/L	12:39:20
3	Co 228.616†	4825.4	5006.7	[100]	ug/L	12:39:40
3	Cr 267.716†	9169.0	9287.8	[100]	ug/L	12:39:20
3	Cu 324.752†	39580.7	34032.0	[100]	ug/L	12:39:20
3	Mn 257.610†	93356.1	94939.9	[100]	ug/L	12:39:20
3	Mo 202.031†	1443.1	1452.6	[100]	ug/L	12:39:40
3	Ni 231.604†	4074.4	4095.2	[100]	ug/L	12:39:40
3	P 214.914†	1041.6	843.7	[500]	ug/L	12:39:40
3	Pb 220.353†	761.2	839.8	[100]	ug/L	12:39:40
3	S 181.975 Axial†	185.0	145.1	[200]	ug/L	12:39:40
3	Sb 206.836†	315.3	288.6	[100]	ug/L	12:39:40
3	Se 196.026†	132.1	167.0	[100]	ug/L	12:39:40
3	Si 251.611†	15986.8	15870.9	[500]	ug/L	12:39:20
3	Sn 189.927†	572.9	583.6	[100]	ug/L	12:39:40
3	Ti 334.940†	60890.5	63538.0	[100]	ug/L	12:39:20
3	Tl 190.801†	310.5	351.3	[100]	ug/L	12:39:40
3	U 409.014†	1639.2	3538.5	[100]	ug/L	12:39:20
3	V 292.402†	13215.0	14859.8	[100]	ug/L	12:39:20
3	Zn 213.857†	11325.5	10945.1	[100]	ug/L	12:39:20
3	SiO2†	16169.6	16059.3	[1069.5]	ug/L	12:39:55

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	839258.8	8257.45	0.98%	97.808	%
Sc Radial	5007.2	37.35	0.75%	97.8	%
Y 371.029	707971.9	6166.49	0.87%	97.294	%
Y RADIAL	5375.2	34.70	0.65%	97.63	%
Ag 328.068†	22212.0	20.72	0.09%	[100]	ug/L
As 188.979†	235.7	2.94	1.25%	[100]	ug/L
B 249.677†	4391.7	22.78	0.52%	[100]	ug/L
Ba 233.527†	13329.5	27.66	0.21%	[100]	ug/L
Be 313.107†	270891.2	250.78	0.09%	[100]	ug/L
Cd 226.502†	9344.4	34.62	0.37%	[100]	ug/L
Co 228.616†	4980.7	43.63	0.88%	[100]	ug/L
Cr 267.716†	9275.5	10.76	0.12%	[100]	ug/L
Cu 324.752†	34049.5	116.76	0.34%	[100]	ug/L
K 766.490 Radial†	5604.6	82.95	1.48%	[1000]	ug/L
Mn 257.610†	94830.1	143.09	0.15%	[100]	ug/L
Mo 202.031†	1449.3	9.25	0.64%	[100]	ug/L
Ni 231.604†	4080.9	38.55	0.94%	[100]	ug/L
P 214.914†	840.2	7.26	0.86%	[500]	ug/L
Pb 220.353†	842.8	9.82	1.17%	[100]	ug/L
S 181.975 Axial†	146.4	5.23	3.57%	[200]	ug/L
Sb 206.836†	291.4	4.42	1.52%	[100]	ug/L
Se 196.026†	165.2	9.35	5.66%	[100]	ug/L
Si 251.611†	15877.1	23.15	0.15%	[500]	ug/L
Sn 189.927†	583.9	5.45	0.93%	[100]	ug/L
Sr 421.552†	15261.9	79.65	0.52%	[100]	ug/L
Ti 334.940†	63344.5	180.05	0.28%	[100]	ug/L
Tl 190.801†	337.9	12.50	3.70%	[100]	ug/L
U 409.014†	3558.5	67.70	1.90%	[100]	ug/L
V 292.402†	14900.2	64.14	0.43%	[100]	ug/L
Zn 213.857†	10945.6	27.98	0.26%	[100]	ug/L
SiO2†	16016.6	226.85	1.42%	[1069.5]	ug/L

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

Autosampler Location: 3
Date Collected: 1/12/2010 12:42:06
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	5024.8	5024.8	98.1	%	12:43:59
1	Y RADIAL	5332.3	5332.3	96.86	%	12:43:59
1	Al 396.153Radial†	6152.3	6276.2	[5000]	ug/L	12:43:59
1	Ca 317.933Radial†	3102.1	3142.3	[5000]	ug/L	12:44:19
1	K 766.490 Radial†	28813.6	26853.5	[5000]	ug/L	12:43:59
1	Mg 279.077 IEC†	158.6	158.5	[5000]	ug/L	12:44:19
1	Sr 421.552†	76236.0	77685.3	[500]	ug/L	12:43:59
1	Sc 361.383	853673.3	853673.3	99.487	%	12:45:16
1	Y 371.029	710210.0	710210.0	97.601	%	12:45:16
1	Ag 328.068†	108724.9	108928.0	[500]	ug/L	12:45:22
1	As 188.979†	1129.2	1159.0	[500]	ug/L	12:45:42
1	B 249.677†	21160.4	21884.6	[500]	ug/L	12:45:22
1	Ba 233.527†	63662.4	63999.0	[500]	ug/L	12:45:22
1	Be 313.107†	1315242.2	1326493.2	[500]	ug/L	12:45:16
1	Cd 226.502†	44932.0	45365.1	[500]	ug/L	12:45:22
1	Co 228.616†	24426.6	24629.7	[500]	ug/L	12:45:22
1	Cr 267.716†	44685.5	44836.8	[500]	ug/L	12:45:22
1	Cu 324.752†	170470.9	164946.7	[500]	ug/L	12:45:22
1	Mn 257.610†	452541.6	454443.4	[500]	ug/L	12:45:16
1	Mo 202.031†	7083.6	7098.5	[500]	ug/L	12:45:42
1	Ni 231.604†	20166.3	20203.1	[500]	ug/L	12:45:22
1	P 214.914†	4311.5	4113.4	[2500]	ug/L	12:45:42
1	Pb 220.353†	4008.6	4091.4	[500]	ug/L	12:45:42
1	S 181.975 Axial†	757.4	717.5	[1000]	ug/L	12:45:42
1	Sb 206.836†	1460.8	1434.9	[500]	ug/L	12:45:42
1	Se 196.026†	766.5	802.5	[500]	ug/L	12:45:42
1	Si 251.611†	78914.3	78860.2	[2500]	ug/L	12:45:22
1	Sn 189.927†	2840.1	2853.0	[500]	ug/L	12:45:42
1	Ti 334.940†	302319.9	305211.7	[500]	ug/L	12:45:22
1	Tl 190.801†	1596.1	1638.4	[500]	ug/L	12:45:42
1	U 409.014†	15158.5	17100.5	[500]	ug/L	12:45:22
1	V 292.402†	71243.7	72970.5	[500]	ug/L	12:45:22
1	Zn 213.857†	53644.2	53295.9	[500]	ug/L	12:45:22
1	SiO2†	78940.1	78887.7	[5347.5]	ug/L	12:46:49
2	Sc Radial	4999.1	4999.1	97.6	%	12:44:24
2	Y RADIAL	5305.7	5305.7	96.37	%	12:44:24
2	Al 396.153Radial†	6184.4	6341.3	[5000]	ug/L	12:44:24
2	Ca 317.933Radial†	3089.4	3145.5	[5000]	ug/L	12:44:44
2	K 766.490 Radial†	29019.2	27215.0	[5000]	ug/L	12:44:24
2	Mg 279.077 IEC†	155.1	155.8	[5000]	ug/L	12:44:44
2	Sr 421.552†	75900.9	77741.2	[500]	ug/L	12:44:24
2	Sc 361.383	845314.1	845314.1	98.513	%	12:45:47
2	Y 371.029	703393.2	703393.2	96.665	%	12:45:47
2	Ag 328.068†	107544.0	108810.0	[500]	ug/L	12:45:53
2	As 188.979†	1121.1	1161.9	[500]	ug/L	12:46:13
2	B 249.677†	21048.5	21981.3	[500]	ug/L	12:45:53
2	Ba 233.527†	63044.2	64004.3	[500]	ug/L	12:45:53
2	Be 313.107†	1305519.1	1329696.6	[500]	ug/L	12:45:47
2	Cd 226.502†	44423.7	45295.8	[500]	ug/L	12:45:53
2	Co 228.616†	24109.7	24550.8	[500]	ug/L	12:45:53
2	Cr 267.716†	44079.0	44665.3	[500]	ug/L	12:45:53
2	Cu 324.752†	168419.2	164558.6	[500]	ug/L	12:45:53
2	Mn 257.610†	449113.4	455461.6	[500]	ug/L	12:45:47
2	Mo 202.031†	7038.5	7123.1	[500]	ug/L	12:46:13
2	Ni 231.604†	19903.8	20137.2	[500]	ug/L	12:45:53
2	P 214.914†	4276.6	4120.9	[2500]	ug/L	12:46:13
2	Pb 220.353†	4002.3	4124.8	[500]	ug/L	12:46:13
2	S 181.975 Axial†	748.5	715.9	[1000]	ug/L	12:46:13
2	Sb 206.836†	1460.0	1448.6	[500]	ug/L	12:46:13

2	Se 196.026†	758.0	801.5	[500]	ug/L	12:46:13
2	Si 251.611†	77838.3	78552.3	[2500]	ug/L	12:45:53
2	Sn 189.927†	2818.7	2859.6	[500]	ug/L	12:46:13
2	Ti 334.940†	299213.6	305063.5	[500]	ug/L	12:45:53
2	Tl 190.801†	1588.3	1646.4	[500]	ug/L	12:46:13
2	U 409.014†	15019.1	17109.6	[500]	ug/L	12:45:53
2	V 292.402†	70419.3	72841.8	[500]	ug/L	12:45:53
2	Zn 213.857†	53069.6	53245.9	[500]	ug/L	12:45:53
2	SiO2†	79601.2	80343.5	[5347.5]	ug/L	12:46:54
3	Sc Radial	4975.7	4975.7	97.2	%	12:44:49
3	Y RADIAL	5287.9	5287.9	96.05	%	12:44:49
3	Al 396.153Radial†	6153.4	6339.1	[5000]	ug/L	12:44:49
3	Ca 317.933Radial†	3107.8	3179.2	[5000]	ug/L	12:45:09
3	K 766.490 Radial†	28709.1	27035.4	[5000]	ug/L	12:44:49
3	Mg 279.077 IEC†	154.2	155.6	[5000]	ug/L	12:45:09
3	Sr 421.552†	75347.5	77536.6	[500]	ug/L	12:44:49
3	Sc 361.383	848277.4	848277.4	98.859	%	12:46:18
3	Y 371.029	706280.3	706280.3	97.061	%	12:46:18
3	Ag 328.068†	109062.4	109964.6	[500]	ug/L	12:46:24
3	As 188.979†	1115.6	1152.4	[500]	ug/L	12:46:44
3	B 249.677†	21335.7	22197.1	[500]	ug/L	12:46:24
3	Ba 233.527†	63826.1	64571.6	[500]	ug/L	12:46:24
3	Be 313.107†	1309469.9	1329063.7	[500]	ug/L	12:46:18
3	Cd 226.502†	44903.5	45623.5	[500]	ug/L	12:46:24
3	Co 228.616†	24436.7	24796.0	[500]	ug/L	12:46:24
3	Cr 267.716†	44771.0	45209.0	[500]	ug/L	12:46:24
3	Cu 324.752†	170788.8	166358.3	[500]	ug/L	12:46:24
3	Mn 257.610†	449789.1	454552.5	[500]	ug/L	12:46:18
3	Mo 202.031†	7050.2	7110.0	[500]	ug/L	12:46:44
3	Ni 231.604†	20173.9	20339.8	[500]	ug/L	12:46:24
3	P 214.914†	4273.1	4102.1	[2500]	ug/L	12:46:44
3	Pb 220.353†	3990.6	4098.9	[500]	ug/L	12:46:44
3	S 181.975 Axial†	756.0	720.8	[1000]	ug/L	12:46:44
3	Sb 206.836†	1465.4	1448.9	[500]	ug/L	12:46:44
3	Se 196.026†	748.4	789.1	[500]	ug/L	12:46:44
3	Si 251.611†	78816.4	79265.7	[2500]	ug/L	12:46:24
3	Sn 189.927†	2819.4	2850.2	[500]	ug/L	12:46:44
3	Ti 334.940†	303078.9	307912.4	[500]	ug/L	12:46:24
3	Tl 190.801†	1587.5	1640.0	[500]	ug/L	12:46:44
3	U 409.014†	15152.5	17191.3	[500]	ug/L	12:46:24
3	V 292.402†	71541.8	73727.6	[500]	ug/L	12:46:24
3	Zn 213.857†	53692.3	53687.6	[500]	ug/L	12:46:24
3	SiO2†	78726.8	79176.7	[5347.5]	ug/L	12:46:59

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	849088.2	4238.18	0.50%	98.953	%
Sc Radial	4999.8	24.53	0.49%	97.6	%
Y 371.029	706627.8	3421.65	0.48%	97.109	%
Y RADIAL	5308.6	22.32	0.42%	96.43	%
Ag 328.068†	109234.2	635.28	0.58%	[500]	ug/L
Al 396.153Radial†	6318.9	36.98	0.59%	[5000]	ug/L
As 188.979†	1157.8	4.87	0.42%	[500]	ug/L
B 249.677†	22021.0	160.03	0.73%	[500]	ug/L
Ba 233.527†	64191.6	329.11	0.51%	[500]	ug/L
Be 313.107†	1328417.8	1696.54	0.13%	[500]	ug/L
Ca 317.933Radial†	3155.7	20.48	0.65%	[5000]	ug/L
Cd 226.502†	45428.1	172.75	0.38%	[500]	ug/L
Co 228.616†	24658.8	125.20	0.51%	[500]	ug/L
Cr 267.716†	44903.7	277.97	0.62%	[500]	ug/L
Cu 324.752†	165287.9	947.11	0.57%	[500]	ug/L
K 766.490 Radial†	27034.6	180.76	0.67%	[5000]	ug/L
Mg 279.077 IEC†	156.7	1.63	1.04%	[5000]	ug/L
Mn 257.610†	454819.2	559.06	0.12%	[500]	ug/L
Mo 202.031†	7110.5	12.31	0.17%	[500]	ug/L
Ni 231.604†	20226.7	103.35	0.51%	[500]	ug/L
P 214.914†	4112.1	9.45	0.23%	[2500]	ug/L
Pb 220.353†	4105.1	17.55	0.43%	[500]	ug/L
S 181.975 Axial†	718.1	2.50	0.35%	[1000]	ug/L

Sb 206.836†	1444.1	7.97	0.55%	[500]	ug/L
Se 196.026†	797.7	7.45	0.93%	[500]	ug/L
Si 251.611†	78892.8	357.79	0.45%	[2500]	ug/L
Sn 189.927†	2854.3	4.81	0.17%	[500]	ug/L
Sr 421.552†	77654.4	105.75	0.14%	[500]	ug/L
Ti 334.940†	306062.5	1603.73	0.52%	[500]	ug/L
Tl 190.801†	1641.6	4.23	0.26%	[500]	ug/L
U 409.014†	17133.8	50.00	0.29%	[500]	ug/L
V 292.402†	73180.0	478.58	0.65%	[500]	ug/L
Zn 213.857†	53409.8	241.86	0.45%	[500]	ug/L
SiO2†	79469.3	770.71	0.97%	[5347.5]	ug/L

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

Autosampler Location: 4
Date Collected: 1/12/2010 12:49:10
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	5073.8	5073.8	99.1	%	12:51:03
1	Y RADIAL	5395.5	5395.5	98.00	%	12:51:03
1	Al 396.153Radial†	12636.1	12759.7	[10000]	ug/L	12:51:03
1	Ca 317.933Radial†	6355.5	6395.3	[10000]	ug/L	12:51:03
1	Fe 238.204 Radial†	1175.7	1175.1	[10000]	ug/L	12:51:23
1	K 766.490 Radial†	56644.9	54659.7	[10000]	ug/L	12:51:03
1	Mg 279.077 IEC†	312.7	312.6	[10000]	ug/L	12:51:23
1	Na 589.592 Radial†	33015.3	34630.9	[10000]	ug/L	12:51:03
1	Sr 421.552†	155081.2	156512.5	[1000]	ug/L	12:51:03
1	Sc 361.383	846221.3	846221.3	98.619	%	12:52:22
1	Y 371.029	702372.7	702372.7	96.524	%	12:52:22
1	Ag 328.068†	215472.0	218132.3	[1000]	ug/L	12:52:22
1	As 188.979†	2274.9	2330.7	[1000]	ug/L	12:52:42
1	B 249.677†	43506.0	44730.3	[1000]	ug/L	12:52:22
1	Ba 233.527†	127574.2	129369.3	[1000]	ug/L	12:52:22
1	Be 313.107†	2606013.2	2646981.7	[1000]	ug/L	12:52:22
1	Cd 226.502†	89753.5	91212.1	[1000]	ug/L	12:52:22
1	Co 228.616†	48698.0	49457.2	[1000]	ug/L	12:52:22
1	Cr 267.716†	89203.4	90373.6	[1000]	ug/L	12:52:22
1	Cu 324.752†	338573.0	336911.8	[1000]	ug/L	12:52:22
1	Mn 257.610†	901500.9	913695.5	[1000]	ug/L	12:52:22
1	Mo 202.031†	14055.5	14230.7	[1000]	ug/L	12:52:42
1	Ni 231.604†	39986.4	40479.3	[1000]	ug/L	12:52:22
1	P 214.914†	8392.1	8289.3	[5000]	ug/L	12:52:42
1	Pb 220.353†	8032.6	8207.3	[1000]	ug/L	12:52:42
1	S 181.975 Axial†	1448.9	1425.4	[2000]	ug/L	12:52:42
1	Sb 206.836†	2925.5	2933.1	[1000]	ug/L	12:52:42
1	Se 196.026†	1524.3	1577.7	[1000]	ug/L	12:52:42
1	Si 251.611†	156650.6	158383.7	[5000]	ug/L	12:52:22
1	Sn 189.927†	5628.5	5705.7	[1000]	ug/L	12:52:42
1	Ti 334.940†	618431.1	628425.6	[1000]	ug/L	12:52:22
1	Tl 190.801†	3215.6	3294.7	[1000]	ug/L	12:52:42
1	U 409.014†	31667.8	33975.2	[1000]	ug/L	12:52:22
1	V 292.402†	144570.6	147954.9	[1000]	ug/L	12:52:22
1	Zn 213.857†	105965.2	106824.5	[1000]	ug/L	12:52:22
1	SiO2†	155379.5	157096.4	[10695]	ug/L	12:53:43
2	Sc Radial	4988.0	4988.0	97.4	%	12:51:28
2	Y RADIAL	5295.4	5295.4	96.19	%	12:51:28
2	Al 396.153Radial†	12473.8	12812.4	[10000]	ug/L	12:51:28
2	Ca 317.933Radial†	6265.5	6413.2	[10000]	ug/L	12:51:28
2	Fe 238.204 Radial†	1167.7	1187.2	[10000]	ug/L	12:51:48
2	K 766.490 Radial†	56111.6	55095.4	[10000]	ug/L	12:51:28
2	Mg 279.077 IEC†	306.0	311.2	[10000]	ug/L	12:51:48
2	Na 589.592 Radial†	32315.6	34485.7	[10000]	ug/L	12:51:28
2	Sr 421.552†	152761.7	156823.2	[1000]	ug/L	12:51:28
2	Sc 361.383	829653.5	829653.5	96.688	%	12:52:50
2	Y 371.029	689200.7	689200.7	94.714	%	12:52:50
2	Ag 328.068†	210949.1	217817.7	[1000]	ug/L	12:52:50
2	As 188.979†	2263.1	2364.6	[1000]	ug/L	12:53:10
2	B 249.677†	42543.7	44616.1	[1000]	ug/L	12:52:50
2	Ba 233.527†	125027.3	129318.4	[1000]	ug/L	12:52:50
2	Be 313.107†	2548706.4	2640481.8	[1000]	ug/L	12:52:50
2	Cd 226.502†	87671.2	90875.9	[1000]	ug/L	12:52:50
2	Co 228.616†	47630.8	49339.6	[1000]	ug/L	12:52:50
2	Cr 267.716†	87278.9	90189.5	[1000]	ug/L	12:52:50
2	Cu 324.752†	330942.7	335876.0	[1000]	ug/L	12:52:50
2	Mn 257.610†	882482.0	912279.8	[1000]	ug/L	12:52:50
2	Mo 202.031†	14035.4	14494.5	[1000]	ug/L	12:53:10
2	Ni 231.604†	39104.5	40376.9	[1000]	ug/L	12:52:50

2	P 214.914†	8354.0	8419.9	[5000]	ug/L	12:53:10
2	Pb 220.353†	8001.6	8337.8	[1000]	ug/L	12:53:10
2	S 181.975 Axial†	1446.5	1452.2	[2000]	ug/L	12:53:10
2	Sb 206.836†	2922.6	2989.3	[1000]	ug/L	12:53:10
2	Se 196.026†	1513.1	1596.9	[1000]	ug/L	12:53:10
2	Si 251.611†	153175.1	157961.2	[5000]	ug/L	12:52:50
2	Sn 189.927†	5598.9	5789.0	[1000]	ug/L	12:53:10
2	Ti 334.940†	605255.5	627321.5	[1000]	ug/L	12:52:50
2	Tl 190.801†	3200.5	3344.2	[1000]	ug/L	12:53:10
2	U 409.014†	30971.9	33896.6	[1000]	ug/L	12:52:50
2	V 292.402†	141521.2	147728.4	[1000]	ug/L	12:52:50
2	Zn 213.857†	103413.8	106331.4	[1000]	ug/L	12:52:50
2	SiO2†	154297.4	159123.5	[10695]	ug/L	12:53:48
3	Sc Radial	4905.8	4905.8	95.8	%	12:51:53
3	Y RADIAL	5231.6	5231.6	95.03	%	12:51:53
3	Al 396.153Radial†	12396.0	12945.8	[10000]	ug/L	12:51:53
3	Ca 317.933Radial†	6210.7	6463.8	[10000]	ug/L	12:51:53
3	Fe 238.204 Radial†	1166.1	1205.7	[10000]	ug/L	12:52:13
3	K 766.490 Radial†	55653.3	55582.2	[10000]	ug/L	12:51:53
3	Mg 279.077 IEC†	307.5	318.0	[10000]	ug/L	12:52:13
3	Na 589.592 Radial†	32040.7	34754.5	[10000]	ug/L	12:51:53
3	Sr 421.552†	151046.8	157660.4	[1000]	ug/L	12:51:53
3	Sc 361.383	837776.7	837776.7	97.635	%	12:53:18
3	Y 371.029	696980.4	696980.4	95.783	%	12:53:18
3	Ag 328.068†	212955.6	217757.3	[1000]	ug/L	12:53:18
3	As 188.979†	2260.5	2339.2	[1000]	ug/L	12:53:38
3	B 249.677†	43056.4	44714.5	[1000]	ug/L	12:53:18
3	Ba 233.527†	125824.6	128881.3	[1000]	ug/L	12:53:18
3	Be 313.107†	2576418.8	2643306.4	[1000]	ug/L	12:53:18
3	Cd 226.502†	88246.5	90585.9	[1000]	ug/L	12:53:18
3	Co 228.616†	47773.6	49008.1	[1000]	ug/L	12:53:18
3	Cr 267.716†	87944.1	89995.6	[1000]	ug/L	12:53:18
3	Cu 324.752†	334486.9	336187.3	[1000]	ug/L	12:53:18
3	Mn 257.610†	889040.1	910147.0	[1000]	ug/L	12:53:18
3	Mo 202.031†	14029.4	14347.6	[1000]	ug/L	12:53:38
3	Ni 231.604†	39438.0	40326.3	[1000]	ug/L	12:53:18
3	P 214.914†	8369.8	8352.2	[5000]	ug/L	12:53:38
3	Pb 220.353†	8025.6	8282.2	[1000]	ug/L	12:53:38
3	S 181.975 Axial†	1442.7	1433.8	[2000]	ug/L	12:53:38
3	Sb 206.836†	2921.0	2958.4	[1000]	ug/L	12:53:38
3	Se 196.026†	1513.0	1581.7	[1000]	ug/L	12:53:38
3	Si 251.611†	154313.1	157590.6	[5000]	ug/L	12:53:18
3	Sn 189.927†	5613.7	5748.0	[1000]	ug/L	12:53:38
3	Ti 334.940†	610672.3	626799.7	[1000]	ug/L	12:53:18
3	Tl 190.801†	3206.3	3318.1	[1000]	ug/L	12:53:38
3	U 409.014†	31143.7	33762.0	[1000]	ug/L	12:53:18
3	V 292.402†	142883.2	147704.2	[1000]	ug/L	12:53:18
3	Zn 213.857†	104218.9	106118.9	[1000]	ug/L	12:53:18
3	SiO2†	155832.1	159148.0	[10695]	ug/L	12:53:54

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	837883.8	8284.44	0.99%	97.647	%
Sc Radial	4989.2	83.99	1.68%	97.4	%
Y 371.029	696184.6	6621.96	0.95%	95.674	%
Y RADIAL	5307.5	82.60	1.56%	96.41	%
Ag 328.068†	217902.4	201.37	0.09%	[1000]	ug/L
Al 396.153Radial†	12839.3	95.92	0.75%	[10000]	ug/L
As 188.979†	2344.8	17.64	0.75%	[1000]	ug/L
B 249.677†	44687.0	61.90	0.14%	[1000]	ug/L
Ba 233.527†	129189.7	268.30	0.21%	[1000]	ug/L
Be 313.107†	2643589.9	3259.21	0.12%	[1000]	ug/L
Ca 317.933Radial†	6424.1	35.53	0.55%	[10000]	ug/L
Cd 226.502†	90891.3	313.39	0.34%	[1000]	ug/L
Co 228.616†	49268.3	232.87	0.47%	[1000]	ug/L
Cr 267.716†	90186.2	189.05	0.21%	[1000]	ug/L
Cu 324.752†	336325.1	531.46	0.16%	[1000]	ug/L
Fe 238.204 Radial†	1189.3	15.40	1.30%	[10000]	ug/L
K 766.490 Radial†	55112.4	461.46	0.84%	[10000]	ug/L

Mg 279.077 IEC†	313.9	3.59	1.14%	[10000]	ug/L
Mn 257.610†	912040.8	1786.27	0.20%	[1000]	ug/L
Mo 202.031†	14357.6	132.17	0.92%	[1000]	ug/L
Na 589.592 Radial†	34623.7	134.56	0.39%	[10000]	ug/L
Ni 231.604†	40394.2	77.93	0.19%	[1000]	ug/L
P 214.914†	8353.8	65.29	0.78%	[5000]	ug/L
Pb 220.353†	8275.8	65.50	0.79%	[1000]	ug/L
S 181.975 Axial†	1437.1	13.73	0.96%	[2000]	ug/L
Sb 206.836†	2960.2	28.15	0.95%	[1000]	ug/L
Se 196.026†	1585.4	10.17	0.64%	[1000]	ug/L
Si 251.611†	157978.5	396.80	0.25%	[5000]	ug/L
Sn 189.927†	5747.6	41.66	0.72%	[1000]	ug/L
Sr 421.552†	156998.7	593.76	0.38%	[1000]	ug/L
Ti 334.940†	627515.6	830.15	0.13%	[1000]	ug/L
Tl 190.801†	3319.0	24.73	0.75%	[1000]	ug/L
U 409.014†	33877.9	107.82	0.32%	[1000]	ug/L
V 292.402†	147795.8	138.28	0.09%	[1000]	ug/L
Zn 213.857†	106424.9	361.96	0.34%	[1000]	ug/L
SiO2†	158456.0	1177.48	0.74%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 1/12/2010 12:56:05
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	4925.6	4925.6	96.2	%	12:58:18
1	Y RADIAL	5219.7	5219.7	94.81	%	12:58:18
1	Al 396.153Radial†	59396.7	61758.0	[50000]	ug/L	12:57:58
1	Ca 317.933Radial†	29411.7	30558.7	[50000]	ug/L	12:57:58
1	Fe 238.204 Radial†	2264.1	2342.3	[20000]	ug/L	12:58:18
1	Mg 279.077 IEC†	1441.9	1496.0	[50000]	ug/L	12:58:18
1	Na 589.592 Radial†	65409.6	69311.9	[20000]	ug/L	12:57:58
1	Sc 361.383	823484.9	823484.9	95.969	%	12:59:15
1	Y 371.029	680559.9	680559.9	93.527	%	12:59:15
2	Sc Radial	4927.3	4927.3	96.2	%	12:58:43
2	Y RADIAL	5225.0	5225.0	94.91	%	12:58:43
2	Al 396.153Radial†	60710.3	63102.4	[50000]	ug/L	12:58:23
2	Ca 317.933Radial†	30130.0	31294.9	[50000]	ug/L	12:58:23
2	Fe 238.204 Radial†	2264.9	2342.4	[20000]	ug/L	12:58:43
2	Mg 279.077 IEC†	1449.8	1503.8	[50000]	ug/L	12:58:43
2	Na 589.592 Radial†	66690.7	70620.6	[20000]	ug/L	12:58:23
2	Sc 361.383	822525.3	822525.3	95.857	%	12:59:21
2	Y 371.029	680709.4	680709.4	93.547	%	12:59:21
3	Sc Radial	4863.9	4863.9	95.0	%	12:59:08
3	Y RADIAL	5133.4	5133.4	93.24	%	12:59:08
3	Al 396.153Radial†	59330.4	62471.5	[50000]	ug/L	12:58:48
3	Ca 317.933Radial†	29380.1	30913.3	[50000]	ug/L	12:58:48
3	Fe 238.204 Radial†	2244.9	2351.9	[20000]	ug/L	12:59:08
3	Mg 279.077 IEC†	1435.0	1507.8	[50000]	ug/L	12:59:08
3	Na 589.592 Radial†	65029.3	69774.3	[20000]	ug/L	12:58:48
3	Sc 361.383	827553.8	827553.8	96.443	%	12:59:27
3	Y 371.029	683978.3	683978.3	93.996	%	12:59:27

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	824521.4	2669.63	0.32%	96.090	%
Sc Radial	4905.6	36.11	0.74%	95.8	%
Y 371.029	681749.2	1931.88	0.28%	93.690	%
Y RADIAL	5192.7	51.42	0.99%	94.32	%
Al 396.153Radial†	62444.0	672.63	1.08%	[50000]	ug/L
Ca 317.933Radial†	30922.3	368.21	1.19%	[50000]	ug/L
Fe 238.204 Radial†	2345.5	5.54	0.24%	[20000]	ug/L
Mg 279.077 IEC†	1502.5	5.98	0.40%	[50000]	ug/L
Na 589.592 Radial†	69902.3	663.67	0.95%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	218.0	0.00000	0.999998	
Al 396.153Radial	3	Lin Thru 0	0.0	1.250	0.00000	0.999985	
As 188.979	3	Lin Thru 0	0.0	2.339	0.00000	0.999987	
B 249.677	3	Lin Thru 0	0.0	44.55	0.00000	0.999983	
Ba 233.527	3	Lin Thru 0	0.0	129.1	0.00000	0.999993	
Be 313.107	3	Lin Thru 0	0.0	2647	0.00000	0.999996	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6195	0.00000	0.999971	
Cd 226.502	3	Lin Thru 0	0.0	90.90	0.00000	0.999997	
Co 228.616	3	Lin Thru 0	0.0	49.28	0.00000	0.999999	
Cr 267.716	3	Lin Thru 0	0.0	90.13	0.00000	0.999995	
Cu 324.752	3	Lin Thru 0	0.0	335.2	0.00000	0.999976	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1176	0.00000	0.999984	
K 766.490 Radial	3	Lin Thru 0	0.0	5.491	0.00000	0.999970	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0301	0.00000	0.999956
Mn 257.610	3	Lin Thru 0	0.0	911.9	0.00000	0.999993
Mo 202.031	3	Lin Thru 0	0.0	14.33	0.00000	0.999992
Na 589.592 Radia	2	Lin Thru 0	0.0	3.489	0.00000	0.999993
Ni 231.604	3	Lin Thru 0	0.0	40.41	0.00000	0.999999
P 214.914	3	Lin Thru 0	0.0	1.666	0.00000	0.999980
Pb 220.353	3	Lin Thru 0	0.0	8.264	0.00000	0.999993
S 181.975 Axial	3	Lin Thru 0	0.0	0.7186	0.00000	0.999999
Sb 206.836	3	Lin Thru 0	0.0	2.946	0.00000	0.999952
Se 196.026	3	Lin Thru 0	0.0	1.588	0.00000	0.999990
Si 251.611	3	Lin Thru 0	0.0	31.59	0.00000	1.000000
Sn 189.927	3	Lin Thru 0	0.0	5.741	0.00000	0.999995
Sr 421.552	3	Lin Thru 0	0.0	156.6	0.00000	0.999988
Ti 334.940	3	Lin Thru 0	0.0	624.5	0.00000	0.999951
Tl 190.801	3	Lin Thru 0	0.0	3.312	0.00000	0.999989
U 409.014	3	Lin Thru 0	0.0	33.97	0.00000	0.999981
V 292.402	3	Lin Thru 0	0.0	147.5	0.00000	0.999992
Zn 213.857	3	Lin Thru 0	0.0	106.5	0.00000	0.999996
SiO2	3	Lin Thru 0	0.0	14.83	0.00000	0.999999

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

Autosampler Location: 9
Date Collected: 1/12/2010 13:01:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5010.0	5010.0	97.8	%			13:03:31
1	Y RADIAL	5302.4	5302.4	96.31	%			13:03:31
1	Al 396.153Radial†	6249.1	6393.7	5087.4	ug/L	5087.4	ppb	13:03:31
1	Ca 317.933Radial†	3090.1	3139.4	5067.8	ug/L	5067.8	ppb	13:03:51
1	Fe 238.204 Radial†	603.1	604.9	5158.4	ug/L	5158.4	ppb	13:03:51
1	K 766.490 Radial†	15625.6	13460.2	2447.7	ug/L	2447.7	ppb	13:03:31
1	Mg 279.077 IEC†	159.4	159.9	5309.0	ug/L	5309.0	ppb	13:03:51
1	Na 589.592 Radial†	7188.4	8656.5	2481.4	ug/L	2481.4	ppb	13:03:31
1	Sr 421.552†	79944.0	81704.9	521.61	ug/L	521.61	ppb	13:03:31
1	Sc 361.383	849869.6	849869.6	99.044	%			13:04:49
1	Y 371.029	711496.0	711496.0	97.778	%			13:04:49
1	Ag 328.068†	56675.3	56865.2	264.26	ug/L	264.26	ppb	13:04:49
1	As 188.979†	1071.5	1105.8	476.98	ug/L	476.98	ppb	13:05:09
1	B 249.677†	22366.5	23197.5	518.39	ug/L	518.39	ppb	13:04:49
1	Ba 233.527†	65677.2	66319.6	515.13	ug/L	515.13	ppb	13:04:49
1	Be 313.107†	679307.1	690337.6	261.96	ug/L	261.96	ppb	13:04:49
1	Cd 226.502†	45224.8	45862.9	504.40	ug/L	504.40	ppb	13:04:49
1	Co 228.616†	24639.9	24955.0	506.52	ug/L	506.52	ppb	13:05:09
1	Cr 267.716†	44068.9	44415.2	493.40	ug/L	493.40	ppb	13:04:49
1	Cu 324.752†	175664.4	170957.3	509.98	ug/L	509.98	ppb	13:04:49
1	Mn 257.610†	463792.9	467839.1	513.36	ug/L	513.36	ppb	13:04:49
1	Mo 202.031†	7661.7	7714.0	538.71	ug/L	538.71	ppb	13:05:09
1	Ni 231.604†	20007.9	20134.0	497.95	ug/L	497.95	ppb	13:05:09
1	P 214.914†	4370.8	4192.7	2397.8	ug/L	2397.8	ppb	13:05:09
1	Pb 220.353†	4040.5	4141.7	503.01	ug/L	503.01	ppb	13:05:09
1	S 181.975 Axial†	1809.3	1782.9	2480.3	ug/L	2480.3	ppb	13:05:09
1	Sb 206.836†	1486.2	1467.1	516.63	ug/L	516.63	ppb	13:05:09
1	Se 196.026†	3988.7	4059.3	2573.5	ug/L	2573.5	ppb	13:05:09
1	Si 251.611†	152179.8	153187.8	4842.7	ug/L	4842.7	ppb	13:04:49
1	Sn 189.927†	3059.7	3087.6	538.79	ug/L	538.79	ppb	13:05:09
1	Ti 334.940†	308948.9	313264.6	501.47	ug/L	501.47	ppb	13:04:49
1	Tl 190.801†	1676.3	1726.5	524.68	ug/L	524.68	ppb	13:05:09
1	U 409.014†	15115.1	17124.9	502.45	ug/L	502.45	ppb	13:04:49
1	V 292.402†	72741.6	74803.3	514.59	ug/L	514.59	ppb	13:04:49
1	Zn 213.857†	54741.7	54645.3	508.61	ug/L	508.61	ppb	13:04:49
1	SiO2†	151046.2	152044.9	10241	ug/L	10241	ppb	13:06:06
2	Sc Radial	4856.2	4856.2	94.8	%			13:03:56
2	Y RADIAL	5210.4	5210.4	94.64	%			13:03:56
2	Al 396.153Radial†	6393.7	6748.3	5371.2	ug/L	5371.2	ppb	13:03:56
2	Ca 317.933Radial†	3109.0	3259.3	5261.3	ug/L	5261.3	ppb	13:04:16
2	Fe 238.204 Radial†	609.3	631.0	5380.3	ug/L	5380.3	ppb	13:04:16
2	K 766.490 Radial†	16036.5	14399.0	2618.5	ug/L	2618.5	ppb	13:03:56
2	Mg 279.077 IEC†	159.6	165.2	5487.0	ug/L	5487.0	ppb	13:04:16
2	Na 589.592 Radial†	7358.5	9068.4	2599.5	ug/L	2599.5	ppb	13:03:56
2	Sr 421.552†	81707.1	86150.7	549.99	ug/L	549.99	ppb	13:03:56
2	Sc 361.383	857001.6	857001.6	99.875	%			13:05:15
2	Y 371.029	717341.1	717341.1	98.581	%			13:05:15
2	Ag 328.068†	56911.5	56625.5	263.23	ug/L	263.23	ppb	13:05:15
2	As 188.979†	1072.5	1097.7	473.60	ug/L	473.60	ppb	13:05:35
2	B 249.677†	22569.5	23212.7	518.71	ug/L	518.71	ppb	13:05:15
2	Ba 233.527†	66137.2	66228.4	514.43	ug/L	514.43	ppb	13:05:15
2	Be 313.107†	683745.0	689073.3	261.48	ug/L	261.48	ppb	13:05:15
2	Cd 226.502†	45542.1	45800.6	503.69	ug/L	503.69	ppb	13:05:15
2	Co 228.616†	24634.6	24742.6	502.20	ug/L	502.20	ppb	13:05:35
2	Cr 267.716†	44333.4	44309.8	492.23	ug/L	492.23	ppb	13:05:15
2	Cu 324.752†	176283.6	170101.3	507.44	ug/L	507.44	ppb	13:05:15
2	Mn 257.610†	466933.8	467087.0	512.55	ug/L	512.55	ppb	13:05:15
2	Mo 202.031†	7658.4	7646.4	534.01	ug/L	534.01	ppb	13:05:35
2	Ni 231.604†	20023.8	19981.8	494.18	ug/L	494.18	ppb	13:05:35

2	P 214.914†	4371.1	4156.3	2376.4 ug/L	2376.4 ppb	13:05:35
2	Pb 220.353†	4047.0	4114.2	499.73 ug/L	499.73 ppb	13:05:35
2	S 181.975 Axial†	1824.4	1782.8	2480.0 ug/L	2480.0 ppb	13:05:35
2	Sb 206.836†	1488.1	1456.5	512.87 ug/L	512.87 ppb	13:05:35
2	Se 196.026†	4016.9	4054.0	2570.9 ug/L	2570.9 ppb	13:05:35
2	Si 251.611†	153041.2	152771.6	4829.6 ug/L	4829.6 ppb	13:05:15
2	Sn 189.927†	3060.0	3062.1	534.39 ug/L	534.39 ppb	13:05:35
2	Ti 334.940†	310900.4	312622.7	500.46 ug/L	500.46 ppb	13:05:15
2	Tl 190.801†	1705.2	1741.4	529.17 ug/L	529.17 ppb	13:05:35
2	U 409.014†	15024.8	16907.4	496.02 ug/L	496.02 ppb	13:05:15
2	V 292.402†	73186.5	74637.6	513.36 ug/L	513.36 ppb	13:05:15
2	Zn 213.857†	55101.8	54546.0	507.68 ug/L	507.68 ppb	13:05:15
2	SiO2†	152226.2	151957.2	10235 ug/L	10235 ppb	13:06:12
3	Sc Radial	5354.1	5354.1	105 %		13:04:21
3	Y RADIAL	5682.9	5682.9	103.2 %		13:04:21
3	Al 396.153Radial†	6189.2	5925.8	4714.3 ug/L	4714.3 ppb	13:04:21
3	Ca 317.933Radial†	3090.8	2936.9	4741.0 ug/L	4741.0 ppb	13:04:41
3	Fe 238.204 Radial†	608.0	570.0	4860.8 ug/L	4860.8 ppb	13:04:41
3	K 766.490 Radial†	15736.8	12539.8	2280.3 ug/L	2280.3 ppb	13:04:21
3	Mg 279.077 IEC†	160.5	150.5	4997.9 ug/L	4997.9 ppb	13:04:41
3	Na 589.592 Radial†	7199.1	8194.4	2348.9 ug/L	2348.9 ppb	13:04:21
3	Sr 421.552†	79611.9	76134.7	486.05 ug/L	486.05 ppb	13:04:21
3	Sc 361.383	885353.8	885353.8	103.18 %		13:05:41
3	Y 371.029	740833.6	740833.6	101.81 %		13:05:41
3	Ag 328.068†	55805.0	53728.3	249.68 ug/L	249.68 ppb	13:05:41
3	As 188.979†	1075.8	1066.6	459.96 ug/L	459.96 ppb	13:06:01
3	B 249.677†	22064.4	21999.6	491.62 ug/L	491.62 ppb	13:05:41
3	Ba 233.527†	64638.2	62654.9	486.66 ug/L	486.66 ppb	13:05:41
3	Be 313.107†	666405.7	650344.9	246.79 ug/L	246.79 ppb	13:05:41
3	Cd 226.502†	44523.6	43353.3	476.80 ug/L	476.80 ppb	13:05:41
3	Co 228.616†	24528.8	23850.2	484.12 ug/L	484.12 ppb	13:06:01
3	Cr 267.716†	43335.4	41921.0	465.69 ug/L	465.69 ppb	13:05:41
3	Cu 324.752†	172464.7	160747.8	479.53 ug/L	479.53 ppb	13:05:41
3	Mn 257.610†	456774.6	442269.2	485.30 ug/L	485.30 ppb	13:05:41
3	Mo 202.031†	7633.0	7376.2	515.11 ug/L	515.11 ppb	13:06:01
3	Ni 231.604†	19894.6	19214.5	475.21 ug/L	475.21 ppb	13:06:01
3	P 214.914†	4356.1	4001.5	2290.2 ug/L	2290.2 ppb	13:06:01
3	Pb 220.353†	4037.4	3975.1	482.76 ug/L	482.76 ppb	13:06:01
3	S 181.975 Axial†	1806.7	1707.2	2374.9 ug/L	2374.9 ppb	13:06:01
3	Sb 206.836†	1486.6	1407.3	495.53 ug/L	495.53 ppb	13:06:01
3	Se 196.026†	3998.3	3907.2	2476.8 ug/L	2476.8 ppb	13:06:01
3	Si 251.611†	149921.2	144840.7	4578.8 ug/L	4578.8 ppb	13:05:41
3	Sn 189.927†	3048.2	2952.6	515.21 ug/L	515.21 ppb	13:06:01
3	Ti 334.940†	303449.3	295432.6	472.92 ug/L	472.92 ppb	13:05:41
3	Tl 190.801†	1688.1	1670.2	507.45 ug/L	507.45 ppb	13:06:01
3	U 409.014†	14649.8	16062.2	471.26 ug/L	471.26 ppb	13:05:41
3	V 292.402†	71433.0	70591.5	485.72 ug/L	485.72 ppb	13:05:41
3	Zn 213.857†	53890.4	51605.1	480.28 ug/L	480.28 ppb	13:05:41
3	SiO2†	152938.4	147766.5	9952.6 ug/L	9952.6 ppb	13:06:17

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	864075.0	100.70	%	2.187				2.17%
Sc Radial	5073.4	99.1	%	4.98				5.02%
Y 371.029	723223.6	99.390	%	2.1340				2.15%
Y RADIAL	5398.6	98.06	%	4.551				4.64%
Ag 328.068†	55739.7	259.06	ug/L	8.137	259.06	ppb	8.137	3.14%
QC value within limits for Ag 328.068 Recovery = 103.62%								
Al 396.153Radial†	6356.0	5057.7	ug/L	329.45	5057.7	ppb	329.45	6.51%
QC value within limits for Al 396.153Radial Recovery = 101.15%								
As 188.979†	1090.0	470.18	ug/L	9.010	470.18	ppb	9.010	1.92%
QC value within limits for As 188.979 Recovery = 94.04%								
B 249.677†	22803.3	509.57	ug/L	15.551	509.57	ppb	15.551	3.05%
QC value within limits for B 249.677 Recovery = 101.91%								
Ba 233.527†	65067.6	505.41	ug/L	16.236	505.41	ppb	16.236	3.21%
QC value within limits for Ba 233.527 Recovery = 101.08%								
Be 313.107†	676585.3	256.75	ug/L	8.626	256.75	ppb	8.626	3.36%
QC value within limits for Be 313.107 Recovery = 102.70%								
Ca 317.933Radial†	3111.9	5023.4	ug/L	263.00	5023.4	ppb	263.00	5.24%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.47%
Cd 226.502†            45005.6      494.96 ug/L        15.732      494.96 ppb        15.732   3.18%
   QC value within limits for Cd 226.502  Recovery = 98.99%
Co 228.616†            24515.9      497.61 ug/L        11.888      497.61 ppb        11.888   2.39%
   QC value within limits for Co 228.616  Recovery = 99.52%
Cr 267.716†            43548.7      483.78 ug/L        15.671      483.78 ppb        15.671   3.24%
   QC value within limits for Cr 267.716  Recovery = 96.76%
Cu 324.752†           167268.8      498.98 ug/L        16.898      498.98 ppb        16.898   3.39%
   QC value within limits for Cu 324.752  Recovery = 99.80%
Fe 238.204 Radial†       602.0      5133.2 ug/L       260.70      5133.2 ppb       260.70   5.08%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.66%
K 766.490 Radial†      13466.3      2448.8 ug/L       169.14      2448.8 ppb       169.14   6.91%
   QC value within limits for K 766.490 Radial  Recovery = 97.95%
Mg 279.077 IEC†          158.5      5264.7 ug/L       247.56      5264.7 ppb       247.56   4.70%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.29%
Mn 257.610†           459065.1      503.73 ug/L        15.971      503.73 ppb        15.971   3.17%
   QC value within limits for Mn 257.610  Recovery = 100.75%
Mo 202.031†             7578.9      529.28 ug/L        12.491      529.28 ppb        12.491   2.36%
   QC value within limits for Mo 202.031  Recovery = 105.86%
Na 589.592 Radial†      8639.8      2476.6 ug/L       125.34      2476.6 ppb       125.34   5.06%
   QC value within limits for Na 589.592 Radial  Recovery = 99.06%
Ni 231.604†            19776.8      489.11 ug/L        12.188      489.11 ppb        12.188   2.49%
   QC value within limits for Ni 231.604  Recovery = 97.82%
P 214.914†              4116.8      2354.8 ug/L        56.95      2354.8 ppb        56.95   2.42%
   QC value within limits for P 214.914  Recovery = 94.19%
Pb 220.353†             4077.0      495.17 ug/L        10.873      495.17 ppb        10.873   2.20%
   QC value within limits for Pb 220.353  Recovery = 99.03%
S 181.975 Axial†        1757.6      2445.1 ug/L        60.75      2445.1 ppb        60.75   2.48%
   QC value within limits for S 181.975 Axial  Recovery = 97.80%
Sb 206.836†             1443.6      508.35 ug/L        11.254      508.35 ppb        11.254   2.21%
   QC value within limits for Sb 206.836  Recovery = 101.67%
Se 196.026†             4006.8      2540.4 ug/L        55.11      2540.4 ppb        55.11   2.17%
   QC value within limits for Se 196.026  Recovery = 101.62%
Si 251.611†           150266.7      4750.4 ug/L       148.75      4750.4 ppb       148.75   3.13%
   QC value within limits for Si 251.611  Recovery = 95.01%
Sn 189.927†             3034.1      529.47 ug/L        12.537      529.47 ppb        12.537   2.37%
   QC value within limits for Sn 189.927  Recovery = 105.89%
Sr 421.552†            81330.1      519.22 ug/L        32.039      519.22 ppb        32.039   6.17%
   QC value within limits for Sr 421.552  Recovery = 103.84%
Ti 334.940†           307106.7      491.62 ug/L        16.198      491.62 ppb        16.198   3.29%
   QC value within limits for Ti 334.940  Recovery = 98.32%
Tl 190.801†             1712.7      520.43 ug/L        11.464      520.43 ppb        11.464   2.20%
   QC value within limits for Tl 190.801  Recovery = 104.09%
U 409.014†             16698.2      489.91 ug/L        16.468      489.91 ppb        16.468   3.36%
   QC value within limits for U 409.014  Recovery = 97.98%
V 292.402†             73344.1      504.56 ug/L        16.328      504.56 ppb        16.328   3.24%
   QC value within limits for V 292.402  Recovery = 100.91%
Zn 213.857†            53598.8      498.86 ug/L        16.092      498.86 ppb        16.092   3.23%
   QC value within limits for Zn 213.857  Recovery = 99.77%
SiO2†                 150589.6       10143 ug/L         164.6       10143 ppb         164.6   1.62%
   QC value within limits for SiO2  Recovery = 94.84%
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 1/12/2010 13:08:27
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	5132.5	5132.5	100	%			13:10:20
1	Y RADIAL	5490.0	5490.0	99.72	%			13:10:20
1	Al 396.153Radial†	-3.5	2.7	2.1297	ug/L	2.1297	ppb	13:10:20
1	Ca 317.933Radial†	10.8	-8.4	-13.622	ug/L	-13.622	ppb	13:10:40
1	Fe 238.204 Radial†	10.5	-1.0	-8.8942	ug/L	-8.8942	ppb	13:10:40
1	K 766.490 Radial†	2595.7	78.3	14.260	ug/L	14.260	ppb	13:10:20
1	Mg 279.077 IEC†	4.0	0.9	30.951	ug/L	30.951	ppb	13:10:40
1	Na 589.592 Radial†	-1229.1	82.6	23.676	ug/L	23.676	ppb	13:10:20
1	Sr 421.552†	35.1	25.3	0.1616	ug/L	0.1616	ppb	13:10:20
1	Sc 361.383	827959.4	827959.4	96.491	%			13:11:37
1	Y 371.029	702033.6	702033.6	96.478	%			13:11:37
1	Ag 328.068†	260.3	-87.3	-0.4028	ug/L	-0.4028	ppb	13:11:37
1	As 188.979†	-19.0	4.2	1.8003	ug/L	1.8003	ppb	13:11:57
1	B 249.677†	-343.4	259.2	5.8194	ug/L	5.8194	ppb	13:11:57
1	Ba 233.527†	-8.2	0.1	0.0009	ug/L	0.0009	ppb	13:11:57
1	Be 313.107†	-4481.6	-169.9	-0.0640	ug/L	-0.0640	ppb	13:11:37
1	Cd 226.502†	-186.7	8.2	0.0916	ug/L	0.0916	ppb	13:11:57
1	Co 228.616†	-83.1	-8.9	-0.1811	ug/L	-0.1811	ppb	13:11:57
1	Cr 267.716†	68.2	-8.3	-0.0919	ug/L	-0.0919	ppb	13:11:57
1	Cu 324.752†	6276.5	102.4	0.3044	ug/L	0.3044	ppb	13:11:37
1	Mn 257.610†	414.4	-0.3	-0.0025	ug/L	-0.0025	ppb	13:11:57
1	Mo 202.031†	21.3	0.4	0.0283	ug/L	0.0283	ppb	13:11:57
1	Ni 231.604†	86.0	22.1	0.5465	ug/L	0.5465	ppb	13:11:57
1	P 214.914†	217.7	5.3	3.1247	ug/L	3.1247	ppb	13:11:57
1	Pb 220.353†	-56.7	3.4	0.4131	ug/L	0.4131	ppb	13:11:57
1	S 181.975 Axial†	52.0	10.0	13.876	ug/L	13.876	ppb	13:11:57
1	Sb 206.836†	43.9	12.0	4.1234	ug/L	4.1234	ppb	13:11:57
1	Se 196.026†	-27.1	3.9	2.4547	ug/L	2.4547	ppb	13:11:57
1	Si 251.611†	493.4	50.7	1.6044	ug/L	1.6044	ppb	13:11:57
1	Sn 189.927†	14.1	13.0	2.2582	ug/L	2.2582	ppb	13:11:57
1	Ti 334.940†	-1235.0	54.2	0.0820	ug/L	0.0820	ppb	13:11:37
1	Tl 190.801†	-40.9	-8.3	-2.5110	ug/L	-2.5110	ppb	13:11:57
1	U 409.014†	-1763.7	36.0	1.0612	ug/L	1.0612	ppb	13:11:37
1	V 292.402†	-1282.3	30.7	0.2129	ug/L	0.2129	ppb	13:11:37
1	Zn 213.857†	628.7	26.9	0.2498	ug/L	0.2498	ppb	13:11:57
1	SiO2†	453.9	11.4	0.7697	ug/L	0.7697	ppb	13:12:53
2	Sc Radial	5004.1	5004.1	97.7	%			13:10:45
2	Y RADIAL	5395.8	5395.8	98.01	%			13:10:45
2	Al 396.153Radial†	-4.0	2.1	1.6928	ug/L	1.6928	ppb	13:10:45
2	Ca 317.933Radial†	14.7	-4.2	-6.7989	ug/L	-6.7989	ppb	13:11:05
2	Fe 238.204 Radial†	13.0	1.7	14.568	ug/L	14.568	ppb	13:11:05
2	K 766.490 Radial†	2582.5	131.3	23.898	ug/L	23.898	ppb	13:10:45
2	Mg 279.077 IEC†	3.9	0.9	30.582	ug/L	30.582	ppb	13:11:05
2	Na 589.592 Radial†	-1207.7	73.0	20.920	ug/L	20.920	ppb	13:10:45
2	Sr 421.552†	18.7	9.3	0.0597	ug/L	0.0597	ppb	13:10:45
2	Sc 361.383	837584.2	837584.2	97.612	%			13:12:02
2	Y 371.029	710200.8	710200.8	97.600	%			13:12:02
2	Ag 328.068†	283.3	-66.9	-0.2968	ug/L	-0.2968	ppb	13:12:02
2	As 188.979†	-26.9	-3.6	-1.5477	ug/L	-1.5477	ppb	13:12:22
2	B 249.677†	-347.9	258.7	5.8054	ug/L	5.8054	ppb	13:12:22
2	Ba 233.527†	-27.8	-19.9	-0.1535	ug/L	-0.1535	ppb	13:12:22
2	Be 313.107†	-4427.1	-60.7	-0.0230	ug/L	-0.0230	ppb	13:12:02
2	Cd 226.502†	-192.5	4.4	0.0456	ug/L	0.0456	ppb	13:12:22
2	Co 228.616†	-78.8	-3.5	-0.0734	ug/L	-0.0734	ppb	13:12:22
2	Cr 267.716†	62.0	-15.5	-0.1692	ug/L	-0.1692	ppb	13:12:22
2	Cu 324.752†	6241.4	-8.4	-0.0212	ug/L	-0.0212	ppb	13:12:02
2	Mn 257.610†	424.2	4.8	0.0054	ug/L	0.0054	ppb	13:12:22
2	Mo 202.031†	9.0	-12.4	-0.8649	ug/L	-0.8649	ppb	13:12:22
2	Ni 231.604†	47.2	-18.7	-0.4626	ug/L	-0.4626	ppb	13:12:22

2	P 214.914†	230.4	15.7	9.4149	ug/L	9.4149 ppb	13:12:22
2	Pb 220.353†	-61.9	-1.2	-0.1500	ug/L	-0.1500 ppb	13:12:22
2	S 181.975 Axial†	49.5	6.9	9.5401	ug/L	9.5401 ppb	13:12:22
2	Sb 206.836†	34.5	1.9	0.6349	ug/L	0.6349 ppb	13:12:22
2	Se 196.026†	-32.2	-1.0	-0.5626	ug/L	-0.5626 ppb	13:12:22
2	Si 251.611†	452.1	2.5	0.0909	ug/L	0.0909 ppb	13:12:22
2	Sn 189.927†	0.9	-0.7	-0.1311	ug/L	-0.1311 ppb	13:12:22
2	Ti 334.940†	-1310.7	-8.6	-0.0147	ug/L	-0.0147 ppb	13:12:02
2	Tl 190.801†	-29.6	3.8	1.1356	ug/L	1.1356 ppb	13:12:22
2	U 409.014†	-2003.2	-188.3	-5.5451	ug/L	-5.5451 ppb	13:12:02
2	V 292.402†	-1310.4	17.3	0.0921	ug/L	0.0921 ppb	13:12:02
2	Zn 213.857†	635.6	26.5	0.2507	ug/L	0.2507 ppb	13:12:22
2	SiO2†	503.0	56.3	3.8213	ug/L	3.8213 ppb	13:12:58
3	Sc Radial	4986.9	4986.9	97.4	%		13:11:10
3	Y RADIAL	5371.2	5371.2	97.56	%		13:11:10
3	Al 396.153Radial†	-13.1	-7.3	-5.8687	ug/L	-5.8687 ppb	13:11:10
3	Ca 317.933Radial†	14.0	-4.9	-7.8391	ug/L	-7.8391 ppb	13:11:30
3	Fe 238.204 Radial†	8.9	-2.4	-20.530	ug/L	-20.530 ppb	13:11:30
3	K 766.490 Radial†	2484.6	39.8	7.2541	ug/L	7.2541 ppb	13:11:10
3	Mg 279.077 IEC†	1.1	-1.9	-63.992	ug/L	-63.992 ppb	13:11:30
3	Na 589.592 Radial†	-1249.6	25.7	7.3714	ug/L	7.3714 ppb	13:11:10
3	Sr 421.552†	20.7	11.5	0.0733	ug/L	0.0733 ppb	13:11:10
3	Sc 361.383	838620.9	838620.9	97.733	%		13:12:28
3	Y 371.029	710266.2	710266.2	97.609	%		13:12:28
3	Ag 328.068†	248.9	-102.4	-0.4763	ug/L	-0.4763 ppb	13:12:28
3	As 188.979†	-17.2	6.3	2.6868	ug/L	2.6868 ppb	13:12:48
3	B 249.677†	-351.7	255.2	5.7327	ug/L	5.7327 ppb	13:12:48
3	Ba 233.527†	-12.0	-3.7	-0.0300	ug/L	-0.0300 ppb	13:12:48
3	Be 313.107†	-4461.9	-90.7	-0.0343	ug/L	-0.0343 ppb	13:12:28
3	Cd 226.502†	-186.4	10.9	0.1216	ug/L	0.1216 ppb	13:12:48
3	Co 228.616†	-83.1	-7.8	-0.1577	ug/L	-0.1577 ppb	13:12:48
3	Cr 267.716†	81.8	4.7	0.0520	ug/L	0.0520 ppb	13:12:48
3	Cu 324.752†	6300.0	43.7	0.1305	ug/L	0.1305 ppb	13:12:28
3	Mn 257.610†	421.6	1.6	0.0023	ug/L	0.0023 ppb	13:12:48
3	Mo 202.031†	27.4	6.4	0.4431	ug/L	0.4431 ppb	13:12:48
3	Ni 231.604†	72.5	7.2	0.1777	ug/L	0.1777 ppb	13:12:48
3	P 214.914†	219.0	3.7	2.2500	ug/L	2.2500 ppb	13:12:48
3	Pb 220.353†	-56.5	4.4	0.5349	ug/L	0.5349 ppb	13:12:48
3	S 181.975 Axial†	48.5	5.7	7.9861	ug/L	7.9861 ppb	13:12:48
3	Sb 206.836†	39.6	7.0	2.4467	ug/L	2.4467 ppb	13:12:48
3	Se 196.026†	-28.0	3.4	2.0664	ug/L	2.0664 ppb	13:12:48
3	Si 251.611†	475.1	25.4	0.7990	ug/L	0.7990 ppb	13:12:48
3	Sn 189.927†	19.4	18.2	3.1682	ug/L	3.1682 ppb	13:12:48
3	Ti 334.940†	-1314.6	-10.9	-0.0123	ug/L	-0.0123 ppb	13:12:28
3	Tl 190.801†	-37.2	-4.0	-1.2004	ug/L	-1.2004 ppb	13:12:48
3	U 409.014†	-1901.7	-81.9	-2.4097	ug/L	-2.4097 ppb	13:12:28
3	V 292.402†	-1398.1	-70.8	-0.4757	ug/L	-0.4757 ppb	13:12:28
3	Zn 213.857†	626.8	16.7	0.1571	ug/L	0.1571 ppb	13:12:48
3	SiO2†	489.0	41.3	2.7732	ug/L	2.7732 ppb	13:13:03

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	834721.5	97.279	%	0.6851				0.70%
Sc Radial	5041.2	98.4	%	1.55				1.58%
Y 371.029	707500.2	97.229	%	0.6506				0.67%
Y RADIAL	5419.0	98.43	%	1.139				1.16%
Ag 328.068†	-85.5	-0.3920	ug/L	0.09024	-0.3920	ppb	0.09024	23.02%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-0.9	-0.6821	ug/L	4.49703	-0.6821	ppb	4.49703	659.32%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.3	0.9798	ug/L	2.23329	0.9798	ppb	2.23329	227.94%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	257.7	5.7858	ug/L	0.04657	5.7858	ppb	0.04657	0.80%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-7.8	-0.0609	ug/L	0.08169	-0.0609	ppb	0.08169	134.22%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-107.1	-0.0404	ug/L	0.02118	-0.0404	ppb	0.02118	52.39%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-5.8	-9.4201	ug/L	3.67624	-9.4201	ppb	3.67624	39.03%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 7.8      0.0863 ug/L       0.03831      0.0863 ppb        0.03831  44.41%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -6.8     -0.1374 ug/L       0.05662     -0.1374 ppb        0.05662  41.21%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -6.3     -0.0697 ug/L       0.11226     -0.0697 ppb        0.11226 161.13%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                45.9      0.1379 ug/L       0.16295      0.1379 ppb        0.16295 118.17%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.6     -4.9520 ug/L      17.87815     -4.9520 ppb       17.87815 361.03%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          83.1      15.137 ug/L        8.3568      15.137 ppb        8.3568  55.21%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.0     -0.8197 ug/L      54.70932     -0.8197 ppb       54.70932 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 2.0      0.0018 ug/L       0.00401      0.0018 ppb        0.00401 227.92%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -1.9     -0.1312 ug/L       0.66844     -0.1312 ppb        0.66844 509.61%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         60.4      17.322 ug/L        8.7273      17.322 ppb        8.7273  50.38%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 3.5      0.0872 ug/L       0.51061      0.0872 ppb        0.51061 585.72%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  8.2      4.9299 ug/L       3.90870      4.9299 ppb        3.90870  79.29%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 2.2      0.2660 ug/L       0.36539      0.2660 ppb        0.36539 137.36%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            7.5      10.467 ug/L        3.0527      10.467 ppb        3.0527  29.16%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 7.0      2.4017 ug/L       1.74473      2.4017 ppb        1.74473  72.65%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 2.1      1.3195 ug/L       1.64149      1.3195 ppb        1.64149 124.40%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                26.2      0.8314 ug/L       0.75728      0.8314 ppb        0.75728  91.08%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.1      1.7651 ug/L       1.70403      1.7651 ppb        1.70403  96.54%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                15.4      0.0982 ug/L       0.05530      0.0982 ppb        0.05530  56.32%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                11.6      0.0183 ug/L       0.05515      0.0183 ppb        0.05515 300.73%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.8     -0.8586 ug/L       1.84716     -0.8586 ppb        1.84716 215.14%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -78.1     -2.2978 ug/L       3.30458     -2.2978 ppb        3.30458 143.81%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -7.6     -0.0569 ug/L       0.36767     -0.0569 ppb        0.36767 646.20%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                23.4      0.2192 ug/L       0.05379      0.2192 ppb        0.05379  24.54%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      36.3      2.4548 ug/L       1.55053      2.4548 ppb        1.55053  63.16%
   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: 1/12/2010 13:15:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5072.5	5072.5	99.1	%			13:17:07
1	Y RADIAL	5458.5	5458.5	99.15	%			13:17:07
1	Al 396.153Radial†	261.2	269.9	215.41	ug/L	215.41	ppb	13:17:07
1	Ca 317.933Radial†	152.0	134.2	216.69	ug/L	216.69	ppb	13:17:27
1	Fe 238.204 Radial†	21.9	10.6	90.073	ug/L	90.073	ppb	13:17:27
1	K 766.490 Radial†	3378.5	899.2	163.53	ug/L	163.53	ppb	13:17:07
1	Mg 279.077 IEC†	9.7	6.7	223.91	ug/L	223.91	ppb	13:17:27
1	Na 589.592 Radial†	-206.1	1100.8	315.55	ug/L	315.55	ppb	13:17:07
1	Sr 421.552†	777.9	775.6	4.9502	ug/L	4.9502	ppb	13:17:07
1	Sc 361.383	867851.8	867851.8	101.14	%			13:18:24
1	Y 371.029	732628.4	732628.4	100.68	%			13:18:24
1	Ag 328.068†	1455.1	1081.6	4.9654	ug/L	4.9654	ppb	13:18:29
1	As 188.979†	45.4	68.8	29.453	ug/L	29.453	ppb	13:18:49
1	B 249.677†	1583.3	2180.6	48.915	ug/L	48.915	ppb	13:18:29
1	Ba 233.527†	642.5	643.9	5.0029	ug/L	5.0029	ppb	13:18:49
1	Be 313.107†	8400.4	12780.4	4.8398	ug/L	4.8398	ppb	13:18:29
1	Cd 226.502†	253.8	452.6	4.9829	ug/L	4.9829	ppb	13:18:49
1	Co 228.616†	158.0	233.5	4.7485	ug/L	4.7485	ppb	13:18:49
1	Cr 267.716†	509.0	424.3	4.6951	ug/L	4.6951	ppb	13:18:49
1	Cu 324.752†	9721.0	3209.0	9.5477	ug/L	9.5477	ppb	13:18:29
1	Mn 257.610†	9876.0	9334.9	10.237	ug/L	10.237	ppb	13:18:29
1	Mo 202.031†	159.9	136.5	9.5349	ug/L	9.5349	ppb	13:18:49
1	Ni 231.604†	265.7	195.7	4.8409	ug/L	4.8409	ppb	13:18:49
1	P 214.914†	464.5	238.9	141.23	ug/L	141.23	ppb	13:18:49
1	Pb 220.353†	9.7	71.8	8.7526	ug/L	8.7526	ppb	13:18:49
1	S 181.975 Axial†	122.9	77.6	108.00	ug/L	108.00	ppb	13:18:49
1	Sb 206.836†	63.0	28.8	10.119	ug/L	10.119	ppb	13:18:49
1	Se 196.026†	12.6	44.5	28.330	ug/L	28.330	ppb	13:18:49
1	Si 251.611†	3584.3	3083.3	97.488	ug/L	97.488	ppb	13:18:29
1	Sn 189.927†	58.7	56.4	9.8653	ug/L	9.8653	ppb	13:18:49
1	Ti 334.940†	1725.7	3040.4	4.8541	ug/L	4.8541	ppb	13:18:29
1	Tl 190.801†	39.4	73.1	22.120	ug/L	22.120	ppb	13:18:49
1	U 409.014†	-23.6	1840.5	54.161	ug/L	54.161	ppb	13:18:24
1	V 292.402†	-611.1	755.5	5.3493	ug/L	5.3493	ppb	13:18:29
1	Zn 213.857†	1755.3	1110.9	10.376	ug/L	10.376	ppb	13:18:49
1	SiO2†	3608.3	3108.7	209.41	ug/L	209.41	ppb	13:19:55
2	Sc Radial	5060.1	5060.1	98.8	%			13:17:32
2	Y RADIAL	5452.4	5452.4	99.04	%			13:17:32
2	Al 396.153Radial†	245.7	254.8	203.36	ug/L	203.36	ppb	13:17:32
2	Ca 317.933Radial†	144.1	126.6	204.32	ug/L	204.32	ppb	13:17:52
2	Fe 238.204 Radial†	22.7	11.4	97.409	ug/L	97.409	ppb	13:17:52
2	K 766.490 Radial†	3309.1	837.4	152.28	ug/L	152.28	ppb	13:17:32
2	Mg 279.077 IEC†	12.6	9.7	322.16	ug/L	322.16	ppb	13:17:52
2	Na 589.592 Radial†	-179.5	1127.3	323.13	ug/L	323.13	ppb	13:17:32
2	Sr 421.552†	766.3	765.8	4.8875	ug/L	4.8875	ppb	13:17:32
2	Sc 361.383	857551.6	857551.6	99.939	%			13:18:54
2	Y 371.029	725347.9	725347.9	99.682	%			13:18:54
2	Ag 328.068†	1468.5	1112.3	5.1069	ug/L	5.1069	ppb	13:18:59
2	As 188.979†	41.4	65.4	27.983	ug/L	27.983	ppb	13:19:20
2	B 249.677†	1646.3	2262.4	50.750	ug/L	50.750	ppb	13:18:59
2	Ba 233.527†	627.0	636.0	4.9413	ug/L	4.9413	ppb	13:19:20
2	Be 313.107†	8517.0	12996.9	4.9218	ug/L	4.9218	ppb	13:18:59
2	Cd 226.502†	246.5	448.3	4.9358	ug/L	4.9358	ppb	13:19:20
2	Co 228.616†	166.3	243.7	4.9545	ug/L	4.9545	ppb	13:19:20
2	Cr 267.716†	507.7	429.0	4.7470	ug/L	4.7470	ppb	13:19:20
2	Cu 324.752†	9880.2	3483.8	10.367	ug/L	10.367	ppb	13:18:59
2	Mn 257.610†	9864.5	9440.7	10.350	ug/L	10.350	ppb	13:18:59
2	Mo 202.031†	157.0	135.5	9.4648	ug/L	9.4648	ppb	13:19:20
2	Ni 231.604†	278.8	211.9	5.2417	ug/L	5.2417	ppb	13:19:20

2	P 214.914†	474.0	254.0	150.10 ug/L	150.10 ppb	13:19:20
2	Pb 220.353†	17.2	79.4	9.6676 ug/L	9.6676 ppb	13:19:20
2	S 181.975 Axial†	118.9	75.1	104.50 ug/L	104.50 ppb	13:19:20
2	Sb 206.836†	73.6	40.2	13.978 ug/L	13.978 ppb	13:19:20
2	Se 196.026†	11.2	43.2	27.549 ug/L	27.549 ppb	13:19:20
2	Si 251.611†	3602.3	3143.8	99.405 ug/L	99.405 ppb	13:18:59
2	Sn 189.927†	62.6	61.0	10.654 ug/L	10.654 ppb	13:19:20
2	Ti 334.940†	1773.8	3109.1	4.9540 ug/L	4.9540 ppb	13:18:59
2	Tl 190.801†	28.6	62.7	18.985 ug/L	18.985 ppb	13:19:20
2	U 409.014†	3.3	1867.2	54.945 ug/L	54.945 ppb	13:18:54
2	V 292.402†	-640.2	719.1	5.1041 ug/L	5.1041 ppb	13:18:59
2	Zn 213.857†	1761.7	1138.1	10.627 ug/L	10.627 ppb	13:19:20
2	SiO2†	3588.3	3131.5	210.96 ug/L	210.96 ppb	13:20:00
3	Sc Radial	5313.6	5313.6	104 %		13:17:57
3	Y RADIAL	5695.4	5695.4	103.5 %		13:17:57
3	Al 396.153Radial†	256.2	253.1	201.93 ug/L	201.93 ppb	13:17:57
3	Ca 317.933Radial†	143.5	119.1	192.24 ug/L	192.24 ppb	13:18:18
3	Fe 238.204 Radial†	23.1	10.7	90.971 ug/L	90.971 ppb	13:18:18
3	K 766.490 Radial†	3366.1	732.5	133.19 ug/L	133.19 ppb	13:17:57
3	Mg 279.077 IEC†	11.1	7.7	255.26 ug/L	255.26 ppb	13:18:18
3	Na 589.592 Radial†	-197.0	1119.0	320.76 ug/L	320.76 ppb	13:17:57
3	Sr 421.552†	762.9	725.5	4.6306 ug/L	4.6306 ppb	13:17:57
3	Sc 361.383	855818.5	855818.5	99.737 %		13:19:25
3	Y 371.029	723943.9	723943.9	99.489 %		13:19:25
3	Ag 328.068†	1367.5	1014.0	4.6585 ug/L	4.6585 ppb	13:19:30
3	As 188.979†	53.4	77.5	33.166 ug/L	33.166 ppb	13:19:50
3	B 249.677†	1602.2	2221.5	49.834 ug/L	49.834 ppb	13:19:30
3	Ba 233.527†	621.1	631.3	4.9054 ug/L	4.9054 ppb	13:19:50
3	Be 313.107†	8534.7	13031.8	4.9351 ug/L	4.9351 ppb	13:19:30
3	Cd 226.502†	247.1	449.4	4.9469 ug/L	4.9469 ppb	13:19:50
3	Co 228.616†	165.2	242.9	4.9398 ug/L	4.9398 ppb	13:19:50
3	Cr 267.716†	497.0	419.3	4.6413 ug/L	4.6413 ppb	13:19:50
3	Cu 324.752†	9737.0	3360.2	10.001 ug/L	10.001 ppb	13:19:30
3	Mn 257.610†	9958.5	9554.9	10.477 ug/L	10.477 ppb	13:19:30
3	Mo 202.031†	163.9	142.7	9.9685 ug/L	9.9685 ppb	13:19:50
3	Ni 231.604†	255.4	189.1	4.6763 ug/L	4.6763 ppb	13:19:50
3	P 214.914†	469.5	250.4	148.04 ug/L	148.04 ppb	13:19:50
3	Pb 220.353†	32.4	94.7	11.520 ug/L	11.520 ppb	13:19:50
3	S 181.975 Axial†	111.1	67.5	93.935 ug/L	93.935 ppb	13:19:50
3	Sb 206.836†	61.2	27.9	9.8257 ug/L	9.8257 ppb	13:19:50
3	Se 196.026†	18.7	50.7	32.271 ug/L	32.271 ppb	13:19:50
3	Si 251.611†	3583.7	3132.5	99.041 ug/L	99.041 ppb	13:19:30
3	Sn 189.927†	60.9	59.4	10.379 ug/L	10.379 ppb	13:19:50
3	Ti 334.940†	1792.6	3131.4	4.9954 ug/L	4.9954 ppb	13:19:30
3	Tl 190.801†	21.4	55.5	16.814 ug/L	16.814 ppb	13:19:50
3	U 409.014†	-127.5	1736.0	51.086 ug/L	51.086 ppb	13:19:25
3	V 292.402†	-605.6	752.5	5.3299 ug/L	5.3299 ppb	13:19:30
3	Zn 213.857†	1750.5	1130.4	10.559 ug/L	10.559 ppb	13:19:50
3	SiO2†	3596.2	3146.6	211.96 ug/L	211.96 ppb	13:20:05

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	860407.3	100.27	%	0.758				0.76%
Sc Radial	5148.7	101	%	2.8				2.78%
Y 371.029	727306.7	99.951	%	0.6407				0.64%
Y RADIAL	5535.4	100.5	%	2.52				2.50%
Ag 328.068†	1069.3	4.9103	ug/L	0.22926	4.9103	ppb	0.22926	4.67%
QC value within limits for Ag 328.068 Recovery = 98.21%								
Al 396.153Radial†	259.3	206.90	ug/L	7.402	206.90	ppb	7.402	3.58%
QC value within limits for Al 396.153Radial Recovery = 103.45%								
As 188.979†	70.5	30.201	ug/L	2.6710	30.201	ppb	2.6710	8.84%
QC value within limits for As 188.979 Recovery = 100.67%								
B 249.677†	2221.5	49.833	ug/L	0.9173	49.833	ppb	0.9173	1.84%
QC value within limits for B 249.677 Recovery = 99.67%								
Ba 233.527†	637.0	4.9499	ug/L	0.04930	4.9499	ppb	0.04930	1.00%
QC value within limits for Ba 233.527 Recovery = 99.00%								
Be 313.107†	12936.4	4.8989	ug/L	0.05163	4.8989	ppb	0.05163	1.05%
QC value within limits for Be 313.107 Recovery = 97.98%								
Ca 317.933Radial†	126.6	204.42	ug/L	12.226	204.42	ppb	12.226	5.98%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.21%
Cd 226.502†              450.1      4.9552 ug/L       0.02461      4.9552 ppb        0.02461   0.50%
   QC value within limits for Cd 226.502  Recovery = 99.10%
Co 228.616†              240.0      4.8809 ug/L       0.11492      4.8809 ppb        0.11492   2.35%
   QC value within limits for Co 228.616  Recovery = 97.62%
Cr 267.716†              424.2      4.6945 ug/L       0.05284      4.6945 ppb        0.05284   1.13%
   QC value within limits for Cr 267.716  Recovery = 93.89%
Cu 324.752†             3351.0      9.9718 ug/L       0.41050      9.9718 ppb        0.41050   4.12%
   QC value within limits for Cu 324.752  Recovery = 99.72%
Fe 238.204 Radial†        10.9      92.818 ug/L        4.0015      92.818 ppb         4.0015   4.31%
   QC value within limits for Fe 238.204 Radial  Recovery = 92.82%
K 766.490 Radial†        823.0      149.67 ug/L        15.339      149.67 ppb         15.339  10.25%
   QC value within limits for K 766.490 Radial  Recovery = 99.78%
Mg 279.077 IEC†           8.0      267.11 ug/L        50.184      267.11 ppb         50.184  18.79%
   QC value within limits for Mg 279.077 IEC  Recovery = 89.04%
Mn 257.610†             9443.5      10.355 ug/L        0.1201      10.355 ppb         0.1201   1.16%
   QC value within limits for Mn 257.610  Recovery = 103.55%
Mo 202.031†              138.2      9.6561 ug/L       0.27283      9.6561 ppb        0.27283   2.83%
   QC value within limits for Mo 202.031  Recovery = 96.56%
Na 589.592 Radial†      1115.7      319.81 ug/L         3.881      319.81 ppb          3.881   1.21%
   QC value within limits for Na 589.592 Radial  Recovery = 106.60%
Ni 231.604†              198.9      4.9196 ug/L       0.29084      4.9196 ppb        0.29084   5.91%
   QC value within limits for Ni 231.604  Recovery = 98.39%
P 214.914†               247.8      146.46 ug/L         4.638      146.46 ppb          4.638   3.17%
   QC value within limits for P 214.914  Recovery = 97.64%
Pb 220.353†               82.0      9.9802 ug/L       1.41008      9.9802 ppb        1.41008  14.13%
   QC value within limits for Pb 220.353  Recovery = 99.80%
S 181.975 Axial†          73.4      102.14 ug/L         7.322      102.14 ppb          7.322   7.17%
   QC value within limits for S 181.975 Axial  Recovery = 102.14%
Sb 206.836†               32.3      11.307 ug/L        2.3171      11.307 ppb         2.3171  20.49%
   QC value within limits for Sb 206.836  Recovery = 113.07%
Se 196.026†               46.2      29.383 ug/L        2.5306      29.383 ppb         2.5306   8.61%
   QC value within limits for Se 196.026  Recovery = 97.94%
Si 251.611†             3119.9      98.645 ug/L        1.0184      98.645 ppb         1.0184   1.03%
   QC value within limits for Si 251.611  Recovery = 98.64%
Sn 189.927†               58.9      10.299 ug/L        0.4003      10.299 ppb         0.4003   3.89%
   QC value within limits for Sn 189.927  Recovery = 102.99%
Sr 421.552†              755.6      4.8228 ug/L       0.16938      4.8228 ppb        0.16938   3.51%
   QC value within limits for Sr 421.552  Recovery = 96.46%
Ti 334.940†             3093.6      4.9345 ug/L       0.07263      4.9345 ppb        0.07263   1.47%
   QC value within limits for Ti 334.940  Recovery = 98.69%
Tl 190.801†               63.8      19.306 ug/L        2.6676      19.306 ppb         2.6676  13.82%
   QC value within limits for Tl 190.801  Recovery = 96.53%
U 409.014†              1814.6      53.398 ug/L        2.0395      53.398 ppb         2.0395   3.82%
   QC value within limits for U 409.014  Recovery = 106.80%
V 292.402†               742.4      5.2611 ug/L       0.13633      5.2611 ppb        0.13633   2.59%
   QC value within limits for V 292.402  Recovery = 105.22%
Zn 213.857†             1126.5      10.521 ug/L        0.1299      10.521 ppb         0.1299   1.23%
   QC value within limits for Zn 213.857  Recovery = 105.21%
SiO2†                   3128.9      210.78 ug/L         1.284      210.78 ppb          1.284   0.61%
   QC value within limits for SiO2  Recovery = 98.96%
All analyte(s) passed QC.
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Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 1/12/2010 13:22:16
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	4817.3	4817.3	94.1	%			13:24:15
1	Y RADIAL	5136.5	5136.5	93.30	%			13:24:15
1	Al 396.153Radial†	573761.5	609935.9	487810	ug/L	487810	ppb	13:24:10
1	Ca 317.933Radial†	263181.8	279752.8	451590	ug/L	451590	ppb	13:24:10
1	Fe 238.204 Radial†	19492.7	20709.9	176090	ug/L	176090	ppb	13:24:15
1	K 766.490 Radial†	2332.2	-32.3	-156.94	ug/L	-156.94	ppb	13:24:15
1	Mg 279.077 IEC†	13027.3	13845.4	459580	ug/L	459580	ppb	13:24:15
1	Na 589.592 Radial†	-1051.6	191.0	54.759	ug/L	54.759	ppb	13:24:15
1	Sr 421.552†	558.9	584.4	0.3588	ug/L	0.3588	ppb	13:24:15
1	Sc 361.383	725568.7	725568.7	84.558	%			13:24:42
1	Y 371.029	596091.4	596091.4	81.919	%			13:24:42
1	Ag 328.068†	-9801.9	-11948.9	-3.8464	ug/L	-3.8464	ppb	13:24:42
1	As 188.979†	-98.7	-92.8	1.4302	ug/L	1.4302	ppb	13:25:02
1	B 249.677†	552.5	1268.5	-0.1280	ug/L	-0.1280	ppb	13:24:42
1	Ba 233.527†	-409.5	-475.7	1.7152	ug/L	1.7152	ppb	13:25:02
1	Be 313.107†	-4390.5	-717.6	-0.3234	ug/L	-0.3234	ppb	13:24:42
1	Cd 226.502†	1262.3	1694.5	0.4589	ug/L	0.4589	ppb	13:25:02
1	Co 228.616†	-7.2	68.7	-1.1464	ug/L	-1.1464	ppb	13:25:02
1	Cr 267.716†	-105.8	-204.0	1.1749	ug/L	1.1749	ppb	13:25:02
1	Cu 324.752†	4073.8	-1584.7	4.5768	ug/L	4.5768	ppb	13:24:42
1	Mn 257.610†	2225.8	2202.4	1.0087	ug/L	1.0087	ppb	13:24:42
1	Mo 202.031†	-210.2	-270.2	0.1861	ug/L	0.1861	ppb	13:25:02
1	Ni 231.604†	178.8	144.5	3.5745	ug/L	3.5745	ppb	13:25:02
1	P 214.914†	175.5	-12.7	-27.404	ug/L	-27.404	ppb	13:25:02
1	Pb 220.353†	-746.8	-821.0	5.8603	ug/L	5.8603	ppb	13:25:02
1	S 181.975 Axial†	88.7	61.0	-6.5613	ug/L	-6.5613	ppb	13:25:02
1	Sb 206.836†	52.2	28.3	-2.6917	ug/L	-2.6917	ppb	13:25:02
1	Se 196.026†	-801.7	-916.1	-28.770	ug/L	-28.770	ppb	13:25:02
1	Si 251.611†	536.8	174.1	5.7445	ug/L	5.7445	ppb	13:25:02
1	Sn 189.927†	-354.7	-421.2	5.4411	ug/L	5.4411	ppb	13:25:02
1	Ti 334.940†	-13276.1	-14366.5	0.7789	ug/L	0.7789	ppb	13:24:42
1	Tl 190.801†	-86.6	-68.3	-20.848	ug/L	-20.848	ppb	13:25:02
1	U 409.014†	-724.9	1006.6	9.5634	ug/L	9.5634	ppb	13:24:42
1	V 292.402†	1329.7	2932.2	-0.0103	ug/L	-0.0103	ppb	13:25:02
1	Zn 213.857†	2869.2	2768.5	8.8907	ug/L	8.8907	ppb	13:25:02
1	SiO2†	553.7	195.7	13.716	ug/L	13.716	ppb	13:25:58
2	Sc Radial	4532.2	4532.2	88.5	%			13:24:25
2	Y RADIAL	4831.5	4831.5	87.76	%			13:24:25
2	Al 396.153Radial†	569974.3	644014.7	515070	ug/L	515070	ppb	13:24:20
2	Ca 317.933Radial†	261076.2	294968.3	476160	ug/L	476160	ppb	13:24:20
2	Fe 238.204 Radial†	19365.5	21869.3	185950	ug/L	185950	ppb	13:24:25
2	K 766.490 Radial†	2347.6	141.0	-133.60	ug/L	-133.60	ppb	13:24:25
2	Mg 279.077 IEC†	13011.0	14698.0	487880	ug/L	487880	ppb	13:24:25
2	Na 589.592 Radial†	-1055.5	116.2	33.320	ug/L	33.320	ppb	13:24:25
2	Sr 421.552†	557.8	620.6	0.4065	ug/L	0.4065	ppb	13:24:25
2	Sc 361.383	725883.6	725883.6	84.595	%			13:25:07
2	Y 371.029	598473.2	598473.2	82.246	%			13:25:07
2	Ag 328.068†	-9770.6	-11907.0	-0.8017	ug/L	-0.8017	ppb	13:25:07
2	As 188.979†	-83.1	-74.3	11.621	ug/L	11.621	ppb	13:25:28
2	B 249.677†	446.6	1143.0	-4.5455	ug/L	-4.5455	ppb	13:25:07
2	Ba 233.527†	-430.3	-500.1	1.8255	ug/L	1.8255	ppb	13:25:28
2	Be 313.107†	-4402.1	-729.1	-0.3275	ug/L	-0.3275	ppb	13:25:07
2	Cd 226.502†	1261.3	1692.7	-0.5778	ug/L	-0.5778	ppb	13:25:28
2	Co 228.616†	-26.5	46.0	-1.7482	ug/L	-1.7482	ppb	13:25:28
2	Cr 267.716†	-106.6	-204.9	1.3539	ug/L	1.3539	ppb	13:25:28
2	Cu 324.752†	4055.2	-1608.8	5.0234	ug/L	5.0234	ppb	13:25:07
2	Mn 257.610†	2147.2	2108.4	0.7218	ug/L	0.7218	ppb	13:25:07
2	Mo 202.031†	-202.6	-261.1	1.8824	ug/L	1.8824	ppb	13:25:28
2	Ni 231.604†	186.3	153.3	3.7922	ug/L	3.7922	ppb	13:25:28

2	P 214.914†	163.3	-27.2	-37.227 ug/L	-37.227 ppb	13:25:28
2	Pb 220.353†	-734.6	-806.2	13.514 ug/L	13.514 ppb	13:25:28
2	S 181.975 Axial†	71.3	40.4	-40.277 ug/L	-40.277 ppb	13:25:28
2	Sb 206.836†	66.0	44.6	2.2667 ug/L	2.2667 ppb	13:25:28
2	Se 196.026†	-790.5	-902.4	10.571 ug/L	10.571 ppb	13:25:28
2	Si 251.611†	513.5	146.3	4.8566 ug/L	4.8566 ppb	13:25:28
2	Sn 189.927†	-345.0	-409.5	11.765 ug/L	11.765 ppb	13:25:28
2	Ti 334.940†	-13222.6	-14296.4	1.9126 ug/L	1.9126 ppb	13:25:07
2	Tl 190.801†	-73.8	-53.2	-16.283 ug/L	-16.283 ppb	13:25:28
2	U 409.014†	-548.8	1215.1	14.578 ug/L	14.578 ppb	13:25:07
2	V 292.402†	1292.1	2887.2	-1.3472 ug/L	-1.3472 ppb	13:25:28
2	Zn 213.857†	2899.3	2802.7	8.2535 ug/L	8.2535 ppb	13:25:28
2	SiO2†	485.3	114.7	8.2324 ug/L	8.2324 ppb	13:26:03
3	Sc Radial	4556.3	4556.3	89.0 %		13:24:35
3	Y RADIAL	4845.5	4845.5	88.01 %		13:24:35
3	Al 396.153Radial†	574684.7	645901.0	516570 ug/L	516570 ppb	13:24:30
3	Ca 317.933Radial†	263299.9	295906.7	477670 ug/L	477670 ppb	13:24:30
3	Fe 238.204 Radial†	19544.2	21954.3	186670 ug/L	186670 ppb	13:24:35
3	K 766.490 Radial†	2223.6	-12.4	-162.04 ug/L	-162.04 ppb	13:24:35
3	Mg 279.077 IEC†	13090.4	14709.4	488260 ug/L	488260 ppb	13:24:35
3	Na 589.592 Radial†	-1000.1	184.9	52.998 ug/L	52.998 ppb	13:24:35
3	Sr 421.552†	533.4	589.7	0.1984 ug/L	0.1984 ppb	13:24:35
3	Sc 361.383	732421.7	732421.7	85.357 %		13:25:33
3	Y 371.029	603682.2	603682.2	82.962 %		13:25:33
3	Ag 328.068†	-9954.9	-12019.7	-1.1058 ug/L	-1.1058 ppb	13:25:33
3	As 188.979†	-92.7	-84.6	7.3885 ug/L	7.3885 ppb	13:25:53
3	B 249.677†	464.1	1158.8	-4.3089 ug/L	-4.3089 ppb	13:25:33
3	Ba 233.527†	-457.7	-527.6	1.6354 ug/L	1.6354 ppb	13:25:53
3	Be 313.107†	-4441.3	-728.6	-0.3266 ug/L	-0.3266 ppb	13:25:33
3	Cd 226.502†	1315.0	1742.3	-0.1065 ug/L	-0.1065 ppb	13:25:53
3	Co 228.616†	-15.9	58.6	-1.5033 ug/L	-1.5033 ppb	13:25:53
3	Cr 267.716†	-75.5	-167.4	1.7832 ug/L	1.7832 ppb	13:25:53
3	Cu 324.752†	4010.8	-1703.6	4.7776 ug/L	4.7776 ppb	13:25:33
3	Mn 257.610†	2194.4	2141.0	0.8135 ug/L	0.8135 ppb	13:25:33
3	Mo 202.031†	-208.3	-265.7	1.6370 ug/L	1.6370 ppb	13:25:53
3	Ni 231.604†	186.8	151.8	3.7565 ug/L	3.7565 ppb	13:25:53
3	P 214.914†	171.5	-19.4	-32.722 ug/L	-32.722 ppb	13:25:53
3	Pb 220.353†	-737.7	-802.1	14.324 ug/L	14.324 ppb	13:25:53
3	S 181.975 Axial†	82.3	52.5	-23.694 ug/L	-23.694 ppb	13:25:53
3	Sb 206.836†	65.5	43.3	1.6863 ug/L	1.6863 ppb	13:25:53
3	Se 196.026†	-826.6	-936.3	-8.5818 ug/L	-8.5818 ppb	13:25:53
3	Si 251.611†	531.4	161.9	5.3548 ug/L	5.3548 ppb	13:25:53
3	Sn 189.927†	-380.4	-447.4	5.4380 ug/L	5.4380 ppb	13:25:53
3	Ti 334.940†	-13186.1	-14114.1	2.3783 ug/L	2.3783 ppb	13:25:33
3	Tl 190.801†	-86.9	-67.7	-20.655 ug/L	-20.655 ppb	13:25:53
3	U 409.014†	-487.0	1293.3	16.797 ug/L	16.797 ppb	13:25:33
3	V 292.402†	1338.7	2928.1	-1.1804 ug/L	-1.1804 ppb	13:25:53
3	Zn 213.857†	2895.0	2767.0	7.8493 ug/L	7.8493 ppb	13:25:53
3	SiO2†	561.9	199.3	13.947 ug/L	13.947 ppb	13:26:08

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	727958.0	84.837	%	0.4509				0.53%
Sc Radial	4635.3	90.5	%	3.09				3.41%
Y 371.029	599415.6	82.375	%	0.5335				0.65%
Y RADIAL	4937.9	89.69	%	3.128				3.49%
Ag 328.068†	-11958.6	-1.9180	ug/L	1.67700	-1.9180	ppb	1.67700	87.44%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	633283.9	506480	ug/L	16188.9	506480	ppb	16188.9	3.20%
QC value within limits for Al 396.153Radial Recovery = 101.30%								
As 188.979†	-83.9	6.8132	ug/L	5.11967	6.8132	ppb	5.11967	75.14%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1190.1	-2.9941	ug/L	2.48497	-2.9941	ppb	2.48497	83.00%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-501.2	1.7254	ug/L	0.09545	1.7254	ppb	0.09545	5.53%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-725.1	-0.3258	ug/L	0.00216	-0.3258	ppb	0.00216	0.66%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	290209.2	468470	ug/L	14637.6	468470	ppb	14637.6	3.12%

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   QC value within limits for Ca 317.933Radial  Recovery = 93.69%
Cd 226.502†            1709.8     -0.0751 ug/L      0.51910     -0.0751 ppb       0.51910 690.96%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              57.8     -1.4660 ug/L      0.30261     -1.4660 ppb       0.30261  20.64%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -192.1      1.4373 ug/L      0.31258      1.4373 ppb       0.31258  21.75%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -1632.3      4.7926 ug/L      0.22368      4.7926 ppb       0.22368   4.67%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    21511.2      182910 ug/L       5911.6      182910 ppb        5911.6   3.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 91.45%
K 766.490 Radial†        32.1     -150.86 ug/L       15.165     -150.86 ppb        15.165  10.05%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       14417.6      478580 ug/L      16449.3      478580 ppb       16449.3   3.44%
   QC value within limits for Mg 279.077 IEC  Recovery = 95.72%
Mn 257.610†            2150.6      0.8480 ug/L      0.14657      0.8480 ppb       0.14657  17.28%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -265.7      1.2352 ug/L      0.91677      1.2352 ppb       0.91677  74.22%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      164.1      47.026 ug/L      11.9018      47.026 ppb       11.9018  25.31%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             149.9      3.7077 ug/L      0.11676      3.7077 ppb       0.11676   3.15%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -19.8     -32.451 ug/L       4.9171     -32.451 ppb        4.9171  15.15%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -809.7      11.233 ug/L       4.6703      11.233 ppb        4.6703  41.58%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         51.3     -23.511 ug/L      16.8587     -23.511 ppb       16.8587  71.71%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              38.8      0.4204 ug/L      2.71073      0.4204 ppb       2.71073 644.73%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -918.3     -8.9269 ug/L     19.67264     -8.9269 ppb      19.67264 220.38%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             160.8      5.3186 ug/L      0.44505      5.3186 ppb       0.44505   8.37%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -426.0      7.5479 ug/L      3.65171      7.5479 ppb       3.65171  48.38%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             598.2      0.3212 ug/L      0.10905      0.3212 ppb       0.10905  33.95%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†          -14259.0      1.6899 ug/L      0.82264      1.6899 ppb       0.82264  48.68%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -63.1     -19.262 ug/L       2.5816     -19.262 ppb        2.5816  13.40%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             1171.7      13.646 ug/L       3.7058      13.646 ppb        3.7058  27.16%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             2915.8     -0.8460 ug/L      0.72849     -0.8460 ppb       0.72849  86.11%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            2779.4      8.3312 ug/L      0.52500      8.3312 ppb       0.52500   6.30%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   169.9      11.965 ug/L       3.2345      11.965 ppb        3.2345  27.03%
   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: 1/12/2010 13:28:20
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	4483.1	4483.1	87.5	%			13:30:18
1	Y RADIAL	4796.8	4796.8	87.13	%			13:30:18
1	Al 396.153Radial†	588773.8	672553.3	537870	ug/L	537870	ppb	13:30:13
1	Ca 317.933Radial†	267848.1	305939.5	493870	ug/L	493870	ppb	13:30:13
1	Fe 238.204 Radial†	19620.8	22400.9	190480	ug/L	190480	ppb	13:30:18
1	K 766.490 Radial†	29237.9	30886.4	5456.5	ug/L	5456.5	ppb	13:30:13
1	Mg 279.077 IEC†	13218.4	15096.1	501100	ug/L	501100	ppb	13:30:18
1	Na 589.592 Radial†	15704.0	19247.3	5517.2	ug/L	5517.2	ppb	13:30:18
1	Sr 421.552†	70989.9	81080.9	513.98	ug/L	513.98	ppb	13:30:13
1	Sc 361.383	728554.1	728554.1	84.906	%			13:30:46
1	Y 371.029	599175.1	599175.1	82.342	%			13:30:46
1	Ag 328.068†	41297.9	48282.5	278.34	ug/L	278.34	ppb	13:30:46
1	As 188.979†	961.9	1156.8	542.32	ug/L	542.32	ppb	13:31:06
1	B 249.677†	20152.8	24350.5	514.31	ug/L	514.31	ppb	13:30:46
1	Ba 233.527†	54514.4	64214.1	504.50	ug/L	504.50	ppb	13:30:46
1	Be 313.107†	554513.1	657565.3	249.58	ug/L	249.58	ppb	13:30:46
1	Cd 226.502†	38105.3	45081.0	476.64	ug/L	476.64	ppb	13:30:46
1	Co 228.616†	19201.7	22692.4	457.82	ug/L	457.82	ppb	13:31:06
1	Cr 267.716†	37235.8	43776.3	489.93	ug/L	489.93	ppb	13:30:46
1	Cu 324.752†	163863.6	186591.7	566.41	ug/L	566.41	ppb	13:30:46
1	Mn 257.610†	379976.1	447095.8	488.63	ug/L	488.63	ppb	13:30:46
1	Mo 202.031†	5939.3	6973.5	507.24	ug/L	507.24	ppb	13:31:06
1	Ni 231.604†	15803.9	18546.3	458.68	ug/L	458.68	ppb	13:31:06
1	P 214.914†	3851.6	4316.0	2443.3	ug/L	2443.3	ppb	13:31:06
1	Pb 220.353†	2580.7	3101.7	492.55	ug/L	492.55	ppb	13:31:06
1	S 181.975 Axial†	1760.3	2029.3	2723.3	ug/L	2723.3	ppb	13:31:06
1	Sb 206.836†	1398.3	1613.4	551.65	ug/L	551.65	ppb	13:31:06
1	Se 196.026†	2668.6	3175.0	2594.5	ug/L	2594.5	ppb	13:31:06
1	Si 251.611†	144426.4	169640.9	5364.2	ug/L	5364.2	ppb	13:30:46
1	Sn 189.927†	2102.0	2474.1	517.13	ug/L	517.13	ppb	13:31:06
1	Ti 334.940†	263115.4	311224.4	524.08	ug/L	524.08	ppb	13:30:46
1	Tl 190.801†	1244.6	1500.0	456.30	ug/L	456.30	ppb	13:31:06
1	U 409.014†	14047.4	18408.5	519.12	ug/L	519.12	ppb	13:30:46
1	V 292.402†	65105.1	78038.8	515.35	ug/L	515.35	ppb	13:30:46
1	Zn 213.857†	48504.3	56502.4	508.25	ug/L	508.25	ppb	13:30:46
1	SiO2†	145640.3	171072.3	11525	ug/L	11525	ppb	13:32:03
2	Sc Radial	4519.8	4519.8	88.3	%			13:30:28
2	Y RADIAL	4815.9	4815.9	87.47	%			13:30:28
2	Al 396.153Radial†	589213.6	667579.2	533890	ug/L	533890	ppb	13:30:23
2	Ca 317.933Radial†	268892.3	304633.1	491760	ug/L	491760	ppb	13:30:23
2	Fe 238.204 Radial†	19571.4	22162.6	188460	ug/L	188460	ppb	13:30:28
2	K 766.490 Radial†	29239.5	30616.6	5408.1	ug/L	5408.1	ppb	13:30:23
2	Mg 279.077 IEC†	13185.6	14936.1	495790	ug/L	495790	ppb	13:30:28
2	Na 589.592 Radial†	15810.6	19222.2	5510.0	ug/L	5510.0	ppb	13:30:28
2	Sr 421.552†	70914.1	80335.2	509.23	ug/L	509.23	ppb	13:30:23
2	Sc 361.383	733184.3	733184.3	85.446	%			13:31:12
2	Y 371.029	601639.4	601639.4	82.681	%			13:31:12
2	Ag 328.068†	41438.9	48140.3	277.06	ug/L	277.06	ppb	13:31:12
2	As 188.979†	949.7	1135.4	532.71	ug/L	532.71	ppb	13:31:32
2	B 249.677†	20470.6	24572.5	519.63	ug/L	519.63	ppb	13:31:12
2	Ba 233.527†	55046.5	64431.4	506.13	ug/L	506.13	ppb	13:31:12
2	Be 313.107†	558335.9	657914.9	249.71	ug/L	249.71	ppb	13:31:12
2	Cd 226.502†	38347.7	45081.4	476.85	ug/L	476.85	ppb	13:31:12
2	Co 228.616†	19231.3	22584.3	455.65	ug/L	455.65	ppb	13:31:32
2	Cr 267.716†	37544.6	43860.8	490.83	ug/L	490.83	ppb	13:31:12
2	Cu 324.752†	165234.9	186977.8	567.45	ug/L	567.45	ppb	13:31:12
2	Mn 257.610†	383214.3	448059.5	489.71	ug/L	489.71	ppb	13:31:12
2	Mo 202.031†	5957.7	6950.9	505.49	ug/L	505.49	ppb	13:31:32
2	Ni 231.604†	15844.2	18476.0	456.95	ug/L	456.95	ppb	13:31:32

2	P 214.914†	3892.3	4335.0	2455.1 ug/L	2455.1 ppb	13:31:32
2	Pb 220.353†	2577.9	3079.2	489.04 ug/L	489.04 ppb	13:31:32
2	S 181.975 Axial†	1767.4	2024.6	2717.5 ug/L	2717.5 ppb	13:31:32
2	Sb 206.836†	1403.1	1608.7	550.05 ug/L	550.05 ppb	13:31:32
2	Se 196.026†	2681.3	3170.1	2585.2 ug/L	2585.2 ppb	13:31:32
2	Si 251.611†	145779.9	170150.8	5380.4 ug/L	5380.4 ppb	13:31:12
2	Sn 189.927†	2100.2	2456.3	513.65 ug/L	513.65 ppb	13:31:32
2	Ti 334.940†	265327.2	311856.0	525.24 ug/L	525.24 ppb	13:31:12
2	Tl 190.801†	1266.0	1515.7	461.07 ug/L	461.07 ppb	13:31:32
2	U 409.014†	14171.0	18448.7	520.53 ug/L	520.53 ppb	13:31:12
2	V 292.402†	65611.5	78147.2	516.29 ug/L	516.29 ppb	13:31:12
2	Zn 213.857†	48899.9	56604.7	509.42 ug/L	509.42 ppb	13:31:12
2	SiO2†	145779.6	170152.0	11463 ug/L	11463 ppb	13:32:09
3	Sc Radial	4490.9	4490.9	87.7 %		13:30:38
3	Y RADIAL	4789.9	4789.9	87.00 %		13:30:38
3	Al 396.153Radial†	586923.1	669266.9	535240 ug/L	535240 ppb	13:30:33
3	Ca 317.933Radial†	267727.2	305266.7	492780 ug/L	492780 ppb	13:30:33
3	Fe 238.204 Radial†	19497.5	22221.1	188960 ug/L	188960 ppb	13:30:38
3	K 766.490 Radial†	29149.7	30727.5	5427.9 ug/L	5427.9 ppb	13:30:33
3	Mg 279.077 IEC†	13142.9	14983.6	497370 ug/L	497370 ppb	13:30:38
3	Na 589.592 Radial†	15586.7	19082.2	5469.9 ug/L	5469.9 ppb	13:30:38
3	Sr 421.552†	70636.8	80536.5	510.51 ug/L	510.51 ppb	13:30:33
3	Sc 361.383	734264.3	734264.3	85.571 %		13:31:38
3	Y 371.029	603129.9	603129.9	82.886 %		13:31:38
3	Ag 328.068†	41696.1	48369.6	278.27 ug/L	278.27 ppb	13:31:38
3	As 188.979†	955.2	1140.2	534.87 ug/L	534.87 ppb	13:31:58
3	B 249.677†	20625.3	24718.1	522.82 ug/L	522.82 ppb	13:31:38
3	Ba 233.527†	55192.3	64507.1	506.73 ug/L	506.73 ppb	13:31:38
3	Be 313.107†	560643.0	659649.8	250.37 ug/L	250.37 ppb	13:31:38
3	Cd 226.502†	38435.1	45117.4	477.19 ug/L	477.19 ppb	13:31:38
3	Co 228.616†	19090.4	22386.5	451.61 ug/L	451.61 ppb	13:31:58
3	Cr 267.716†	37631.0	43897.2	491.24 ug/L	491.24 ppb	13:31:38
3	Cu 324.752†	166044.4	187639.4	569.46 ug/L	569.46 ppb	13:31:38
3	Mn 257.610†	384387.6	448770.9	490.47 ug/L	490.47 ppb	13:31:38
3	Mo 202.031†	5901.3	6874.7	500.22 ug/L	500.22 ppb	13:31:58
3	Ni 231.604†	15681.5	18258.6	451.57 ug/L	451.57 ppb	13:31:58
3	P 214.914†	3816.0	4239.1	2396.9 ug/L	2396.9 ppb	13:31:58
3	Pb 220.353†	2552.5	3045.0	485.18 ug/L	485.18 ppb	13:31:58
3	S 181.975 Axial†	1730.8	1978.7	2653.4 ug/L	2653.4 ppb	13:31:58
3	Sb 206.836†	1402.5	1605.6	548.81 ug/L	548.81 ppb	13:31:58
3	Se 196.026†	2658.5	3138.9	2567.0 ug/L	2567.0 ppb	13:31:58
3	Si 251.611†	146215.5	170408.8	5388.6 ug/L	5388.6 ppb	13:31:38
3	Sn 189.927†	2091.6	2442.6	511.43 ug/L	511.43 ppb	13:31:58
3	Ti 334.940†	266337.0	312579.2	526.41 ug/L	526.41 ppb	13:31:38
3	Tl 190.801†	1227.9	1469.0	447.00 ug/L	447.00 ppb	13:31:58
3	U 409.014†	14160.0	18411.5	519.38 ug/L	519.38 ppb	13:31:38
3	V 292.402†	65764.9	78213.5	516.60 ug/L	516.60 ppb	13:31:38
3	Zn 213.857†	49091.7	56744.5	510.71 ug/L	510.71 ppb	13:31:38
3	SiO2†	146206.7	170400.2	11480 ug/L	11480 ppb	13:32:14

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	732000.9	85.308	%	0.3535				0.41%
Sc Radial	4497.9	87.8	%	0.38				0.43%
Y 371.029	601314.8	82.636	%	0.2745				0.33%
Y RADIAL	4800.9	87.20	%	0.244				0.28%
Ag 328.068†	48264.1	277.89	ug/L	0.717	277.89	ppb	0.717	0.26%
QC value within limits for Ag 328.068 Recovery = 111.16%								
Al 396.153Radial†	669799.8	535660	ug/L	2022.9	535660	ppb	2022.9	0.38%
QC value within limits for Al 396.153Radial Recovery = 107.13%								
As 188.979†	1144.1	536.63	ug/L	5.044	536.63	ppb	5.044	0.94%
QC value within limits for As 188.979 Recovery = 107.33%								
B 249.677†	24547.1	518.92	ug/L	4.302	518.92	ppb	4.302	0.83%
QC value within limits for B 249.677 Recovery = 103.78%								
Ba 233.527†	64384.2	505.79	ug/L	1.151	505.79	ppb	1.151	0.23%
QC value within limits for Ba 233.527 Recovery = 101.16%								
Be 313.107†	658376.7	249.88	ug/L	0.424	249.88	ppb	0.424	0.17%
QC value within limits for Be 313.107 Recovery = 99.95%								
Ca 317.933Radial†	305279.8	492800	ug/L	1054.6	492800	ppb	1054.6	0.21%

```
   QC value within limits for Ca 317.933Radial  Recovery = 98.56%
Cd 226.502†            45093.2      476.89 ug/L         0.279      476.89 ppb          0.279   0.06%
   QC value within limits for Cd 226.502  Recovery = 95.38%
Co 228.616†            22554.4      455.03 ug/L         3.149      455.03 ppb          3.149   0.69%
   QC value within limits for Co 228.616  Recovery = 91.01%
Cr 267.716†            43844.8      490.67 ug/L         0.671      490.67 ppb          0.671   0.14%
   QC value within limits for Cr 267.716  Recovery = 98.13%
Cu 324.752†           187069.6      567.77 ug/L         1.547      567.77 ppb          1.547   0.27%
   QC value within limits for Cu 324.752  Recovery = 113.55%
Fe 238.204 Radial†     22261.6      189300 ug/L        1056.1      189300 ppb         1056.1   0.56%
   QC value within limits for Fe 238.204 Radial  Recovery = 94.65%
K 766.490 Radial†      30743.5      5430.8 ug/L         24.35      5430.8 ppb          24.35   0.45%
   QC value within limits for K 766.490 Radial  Recovery = 108.62%
Mg 279.077 IEC†        15005.3      498090 ug/L        2727.0      498090 ppb         2727.0   0.55%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.62%
Mn 257.610†           447975.4      489.60 ug/L         0.924      489.60 ppb          0.924   0.19%
   QC value within limits for Mn 257.610  Recovery = 97.92%
Mo 202.031†             6933.0      504.32 ug/L         3.653      504.32 ppb          3.653   0.72%
   QC value within limits for Mo 202.031  Recovery = 100.86%
Na 589.592 Radial†     19183.9      5499.1 ug/L         25.50      5499.1 ppb          25.50   0.46%
   QC value within limits for Na 589.592 Radial  Recovery = 109.98%
Ni 231.604†            18427.0      455.73 ug/L         3.711      455.73 ppb          3.711   0.81%
   QC value within limits for Ni 231.604  Recovery = 91.15%
P 214.914†              4296.7      2431.7 ug/L         30.76      2431.7 ppb          30.76   1.27%
   QC value within limits for P 214.914  Recovery = 97.27%
Pb 220.353†             3075.3      488.92 ug/L         3.684      488.92 ppb          3.684   0.75%
   QC value within limits for Pb 220.353  Recovery = 97.78%
S 181.975 Axial†        2010.9      2698.1 ug/L         38.79      2698.1 ppb          38.79   1.44%
   QC value within limits for S 181.975 Axial  Recovery = 107.92%
Sb 206.836†             1609.3      550.17 ug/L         1.425      550.17 ppb          1.425   0.26%
   QC value within limits for Sb 206.836  Recovery = 110.03%
Se 196.026†             3161.3      2582.2 ug/L         13.96      2582.2 ppb          13.96   0.54%
   QC value within limits for Se 196.026  Recovery = 103.29%
Si 251.611†           170066.8      5377.7 ug/L         12.41      5377.7 ppb          12.41   0.23%
   QC value within limits for Si 251.611  Recovery = 107.55%
Sn 189.927†             2457.7      514.07 ug/L         2.871      514.07 ppb          2.871   0.56%
   QC value within limits for Sn 189.927  Recovery = 102.81%
Sr 421.552†            80650.9      511.24 ug/L         2.456      511.24 ppb          2.456   0.48%
   QC value within limits for Sr 421.552  Recovery = 102.25%
Ti 334.940†           311886.5      525.24 ug/L         1.163      525.24 ppb          1.163   0.22%
   QC value within limits for Ti 334.940  Recovery = 105.05%
Tl 190.801†             1494.9      454.79 ug/L         7.156      454.79 ppb          7.156   1.57%
   QC value within limits for Tl 190.801  Recovery = 90.96%
U 409.014†             18422.9      519.68 ug/L         0.751      519.68 ppb          0.751   0.14%
   QC value within limits for U 409.014  Recovery = 103.94%
V 292.402†             78133.2      516.08 ug/L         0.653      516.08 ppb          0.653   0.13%
   QC value within limits for V 292.402  Recovery = 103.22%
Zn 213.857†            56617.2      509.46 ug/L         1.232      509.46 ppb          1.232   0.24%
   QC value within limits for Zn 213.857  Recovery = 101.89%
SiO2†                 170541.5       11490 ug/L          32.1       11490 ppb           32.1   0.28%
   QC value within limits for SiO2  Recovery = 107.43%
All analyte(s) passed QC.
```

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

Autosampler Location: 15
Date Collected: 1/12/2010 13:34:24
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	4464.7	4464.7	87.2	%			13:36:22
1	Y RADIAL	4798.4	4798.4	87.16	%			13:36:22
1	Al 396.153Radial†	556865.1	638718.0	510830	ug/L	510830	ppb	13:36:17
1	Ca 317.933Radial†	254440.1	291817.9	471070	ug/L	471070	ppb	13:36:17
1	Fe 238.204 Radial†	45321.3	51971.0	441900	ug/L	441900	ppb	13:36:22
1	K 766.490 Radial†	2855.7	763.9	-211.40	ug/L	-211.40	ppb	13:36:17
1	Mg 279.077 IEC†	12918.2	14813.8	491460	ug/L	491460	ppb	13:36:22
1	Na 589.592 Radial†	1503666.2	1725980.3	494750	ug/L	494750	ppb	13:36:17
1	Sr 421.552†	783.4	888.8	2.1573	ug/L	2.1573	ppb	13:36:22
1	Sc 361.383	711484.0	711484.0	82.917	%			13:36:50
1	Y 371.029	586561.8	586561.8	80.609	%			13:36:50
1	Ag 328.068†	-22744.9	-27788.2	-2.8534	ug/L	-2.8534	ppb	13:36:50
1	As 188.979†	-190.9	-206.3	15.228	ug/L	15.228	ppb	13:37:10
1	B 249.677†	1770.1	2749.9	-10.056	ug/L	-10.056	ppb	13:36:50
1	Ba 233.527†	-1228.4	-1472.9	2.1142	ug/L	2.1142	ppb	13:37:10
1	Be 313.107†	-11159.1	-8983.6	-3.4478	ug/L	-3.4478	ppb	13:36:50
1	Cd 226.502†	3288.9	4168.1	3.1407	ug/L	3.1407	ppb	13:37:10
1	Co 228.616†	178.2	292.1	-0.5092	ug/L	-0.5092	ppb	13:37:10
1	Cr 267.716†	-46.2	-134.7	1.1808	ug/L	1.1808	ppb	13:37:10
1	Cu 324.752†	1406.3	-4706.3	1.0193	ug/L	1.0193	ppb	13:36:50
1	Mn 257.610†	-17768.8	-21859.6	-0.4414	ug/L	-0.4414	ppb	13:36:50
1	Mo 202.031†	-483.9	-605.2	-2.3204	ug/L	-2.3204	ppb	13:37:10
1	Ni 231.604†	244.3	227.7	5.6305	ug/L	5.6305	ppb	13:37:10
1	P 214.914†	530.6	419.6	25.974	ug/L	25.974	ppb	13:37:10
1	Pb 220.353†	-535.1	-583.2	14.911	ug/L	14.911	ppb	13:37:10
1	S 181.975 Axial†	108.6	87.1	25.489	ug/L	25.489	ppb	13:37:10
1	Sb 206.836†	55.6	33.6	1.3220	ug/L	1.3220	ppb	13:37:10
1	Se 196.026†	-1843.4	-2191.2	-41.309	ug/L	-41.309	ppb	13:37:10
1	Si 251.611†	-324.8	-852.4	-26.465	ug/L	-26.465	ppb	13:37:10
1	Sn 189.927†	-371.7	-450.0	8.1703	ug/L	8.1703	ppb	13:37:10
1	Ti 334.940†	-13324.4	-14735.5	-6.3885	ug/L	-6.3885	ppb	13:36:50
1	Tl 190.801†	-103.1	-90.2	-27.648	ug/L	-27.648	ppb	13:37:10
1	U 409.014†	422307.1	511179.2	14998	ug/L	14998	ppb	13:36:50
1	V 292.402†	3420.1	5484.4	3.1854	ug/L	3.1854	ppb	13:37:10
1	Zn 213.857†	5572.3	6095.7	14.338	ug/L	14.338	ppb	13:37:10
1	SiO2†	-237.5	-745.4	-49.127	ug/L	-49.127	ppb	13:38:07
2	Sc Radial	4409.0	4409.0	86.1	%			13:36:32
2	Y RADIAL	4715.4	4715.4	85.65	%			13:36:32
2	Al 396.153Radial†	566394.5	657857.3	526140	ug/L	526140	ppb	13:36:27
2	Ca 317.933Radial†	258654.0	300400.0	484920	ug/L	484920	ppb	13:36:27
2	Fe 238.204 Radial†	44605.9	51796.9	440420	ug/L	440420	ppb	13:36:32
2	K 766.490 Radial†	2767.4	702.7	-232.49	ug/L	-232.49	ppb	13:36:27
2	Mg 279.077 IEC†	12686.9	14732.5	488760	ug/L	488760	ppb	13:36:32
2	Na 589.592 Radial†	1525827.1	1773513.9	508380	ug/L	508380	ppb	13:36:27
2	Sr 421.552†	730.7	839.0	1.7355	ug/L	1.7355	ppb	13:36:32
2	Sc 361.383	719543.3	719543.3	83.856	%			13:37:16
2	Y 371.029	593151.9	593151.9	81.515	%			13:37:16
2	Ag 328.068†	-23042.1	-27835.2	-3.7792	ug/L	-3.7792	ppb	13:37:16
2	As 188.979†	-183.0	-194.4	19.979	ug/L	19.979	ppb	13:37:36
2	B 249.677†	1835.7	2804.2	-8.5991	ug/L	-8.5991	ppb	13:37:16
2	Ba 233.527†	-1336.1	-1584.8	1.2023	ug/L	1.2023	ppb	13:37:36
2	Be 313.107†	-11191.8	-8871.9	-3.4040	ug/L	-3.4040	ppb	13:37:16
2	Cd 226.502†	3260.0	4089.3	2.4363	ug/L	2.4363	ppb	13:37:36
2	Co 228.616†	215.3	334.0	0.3626	ug/L	0.3626	ppb	13:37:36
2	Cr 267.716†	-117.7	-219.3	0.1922	ug/L	0.1922	ppb	13:37:36
2	Cu 324.752†	1283.4	-4871.9	0.4186	ug/L	0.4186	ppb	13:37:16
2	Mn 257.610†	-18335.1	-22294.9	-0.9546	ug/L	-0.9546	ppb	13:37:16
2	Mo 202.031†	-484.1	-599.0	-1.8333	ug/L	-1.8333	ppb	13:37:36
2	Ni 231.604†	249.5	230.5	5.6999	ug/L	5.6999	ppb	13:37:36

2	P 214.914†	555.8	442.5	44.828 ug/L	44.828 ppb	13:37:36
2	Pb 220.353†	-510.9	-547.1	23.241 ug/L	23.241 ppb	13:37:36
2	S 181.975 Axial†	91.5	65.3	-7.7785 ug/L	-7.7785 ppb	13:37:36
2	Sb 206.836†	58.2	36.0	1.6658 ug/L	1.6658 ppb	13:37:36
2	Se 196.026†	-1884.9	-2215.7	-60.376 ug/L	-60.376 ppb	13:37:36
2	Si 251.611†	-341.0	-867.3	-26.942 ug/L	-26.942 ppb	13:37:36
2	Sn 189.927†	-388.7	-465.2	7.8128 ug/L	7.8128 ppb	13:37:36
2	Ti 334.940†	-13119.9	-14311.7	-3.6294 ug/L	-3.6294 ppb	13:37:16
2	Tl 190.801†	-95.2	-79.5	-24.405 ug/L	-24.405 ppb	13:37:36
2	U 409.014†	428548.5	512917.6	15049 ug/L	15049 ppb	13:37:16
2	V 292.402†	3449.2	5472.9	3.3994 ug/L	3.3994 ppb	13:37:36
2	Zn 213.857†	5608.9	6064.0	14.185 ug/L	14.185 ppb	13:37:36
2	SiO2†	-365.3	-894.6	-59.204 ug/L	-59.204 ppb	13:38:12
3	Sc Radial	4450.5	4450.5	86.9 %		13:36:43
3	Y RADIAL	4751.9	4751.9	86.31 %		13:36:43
3	Al 396.153Radial†	571201.7	657256.8	525660 ug/L	525660 ppb	13:36:38
3	Ca 317.933Radial†	259752.4	298863.7	482440 ug/L	482440 ppb	13:36:38
3	Fe 238.204 Radial†	44822.5	51563.2	438430 ug/L	438430 ppb	13:36:43
3	K 766.490 Radial†	2810.0	721.7	-227.83 ug/L	-227.83 ppb	13:36:38
3	Mg 279.077 IEC†	12795.3	14719.9	488350 ug/L	488350 ppb	13:36:43
3	Na 589.592 Radial†	1537296.0	1770191.5	507430 ug/L	507430 ppb	13:36:38
3	Sr 421.552†	748.6	851.6	1.8346 ug/L	1.8346 ppb	13:36:43
3	Sc 361.383	715943.4	715943.4	83.436 %		13:37:41
3	Y 371.029	590304.5	590304.5	81.123 %		13:37:41
3	Ag 328.068†	-23205.4	-28169.2	-5.9238 ug/L	-5.9238 ppb	13:37:41
3	As 188.979†	-195.0	-209.8	12.899 ug/L	12.899 ppb	13:38:02
3	B 249.677†	1931.3	2929.8	-5.4572 ug/L	-5.4572 ppb	13:37:41
3	Ba 233.527†	-1316.3	-1569.1	1.2654 ug/L	1.2654 ppb	13:38:02
3	Be 313.107†	-11292.7	-9059.9	-3.4760 ug/L	-3.4760 ppb	13:37:41
3	Cd 226.502†	3298.2	4154.6	3.3612 ug/L	3.3612 ppb	13:38:02
3	Co 228.616†	206.7	325.0	0.2132 ug/L	0.2132 ppb	13:38:02
3	Cr 267.716†	-56.0	-146.1	0.9636 ug/L	0.9636 ppb	13:38:02
3	Cu 324.752†	1308.1	-4834.7	0.4197 ug/L	0.4197 ppb	13:37:41
3	Mn 257.610†	-18005.6	-22009.8	-0.8210 ug/L	-0.8210 ppb	13:37:41
3	Mo 202.031†	-460.9	-574.0	-0.2765 ug/L	-0.2765 ppb	13:38:02
3	Ni 231.604†	242.8	223.9	5.5378 ug/L	5.5378 ppb	13:38:02
3	P 214.914†	563.3	454.9	53.677 ug/L	53.677 ppb	13:38:02
3	Pb 220.353†	-503.3	-541.1	24.009 ug/L	24.009 ppb	13:38:02
3	S 181.975 Axial†	114.3	93.1	31.104 ug/L	31.104 ppb	13:38:02
3	Sb 206.836†	46.6	22.4	-2.9306 ug/L	-2.9306 ppb	13:38:02
3	Se 196.026†	-1872.1	-2211.8	-63.781 ug/L	-63.781 ppb	13:38:02
3	Si 251.611†	-302.7	-823.5	-25.576 ug/L	-25.576 ppb	13:38:02
3	Sn 189.927†	-390.8	-470.0	6.5217 ug/L	6.5217 ppb	13:38:02
3	Ti 334.940†	-13264.5	-14563.6	-4.3396 ug/L	-4.3396 ppb	13:37:41
3	Tl 190.801†	-122.8	-113.1	-34.545 ug/L	-34.545 ppb	13:38:02
3	U 409.014†	426654.0	513216.7	15058 ug/L	15058 ppb	13:37:41
3	V 292.402†	3536.6	5598.4	4.6073 ug/L	4.6073 ppb	13:38:02
3	Zn 213.857†	5622.9	6114.5	14.853 ug/L	14.853 ppb	13:38:02
3	SiO2†	-318.5	-840.7	-55.615 ug/L	-55.615 ppb	13:38:17

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	715656.9	83.403	%	0.4705				0.56%
Sc Radial	4441.4	86.7	%	0.57				0.65%
Y 371.029	590006.1	81.082	%	0.4542				0.56%
Y RADIAL	4755.2	86.37	%	0.756				0.88%
Ag 328.068†	-27930.9	-4.1855	ug/L	1.57501	-4.1855	ppb	1.57501	37.63%
Al 396.153Radial†	651277.4	520880	ug/L	8702.2	520880	ppb	8702.2	1.67%
QC value within limits for Al 396.153Radial Recovery = 104.18%								
As 188.979†	-203.5	16.036	ug/L	3.6084	16.036	ppb	3.6084	22.50%
B 249.677†	2828.0	-8.0375	ug/L	2.35037	-8.0375	ppb	2.35037	29.24%
Ba 233.527†	-1542.2	1.5273	ug/L	0.50926	1.5273	ppb	0.50926	33.34%
Be 313.107†	-8971.8	-3.4426	ug/L	0.03626	-3.4426	ppb	0.03626	1.05%
Ca 317.933Radial†	297027.2	479480	ug/L	7387.4	479480	ppb	7387.4	1.54%
QC value within limits for Ca 317.933Radial Recovery = 95.90%								
Cd 226.502†	4137.3	2.9794	ug/L	0.48309	2.9794	ppb	0.48309	16.21%
Co 228.616†	317.0	0.0222	ug/L	0.46625	0.0222	ppb	0.46625	>999.9%
Cr 267.716†	-166.7	0.7789	ug/L	0.51955	0.7789	ppb	0.51955	66.71%
Cu 324.752†	-4804.3	0.6192	ug/L	0.34648	0.6192	ppb	0.34648	55.95%

Fe 238.204 Radial†	51777.0	440250	ug/L	1739.6	440250	ppb	1739.6	0.40%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 88.05%								
K 766.490 Radial†	729.5	-223.91	ug/L	11.080	-223.91	ppb	11.080	4.95%
Mg 279.077 IEC†	14755.4	489520	ug/L	1692.1	489520	ppb	1692.1	0.35%
QC value within limits for Mg 279.077 IEC Recovery = 97.90%								
Mn 257.610†	-22054.8	-0.7390	ug/L	0.26623	-0.7390	ppb	0.26623	36.03%
Mo 202.031†	-592.7	-1.4768	ug/L	1.06758	-1.4768	ppb	1.06758	72.29%
Na 589.592 Radial†	1756561.9	503520	ug/L	7606.7	503520	ppb	7606.7	1.51%
QC value within limits for Na 589.592 Radial Recovery = 100.70%								
Ni 231.604†	227.4	5.6227	ug/L	0.08130	5.6227	ppb	0.08130	1.45%
P 214.914†	439.0	41.493	ug/L	14.1492	41.493	ppb	14.1492	34.10%
Pb 220.353†	-557.1	20.721	ug/L	5.0461	20.721	ppb	5.0461	24.35%
S 181.975 Axial†	81.8	16.271	ug/L	21.0162	16.271	ppb	21.0162	129.16%
Sb 206.836†	30.6	0.0191	ug/L	2.56025	0.0191	ppb	2.56025	>999.9%
Se 196.026†	-2206.2	-55.156	ug/L	12.1116	-55.156	ppb	12.1116	21.96%
Si 251.611†	-847.8	-26.328	ug/L	0.6934	-26.328	ppb	0.6934	2.63%
Sn 189.927†	-461.7	7.5016	ug/L	0.86723	7.5016	ppb	0.86723	11.56%
Sr 421.552†	859.8	1.9091	ug/L	0.22055	1.9091	ppb	0.22055	11.55%
Ti 334.940†	-14536.9	-4.7859	ug/L	1.43264	-4.7859	ppb	1.43264	29.93%
Tl 190.801†	-94.3	-28.866	ug/L	5.1786	-28.866	ppb	5.1786	17.94%
U 409.014†	512437.8	15035	ug/L	32.6	15035	ppb	32.6	0.22%
QC value within limits for U 409.014 Recovery = 100.24%								
V 292.402†	5518.6	3.7307	ug/L	0.76667	3.7307	ppb	0.76667	20.55%
Zn 213.857†	6091.4	14.459	ug/L	0.3497	14.459	ppb	0.3497	2.42%
SiO2†	-826.9	-54.649	ug/L	5.1080	-54.649	ppb	5.1080	9.35%

QC Failed. Continue with analysis.

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

Autosampler Location: 16
Date Collected: 1/12/2010 13:40:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5006.2	5006.2	97.8	%			13:42:24
1	Y RADIAL	5292.0	5292.0	96.12	%			13:42:24
1	Al 396.153Radial†	588.5	608.2	10.130	ug/L	10.130	ppb	13:42:24
1	Ca 317.933Radial†	27.5	8.9	14.403	ug/L	14.403	ppb	13:42:44
1	Fe 238.204 Radial†	-21.1	-33.2	10.434	ug/L	10.434	ppb	13:42:44
1	K 766.490 Radial†	1587709.7	1621579.2	295280	ug/L	295280	ppb	13:42:19
1	Mg 279.077 IEC†	-6.1	-9.3	-205.20	ug/L	-205.20	ppb	13:42:44
1	Na 589.592 Radial†	-76.6	1230.5	352.73	ug/L	352.73	ppb	13:42:24
1	Sr 421.552†	1478874.0	1512751.4	9658.2	ug/L	9658.2	ppb	13:42:19
1	Sc 361.383	833594.2	833594.2	97.147	%			13:44:02
1	Y 371.029	684561.0	684561.0	94.077	%			13:44:02
1	Ag 328.068†	-8495.5	-9102.0	3.5744	ug/L	3.5744	ppb	13:44:07
1	As 188.979†	22899.7	23596.0	10150	ug/L	10150	ppb	13:44:07
1	B 249.677†	218747.3	225785.6	5040.0	ug/L	5040.0	ppb	13:44:02
1	Ba 233.527†	1769898.7	1821877.9	14138	ug/L	14138	ppb	13:44:02
1	Be 313.107†	7464541.6	7688202.3	2927.3	ug/L	2927.3	ppb	13:43:55
1	Cd 226.502†	860248.9	885710.6	9749.6	ug/L	9749.6	ppb	13:44:02
1	Co 228.616†	467767.9	481580.5	9770.1	ug/L	9770.1	ppb	13:44:02
1	Cr 267.716†	2112081.6	2174021.0	24135	ug/L	24135	ppb	13:44:02
1	Cu 324.752†	6548134.3	6734009.0	20088	ug/L	20088	ppb	13:43:55
1	Mn 257.610†	8350987.4	8595772.9	9426.7	ug/L	9426.7	ppb	13:43:55
1	Mo 202.031†	136763.1	140757.4	9821.5	ug/L	9821.5	ppb	13:44:07
1	Ni 231.604†	386673.4	397960.5	9842.4	ug/L	9842.4	ppb	13:44:02
1	P 214.914†	31467.2	32170.9	14628	ug/L	14628	ppb	13:44:07
1	Pb 220.353†	194857.3	200641.2	24292	ug/L	24292	ppb	13:44:07
1	S 181.975 Axial†	36484.1	37511.5	52203	ug/L	52203	ppb	13:44:07
1	Sb 206.836†	30011.9	30859.7	10827	ug/L	10827	ppb	13:44:07
1	Se 196.026†	15639.3	16130.5	10188	ug/L	10188	ppb	13:44:07
1	Si 251.611†	1500256.3	1543848.6	48752	ug/L	48752	ppb	13:44:02
1	Sn 189.927†	58479.8	60195.3	10486	ug/L	10486	ppb	13:44:07
1	Ti 334.940†	6004470.7	6182118.0	9890.5	ug/L	9890.5	ppb	13:43:55
1	Tl 190.801†	31031.1	31976.4	9719.0	ug/L	9719.0	ppb	13:44:07
1	U 409.014†	-610.0	1236.0	-17.559	ug/L	-17.559	ppb	13:44:07
1	V 292.402†	1443166.5	1486902.8	10206	ug/L	10206	ppb	13:44:02
1	Zn 213.857†	1471504.9	1514089.0	14123	ug/L	14123	ppb	13:44:02
1	SiO2†	1521551.2	1565770.5	105340	ug/L	105340	ppb	13:44:54
2	Sc Radial	4972.9	4972.9	97.1	%			13:42:54
2	Y RADIAL	5231.2	5231.2	95.02	%			13:42:54
2	Al 396.153Radial†	568.3	591.4	-10.105	ug/L	-10.105	ppb	13:42:54
2	Ca 317.933Radial†	27.3	8.9	14.308	ug/L	14.308	ppb	13:43:14
2	Fe 238.204 Radial†	-22.6	-34.9	-3.0238	ug/L	-3.0238	ppb	13:43:14
2	K 766.490 Radial†	1583874.0	1628517.4	296550	ug/L	296550	ppb	13:42:49
2	Mg 279.077 IEC†	-5.9	-9.1	-196.57	ug/L	-196.57	ppb	13:43:14
2	Na 589.592 Radial†	-125.8	1179.3	338.06	ug/L	338.06	ppb	13:42:54
2	Sr 421.552†	1474713.4	1518608.6	9695.6	ug/L	9695.6	ppb	13:42:49
2	Sc 361.383	823486.6	823486.6	95.969	%			13:44:21
2	Y 371.029	676051.6	676051.6	92.907	%			13:44:21
2	Ag 328.068†	-8718.4	-9441.6	2.1097	ug/L	2.1097	ppb	13:44:27
2	As 188.979†	23013.1	24003.6	10325	ug/L	10325	ppb	13:44:27
2	B 249.677†	215907.9	225590.8	5035.5	ug/L	5035.5	ppb	13:44:21
2	Ba 233.527†	1757527.0	1831348.6	14212	ug/L	14212	ppb	13:44:21
2	Be 313.107†	7514387.8	7834453.6	2983.0	ug/L	2983.0	ppb	13:44:15
2	Cd 226.502†	854150.1	890224.5	9799.3	ug/L	9799.3	ppb	13:44:21
2	Co 228.616†	463831.9	483389.2	9806.7	ug/L	9806.7	ppb	13:44:21
2	Cr 267.716†	2095736.6	2183674.9	24242	ug/L	24242	ppb	13:44:21
2	Cu 324.752†	6596230.7	6866858.4	20485	ug/L	20485	ppb	13:44:15
2	Mn 257.610†	8410772.6	8763580.4	9610.7	ug/L	9610.7	ppb	13:44:15
2	Mo 202.031†	137039.0	142772.8	9962.1	ug/L	9962.1	ppb	13:44:27
2	Ni 231.604†	383734.9	399784.0	9887.5	ug/L	9887.5	ppb	13:44:21

2	P 214.914†	31725.4	32837.5	14936	ug/L	14936 ppb	13:44:27
2	Pb 220.353†	195069.0	203323.8	24617	ug/L	24617 ppb	13:44:27
2	S 181.975 Axial†	36587.1	38079.8	52994	ug/L	52994 ppb	13:44:27
2	Sb 206.836†	30179.3	31413.3	11020	ug/L	11020 ppb	13:44:27
2	Se 196.026†	15684.9	16375.7	10342	ug/L	10342 ppb	13:44:27
2	Si 251.611†	1482853.4	1544669.9	48776	ug/L	48776 ppb	13:44:21
2	Sn 189.927†	58669.8	61132.2	10649	ug/L	10649 ppb	13:44:27
2	Ti 334.940†	6049254.2	6304646.3	10087	ug/L	10087 ppb	13:44:15
2	Tl 190.801†	31134.0	32475.6	9872.1	ug/L	9872.1 ppb	13:44:27
2	U 409.014†	-515.5	1326.7	-15.126	ug/L	-15.126 ppb	13:44:27
2	V 292.402†	1428802.1	1490169.0	10230	ug/L	10230 ppb	13:44:21
2	Zn 213.857†	1460915.1	1521646.3	14193	ug/L	14193 ppb	13:44:21
2	SiO2†	1535905.2	1599951.5	107640	ug/L	107640 ppb	13:45:01
3	Sc Radial	4910.6	4910.6	95.9	%		13:43:25
3	Y RADIAL	5187.9	5187.9	94.23	%		13:43:25
3	Al 396.153Radial†	561.3	591.5	-7.2377	ug/L	-7.2377 ppb	13:43:25
3	Ca 317.933Radial†	23.2	5.0	8.0876	ug/L	8.0876 ppb	13:43:45
3	Fe 238.204 Radial†	-20.0	-32.4	17.627	ug/L	17.627 ppb	13:43:45
3	K 766.490 Radial†	1580271.0	1645440.6	299630	ug/L	299630 ppb	13:43:20
3	Mg 279.077 IEC†	-5.2	-8.4	-175.73	ug/L	-175.73 ppb	13:43:45
3	Na 589.592 Radial†	-142.1	1160.7	332.71	ug/L	332.71 ppb	13:43:25
3	Sr 421.552†	1472610.5	1535670.9	9804.5	ug/L	9804.5 ppb	13:43:20
3	Sc 361.383	835061.6	835061.6	97.318	%		13:44:41
3	Y 371.029	686100.8	686100.8	94.288	%		13:44:41
3	Ag 328.068†	-8790.5	-9389.8	2.3599	ug/L	2.3599 ppb	13:44:47
3	As 188.979†	23204.8	23868.1	10267	ug/L	10267 ppb	13:44:47
3	B 249.677†	220158.3	226839.9	5063.5	ug/L	5063.5 ppb	13:44:41
3	Ba 233.527†	1778069.6	1827072.5	14179	ug/L	14179 ppb	13:44:41
3	Be 313.107†	7580665.1	7794023.5	2967.6	ug/L	2967.6 ppb	13:44:35
3	Cd 226.502†	864042.9	888053.1	9775.4	ug/L	9775.4 ppb	13:44:41
3	Co 228.616†	469681.3	482700.5	9792.7	ug/L	9792.7 ppb	13:44:41
3	Cr 267.716†	2120105.2	2178445.3	24184	ug/L	24184 ppb	13:44:41
3	Cu 324.752†	6666298.4	6843584.5	20415	ug/L	20415 ppb	13:44:35
3	Mn 257.610†	8485289.8	8718670.5	9561.5	ug/L	9561.5 ppb	13:44:35
3	Mo 202.031†	138163.1	141948.5	9904.6	ug/L	9904.6 ppb	13:44:47
3	Ni 231.604†	388508.7	399146.9	9871.7	ug/L	9871.7 ppb	13:44:41
3	P 214.914†	32007.5	32669.1	14850	ug/L	14850 ppb	13:44:47
3	Pb 220.353†	196807.3	202292.5	24492	ug/L	24492 ppb	13:44:47
3	S 181.975 Axial†	36966.2	37941.0	52800	ug/L	52800 ppb	13:44:47
3	Sb 206.836†	30379.5	31183.1	10940	ug/L	10940 ppb	13:44:47
3	Se 196.026†	15797.8	16265.2	10273	ug/L	10273 ppb	13:44:47
3	Si 251.611†	1506806.7	1547865.8	48878	ug/L	48878 ppb	13:44:41
3	Sn 189.927†	59214.1	60844.1	10599	ug/L	10599 ppb	13:44:47
3	Ti 334.940†	6105556.4	6275127.9	10039	ug/L	10039 ppb	13:44:35
3	Tl 190.801†	31428.3	32328.4	9827.1	ug/L	9827.1 ppb	13:44:47
3	U 409.014†	-536.5	1312.6	-15.415	ug/L	-15.415 ppb	13:44:47
3	V 292.402†	1449052.6	1490340.6	10230	ug/L	10230 ppb	13:44:41
3	Zn 213.857†	1477927.9	1518027.3	14160	ug/L	14160 ppb	13:44:41
3	SiO2†	1526967.6	1568583.9	105530	ug/L	105530 ppb	13:45:09

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	830714.1	96.812	%	0.7344				0.76%
Sc Radial	4963.2	96.9	%	0.95				0.98%
Y 371.029	682237.8	93.757	%	0.7438				0.79%
Y RADIAL	5237.0	95.13	%	0.950				1.00%
Ag 328.068†	-9311.2	2.6813	ug/L	0.78349	2.6813	ppb	0.78349	29.22%
Al 396.153Radial†	597.0	-2.4041	ug/L	10.94916	-2.4041	ppb	10.94916	455.44%
As 188.979†	23822.6	10247	ug/L	89.5	10247	ppb	89.5	0.87%
QC value within limits for As 188.979 Recovery = 102.47%								
B 249.677†	226072.1	5046.3	ug/L	15.08	5046.3	ppb	15.08	0.30%
QC value within limits for B 249.677 Recovery = 100.93%								
Ba 233.527†	1826766.3	14176	ug/L	36.8	14176	ppb	36.8	0.26%
QC value within limits for Ba 233.527 Recovery = 94.51%								
Be 313.107†	7772226.5	2959.3	ug/L	28.77	2959.3	ppb	28.77	0.97%
QC value within limits for Be 313.107 Recovery = 98.64%								
Ca 317.933Radial†	7.6	12.266	ug/L	3.6192	12.266	ppb	3.6192	29.51%
Cd 226.502†	887996.1	9774.8	ug/L	24.85	9774.8	ppb	24.85	0.25%
QC value within limits for Cd 226.502 Recovery = 97.75%								

Co 228.616†	482556.8	9789.8 ug/L	18.47	9789.8 ppb	18.47	0.19%
QC value within limits for Co 228.616 Recovery = 97.90%						
Cr 267.716†	2178713.8	24187 ug/L	53.6	24187 ppb	53.6	0.22%
QC value within limits for Cr 267.716 Recovery = 96.75%						
Cu 324.752†	6814817.3	20330 ug/L	211.6	20330 ppb	211.6	1.04%
QC value within limits for Cu 324.752 Recovery = 101.65%						
Fe 238.204 Radial†	-33.5	8.3456 ug/L	10.48241	8.3456 ppb	10.48241	125.60%
K 766.490 Radial†	1631845.7	297150 ug/L	2235.1	297150 ppb	2235.1	0.75%
QC value within limits for K 766.490 Radial Recovery = 99.05%						
Mg 279.077 IEC†	-8.9	-192.50 ug/L	15.153	-192.50 ppb	15.153	7.87%
Mn 257.610†	8692674.6	9533.0 ug/L	95.27	9533.0 ppb	95.27	1.00%
QC value within limits for Mn 257.610 Recovery = 95.33%						
Mo 202.031†	141826.2	9896.0 ug/L	70.70	9896.0 ppb	70.70	0.71%
QC value within limits for Mo 202.031 Recovery = 98.96%						
Na 589.592 Radial†	1190.2	341.17 ug/L	10.369	341.17 ppb	10.369	3.04%
Ni 231.604†	398963.8	9867.2 ug/L	22.89	9867.2 ppb	22.89	0.23%
QC value within limits for Ni 231.604 Recovery = 98.67%						
P 214.914†	32559.2	14805 ug/L	158.7	14805 ppb	158.7	1.07%
QC value within limits for P 214.914 Recovery = 98.70%						
Pb 220.353†	202085.8	24467 ug/L	163.8	24467 ppb	163.8	0.67%
QC value within limits for Pb 220.353 Recovery = 97.87%						
S 181.975 Axial†	37844.1	52666 ug/L	412.3	52666 ppb	412.3	0.78%
QC value within limits for S 181.975 Axial Recovery = 105.33%						
Sb 206.836†	31152.1	10929 ug/L	96.8	10929 ppb	96.8	0.89%
QC value within limits for Sb 206.836 Recovery = 109.29%						
Se 196.026†	16257.1	10268 ug/L	77.5	10268 ppb	77.5	0.75%
QC value within limits for Se 196.026 Recovery = 102.68%						
Si 251.611†	1545461.4	48802 ug/L	66.9	48802 ppb	66.9	0.14%
QC value within limits for Si 251.611 Recovery = 97.60%						
Sn 189.927†	60723.9	10578 ug/L	83.6	10578 ppb	83.6	0.79%
QC value within limits for Sn 189.927 Recovery = 105.78%						
Sr 421.552†	1522343.6	9719.4 ug/L	76.02	9719.4 ppb	76.02	0.78%
QC value within limits for Sr 421.552 Recovery = 97.19%						
Ti 334.940†	6253964.1	10005 ug/L	102.4	10005 ppb	102.4	1.02%
QC value within limits for Ti 334.940 Recovery = 100.05%						
Tl 190.801†	32260.1	9806.1 ug/L	78.65	9806.1 ppb	78.65	0.80%
QC value within limits for Tl 190.801 Recovery = 98.06%						
U 409.014†	1291.8	-16.033 ug/L	1.3293	-16.033 ppb	1.3293	8.29%
V 292.402†	1489137.5	10222 ug/L	14.0	10222 ppb	14.0	0.14%
QC value within limits for V 292.402 Recovery = 102.22%						
Zn 213.857†	1517920.8	14159 ug/L	35.1	14159 ppb	35.1	0.25%
QC value within limits for Zn 213.857 Recovery = 94.39%						
SiO2†	1578101.9	106170 ug/L	1278.2	106170 ppb	1278.2	1.20%
QC value within limits for SiO2 Recovery = 99.23%						

All analyte(s) passed QC.

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

Autosampler Location: 7
Date Collected: 1/12/2010 13:47:18
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	5177.0	5177.0	101	%			13:49:10
1	Y RADIAL	5491.9	5491.9	99.75	%			13:49:10
1	Al 396.153Radial†	6429.9	6366.4	5067.5	ug/L	5067.5	ppb	13:49:10
1	Ca 317.933Radial†	3189.4	3135.7	5061.8	ug/L	5061.8	ppb	13:49:30
1	Fe 238.204 Radial†	612.7	594.5	5069.6	ug/L	5069.6	ppb	13:49:30
1	K 766.490 Radial†	32445.2	29582.2	5380.8	ug/L	5380.8	ppb	13:49:10
1	Mg 279.077 IEC†	160.4	155.6	5166.8	ug/L	5166.8	ppb	13:49:30
1	Na 589.592 Radial†	33017.2	33968.4	9737.1	ug/L	9737.1	ppb	13:49:10
1	Sr 421.552†	77720.7	76868.9	490.73	ug/L	490.73	ppb	13:49:10
1	Sc 361.383	868006.0	868006.0	101.16	%			13:50:28
1	Y 371.029	719503.4	719503.4	98.879	%			13:50:28
1	Ag 328.068†	110283.0	108663.7	501.73	ug/L	501.73	ppb	13:50:33
1	As 188.979†	1206.4	1216.6	524.31	ug/L	524.31	ppb	13:50:53
1	B 249.677†	22879.4	23232.6	519.21	ug/L	519.21	ppb	13:50:33
1	Ba 233.527†	64660.3	63928.8	496.57	ug/L	496.57	ppb	13:50:33
1	Be 313.107†	1334592.0	1323792.1	501.27	ug/L	501.27	ppb	13:50:28
1	Cd 226.502†	45743.9	45422.0	499.56	ug/L	499.56	ppb	13:50:33
1	Co 228.616†	24816.8	24610.0	499.45	ug/L	499.45	ppb	13:50:33
1	Cr 267.716†	45137.2	44541.7	494.78	ug/L	494.78	ppb	13:50:33
1	Cu 324.752†	173290.2	164904.5	491.92	ug/L	491.92	ppb	13:50:33
1	Mn 257.610†	461133.5	455425.9	499.74	ug/L	499.74	ppb	13:50:28
1	Mo 202.031†	7263.1	7158.3	499.93	ug/L	499.93	ppb	13:50:53
1	Ni 231.604†	20382.2	20081.9	496.66	ug/L	496.66	ppb	13:50:33
1	P 214.914†	4438.4	4167.2	2386.6	ug/L	2386.6	ppb	13:50:53
1	Pb 220.353†	4126.8	4141.7	502.94	ug/L	502.94	ppb	13:50:53
1	S 181.975 Axial†	790.6	737.7	1025.7	ug/L	1025.7	ppb	13:50:53
1	Sb 206.836†	1551.2	1500.0	526.51	ug/L	526.51	ppb	13:50:53
1	Se 196.026†	785.3	808.3	525.85	ug/L	525.85	ppb	13:50:53
1	Si 251.611†	80367.7	78987.2	2494.3	ug/L	2494.3	ppb	13:50:33
1	Sn 189.927†	2918.6	2883.5	503.24	ug/L	503.24	ppb	13:50:53
1	Ti 334.940†	307172.1	304990.6	488.24	ug/L	488.24	ppb	13:50:33
1	Tl 190.801†	1654.0	1669.2	507.24	ug/L	507.24	ppb	13:50:53
1	U 409.014†	15380.6	17068.5	500.79	ug/L	500.79	ppb	13:50:33
1	V 292.402†	72145.6	72679.6	499.64	ug/L	499.64	ppb	13:50:33
1	Zn 213.857†	54676.8	53426.3	497.21	ug/L	497.21	ppb	13:50:33
1	SiO2†	79766.5	78394.6	5274.0	ug/L	5274.0	ppb	13:52:00
2	Sc Radial	5246.9	5246.9	102	%			13:49:36
2	Y RADIAL	5550.3	5550.3	100.8	%			13:49:36
2	Al 396.153Radial†	6503.6	6353.7	5057.4	ug/L	5057.4	ppb	13:49:36
2	Ca 317.933Radial†	3182.1	3086.5	4982.4	ug/L	4982.4	ppb	13:49:56
2	Fe 238.204 Radial†	609.3	583.1	4972.9	ug/L	4972.9	ppb	13:49:56
2	K 766.490 Radial†	32524.2	29232.0	5317.1	ug/L	5317.1	ppb	13:49:36
2	Mg 279.077 IEC†	157.8	150.9	5012.1	ug/L	5012.1	ppb	13:49:56
2	Na 589.592 Radial†	33169.4	33682.2	9655.0	ug/L	9655.0	ppb	13:49:36
2	Sr 421.552†	78280.3	76391.7	487.69	ug/L	487.69	ppb	13:49:36
2	Sc 361.383	873768.5	873768.5	101.83	%			13:50:59
2	Y 371.029	726636.0	726636.0	99.859	%			13:50:59
2	Ag 328.068†	112260.1	109886.3	507.33	ug/L	507.33	ppb	13:51:04
2	As 188.979†	1204.6	1206.9	520.20	ug/L	520.20	ppb	13:51:24
2	B 249.677†	23422.9	23617.3	527.84	ug/L	527.84	ppb	13:51:04
2	Ba 233.527†	66029.4	64851.8	503.74	ug/L	503.74	ppb	13:51:04
2	Be 313.107†	1350630.0	1330841.1	503.95	ug/L	503.95	ppb	13:50:59
2	Cd 226.502†	46798.8	46159.7	507.69	ug/L	507.69	ppb	13:51:04
2	Co 228.616†	25366.3	24987.8	507.10	ug/L	507.10	ppb	13:51:04
2	Cr 267.716†	46167.2	45258.8	502.74	ug/L	502.74	ppb	13:51:04
2	Cu 324.752†	176530.6	166956.9	498.04	ug/L	498.04	ppb	13:51:04
2	Mn 257.610†	464653.6	455876.5	500.23	ug/L	500.23	ppb	13:50:59
2	Mo 202.031†	7288.2	7135.6	498.34	ug/L	498.34	ppb	13:51:24
2	Ni 231.604†	20903.5	20461.0	506.04	ug/L	506.04	ppb	13:51:04

2	P 214.914†	4454.2	4153.9	2377.1 ug/L	2377.1 ppb	13:51:24
2	Pb 220.353†	4149.5	4137.2	502.38 ug/L	502.38 ppb	13:51:24
2	S 181.975 Axial†	788.2	730.2	1015.2 ug/L	1015.2 ppb	13:51:24
2	Sb 206.836†	1572.0	1510.3	529.94 ug/L	529.94 ppb	13:51:24
2	Se 196.026†	782.6	800.6	520.67 ug/L	520.67 ppb	13:51:24
2	Si 251.611†	81994.6	80061.0	2528.3 ug/L	2528.3 ppb	13:51:04
2	Sn 189.927†	2924.6	2870.4	500.94 ug/L	500.94 ppb	13:51:24
2	Ti 334.940†	313457.4	309160.4	494.91 ug/L	494.91 ppb	13:51:04
2	Tl 190.801†	1659.7	1664.0	505.68 ug/L	505.68 ppb	13:51:24
2	U 409.014†	15766.7	17347.3	509.00 ug/L	509.00 ppb	13:51:04
2	V 292.402†	73683.6	73719.6	506.69 ug/L	506.69 ppb	13:51:04
2	Zn 213.857†	55806.5	54179.3	504.22 ug/L	504.22 ppb	13:51:04
2	SiO2†	80255.5	78354.8	5271.4 ug/L	5271.4 ppb	13:52:06
3	Sc Radial	5130.0	5130.0	100 %		13:50:01
3	Y RADIAL	5423.6	5423.6	98.51 %		13:50:01
3	Al 396.153Radial†	6390.8	6385.7	5083.1 ug/L	5083.1 ppb	13:50:01
3	Ca 317.933Radial†	3186.0	3161.1	5102.9 ug/L	5102.9 ppb	13:50:21
3	Fe 238.204 Radial†	607.0	594.4	5069.1 ug/L	5069.1 ppb	13:50:21
3	K 766.490 Radial†	31597.0	29029.5	5280.2 ug/L	5280.2 ppb	13:50:01
3	Mg 279.077 IEC†	160.9	157.6	5233.5 ug/L	5233.5 ppb	13:50:21
3	Na 589.592 Radial†	32421.8	33673.3	9652.5 ug/L	9652.5 ppb	13:50:01
3	Sr 421.552†	76645.0	76499.5	488.38 ug/L	488.38 ppb	13:50:01
3	Sc 361.383	868771.5	868771.5	101.25 %		13:51:30
3	Y 371.029	720865.1	720865.1	99.066 %		13:51:30
3	Ag 328.068†	111191.5	109465.0	505.41 ug/L	505.41 ppb	13:51:35
3	As 188.979†	1187.7	1197.0	515.99 ug/L	515.99 ppb	13:51:55
3	B 249.677†	23084.9	23415.7	523.31 ug/L	523.31 ppb	13:51:35
3	Ba 233.527†	65402.3	64605.4	501.82 ug/L	501.82 ppb	13:51:35
3	Be 313.107†	1336110.4	1324129.2	501.41 ug/L	501.41 ppb	13:51:30
3	Cd 226.502†	46413.6	46043.6	506.40 ug/L	506.40 ppb	13:51:35
3	Co 228.616†	25140.8	24908.4	505.49 ug/L	505.49 ppb	13:51:35
3	Cr 267.716†	45601.4	44960.8	499.43 ug/L	499.43 ppb	13:51:35
3	Cu 324.752†	174463.8	165912.6	494.93 ug/L	494.93 ppb	13:51:35
3	Mn 257.610†	462230.6	456107.9	500.48 ug/L	500.48 ppb	13:51:30
3	Mo 202.031†	7205.2	7094.8	495.50 ug/L	495.50 ppb	13:51:55
3	Ni 231.604†	20662.1	20340.6	503.06 ug/L	503.06 ppb	13:51:35
3	P 214.914†	4407.1	4132.5	2365.0 ug/L	2365.0 ppb	13:51:55
3	Pb 220.353†	4122.2	4133.6	501.94 ug/L	501.94 ppb	13:51:55
3	S 181.975 Axial†	779.2	725.7	1008.9 ug/L	1008.9 ppb	13:51:55
3	Sb 206.836†	1537.6	1485.2	521.36 ug/L	521.36 ppb	13:51:55
3	Se 196.026†	789.4	811.7	527.97 ug/L	527.97 ppb	13:51:55
3	Si 251.611†	81240.0	79778.8	2519.4 ug/L	2519.4 ppb	13:51:35
3	Sn 189.927†	2902.8	2865.4	500.09 ug/L	500.09 ppb	13:51:55
3	Ti 334.940†	309892.7	307410.1	492.10 ug/L	492.10 ppb	13:51:35
3	Tl 190.801†	1655.0	1668.7	507.09 ug/L	507.09 ppb	13:51:55
3	U 409.014†	15673.8	17344.6	508.91 ug/L	508.91 ppb	13:51:35
3	V 292.402†	72819.4	73282.2	503.67 ug/L	503.67 ppb	13:51:35
3	Zn 213.857†	55205.1	53900.5	501.61 ug/L	501.61 ppb	13:51:35
3	SiO2†	80144.5	78698.4	5294.6 ug/L	5294.6 ppb	13:52:11

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	870182.0	101.41	%	0.365				0.36%
Sc Radial	5184.6	101	%	1.1				1.13%
Y 371.029	722334.8	99.268	%	0.5204				0.52%
Y RADIAL	5488.6	99.69	%	1.152				1.16%
Ag 328.068†	109338.3	504.82	ug/L	2.847	504.82	ppb	2.847	0.56%
QC value within limits for Ag 328.068 Recovery = 100.96%								
Al 396.153Radial†	6368.6	5069.3	ug/L	12.97	5069.3	ppb	12.97	0.26%
QC value within limits for Al 396.153Radial Recovery = 101.39%								
As 188.979†	1206.8	520.17	ug/L	4.158	520.17	ppb	4.158	0.80%
QC value within limits for As 188.979 Recovery = 104.03%								
B 249.677†	23421.9	523.45	ug/L	4.316	523.45	ppb	4.316	0.82%
QC value within limits for B 249.677 Recovery = 104.69%								
Ba 233.527†	64462.0	500.71	ug/L	3.709	500.71	ppb	3.709	0.74%
QC value within limits for Ba 233.527 Recovery = 100.14%								
Be 313.107†	1326254.1	502.21	ug/L	1.509	502.21	ppb	1.509	0.30%
QC value within limits for Be 313.107 Recovery = 100.44%								
Ca 317.933Radial†	3127.8	5049.0	ug/L	61.26	5049.0	ppb	61.26	1.21%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.98%
Cd 226.502†            45875.1      504.55 ug/L         4.371      504.55 ppb          4.371   0.87%
   QC value within limits for Cd 226.502  Recovery = 100.91%
Co 228.616†            24835.4      504.02 ug/L         4.033      504.02 ppb          4.033   0.80%
   QC value within limits for Co 228.616  Recovery = 100.80%
Cr 267.716†            44920.4      498.99 ug/L         4.000      498.99 ppb          4.000   0.80%
   QC value within limits for Cr 267.716  Recovery = 99.80%
Cu 324.752†           165924.7      494.96 ug/L         3.057      494.96 ppb          3.057   0.62%
   QC value within limits for Cu 324.752  Recovery = 98.99%
Fe 238.204 Radial†       590.6      5037.2 ug/L        55.64      5037.2 ppb          55.64   1.10%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.74%
K 766.490 Radial†      29281.2      5326.1 ug/L        50.90      5326.1 ppb          50.90   0.96%
   QC value within limits for K 766.490 Radial  Recovery = 106.52%
Mg 279.077 IEC†          154.7      5137.5 ug/L       113.61      5137.5 ppb         113.61   2.21%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.75%
Mn 257.610†           455803.4      500.15 ug/L         0.379      500.15 ppb          0.379   0.08%
   QC value within limits for Mn 257.610  Recovery = 100.03%
Mo 202.031†             7129.6      497.92 ug/L         2.244      497.92 ppb          2.244   0.45%
   QC value within limits for Mo 202.031  Recovery = 99.58%
Na 589.592 Radial†     33774.6      9681.5 ug/L        48.12      9681.5 ppb          48.12   0.50%
   QC value within limits for Na 589.592 Radial  Recovery = 96.82%
Ni 231.604†            20294.5      501.92 ug/L         4.791      501.92 ppb          4.791   0.95%
   QC value within limits for Ni 231.604  Recovery = 100.38%
P 214.914†              4151.2      2376.2 ug/L        10.82      2376.2 ppb          10.82   0.46%
   QC value within limits for P 214.914  Recovery = 95.05%
Pb 220.353†             4137.5      502.42 ug/L         0.499      502.42 ppb          0.499   0.10%
   QC value within limits for Pb 220.353  Recovery = 100.48%
S 181.975 Axial†         731.2      1016.6 ug/L         8.47      1016.6 ppb           8.47   0.83%
   QC value within limits for S 181.975 Axial  Recovery = 101.66%
Sb 206.836†             1498.5      525.94 ug/L         4.316      525.94 ppb          4.316   0.82%
   QC value within limits for Sb 206.836  Recovery = 105.19%
Se 196.026†              806.9      524.83 ug/L         3.758      524.83 ppb          3.758   0.72%
   QC value within limits for Se 196.026  Recovery = 104.97%
Si 251.611†            79609.0      2514.0 ug/L        17.64      2514.0 ppb          17.64   0.70%
   QC value within limits for Si 251.611  Recovery = 100.56%
Sn 189.927†             2873.1      501.42 ug/L         1.628      501.42 ppb          1.628   0.32%
   QC value within limits for Sn 189.927  Recovery = 100.28%
Sr 421.552†            76586.7      488.93 ug/L         1.597      488.93 ppb          1.597   0.33%
   QC value within limits for Sr 421.552  Recovery = 97.79%
Ti 334.940†           307187.1      491.75 ug/L         3.350      491.75 ppb          3.350   0.68%
   QC value within limits for Ti 334.940  Recovery = 98.35%
Tl 190.801†             1667.3      506.67 ug/L         0.861      506.67 ppb          0.861   0.17%
   QC value within limits for Tl 190.801  Recovery = 101.33%
U 409.014†             17253.5      506.23 ug/L         4.711      506.23 ppb          4.711   0.93%
   QC value within limits for U 409.014  Recovery = 101.25%
V 292.402†             73227.1      503.34 ug/L         3.535      503.34 ppb          3.535   0.70%
   QC value within limits for V 292.402  Recovery = 100.67%
Zn 213.857†            53835.4      501.01 ug/L         3.543      501.01 ppb          3.543   0.71%
   QC value within limits for Zn 213.857  Recovery = 100.20%
SiO2†                  78482.6      5280.0 ug/L        12.73      5280.0 ppb          12.73   0.24%
   QC value within limits for SiO2  Recovery = 98.74%
All analyte(s) passed QC.
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Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/12/2010 13:54:20
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	5283.0	5283.0	103	%			13:56:13
1	Y RADIAL	5629.2	5629.2	102.2	%			13:56:13
1	Al 396.153Radial†	-0.8	5.4	4.3122	ug/L	4.3122	ppb	13:56:13
1	Ca 317.933Radial†	19.3	-0.5	-0.8525	ug/L	-0.8525	ppb	13:56:33
1	Fe 238.204 Radial†	10.3	-1.6	-13.552	ug/L	-13.552	ppb	13:56:33
1	K 766.490 Radial†	3375.3	760.2	138.41	ug/L	138.41	ppb	13:56:13
1	Mg 279.077 IEC†	3.5	0.3	10.291	ug/L	10.291	ppb	13:56:33
1	Na 589.592 Radial†	-1042.0	298.8	85.664	ug/L	85.664	ppb	13:56:13
1	Sr 421.552†	12.0	1.9	0.0120	ug/L	0.0120	ppb	13:56:13
1	Sc 361.383	878242.6	878242.6	102.35	%			13:57:30
1	Y 371.029	742332.4	742332.4	102.02	%			13:57:30
1	Ag 328.068†	249.8	-113.0	-0.5251	ug/L	-0.5251	ppb	13:57:35
1	As 188.979†	6.4	30.2	12.903	ug/L	12.903	ppb	13:57:55
1	B 249.677†	250.5	859.8	19.301	ug/L	19.301	ppb	13:57:55
1	Ba 233.527†	-33.5	-24.2	-0.1875	ug/L	-0.1875	ppb	13:57:55
1	Be 313.107†	-4604.1	-23.7	-0.0087	ug/L	-0.0087	ppb	13:57:35
1	Cd 226.502†	-126.3	78.2	0.8624	ug/L	0.8624	ppb	13:57:55
1	Co 228.616†	-73.4	5.5	0.1130	ug/L	0.1130	ppb	13:57:55
1	Cr 267.716†	105.7	24.3	0.2685	ug/L	0.2685	ppb	13:57:55
1	Cu 324.752†	6522.3	-29.9	-0.0918	ug/L	-0.0918	ppb	13:57:35
1	Mn 257.610†	444.3	4.3	0.0030	ug/L	0.0030	ppb	13:57:55
1	Mo 202.031†	29.2	6.9	0.4816	ug/L	0.4816	ppb	13:57:55
1	Ni 231.604†	49.0	-19.2	-0.4742	ug/L	-0.4742	ppb	13:57:55
1	P 214.914†	243.3	17.4	10.501	ug/L	10.501	ppb	13:57:55
1	Pb 220.353†	-42.3	20.9	2.5313	ug/L	2.5313	ppb	13:57:55
1	S 181.975 Axial†	53.2	8.1	11.227	ug/L	11.227	ppb	13:57:55
1	Sb 206.836†	52.2	17.5	6.0162	ug/L	6.0162	ppb	13:57:55
1	Se 196.026†	-32.5	0.3	0.1206	ug/L	0.1206	ppb	13:57:55
1	Si 251.611†	615.9	141.1	4.4605	ug/L	4.4605	ppb	13:57:55
1	Sn 189.927†	20.8	18.7	3.2497	ug/L	3.2497	ppb	13:57:55
1	Ti 334.940†	-1286.4	77.3	0.1214	ug/L	0.1214	ppb	13:57:35
1	Tl 190.801†	-29.2	5.5	1.6651	ug/L	1.6651	ppb	13:57:55
1	U 409.014†	-1797.5	107.7	3.1713	ug/L	3.1713	ppb	13:57:30
1	V 292.402†	-1381.9	9.5	0.0801	ug/L	0.0801	ppb	13:57:35
1	Zn 213.857†	774.8	132.3	1.2465	ug/L	1.2465	ppb	13:57:55
1	SiO2†	573.2	101.0	6.7985	ug/L	6.7985	ppb	13:59:01
2	Sc Radial	5251.1	5251.1	103	%			13:56:38
2	Y RADIAL	5580.4	5580.4	101.4	%			13:56:38
2	Al 396.153Radial†	-16.7	-10.1	-8.0961	ug/L	-8.0961	ppb	13:56:38
2	Ca 317.933Radial†	19.3	-0.4	-0.6202	ug/L	-0.6202	ppb	13:56:58
2	Fe 238.204 Radial†	8.8	-2.9	-24.849	ug/L	-24.849	ppb	13:56:58
2	K 766.490 Radial†	3309.8	716.2	130.39	ug/L	130.39	ppb	13:56:38
2	Mg 279.077 IEC†	4.8	1.7	54.846	ug/L	54.846	ppb	13:56:58
2	Na 589.592 Radial†	-1004.2	329.6	94.482	ug/L	94.482	ppb	13:56:38
2	Sr 421.552†	2.6	-7.2	-0.0459	ug/L	-0.0459	ppb	13:56:38
2	Sc 361.383	880232.0	880232.0	102.58	%			13:58:00
2	Y 371.029	742313.3	742313.3	102.01	%			13:58:00
2	Ag 328.068†	307.0	-57.8	-0.2741	ug/L	-0.2741	ppb	13:58:05
2	As 188.979†	3.5	27.3	11.683	ug/L	11.683	ppb	13:58:25
2	B 249.677†	224.8	834.2	18.729	ug/L	18.729	ppb	13:58:25
2	Ba 233.527†	-11.7	-2.8	-0.0221	ug/L	-0.0221	ppb	13:58:25
2	Be 313.107†	-4573.0	16.8	0.0066	ug/L	0.0066	ppb	13:58:05
2	Cd 226.502†	-153.0	52.5	0.5798	ug/L	0.5798	ppb	13:58:25
2	Co 228.616†	-79.5	-0.3	-0.0051	ug/L	-0.0051	ppb	13:58:25
2	Cr 267.716†	99.7	18.2	0.2008	ug/L	0.2008	ppb	13:58:25
2	Cu 324.752†	6327.1	-234.6	-0.7026	ug/L	-0.7026	ppb	13:58:05
2	Mn 257.610†	433.7	-7.0	-0.0124	ug/L	-0.0124	ppb	13:58:25
2	Mo 202.031†	24.0	1.8	0.1234	ug/L	0.1234	ppb	13:58:25
2	Ni 231.604†	48.1	-20.2	-0.4988	ug/L	-0.4988	ppb	13:58:25

2	P 214.914†	232.7	6.5	4.1244 ug/L	4.1244 ppb	13:58:25
2	Pb 220.353†	-37.8	25.4	3.0706 ug/L	3.0706 ppb	13:58:25
2	S 181.975 Axial†	55.0	9.8	13.600 ug/L	13.600 ppb	13:58:25
2	Sb 206.836†	53.8	19.0	6.4880 ug/L	6.4880 ppb	13:58:25
2	Se 196.026†	-28.1	4.7	2.8759 ug/L	2.8759 ppb	13:58:25
2	Si 251.611†	591.1	115.5	3.6560 ug/L	3.6560 ppb	13:58:25
2	Sn 189.927†	17.4	15.3	2.6675 ug/L	2.6675 ppb	13:58:25
2	Ti 334.940†	-1298.0	68.8	0.1043 ug/L	0.1043 ppb	13:58:05
2	Tl 190.801†	-19.4	15.2	4.5912 ug/L	4.5912 ppb	13:58:25
2	U 409.014†	-1818.5	91.1	2.6848 ug/L	2.6848 ppb	13:58:00
2	V 292.402†	-1358.4	35.5	0.2527 ug/L	0.2527 ppb	13:58:05
2	Zn 213.857†	776.8	132.6	1.2514 ug/L	1.2514 ppb	13:58:25
2	SiO2†	615.2	140.7	9.4841 ug/L	9.4841 ppb	13:59:06
3	Sc Radial	5285.5	5285.5	103 %		13:57:03
3	Y RADIAL	5655.6	5655.6	102.7 %		13:57:03
3	Al 396.153Radial†	-0.4	5.8	4.6244 ug/L	4.6244 ppb	13:57:03
3	Ca 317.933Radial†	17.1	-2.7	-4.2842 ug/L	-4.2842 ppb	13:57:23
3	Fe 238.204 Radial†	11.0	-0.9	-7.4570 ug/L	-7.4570 ppb	13:57:23
3	K 766.490 Radial†	3264.7	651.5	118.61 ug/L	118.61 ppb	13:57:03
3	Mg 279.077 IEC†	0.8	-2.2	-74.102 ug/L	-74.102 ppb	13:57:23
3	Na 589.592 Radial†	-1042.1	299.2	85.770 ug/L	85.770 ppb	13:57:03
3	Sr 421.552†	-0.5	-10.3	-0.0654 ug/L	-0.0654 ppb	13:57:03
3	Sc 361.383	878888.4	878888.4	102.43 %		13:58:30
3	Y 371.029	740439.6	740439.6	101.76 %		13:58:30
3	Ag 328.068†	243.5	-119.3	-0.5482 ug/L	-0.5482 ppb	13:58:35
3	As 188.979†	4.7	28.5	12.191 ug/L	12.191 ppb	13:58:55
3	B 249.677†	233.2	842.8	18.917 ug/L	18.917 ppb	13:58:55
3	Ba 233.527†	-22.6	-13.5	-0.1039 ug/L	-0.1039 ppb	13:58:55
3	Be 313.107†	-4601.2	-17.6	-0.0063 ug/L	-0.0063 ppb	13:58:35
3	Cd 226.502†	-131.2	73.5	0.8093 ug/L	0.8093 ppb	13:58:55
3	Co 228.616†	-75.2	3.8	0.0776 ug/L	0.0776 ppb	13:58:55
3	Cr 267.716†	98.8	17.5	0.1941 ug/L	0.1941 ppb	13:58:55
3	Cu 324.752†	6531.5	-25.6	-0.0770 ug/L	-0.0770 ppb	13:58:35
3	Mn 257.610†	426.8	-13.1	-0.0121 ug/L	-0.0121 ppb	13:58:55
3	Mo 202.031†	24.2	2.0	0.1384 ug/L	0.1384 ppb	13:58:55
3	Ni 231.604†	42.7	-25.3	-0.6259 ug/L	-0.6259 ppb	13:58:55
3	P 214.914†	232.2	6.4	3.8779 ug/L	3.8779 ppb	13:58:55
3	Pb 220.353†	-43.2	20.0	2.4241 ug/L	2.4241 ppb	13:58:55
3	S 181.975 Axial†	49.6	4.5	6.3006 ug/L	6.3006 ppb	13:58:55
3	Sb 206.836†	57.0	22.2	7.5469 ug/L	7.5469 ppb	13:58:55
3	Se 196.026†	-33.7	-0.9	-0.5866 ug/L	-0.5866 ppb	13:58:55
3	Si 251.611†	595.0	120.3	3.8053 ug/L	3.8053 ppb	13:58:55
3	Sn 189.927†	4.9	3.1	0.5458 ug/L	0.5458 ppb	13:58:55
3	Ti 334.940†	-1282.1	82.4	0.1372 ug/L	0.1372 ppb	13:58:35
3	Tl 190.801†	-35.0	-0.0	-0.0140 ug/L	-0.0140 ppb	13:58:55
3	U 409.014†	-1900.6	8.3	0.2443 ug/L	0.2443 ppb	13:58:30
3	V 292.402†	-1337.5	53.9	0.3673 ug/L	0.3673 ppb	13:58:35
3	Zn 213.857†	758.0	115.4	1.0877 ug/L	1.0877 ppb	13:58:55
3	SiO2†	608.6	135.1	9.1111 ug/L	9.1111 ppb	13:59:11

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	879121.0	102.45	%	0.118				0.12%
Sc Radial	5273.2	103	%	0.4				0.36%
Y 371.029	741695.1	101.93	%	0.149				0.15%
Y RADIAL	5621.7	102.1	%	0.69				0.68%
Ag 328.068†	-96.7	-0.4492	ug/L	0.15202	-0.4492	ppb	0.15202	33.85%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.4	0.2802	ug/L	7.25575	0.2802	ppb	7.25575	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	28.7	12.259	ug/L	0.6130	12.259	ppb	0.6130	5.00%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	845.6	18.982	ug/L	0.2918	18.982	ppb	0.2918	1.54%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-13.5	-0.1045	ug/L	0.08270	-0.1045	ppb	0.08270	79.12%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-8.2	-0.0028	ug/L	0.00822	-0.0028	ppb	0.00822	292.64%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.2	-1.9190	ug/L	2.05161	-1.9190	ppb	2.05161	106.91%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                68.1      0.7505 ug/L       0.15017      0.7505 ppb        0.15017  20.01%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.0      0.0618 ug/L       0.06064      0.0618 ppb        0.06064  98.06%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                20.0      0.2211 ug/L       0.04116      0.2211 ppb        0.04116  18.61%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -96.7     -0.2905 ug/L       0.35699     -0.2905 ppb        0.35699 122.90%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.8     -15.286 ug/L        8.8246     -15.286 ppb         8.8246  57.73%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         709.3      129.14 ug/L         9.961      129.14 ppb          9.961   7.71%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.1     -2.9882 ug/L      65.49156     -2.9882 ppb       65.49156 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                -5.3     -0.0072 ug/L       0.00878     -0.0072 ppb        0.00878 122.67%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.6      0.2478 ug/L       0.20261      0.2478 ppb        0.20261  81.75%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        309.2      88.638 ug/L        5.0607      88.638 ppb         5.0607   5.71%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -21.5     -0.5330 ug/L       0.08142     -0.5330 ppb        0.08142  15.28%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 10.1      6.1677 ug/L       3.75446      6.1677 ppb        3.75446  60.87%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                22.1      2.6754 ug/L       0.34648      2.6754 ppb        0.34648  12.95%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            7.5      10.376 ug/L        3.7236      10.376 ppb         3.7236  35.89%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                19.6      6.6837 ug/L       0.78389      6.6837 ppb        0.78389  11.73%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 1.3      0.8033 ug/L       1.82941      0.8033 ppb        1.82941 227.73%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               125.6      3.9739 ug/L       0.42791      3.9739 ppb        0.42791  10.77%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                12.4      2.1543 ug/L       1.42313      2.1543 ppb        1.42313  66.06%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -5.2     -0.0331 ug/L       0.04025     -0.0331 ppb        0.04025 121.54%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                76.2      0.1210 ug/L       0.01644      0.1210 ppb        0.01644  13.59%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 6.9      2.0808 ug/L       2.33055      2.0808 ppb        2.33055 112.00%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 69.0      2.0334 ug/L       1.56845      2.0334 ppb        1.56845  77.13%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 33.0      0.2334 ug/L       0.14458      0.2334 ppb        0.14458  61.95%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               126.8      1.1952 ug/L       0.09315      1.1952 ppb        0.09315   7.79%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     125.6      8.4646 ug/L       1.45487      8.4646 ppb        1.45487  17.19%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

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Analysis Begun

Start Time: 1/12/2010 14:12:32 **Plasma On Time:** 1/11/2010 06:15:31
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\011210.sif
Batch ID:
Results Data Set: 011210
Results Library: C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved:** 1/12/2010 12:24:47
IEC File: 011110.iec **MSF File:**
Method Description:

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

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Sequence No.: 1 **Autosampler Location:** 37
Sample ID: LR1 **Date Collected:** 1/12/2010 14:12:33
Analyst: HSC **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc Radial	5074.5	5074.5	99.1	%			14:14:26
1	Y RADIAL	5421.9	5421.9	98.48	%			14:14:26
1	Al 396.153Radial†	-7.4	-1.3	0.2854	ug/L	0.2854	ppb	14:14:26

1	Ca 317.933Radial†	-1.8	-21.0	-33.907 ug/L	-33.907 ppb	14:14:46
1	Fe 238.204 Radial†	43162.5	43546.1	370260 ug/L	370260 ppb	14:14:26
1	K 766.490 Radial†	2462.1	-26.9	-4.8692 ug/L	-4.8692 ppb	14:14:26
1	Mg 279.077 IEC†	13.5	10.6	-35.738 ug/L	-35.738 ppb	14:14:46
1	Na 589.592 Radial†	-1085.9	213.1	61.073 ug/L	61.073 ppb	14:14:26
1	Sr 421.552†	97.4	88.5	0.5655 ug/L	0.5655 ppb	14:14:26
1	Sc 361.383	854254.0	854254.0	99.555 %		14:15:44
1	Y 371.029	713373.9	713373.9	98.036 %		14:15:44
1	Ag 328.068†	-25544.9	-26016.2	0.8293 ug/L	0.8293 ppb	14:15:49
1	As 188.979†	-221.5	-198.5	1.9262 ug/L	1.9262 ppb	14:16:09
1	B 249.677†	2578.1	3204.8	11.788 ug/L	11.788 ppb	14:15:49
1	Ba 233.527†	-1448.6	-1446.5	0.1950 ug/L	0.1950 ppb	14:15:49
1	Be 313.107†	-4462.5	-7.8	-0.0030 ug/L	-0.0030 ppb	14:15:49
1	Cd 226.502†	3176.1	3391.9	-0.9192 ug/L	-0.9192 ppb	14:15:49
1	Co 228.616†	178.5	256.6	-0.2074 ug/L	-0.2074 ppb	14:16:09
1	Cr 267.716†	-519.1	-600.4	0.5994 ug/L	0.5994 ppb	14:15:49
1	Cu 324.752†	1222.0	-5175.0	4.1274 ug/L	4.1274 ppb	14:15:49
1	Mn 257.610†	-30129.3	-30693.7	2.8943 ug/L	2.8943 ppb	14:15:44
1	Mo 202.031†	-367.4	-390.6	1.4871 ug/L	1.4871 ppb	14:15:49
1	Ni 231.604†	157.6	91.3	2.2553 ug/L	2.2553 ppb	14:16:09
1	P 214.914†	676.4	459.1	-18.926 ug/L	-18.926 ppb	14:16:09
1	Pb 220.353†	222.3	285.5	-0.8845 ug/L	-0.8845 ppb	14:16:09
1	S 181.975 Axial†	75.1	31.6	43.983 ug/L	43.983 ppb	14:16:09
1	Sb 206.836†	16.1	-17.3	-1.6388 ug/L	-1.6388 ppb	14:16:09
1	Se 196.026†	-1580.6	-1555.6	119.76 ug/L	119.76 ppb	14:16:09
1	Si 251.611†	-557.3	-1020.4	-31.967 ug/L	-31.967 ppb	14:15:49
1	Sn 189.927†	-15.4	-17.1	3.2478 ug/L	3.2478 ppb	14:16:09
1	Ti 334.940†	-1330.4	-2.2	-0.0607 ug/L	-0.0607 ppb	14:15:49
1	Tl 190.801†	-50.1	-16.2	-5.1893 ug/L	-5.1893 ppb	14:16:09
1	U 409.014†	170.4	2035.0	17.713 ug/L	17.713 ppb	14:15:49
1	V 292.402†	7826.5	9221.2	2.1578 ug/L	2.1578 ppb	14:15:49
1	Zn 213.857†	4456.4	3851.7	0.2457 ug/L	0.2457 ppb	14:16:09
1	SiO2†	-599.1	-1060.8	-70.810 ug/L	-70.810 ppb	14:17:16
2	Sc Radial	5138.4	5138.4	100 %		14:14:52
2	Y RADIAL	5462.3	5462.3	99.22 %		14:14:52
2	Al 396.153Radial†	-24.7	-18.4	-13.356 ug/L	-13.356 ppb	14:14:52
2	Ca 317.933Radial†	4.9	-14.3	-23.082 ug/L	-23.082 ppb	14:15:12
2	Fe 238.204 Radial†	43610.8	43451.2	369460 ug/L	369460 ppb	14:14:52
2	K 766.490 Radial†	2573.8	53.6	9.7821 ug/L	9.7821 ppb	14:14:52
2	Mg 279.077 IEC†	12.8	9.7	-64.148 ug/L	-64.148 ppb	14:15:12
2	Na 589.592 Radial†	-1091.4	221.2	63.413 ug/L	63.413 ppb	14:14:52
2	Sr 421.552†	87.6	77.5	0.4951 ug/L	0.4951 ppb	14:14:52
2	Sc 361.383	846726.6	846726.6	98.678 %		14:16:14
2	Y 371.029	707416.3	707416.3	97.217 %		14:16:14
2	Ag 328.068†	-25218.0	-25913.0	1.0481 ug/L	1.0481 ppb	14:16:20
2	As 188.979†	-214.2	-193.2	4.0317 ug/L	4.0317 ppb	14:16:40
2	B 249.677†	2551.6	3200.9	11.833 ug/L	11.833 ppb	14:16:20
2	Ba 233.527†	-1597.3	-1610.1	-1.0961 ug/L	-1.0961 ppb	14:16:20
2	Be 313.107†	-4564.0	-150.5	-0.0571 ug/L	-0.0571 ppb	14:16:20
2	Cd 226.502†	3225.4	3470.3	0.0243 ug/L	0.0243 ppb	14:16:20
2	Co 228.616†	174.4	254.0	-0.2510 ug/L	-0.2510 ppb	14:16:40
2	Cr 267.716†	-558.5	-644.9	0.0925 ug/L	0.0925 ppb	14:16:20
2	Cu 324.752†	1226.5	-5159.5	4.1337 ug/L	4.1337 ppb	14:16:20
2	Mn 257.610†	-30006.5	-30838.3	2.6572 ug/L	2.6572 ppb	14:16:14
2	Mo 202.031†	-381.0	-407.8	0.2287 ug/L	0.2287 ppb	14:16:20
2	Ni 231.604†	114.0	48.5	1.1978 ug/L	1.1978 ppb	14:16:40
2	P 214.914†	655.5	444.0	-27.424 ug/L	-27.424 ppb	14:16:40
2	Pb 220.353†	214.4	279.4	-1.5520 ug/L	-1.5520 ppb	14:16:40
2	S 181.975 Axial†	73.7	30.9	42.955 ug/L	42.955 ppb	14:16:40
2	Sb 206.836†	27.7	-5.3	2.3549 ug/L	2.3549 ppb	14:16:40
2	Se 196.026†	-1563.9	-1552.8	119.15 ug/L	119.15 ppb	14:16:40
2	Si 251.611†	-562.6	-1030.8	-32.280 ug/L	-32.280 ppb	14:16:20
2	Sn 189.927†	-27.8	-29.8	1.0217 ug/L	1.0217 ppb	14:16:40
2	Ti 334.940†	-1374.2	-58.4	-0.1444 ug/L	-0.1444 ppb	14:16:20
2	Tl 190.801†	-57.8	-24.5	-7.6951 ug/L	-7.6951 ppb	14:16:40
2	U 409.014†	-13.9	1849.8	12.354 ug/L	12.354 ppb	14:16:20
2	V 292.402†	7838.6	9303.4	2.8174 ug/L	2.8174 ppb	14:16:20
2	Zn 213.857†	4486.9	3922.4	0.9945 ug/L	0.9945 ppb	14:16:40
2	SiO2†	-616.6	-1083.9	-72.332 ug/L	-72.332 ppb	14:17:21
3	Sc Radial	5205.1	5205.1	102 %		14:15:17
3	Y RADIAL	5566.3	5566.3	101.1 %		14:15:17

3	Al 396.153Radial†	-34.5	-27.7	-20.785 ug/L	-20.785 ppb	14:15:17
3	Ca 317.933Radial†	1.3	-17.9	-28.926 ug/L	-28.926 ppb	14:15:37
3	Fe 238.204 Radial†	44301.7	43574.0	370500 ug/L	370500 ppb	14:15:17
3	K 766.490 Radial†	2530.3	-22.2	-4.0066 ug/L	-4.0066 ppb	14:15:17
3	Mg 279.077 IEC†	8.9	5.7	-197.49 ug/L	-197.49 ppb	14:15:37
3	Na 589.592 Radial†	-1098.0	228.6	65.538 ug/L	65.538 ppb	14:15:17
3	Sr 421.552†	76.3	65.3	0.4170 ug/L	0.4170 ppb	14:15:17
3	Sc 361.383	851438.2	851438.2	99.227 %		14:16:45
3	Y 371.029	711617.7	711617.7	97.795 %		14:16:45
3	Ag 328.068†	-25779.9	-26337.8	-0.5610 ug/L	-0.5610 ppb	14:16:50
3	As 188.979†	-216.8	-194.5	3.7008 ug/L	3.7008 ppb	14:17:10
3	B 249.677†	2425.0	3059.0	8.4786 ug/L	8.4786 ppb	14:16:50
3	Ba 233.527†	-1514.5	-1517.7	-0.3466 ug/L	-0.3466 ppb	14:16:50
3	Be 313.107†	-4531.9	-92.5	-0.0348 ug/L	-0.0348 ppb	14:16:50
3	Cd 226.502†	3232.7	3459.5	-0.2017 ug/L	-0.2017 ppb	14:16:50
3	Co 228.616†	165.1	243.6	-0.4778 ug/L	-0.4778 ppb	14:17:10
3	Cr 267.716†	-471.7	-554.4	1.1176 ug/L	1.1176 ppb	14:16:50
3	Cu 324.752†	1362.1	-5029.7	4.5752 ug/L	4.5752 ppb	14:16:50
3	Mn 257.610†	-30208.1	-30873.3	2.7275 ug/L	2.7275 ppb	14:16:45
3	Mo 202.031†	-388.5	-413.1	-0.0632 ug/L	-0.0632 ppb	14:16:50
3	Ni 231.604†	124.4	58.3	1.4398 ug/L	1.4398 ppb	14:17:10
3	P 214.914†	675.6	460.6	-18.390 ug/L	-18.390 ppb	14:17:10
3	Pb 220.353†	240.5	304.6	1.3852 ug/L	1.3852 ppb	14:17:10
3	S 181.975 Axial†	72.0	28.7	39.984 ug/L	39.984 ppb	14:17:10
3	Sb 206.836†	21.9	-11.4	0.3161 ug/L	0.3161 ppb	14:17:10
3	Se 196.026†	-1567.7	-1547.9	125.34 ug/L	125.34 ppb	14:17:10
3	Si 251.611†	-632.9	-1098.5	-34.420 ug/L	-34.420 ppb	14:16:50
3	Sn 189.927†	-25.0	-26.8	1.5547 ug/L	1.5547 ppb	14:17:10
3	Ti 334.940†	-1285.8	38.4	0.0193 ug/L	0.0193 ppb	14:16:50
3	Tl 190.801†	-43.9	-10.2	-3.3811 ug/L	-3.3811 ppb	14:17:10
3	U 409.014†	57.6	1921.9	14.355 ug/L	14.355 ppb	14:16:50
3	V 292.402†	7971.9	9393.7	3.2556 ug/L	3.2556 ppb	14:16:50
3	Zn 213.857†	4489.8	3900.1	0.6823 ug/L	0.6823 ppb	14:17:10
3	SiO2†	-640.0	-1104.0	-73.676 ug/L	-73.676 ppb	14:17:26

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	850806.3	99.153	%	0.4432				0.45%
Sc Radial	5139.3	100	%	1.3				1.27%
Y 371.029	710802.6	97.683	%	0.4207				0.43%
Y RADIAL	5483.5	99.60	%	1.353				1.36%
Ag 328.068†	-26089.0	0.4388	ug/L	0.87277	0.4388	ppb	0.87277	198.90%
Al 396.153Radial†	-15.8	-11.285	ug/L	10.6869	-11.285	ppb	10.6869	94.70%
As 188.979†	-195.4	3.2196	ug/L	1.13219	3.2196	ppb	1.13219	35.17%
B 249.677†	3154.9	10.700	ug/L	1.9236	10.700	ppb	1.9236	17.98%
Ba 233.527†	-1524.8	-0.4159	ug/L	0.64837	-0.4159	ppb	0.64837	155.90%
Be 313.107†	-83.6	-0.0316	ug/L	0.02720	-0.0316	ppb	0.02720	86.01%
Ca 317.933Radial†	-17.7	-28.638	ug/L	5.4181	-28.638	ppb	5.4181	18.92%
Cd 226.502†	3440.6	-0.3655	ug/L	0.49262	-0.3655	ppb	0.49262	134.76%
Co 228.616†	251.4	-0.3121	ug/L	0.14514	-0.3121	ppb	0.14514	46.51%
Cr 267.716†	-599.9	0.6032	ug/L	0.51258	0.6032	ppb	0.51258	84.98%
Cu 324.752†	-5121.4	4.2787	ug/L	0.25673	4.2787	ppb	0.25673	6.00%
Fe 238.204 Radial†	43523.8	370070	ug/L	547.5	370070	ppb	547.5	0.15%
K 766.490 Radial†	1.5	0.3021	ug/L	8.22123	0.3021	ppb	8.22123	>999.9%
Mg 279.077 IEC†	8.7	-99.127	ug/L	86.3640	-99.127	ppb	86.3640	87.13%
Mn 257.610†	-30801.8	2.7597	ug/L	0.12178	2.7597	ppb	0.12178	4.41%
Mo 202.031†	-403.8	0.5509	ug/L	0.82384	0.5509	ppb	0.82384	149.55%
Na 589.592 Radial†	221.0	63.341	ug/L	2.2332	63.341	ppb	2.2332	3.53%
Ni 231.604†	66.0	1.6310	ug/L	0.55406	1.6310	ppb	0.55406	33.97%
P 214.914†	454.6	-21.580	ug/L	5.0680	-21.580	ppb	5.0680	23.48%
Pb 220.353†	289.8	-0.3504	ug/L	1.53974	-0.3504	ppb	1.53974	439.41%
S 181.975 Axial†	30.4	42.307	ug/L	2.0767	42.307	ppb	2.0767	4.91%
Sb 206.836†	-11.3	0.3441	ug/L	1.99699	0.3441	ppb	1.99699	580.43%
Se 196.026†	-1552.1	121.42	ug/L	3.411	121.42	ppb	3.411	2.81%
Si 251.611†	-1049.9	-32.889	ug/L	1.3350	-32.889	ppb	1.3350	4.06%
Sn 189.927†	-24.6	1.9414	ug/L	1.16232	1.9414	ppb	1.16232	59.87%
Sr 421.552†	77.1	0.4926	ug/L	0.07431	0.4926	ppb	0.07431	15.09%
Ti 334.940†	-7.4	-0.0619	ug/L	0.08186	-0.0619	ppb	0.08186	132.21%
Tl 190.801†	-17.0	-5.4218	ug/L	2.16637	-5.4218	ppb	2.16637	39.96%

U 409.014†	1935.6	14.807	ug/L	2.7081	14.807	ppb	2.7081	18.29%
V 292.402†	9306.1	2.7436	ug/L	0.55260	2.7436	ppb	0.55260	20.14%
Zn 213.857†	3891.4	0.6408	ug/L	0.37610	0.6408	ppb	0.37610	58.69%
SiO2†	-1082.9	-72.273	ug/L	1.4337	-72.273	ppb	1.4337	1.98%

Sequence No.: 2
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/12/2010 14:19:37
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	5165.4	5165.4	101	%			14:21:29
1	Y RADIAL	5478.9	5478.9	99.52	%			14:21:29
1	Al 396.153Radial†	6456.0	6406.7	5099.9	ug/L	5099.9	ppb	14:21:29
1	Ca 317.933Radial†	3227.6	3180.6	5134.3	ug/L	5134.3	ppb	14:21:49
1	Fe 238.204 Radial†	622.3	605.4	5162.8	ug/L	5162.8	ppb	14:21:49
1	K 766.490 Radial†	30275.6	27503.5	5002.2	ug/L	5002.2	ppb	14:21:29
1	Mg 279.077 IEC†	160.5	156.1	5184.0	ug/L	5184.0	ppb	14:21:49
1	Na 589.592 Radial†	33325.2	34347.2	9845.7	ug/L	9845.7	ppb	14:21:29
1	Sr 421.552†	78740.1	78052.7	498.29	ug/L	498.29	ppb	14:21:29
1	Sc 361.383	873197.0	873197.0	101.76	%			14:22:47
1	Y 371.029	724713.7	724713.7	99.595	%			14:22:47
1	Ag 328.068†	112194.1	109893.6	507.41	ug/L	507.41	ppb	14:22:52
1	As 188.979†	1158.8	1162.7	501.48	ug/L	501.48	ppb	14:23:12
1	B 249.677†	22232.7	22462.7	501.90	ug/L	501.90	ppb	14:22:52
1	Ba 233.527†	65881.7	64749.1	502.94	ug/L	502.94	ppb	14:22:52
1	Be 313.107†	1353056.5	1334093.6	505.20	ug/L	505.20	ppb	14:22:47
1	Cd 226.502†	46324.7	45724.0	502.88	ug/L	502.88	ppb	14:22:52
1	Co 228.616†	25275.2	24914.7	505.58	ug/L	505.58	ppb	14:22:52
1	Cr 267.716†	45862.6	44989.2	499.75	ug/L	499.75	ppb	14:22:52
1	Cu 324.752†	176966.9	167499.1	499.66	ug/L	499.66	ppb	14:22:52
1	Mn 257.610†	467219.8	458696.9	503.34	ug/L	503.34	ppb	14:22:47
1	Mo 202.031†	7236.7	7089.7	495.15	ug/L	495.15	ppb	14:23:12
1	Ni 231.604†	20743.8	20317.5	502.49	ug/L	502.49	ppb	14:22:52
1	P 214.914†	4417.3	4120.5	2356.5	ug/L	2356.5	ppb	14:23:12
1	Pb 220.353†	4087.9	4079.2	495.36	ug/L	495.36	ppb	14:23:12
1	S 181.975 Axial†	778.0	720.6	1001.9	ug/L	1001.9	ppb	14:23:12
1	Sb 206.836†	1517.6	1457.8	511.97	ug/L	511.97	ppb	14:23:12
1	Se 196.026†	773.5	792.1	515.93	ug/L	515.93	ppb	14:23:12
1	Si 251.611†	81655.9	79780.8	2519.5	ug/L	2519.5	ppb	14:22:52
1	Sn 189.927†	2903.1	2851.1	497.61	ug/L	497.61	ppb	14:23:12
1	Ti 334.940†	321063.2	316835.9	507.20	ug/L	507.20	ppb	14:22:47
1	Tl 190.801†	1634.0	1639.8	498.50	ug/L	498.50	ppb	14:23:12
1	U 409.014†	15852.9	17442.2	511.77	ug/L	511.77	ppb	14:22:52
1	V 292.402†	73503.8	73590.3	505.73	ug/L	505.73	ppb	14:22:52
1	Zn 213.857†	55427.3	53842.5	501.06	ug/L	501.06	ppb	14:22:52
1	SiO2†	81180.7	79315.4	5336.2	ug/L	5336.2	ppb	14:24:20
2	Sc Radial	5176.4	5176.4	101	%			14:21:54
2	Y RADIAL	5452.2	5452.2	99.03	%			14:21:54
2	Al 396.153Radial†	6456.1	6393.1	5088.7	ug/L	5088.7	ppb	14:21:54
2	Ca 317.933Radial†	3211.5	3157.8	5097.6	ug/L	5097.6	ppb	14:22:14
2	Fe 238.204 Radial†	618.6	600.4	5120.6	ug/L	5120.6	ppb	14:22:14
2	K 766.490 Radial†	30174.4	27339.2	4972.3	ug/L	4972.3	ppb	14:21:54
2	Mg 279.077 IEC†	159.7	155.0	5145.5	ug/L	5145.5	ppb	14:22:14
2	Na 589.592 Radial†	33142.9	34096.3	9773.7	ug/L	9773.7	ppb	14:21:54
2	Sr 421.552†	78439.6	77588.5	495.33	ug/L	495.33	ppb	14:21:54
2	Sc 361.383	867072.7	867072.7	101.05	%			14:23:18
2	Y 371.029	719981.4	719981.4	98.944	%			14:23:18
2	Ag 328.068†	111601.1	110085.4	508.28	ug/L	508.28	ppb	14:23:23
2	As 188.979†	1162.1	1174.0	506.28	ug/L	506.28	ppb	14:23:43
2	B 249.677†	22148.6	22533.8	503.50	ug/L	503.50	ppb	14:23:23
2	Ba 233.527†	65520.9	64849.4	503.72	ug/L	503.72	ppb	14:23:23
2	Be 313.107†	1344931.5	1335444.3	505.72	ug/L	505.72	ppb	14:23:18
2	Cd 226.502†	46147.6	45870.2	504.49	ug/L	504.49	ppb	14:23:23
2	Co 228.616†	25163.1	24979.1	506.91	ug/L	506.91	ppb	14:23:23
2	Cr 267.716†	45730.3	45176.6	501.83	ug/L	501.83	ppb	14:23:23
2	Cu 324.752†	175475.6	167251.6	498.92	ug/L	498.92	ppb	14:23:23
2	Mn 257.610†	465509.3	460247.0	505.03	ug/L	505.03	ppb	14:23:18
2	Mo 202.031†	7285.4	7188.1	502.02	ug/L	502.02	ppb	14:23:43
2	Ni 231.604†	20654.9	20373.4	503.87	ug/L	503.87	ppb	14:23:23

2	P 214.914†	4458.4	4191.8	2399.6 ug/L	2399.6 ppb	14:23:43
2	Pb 220.353†	4131.6	4150.9	504.04 ug/L	504.04 ppb	14:23:43
2	S 181.975 Axial†	783.6	731.6	1017.2 ug/L	1017.2 ppb	14:23:43
2	Sb 206.836†	1524.6	1475.3	518.18 ug/L	518.18 ppb	14:23:43
2	Se 196.026†	788.4	812.2	528.48 ug/L	528.48 ppb	14:23:43
2	Si 251.611†	81229.7	79925.8	2524.0 ug/L	2524.0 ppb	14:23:23
2	Sn 189.927†	2938.6	2906.4	507.24 ug/L	507.24 ppb	14:23:43
2	Ti 334.940†	319463.0	317480.8	508.23 ug/L	508.23 ppb	14:23:18
2	Tl 190.801†	1646.9	1663.9	505.81 ug/L	505.81 ppb	14:23:43
2	U 409.014†	15835.4	17534.9	514.50 ug/L	514.50 ppb	14:23:23
2	V 292.402†	73065.7	73666.9	506.36 ug/L	506.36 ppb	14:23:23
2	Zn 213.857†	55154.7	53957.5	502.13 ug/L	502.13 ppb	14:23:23
2	SiO2†	81481.7	80176.8	5394.1 ug/L	5394.1 ppb	14:24:25
3	Sc Radial	5144.3	5144.3	100 %		14:22:19
3	Y RADIAL	5481.7	5481.7	99.57 %		14:22:19
3	Al 396.153Radial†	6414.1	6391.2	5087.1 ug/L	5087.1 ppb	14:22:19
3	Ca 317.933Radial†	3193.9	3160.2	5101.4 ug/L	5101.4 ppb	14:22:39
3	Fe 238.204 Radial†	617.3	602.9	5142.1 ug/L	5142.1 ppb	14:22:39
3	K 766.490 Radial†	30188.8	27540.3	5009.0 ug/L	5009.0 ppb	14:22:19
3	Mg 279.077 IEC†	161.4	157.6	5234.9 ug/L	5234.9 ppb	14:22:39
3	Na 589.592 Radial†	32996.6	34155.8	9790.8 ug/L	9790.8 ppb	14:22:19
3	Sr 421.552†	78218.4	77853.9	497.02 ug/L	497.02 ppb	14:22:19
3	Sc 361.383	861996.1	861996.1	100.46 %		14:23:49
3	Y 371.029	715819.1	715819.1	98.372 %		14:23:49
3	Ag 328.068†	113080.8	112208.9	518.06 ug/L	518.06 ppb	14:23:54
3	As 188.979†	1160.3	1179.0	508.41 ug/L	508.41 ppb	14:24:14
3	B 249.677†	22511.2	23023.8	514.47 ug/L	514.47 ppb	14:23:54
3	Ba 233.527†	66297.4	66004.1	512.69 ug/L	512.69 ppb	14:23:54
3	Be 313.107†	1335323.4	1333718.5	505.06 ug/L	505.06 ppb	14:23:49
3	Cd 226.502†	46770.0	46758.7	514.27 ug/L	514.27 ppb	14:23:54
3	Co 228.616†	25469.5	25430.8	516.08 ug/L	516.08 ppb	14:23:54
3	Cr 267.716†	46078.3	45789.6	508.64 ug/L	508.64 ppb	14:23:54
3	Cu 324.752†	177871.1	170658.9	509.08 ug/L	509.08 ppb	14:23:54
3	Mn 257.610†	462603.6	460067.6	504.83 ug/L	504.83 ppb	14:23:49
3	Mo 202.031†	7271.2	7216.4	503.99 ug/L	503.99 ppb	14:24:14
3	Ni 231.604†	20978.9	20816.4	514.83 ug/L	514.83 ppb	14:23:54
3	P 214.914†	4432.9	4192.4	2397.5 ug/L	2397.5 ppb	14:24:14
3	Pb 220.353†	4121.4	4164.9	505.73 ug/L	505.73 ppb	14:24:14
3	S 181.975 Axial†	778.2	730.8	1016.1 ug/L	1016.1 ppb	14:24:14
3	Sb 206.836†	1531.7	1491.3	523.67 ug/L	523.67 ppb	14:24:14
3	Se 196.026†	776.2	804.7	523.81 ug/L	523.81 ppb	14:24:14
3	Si 251.611†	82138.0	81303.4	2567.6 ug/L	2567.6 ppb	14:23:54
3	Sn 189.927†	2916.9	2901.9	506.46 ug/L	506.46 ppb	14:24:14
3	Ti 334.940†	317265.8	317155.5	507.70 ug/L	507.70 ppb	14:23:49
3	Tl 190.801†	1629.8	1656.5	503.50 ug/L	503.50 ppb	14:24:14
3	U 409.014†	15980.1	17771.2	521.44 ug/L	521.44 ppb	14:23:54
3	V 292.402†	74033.3	75056.0	515.82 ug/L	515.82 ppb	14:23:54
3	Zn 213.857†	55830.3	54951.5	511.38 ug/L	511.38 ppb	14:23:54
3	SiO2†	82582.4	81747.4	5500.0 ug/L	5500.0 ppb	14:24:30

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	867421.9	101.09	%	0.654				0.65%
Sc Radial	5162.0	101	%	0.3				0.32%
Y 371.029	720171.4	98.970	%	0.6116				0.62%
Y RADIAL	5470.9	99.37	%	0.296				0.30%
Ag 328.068†	110729.3	511.25	ug/L	5.914	511.25	ppb	5.914	1.16%
QC value within limits for Ag 328.068 Recovery = 102.25%								
Al 396.153Radial†	6397.0	5091.9	ug/L	6.99	5091.9	ppb	6.99	0.14%
QC value within limits for Al 396.153Radial Recovery = 101.84%								
As 188.979†	1171.9	505.39	ug/L	3.553	505.39	ppb	3.553	0.70%
QC value within limits for As 188.979 Recovery = 101.08%								
B 249.677†	22673.4	506.62	ug/L	6.842	506.62	ppb	6.842	1.35%
QC value within limits for B 249.677 Recovery = 101.32%								
Ba 233.527†	65200.8	506.45	ug/L	5.416	506.45	ppb	5.416	1.07%
QC value within limits for Ba 233.527 Recovery = 101.29%								
Be 313.107†	1334418.8	505.33	ug/L	0.344	505.33	ppb	0.344	0.07%
QC value within limits for Be 313.107 Recovery = 101.07%								
Ca 317.933Radial†	3166.2	5111.1	ug/L	20.17	5111.1	ppb	20.17	0.39%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.22%
Cd 226.502†            46117.6      507.21 ug/L         6.166      507.21 ppb          6.166   1.22%
   QC value within limits for Cd 226.502  Recovery = 101.44%
Co 228.616†            25108.2      509.52 ug/L         5.716      509.52 ppb          5.716   1.12%
   QC value within limits for Co 228.616  Recovery = 101.90%
Cr 267.716†            45318.5      503.41 ug/L         4.650      503.41 ppb          4.650   0.92%
   QC value within limits for Cr 267.716  Recovery = 100.68%
Cu 324.752†           168469.9      502.55 ug/L         5.665      502.55 ppb          5.665   1.13%
   QC value within limits for Cu 324.752  Recovery = 100.51%
Fe 238.204 Radial†       602.9      5141.8 ug/L        21.12      5141.8 ppb          21.12   0.41%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.84%
K 766.490 Radial†      27461.0      4994.5 ug/L        19.50      4994.5 ppb          19.50   0.39%
   QC value within limits for K 766.490 Radial  Recovery = 99.89%
Mg 279.077 IEC†          156.2      5188.1 ug/L        44.84      5188.1 ppb          44.84   0.86%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.76%
Mn 257.610†           459670.5      504.40 ug/L         0.928      504.40 ppb          0.928   0.18%
   QC value within limits for Mn 257.610  Recovery = 100.88%
Mo 202.031†             7164.8      500.39 ug/L         4.640      500.39 ppb          4.640   0.93%
   QC value within limits for Mo 202.031  Recovery = 100.08%
Na 589.592 Radial†     34199.8      9803.4 ug/L        37.58      9803.4 ppb          37.58   0.38%
   QC value within limits for Na 589.592 Radial  Recovery = 98.03%
Ni 231.604†            20502.4      507.06 ug/L         6.761      507.06 ppb          6.761   1.33%
   QC value within limits for Ni 231.604  Recovery = 101.41%
P 214.914†              4168.2      2384.5 ug/L        24.31      2384.5 ppb          24.31   1.02%
   QC value within limits for P 214.914  Recovery = 95.38%
Pb 220.353†             4131.7      501.71 ug/L         5.568      501.71 ppb          5.568   1.11%
   QC value within limits for Pb 220.353  Recovery = 100.34%
S 181.975 Axial†         727.7      1011.7 ug/L         8.55      1011.7 ppb           8.55   0.84%
   QC value within limits for S 181.975 Axial  Recovery = 101.17%
Sb 206.836†             1474.8      517.94 ug/L         5.850      517.94 ppb          5.850   1.13%
   QC value within limits for Sb 206.836  Recovery = 103.59%
Se 196.026†              803.0      522.74 ug/L         6.344      522.74 ppb          6.344   1.21%
   QC value within limits for Se 196.026  Recovery = 104.55%
Si 251.611†            80336.7      2537.0 ug/L        26.56      2537.0 ppb          26.56   1.05%
   QC value within limits for Si 251.611  Recovery = 101.48%
Sn 189.927†             2886.5      503.77 ug/L         5.345      503.77 ppb          5.345   1.06%
   QC value within limits for Sn 189.927  Recovery = 100.75%
Sr 421.552†            77831.7      496.88 ug/L         1.487      496.88 ppb          1.487   0.30%
   QC value within limits for Sr 421.552  Recovery = 99.38%
Ti 334.940†           317157.4      507.71 ug/L         0.515      507.71 ppb          0.515   0.10%
   QC value within limits for Ti 334.940  Recovery = 101.54%
Tl 190.801†             1653.4      502.60 ug/L         3.736      502.60 ppb          3.736   0.74%
   QC value within limits for Tl 190.801  Recovery = 100.52%
U 409.014†             17582.8      515.91 ug/L         4.985      515.91 ppb          4.985   0.97%
   QC value within limits for U 409.014  Recovery = 103.18%
V 292.402†             74104.4      509.30 ug/L         5.650      509.30 ppb          5.650   1.11%
   QC value within limits for V 292.402  Recovery = 101.86%
Zn 213.857†            54250.5      504.85 ug/L         5.674      504.85 ppb          5.674   1.12%
   QC value within limits for Zn 213.857  Recovery = 100.97%
SiO2†                  80413.2      5410.1 ug/L        83.06      5410.1 ppb          83.06   1.54%
   QC value within limits for SiO2  Recovery = 101.17%
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/12/2010 14:26:39
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	5299.8	5299.8	103	%			14:28:32
1	Y RADIAL	5679.7	5679.7	103.2	%			14:28:32
1	Al 396.153Radial†	11.9	17.6	14.098	ug/L	14.098	ppb	14:28:32
1	Ca 317.933Radial†	21.5	1.6	2.5893	ug/L	2.5893	ppb	14:28:52
1	Fe 238.204 Radial†	10.3	-1.6	-13.893	ug/L	-13.893	ppb	14:28:52
1	K 766.490 Radial†	2753.6	149.1	27.129	ug/L	27.129	ppb	14:28:32
1	Mg 279.077 IEC†	2.9	-0.3	-8.9269	ug/L	-8.9269	ppb	14:28:52
1	Na 589.592 Radial†	-1156.5	191.4	54.864	ug/L	54.864	ppb	14:28:32
1	Sr 421.552†	-7.5	-17.0	-0.1085	ug/L	-0.1085	ppb	14:28:32
1	Sc 361.383	888071.5	888071.5	103.50	%			14:29:49
1	Y 371.029	748407.4	748407.4	102.85	%			14:29:49
1	Ag 328.068†	283.3	-83.3	-0.3822	ug/L	-0.3822	ppb	14:29:54
1	As 188.979†	-13.7	10.7	4.5805	ug/L	4.5805	ppb	14:30:14
1	B 249.677†	-271.8	352.5	7.9130	ug/L	7.9130	ppb	14:30:14
1	Ba 233.527†	-23.5	-14.2	-0.1079	ug/L	-0.1079	ppb	14:30:14
1	Be 313.107†	-4601.7	28.4	0.0111	ug/L	0.0111	ppb	14:29:54
1	Cd 226.502†	-175.9	31.7	0.3497	ug/L	0.3497	ppb	14:30:14
1	Co 228.616†	-65.3	14.2	0.2878	ug/L	0.2878	ppb	14:30:14
1	Cr 267.716†	87.2	5.3	0.0598	ug/L	0.0598	ppb	14:30:14
1	Cu 324.752†	6455.3	-165.2	-0.4938	ug/L	-0.4938	ppb	14:29:54
1	Mn 257.610†	426.6	-17.6	-0.0203	ug/L	-0.0203	ppb	14:30:14
1	Mo 202.031†	23.0	0.6	0.0397	ug/L	0.0397	ppb	14:30:14
1	Ni 231.604†	63.0	-6.1	-0.1515	ug/L	-0.1515	ppb	14:30:14
1	P 214.914†	242.3	13.8	8.4286	ug/L	8.4286	ppb	14:30:14
1	Pb 220.353†	-48.9	15.0	1.8164	ug/L	1.8164	ppb	14:30:14
1	S 181.975 Axial†	40.9	-4.3	-6.0330	ug/L	-6.0330	ppb	14:30:14
1	Sb 206.836†	54.2	19.0	6.4705	ug/L	6.4705	ppb	14:30:14
1	Se 196.026†	-25.2	7.7	4.8146	ug/L	4.8146	ppb	14:30:14
1	Si 251.611†	496.7	19.2	0.6084	ug/L	0.6084	ppb	14:30:14
1	Sn 189.927†	13.9	11.8	2.0503	ug/L	2.0503	ppb	14:30:14
1	Ti 334.940†	-1261.8	115.0	0.1850	ug/L	0.1850	ppb	14:29:54
1	Tl 190.801†	-37.6	-2.3	-0.6916	ug/L	-0.6916	ppb	14:30:14
1	U 409.014†	-1918.5	10.2	0.3024	ug/L	0.3024	ppb	14:29:49
1	V 292.402†	-1248.6	153.3	1.0425	ug/L	1.0425	ppb	14:29:54
1	Zn 213.857†	659.1	12.2	0.1171	ug/L	0.1171	ppb	14:30:14
1	SiO2†	516.6	40.2	2.7077	ug/L	2.7077	ppb	14:31:20
2	Sc Radial	4945.9	4945.9	96.6	%			14:28:57
2	Y RADIAL	5290.9	5290.9	96.10	%			14:28:57
2	Al 396.153Radial†	-35.8	-30.8	-24.671	ug/L	-24.671	ppb	14:28:57
2	Ca 317.933Radial†	15.9	-2.7	-4.3682	ug/L	-4.3682	ppb	14:29:17
2	Fe 238.204 Radial†	11.3	0.2	1.7015	ug/L	1.7015	ppb	14:29:17
2	K 766.490 Radial†	2731.1	316.2	57.575	ug/L	57.575	ppb	14:28:57
2	Mg 279.077 IEC†	-1.3	-4.4	-145.00	ug/L	-145.00	ppb	14:29:17
2	Na 589.592 Radial†	-1145.4	123.0	35.258	ug/L	35.258	ppb	14:28:57
2	Sr 421.552†	9.2	-0.2	-0.0011	ug/L	-0.0011	ppb	14:28:57
2	Sc 361.383	873629.9	873629.9	101.81	%			14:30:19
2	Y 371.029	737481.5	737481.5	101.35	%			14:30:19
2	Ag 328.068†	309.4	-53.2	-0.2409	ug/L	-0.2409	ppb	14:30:24
2	As 188.979†	-17.3	7.0	2.9863	ug/L	2.9863	ppb	14:30:44
2	B 249.677†	-280.2	339.9	7.6283	ug/L	7.6283	ppb	14:30:44
2	Ba 233.527†	-6.4	2.3	0.0197	ug/L	0.0197	ppb	14:30:44
2	Be 313.107†	-4742.9	-183.8	-0.0691	ug/L	-0.0691	ppb	14:30:24
2	Cd 226.502†	-165.9	38.7	0.4254	ug/L	0.4254	ppb	14:30:44
2	Co 228.616†	-67.1	11.4	0.2303	ug/L	0.2303	ppb	14:30:44
2	Cr 267.716†	101.9	21.1	0.2345	ug/L	0.2345	ppb	14:30:44
2	Cu 324.752†	6518.0	-0.5	-0.0021	ug/L	-0.0021	ppb	14:30:24
2	Mn 257.610†	382.2	-54.5	-0.0536	ug/L	-0.0536	ppb	14:30:44
2	Mo 202.031†	22.3	0.3	0.0219	ug/L	0.0219	ppb	14:30:44
2	Ni 231.604†	46.0	-21.9	-0.5412	ug/L	-0.5412	ppb	14:30:44

2	P 214.914†	233.7	9.2	5.5331 ug/L	5.5331 ppb	14:30:44
2	Pb 220.353†	-52.7	10.4	1.2581 ug/L	1.2581 ppb	14:30:44
2	S 181.975 Axial†	53.4	8.6	11.966 ug/L	11.966 ppb	14:30:44
2	Sb 206.836†	50.5	16.2	5.5171 ug/L	5.5171 ppb	14:30:44
2	Se 196.026†	-37.1	-4.4	-2.7470 ug/L	-2.7470 ppb	14:30:44
2	Si 251.611†	494.9	25.4	0.8047 ug/L	0.8047 ppb	14:30:44
2	Sn 189.927†	12.7	10.8	1.8755 ug/L	1.8755 ppb	14:30:44
2	Ti 334.940†	-1260.3	96.3	0.1648 ug/L	0.1648 ppb	14:30:24
2	Tl 190.801†	-42.0	-7.2	-2.1661 ug/L	-2.1661 ppb	14:30:44
2	U 409.014†	-1848.9	47.9	1.4087 ug/L	1.4087 ppb	14:30:19
2	V 292.402†	-1262.5	119.7	0.8110 ug/L	0.8110 ppb	14:30:24
2	Zn 213.857†	658.4	22.0	0.2100 ug/L	0.2100 ppb	14:30:44
2	SiO2†	528.1	59.6	4.0211 ug/L	4.0211 ppb	14:31:25
3	Sc Radial	5301.5	5301.5	104 %		14:29:22
3	Y RADIAL	5668.5	5668.5	103.0 %		14:29:22
3	Al 396.153Radial†	4.5	10.5	8.4290 ug/L	8.4290 ppb	14:29:22
3	Ca 317.933Radial†	18.3	-1.5	-2.4806 ug/L	-2.4806 ppb	14:29:42
3	Fe 238.204 Radial†	8.9	-3.0	-25.270 ug/L	-25.270 ppb	14:29:42
3	K 766.490 Radial†	2809.8	202.6	36.868 ug/L	36.868 ppb	14:29:22
3	Mg 279.077 IEC†	2.2	-0.9	-31.388 ug/L	-31.388 ppb	14:29:42
3	Na 589.592 Radial†	-1149.7	198.3	56.846 ug/L	56.846 ppb	14:29:22
3	Sr 421.552†	3.4	-6.5	-0.0414 ug/L	-0.0414 ppb	14:29:22
3	Sc 361.383	861442.9	861442.9	100.39 %		14:30:49
3	Y 371.029	727136.0	727136.0	99.927 %		14:30:49
3	Ag 328.068†	239.3	-118.7	-0.5519 ug/L	-0.5519 ppb	14:30:54
3	As 188.979†	-23.2	0.8	0.3533 ug/L	0.3533 ppb	14:31:14
3	B 249.677†	-300.6	315.7	7.0900 ug/L	7.0900 ppb	14:31:14
3	Ba 233.527†	-16.0	-7.3	-0.0565 ug/L	-0.0565 ppb	14:31:14
3	Be 313.107†	-4683.0	-190.0	-0.0716 ug/L	-0.0716 ppb	14:30:54
3	Cd 226.502†	-171.9	30.4	0.3374 ug/L	0.3374 ppb	14:31:14
3	Co 228.616†	-79.1	-1.5	-0.0317 ug/L	-0.0317 ppb	14:31:14
3	Cr 267.716†	75.5	-3.8	-0.0424 ug/L	-0.0424 ppb	14:31:14
3	Cu 324.752†	6394.5	-32.9	-0.1005 ug/L	-0.1005 ppb	14:30:54
3	Mn 257.610†	399.7	-31.6	-0.0359 ug/L	-0.0359 ppb	14:31:14
3	Mo 202.031†	15.0	-6.7	-0.4685 ug/L	-0.4685 ppb	14:31:14
3	Ni 231.604†	42.2	-25.0	-0.6176 ug/L	-0.6176 ppb	14:31:14
3	P 214.914†	224.6	3.5	2.1308 ug/L	2.1308 ppb	14:31:14
3	Pb 220.353†	-49.6	12.8	1.5557 ug/L	1.5557 ppb	14:31:14
3	S 181.975 Axial†	53.6	9.5	13.225 ug/L	13.225 ppb	14:31:14
3	Sb 206.836†	43.1	9.5	3.2170 ug/L	3.2170 ppb	14:31:14
3	Se 196.026†	-35.2	-3.0	-1.9765 ug/L	-1.9765 ppb	14:31:14
3	Si 251.611†	509.2	46.6	1.4796 ug/L	1.4796 ppb	14:31:14
3	Sn 189.927†	7.1	5.4	0.9433 ug/L	0.9433 ppb	14:31:14
3	Ti 334.940†	-1276.6	62.6	0.1017 ug/L	0.1017 ppb	14:30:54
3	Tl 190.801†	-39.9	-5.7	-1.7167 ug/L	-1.7167 ppb	14:31:14
3	U 409.014†	-1812.7	58.2	1.7173 ug/L	1.7173 ppb	14:30:49
3	V 292.402†	-1303.5	61.4	0.4158 ug/L	0.4158 ppb	14:30:54
3	Zn 213.857†	664.8	37.6	0.3592 ug/L	0.3592 ppb	14:31:14
3	SiO2†	531.3	70.2	4.7488 ug/L	4.7488 ppb	14:31:30

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	874381.4	101.90	%	1.554				1.52%
Sc Radial	5182.4	101	%	4.0				3.95%
Y 371.029	737674.9	101.38	%	1.462				1.44%
Y RADIAL	5546.4	100.7	%	4.02				3.99%
Ag 328.068†	-85.1	-0.3917	ug/L	0.15572	-0.3917	ppb	0.15572	39.75%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-0.9	-0.7148	ug/L	20.93968	-0.7148	ppb	20.93968	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.2	2.6400	ug/L	2.13479	2.6400	ppb	2.13479	80.86%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	336.0	7.5437	ug/L	0.41796	7.5437	ppb	0.41796	5.54%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-6.4	-0.0482	ug/L	0.06422	-0.0482	ppb	0.06422	133.16%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-115.1	-0.0432	ug/L	0.04705	-0.0432	ppb	0.04705	108.99%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-0.9	-1.4198	ug/L	3.59799	-1.4198	ppb	3.59799	253.41%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                33.6      0.3708 ug/L       0.04764      0.3708 ppb        0.04764  12.85%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 8.0      0.1621 ug/L       0.17032      0.1621 ppb        0.17032 105.06%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 7.5      0.0840 ug/L       0.14005      0.0840 ppb        0.14005 166.78%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -66.2     -0.1988 ug/L       0.26015     -0.1988 ppb        0.26015 130.86%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.5     -12.487 ug/L       13.5407     -12.487 ppb        13.5407 108.44%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         222.6      40.524 ug/L       15.5489      40.524 ppb        15.5489  38.37%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.9     -61.771 ug/L       72.9468     -61.771 ppb        72.9468 118.09%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -34.6     -0.0366 ug/L       0.01667     -0.0366 ppb        0.01667  45.54%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -1.9     -0.1356 ug/L       0.28845     -0.1356 ppb        0.28845 212.66%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        170.9      48.989 ug/L       11.9330      48.989 ppb        11.9330  24.36%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -17.6     -0.4368 ug/L       0.24997     -0.4368 ppb        0.24997  57.23%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 8.8      5.3642 ug/L       3.15228      5.3642 ppb        3.15228  58.77%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               12.7      1.5434 ug/L       0.27931      1.5434 ppb        0.27931  18.10%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           4.6      6.3861 ug/L      10.77363      6.3861 ppb       10.77363 168.71%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               14.9      5.0682 ug/L       1.67253      5.0682 ppb        1.67253  33.00%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                0.1      0.0303 ug/L       4.16112      0.0303 ppb        4.16112 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               30.4      0.9642 ug/L       0.45699      0.9642 ppb        0.45699  47.40%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                9.3      1.6230 ug/L       0.59509      1.6230 ppb        0.59509  36.67%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -7.9     -0.0503 ug/L       0.05425     -0.0503 ppb        0.05425 107.78%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               91.3      0.1505 ug/L       0.04345      0.1505 ppb        0.04345  28.87%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -5.0     -1.5248 ug/L       0.75574     -1.5248 ppb        0.75574  49.56%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                38.8      1.1428 ug/L       0.74398      1.1428 ppb        0.74398  65.10%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               111.5      0.7564 ug/L       0.31689      0.7564 ppb        0.31689  41.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               23.9      0.2288 ug/L       0.12214      0.2288 ppb        0.12214  53.40%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     56.7      3.8258 ug/L       1.03448      3.8258 ppb        1.03448  27.04%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 4
Sample ID: 1202006002|937469|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 1/12/2010 14:33:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202006002|937469|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5383.4	5383.4	105	%			14:35:33
1	Y RADIAL	5725.6	5725.6	104.0	%			14:35:33
1	Al 396.153Radial†	-1.2	5.0	4.0078	ug/L	4.0078	ppb	14:35:33
1	Ca 317.933Radial†	15.3	-4.7	-7.5575	ug/L	-7.5575	ppb	14:35:53
1	Fe 238.204 Radial†	10.2	-1.8	-15.522	ug/L	-15.522	ppb	14:35:53
1	K 766.490 Radial†	2650.7	9.9	1.7826	ug/L	1.7826	ppb	14:35:33
1	Mg 279.077 IEC†	1.8	-1.3	-44.083	ug/L	-44.083	ppb	14:35:53
1	Na 589.592 Radial†	-1089.6	272.5	78.103	ug/L	78.103	ppb	14:35:33
1	Sr 421.552†	-5.2	-14.7	-0.0940	ug/L	-0.0940	ppb	14:35:33
1	Sc 361.383	866412.3	866412.3	100.97	%			14:36:50
1	Y 371.029	730578.7	730578.7	100.40	%			14:36:50
1	Ag 328.068†	234.4	-124.9	-0.5781	ug/L	-0.5781	ppb	14:36:50
1	As 188.979†	-7.7	16.3	6.9630	ug/L	6.9630	ppb	14:37:10
1	B 249.677†	-378.3	240.4	5.3999	ug/L	5.3999	ppb	14:37:10
1	Ba 233.527†	2.7	11.2	0.0877	ug/L	0.0877	ppb	14:37:10
1	Be 313.107†	-4660.5	-141.0	-0.0525	ug/L	-0.0525	ppb	14:36:50
1	Cd 226.502†	-199.4	4.1	0.0478	ug/L	0.0478	ppb	14:37:10
1	Co 228.616†	-94.9	-16.7	-0.3388	ug/L	-0.3388	ppb	14:37:10
1	Cr 267.716†	92.9	13.0	0.1437	ug/L	0.1437	ppb	14:37:10
1	Cu 324.752†	6451.5	-13.0	-0.0415	ug/L	-0.0415	ppb	14:36:50
1	Mn 257.610†	454.4	20.2	0.0225	ug/L	0.0225	ppb	14:37:10
1	Mo 202.031†	25.5	3.6	0.2499	ug/L	0.2499	ppb	14:37:10
1	Ni 231.604†	75.3	7.5	0.1860	ug/L	0.1860	ppb	14:37:10
1	P 214.914†	241.2	18.5	11.164	ug/L	11.164	ppb	14:37:10
1	Pb 220.353†	-58.1	4.6	0.5611	ug/L	0.5611	ppb	14:37:10
1	S 181.975 Axial†	56.4	12.0	16.692	ug/L	16.692	ppb	14:37:10
1	Sb 206.836†	66.9	32.9	11.185	ug/L	11.185	ppb	14:37:10
1	Se 196.026†	-29.4	2.9	1.8034	ug/L	1.8034	ppb	14:37:10
1	Si 251.611†	885.1	416.0	13.164	ug/L	13.164	ppb	14:37:10
1	Sn 189.927†	11.5	9.8	1.7016	ug/L	1.7016	ppb	14:37:10
1	Ti 334.940†	-1146.7	198.5	0.3188	ug/L	0.3188	ppb	14:36:50
1	Tl 190.801†	-39.4	-5.0	-1.5021	ug/L	-1.5021	ppb	14:37:10
1	U 409.014†	-1766.0	114.9	3.3829	ug/L	3.3829	ppb	14:36:50
1	V 292.402†	-1289.5	82.7	0.5719	ug/L	0.5719	ppb	14:36:50
1	Zn 213.857†	727.6	95.9	0.9009	ug/L	0.9009	ppb	14:37:10
1	SiO2†	864.5	397.2	26.781	ug/L	26.781	ppb	14:38:06
2	Sc Radial	5404.4	5404.4	106	%			14:35:58
2	Y RADIAL	5776.1	5776.1	104.9	%			14:35:58
2	Al 396.153Radial†	0.5	6.7	5.3648	ug/L	5.3648	ppb	14:35:58
2	Ca 317.933Radial†	15.1	-4.9	-7.9004	ug/L	-7.9004	ppb	14:36:18
2	Fe 238.204 Radial†	8.8	-3.3	-27.654	ug/L	-27.654	ppb	14:36:18
2	K 766.490 Radial†	2647.0	-3.4	-0.6403	ug/L	-0.6403	ppb	14:35:58
2	Mg 279.077 IEC†	1.8	-1.3	-43.639	ug/L	-43.639	ppb	14:36:18
2	Na 589.592 Radial†	-1123.8	244.1	69.957	ug/L	69.957	ppb	14:35:58
2	Sr 421.552†	35.4	23.8	0.1519	ug/L	0.1519	ppb	14:35:58
2	Sc 361.383	865037.1	865037.1	100.81	%			14:37:15
2	Y 371.029	729112.0	729112.0	100.20	%			14:37:15
2	Ag 328.068†	214.3	-144.5	-0.6787	ug/L	-0.6787	ppb	14:37:15
2	As 188.979†	-14.2	9.9	4.2280	ug/L	4.2280	ppb	14:37:35
2	B 249.677†	-357.8	260.2	5.8449	ug/L	5.8449	ppb	14:37:35
2	Ba 233.527†	-18.6	-9.9	-0.0786	ug/L	-0.0786	ppb	14:37:35
2	Be 313.107†	-4673.4	-161.1	-0.0603	ug/L	-0.0603	ppb	14:37:15
2	Cd 226.502†	-189.4	13.8	0.1554	ug/L	0.1554	ppb	14:37:35
2	Co 228.616†	-79.4	-1.5	-0.0321	ug/L	-0.0321	ppb	14:37:35
2	Cr 267.716†	82.1	2.5	0.0242	ug/L	0.0242	ppb	14:37:35
2	Cu 324.752†	6463.1	8.6	0.0209	ug/L	0.0209	ppb	14:37:15
2	Mn 257.610†	445.5	12.1	0.0123	ug/L	0.0123	ppb	14:37:35
2	Mo 202.031†	16.9	-4.9	-0.3435	ug/L	-0.3435	ppb	14:37:35
2	Ni 231.604†	64.7	-2.9	-0.0711	ug/L	-0.0711	ppb	14:37:35

2	P 214.914†	233.9	11.7	7.0354 ug/L	7.0354 ppb	14:37:35
2	Pb 220.353†	-52.0	10.6	1.2878 ug/L	1.2878 ppb	14:37:35
2	S 181.975 Axial†	44.8	0.6	0.8170 ug/L	0.8170 ppb	14:37:35
2	Sb 206.836†	66.8	32.8	11.149 ug/L	11.149 ppb	14:37:35
2	Se 196.026†	-16.6	15.6	9.7122 ug/L	9.7122 ppb	14:37:35
2	Si 251.611†	908.3	440.4	13.945 ug/L	13.945 ppb	14:37:35
2	Sn 189.927†	8.2	6.5	1.1282 ug/L	1.1282 ppb	14:37:35
2	Ti 334.940†	-1191.0	152.7	0.2443 ug/L	0.2443 ppb	14:37:15
2	Tl 190.801†	-33.9	0.4	0.1286 ug/L	0.1286 ppb	14:37:35
2	U 409.014†	-1667.0	210.3	6.1941 ug/L	6.1941 ppb	14:37:15
2	V 292.402†	-1441.9	-70.5	-0.4678 ug/L	-0.4678 ppb	14:37:15
2	Zn 213.857†	743.0	112.3	1.0577 ug/L	1.0577 ppb	14:37:35
2	SiO2†	914.5	448.1	30.231 ug/L	30.231 ppb	14:38:11
3	Sc Radial	5337.3	5337.3	104 %		14:36:23
3	Y RADIAL	5725.0	5725.0	104.0 %		14:36:23
3	Al 396.153Radial†	7.5	13.4	10.712 ug/L	10.712 ppb	14:36:23
3	Ca 317.933Radial†	23.8	3.6	5.8464 ug/L	5.8464 ppb	14:36:43
3	Fe 238.204 Radial†	9.7	-2.3	-19.426 ug/L	-19.426 ppb	14:36:43
3	K 766.490 Radial†	2888.0	259.4	47.209 ug/L	47.209 ppb	14:36:23
3	Mg 279.077 IEC†	2.4	-0.8	-25.565 ug/L	-25.565 ppb	14:36:43
3	Na 589.592 Radial†	-1112.3	241.7	69.284 ug/L	69.284 ppb	14:36:23
3	Sr 421.552†	34.5	23.3	0.1490 ug/L	0.1490 ppb	14:36:23
3	Sc 361.383	873649.9	873649.9	101.82 %		14:37:40
3	Y 371.029	737752.3	737752.3	101.39 %		14:37:40
3	Ag 328.068†	217.8	-143.1	-0.6619 ug/L	-0.6619 ppb	14:37:40
3	As 188.979†	-9.4	14.7	6.2999 ug/L	6.2999 ppb	14:38:00
3	B 249.677†	-375.0	246.8	5.5426 ug/L	5.5426 ppb	14:38:00
3	Ba 233.527†	-16.3	-7.4	-0.0580 ug/L	-0.0580 ppb	14:38:00
3	Be 313.107†	-4658.6	-100.9	-0.0375 ug/L	-0.0375 ppb	14:37:40
3	Cd 226.502†	-175.8	29.0	0.3204 ug/L	0.3204 ppb	14:38:00
3	Co 228.616†	-72.5	6.0	0.1218 ug/L	0.1218 ppb	14:38:00
3	Cr 267.716†	77.3	-3.1	-0.0341 ug/L	-0.0341 ppb	14:38:00
3	Cu 324.752†	6424.5	-92.5	-0.2768 ug/L	-0.2768 ppb	14:37:40
3	Mn 257.610†	434.1	-3.5	-0.0047 ug/L	-0.0047 ppb	14:38:00
3	Mo 202.031†	21.5	-0.5	-0.0366 ug/L	-0.0366 ppb	14:38:00
3	Ni 231.604†	59.2	-8.8	-0.2190 ug/L	-0.2190 ppb	14:38:00
3	P 214.914†	237.4	12.8	7.7981 ug/L	7.7981 ppb	14:38:00
3	Pb 220.353†	-68.8	-5.4	-0.6515 ug/L	-0.6515 ppb	14:38:00
3	S 181.975 Axial†	51.1	6.4	8.8412 ug/L	8.8412 ppb	14:38:00
3	Sb 206.836†	52.8	18.4	6.2868 ug/L	6.2868 ppb	14:38:00
3	Se 196.026†	-25.5	7.0	4.3539 ug/L	4.3539 ppb	14:38:00
3	Si 251.611†	887.3	410.8	13.005 ug/L	13.005 ppb	14:38:00
3	Sn 189.927†	13.7	11.8	2.0583 ug/L	2.0583 ppb	14:38:00
3	Ti 334.940†	-1174.5	180.6	0.2922 ug/L	0.2922 ppb	14:37:40
3	Tl 190.801†	-36.4	-1.7	-0.4996 ug/L	-0.4996 ppb	14:38:00
3	U 409.014†	-1911.4	-13.4	-0.3921 ug/L	-0.3921 ppb	14:37:40
3	V 292.402†	-1363.5	20.5	0.1403 ug/L	0.1403 ppb	14:37:40
3	Zn 213.857†	732.7	95.0	0.8956 ug/L	0.8956 ppb	14:38:00
3	SiO2†	878.7	404.0	27.248 ug/L	27.248 ppb	14:38:16

Mean Data: 1202006002|937469|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	868366.4	101.20	%	0.539				0.53%
Sc Radial	5375.1	105	%	0.7				0.64%
Y 371.029	732481.0	100.66	%	0.635				0.63%
Y RADIAL	5742.2	104.3	%	0.53				0.51%
Ag 328.068†	-137.5	-0.6396	ug/L	0.05387	-0.6396	ppb	0.05387	8.42%
Al 396.153Radial†	8.4	6.6949	ug/L	3.54456	6.6949	ppb	3.54456	52.94%
As 188.979†	13.6	5.8303	ug/L	1.42668	5.8303	ppb	1.42668	24.47%
B 249.677†	249.1	5.5958	ug/L	0.22724	5.5958	ppb	0.22724	4.06%
Ba 233.527†	-2.0	-0.0163	ug/L	0.09061	-0.0163	ppb	0.09061	556.01%
Be 313.107†	-134.3	-0.0501	ug/L	0.01161	-0.0501	ppb	0.01161	23.17%
Ca 317.933Radial†	-2.0	-3.2038	ug/L	7.83957	-3.2038	ppb	7.83957	244.69%
Cd 226.502†	15.6	0.1745	ug/L	0.13732	0.1745	ppb	0.13732	78.67%
Co 228.616†	-4.1	-0.0830	ug/L	0.23452	-0.0830	ppb	0.23452	282.42%
Cr 267.716†	4.2	0.0446	ug/L	0.09066	0.0446	ppb	0.09066	203.32%
Cu 324.752†	-32.3	-0.0991	ug/L	0.15698	-0.0991	ppb	0.15698	158.35%
Fe 238.204 Radial†	-2.5	-20.867	ug/L	6.1929	-20.867	ppb	6.1929	29.68%
K 766.490 Radial†	88.7	16.117	ug/L	26.9535	16.117	ppb	26.9535	167.24%

Mg 279.077 IEC†	-1.1	-37.762	ug/L	10.5658	-37.762	ppb	10.5658 27.98%
Mn 257.610†	9.6	0.0100	ug/L	0.01371	0.0100	ppb	0.01371 136.69%
Mo 202.031†	-0.6	-0.0434	ug/L	0.29677	-0.0434	ppb	0.29677 683.48%
Na 589.592 Radial†	252.7	72.448	ug/L	4.9092	72.448	ppb	4.9092 6.78%
Ni 231.604†	-1.4	-0.0347	ug/L	0.20495	-0.0347	ppb	0.20495 590.79%
P 214.914†	14.3	8.6657	ug/L	2.19663	8.6657	ppb	2.19663 25.35%
Pb 220.353†	3.3	0.3992	ug/L	0.97976	0.3992	ppb	0.97976 245.46%
S 181.975 Axial†	6.3	8.7834	ug/L	7.93772	8.7834	ppb	7.93772 90.37%
Sb 206.836†	28.0	9.5402	ug/L	2.81762	9.5402	ppb	2.81762 29.53%
Se 196.026†	8.5	5.2898	ug/L	4.03664	5.2898	ppb	4.03664 76.31%
Si 251.611†	422.4	13.371	ug/L	0.5031	13.371	ppb	0.5031 3.76%
Sn 189.927†	9.4	1.6294	ug/L	0.46925	1.6294	ppb	0.46925 28.80%
Sr 421.552†	10.8	0.0689	ug/L	0.14110	0.0689	ppb	0.14110 204.64%
Ti 334.940†	177.2	0.2851	ug/L	0.03778	0.2851	ppb	0.03778 13.25%
Tl 190.801†	-2.1	-0.6243	ug/L	0.82247	-0.6243	ppb	0.82247 131.74%
U 409.014†	103.9	3.0616	ug/L	3.30480	3.0616	ppb	3.30480 107.94%
V 292.402†	10.9	0.0814	ug/L	0.52235	0.0814	ppb	0.52235 641.38%
Zn 213.857†	101.1	0.9514	ug/L	0.09211	0.9514	ppb	0.09211 9.68%
SiO2†	416.4	28.086	ug/L	1.8714	28.086	ppb	1.8714 6.66%

Sequence No.: 5
Sample ID: 1202006003|937469|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 1/12/2010 14:40:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202006003|937469|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5335.7	5335.7	104	%			14:42:19
1	Y RADIAL	5592.4	5592.4	101.6	%			14:42:19
1	Al 396.153Radial†	6663.6	6401.5	5095.5	ug/L	5095.5	ppb	14:42:19
1	Ca 317.933Radial†	3322.7	3169.7	5116.7	ug/L	5116.7	ppb	14:42:39
1	Fe 238.204 Radial†	646.2	608.6	5189.6	ug/L	5189.6	ppb	14:42:39
1	K 766.490 Radial†	30854.2	27100.5	4930.7	ug/L	4930.7	ppb	14:42:19
1	Mg 279.077 IEC†	169.0	159.2	5286.1	ug/L	5286.1	ppb	14:42:39
1	Na 589.592 Radial†	17385.3	17994.3	5158.1	ug/L	5158.1	ppb	14:42:19
1	Sr 421.552†	82889.1	79542.2	507.80	ug/L	507.80	ppb	14:42:19
1	Sc 361.383	880752.0	880752.0	102.64	%			14:43:38
1	Y 371.029	731741.5	731741.5	100.56	%			14:43:38
1	Ag 328.068†	112822.3	109559.9	505.92	ug/L	505.92	ppb	14:43:38
1	As 188.979†	1182.7	1176.2	507.32	ug/L	507.32	ppb	14:43:58
1	B 249.677†	22361.7	22401.0	500.54	ug/L	500.54	ppb	14:43:38
1	Ba 233.527†	68229.7	66481.3	516.38	ug/L	516.38	ppb	14:43:38
1	Be 313.107†	1379264.0	1348220.8	510.56	ug/L	510.56	ppb	14:43:38
1	Cd 226.502†	46562.8	45565.4	501.13	ug/L	501.13	ppb	14:43:38
1	Co 228.616†	25047.5	24479.7	496.76	ug/L	496.76	ppb	14:43:58
1	Cr 267.716†	46415.8	45141.5	501.45	ug/L	501.45	ppb	14:43:38
1	Cu 324.752†	182834.9	171724.3	512.26	ug/L	512.26	ppb	14:43:38
1	Mn 257.610†	478744.6	465986.5	511.33	ug/L	511.33	ppb	14:43:38
1	Mo 202.031†	7378.3	7166.7	500.52	ug/L	500.52	ppb	14:43:58
1	Ni 231.604†	20961.7	20354.8	503.42	ug/L	503.42	ppb	14:43:58
1	P 214.914†	1265.0	1012.1	487.58	ug/L	487.58	ppb	14:43:58
1	Pb 220.353†	4221.9	4175.4	506.99	ug/L	506.99	ppb	14:43:58
1	S 181.975 Axial†	3818.3	3676.1	5114.9	ug/L	5114.9	ppb	14:43:58
1	Sb 206.836†	1597.3	1522.7	534.44	ug/L	534.44	ppb	14:43:58
1	Se 196.026†	763.7	776.0	505.88	ug/L	505.88	ppb	14:43:58
1	Si 251.611†	163572.4	158899.5	5024.0	ug/L	5024.0	ppb	14:43:38
1	Sn 189.927†	3060.6	2980.1	520.07	ug/L	520.07	ppb	14:43:58
1	Ti 334.940†	328862.9	321728.4	515.02	ug/L	515.02	ppb	14:43:38
1	Tl 190.801†	1683.4	1674.2	509.02	ug/L	509.02	ppb	14:43:58
1	U 409.014†	16228.7	17674.7	518.61	ug/L	518.61	ppb	14:43:38
1	V 292.402†	75241.9	74664.0	513.09	ug/L	513.09	ppb	14:43:38
1	Zn 213.857†	54926.3	52887.2	492.06	ug/L	492.06	ppb	14:43:38
1	SiO2†	164098.4	159413.6	10739	ug/L	10739	ppb	14:44:58
2	Sc Radial	5338.0	5338.0	104	%			14:42:44
2	Y RADIAL	5672.6	5672.6	103.0	%			14:42:44
2	Al 396.153Radial†	6771.1	6501.9	5175.8	ug/L	5175.8	ppb	14:42:44
2	Ca 317.933Radial†	3327.4	3172.9	5121.9	ug/L	5121.9	ppb	14:43:04
2	Fe 238.204 Radial†	647.2	609.3	5195.6	ug/L	5195.6	ppb	14:43:04
2	K 766.490 Radial†	31353.5	27567.0	5015.6	ug/L	5015.6	ppb	14:42:44
2	Mg 279.077 IEC†	165.5	155.7	5169.9	ug/L	5169.9	ppb	14:43:04
2	Na 589.592 Radial†	17479.6	18077.7	5182.0	ug/L	5182.0	ppb	14:42:44
2	Sr 421.552†	83817.4	80399.3	513.27	ug/L	513.27	ppb	14:42:44
2	Sc 361.383	884738.7	884738.7	103.11	%			14:44:05
2	Y 371.029	735003.8	735003.8	101.01	%			14:44:05
2	Ag 328.068†	113171.1	109402.9	505.19	ug/L	505.19	ppb	14:44:05
2	As 188.979†	1184.2	1172.5	505.71	ug/L	505.71	ppb	14:44:25
2	B 249.677†	22344.7	22286.3	497.97	ug/L	497.97	ppb	14:44:05
2	Ba 233.527†	68108.3	66064.0	513.15	ug/L	513.15	ppb	14:44:05
2	Be 313.107†	1381159.1	1344003.9	508.96	ug/L	508.96	ppb	14:44:05
2	Cd 226.502†	46606.9	45403.8	499.35	ug/L	499.35	ppb	14:44:05
2	Co 228.616†	25042.0	24364.4	494.42	ug/L	494.42	ppb	14:44:25
2	Cr 267.716†	46489.5	45009.3	499.98	ug/L	499.98	ppb	14:44:05
2	Cu 324.752†	183601.6	171665.2	512.08	ug/L	512.08	ppb	14:44:05
2	Mn 257.610†	479037.8	464169.2	509.34	ug/L	509.34	ppb	14:44:05
2	Mo 202.031†	7397.3	7152.7	499.55	ug/L	499.55	ppb	14:44:25
2	Ni 231.604†	20948.0	20249.6	500.81	ug/L	500.81	ppb	14:44:25

2	P 214.914†	1273.3	1014.6	489.14 ug/L	489.14 ppb	14:44:25
2	Pb 220.353†	4235.8	4170.4	506.40 ug/L	506.40 ppb	14:44:25
2	S 181.975 Axial†	3804.5	3646.0	5073.0 ug/L	5073.0 ppb	14:44:25
2	Sb 206.836†	1595.4	1513.9	531.43 ug/L	531.43 ppb	14:44:25
2	Se 196.026†	769.2	778.1	507.19 ug/L	507.19 ppb	14:44:25
2	Si 251.611†	163616.0	158223.8	5002.6 ug/L	5002.6 ppb	14:44:05
2	Sn 189.927†	3078.3	2983.8	520.72 ug/L	520.72 ppb	14:44:25
2	Ti 334.940†	329713.8	321110.0	514.04 ug/L	514.04 ppb	14:44:05
2	Tl 190.801†	1686.0	1669.2	507.52 ug/L	507.52 ppb	14:44:25
2	U 409.014†	16624.8	17987.5	527.82 ug/L	527.82 ppb	14:44:05
2	V 292.402†	75429.8	74516.0	512.09 ug/L	512.09 ppb	14:44:05
2	Zn 213.857†	55013.4	52730.6	490.61 ug/L	490.61 ppb	14:44:05
2	SiO2†	162403.4	157049.3	10579 ug/L	10579 ppb	14:45:04
3	Sc Radial	5284.0	5284.0	103 %		14:43:09
3	Y RADIAL	5616.0	5616.0	102.0 %		14:43:09
3	Al 396.153Radial†	6680.7	6480.7	5158.9 ug/L	5158.9 ppb	14:43:09
3	Ca 317.933Radial†	3317.9	3196.3	5159.6 ug/L	5159.6 ppb	14:43:29
3	Fe 238.204 Radial†	649.2	617.6	5266.0 ug/L	5266.0 ppb	14:43:29
3	K 766.490 Radial†	31075.7	27605.1	5022.6 ug/L	5022.6 ppb	14:43:09
3	Mg 279.077 IEC†	168.8	160.5	5330.9 ug/L	5330.9 ppb	14:43:29
3	Na 589.592 Radial†	17103.8	17884.9	5126.7 ug/L	5126.7 ppb	14:43:09
3	Sr 421.552†	82928.4	80359.4	513.02 ug/L	513.02 ppb	14:43:09
3	Sc 361.383	883269.7	883269.7	102.94 %		14:44:33
3	Y 371.029	733423.4	733423.4	100.79 %		14:44:33
3	Ag 328.068†	113090.6	109507.3	505.69 ug/L	505.69 ppb	14:44:33
3	As 188.979†	1173.8	1164.3	502.22 ug/L	502.22 ppb	14:44:53
3	B 249.677†	22365.9	22342.9	499.23 ug/L	499.23 ppb	14:44:33
3	Ba 233.527†	68238.6	66300.5	514.98 ug/L	514.98 ppb	14:44:33
3	Be 313.107†	1381407.3	1346472.8	509.90 ug/L	509.90 ppb	14:44:33
3	Cd 226.502†	46498.4	45373.5	499.01 ug/L	499.01 ppb	14:44:33
3	Co 228.616†	24927.1	24293.2	492.97 ug/L	492.97 ppb	14:44:53
3	Cr 267.716†	46490.8	45085.6	500.83 ug/L	500.83 ppb	14:44:33
3	Cu 324.752†	183399.7	171765.2	512.39 ug/L	512.39 ppb	14:44:33
3	Mn 257.610†	479111.3	465013.3	510.27 ug/L	510.27 ppb	14:44:33
3	Mo 202.031†	7382.9	7150.6	499.41 ug/L	499.41 ppb	14:44:53
3	Ni 231.604†	20814.1	20153.3	498.43 ug/L	498.43 ppb	14:44:53
3	P 214.914†	1243.5	987.8	472.87 ug/L	472.87 ppb	14:44:53
3	Pb 220.353†	4215.5	4157.4	504.83 ug/L	504.83 ppb	14:44:53
3	S 181.975 Axial†	3794.1	3642.0	5067.4 ug/L	5067.4 ppb	14:44:53
3	Sb 206.836†	1583.8	1505.1	528.41 ug/L	528.41 ppb	14:44:53
3	Se 196.026†	769.3	779.3	508.19 ug/L	508.19 ppb	14:44:53
3	Si 251.611†	163802.8	158669.2	5016.7 ug/L	5016.7 ppb	14:44:33
3	Sn 189.927†	3052.4	2963.7	517.22 ug/L	517.22 ppb	14:44:53
3	Ti 334.940†	329454.4	321389.8	514.48 ug/L	514.48 ppb	14:44:33
3	Tl 190.801†	1654.5	1641.4	499.13 ug/L	499.13 ppb	14:44:53
3	U 409.014†	16439.5	17834.4	523.31 ug/L	523.31 ppb	14:44:33
3	V 292.402†	75268.0	74480.5	511.83 ug/L	511.83 ppb	14:44:33
3	Zn 213.857†	54824.6	52635.9	489.73 ug/L	489.73 ppb	14:44:33
3	SiO2†	162482.6	157388.2	10602 ug/L	10602 ppb	14:45:09

Mean Data: 1202006003|937469|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	882920.1	102.90	%	0.235				0.23%
Sc Radial	5319.2	104	%	0.6				0.57%
Y 371.029	733389.6	100.79	%	0.224				0.22%
Y RADIAL	5627.0	102.2	%	0.75				0.73%
Ag 328.068†	109490.0	505.60	ug/L	0.374	505.60	ppb	0.374	0.07%
Al 396.153Radial†	6461.4	5143.4	ug/L	42.37	5143.4	ppb	42.37	0.82%
As 188.979†	1171.0	505.08	ug/L	2.606	505.08	ppb	2.606	0.52%
B 249.677†	22343.4	499.25	ug/L	1.284	499.25	ppb	1.284	0.26%
Ba 233.527†	66281.9	514.84	ug/L	1.622	514.84	ppb	1.622	0.32%
Be 313.107†	1346232.5	509.81	ug/L	0.802	509.81	ppb	0.802	0.16%
Ca 317.933Radial†	3179.6	5132.7	ug/L	23.43	5132.7	ppb	23.43	0.46%
Cd 226.502†	45447.6	499.83	ug/L	1.139	499.83	ppb	1.139	0.23%
Co 228.616†	24379.1	494.72	ug/L	1.911	494.72	ppb	1.911	0.39%
Cr 267.716†	45078.8	500.75	ug/L	0.739	500.75	ppb	0.739	0.15%
Cu 324.752†	171718.2	512.24	ug/L	0.153	512.24	ppb	0.153	0.03%
Fe 238.204 Radial†	611.8	5217.1	ug/L	42.46	5217.1	ppb	42.46	0.81%
K 766.490 Radial†	27424.2	4989.6	ug/L	51.17	4989.6	ppb	51.17	1.03%

Mg 279.077 IEC†	158.5	5262.3 ug/L	83.07	5262.3 ppb	83.07	1.58%
Mn 257.610†	465056.3	510.31 ug/L	0.995	510.31 ppb	0.995	0.19%
Mo 202.031†	7156.6	499.83 ug/L	0.607	499.83 ppb	0.607	0.12%
Na 589.592 Radial†	17985.6	5155.6 ug/L	27.71	5155.6 ppb	27.71	0.54%
Ni 231.604†	20252.6	500.89 ug/L	2.494	500.89 ppb	2.494	0.50%
P 214.914†	1004.8	483.20 ug/L	8.978	483.20 ppb	8.978	1.86%
Pb 220.353†	4167.7	506.07 ug/L	1.119	506.07 ppb	1.119	0.22%
S 181.975 Axial†	3654.7	5085.1 ug/L	25.94	5085.1 ppb	25.94	0.51%
Sb 206.836†	1513.9	531.42 ug/L	3.015	531.42 ppb	3.015	0.57%
Se 196.026†	777.8	507.09 ug/L	1.161	507.09 ppb	1.161	0.23%
Si 251.611†	158597.5	5014.5 ug/L	10.87	5014.5 ppb	10.87	0.22%
Sn 189.927†	2975.9	519.34 ug/L	1.863	519.34 ppb	1.863	0.36%
Sr 421.552†	80100.3	511.36 ug/L	3.088	511.36 ppb	3.088	0.60%
Ti 334.940†	321409.4	514.52 ug/L	0.493	514.52 ppb	0.493	0.10%
Tl 190.801†	1661.6	505.22 ug/L	5.332	505.22 ppb	5.332	1.06%
U 409.014†	17832.2	523.25 ug/L	4.606	523.25 ppb	4.606	0.88%
V 292.402†	74553.5	512.34 ug/L	0.667	512.34 ppb	0.667	0.13%
Zn 213.857†	52751.2	490.80 ug/L	1.179	490.80 ppb	1.179	0.24%
SiO2†	157950.4	10640 ug/L	86.2	10640 ppb	86.2	0.81%

Sequence No.: 10
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/12/2010 15:14:38
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	5193.4	5193.4	101	%			15:16:30
1	Y RADIAL	5506.6	5506.6	100.0	%			15:16:30
1	Al 396.153Radial†	6511.4	6426.7	5115.7	ug/L	5115.7	ppb	15:16:30
1	Ca 317.933Radial†	3214.2	3150.1	5085.1	ug/L	5085.1	ppb	15:16:50
1	Fe 238.204 Radial†	605.9	585.9	4997.2	ug/L	4997.2	ppb	15:16:50
1	K 766.490 Radial†	30155.5	27223.3	4951.4	ug/L	4951.4	ppb	15:16:30
1	Mg 279.077 IEC†	160.0	154.7	5137.8	ug/L	5137.8	ppb	15:16:50
1	Na 589.592 Radial†	31762.7	32628.4	9353.0	ug/L	9353.0	ppb	15:16:30
1	Sr 421.552†	77289.6	76201.5	486.47	ug/L	486.47	ppb	15:16:30
1	Sc 361.383	877787.4	877787.4	102.30	%			15:17:48
1	Y 371.029	728223.0	728223.0	100.08	%			15:17:48
1	Ag 328.068†	111870.4	109000.7	503.25	ug/L	503.25	ppb	15:17:53
1	As 188.979†	1179.5	1177.0	507.38	ug/L	507.38	ppb	15:18:13
1	B 249.677†	21861.0	21985.1	491.22	ug/L	491.22	ppb	15:17:53
1	Ba 233.527†	65659.7	64193.5	498.63	ug/L	498.63	ppb	15:17:53
1	Be 313.107†	1364615.8	1338440.0	506.81	ug/L	506.81	ppb	15:17:48
1	Cd 226.502†	46341.1	45501.8	500.45	ug/L	500.45	ppb	15:17:53
1	Co 228.616†	25289.1	24798.3	503.27	ug/L	503.27	ppb	15:17:53
1	Cr 267.716†	45819.2	44711.1	496.66	ug/L	496.66	ppb	15:17:53
1	Cu 324.752†	175354.6	165013.5	492.24	ug/L	492.24	ppb	15:17:53
1	Mn 257.610†	470655.3	459654.2	504.37	ug/L	504.37	ppb	15:17:48
1	Mo 202.031†	7329.4	7143.2	498.87	ug/L	498.87	ppb	15:18:13
1	Ni 231.604†	20712.3	20180.0	499.09	ug/L	499.09	ppb	15:17:53
1	P 214.914†	4470.6	4149.9	2376.1	ug/L	2376.1	ppb	15:18:13
1	Pb 220.353†	4133.2	4102.6	498.22	ug/L	498.22	ppb	15:18:13
1	S 181.975 Axial†	785.5	724.0	1006.6	ug/L	1006.6	ppb	15:18:13
1	Sb 206.836†	1532.7	1464.9	514.51	ug/L	514.51	ppb	15:18:13
1	Se 196.026†	776.9	791.4	515.01	ug/L	515.01	ppb	15:18:13
1	Si 251.611†	81234.7	78949.5	2493.1	ug/L	2493.1	ppb	15:17:53
1	Sn 189.927†	2930.4	2862.9	499.66	ug/L	499.66	ppb	15:18:13
1	Ti 334.940†	311732.9	306065.2	489.96	ug/L	489.96	ppb	15:17:53
1	Tl 190.801†	1650.6	1647.6	500.75	ug/L	500.75	ppb	15:18:13
1	U 409.014†	15768.5	17278.2	506.97	ug/L	506.97	ppb	15:17:53
1	V 292.402†	73366.6	73078.5	502.35	ug/L	502.35	ppb	15:17:53
1	Zn 213.857†	55345.3	53477.5	497.68	ug/L	497.68	ppb	15:17:53
1	SiO2†	82654.2	80338.7	5405.2	ug/L	5405.2	ppb	15:19:20
2	Sc Radial	5225.6	5225.6	102	%			15:16:55
2	Y RADIAL	5583.3	5583.3	101.4	%			15:16:55
2	Al 396.153Radial†	6554.1	6428.9	5117.3	ug/L	5117.3	ppb	15:16:55
2	Ca 317.933Radial†	3217.1	3133.4	5058.2	ug/L	5058.2	ppb	15:17:16
2	Fe 238.204 Radial†	603.0	579.3	4941.1	ug/L	4941.1	ppb	15:17:16
2	K 766.490 Radial†	30410.5	27289.5	4963.5	ug/L	4963.5	ppb	15:16:55
2	Mg 279.077 IEC†	157.2	151.0	5015.2	ug/L	5015.2	ppb	15:17:16
2	Na 589.592 Radial†	31839.1	32509.9	9319.0	ug/L	9319.0	ppb	15:16:55
2	Sr 421.552†	77672.3	76106.1	485.86	ug/L	485.86	ppb	15:16:55
2	Sc 361.383	866360.1	866360.1	100.97	%			15:18:19
2	Y 371.029	719535.7	719535.7	98.883	%			15:18:19
2	Ag 328.068†	112791.3	111355.1	514.07	ug/L	514.07	ppb	15:18:24
2	As 188.979†	1175.8	1188.5	512.38	ug/L	512.38	ppb	15:18:44
2	B 249.677†	22120.8	22524.2	503.30	ug/L	503.30	ppb	15:18:24
2	Ba 233.527†	65959.9	65337.5	507.51	ug/L	507.51	ppb	15:18:24
2	Be 313.107†	1346864.3	1338453.4	506.84	ug/L	506.84	ppb	15:18:19
2	Cd 226.502†	46341.8	46100.0	507.04	ug/L	507.04	ppb	15:18:24
2	Co 228.616†	25331.9	25166.8	510.73	ug/L	510.73	ppb	15:18:24
2	Cr 267.716†	45971.5	45452.7	504.90	ug/L	504.90	ppb	15:18:24
2	Cu 324.752†	177492.9	169392.4	505.29	ug/L	505.29	ppb	15:18:24
2	Mn 257.610†	463891.5	459023.5	503.68	ug/L	503.68	ppb	15:18:19
2	Mo 202.031†	7285.5	7194.2	502.43	ug/L	502.43	ppb	15:18:44
2	Ni 231.604†	20835.5	20569.1	508.71	ug/L	508.71	ppb	15:18:24

2	P 214.914†	4423.0	4160.4	2379.4 ug/L	2379.4 ppb	15:18:44
2	Pb 220.353†	4144.4	4167.0	506.02 ug/L	506.02 ppb	15:18:44
2	S 181.975 Axial†	793.0	741.5	1031.0 ug/L	1031.0 ppb	15:18:44
2	Sb 206.836†	1526.8	1478.7	519.34 ug/L	519.34 ppb	15:18:44
2	Se 196.026†	781.1	805.7	523.82 ug/L	523.82 ppb	15:18:44
2	Si 251.611†	81849.7	80606.0	2545.5 ug/L	2545.5 ppb	15:18:24
2	Sn 189.927†	2919.8	2890.2	504.40 ug/L	504.40 ppb	15:18:44
2	Ti 334.940†	314573.8	312898.4	500.90 ug/L	500.90 ppb	15:18:24
2	Tl 190.801†	1636.3	1654.7	502.93 ug/L	502.93 ppb	15:18:44
2	U 409.014†	16018.0	17728.6	520.22 ug/L	520.22 ppb	15:18:24
2	V 292.402†	73775.3	74429.2	511.58 ug/L	511.58 ppb	15:18:24
2	Zn 213.857†	55513.5	54357.8	505.87 ug/L	505.87 ppb	15:18:24
2	SiO2†	80893.1	79660.1	5359.3 ug/L	5359.3 ppb	15:19:26
3	Sc Radial	5118.3	5118.3	99.9 %		15:17:21
3	Y RADIAL	5448.8	5448.8	98.97 %		15:17:21
3	Al 396.153Radial†	6423.9	6433.4	5120.9 ug/L	5120.9 ppb	15:17:21
3	Ca 317.933Radial†	3198.7	3181.2	5135.3 ug/L	5135.3 ppb	15:17:41
3	Fe 238.204 Radial†	600.3	589.1	5024.0 ug/L	5024.0 ppb	15:17:41
3	K 766.490 Radial†	29894.3	27398.3	4983.3 ug/L	4983.3 ppb	15:17:21
3	Mg 279.077 IEC†	155.8	152.9	5076.2 ug/L	5076.2 ppb	15:17:41
3	Na 589.592 Radial†	31015.0	32340.0	9270.3 ug/L	9270.3 ppb	15:17:21
3	Sr 421.552†	76128.5	76158.3	486.20 ug/L	486.20 ppb	15:17:21
3	Sc 361.383	864224.7	864224.7	100.72 %		15:18:50
3	Y 371.029	719577.7	719577.7	98.889 %		15:18:50
3	Ag 328.068†	112050.0	110895.2	511.98 ug/L	511.98 ppb	15:18:55
3	As 188.979†	1161.9	1177.6	507.72 ug/L	507.72 ppb	15:19:15
3	B 249.677†	21944.1	22403.0	500.58 ug/L	500.58 ppb	15:18:55
3	Ba 233.527†	65436.9	64979.6	504.74 ug/L	504.74 ppb	15:18:55
3	Be 313.107†	1345836.3	1340728.7	507.69 ug/L	507.69 ppb	15:18:50
3	Cd 226.502†	46114.4	45987.7	505.79 ug/L	505.79 ppb	15:18:55
3	Co 228.616†	25109.0	25007.4	507.51 ug/L	507.51 ppb	15:18:55
3	Cr 267.716†	45792.0	45387.0	504.17 ug/L	504.17 ppb	15:18:55
3	Cu 324.752†	176227.0	168569.9	502.85 ug/L	502.85 ppb	15:18:55
3	Mn 257.610†	461897.1	458178.6	502.76 ug/L	502.76 ppb	15:18:50
3	Mo 202.031†	7278.1	7204.6	503.16 ug/L	503.16 ppb	15:19:15
3	Ni 231.604†	20690.0	20475.6	506.40 ug/L	506.40 ppb	15:18:55
3	P 214.914†	4418.4	4166.6	2383.6 ug/L	2383.6 ppb	15:19:15
3	Pb 220.353†	4126.1	4158.9	505.03 ug/L	505.03 ppb	15:19:15
3	S 181.975 Axial†	769.2	719.8	1000.8 ug/L	1000.8 ppb	15:19:15
3	Sb 206.836†	1521.6	1477.3	518.87 ug/L	518.87 ppb	15:19:15
3	Se 196.026†	786.8	813.2	528.81 ug/L	528.81 ppb	15:19:15
3	Si 251.611†	81077.3	80039.4	2527.6 ug/L	2527.6 ppb	15:18:55
3	Sn 189.927†	2903.6	2881.3	502.86 ug/L	502.86 ppb	15:19:15
3	Ti 334.940†	311984.9	311097.7	498.02 ug/L	498.02 ppb	15:18:55
3	Tl 190.801†	1634.0	1656.5	503.46 ug/L	503.46 ppb	15:19:15
3	U 409.014†	15699.9	17452.0	512.07 ug/L	512.07 ppb	15:18:55
3	V 292.402†	73424.9	74261.8	510.43 ug/L	510.43 ppb	15:18:55
3	Zn 213.857†	55210.1	54192.4	504.32 ug/L	504.32 ppb	15:18:55
3	SiO2†	81597.1	80557.1	5419.8 ug/L	5419.8 ppb	15:19:31

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	869457.4	101.33	%	0.850				0.84%
Sc Radial	5179.1	101	%	1.1				1.06%
Y 371.029	722445.5	99.283	%	0.6876				0.69%
Y RADIAL	5512.9	100.1	%	1.23				1.22%
Ag 328.068†	110417.0	509.77	ug/L	5.736	509.77	ppb	5.736	1.13%
QC value within limits for Ag 328.068 Recovery = 101.95%								
Al 396.153Radial†	6429.7	5118.0	ug/L	2.65	5118.0	ppb	2.65	0.05%
QC value within limits for Al 396.153Radial Recovery = 102.36%								
As 188.979†	1181.0	509.16	ug/L	2.794	509.16	ppb	2.794	0.55%
QC value within limits for As 188.979 Recovery = 101.83%								
B 249.677†	22304.1	498.37	ug/L	6.341	498.37	ppb	6.341	1.27%
QC value within limits for B 249.677 Recovery = 99.67%								
Ba 233.527†	64836.8	503.62	ug/L	4.544	503.62	ppb	4.544	0.90%
QC value within limits for Ba 233.527 Recovery = 100.72%								
Be 313.107†	1339207.4	507.11	ug/L	0.501	507.11	ppb	0.501	0.10%
QC value within limits for Be 313.107 Recovery = 101.42%								
Ca 317.933Radial†	3154.9	5092.9	ug/L	39.11	5092.9	ppb	39.11	0.77%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.86%
Cd 226.502†            45863.2      504.43 ug/L         3.504      504.43 ppb          3.504   0.69%
   QC value within limits for Cd 226.502  Recovery = 100.89%
Co 228.616†            24990.8      507.17 ug/L         3.744      507.17 ppb          3.744   0.74%
   QC value within limits for Co 228.616  Recovery = 101.43%
Cr 267.716†            45183.6      501.91 ug/L         4.559      501.91 ppb          4.559   0.91%
   QC value within limits for Cr 267.716  Recovery = 100.38%
Cu 324.752†           167658.6      500.13 ug/L         6.939      500.13 ppb          6.939   1.39%
   QC value within limits for Cu 324.752  Recovery = 100.03%
Fe 238.204 Radial†       584.8      4987.4 ug/L        42.32      4987.4 ppb          42.32   0.85%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.75%
K 766.490 Radial†      27303.7      4966.1 ug/L        16.09      4966.1 ppb          16.09   0.32%
   QC value within limits for K 766.490 Radial  Recovery = 99.32%
Mg 279.077 IEC†          152.9      5076.4 ug/L        61.32      5076.4 ppb          61.32   1.21%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.53%
Mn 257.610†           458952.1      503.60 ug/L         0.809      503.60 ppb          0.809   0.16%
   QC value within limits for Mn 257.610  Recovery = 100.72%
Mo 202.031†             7180.7      501.48 ug/L         2.295      501.48 ppb          2.295   0.46%
   QC value within limits for Mo 202.031  Recovery = 100.30%
Na 589.592 Radial†     32492.8      9314.1 ug/L        41.56      9314.1 ppb          41.56   0.45%
   QC value within limits for Na 589.592 Radial  Recovery = 93.14%
Ni 231.604†            20408.3      504.73 ug/L         5.024      504.73 ppb          5.024   1.00%
   QC value within limits for Ni 231.604  Recovery = 100.95%
P 214.914†              4159.0      2379.7 ug/L         3.77      2379.7 ppb           3.77   0.16%
   QC value within limits for P 214.914  Recovery = 95.19%
Pb 220.353†             4142.8      503.09 ug/L         4.248      503.09 ppb          4.248   0.84%
   QC value within limits for Pb 220.353  Recovery = 100.62%
S 181.975 Axial†         728.5      1012.8 ug/L        16.02      1012.8 ppb          16.02   1.58%
   QC value within limits for S 181.975 Axial  Recovery = 101.28%
Sb 206.836†             1473.6      517.57 ug/L         2.665      517.57 ppb          2.665   0.51%
   QC value within limits for Sb 206.836  Recovery = 103.51%
Se 196.026†              803.4      522.54 ug/L         6.987      522.54 ppb          6.987   1.34%
   QC value within limits for Se 196.026  Recovery = 104.51%
Si 251.611†            79864.9      2522.1 ug/L        26.63      2522.1 ppb          26.63   1.06%
   QC value within limits for Si 251.611  Recovery = 100.88%
Sn 189.927†             2878.1      502.31 ug/L         2.421      502.31 ppb          2.421   0.48%
   QC value within limits for Sn 189.927  Recovery = 100.46%
Sr 421.552†            76155.3      486.18 ug/L         0.305      486.18 ppb          0.305   0.06%
   QC value within limits for Sr 421.552  Recovery = 97.24%
Ti 334.940†           310020.4      496.29 ug/L         5.671      496.29 ppb          5.671   1.14%
   QC value within limits for Ti 334.940  Recovery = 99.26%
Tl 190.801†             1652.9      502.38 ug/L         1.434      502.38 ppb          1.434   0.29%
   QC value within limits for Tl 190.801  Recovery = 100.48%
U 409.014†             17486.3      513.09 ug/L         6.683      513.09 ppb          6.683   1.30%
   QC value within limits for U 409.014  Recovery = 102.62%
V 292.402†             73923.2      508.12 ug/L         5.028      508.12 ppb          5.028   0.99%
   QC value within limits for V 292.402  Recovery = 101.62%
Zn 213.857†            54009.2      502.62 ug/L         4.352      502.62 ppb          4.352   0.87%
   QC value within limits for Zn 213.857  Recovery = 100.52%
SiO2†                  80185.3      5394.7 ug/L        31.56      5394.7 ppb          31.56   0.58%
   QC value within limits for SiO2  Recovery = 100.88%
All analyte(s) passed QC.
```

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

Autosampler Location: 8
Date Collected: 1/12/2010 15:21:40
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	5225.1	5225.1	102	%			15:23:33
1	Y RADIAL	5612.5	5612.5	101.9	%			15:23:33
1	Al 396.153Radial†	-25.9	-19.2	-15.409	ug/L	-15.409	ppb	15:23:33
1	Ca 317.933Radial†	16.8	-2.8	-4.5010	ug/L	-4.5010	ppb	15:23:53
1	Fe 238.204 Radial†	9.1	-2.6	-22.389	ug/L	-22.389	ppb	15:23:53
1	K 766.490 Radial†	2708.5	143.0	26.029	ug/L	26.029	ppb	15:23:33
1	Mg 279.077 IEC†	2.0	-1.1	-35.396	ug/L	-35.396	ppb	15:23:53
1	Na 589.592 Radial†	-1201.7	131.2	37.603	ug/L	37.603	ppb	15:23:33
1	Sr 421.552†	4.3	-5.5	-0.0350	ug/L	-0.0350	ppb	15:23:33
1	Sc 361.383	865424.8	865424.8	100.86	%			15:24:50
1	Y 371.029	731274.2	731274.2	100.50	%			15:24:50
1	Ag 328.068†	328.4	-31.4	-0.1542	ug/L	-0.1542	ppb	15:24:50
1	As 188.979†	-19.4	4.7	2.0057	ug/L	2.0057	ppb	15:25:10
1	B 249.677†	-414.5	204.1	4.5852	ug/L	4.5852	ppb	15:25:10
1	Ba 233.527†	-21.1	-12.3	-0.0968	ug/L	-0.0968	ppb	15:25:10
1	Be 313.107†	-4537.2	-24.0	-0.0088	ug/L	-0.0088	ppb	15:24:50
1	Cd 226.502†	-195.1	8.2	0.0924	ug/L	0.0924	ppb	15:25:10
1	Co 228.616†	-80.4	-2.5	-0.0495	ug/L	-0.0495	ppb	15:25:10
1	Cr 267.716†	81.9	2.2	0.0228	ug/L	0.0228	ppb	15:25:10
1	Cu 324.752†	6375.2	-81.4	-0.2450	ug/L	-0.2450	ppb	15:24:50
1	Mn 257.610†	429.6	-3.9	-0.0050	ug/L	-0.0050	ppb	15:25:10
1	Mo 202.031†	27.5	5.7	0.3945	ug/L	0.3945	ppb	15:25:10
1	Ni 231.604†	41.8	-25.6	-0.6330	ug/L	-0.6330	ppb	15:25:10
1	P 214.914†	243.2	20.8	12.564	ug/L	12.564	ppb	15:25:10
1	Pb 220.353†	-55.2	7.4	0.8971	ug/L	0.8971	ppb	15:25:10
1	S 181.975 Axial†	46.8	2.6	3.5656	ug/L	3.5656	ppb	15:25:10
1	Sb 206.836†	48.7	14.9	5.0648	ug/L	5.0648	ppb	15:25:10
1	Se 196.026†	-31.3	1.0	0.5652	ug/L	0.5652	ppb	15:25:10
1	Si 251.611†	510.2	45.2	1.4269	ug/L	1.4269	ppb	15:25:10
1	Sn 189.927†	3.5	1.8	0.3058	ug/L	0.3058	ppb	15:25:10
1	Ti 334.940†	-1275.3	69.7	0.1130	ug/L	0.1130	ppb	15:24:50
1	Tl 190.801†	-37.6	-3.2	-0.9622	ug/L	-0.9622	ppb	15:25:10
1	U 409.014†	-1813.3	66.0	1.9458	ug/L	1.9458	ppb	15:24:50
1	V 292.402†	-1418.0	-46.2	-0.3009	ug/L	-0.3009	ppb	15:24:50
1	Zn 213.857†	654.6	24.4	0.2357	ug/L	0.2357	ppb	15:25:10
1	SiO2†	526.9	63.4	4.2625	ug/L	4.2625	ppb	15:26:06
2	Sc Radial	5271.6	5271.6	103	%			15:23:58
2	Y RADIAL	5661.6	5661.6	102.8	%			15:23:58
2	Al 396.153Radial†	-14.3	-7.7	-6.1236	ug/L	-6.1236	ppb	15:23:58
2	Ca 317.933Radial†	23.1	3.2	5.1629	ug/L	5.1629	ppb	15:24:18
2	Fe 238.204 Radial†	10.8	-1.0	-8.9072	ug/L	-8.9072	ppb	15:24:18
2	K 766.490 Radial†	2785.2	194.0	35.318	ug/L	35.318	ppb	15:23:58
2	Mg 279.077 IEC†	0.7	-2.4	-79.125	ug/L	-79.125	ppb	15:24:18
2	Na 589.592 Radial†	-1211.8	131.7	37.761	ug/L	37.761	ppb	15:23:58
2	Sr 421.552†	26.7	16.2	0.1034	ug/L	0.1034	ppb	15:23:58
2	Sc 361.383	855398.2	855398.2	99.688	%			15:25:15
2	Y 371.029	723767.5	723767.5	99.465	%			15:25:15
2	Ag 328.068†	277.6	-78.6	-0.3648	ug/L	-0.3648	ppb	15:25:15
2	As 188.979†	-17.8	6.0	2.5823	ug/L	2.5823	ppb	15:25:35
2	B 249.677†	-414.5	199.3	4.4755	ug/L	4.4755	ppb	15:25:35
2	Ba 233.527†	-12.1	-3.5	-0.0272	ug/L	-0.0272	ppb	15:25:35
2	Be 313.107†	-4541.2	-80.7	-0.0302	ug/L	-0.0302	ppb	15:25:15
2	Cd 226.502†	-201.4	-0.4	-0.0026	ug/L	-0.0026	ppb	15:25:35
2	Co 228.616†	-84.0	-7.0	-0.1424	ug/L	-0.1424	ppb	15:25:35
2	Cr 267.716†	76.8	-1.9	-0.0223	ug/L	-0.0223	ppb	15:25:35
2	Cu 324.752†	6442.1	59.8	0.1760	ug/L	0.1760	ppb	15:25:15
2	Mn 257.610†	434.3	5.9	0.0088	ug/L	0.0088	ppb	15:25:35
2	Mo 202.031†	19.7	-1.8	-0.1297	ug/L	-0.1297	ppb	15:25:35
2	Ni 231.604†	71.1	4.3	0.1058	ug/L	0.1058	ppb	15:25:35

2	P 214.914†	221.2	1.6	0.9527 ug/L	0.9527 ppb	15:25:35
2	Pb 220.353†	-55.9	6.1	0.7424 ug/L	0.7424 ppb	15:25:35
2	S 181.975 Axial†	53.0	9.3	12.889 ug/L	12.889 ppb	15:25:35
2	Sb 206.836†	42.5	9.2	3.1497 ug/L	3.1497 ppb	15:25:35
2	Se 196.026†	-34.7	-2.7	-1.7422 ug/L	-1.7422 ppb	15:25:35
2	Si 251.611†	503.9	44.8	1.4194 ug/L	1.4194 ppb	15:25:35
2	Sn 189.927†	10.2	8.6	1.5005 ug/L	1.5005 ppb	15:25:35
2	Ti 334.940†	-1254.2	76.0	0.1274 ug/L	0.1274 ppb	15:25:15
2	Tl 190.801†	-33.0	1.0	0.3115 ug/L	0.3115 ppb	15:25:35
2	U 409.014†	-1743.8	114.7	3.3769 ug/L	3.3769 ppb	15:25:15
2	V 292.402†	-1316.9	38.7	0.2666 ug/L	0.2666 ppb	15:25:15
2	Zn 213.857†	649.0	26.4	0.2477 ug/L	0.2477 ppb	15:25:35
2	SiO2†	518.6	61.2	4.1335 ug/L	4.1335 ppb	15:26:11
3	Sc Radial	5255.9	5255.9	103 %		15:24:23
3	Y RADIAL	5633.2	5633.2	102.3 %		15:24:23
3	Al 396.153Radial†	-2.5	3.7	2.9903 ug/L	2.9903 ppb	15:24:23
3	Ca 317.933Radial†	20.0	0.3	0.5165 ug/L	0.5165 ppb	15:24:43
3	Fe 238.204 Radial†	8.7	-3.1	-26.062 ug/L	-26.062 ppb	15:24:43
3	K 766.490 Radial†	2510.2	-65.8	-11.994 ug/L	-11.994 ppb	15:24:23
3	Mg 279.077 IEC†	2.6	-0.5	-17.894 ug/L	-17.894 ppb	15:24:43
3	Na 589.592 Radial†	-1219.7	120.5	34.536 ug/L	34.536 ppb	15:24:23
3	Sr 421.552†	-9.4	-18.9	-0.1206 ug/L	-0.1206 ppb	15:24:23
3	Sc 361.383	862318.6	862318.6	100.49 %		15:25:40
3	Y 371.029	729727.8	729727.8	100.28 %		15:25:40
3	Ag 328.068†	287.5	-71.0	-0.3321 ug/L	-0.3321 ppb	15:25:40
3	As 188.979†	-12.8	11.2	4.7880 ug/L	4.7880 ppb	15:26:00
3	B 249.677†	-412.2	204.9	4.6044 ug/L	4.6044 ppb	15:26:00
3	Ba 233.527†	-11.7	-3.1	-0.0241 ug/L	-0.0241 ppb	15:26:00
3	Be 313.107†	-4481.2	15.5	0.0062 ug/L	0.0062 ppb	15:25:40
3	Cd 226.502†	-176.4	26.1	0.2893 ug/L	0.2893 ppb	15:26:00
3	Co 228.616†	-97.3	-19.5	-0.3972 ug/L	-0.3972 ppb	15:26:00
3	Cr 267.716†	53.8	-25.4	-0.2820 ug/L	-0.2820 ppb	15:26:00
3	Cu 324.752†	6383.3	-50.5	-0.1516 ug/L	-0.1516 ppb	15:25:40
3	Mn 257.610†	375.9	-55.7	-0.0629 ug/L	-0.0629 ppb	15:26:00
3	Mo 202.031†	16.1	-5.6	-0.3907 ug/L	-0.3907 ppb	15:26:00
3	Ni 231.604†	64.9	-2.5	-0.0609 ug/L	-0.0609 ppb	15:26:00
3	P 214.914†	226.5	5.1	3.1275 ug/L	3.1275 ppb	15:26:00
3	Pb 220.353†	-92.1	-29.4	-3.5611 ug/L	-3.5611 ppb	15:26:00
3	S 181.975 Axial†	45.3	1.2	1.6618 ug/L	1.6618 ppb	15:26:00
3	Sb 206.836†	45.6	11.9	4.0527 ug/L	4.0527 ppb	15:26:00
3	Se 196.026†	-35.9	-3.7	-2.3981 ug/L	-2.3981 ppb	15:26:00
3	Si 251.611†	511.1	47.9	1.5203 ug/L	1.5203 ppb	15:26:00
3	Sn 189.927†	4.0	2.3	0.4073 ug/L	0.4073 ppb	15:26:00
3	Ti 334.940†	-1250.0	90.3	0.1467 ug/L	0.1467 ppb	15:25:40
3	Tl 190.801†	-34.4	-0.2	-0.0530 ug/L	-0.0530 ppb	15:26:00
3	U 409.014†	-1911.0	-37.7	-1.1054 ug/L	-1.1054 ppb	15:25:40
3	V 292.402†	-1331.2	35.1	0.2338 ug/L	0.2338 ppb	15:25:40
3	Zn 213.857†	645.5	17.7	0.1688 ug/L	0.1688 ppb	15:26:00
3	SiO2†	516.9	55.3	3.7420 ug/L	3.7420 ppb	15:26:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	861047.2	100.35	%	0.598				0.60%
Sc Radial	5250.9	103	%	0.5				0.45%
Y 371.029	728256.5	100.08	%	0.545				0.54%
Y RADIAL	5635.8	102.4	%	0.45				0.44%
Ag 328.068†	-60.3	-0.2837	ug/L	0.11332	-0.2837	ppb	0.11332	39.94%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-7.7	-6.1809	ug/L	9.19995	-6.1809	ppb	9.19995	148.84%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	7.3	3.1253	ug/L	1.46853	3.1253	ppb	1.46853	46.99%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	202.8	4.5550	ug/L	0.06955	4.5550	ppb	0.06955	1.53%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-6.3	-0.0494	ug/L	0.04113	-0.0494	ppb	0.04113	83.32%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-29.7	-0.0110	ug/L	0.01830	-0.0110	ppb	0.01830	167.06%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.2	0.3928	ug/L	4.83315	0.3928	ppb	4.83315	>999.9%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                11.3      0.1264 ug/L       0.14887      0.1264 ppb        0.14887 117.81%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -9.7     -0.1964 ug/L       0.17999     -0.1964 ppb        0.17999  91.66%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -8.4     -0.0938 ug/L       0.16455     -0.0938 ppb        0.16455 175.38%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -24.0     -0.0735 ug/L       0.22107     -0.0735 ppb        0.22107 300.67%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -2.2     -19.119 ug/L        9.0325     -19.119 ppb         9.0325  47.24%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          90.4      16.451 ug/L       25.0682      16.451 ppb        25.0682 152.38%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.3     -44.138 ug/L       31.5381     -44.138 ppb        31.5381  71.45%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -17.9     -0.0197 ug/L       0.03805     -0.0197 ppb        0.03805 192.83%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -0.6     -0.0420 ug/L       0.39988     -0.0420 ppb        0.39988 953.22%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        127.8      36.633 ug/L        1.8180      36.633 ppb         1.8180   4.96%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -7.9     -0.1961 ug/L       0.38750     -0.1961 ppb        0.38750 197.64%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  9.2      5.5481 ug/L       6.17261      5.5481 ppb        6.17261 111.26%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -5.3     -0.6405 ug/L       2.53046     -0.6405 ppb        2.53046 395.07%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            4.3      6.0389 ug/L       6.00844      6.0389 ppb        6.00844  99.50%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                12.0      4.0890 ug/L       0.95804      4.0890 ppb        0.95804  23.43%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.8     -1.1917 ug/L       1.55646     -1.1917 ppb        1.55646 130.61%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                46.0      1.4556 ug/L       0.05624      1.4556 ppb        0.05624   3.86%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 4.2      0.7379 ug/L       0.66242      0.7379 ppb        0.66242  89.77%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -2.7     -0.0174 ug/L       0.11305     -0.0174 ppb        0.11305 649.89%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                78.7      0.1290 ug/L       0.01690      0.1290 ppb        0.01690  13.10%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -0.8     -0.2346 ug/L       0.65600     -0.2346 ppb        0.65600 279.68%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 47.7      1.4057 ug/L       2.28945      1.4057 ppb        2.28945 162.86%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                  9.2      0.0665 ug/L       0.31862      0.0665 ppb        0.31862 479.13%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                22.8      0.2174 ug/L       0.04251      0.2174 ppb        0.04251  19.55%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      60.0      4.0460 ug/L       0.27106      4.0460 ppb        0.27106   6.70%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 21
Sample ID: 1202006013|937474|1
Analyst: HSC
Initial Sample Wt:
Dilution:
User canceled analysis.

Autosampler Location: 51
Date Collected: 1/12/2010 16:30:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Analysis Begun

Start Time: 1/12/2010 16:37:36
Logged In Analyst: Optima3
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Plasma On Time: 1/11/2010 06:15:31
Technique: ICP Continuous

Sample Information File: C:\pe\Optima3\Sample Information\011210.sif
Batch ID:
Results Data Set: 011210
Results Library: C:\pe\Optima3\Results\Results.mdb

Sequence No.: 10
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/12/2010 16:37:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc Radial	5168.0	5168.0	101	%			16:39:29
1	Y RADIAL	5450.0	5450.0	98.99	%			16:39:29
1	Al 396.153Radial†	6474.6	6421.8	5111.7	ug/L	5111.7	ppb	16:39:29
1	Ca 317.933Radial†	3212.3	3163.8	5107.2	ug/L	5107.2	ppb	16:39:49
1	Fe 238.204 Radial†	610.5	593.4	5060.9	ug/L	5060.9	ppb	16:39:49
1	K 766.490 Radial†	30267.6	27480.3	4998.1	ug/L	4998.1	ppb	16:39:29
1	Mg 279.077 IEC†	159.9	155.4	5161.3	ug/L	5161.3	ppb	16:39:49
1	Na 589.592 Radial†	32141.7	33157.8	9504.7	ug/L	9504.7	ppb	16:39:29
1	Sr 421.552†	77498.4	76782.6	490.18	ug/L	490.18	ppb	16:39:29
1	Sc 361.383	872998.3	872998.3	101.74	%			16:40:47
1	Y 371.029	726407.0	726407.0	99.827	%			16:40:47
1	Ag 328.068†	112133.1	109858.7	507.22	ug/L	507.22	ppb	16:40:52
1	As 188.979†	1167.9	1171.9	505.39	ug/L	505.39	ppb	16:41:12
1	B 249.677†	22264.1	22498.5	502.73	ug/L	502.73	ppb	16:40:52
1	Ba 233.527†	65709.8	64594.9	501.75	ug/L	501.75	ppb	16:40:52
1	Be 313.107†	1367645.3	1348735.5	510.74	ug/L	510.74	ppb	16:40:47
1	Cd 226.502†	46168.4	45580.6	501.31	ug/L	501.31	ppb	16:40:52
1	Co 228.616†	25187.1	24833.7	503.95	ug/L	503.95	ppb	16:40:52
1	Cr 267.716†	45790.1	44928.2	499.07	ug/L	499.07	ppb	16:40:52
1	Cu 324.752†	175771.3	166363.5	496.27	ug/L	496.27	ppb	16:40:52
1	Mn 257.610†	469179.2	460727.2	505.55	ug/L	505.55	ppb	16:40:47
1	Mo 202.031†	7323.7	7176.9	501.23	ug/L	501.23	ppb	16:41:12
1	Ni 231.604†	20712.5	20291.3	501.84	ug/L	501.84	ppb	16:40:52
1	P 214.914†	4456.6	4160.1	2381.2	ug/L	2381.2	ppb	16:41:12
1	Pb 220.353†	4138.1	4129.6	501.48	ug/L	501.48	ppb	16:41:12
1	S 181.975 Axial†	784.4	727.2	1011.0	ug/L	1011.0	ppb	16:41:12
1	Sb 206.836†	1526.7	1467.1	515.31	ug/L	515.31	ppb	16:41:12
1	Se 196.026†	780.5	799.2	520.06	ug/L	520.06	ppb	16:41:12
1	Si 251.611†	81272.2	79421.9	2508.0	ug/L	2508.0	ppb	16:40:52
1	Sn 189.927†	2928.4	2876.6	502.05	ug/L	502.05	ppb	16:41:12
1	Ti 334.940†	322696.1	318512.7	509.89	ug/L	509.89	ppb	16:40:47
1	Tl 190.801†	1655.4	1661.2	505.02	ug/L	505.02	ppb	16:41:12
1	U 409.014†	15811.9	17405.4	510.70	ug/L	510.70	ppb	16:40:52
1	V 292.402†	73510.4	73613.2	505.99	ug/L	505.99	ppb	16:40:52
1	Zn 213.857†	55306.7	53736.4	500.08	ug/L	500.08	ppb	16:40:52
1	SiO2†	81238.3	79390.2	5341.1	ug/L	5341.1	ppb	16:42:20
2	Sc Radial	5099.6	5099.6	99.6	%			16:39:54
2	Y RADIAL	5413.6	5413.6	98.33	%			16:39:54
2	Al 396.153Radial†	6527.8	6561.4	5223.2	ug/L	5223.2	ppb	16:39:54

2	Ca 317.933Radial†	3226.9	3221.2	5199.8 ug/L	5199.8 ppb	16:40:14
2	Fe 238.204 Radial†	613.7	604.7	5156.6 ug/L	5156.6 ppb	16:40:14
2	K 766.490 Radial†	30224.6	27839.7	5063.5 ug/L	5063.5 ppb	16:39:54
2	Mg 279.077 IEC†	165.2	162.8	5407.2 ug/L	5407.2 ppb	16:40:14
2	Na 589.592 Radial†	32021.2	33464.1	9592.5 ug/L	9592.5 ppb	16:39:54
2	Sr 421.552†	77501.0	77815.8	496.78 ug/L	496.78 ppb	16:39:54
2	Sc 361.383	870542.5	870542.5	101.45 %		16:41:18
2	Y 371.029	722660.3	722660.3	99.312 %		16:41:18
2	Ag 328.068†	113319.6	111339.2	514.07 ug/L	514.07 ppb	16:41:23
2	As 188.979†	1174.0	1181.1	509.37 ug/L	509.37 ppb	16:41:43
2	B 249.677†	22517.1	22809.6	509.68 ug/L	509.68 ppb	16:41:23
2	Ba 233.527†	66222.2	65282.1	507.09 ug/L	507.09 ppb	16:41:23
2	Be 313.107†	1364652.9	1349578.2	511.06 ug/L	511.06 ppb	16:41:18
2	Cd 226.502†	46746.7	46278.6	508.98 ug/L	508.98 ppb	16:41:23
2	Co 228.616†	25428.1	25141.1	510.19 ug/L	510.19 ppb	16:41:23
2	Cr 267.716†	46281.2	45539.2	505.86 ug/L	505.86 ppb	16:41:23
2	Cu 324.752†	178438.0	169479.3	505.57 ug/L	505.57 ppb	16:41:23
2	Mn 257.610†	470193.7	463028.1	508.08 ug/L	508.08 ppb	16:41:18
2	Mo 202.031†	7341.2	7214.4	503.85 ug/L	503.85 ppb	16:41:43
2	Ni 231.604†	20894.2	20527.8	507.69 ug/L	507.69 ppb	16:41:23
2	P 214.914†	4467.8	4183.5	2393.1 ug/L	2393.1 ppb	16:41:43
2	Pb 220.353†	4159.2	4161.8	505.39 ug/L	505.39 ppb	16:41:43
2	S 181.975 Axial†	788.7	733.6	1019.9 ug/L	1019.9 ppb	16:41:43
2	Sb 206.836†	1534.0	1478.6	519.30 ug/L	519.30 ppb	16:41:43
2	Se 196.026†	784.9	805.6	524.45 ug/L	524.45 ppb	16:41:43
2	Si 251.611†	82361.9	80721.4	2549.1 ug/L	2549.1 ppb	16:41:23
2	Sn 189.927†	2939.1	2895.4	505.33 ug/L	505.33 ppb	16:41:43
2	Ti 334.940†	322767.0	319477.4	511.42 ug/L	511.42 ppb	16:41:18
2	Tl 190.801†	1654.3	1664.7	506.05 ug/L	506.05 ppb	16:41:43
2	U 409.014†	15810.8	17448.1	511.94 ug/L	511.94 ppb	16:41:23
2	V 292.402†	74091.8	74390.1	511.28 ug/L	511.28 ppb	16:41:23
2	Zn 213.857†	55916.4	54490.7	507.10 ug/L	507.10 ppb	16:41:23
2	SiO2†	81830.2	80198.9	5395.6 ug/L	5395.6 ppb	16:42:25
3	Sc Radial	5210.0	5210.0	102 %		16:40:19
3	Y RADIAL	5503.0	5503.0	99.96 %		16:40:19
3	Al 396.153Radial†	6560.0	6454.0	5137.3 ug/L	5137.3 ppb	16:40:19
3	Ca 317.933Radial†	3229.1	3154.6	5092.4 ug/L	5092.4 ppb	16:40:39
3	Fe 238.204 Radial†	615.2	593.1	5058.5 ug/L	5058.5 ppb	16:40:39
3	K 766.490 Radial†	30428.4	27396.6	4982.9 ug/L	4982.9 ppb	16:40:19
3	Mg 279.077 IEC†	161.9	156.0	5181.9 ug/L	5181.9 ppb	16:40:39
3	Na 589.592 Radial†	32319.9	33076.1	9481.3 ug/L	9481.3 ppb	16:40:19
3	Sr 421.552†	78061.7	76717.2	489.77 ug/L	489.77 ppb	16:40:19
3	Sc 361.383	865526.3	865526.3	100.87 %		16:41:49
3	Y 371.029	718990.0	718990.0	98.808 %		16:41:49
3	Ag 328.068†	113313.9	111980.9	516.99 ug/L	516.99 ppb	16:41:54
3	As 188.979†	1163.7	1177.6	507.81 ug/L	507.81 ppb	16:42:14
3	B 249.677†	22726.4	23145.8	517.22 ug/L	517.22 ppb	16:41:54
3	Ba 233.527†	66387.7	65824.5	511.29 ug/L	511.29 ppb	16:41:54
3	Be 313.107†	1348141.4	1341004.7	507.82 ug/L	507.82 ppb	16:41:49
3	Cd 226.502†	46552.7	46353.3	509.82 ug/L	509.82 ppb	16:41:54
3	Co 228.616†	25490.7	25348.4	514.40 ug/L	514.40 ppb	16:41:54
3	Cr 267.716†	46239.9	45762.6	508.34 ug/L	508.34 ppb	16:41:54
3	Cu 324.752†	178657.0	170715.8	509.25 ug/L	509.25 ppb	16:41:54
3	Mn 257.610†	464741.8	460309.2	505.09 ug/L	505.09 ppb	16:41:49
3	Mo 202.031†	7289.6	7205.2	503.20 ug/L	503.20 ppb	16:42:14
3	Ni 231.604†	20940.9	20693.5	511.79 ug/L	511.79 ppb	16:41:54
3	P 214.914†	4416.2	4157.8	2376.8 ug/L	2376.8 ppb	16:42:14
3	Pb 220.353†	4103.8	4130.7	501.62 ug/L	501.62 ppb	16:42:14
3	S 181.975 Axial†	777.9	727.3	1011.2 ug/L	1011.2 ppb	16:42:14
3	Sb 206.836†	1508.0	1461.6	513.53 ug/L	513.53 ppb	16:42:14
3	Se 196.026†	777.2	802.6	522.21 ug/L	522.21 ppb	16:42:14
3	Si 251.611†	82448.4	81277.7	2566.8 ug/L	2566.8 ppb	16:41:54
3	Sn 189.927†	2920.1	2893.3	504.95 ug/L	504.95 ppb	16:42:14
3	Ti 334.940†	319319.0	317902.8	508.90 ug/L	508.90 ppb	16:41:49
3	Tl 190.801†	1643.7	1663.6	505.67 ug/L	505.67 ppb	16:42:14
3	U 409.014†	15896.3	17623.2	517.10 ug/L	517.10 ppb	16:41:54
3	V 292.402†	74237.0	74957.3	515.14 ug/L	515.14 ppb	16:41:54
3	Zn 213.857†	55837.9	54732.3	509.35 ug/L	509.35 ppb	16:41:54
3	SiO2†	81357.6	80197.9	5395.5 ug/L	5395.5 ppb	16:42:30

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	869689.0	101.35	%	0.444				0.44%
Sc Radial	5159.2	101	%	1.1				1.08%
Y 371.029	722685.8	99.316	%	0.5097				0.51%
Y RADIAL	5455.5	99.09	%	0.817				0.82%
Ag 328.068†	111059.6	512.76	ug/L	5.013	512.76	ppb	5.013	0.98%
QC value within limits for Ag 328.068 Recovery = 102.55%								
Al 396.153Radial†	6479.0	5157.4	ug/L	58.40	5157.4	ppb	58.40	1.13%
QC value within limits for Al 396.153Radial Recovery = 103.15%								
As 188.979†	1176.9	507.52	ug/L	2.005	507.52	ppb	2.005	0.39%
QC value within limits for As 188.979 Recovery = 101.50%								
B 249.677†	22818.0	509.88	ug/L	7.251	509.88	ppb	7.251	1.42%
QC value within limits for B 249.677 Recovery = 101.98%								
Ba 233.527†	65233.8	506.71	ug/L	4.785	506.71	ppb	4.785	0.94%
QC value within limits for Ba 233.527 Recovery = 101.34%								
Be 313.107†	1346439.4	509.88	ug/L	1.788	509.88	ppb	1.788	0.35%
QC value within limits for Be 313.107 Recovery = 101.98%								
Ca 317.933Radial†	3179.9	5133.1	ug/L	58.22	5133.1	ppb	58.22	1.13%
QC value within limits for Ca 317.933Radial Recovery = 102.66%								
Cd 226.502†	46070.9	506.70	ug/L	4.690	506.70	ppb	4.690	0.93%
QC value within limits for Cd 226.502 Recovery = 101.34%								
Co 228.616†	25107.7	509.51	ug/L	5.258	509.51	ppb	5.258	1.03%
QC value within limits for Co 228.616 Recovery = 101.90%								
Cr 267.716†	45410.0	504.43	ug/L	4.798	504.43	ppb	4.798	0.95%
QC value within limits for Cr 267.716 Recovery = 100.89%								
Cu 324.752†	168852.9	503.70	ug/L	6.689	503.70	ppb	6.689	1.33%
QC value within limits for Cu 324.752 Recovery = 100.74%								
Fe 238.204 Radial†	597.1	5092.0	ug/L	55.98	5092.0	ppb	55.98	1.10%
QC value within limits for Fe 238.204 Radial Recovery = 101.84%								
K 766.490 Radial†	27572.2	5014.9	ug/L	42.82	5014.9	ppb	42.82	0.85%
QC value within limits for K 766.490 Radial Recovery = 100.30%								
Mg 279.077 IEC†	158.1	5250.1	ug/L	136.40	5250.1	ppb	136.40	2.60%
QC value within limits for Mg 279.077 IEC Recovery = 105.00%								
Mn 257.610†	461354.9	506.24	ug/L	1.606	506.24	ppb	1.606	0.32%
QC value within limits for Mn 257.610 Recovery = 101.25%								
Mo 202.031†	7198.8	502.76	ug/L	1.367	502.76	ppb	1.367	0.27%
QC value within limits for Mo 202.031 Recovery = 100.55%								
Na 589.592 Radial†	33232.7	9526.2	ug/L	58.64	9526.2	ppb	58.64	0.62%
QC value within limits for Na 589.592 Radial Recovery = 95.26%								
Ni 231.604†	20504.2	507.11	ug/L	4.999	507.11	ppb	4.999	0.99%
QC value within limits for Ni 231.604 Recovery = 101.42%								
P 214.914†	4167.2	2383.7	ug/L	8.40	2383.7	ppb	8.40	0.35%
QC value within limits for P 214.914 Recovery = 95.35%								
Pb 220.353†	4140.7	502.83	ug/L	2.221	502.83	ppb	2.221	0.44%
QC value within limits for Pb 220.353 Recovery = 100.57%								
S 181.975 Axial†	729.3	1014.0	ug/L	5.09	1014.0	ppb	5.09	0.50%
QC value within limits for S 181.975 Axial Recovery = 101.40%								
Sb 206.836†	1469.1	516.05	ug/L	2.958	516.05	ppb	2.958	0.57%
QC value within limits for Sb 206.836 Recovery = 103.21%								
Se 196.026†	802.5	522.24	ug/L	2.191	522.24	ppb	2.191	0.42%
QC value within limits for Se 196.026 Recovery = 104.45%								
Si 251.611†	80473.7	2541.3	ug/L	30.13	2541.3	ppb	30.13	1.19%
QC value within limits for Si 251.611 Recovery = 101.65%								
Sn 189.927†	2888.4	504.11	ug/L	1.794	504.11	ppb	1.794	0.36%
QC value within limits for Sn 189.927 Recovery = 100.82%								
Sr 421.552†	77105.2	492.24	ug/L	3.934	492.24	ppb	3.934	0.80%
QC value within limits for Sr 421.552 Recovery = 98.45%								
Ti 334.940†	318631.0	510.07	ug/L	1.270	510.07	ppb	1.270	0.25%
QC value within limits for Ti 334.940 Recovery = 102.01%								
Tl 190.801†	1663.2	505.58	ug/L	0.524	505.58	ppb	0.524	0.10%
QC value within limits for Tl 190.801 Recovery = 101.12%								
U 409.014†	17492.3	513.25	ug/L	3.391	513.25	ppb	3.391	0.66%
QC value within limits for U 409.014 Recovery = 102.65%								
V 292.402†	74320.2	510.80	ug/L	4.594	510.80	ppb	4.594	0.90%
QC value within limits for V 292.402 Recovery = 102.16%								
Zn 213.857†	54319.8	505.51	ug/L	4.835	505.51	ppb	4.835	0.96%
QC value within limits for Zn 213.857 Recovery = 101.10%								
SiO2†	79929.0	5377.4	ug/L	31.43	5377.4	ppb	31.43	0.58%
QC value within limits for SiO2 Recovery = 100.56%								

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

Autosampler Location: 8
Date Collected: 1/12/2010 16:44:41
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	5218.4	5218.4	102	%			16:46:34
1	Y RADIAL	5573.5	5573.5	101.2	%			16:46:34
1	Al 396.153Radial†	-15.3	-8.9	-7.1141	ug/L	-7.1141	ppb	16:46:34
1	Ca 317.933Radial†	21.4	1.8	2.8711	ug/L	2.8711	ppb	16:46:54
1	Fe 238.204 Radial†	9.6	-2.1	-17.792	ug/L	-17.792	ppb	16:46:54
1	K 766.490 Radial†	2733.4	170.8	31.100	ug/L	31.100	ppb	16:46:34
1	Mg 279.077 IEC†	2.1	-1.0	-32.518	ug/L	-32.518	ppb	16:46:54
1	Na 589.592 Radial†	-1270.0	62.6	17.949	ug/L	17.949	ppb	16:46:34
1	Sr 421.552†	-23.6	-32.9	-0.2100	ug/L	-0.2100	ppb	16:46:34
1	Sc 361.383	860706.5	860706.5	100.31	%			16:47:50
1	Y 371.029	727524.4	727524.4	99.981	%			16:47:50
1	Ag 328.068†	336.5	-21.6	-0.1033	ug/L	-0.1033	ppb	16:47:55
1	As 188.979†	-14.4	9.6	4.1016	ug/L	4.1016	ppb	16:48:15
1	B 249.677†	-264.3	351.6	7.8955	ug/L	7.8955	ppb	16:48:15
1	Ba 233.527†	-3.7	4.9	0.0370	ug/L	0.0370	ppb	16:48:15
1	Be 313.107†	-4535.9	-47.4	-0.0179	ug/L	-0.0179	ppb	16:47:55
1	Cd 226.502†	-175.7	26.5	0.2924	ug/L	0.2924	ppb	16:48:15
1	Co 228.616†	-87.1	-9.6	-0.1930	ug/L	-0.1930	ppb	16:48:15
1	Cr 267.716†	86.1	6.9	0.0766	ug/L	0.0766	ppb	16:48:15
1	Cu 324.752†	6402.2	-19.8	-0.0590	ug/L	-0.0590	ppb	16:47:55
1	Mn 257.610†	423.5	-7.6	-0.0088	ug/L	-0.0088	ppb	16:48:15
1	Mo 202.031†	28.8	7.1	0.4933	ug/L	0.4933	ppb	16:48:15
1	Ni 231.604†	65.1	-2.1	-0.0524	ug/L	-0.0524	ppb	16:48:15
1	P 214.914†	218.7	-2.3	-1.3528	ug/L	-1.3528	ppb	16:48:15
1	Pb 220.353†	-63.0	-0.6	-0.0693	ug/L	-0.0693	ppb	16:48:15
1	S 181.975 Axial†	43.7	-0.3	-0.3568	ug/L	-0.3568	ppb	16:48:15
1	Sb 206.836†	36.8	3.2	1.1274	ug/L	1.1274	ppb	16:48:15
1	Se 196.026†	-27.7	4.4	2.7147	ug/L	2.7147	ppb	16:48:15
1	Si 251.611†	545.7	83.4	2.6337	ug/L	2.6337	ppb	16:48:15
1	Sn 189.927†	8.2	6.5	1.1376	ug/L	1.1376	ppb	16:48:15
1	Ti 334.940†	-1321.3	16.9	0.0310	ug/L	0.0310	ppb	16:47:55
1	Tl 190.801†	-34.9	-0.7	-0.2031	ug/L	-0.2031	ppb	16:48:15
1	U 409.014†	-1938.6	-68.8	-2.0243	ug/L	-2.0243	ppb	16:47:50
1	V 292.402†	-1371.8	-7.9	-0.0480	ug/L	-0.0480	ppb	16:47:55
1	Zn 213.857†	692.1	65.3	0.6154	ug/L	0.6154	ppb	16:48:15
1	SiO2†	586.6	125.8	8.4731	ug/L	8.4731	ppb	16:49:21
2	Sc Radial	5184.3	5184.3	101	%			16:46:59
2	Y RADIAL	5539.4	5539.4	100.6	%			16:46:59
2	Al 396.153Radial†	-7.0	-0.7	-0.5625	ug/L	-0.5625	ppb	16:46:59
2	Ca 317.933Radial†	17.5	-1.9	-3.0519	ug/L	-3.0519	ppb	16:47:19
2	Fe 238.204 Radial†	9.6	-2.1	-17.883	ug/L	-17.883	ppb	16:47:19
2	K 766.490 Radial†	2864.9	318.3	57.947	ug/L	57.947	ppb	16:46:59
2	Mg 279.077 IEC†	1.0	-2.1	-69.771	ug/L	-69.771	ppb	16:47:19
2	Na 589.592 Radial†	-1203.9	119.7	34.315	ug/L	34.315	ppb	16:46:59
2	Sr 421.552†	15.6	5.7	0.0363	ug/L	0.0363	ppb	16:46:59
2	Sc 361.383	873944.8	873944.8	101.85	%			16:48:21
2	Y 371.029	737504.9	737504.9	101.35	%			16:48:21
2	Ag 328.068†	387.1	23.0	0.1084	ug/L	0.1084	ppb	16:48:26
2	As 188.979†	-21.8	2.5	1.0686	ug/L	1.0686	ppb	16:48:46
2	B 249.677†	-292.5	328.0	7.3636	ug/L	7.3636	ppb	16:48:46
2	Ba 233.527†	-10.9	-2.1	-0.0149	ug/L	-0.0149	ppb	16:48:46
2	Be 313.107†	-4530.7	26.3	0.0101	ug/L	0.0101	ppb	16:48:26
2	Cd 226.502†	-178.8	26.1	0.2877	ug/L	0.2877	ppb	16:48:46
2	Co 228.616†	-72.2	6.3	0.1293	ug/L	0.1293	ppb	16:48:46
2	Cr 267.716†	96.6	15.9	0.1790	ug/L	0.1790	ppb	16:48:46
2	Cu 324.752†	6419.5	-99.5	-0.2944	ug/L	-0.2944	ppb	16:48:26
2	Mn 257.610†	437.4	-0.3	0.0007	ug/L	0.0007	ppb	16:48:46
2	Mo 202.031†	25.0	2.9	0.2022	ug/L	0.2022	ppb	16:48:46
2	Ni 231.604†	59.9	-8.2	-0.2020	ug/L	-0.2020	ppb	16:48:46

2	P 214.914†	220.0	-4.3	-2.4558	ug/L	-2.4558	ppb	16:48:46
2	Pb 220.353†	-36.2	26.6	3.2234	ug/L	3.2234	ppb	16:48:46
2	S 181.975 Axial†	47.9	3.2	4.4351	ug/L	4.4351	ppb	16:48:46
2	Sb 206.836†	40.5	6.4	2.1928	ug/L	2.1928	ppb	16:48:46
2	Se 196.026†	-33.1	-0.5	-0.3370	ug/L	-0.3370	ppb	16:48:46
2	Si 251.611†	519.7	49.6	1.5665	ug/L	1.5665	ppb	16:48:46
2	Sn 189.927†	12.1	10.2	1.7774	ug/L	1.7774	ppb	16:48:46
2	Ti 334.940†	-1310.7	47.2	0.0835	ug/L	0.0835	ppb	16:48:26
2	Tl 190.801†	-41.5	-6.7	-2.0239	ug/L	-2.0239	ppb	16:48:46
2	U 409.014†	-2110.9	-208.7	-6.1418	ug/L	-6.1418	ppb	16:48:21
2	V 292.402†	-1268.1	114.7	0.7701	ug/L	0.7701	ppb	16:48:26
2	Zn 213.857†	691.3	54.1	0.5116	ug/L	0.5116	ppb	16:48:46
2	SiO2†	540.0	71.2	4.7955	ug/L	4.7955	ppb	16:49:26
3	Sc Radial	5230.9	5230.9	102	%			16:47:24
3	Y RADIAL	5568.2	5568.2	101.1	%			16:47:24
3	Al 396.153Radial†	-0.3	5.9	4.7145	ug/L	4.7145	ppb	16:47:24
3	Ca 317.933Radial†	22.7	3.0	4.8329	ug/L	4.8329	ppb	16:47:44
3	Fe 238.204 Radial†	10.3	-1.5	-12.710	ug/L	-12.710	ppb	16:47:44
3	K 766.490 Radial†	2706.3	137.9	25.102	ug/L	25.102	ppb	16:47:24
3	Mg 279.077 IEC†	3.0	-0.1	-3.0016	ug/L	-3.0016	ppb	16:47:44
3	Na 589.592 Radial†	-1233.4	101.4	29.061	ug/L	29.061	ppb	16:47:24
3	Sr 421.552†	2.5	-7.3	-0.0467	ug/L	-0.0467	ppb	16:47:24
3	Sc 361.383	866602.9	866602.9	100.99	%			16:48:51
3	Y 371.029	731442.2	731442.2	100.52	%			16:48:51
3	Ag 328.068†	264.8	-94.9	-0.4343	ug/L	-0.4343	ppb	16:48:56
3	As 188.979†	-26.7	-2.5	-1.0819	ug/L	-1.0819	ppb	16:49:16
3	B 249.677†	-250.0	367.5	8.2513	ug/L	8.2513	ppb	16:49:16
3	Ba 233.527†	-17.0	-8.3	-0.0642	ug/L	-0.0642	ppb	16:49:16
3	Be 313.107†	-4528.8	-9.5	-0.0032	ug/L	-0.0032	ppb	16:48:56
3	Cd 226.502†	-193.5	10.0	0.1107	ug/L	0.1107	ppb	16:49:16
3	Co 228.616†	-76.0	1.9	0.0388	ug/L	0.0388	ppb	16:49:16
3	Cr 267.716†	77.4	-2.3	-0.0237	ug/L	-0.0237	ppb	16:49:16
3	Cu 324.752†	6433.2	-32.5	-0.0949	ug/L	-0.0949	ppb	16:48:56
3	Mn 257.610†	429.5	-4.5	-0.0061	ug/L	-0.0061	ppb	16:49:16
3	Mo 202.031†	19.2	-2.6	-0.1856	ug/L	-0.1856	ppb	16:49:16
3	Ni 231.604†	70.8	3.1	0.0768	ug/L	0.0768	ppb	16:49:16
3	P 214.914†	239.8	17.1	10.318	ug/L	10.318	ppb	16:49:16
3	Pb 220.353†	-73.2	-10.3	-1.2396	ug/L	-1.2396	ppb	16:49:16
3	S 181.975 Axial†	49.5	5.2	7.2009	ug/L	7.2009	ppb	16:49:16
3	Sb 206.836†	37.9	4.1	1.3937	ug/L	1.3937	ppb	16:49:16
3	Se 196.026†	-36.4	-4.0	-2.5865	ug/L	-2.5865	ppb	16:49:16
3	Si 251.611†	516.7	51.0	1.6162	ug/L	1.6162	ppb	16:49:16
3	Sn 189.927†	5.6	3.9	0.6846	ug/L	0.6846	ppb	16:49:16
3	Ti 334.940†	-1222.7	123.4	0.2008	ug/L	0.2008	ppb	16:48:56
3	Tl 190.801†	-39.1	-4.6	-1.3988	ug/L	-1.3988	ppb	16:49:16
3	U 409.014†	-2057.2	-173.0	-5.0926	ug/L	-5.0926	ppb	16:48:51
3	V 292.402†	-1343.6	29.4	0.1883	ug/L	0.1883	ppb	16:48:56
3	Zn 213.857†	695.1	63.6	0.5983	ug/L	0.5983	ppb	16:49:16
3	SiO2†	549.5	85.1	5.7435	ug/L	5.7435	ppb	16:49:31

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	867084.7	101.05	%	0.773				0.76%
Sc Radial	5211.2	102	%	0.5				0.46%
Y 371.029	732157.2	100.62	%	0.691				0.69%
Y RADIAL	5560.4	101.0	%	0.33				0.33%
Ag 328.068†	-31.1	-0.1431	ug/L	0.27350	-0.1431	ppb	0.27350	191.19%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-1.2	-0.9874	ug/L	5.92572	-0.9874	ppb	5.92572	600.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.2	1.3628	ug/L	2.60425	1.3628	ppb	2.60425	191.10%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	349.0	7.8368	ug/L	0.44675	7.8368	ppb	0.44675	5.70%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.8	-0.0140	ug/L	0.05056	-0.0140	ppb	0.05056	360.08%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-10.2	-0.0036	ug/L	0.01398	-0.0036	ppb	0.01398	384.53%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.0	1.5507	ug/L	4.10487	1.5507	ppb	4.10487	264.71%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              20.9      0.2303 ug/L       0.10358      0.2303 ppb        0.10358  44.98%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -0.4     -0.0083 ug/L       0.16623     -0.0083 ppb        0.16623 >999.9%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               6.8      0.0773 ug/L       0.10138      0.0773 ppb        0.10138 131.10%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -50.6     -0.1494 ug/L       0.12686     -0.1494 ppb        0.12686  84.90%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -1.9     -16.128 ug/L        2.9608     -16.128 ppb         2.9608  18.36%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       209.0      38.050 ug/L       17.4906      38.050 ppb        17.4906  45.97%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -1.1     -35.097 ug/L       33.4592     -35.097 ppb        33.4592  95.33%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              -4.2     -0.0047 ug/L       0.00488     -0.0047 ppb        0.00488 103.49%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               2.5      0.1700 ug/L       0.34062      0.1700 ppb        0.34062 200.38%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       94.6      27.109 ug/L        8.3558      27.109 ppb         8.3558  30.82%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -2.4     -0.0592 ug/L       0.13953     -0.0592 ppb        0.13953 235.56%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                3.5      2.1699 ug/L       7.07818      2.1699 ppb        7.07818 326.20%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               5.3      0.6382 ug/L       2.31407      0.6382 ppb        2.31407 362.62%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          2.7      3.7598 ug/L       3.82385      3.7598 ppb        3.82385 101.70%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               4.6      1.5713 ug/L       0.55445      1.5713 ppb        0.55445  35.29%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -0.0     -0.0696 ug/L       2.66068     -0.0696 ppb        2.66068 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              61.3      1.9388 ug/L       0.60229      1.9388 ppb        0.60229  31.07%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               6.9      1.1998 ug/L       0.54903      1.1998 ppb        0.54903  45.76%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -11.5     -0.0735 ug/L       0.12530     -0.0735 ppb        0.12530 170.57%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              62.5      0.1051 ug/L       0.08693      0.1051 ppb        0.08693  82.70%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -4.0     -1.2086 ug/L       0.92516     -1.2086 ppb        0.92516  76.55%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             -150.2     -4.4196 ug/L       2.13966     -4.4196 ppb        2.13966  48.41%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               45.4      0.3035 ug/L       0.42103      0.3035 ppb        0.42103 138.73%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              61.0      0.5751 ug/L       0.05569      0.5751 ppb        0.05569   9.68%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    94.0      6.3373 ug/L       1.90935      6.3373 ppb        1.90935  30.13%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: 243629001|937469|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 1/12/2010 16:51:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 243629001|937469|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5289.3	5289.3	103	%			16:53:35
1	Y RADIAL	5690.0	5690.0	103.4	%			16:53:35
1	Al 396.153Radial†	9.9	15.7	12.602	ug/L	12.602	ppb	16:53:35
1	Ca 317.933Radial†	31.2	11.0	17.687	ug/L	17.687	ppb	16:53:55
1	Fe 238.204 Radial†	9.9	-1.9	-16.485	ug/L	-16.485	ppb	16:53:55
1	K 766.490 Radial†	3370.1	751.3	136.76	ug/L	136.76	ppb	16:53:35
1	Mg 279.077 IEC†	1.5	-1.6	-52.689	ug/L	-52.689	ppb	16:53:55
1	Na 589.592 Radial†	-947.2	391.8	112.31	ug/L	112.31	ppb	16:53:35
1	Sr 421.552†	26.5	15.9	0.1012	ug/L	0.1012	ppb	16:53:35
1	Sc 361.383	894009.2	894009.2	104.19	%			16:54:51
1	Y 371.029	753304.1	753304.1	103.52	%			16:54:51
1	Ag 328.068†	324.8	-45.3	-0.2120	ug/L	-0.2120	ppb	16:54:56
1	As 188.979†	-22.4	2.5	1.0527	ug/L	1.0527	ppb	16:55:16
1	B 249.677†	467.6	1063.9	23.883	ug/L	23.883	ppb	16:55:16
1	Ba 233.527†	48.4	55.1	0.4266	ug/L	0.4266	ppb	16:55:16
1	Be 313.107†	-4579.2	79.6	0.0317	ug/L	0.0317	ppb	16:54:56
1	Cd 226.502†	-178.6	30.2	0.3334	ug/L	0.3334	ppb	16:55:16
1	Co 228.616†	-75.4	4.8	0.0963	ug/L	0.0963	ppb	16:55:16
1	Cr 267.716†	103.5	20.3	0.2259	ug/L	0.2259	ppb	16:55:16
1	Cu 324.752†	6774.3	99.6	0.2964	ug/L	0.2964	ppb	16:54:56
1	Mn 257.610†	752.3	292.3	0.3210	ug/L	0.3210	ppb	16:55:16
1	Mo 202.031†	18.7	-3.6	-0.2552	ug/L	-0.2552	ppb	16:55:16
1	Ni 231.604†	58.8	-10.6	-0.2628	ug/L	-0.2628	ppb	16:55:16
1	P 214.914†	233.0	3.3	1.9570	ug/L	1.9570	ppb	16:55:16
1	Pb 220.353†	-73.8	-8.6	-1.0419	ug/L	-1.0419	ppb	16:55:16
1	S 181.975 Axial†	78.2	31.2	43.355	ug/L	43.355	ppb	16:55:16
1	Sb 206.836†	37.4	2.5	0.8458	ug/L	0.8458	ppb	16:55:16
1	Se 196.026†	-36.7	-3.2	-2.0449	ug/L	-2.0449	ppb	16:55:16
1	Si 251.611†	45356.5	43072.6	1363.5	ug/L	1363.5	ppb	16:54:56
1	Sn 189.927†	9.2	7.2	1.2488	ug/L	1.2488	ppb	16:55:16
1	Ti 334.940†	-926.1	445.3	0.7198	ug/L	0.7198	ppb	16:54:56
1	Tl 190.801†	-36.5	-1.0	-0.2860	ug/L	-0.2860	ppb	16:55:16
1	U 409.014†	-1959.5	-16.8	-0.4945	ug/L	-0.4945	ppb	16:54:51
1	V 292.402†	-1381.2	34.1	0.2270	ug/L	0.2270	ppb	16:54:56
1	Zn 213.857†	794.2	137.6	1.2948	ug/L	1.2948	ppb	16:55:16
1	SiO2†	45919.2	43614.3	2941.7	ug/L	2941.7	ppb	16:56:22
2	Sc Radial	5408.7	5408.7	106	%			16:54:00
2	Y RADIAL	5737.0	5737.0	104.2	%			16:54:00
2	Al 396.153Radial†	8.1	13.8	11.061	ug/L	11.061	ppb	16:54:00
2	Ca 317.933Radial†	29.8	9.0	14.582	ug/L	14.582	ppb	16:54:20
2	Fe 238.204 Radial†	10.6	-1.5	-12.540	ug/L	-12.540	ppb	16:54:20
2	K 766.490 Radial†	3347.9	658.2	119.81	ug/L	119.81	ppb	16:54:00
2	Mg 279.077 IEC†	4.8	1.5	50.752	ug/L	50.752	ppb	16:54:20
2	Na 589.592 Radial†	-934.7	423.9	121.51	ug/L	121.51	ppb	16:54:00
2	Sr 421.552†	34.6	23.0	0.1470	ug/L	0.1470	ppb	16:54:00
2	Sc 361.383	899740.6	899740.6	104.86	%			16:55:22
2	Y 371.029	755630.9	755630.9	103.84	%			16:55:22
2	Ag 328.068†	281.5	-88.6	-0.4131	ug/L	-0.4131	ppb	16:55:27
2	As 188.979†	-16.6	8.1	3.4824	ug/L	3.4824	ppb	16:55:47
2	B 249.677†	492.1	1084.4	24.340	ug/L	24.340	ppb	16:55:47
2	Ba 233.527†	54.3	60.4	0.4679	ug/L	0.4679	ppb	16:55:47
2	Be 313.107†	-4669.5	21.4	0.0095	ug/L	0.0095	ppb	16:55:27
2	Cd 226.502†	-185.8	24.4	0.2711	ug/L	0.2711	ppb	16:55:47
2	Co 228.616†	-67.2	13.1	0.2642	ug/L	0.2642	ppb	16:55:47
2	Cr 267.716†	115.4	31.1	0.3438	ug/L	0.3438	ppb	16:55:47
2	Cu 324.752†	6892.9	171.2	0.5079	ug/L	0.5079	ppb	16:55:27
2	Mn 257.610†	745.7	281.3	0.3052	ug/L	0.3052	ppb	16:55:47
2	Mo 202.031†	17.3	-5.2	-0.3607	ug/L	-0.3607	ppb	16:55:47
2	Ni 231.604†	73.4	2.9	0.0726	ug/L	0.0726	ppb	16:55:47

2	P 214.914†	240.5	9.0	5.3327 ug/L	5.3327 ppb	16:55:47
2	Pb 220.353†	-59.3	5.7	0.6909 ug/L	0.6909 ppb	16:55:47
2	S 181.975 Axial†	71.9	24.7	34.359 ug/L	34.359 ppb	16:55:47
2	Sb 206.836†	52.8	17.0	5.7820 ug/L	5.7820 ppb	16:55:47
2	Se 196.026†	-34.7	-1.1	-0.7059 ug/L	-0.7059 ppb	16:55:47
2	Si 251.611†	45568.8	42997.7	1361.2 ug/L	1361.2 ppb	16:55:27
2	Sn 189.927†	14.3	11.9	2.0831 ug/L	2.0831 ppb	16:55:47
2	Ti 334.940†	-1002.6	378.0	0.6012 ug/L	0.6012 ppb	16:55:27
2	Tl 190.801†	-47.1	-10.9	-3.2730 ug/L	-3.2730 ppb	16:55:47
2	U 409.014†	-1807.2	140.4	4.1344 ug/L	4.1344 ppb	16:55:22
2	V 292.402†	-1396.9	27.5	0.1910 ug/L	0.1910 ppb	16:55:27
2	Zn 213.857†	792.4	131.0	1.2300 ug/L	1.2300 ppb	16:55:47
2	SiO2†	44706.4	42176.9	2844.8 ug/L	2844.8 ppb	16:56:27
3	Sc Radial	5411.6	5411.6	106 %		16:54:25
3	Y RADIAL	5799.6	5799.6	105.3 %		16:54:25
3	Al 396.153Radial†	15.8	21.1	16.910 ug/L	16.910 ppb	16:54:25
3	Ca 317.933Radial†	35.5	14.4	23.196 ug/L	23.196 ppb	16:54:45
3	Fe 238.204 Radial†	9.6	-2.4	-20.635 ug/L	-20.635 ppb	16:54:45
3	K 766.490 Radial†	3409.3	714.6	130.09 ug/L	130.09 ppb	16:54:25
3	Mg 279.077 IEC†	2.8	-0.4	-14.484 ug/L	-14.484 ppb	16:54:45
3	Na 589.592 Radial†	-953.6	406.5	116.51 ug/L	116.51 ppb	16:54:25
3	Sr 421.552†	48.7	36.3	0.2318 ug/L	0.2318 ppb	16:54:25
3	Sc 361.383	891090.9	891090.9	103.85 %		16:55:52
3	Y 371.029	750963.8	750963.8	103.20 %		16:55:52
3	Ag 328.068†	339.8	-29.9	-0.1442 ug/L	-0.1442 ppb	16:55:57
3	As 188.979†	-21.8	2.9	1.2552 ug/L	1.2552 ppb	16:56:17
3	B 249.677†	454.9	1053.2	23.642 ug/L	23.642 ppb	16:56:17
3	Ba 233.527†	40.3	47.4	0.3687 ug/L	0.3687 ppb	16:56:17
3	Be 313.107†	-4472.0	168.4	0.0649 ug/L	0.0649 ppb	16:55:57
3	Cd 226.502†	-192.9	15.9	0.1783 ug/L	0.1783 ppb	16:56:17
3	Co 228.616†	-75.1	4.9	0.0979 ug/L	0.0979 ppb	16:56:17
3	Cr 267.716†	111.8	28.7	0.3168 ug/L	0.3168 ppb	16:56:17
3	Cu 324.752†	6811.2	156.4	0.4625 ug/L	0.4625 ppb	16:55:57
3	Mn 257.610†	735.3	278.2	0.3037 ug/L	0.3037 ppb	16:56:17
3	Mo 202.031†	17.8	-4.5	-0.3132 ug/L	-0.3132 ppb	16:56:17
3	Ni 231.604†	69.0	-0.5	-0.0133 ug/L	-0.0133 ppb	16:56:17
3	P 214.914†	231.5	2.6	1.4799 ug/L	1.4799 ppb	16:56:17
3	Pb 220.353†	-66.3	-1.6	-0.1919 ug/L	-0.1919 ppb	16:56:17
3	S 181.975 Axial†	85.5	38.5	53.506 ug/L	53.506 ppb	16:56:17
3	Sb 206.836†	55.2	19.8	6.6882 ug/L	6.6882 ppb	16:56:17
3	Se 196.026†	-23.7	9.3	5.7663 ug/L	5.7663 ppb	16:56:17
3	Si 251.611†	45398.9	43256.0	1369.3 ug/L	1369.3 ppb	16:55:57
3	Sn 189.927†	-4.3	-5.8	-1.0060 ug/L	-1.0060 ppb	16:56:17
3	Ti 334.940†	-1007.1	364.4	0.5853 ug/L	0.5853 ppb	16:55:57
3	Tl 190.801†	-28.1	7.0	2.1218 ug/L	2.1218 ppb	16:56:17
3	U 409.014†	-1743.3	185.2	5.4544 ug/L	5.4544 ppb	16:55:52
3	V 292.402†	-1263.7	142.8	0.9763 ug/L	0.9763 ppb	16:55:57
3	Zn 213.857†	784.5	130.8	1.2289 ug/L	1.2289 ppb	16:56:17
3	SiO2†	45652.6	43501.9	2934.1 ug/L	2934.1 ppb	16:56:33

Mean Data: 243629001|937469|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	894946.9	104.30	%	0.513				0.49%
Sc Radial	5369.9	105	%	1.4				1.30%
Y 371.029	753299.6	103.52	%	0.321				0.31%
Y RADIAL	5742.2	104.3	%	1.00				0.96%
Ag 328.068†	-54.6	-0.2565	ug/L	0.13985	-0.2565	ppb	0.13985	54.53%
Al 396.153Radial†	16.9	13.524	ug/L	3.0317	13.524	ppb	3.0317	22.42%
As 188.979†	4.5	1.9301	ug/L	1.34814	1.9301	ppb	1.34814	69.85%
B 249.677†	1067.2	23.955	ug/L	0.3549	23.955	ppb	0.3549	1.48%
Ba 233.527†	54.3	0.4211	ug/L	0.04984	0.4211	ppb	0.04984	11.84%
Be 313.107†	89.8	0.0354	ug/L	0.02792	0.0354	ppb	0.02792	78.96%
Ca 317.933Radial†	11.5	18.488	ug/L	4.3625	18.488	ppb	4.3625	23.60%
Cd 226.502†	23.5	0.2609	ug/L	0.07806	0.2609	ppb	0.07806	29.92%
Co 228.616†	7.6	0.1528	ug/L	0.09648	0.1528	ppb	0.09648	63.13%
Cr 267.716†	26.7	0.2955	ug/L	0.06181	0.2955	ppb	0.06181	20.92%
Cu 324.752†	142.4	0.4223	ug/L	0.11133	0.4223	ppb	0.11133	26.37%
Fe 238.204 Radial†	-1.9	-16.553	ug/L	4.0478	-16.553	ppb	4.0478	24.45%
K 766.490 Radial†	708.0	128.89	ug/L	8.536	128.89	ppb	8.536	6.62%

Mg 279.077 IEC†	-0.2	-5.4738	ug/L	52.30576	-5.4738	ppb	52.30576 955.57%
Mn 257.610†	283.9	0.3100	ug/L	0.00962	0.3100	ppb	0.00962 3.10%
Mo 202.031†	-4.4	-0.3097	ug/L	0.05286	-0.3097	ppb	0.05286 17.07%
Na 589.592 Radial†	407.4	116.78	ug/L	4.607	116.78	ppb	4.607 3.95%
Ni 231.604†	-2.7	-0.0678	ug/L	0.17422	-0.0678	ppb	0.17422 256.90%
P 214.914†	5.0	2.9232	ug/L	2.10028	2.9232	ppb	2.10028 71.85%
Pb 220.353†	-1.5	-0.1810	ug/L	0.86641	-0.1810	ppb	0.86641 478.71%
S 181.975 Axial†	31.4	43.740	ug/L	9.5793	43.740	ppb	9.5793 21.90%
Sb 206.836†	13.1	4.4387	ug/L	3.14434	4.4387	ppb	3.14434 70.84%
Se 196.026†	1.7	1.0052	ug/L	4.17726	1.0052	ppb	4.17726 415.57%
Si 251.611†	43108.8	1364.7	ug/L	4.21	1364.7	ppb	4.21 0.31%
Sn 189.927†	4.4	0.7753	ug/L	1.59805	0.7753	ppb	1.59805 206.11%
Sr 421.552†	25.1	0.1600	ug/L	0.06625	0.1600	ppb	0.06625 41.41%
Ti 334.940†	395.9	0.6354	ug/L	0.07352	0.6354	ppb	0.07352 11.57%
Tl 190.801†	-1.6	-0.4790	ug/L	2.70256	-0.4790	ppb	2.70256 564.16%
U 409.014†	102.9	3.0315	ug/L	3.12407	3.0315	ppb	3.12407 103.05%
V 292.402†	68.1	0.4648	ug/L	0.44334	0.4648	ppb	0.44334 95.39%
Zn 213.857†	133.1	1.2512	ug/L	0.03773	1.2512	ppb	0.03773 3.02%
SiO2†	43097.7	2906.9	ug/L	53.92	2906.9	ppb	53.92 1.85%

Sequence No.: 15
Sample ID: 1202006004|937469|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 1/12/2010 17:12:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202006004|937469|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5492.3	5492.3	107	%			17:14:26
1	Y RADIAL	5863.7	5863.7	106.5	%			17:14:26
1	Al 396.153Radial†	-9.4	-2.6	-2.0601	ug/L	-2.0601	ppb	17:14:26
1	Ca 317.933Radial†	40.8	18.8	30.380	ug/L	30.380	ppb	17:14:46
1	Fe 238.204 Radial†	9.7	-2.5	-20.983	ug/L	-20.983	ppb	17:14:46
1	K 766.490 Radial†	3303.7	568.7	103.51	ug/L	103.51	ppb	17:14:26
1	Mg 279.077 IEC†	4.3	1.0	32.646	ug/L	32.646	ppb	17:14:46
1	Na 589.592 Radial†	-880.9	487.6	139.76	ug/L	139.76	ppb	17:14:26
1	Sr 421.552†	9.1	-1.2	-0.0082	ug/L	-0.0082	ppb	17:14:26
1	Sc 361.383	903742.4	903742.4	105.32	%			17:15:43
1	Y 371.029	758640.4	758640.4	104.26	%			17:15:43
1	Ag 328.068†	376.5	0.4	-0.0055	ug/L	-0.0055	ppb	17:15:48
1	As 188.979†	-24.5	0.7	0.2832	ug/L	0.2832	ppb	17:16:08
1	B 249.677†	360.5	957.4	21.492	ug/L	21.492	ppb	17:16:08
1	Ba 233.527†	7.2	15.4	0.1210	ug/L	0.1210	ppb	17:16:08
1	Be 313.107†	-4652.2	57.5	0.0229	ug/L	0.0229	ppb	17:15:48
1	Cd 226.502†	-198.6	13.1	0.1474	ug/L	0.1474	ppb	17:16:08
1	Co 228.616†	-79.3	2.0	0.0387	ug/L	0.0387	ppb	17:16:08
1	Cr 267.716†	103.5	19.3	0.2131	ug/L	0.2131	ppb	17:16:08
1	Cu 324.752†	6862.8	113.5	0.3349	ug/L	0.3349	ppb	17:15:48
1	Mn 257.610†	675.3	211.4	0.2284	ug/L	0.2284	ppb	17:16:08
1	Mo 202.031†	17.3	-5.2	-0.3615	ug/L	-0.3615	ppb	17:16:08
1	Ni 231.604†	68.8	-1.7	-0.0422	ug/L	-0.0422	ppb	17:16:08
1	P 214.914†	241.9	9.3	5.5328	ug/L	5.5328	ppb	17:16:08
1	Pb 220.353†	-57.6	7.6	0.9146	ug/L	0.9146	ppb	17:16:08
1	S 181.975 Axial†	69.8	22.4	31.178	ug/L	31.178	ppb	17:16:08
1	Sb 206.836†	38.6	3.2	1.0574	ug/L	1.0574	ppb	17:16:08
1	Se 196.026†	-23.6	9.6	5.9838	ug/L	5.9838	ppb	17:16:08
1	Si 251.611†	45700.0	42929.9	1359.0	ug/L	1359.0	ppb	17:15:48
1	Sn 189.927†	-5.5	-6.9	-1.1980	ug/L	-1.1980	ppb	17:16:08
1	Ti 334.940†	-1074.4	314.0	0.5020	ug/L	0.5020	ppb	17:15:48
1	Tl 190.801†	-40.5	-4.4	-1.3238	ug/L	-1.3238	ppb	17:16:08
1	U 409.014†	-1789.3	165.0	4.8588	ug/L	4.8588	ppb	17:15:43
1	V 292.402†	-1295.9	129.3	0.8842	ug/L	0.8842	ppb	17:15:48
1	Zn 213.857†	776.3	112.4	1.0572	ug/L	1.0572	ppb	17:16:08
1	SiO2†	45639.3	42873.9	2891.8	ug/L	2891.8	ppb	17:17:14
2	Sc Radial	5538.4	5538.4	108	%			17:14:51
2	Y RADIAL	5901.7	5901.7	107.2	%			17:14:51
2	Al 396.153Radial†	-10.6	-3.6	-2.8444	ug/L	-2.8444	ppb	17:14:51
2	Ca 317.933Radial†	43.0	20.5	33.165	ug/L	33.165	ppb	17:15:11
2	Fe 238.204 Radial†	10.2	-2.1	-17.702	ug/L	-17.702	ppb	17:15:11
2	K 766.490 Radial†	3395.6	628.2	114.32	ug/L	114.32	ppb	17:14:51
2	Mg 279.077 IEC†	-1.1	-4.0	-133.80	ug/L	-133.80	ppb	17:15:11
2	Na 589.592 Radial†	-868.9	505.5	144.89	ug/L	144.89	ppb	17:14:51
2	Sr 421.552†	17.9	6.8	0.0432	ug/L	0.0432	ppb	17:14:51
2	Sc 361.383	894543.5	894543.5	104.25	%			17:16:13
2	Y 371.029	752156.2	752156.2	103.37	%			17:16:13
2	Ag 328.068†	312.6	-57.3	-0.2647	ug/L	-0.2647	ppb	17:16:18
2	As 188.979†	-22.6	2.2	0.9614	ug/L	0.9614	ppb	17:16:38
2	B 249.677†	342.6	943.7	21.185	ug/L	21.185	ppb	17:16:38
2	Ba 233.527†	-9.7	-0.7	-0.0042	ug/L	-0.0042	ppb	17:16:38
2	Be 313.107†	-4545.2	114.7	0.0443	ug/L	0.0443	ppb	17:16:18
2	Cd 226.502†	-200.7	9.1	0.1024	ug/L	0.1024	ppb	17:16:38
2	Co 228.616†	-83.5	-2.9	-0.0602	ug/L	-0.0602	ppb	17:16:38
2	Cr 267.716†	92.6	9.9	0.1102	ug/L	0.1102	ppb	17:16:38
2	Cu 324.752†	6861.2	179.1	0.5331	ug/L	0.5331	ppb	17:16:18
2	Mn 257.610†	673.2	215.9	0.2405	ug/L	0.2405	ppb	17:16:38
2	Mo 202.031†	16.2	-6.1	-0.4262	ug/L	-0.4262	ppb	17:16:38
2	Ni 231.604†	75.1	5.0	0.1240	ug/L	0.1240	ppb	17:16:38

2	P 214.914†	250.6	20.1	11.962 ug/L	11.962 ppb	17:16:38
2	Pb 220.353†	-59.7	4.9	0.5984 ug/L	0.5984 ppb	17:16:38
2	S 181.975 Axial†	79.7	32.6	45.330 ug/L	45.330 ppb	17:16:38
2	Sb 206.836†	47.9	12.5	4.2259 ug/L	4.2259 ppb	17:16:38
2	Se 196.026†	-25.6	7.5	4.6396 ug/L	4.6396 ppb	17:16:38
2	Si 251.611†	45465.4	43151.0	1366.0 ug/L	1366.0 ppb	17:16:18
2	Sn 189.927†	2.0	0.3	0.0511 ug/L	0.0511 ppb	17:16:38
2	Ti 334.940†	-1109.2	270.2	0.4480 ug/L	0.4480 ppb	17:16:18
2	Tl 190.801†	-30.6	4.8	1.4393 ug/L	1.4393 ppb	17:16:38
2	U 409.014†	-1935.5	7.3	0.2157 ug/L	0.2157 ppb	17:16:13
2	V 292.402†	-1273.3	138.4	0.9319 ug/L	0.9319 ppb	17:16:18
2	Zn 213.857†	788.8	131.9	1.2388 ug/L	1.2388 ppb	17:16:38
2	SiO2†	45654.9	43334.5	2922.9 ug/L	2922.9 ppb	17:17:19
3	Sc Radial	5607.2	5607.2	109 %		17:15:16
3	Y RADIAL	5968.1	5968.1	108.4 %		17:15:16
3	Al 396.153Radial†	18.8	23.3	18.638 ug/L	18.638 ppb	17:15:16
3	Ca 317.933Radial†	37.1	14.7	23.739 ug/L	23.739 ppb	17:15:36
3	Fe 238.204 Radial†	10.6	-1.9	-15.738 ug/L	-15.738 ppb	17:15:36
3	K 766.490 Radial†	3241.1	448.5	81.601 ug/L	81.601 ppb	17:15:16
3	Mg 279.077 IEC†	-1.5	-4.4	-146.02 ug/L	-146.02 ppb	17:15:36
3	Na 589.592 Radial†	-844.9	537.2	154.00 ug/L	154.00 ppb	17:15:16
3	Sr 421.552†	8.1	-2.4	-0.0153 ug/L	-0.0153 ppb	17:15:16
3	Sc 361.383	907104.0	907104.0	105.71 %		17:16:43
3	Y 371.029	763447.1	763447.1	104.92 %		17:16:43
3	Ag 328.068†	302.9	-70.6	-0.3336 ug/L	-0.3336 ppb	17:16:48
3	As 188.979†	-16.5	8.4	3.5706 ug/L	3.5706 ppb	17:17:08
3	B 249.677†	337.1	934.0	20.966 ug/L	20.966 ppb	17:17:08
3	Ba 233.527†	-4.3	4.5	0.0355 ug/L	0.0355 ppb	17:17:08
3	Be 313.107†	-4559.2	161.9	0.0623 ug/L	0.0623 ppb	17:16:48
3	Cd 226.502†	-195.3	16.9	0.1896 ug/L	0.1896 ppb	17:17:08
3	Co 228.616†	-82.1	-0.4	-0.0090 ug/L	-0.0090 ppb	17:17:08
3	Cr 267.716†	99.3	15.0	0.1632 ug/L	0.1632 ppb	17:17:08
3	Cu 324.752†	6735.1	-31.4	-0.0987 ug/L	-0.0987 ppb	17:16:48
3	Mn 257.610†	666.6	200.8	0.2246 ug/L	0.2246 ppb	17:17:08
3	Mo 202.031†	22.8	-0.0	-0.0024 ug/L	-0.0024 ppb	17:17:08
3	Ni 231.604†	78.9	7.6	0.1884 ug/L	0.1884 ppb	17:17:08
3	P 214.914†	238.2	5.0	3.0582 ug/L	3.0582 ppb	17:17:08
3	Pb 220.353†	-70.2	-4.2	-0.4990 ug/L	-0.4990 ppb	17:17:08
3	S 181.975 Axial†	78.1	30.0	41.747 ug/L	41.747 ppb	17:17:08
3	Sb 206.836†	41.2	5.5	1.8999 ug/L	1.8999 ppb	17:17:08
3	Se 196.026†	-34.1	-0.2	-0.1867 ug/L	-0.1867 ppb	17:17:08
3	Si 251.611†	45351.5	42439.4	1343.5 ug/L	1343.5 ppb	17:16:48
3	Sn 189.927†	8.9	6.8	1.1830 ug/L	1.1830 ppb	17:17:08
3	Ti 334.940†	-1085.8	307.1	0.5035 ug/L	0.5035 ppb	17:16:48
3	Tl 190.801†	-40.8	-4.6	-1.3704 ug/L	-1.3704 ppb	17:17:08
3	U 409.014†	-1697.1	258.5	7.6107 ug/L	7.6107 ppb	17:16:43
3	V 292.402†	-1378.9	55.3	0.3887 ug/L	0.3887 ppb	17:16:48
3	Zn 213.857†	761.4	95.6	0.8981 ug/L	0.8981 ppb	17:17:08
3	SiO2†	45563.0	42641.1	2876.1 ug/L	2876.1 ppb	17:17:24

Mean Data: 1202006004|937469|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	901796.7	105.10	%	0.758				0.72%
Sc Radial	5546.0	108	%	1.1				1.04%
Y 371.029	758081.2	104.18	%	0.779				0.75%
Y RADIAL	5911.2	107.4	%	0.96				0.89%
Ag 328.068†	-42.5	-0.2013	ug/L	0.17299	-0.2013	ppb	0.17299	85.95%
Al 396.153Radial†	5.7	4.5780	ug/L	12.18297	4.5780	ppb	12.18297	266.12%
As 188.979†	3.8	1.6051	ug/L	1.73566	1.6051	ppb	1.73566	108.14%
B 249.677†	945.0	21.214	ug/L	0.2644	21.214	ppb	0.2644	1.25%
Ba 233.527†	6.4	0.0508	ug/L	0.06394	0.0508	ppb	0.06394	125.94%
Be 313.107†	111.4	0.0432	ug/L	0.01972	0.0432	ppb	0.01972	45.70%
Ca 317.933Radial†	18.0	29.095	ug/L	4.8424	29.095	ppb	4.8424	16.64%
Cd 226.502†	13.1	0.1465	ug/L	0.04362	0.1465	ppb	0.04362	29.78%
Co 228.616†	-0.4	-0.0102	ug/L	0.04946	-0.0102	ppb	0.04946	485.59%
Cr 267.716†	14.7	0.1622	ug/L	0.05146	0.1622	ppb	0.05146	31.73%
Cu 324.752†	87.1	0.2564	ug/L	0.32310	0.2564	ppb	0.32310	126.00%
Fe 238.204 Radial†	-2.1	-18.141	ug/L	2.6501	-18.141	ppb	2.6501	14.61%
K 766.490 Radial†	548.5	99.810	ug/L	16.6714	99.810	ppb	16.6714	16.70%

Mg 279.077 IEC†	-2.5	-82.390	ug/L	99.8107	-82.390	ppb	99.8107 121.14%
Mn 257.610†	209.4	0.2312	ug/L	0.00829	0.2312	ppb	0.00829 3.58%
Mo 202.031†	-3.8	-0.2633	ug/L	0.22832	-0.2633	ppb	0.22832 86.70%
Na 589.592 Radial†	510.1	146.22	ug/L	7.211	146.22	ppb	7.211 4.93%
Ni 231.604†	3.6	0.0901	ug/L	0.11899	0.0901	ppb	0.11899 132.07%
P 214.914†	11.5	6.8509	ug/L	4.59571	6.8509	ppb	4.59571 67.08%
Pb 220.353†	2.8	0.3380	ug/L	0.74194	0.3380	ppb	0.74194 219.51%
S 181.975 Axial†	28.3	39.418	ug/L	7.3581	39.418	ppb	7.3581 18.67%
Sb 206.836†	7.1	2.3944	ug/L	1.64113	2.3944	ppb	1.64113 68.54%
Se 196.026†	5.6	3.4789	ug/L	3.24488	3.4789	ppb	3.24488 93.27%
Si 251.611†	42840.1	1356.2	ug/L	11.53	1356.2	ppb	11.53 0.85%
Sn 189.927†	0.0	0.0120	ug/L	1.19100	0.0120	ppb	1.19100 >999.9%
Sr 421.552†	1.1	0.0066	ug/L	0.03192	0.0066	ppb	0.03192 486.77%
Ti 334.940†	297.1	0.4845	ug/L	0.03163	0.4845	ppb	0.03163 6.53%
Tl 190.801†	-1.4	-0.4183	ug/L	1.60887	-0.4183	ppb	1.60887 384.60%
U 409.014†	143.6	4.2284	ug/L	3.73758	4.2284	ppb	3.73758 88.39%
V 292.402†	107.7	0.7349	ug/L	0.30079	0.7349	ppb	0.30079 40.93%
Zn 213.857†	113.3	1.0647	ug/L	0.17050	1.0647	ppb	0.17050 16.01%
SiO2†	42949.8	2896.9	ug/L	23.81	2896.9	ppb	23.81 0.82%

Sequence No.: 16
Sample ID: 1202006005|937469|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 48
Date Collected: 1/12/2010 17:19:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202006005|937469|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5327.7	5327.7	104	%			17:21:28
1	Y RADIAL	5627.2	5627.2	102.2	%			17:21:28
1	Al 396.153Radial†	6768.4	6511.8	5183.6	ug/L	5183.6	ppb	17:21:28
1	Ca 317.933Radial†	3354.3	3204.8	5173.4	ug/L	5173.4	ppb	17:21:48
1	Fe 238.204 Radial†	634.9	598.7	5105.4	ug/L	5105.4	ppb	17:21:48
1	K 766.490 Radial†	31632.0	27892.5	5075.0	ug/L	5075.0	ppb	17:21:28
1	Mg 279.077 IEC†	166.7	157.2	5218.9	ug/L	5218.9	ppb	17:21:48
1	Na 589.592 Radial†	16491.4	17160.1	4918.9	ug/L	4918.9	ppb	17:21:28
1	Sr 421.552†	80918.5	77767.5	496.47	ug/L	496.47	ppb	17:21:28
1	Sc 361.383	885192.1	885192.1	103.16	%			17:22:47
1	Y 371.029	734354.9	734354.9	100.92	%			17:22:47
1	Ag 328.068†	113230.8	109404.5	505.19	ug/L	505.19	ppb	17:22:47
1	As 188.979†	1187.2	1174.7	506.65	ug/L	506.65	ppb	17:23:07
1	B 249.677†	23270.9	23173.1	517.88	ug/L	517.88	ppb	17:22:47
1	Ba 233.527†	68598.8	66505.6	516.57	ug/L	516.57	ppb	17:22:47
1	Be 313.107†	1392813.1	1354614.6	512.98	ug/L	512.98	ppb	17:22:47
1	Cd 226.502†	46796.4	45564.3	501.13	ug/L	501.13	ppb	17:22:47
1	Co 228.616†	25222.4	24526.9	497.72	ug/L	497.72	ppb	17:23:07
1	Cr 267.716†	47009.8	45490.6	505.32	ug/L	505.32	ppb	17:22:47
1	Cu 324.752†	184388.9	172337.1	514.09	ug/L	514.09	ppb	17:22:47
1	Mn 257.610†	482783.2	467561.8	513.05	ug/L	513.05	ppb	17:22:47
1	Mo 202.031†	7453.0	7203.0	503.05	ug/L	503.05	ppb	17:23:07
1	Ni 231.604†	21109.1	20395.3	504.42	ug/L	504.42	ppb	17:23:07
1	P 214.914†	1256.5	997.7	478.61	ug/L	478.61	ppb	17:23:07
1	Pb 220.353†	4249.0	4181.0	507.71	ug/L	507.71	ppb	17:23:07
1	S 181.975 Axial†	3852.5	3690.6	5135.0	ug/L	5135.0	ppb	17:23:07
1	Sb 206.836†	1589.3	1507.1	529.24	ug/L	529.24	ppb	17:23:07
1	Se 196.026†	769.6	778.0	506.90	ug/L	506.90	ppb	17:23:07
1	Si 251.611†	210254.3	203351.8	6431.2	ug/L	6431.2	ppb	17:22:47
1	Sn 189.927†	3088.5	2992.3	522.20	ug/L	522.20	ppb	17:23:07
1	Ti 334.940†	330662.7	321865.9	515.26	ug/L	515.26	ppb	17:22:47
1	Tl 190.801†	1578.6	1564.3	475.86	ug/L	475.86	ppb	17:23:07
1	U 409.014†	16304.3	17668.7	518.43	ug/L	518.43	ppb	17:22:47
1	V 292.402†	75921.0	74954.7	515.11	ug/L	515.11	ppb	17:22:47
1	Zn 213.857†	55130.4	52816.6	491.40	ug/L	491.40	ppb	17:22:47
1	SiO2†	211257.4	204325.8	13768	ug/L	13768	ppb	17:24:07
2	Sc Radial	5318.2	5318.2	104	%			17:21:53
2	Y RADIAL	5644.4	5644.4	102.5	%			17:21:53
2	Al 396.153Radial†	6803.4	6557.2	5219.9	ug/L	5219.9	ppb	17:21:53
2	Ca 317.933Radial†	3370.6	3226.3	5208.1	ug/L	5208.1	ppb	17:22:13
2	Fe 238.204 Radial†	643.4	608.0	5184.4	ug/L	5184.4	ppb	17:22:13
2	K 766.490 Radial†	31640.7	27955.6	5086.4	ug/L	5086.4	ppb	17:21:53
2	Mg 279.077 IEC†	168.2	158.9	5275.9	ug/L	5275.9	ppb	17:22:13
2	Na 589.592 Radial†	16490.5	17187.8	4926.9	ug/L	4926.9	ppb	17:21:53
2	Sr 421.552†	81093.4	78075.9	498.44	ug/L	498.44	ppb	17:21:53
2	Sc 361.383	889850.7	889850.7	103.70	%			17:23:14
2	Y 371.029	740065.0	740065.0	101.70	%			17:23:14
2	Ag 328.068†	113871.2	109447.5	505.41	ug/L	505.41	ppb	17:23:14
2	As 188.979†	1186.6	1168.2	503.87	ug/L	503.87	ppb	17:23:34
2	B 249.677†	23366.7	23147.3	517.29	ug/L	517.29	ppb	17:23:14
2	Ba 233.527†	68882.7	66431.2	516.00	ug/L	516.00	ppb	17:23:14
2	Be 313.107†	1398898.6	1353414.6	512.52	ug/L	512.52	ppb	17:23:14
2	Cd 226.502†	46829.5	45358.7	498.86	ug/L	498.86	ppb	17:23:14
2	Co 228.616†	25295.2	24469.1	496.55	ug/L	496.55	ppb	17:23:34
2	Cr 267.716†	47000.5	45243.0	502.58	ug/L	502.58	ppb	17:23:14
2	Cu 324.752†	185654.6	172621.9	514.94	ug/L	514.94	ppb	17:23:14
2	Mn 257.610†	483663.8	465961.0	511.30	ug/L	511.30	ppb	17:23:14
2	Mo 202.031†	7474.7	7186.2	501.89	ug/L	501.89	ppb	17:23:34
2	Ni 231.604†	21172.5	20349.3	503.28	ug/L	503.28	ppb	17:23:34

2	P 214.914†	1258.5	993.3	475.65 ug/L	475.65 ppb	17:23:34
2	Pb 220.353†	4273.5	4183.1	507.96 ug/L	507.96 ppb	17:23:34
2	S 181.975 Axial†	3867.6	3685.6	5128.2 ug/L	5128.2 ppb	17:23:34
2	Sb 206.836†	1601.0	1510.4	530.27 ug/L	530.27 ppb	17:23:34
2	Se 196.026†	778.7	782.9	510.22 ug/L	510.22 ppb	17:23:34
2	Si 251.611†	211015.7	203019.1	6420.7 ug/L	6420.7 ppb	17:23:14
2	Sn 189.927†	3080.2	2968.6	518.09 ug/L	518.09 ppb	17:23:34
2	Ti 334.940†	332331.0	321796.7	515.15 ug/L	515.15 ppb	17:23:14
2	Tl 190.801†	1579.6	1557.2	473.71 ug/L	473.71 ppb	17:23:34
2	U 409.014†	16455.8	17732.0	520.30 ug/L	520.30 ppb	17:23:14
2	V 292.402†	76316.3	74950.6	515.06 ug/L	515.06 ppb	17:23:14
2	Zn 213.857†	55306.6	52706.7	490.37 ug/L	490.37 ppb	17:23:14
2	SiO2†	209878.2	201923.9	13606 ug/L	13606 ppb	17:24:13
3	Sc Radial	5321.5	5321.5	104 %		17:22:18
3	Y RADIAL	5631.3	5631.3	102.3 %		17:22:18
3	Al 396.153Radial†	6778.1	6528.8	5197.1 ug/L	5197.1 ppb	17:22:18
3	Ca 317.933Radial†	3348.7	3203.3	5170.9 ug/L	5170.9 ppb	17:22:38
3	Fe 238.204 Radial†	638.9	603.3	5144.3 ug/L	5144.3 ppb	17:22:38
3	K 766.490 Radial†	31775.7	28066.4	5106.6 ug/L	5106.6 ppb	17:22:18
3	Mg 279.077 IEC†	169.2	159.7	5304.3 ug/L	5304.3 ppb	17:22:38
3	Na 589.592 Radial†	16514.1	17200.5	4930.5 ug/L	4930.5 ppb	17:22:18
3	Sr 421.552†	80818.6	77762.3	496.44 ug/L	496.44 ppb	17:22:18
3	Sc 361.383	883336.1	883336.1	102.94 %		17:23:42
3	Y 371.029	733645.6	733645.6	100.82 %		17:23:42
3	Ag 328.068†	113307.5	109709.7	506.60 ug/L	506.60 ppb	17:23:42
3	As 188.979†	1186.9	1176.9	507.59 ug/L	507.59 ppb	17:24:02
3	B 249.677†	23194.5	23146.2	517.26 ug/L	517.26 ppb	17:23:42
3	Ba 233.527†	68489.1	66538.8	516.83 ug/L	516.83 ppb	17:23:42
3	Be 313.107†	1390719.4	1355417.6	513.28 ug/L	513.28 ppb	17:23:42
3	Cd 226.502†	46589.7	45458.8	499.96 ug/L	499.96 ppb	17:23:42
3	Co 228.616†	25235.3	24590.8	499.02 ug/L	499.02 ppb	17:24:02
3	Cr 267.716†	46846.5	45427.7	504.63 ug/L	504.63 ppb	17:23:42
3	Cu 324.752†	184650.4	172966.7	515.97 ug/L	515.97 ppb	17:23:42
3	Mn 257.610†	481662.0	467456.0	512.93 ug/L	512.93 ppb	17:23:42
3	Mo 202.031†	7477.5	7242.0	505.78 ug/L	505.78 ppb	17:24:02
3	Ni 231.604†	21139.1	20467.5	506.20 ug/L	506.20 ppb	17:24:02
3	P 214.914†	1262.2	1005.7	483.01 ug/L	483.01 ppb	17:24:02
3	Pb 220.353†	4267.7	4207.8	510.96 ug/L	510.96 ppb	17:24:02
3	S 181.975 Axial†	3871.9	3717.3	5172.2 ug/L	5172.2 ppb	17:24:02
3	Sb 206.836†	1593.3	1514.3	531.76 ug/L	531.76 ppb	17:24:02
3	Se 196.026†	762.4	772.6	503.61 ug/L	503.61 ppb	17:24:02
3	Si 251.611†	210269.2	203794.5	6445.2 ug/L	6445.2 ppb	17:23:42
3	Sn 189.927†	3104.9	3014.4	526.06 ug/L	526.06 ppb	17:24:02
3	Ti 334.940†	330714.9	322590.2	516.41 ug/L	516.41 ppb	17:23:42
3	Tl 190.801†	1594.5	1582.9	481.48 ug/L	481.48 ppb	17:24:02
3	U 409.014†	16284.0	17682.1	518.83 ug/L	518.83 ppb	17:23:42
3	V 292.402†	75758.6	74951.5	515.12 ug/L	515.12 ppb	17:23:42
3	Zn 213.857†	55036.7	52838.0	491.58 ug/L	491.58 ppb	17:23:42
3	SiO2†	208508.1	202085.4	13617 ug/L	13617 ppb	17:24:18

Mean Data: 1202006005|937469|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	886126.3	103.27	%	0.391				0.38%
Sc Radial	5322.5	104	%	0.1				0.09%
Y 371.029	736021.8	101.15	%	0.484				0.48%
Y RADIAL	5634.3	102.3	%	0.16				0.16%
Ag 328.068†	109520.6	505.73	ug/L	0.759	505.73	ppb	0.759	0.15%
Al 396.153Radial†	6532.6	5200.2	ug/L	18.37	5200.2	ppb	18.37	0.35%
As 188.979†	1173.3	506.04	ug/L	1.932	506.04	ppb	1.932	0.38%
B 249.677†	23155.5	517.48	ug/L	0.347	517.48	ppb	0.347	0.07%
Ba 233.527†	66491.9	516.47	ug/L	0.426	516.47	ppb	0.426	0.08%
Be 313.107†	1354482.3	512.93	ug/L	0.382	512.93	ppb	0.382	0.07%
Ca 317.933Radial†	3211.5	5184.2	ug/L	20.80	5184.2	ppb	20.80	0.40%
Cd 226.502†	45460.6	499.98	ug/L	1.135	499.98	ppb	1.135	0.23%
Co 228.616†	24528.9	497.76	ug/L	1.239	497.76	ppb	1.239	0.25%
Cr 267.716†	45387.1	504.18	ug/L	1.427	504.18	ppb	1.427	0.28%
Cu 324.752†	172641.9	515.00	ug/L	0.941	515.00	ppb	0.941	0.18%
Fe 238.204 Radial†	603.3	5144.7	ug/L	39.49	5144.7	ppb	39.49	0.77%
K 766.490 Radial†	27971.5	5089.3	ug/L	16.02	5089.3	ppb	16.02	0.31%

Mg 279.077 IEC†	158.6	5266.4 ug/L	43.52	5266.4 ppb	43.52	0.83%
Mn 257.610†	466993.0	512.43 ug/L	0.979	512.43 ppb	0.979	0.19%
Mo 202.031†	7210.4	503.57 ug/L	1.997	503.57 ppb	1.997	0.40%
Na 589.592 Radial†	17182.8	4925.5 ug/L	5.92	4925.5 ppb	5.92	0.12%
Ni 231.604†	20404.1	504.64 ug/L	1.473	504.64 ppb	1.473	0.29%
P 214.914†	998.9	479.09 ug/L	3.702	479.09 ppb	3.702	0.77%
Pb 220.353†	4190.6	508.88 ug/L	1.810	508.88 ppb	1.810	0.36%
S 181.975 Axial†	3697.8	5145.1 ug/L	23.72	5145.1 ppb	23.72	0.46%
Sb 206.836†	1510.6	530.42 ug/L	1.268	530.42 ppb	1.268	0.24%
Se 196.026†	777.9	506.91 ug/L	3.303	506.91 ppb	3.303	0.65%
Si 251.611†	203388.5	6432.3 ug/L	12.29	6432.3 ppb	12.29	0.19%
Sn 189.927†	2991.7	522.12 ug/L	3.987	522.12 ppb	3.987	0.76%
Sr 421.552†	77868.6	497.12 ug/L	1.146	497.12 ppb	1.146	0.23%
Ti 334.940†	322084.3	515.60 ug/L	0.699	515.60 ppb	0.699	0.14%
Tl 190.801†	1568.2	477.02 ug/L	4.013	477.02 ppb	4.013	0.84%
U 409.014†	17694.3	519.19 ug/L	0.981	519.19 ppb	0.981	0.19%
V 292.402†	74952.3	515.10 ug/L	0.035	515.10 ppb	0.035	0.01%
Zn 213.857†	52787.1	491.12 ug/L	0.656	491.12 ppb	0.656	0.13%
SiO2†	202778.4	13663 ug/L	90.6	13663 ppb	90.6	0.66%

Sequence No.: 17
Sample ID: 1202006006|937469|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 49
Date Collected: 1/12/2010 17:26:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202006006|937469|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5458.6	5458.6	107	%			17:28:22
1	Y RADIAL	5824.0	5824.0	105.8	%			17:28:22
1	Al 396.153Radial†	-2.7	3.6	2.9112	ug/L	2.9112	ppb	17:28:22
1	Ca 317.933Radial†	24.0	3.3	5.3856	ug/L	5.3856	ppb	17:28:42
1	Fe 238.204 Radial†	7.7	-4.3	-36.511	ug/L	-36.511	ppb	17:28:42
1	K 766.490 Radial†	2590.2	-81.6	-14.892	ug/L	-14.892	ppb	17:28:22
1	Mg 279.077 IEC†	1.0	-2.1	-71.013	ug/L	-71.013	ppb	17:28:42
1	Na 589.592 Radial†	-1135.3	243.9	69.903	ug/L	69.903	ppb	17:28:22
1	Sr 421.552†	33.3	21.5	0.1374	ug/L	0.1374	ppb	17:28:22
1	Sc 361.383	896342.7	896342.7	104.46	%			17:29:39
1	Y 371.029	754265.2	754265.2	103.66	%			17:29:39
1	Ag 328.068†	318.7	-52.0	-0.2476	ug/L	-0.2476	ppb	17:29:44
1	As 188.979†	-12.9	11.5	4.9320	ug/L	4.9320	ppb	17:30:04
1	B 249.677†	-288.0	339.4	7.6246	ug/L	7.6246	ppb	17:30:04
1	Ba 233.527†	7.7	16.0	0.1240	ug/L	0.1240	ppb	17:30:04
1	Be 313.107†	-4493.9	172.6	0.0659	ug/L	0.0659	ppb	17:29:44
1	Cd 226.502†	-197.7	12.4	0.1401	ug/L	0.1401	ppb	17:30:04
1	Co 228.616†	-82.2	-1.5	-0.0312	ug/L	-0.0312	ppb	17:30:04
1	Cr 267.716†	67.7	-14.2	-0.1572	ug/L	-0.1572	ppb	17:30:04
1	Cu 324.752†	6554.9	-127.4	-0.3821	ug/L	-0.3821	ppb	17:29:44
1	Mn 257.610†	517.9	66.0	0.0716	ug/L	0.0716	ppb	17:30:04
1	Mo 202.031†	13.9	-8.3	-0.5821	ug/L	-0.5821	ppb	17:30:04
1	Ni 231.604†	78.9	8.5	0.2098	ug/L	0.2098	ppb	17:30:04
1	P 214.914†	230.7	0.5	0.4408	ug/L	0.4408	ppb	17:30:04
1	Pb 220.353†	-55.1	9.4	1.1433	ug/L	1.1433	ppb	17:30:04
1	S 181.975 Axial†	53.0	6.9	9.6166	ug/L	9.6166	ppb	17:30:04
1	Sb 206.836†	23.1	-11.3	-3.8231	ug/L	-3.8231	ppb	17:30:04
1	Se 196.026†	-28.8	4.5	2.7191	ug/L	2.7191	ppb	17:30:04
1	Si 251.611†	9352.4	8492.4	268.85	ug/L	268.85	ppb	17:29:44
1	Sn 189.927†	8.9	6.9	1.2021	ug/L	1.2021	ppb	17:30:04
1	Ti 334.940†	-1185.0	199.8	0.3263	ug/L	0.3263	ppb	17:29:44
1	Tl 190.801†	-22.3	12.7	3.8377	ug/L	3.8377	ppb	17:30:04
1	U 409.014†	-1937.4	9.2	0.2757	ug/L	0.2757	ppb	17:29:39
1	V 292.402†	-1319.3	96.7	0.6519	ug/L	0.6519	ppb	17:29:44
1	Zn 213.857†	712.5	57.4	0.5416	ug/L	0.5416	ppb	17:30:04
1	SiO2†	9445.7	8583.3	578.95	ug/L	578.95	ppb	17:31:10
2	Sc Radial	5400.7	5400.7	105	%			17:28:47
2	Y RADIAL	5738.8	5738.8	104.2	%			17:28:47
2	Al 396.153Radial†	6.4	12.2	9.7997	ug/L	9.7997	ppb	17:28:47
2	Ca 317.933Radial†	23.8	3.3	5.3434	ug/L	5.3434	ppb	17:29:07
2	Fe 238.204 Radial†	11.9	-0.3	-2.2495	ug/L	-2.2495	ppb	17:29:07
2	K 766.490 Radial†	2812.4	155.1	28.223	ug/L	28.223	ppb	17:28:47
2	Mg 279.077 IEC†	1.7	-1.4	-46.877	ug/L	-46.877	ppb	17:29:07
2	Na 589.592 Radial†	-1120.2	246.7	70.728	ug/L	70.728	ppb	17:28:47
2	Sr 421.552†	29.7	18.4	0.1177	ug/L	0.1177	ppb	17:28:47
2	Sc 361.383	885203.2	885203.2	103.16	%			17:30:09
2	Y 371.029	746099.2	746099.2	102.53	%			17:30:09
2	Ag 328.068†	282.0	-83.7	-0.3813	ug/L	-0.3813	ppb	17:30:14
2	As 188.979†	-17.3	7.2	3.0642	ug/L	3.0642	ppb	17:30:35
2	B 249.677†	-268.9	354.4	7.9559	ug/L	7.9559	ppb	17:30:35
2	Ba 233.527†	-6.0	2.7	0.0224	ug/L	0.0224	ppb	17:30:35
2	Be 313.107†	-4610.7	5.3	0.0028	ug/L	0.0028	ppb	17:30:14
2	Cd 226.502†	-194.1	13.5	0.1483	ug/L	0.1483	ppb	17:30:35
2	Co 228.616†	-78.3	1.4	0.0262	ug/L	0.0262	ppb	17:30:35
2	Cr 267.716†	70.9	-10.3	-0.1128	ug/L	-0.1128	ppb	17:30:35
2	Cu 324.752†	6654.0	47.6	0.1424	ug/L	0.1424	ppb	17:30:14
2	Mn 257.610†	524.1	78.3	0.0875	ug/L	0.0875	ppb	17:30:35
2	Mo 202.031†	17.1	-5.1	-0.3543	ug/L	-0.3543	ppb	17:30:35
2	Ni 231.604†	84.0	14.4	0.3555	ug/L	0.3555	ppb	17:30:35

2	P 214.914†	234.2	6.7	3.9921 ug/L	3.9921 ppb	17:30:35
2	Pb 220.353†	-62.0	2.1	0.2545 ug/L	0.2545 ppb	17:30:35
2	S 181.975 Axial†	59.7	14.0	19.462 ug/L	19.462 ppb	17:30:35
2	Sb 206.836†	26.2	-8.1	-2.7498 ug/L	-2.7498 ppb	17:30:35
2	Se 196.026†	-32.8	0.2	0.1207 ug/L	0.1207 ppb	17:30:35
2	Si 251.611†	9396.7	8648.0	273.77 ug/L	273.77 ppb	17:30:14
2	Sn 189.927†	2.1	0.4	0.0714 ug/L	0.0714 ppb	17:30:35
2	Ti 334.940†	-1143.8	225.5	0.3659 ug/L	0.3659 ppb	17:30:14
2	Tl 190.801†	-25.7	9.2	2.7754 ug/L	2.7754 ppb	17:30:35
2	U 409.014†	-1950.2	-26.5	-0.7807 ug/L	-0.7807 ppb	17:30:09
2	V 292.402†	-1309.8	90.1	0.6032 ug/L	0.6032 ppb	17:30:14
2	Zn 213.857†	709.0	62.6	0.5854 ug/L	0.5854 ppb	17:30:35
2	SiO2†	9302.0	8557.9	577.23 ug/L	577.23 ppb	17:31:15
3	Sc Radial	5414.7	5414.7	106 %		17:29:13
3	Y RADIAL	5761.7	5761.7	104.7 %		17:29:13
3	Al 396.153Radial†	16.0	21.3	17.053 ug/L	17.053 ppb	17:29:13
3	Ca 317.933Radial†	29.9	9.1	14.620 ug/L	14.620 ppb	17:29:33
3	Fe 238.204 Radial†	11.5	-0.7	-6.1281 ug/L	-6.1281 ppb	17:29:33
3	K 766.490 Radial†	2822.9	158.2	28.782 ug/L	28.782 ppb	17:29:13
3	Mg 279.077 IEC†	1.2	-1.9	-63.217 ug/L	-63.217 ppb	17:29:33
3	Na 589.592 Radial†	-1149.9	221.4	63.464 ug/L	63.464 ppb	17:29:13
3	Sr 421.552†	36.2	24.5	0.1560 ug/L	0.1560 ppb	17:29:13
3	Sc 361.383	896480.2	896480.2	104.48 %		17:30:40
3	Y 371.029	754992.4	754992.4	103.76 %		17:30:40
3	Ag 328.068†	219.2	-147.2	-0.6783 ug/L	-0.6783 ppb	17:30:45
3	As 188.979†	-19.2	5.6	2.3756 ug/L	2.3756 ppb	17:31:05
3	B 249.677†	-283.1	344.1	7.7247 ug/L	7.7247 ppb	17:31:05
3	Ba 233.527†	-32.2	-22.2	-0.1725 ug/L	-0.1725 ppb	17:31:05
3	Be 313.107†	-4538.2	130.9	0.0499 ug/L	0.0499 ppb	17:30:45
3	Cd 226.502†	-189.3	20.4	0.2256 ug/L	0.2256 ppb	17:31:05
3	Co 228.616†	-66.8	13.3	0.2675 ug/L	0.2675 ppb	17:31:05
3	Cr 267.716†	84.7	2.1	0.0224 ug/L	0.0224 ppb	17:31:05
3	Cu 324.752†	6526.9	-155.1	-0.4636 ug/L	-0.4636 ppb	17:30:45
3	Mn 257.610†	502.3	51.0	0.0579 ug/L	0.0579 ppb	17:31:05
3	Mo 202.031†	11.9	-10.3	-0.7177 ug/L	-0.7177 ppb	17:31:05
3	Ni 231.604†	68.3	-1.6	-0.0403 ug/L	-0.0403 ppb	17:31:05
3	P 214.914†	233.2	2.9	1.8726 ug/L	1.8726 ppb	17:31:05
3	Pb 220.353†	-70.0	-4.8	-0.5756 ug/L	-0.5756 ppb	17:31:05
3	S 181.975 Axial†	58.6	12.3	17.064 ug/L	17.064 ppb	17:31:05
3	Sb 206.836†	28.3	-6.4	-2.1726 ug/L	-2.1726 ppb	17:31:05
3	Se 196.026†	-27.8	5.4	3.3821 ug/L	3.3821 ppb	17:31:05
3	Si 251.611†	9301.0	8441.9	267.25 ug/L	267.25 ppb	17:30:45
3	Sn 189.927†	1.7	-0.0	-0.0063 ug/L	-0.0063 ppb	17:31:05
3	Ti 334.940†	-1267.0	121.5	0.2012 ug/L	0.2012 ppb	17:30:45
3	Tl 190.801†	-22.6	12.4	3.7481 ug/L	3.7481 ppb	17:31:05
3	U 409.014†	-1910.8	34.9	1.0291 ug/L	1.0291 ppb	17:30:40
3	V 292.402†	-1422.7	-2.1	-0.0231 ug/L	-0.0231 ppb	17:30:45
3	Zn 213.857†	715.3	60.0	0.5643 ug/L	0.5643 ppb	17:31:05
3	SiO2†	9411.1	8548.8	576.63 ug/L	576.63 ppb	17:31:20

Mean Data: 1202006006|937469|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	892675.4	104.03	%	0.754				0.72%
Sc Radial	5424.7	106	%	0.6				0.56%
Y 371.029	751785.6	103.31	%	0.679				0.66%
Y RADIAL	5774.8	104.9	%	0.80				0.76%
Ag 328.068†	-94.3	-0.4357	ug/L	0.22047	-0.4357	ppb	0.22047	50.60%
Al 396.153Radial†	12.4	9.9212	ug/L	7.07146	9.9212	ppb	7.07146	71.28%
As 188.979†	8.1	3.4573	ug/L	1.32274	3.4573	ppb	1.32274	38.26%
B 249.677†	346.0	7.7684	ug/L	0.16993	7.7684	ppb	0.16993	2.19%
Ba 233.527†	-1.2	-0.0087	ug/L	0.15068	-0.0087	ppb	0.15068	>999.9%
Be 313.107†	102.9	0.0396	ug/L	0.03281	0.0396	ppb	0.03281	82.96%
Ca 317.933Radial†	5.2	8.4496	ug/L	5.34362	8.4496	ppb	5.34362	63.24%
Cd 226.502†	15.4	0.1713	ug/L	0.04715	0.1713	ppb	0.04715	27.52%
Co 228.616†	4.4	0.0875	ug/L	0.15848	0.0875	ppb	0.15848	181.13%
Cr 267.716†	-7.5	-0.0825	ug/L	0.09357	-0.0825	ppb	0.09357	113.39%
Cu 324.752†	-78.3	-0.2344	ug/L	0.32888	-0.2344	ppb	0.32888	140.28%
Fe 238.204 Radial†	-1.8	-14.963	ug/L	18.7616	-14.963	ppb	18.7616	125.39%
K 766.490 Radial†	77.2	14.038	ug/L	25.0551	14.038	ppb	25.0551	178.48%

Mg 279.077 IEC†	-1.8	-60.369	ug/L	12.3176	-60.369	ppb	12.3176 20.40%
Mn 257.610†	65.1	0.0723	ug/L	0.01483	0.0723	ppb	0.01483 20.50%
Mo 202.031†	-7.9	-0.5514	ug/L	0.18363	-0.5514	ppb	0.18363 33.30%
Na 589.592 Radial†	237.3	68.032	ug/L	3.9774	68.032	ppb	3.9774 5.85%
Ni 231.604†	7.1	0.1750	ug/L	0.20018	0.1750	ppb	0.20018 114.37%
P 214.914†	3.4	2.1018	ug/L	1.78671	2.1018	ppb	1.78671 85.01%
Pb 220.353†	2.2	0.2741	ug/L	0.85961	0.2741	ppb	0.85961 313.63%
S 181.975 Axial†	11.1	15.381	ug/L	5.1339	15.381	ppb	5.1339 33.38%
Sb 206.836†	-8.6	-2.9152	ug/L	0.83758	-2.9152	ppb	0.83758 28.73%
Se 196.026†	3.4	2.0739	ug/L	1.72377	2.0739	ppb	1.72377 83.12%
Si 251.611†	8527.4	269.95	ug/L	3.399	269.95	ppb	3.399 1.26%
Sn 189.927†	2.4	0.4224	ug/L	0.67635	0.4224	ppb	0.67635 160.11%
Sr 421.552†	21.5	0.1370	ug/L	0.01915	0.1370	ppb	0.01915 13.98%
Ti 334.940†	182.2	0.2978	ug/L	0.08601	0.2978	ppb	0.08601 28.88%
Tl 190.801†	11.4	3.4538	ug/L	0.58918	3.4538	ppb	0.58918 17.06%
U 409.014†	5.9	0.1747	ug/L	0.90910	0.1747	ppb	0.90910 520.33%
V 292.402†	61.6	0.4107	ug/L	0.37645	0.4107	ppb	0.37645 91.67%
Zn 213.857†	60.0	0.5638	ug/L	0.02188	0.5638	ppb	0.02188 3.88%
SiO2†	8563.3	577.60	ug/L	1.206	577.60	ppb	1.206 0.21%

Sequence No.: 18
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 1/12/2010 17:33:32
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	5136.5	5136.5	100	%			17:35:24
1	Y RADIAL	5441.1	5441.1	98.83	%			17:35:24
1	Al 396.153Radial†	6580.9	6567.2	5227.4	ug/L	5227.4	ppb	17:35:24
1	Ca 317.933Radial†	3252.5	3223.4	5203.4	ug/L	5203.4	ppb	17:35:44
1	Fe 238.204 Radial†	623.0	609.6	5198.6	ug/L	5198.6	ppb	17:35:44
1	K 766.490 Radial†	30109.1	27506.4	5002.7	ug/L	5002.7	ppb	17:35:24
1	Mg 279.077 IEC†	162.9	159.3	5290.9	ug/L	5290.9	ppb	17:35:44
1	Na 589.592 Radial†	32766.4	33976.0	9739.2	ug/L	9739.2	ppb	17:35:24
1	Sr 421.552†	78723.0	78474.9	500.99	ug/L	500.99	ppb	17:35:24
1	Sc 361.383	849021.6	849021.6	98.945	%			17:36:43
1	Y 371.029	704216.6	704216.6	96.778	%			17:36:43
1	Ag 328.068†	110165.7	110983.0	512.46	ug/L	512.46	ppb	17:36:43
1	As 188.979†	1159.7	1196.0	515.71	ug/L	515.71	ppb	17:37:03
1	B 249.677†	21531.6	22376.3	499.95	ug/L	499.95	ppb	17:36:43
1	Ba 233.527†	64856.8	65556.7	509.21	ug/L	509.21	ppb	17:36:43
1	Be 313.107†	1337219.6	1355948.0	513.47	ug/L	513.47	ppb	17:36:43
1	Cd 226.502†	45681.0	46369.5	509.97	ug/L	509.97	ppb	17:36:43
1	Co 228.616†	24685.2	25025.5	507.86	ug/L	507.86	ppb	17:37:03
1	Cr 267.716†	45243.7	45647.0	507.07	ug/L	507.07	ppb	17:36:43
1	Cu 324.752†	174798.3	170259.1	507.91	ug/L	507.91	ppb	17:36:43
1	Mn 257.610†	459753.1	464223.9	509.40	ug/L	509.40	ppb	17:36:43
1	Mo 202.031†	7291.7	7347.8	513.16	ug/L	513.16	ppb	17:37:03
1	Ni 231.604†	20374.0	20524.2	507.60	ug/L	507.60	ppb	17:37:03
1	P 214.914†	4416.5	4243.3	2428.4	ug/L	2428.4	ppb	17:37:03
1	Pb 220.353†	4126.5	4232.7	514.00	ug/L	514.00	ppb	17:37:03
1	S 181.975 Axial†	773.3	737.6	1025.5	ug/L	1025.5	ppb	17:37:03
1	Sb 206.836†	1493.2	1475.7	518.59	ug/L	518.59	ppb	17:37:03
1	Se 196.026†	776.4	816.7	531.54	ug/L	531.54	ppb	17:37:03
1	Si 251.611†	80363.4	80759.4	2550.2	ug/L	2550.2	ppb	17:36:43
1	Sn 189.927†	2895.4	2924.6	510.42	ug/L	510.42	ppb	17:37:03
1	Ti 334.940†	315537.6	320235.1	512.65	ug/L	512.65	ppb	17:36:43
1	Tl 190.801†	1602.7	1653.9	502.83	ug/L	502.83	ppb	17:37:03
1	U 409.014†	14822.3	16844.2	494.15	ug/L	494.15	ppb	17:36:43
1	V 292.402†	72212.9	74342.3	511.05	ug/L	511.05	ppb	17:36:43
1	Zn 213.857†	54595.4	54552.7	507.68	ug/L	507.68	ppb	17:36:43
1	SiO2†	81975.0	82389.8	5543.1	ug/L	5543.1	ppb	17:38:03
2	Sc Radial	5164.2	5164.2	101	%			17:35:49
2	Y RADIAL	5458.1	5458.1	99.14	%			17:35:49
2	Al 396.153Radial†	6512.3	6464.0	5144.9	ug/L	5144.9	ppb	17:35:49
2	Ca 317.933Radial†	3244.8	3198.4	5163.1	ug/L	5163.1	ppb	17:36:09
2	Fe 238.204 Radial†	621.8	605.0	5159.7	ug/L	5159.7	ppb	17:36:09
2	K 766.490 Radial†	29989.7	27227.0	4951.9	ug/L	4951.9	ppb	17:35:49
2	Mg 279.077 IEC†	165.5	161.1	5350.0	ug/L	5350.0	ppb	17:36:09
2	Na 589.592 Radial†	32721.9	33756.8	9676.4	ug/L	9676.4	ppb	17:35:49
2	Sr 421.552†	78306.2	77640.7	495.66	ug/L	495.66	ppb	17:35:49
2	Sc 361.383	855400.2	855400.2	99.689	%			17:37:10
2	Y 371.029	710715.4	710715.4	97.671	%			17:37:10
2	Ag 328.068†	111443.6	111434.6	514.53	ug/L	514.53	ppb	17:37:10
2	As 188.979†	1172.7	1200.3	517.59	ug/L	517.59	ppb	17:37:30
2	B 249.677†	21995.1	22678.9	506.75	ug/L	506.75	ppb	17:37:10
2	Ba 233.527†	65387.7	65600.5	509.56	ug/L	509.56	ppb	17:37:10
2	Be 313.107†	1358094.3	1366810.1	517.58	ug/L	517.58	ppb	17:37:10
2	Cd 226.502†	46136.3	46482.0	511.22	ug/L	511.22	ppb	17:37:10
2	Co 228.616†	24800.2	24954.9	506.43	ug/L	506.43	ppb	17:37:30
2	Cr 267.716†	45754.7	45818.6	508.97	ug/L	508.97	ppb	17:37:10
2	Cu 324.752†	177366.8	171518.3	511.65	ug/L	511.65	ppb	17:37:10
2	Mn 257.610†	464392.0	465412.5	510.69	ug/L	510.69	ppb	17:37:10
2	Mo 202.031†	7341.1	7342.4	512.78	ug/L	512.78	ppb	17:37:30
2	Ni 231.604†	20523.0	20520.0	507.50	ug/L	507.50	ppb	17:37:30

2	P 214.914†	4452.7	4246.3	2429.4 ug/L	2429.4 ppb	17:37:30
2	Pb 220.353†	4166.1	4241.3	515.02 ug/L	515.02 ppb	17:37:30
2	S 181.975 Axial†	774.0	732.6	1018.5 ug/L	1018.5 ppb	17:37:30
2	Sb 206.836†	1518.1	1489.4	523.27 ug/L	523.27 ppb	17:37:30
2	Se 196.026†	780.3	814.8	530.26 ug/L	530.26 ppb	17:37:30
2	Si 251.611†	81273.1	81066.2	2559.9 ug/L	2559.9 ppb	17:37:10
2	Sn 189.927†	2934.7	2942.2	513.48 ug/L	513.48 ppb	17:37:30
2	Ti 334.940†	319169.0	321499.9	514.66 ug/L	514.66 ppb	17:37:10
2	Tl 190.801†	1624.4	1663.6	505.76 ug/L	505.76 ppb	17:37:30
2	U 409.014†	15288.0	17199.6	504.61 ug/L	504.61 ppb	17:37:10
2	V 292.402†	73417.5	75006.5	515.57 ug/L	515.57 ppb	17:37:10
2	Zn 213.857†	55168.9	54716.5	509.21 ug/L	509.21 ppb	17:37:10
2	SiO2†	80928.5	80722.2	5430.6 ug/L	5430.6 ppb	17:38:08
3	Sc Radial	5027.3	5027.3	98.2 %		17:36:14
3	Y RADIAL	5322.0	5322.0	96.67 %		17:36:14
3	Al 396.153Radial†	6385.2	6510.3	5182.0 ug/L	5182.0 ppb	17:36:14
3	Ca 317.933Radial†	3244.1	3285.3	5303.3 ug/L	5303.3 ppb	17:36:34
3	Fe 238.204 Radial†	618.7	618.7	5275.6 ug/L	5275.6 ppb	17:36:34
3	K 766.490 Radial†	29499.0	27536.9	5008.3 ug/L	5008.3 ppb	17:36:14
3	Mg 279.077 IEC†	161.6	161.6	5366.6 ug/L	5366.6 ppb	17:36:34
3	Na 589.592 Radial†	31956.2	33860.2	9706.1 ug/L	9706.1 ppb	17:36:14
3	Sr 421.552†	76563.2	77979.4	497.82 ug/L	497.82 ppb	17:36:14
3	Sc 361.383	857948.8	857948.8	99.986 %		17:37:38
3	Y 371.029	712746.3	712746.3	97.950 %		17:37:38
3	Ag 328.068†	111500.6	111159.5	513.31 ug/L	513.31 ppb	17:37:38
3	As 188.979†	1171.9	1196.0	515.77 ug/L	515.77 ppb	17:37:58
3	B 249.677†	22056.6	22674.8	506.64 ug/L	506.64 ppb	17:37:38
3	Ba 233.527†	65584.7	65602.7	509.58 ug/L	509.58 ppb	17:37:38
3	Be 313.107†	1359041.9	1363711.0	516.41 ug/L	516.41 ppb	17:37:38
3	Cd 226.502†	46368.9	46577.2	512.25 ug/L	512.25 ppb	17:37:38
3	Co 228.616†	24850.7	24931.5	505.95 ug/L	505.95 ppb	17:37:58
3	Cr 267.716†	45890.5	45818.1	508.97 ug/L	508.97 ppb	17:37:38
3	Cu 324.752†	177085.8	170708.8	509.25 ug/L	509.25 ppb	17:37:38
3	Mn 257.610†	465154.5	464791.3	510.02 ug/L	510.02 ppb	17:37:38
3	Mo 202.031†	7323.2	7302.6	510.02 ug/L	510.02 ppb	17:37:58
3	Ni 231.604†	20566.9	20502.8	507.07 ug/L	507.07 ppb	17:37:58
3	P 214.914†	4470.2	4250.5	2432.3 ug/L	2432.3 ppb	17:37:58
3	Pb 220.353†	4163.3	4226.1	513.17 ug/L	513.17 ppb	17:37:58
3	S 181.975 Axial†	785.9	742.1	1031.8 ug/L	1031.8 ppb	17:37:58
3	Sb 206.836†	1520.7	1487.4	522.50 ug/L	522.50 ppb	17:37:58
3	Se 196.026†	787.5	819.7	533.65 ug/L	533.65 ppb	17:37:58
3	Si 251.611†	81250.6	80801.6	2551.6 ug/L	2551.6 ppb	17:37:38
3	Sn 189.927†	2924.5	2923.2	510.20 ug/L	510.20 ppb	17:37:58
3	Ti 334.940†	319649.4	321029.3	513.93 ug/L	513.93 ppb	17:37:38
3	Tl 190.801†	1630.8	1665.1	506.23 ug/L	506.23 ppb	17:37:58
3	U 409.014†	15057.9	16924.0	496.48 ug/L	496.48 ppb	17:37:38
3	V 292.402†	73542.0	74912.2	514.86 ug/L	514.86 ppb	17:37:38
3	Zn 213.857†	55329.5	54712.8	509.17 ug/L	509.17 ppb	17:37:38
3	SiO2†	81001.5	80554.1	5419.4 ug/L	5419.4 ppb	17:38:14

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	854123.5	99.540	%	0.5359				0.54%
Sc Radial	5109.3	99.8	%	1.41				1.42%
Y 371.029	709226.1	97.466	%	0.6123				0.63%
Y RADIAL	5407.1	98.21	%	1.347				1.37%
Ag 328.068†	111192.3	513.43	ug/L	1.041	513.43	ppb	1.041	0.20%
QC value within limits for Ag 328.068 Recovery = 102.69%								
Al 396.153Radial†	6513.8	5184.7	ug/L	41.33	5184.7	ppb	41.33	0.80%
QC value within limits for Al 396.153Radial Recovery = 103.69%								
As 188.979†	1197.4	516.35	ug/L	1.068	516.35	ppb	1.068	0.21%
QC value within limits for As 188.979 Recovery = 103.27%								
B 249.677†	22576.7	504.45	ug/L	3.897	504.45	ppb	3.897	0.77%
QC value within limits for B 249.677 Recovery = 100.89%								
Ba 233.527†	65586.6	509.45	ug/L	0.207	509.45	ppb	0.207	0.04%
QC value within limits for Ba 233.527 Recovery = 101.89%								
Be 313.107†	1362156.4	515.82	ug/L	2.116	515.82	ppb	2.116	0.41%
QC value within limits for Be 313.107 Recovery = 103.16%								
Ca 317.933Radial†	3235.7	5223.3	ug/L	72.20	5223.3	ppb	72.20	1.38%

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   QC value within limits for Ca 317.933Radial  Recovery = 104.47%
Cd 226.502†            46476.3      511.15 ug/L        1.140      511.15 ppb        1.140   0.22%
   QC value within limits for Cd 226.502  Recovery = 102.23%
Co 228.616†            24970.7      506.75 ug/L        0.999      506.75 ppb        0.999   0.20%
   QC value within limits for Co 228.616  Recovery = 101.35%
Cr 267.716†            45761.3      508.34 ug/L        1.100      508.34 ppb        1.100   0.22%
   QC value within limits for Cr 267.716  Recovery = 101.67%
Cu 324.752†           170828.7      509.60 ug/L        1.899      509.60 ppb        1.899   0.37%
   QC value within limits for Cu 324.752  Recovery = 101.92%
Fe 238.204 Radial†       611.1      5211.3 ug/L       58.99      5211.3 ppb        58.99   1.13%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.23%
K 766.490 Radial†      27423.4      4987.6 ug/L       31.08      4987.6 ppb        31.08   0.62%
   QC value within limits for K 766.490 Radial  Recovery = 99.75%
Mg 279.077 IEC†          160.7      5335.9 ug/L       39.82      5335.9 ppb        39.82   0.75%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.72%
Mn 257.610†           464809.2      510.04 ug/L        0.649      510.04 ppb        0.649   0.13%
   QC value within limits for Mn 257.610  Recovery = 102.01%
Mo 202.031†             7330.9      511.99 ug/L        1.716      511.99 ppb        1.716   0.34%
   QC value within limits for Mo 202.031  Recovery = 102.40%
Na 589.592 Radial†     33864.3      9707.2 ug/L       31.44      9707.2 ppb        31.44   0.32%
   QC value within limits for Na 589.592 Radial  Recovery = 97.07%
Ni 231.604†            20515.7      507.39 ug/L        0.280      507.39 ppb        0.280   0.06%
   QC value within limits for Ni 231.604  Recovery = 101.48%
P 214.914†              4246.7      2430.0 ug/L        2.05      2430.0 ppb         2.05   0.08%
   QC value within limits for P 214.914  Recovery = 97.20%
Pb 220.353†             4233.4      514.06 ug/L        0.928      514.06 ppb        0.928   0.18%
   QC value within limits for Pb 220.353  Recovery = 102.81%
S 181.975 Axial†         737.4      1025.3 ug/L        6.62      1025.3 ppb         6.62   0.65%
   QC value within limits for S 181.975 Axial  Recovery = 102.53%
Sb 206.836†             1484.2      521.46 ug/L        2.512      521.46 ppb        2.512   0.48%
   QC value within limits for Sb 206.836  Recovery = 104.29%
Se 196.026†              817.1      531.82 ug/L        1.712      531.82 ppb        1.712   0.32%
   QC value within limits for Se 196.026  Recovery = 106.36%
Si 251.611†            80875.7      2553.9 ug/L        5.26      2553.9 ppb         5.26   0.21%
   QC value within limits for Si 251.611  Recovery = 102.16%
Sn 189.927†             2930.0      511.37 ug/L        1.835      511.37 ppb        1.835   0.36%
   QC value within limits for Sn 189.927  Recovery = 102.27%
Sr 421.552†            78031.7      498.16 ug/L        2.678      498.16 ppb        2.678   0.54%
   QC value within limits for Sr 421.552  Recovery = 99.63%
Ti 334.940†           320921.4      513.75 ug/L        1.017      513.75 ppb        1.017   0.20%
   QC value within limits for Ti 334.940  Recovery = 102.75%
Tl 190.801†             1660.9      504.94 ug/L        1.845      504.94 ppb        1.845   0.37%
   QC value within limits for Tl 190.801  Recovery = 100.99%
U 409.014†             16989.3      498.41 ug/L        5.492      498.41 ppb        5.492   1.10%
   QC value within limits for U 409.014  Recovery = 99.68%
V 292.402†             74753.7      513.83 ug/L        2.431      513.83 ppb        2.431   0.47%
   QC value within limits for V 292.402  Recovery = 102.77%
Zn 213.857†            54660.7      508.69 ug/L        0.876      508.69 ppb        0.876   0.17%
   QC value within limits for Zn 213.857  Recovery = 101.74%
SiO2†                  81222.0      5464.4 ug/L       68.41      5464.4 ppb        68.41   1.25%
   QC value within limits for SiO2  Recovery = 102.19%
All analyte(s) passed QC.
```

Sequence No.: 19
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 1/12/2010 17:40:23
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	5050.4	5050.4	98.6	%			17:42:15
1	Y RADIAL	5387.0	5387.0	97.85	%			17:42:15
1	Al 396.153Radial†	6.3	12.5	10.052	ug/L	10.052	ppb	17:42:15
1	Ca 317.933Radial†	14.5	-4.5	-7.2003	ug/L	-7.2003	ppb	17:42:35
1	Fe 238.204 Radial†	11.7	0.4	3.0254	ug/L	3.0254	ppb	17:42:35
1	K 766.490 Radial†	2689.2	215.3	39.205	ug/L	39.205	ppb	17:42:15
1	Mg 279.077 IEC†	3.9	0.9	30.276	ug/L	30.276	ppb	17:42:35
1	Na 589.592 Radial†	-1312.4	-21.9	-6.2708	ug/L	-6.2708	ppb	17:42:15
1	Sr 421.552†	7.6	-2.0	-0.0128	ug/L	-0.0128	ppb	17:42:15
1	Sc 361.383	904505.5	904505.5	105.41	%			17:43:32
1	Y 371.029	762654.1	762654.1	104.81	%			17:43:32
1	Ag 328.068†	381.5	4.9	0.0227	ug/L	0.0227	ppb	17:43:37
1	As 188.979†	-23.9	1.2	0.5297	ug/L	0.5297	ppb	17:43:57
1	B 249.677†	-387.4	247.6	5.5566	ug/L	5.5566	ppb	17:43:57
1	Ba 233.527†	-19.1	-9.6	-0.0725	ug/L	-0.0725	ppb	17:43:57
1	Be 313.107†	-4492.9	212.4	0.0805	ug/L	0.0805	ppb	17:43:37
1	Cd 226.502†	-182.1	28.9	0.3182	ug/L	0.3182	ppb	17:43:57
1	Co 228.616†	-73.5	7.5	0.1507	ug/L	0.1507	ppb	17:43:57
1	Cr 267.716†	70.9	-11.7	-0.1303	ug/L	-0.1303	ppb	17:43:57
1	Cu 324.752†	6453.8	-279.9	-0.8376	ug/L	-0.8376	ppb	17:43:37
1	Mn 257.610†	416.5	-34.7	-0.0390	ug/L	-0.0390	ppb	17:43:57
1	Mo 202.031†	17.5	-5.1	-0.3524	ug/L	-0.3524	ppb	17:43:57
1	Ni 231.604†	70.6	-0.0	-0.0009	ug/L	-0.0009	ppb	17:43:57
1	P 214.914†	231.8	-0.4	-0.0333	ug/L	-0.0333	ppb	17:43:57
1	Pb 220.353†	-58.1	7.1	0.8591	ug/L	0.8591	ppb	17:43:57
1	S 181.975 Axial†	58.2	11.4	15.802	ug/L	15.802	ppb	17:43:57
1	Sb 206.836†	37.1	1.8	0.6236	ug/L	0.6236	ppb	17:43:57
1	Se 196.026†	-30.8	2.9	1.8069	ug/L	1.8069	ppb	17:43:57
1	Si 251.611†	487.2	1.5	0.0525	ug/L	0.0525	ppb	17:43:57
1	Sn 189.927†	14.8	12.4	2.1503	ug/L	2.1503	ppb	17:43:57
1	Ti 334.940†	-1324.2	77.9	0.1192	ug/L	0.1192	ppb	17:43:37
1	Tl 190.801†	-29.4	6.2	1.8751	ug/L	1.8751	ppb	17:43:57
1	U 409.014†	-1789.8	166.0	4.8862	ug/L	4.8862	ppb	17:43:32
1	V 292.402†	-1317.8	109.6	0.7470	ug/L	0.7470	ppb	17:43:37
1	Zn 213.857†	644.9	-12.9	-0.1203	ug/L	-0.1203	ppb	17:43:57
1	SiO2†	487.3	3.2	0.2280	ug/L	0.2280	ppb	17:45:03
2	Sc Radial	4831.2	4831.2	94.3	%			17:42:40
2	Y RADIAL	5221.0	5221.0	94.83	%			17:42:40
2	Al 396.153Radial†	3.5	9.9	7.8761	ug/L	7.8761	ppb	17:42:40
2	Ca 317.933Radial†	13.2	-5.2	-8.3508	ug/L	-8.3508	ppb	17:43:00
2	Fe 238.204 Radial†	9.7	-1.3	-11.190	ug/L	-11.190	ppb	17:43:00
2	K 766.490 Radial†	2635.3	281.8	51.332	ug/L	51.332	ppb	17:42:40
2	Mg 279.077 IEC†	0.9	-2.1	-68.277	ug/L	-68.277	ppb	17:43:00
2	Na 589.592 Radial†	-1288.1	-56.5	-16.184	ug/L	-16.184	ppb	17:42:40
2	Sr 421.552†	31.9	24.0	0.1534	ug/L	0.1534	ppb	17:42:40
2	Sc 361.383	881522.3	881522.3	102.73	%			17:44:02
2	Y 371.029	746169.7	746169.7	102.54	%			17:44:02
2	Ag 328.068†	356.5	-10.1	-0.0483	ug/L	-0.0483	ppb	17:44:07
2	As 188.979†	-25.2	-0.6	-0.2438	ug/L	-0.2438	ppb	17:44:27
2	B 249.677†	-453.1	174.0	3.9068	ug/L	3.9068	ppb	17:44:27
2	Ba 233.527†	-23.8	-14.5	-0.1122	ug/L	-0.1122	ppb	17:44:27
2	Be 313.107†	-4462.2	131.1	0.0497	ug/L	0.0497	ppb	17:44:07
2	Cd 226.502†	-193.0	13.7	0.1524	ug/L	0.1524	ppb	17:44:27
2	Co 228.616†	-62.8	16.1	0.3278	ug/L	0.3278	ppb	17:44:27
2	Cr 267.716†	88.8	7.5	0.0833	ug/L	0.0833	ppb	17:44:27
2	Cu 324.752†	6361.8	-209.9	-0.6269	ug/L	-0.6269	ppb	17:44:07
2	Mn 257.610†	420.2	-20.8	-0.0211	ug/L	-0.0211	ppb	17:44:27
2	Mo 202.031†	26.6	4.2	0.2931	ug/L	0.2931	ppb	17:44:27
2	Ni 231.604†	70.2	1.3	0.0328	ug/L	0.0328	ppb	17:44:27

2	P 214.914†	223.8	-2.5	-1.3211 ug/L	-1.3211 ppb	17:44:27
2	Pb 220.353†	-55.6	8.1	0.9828 ug/L	0.9828 ppb	17:44:27
2	S 181.975 Axial†	45.7	0.6	0.8879 ug/L	0.8879 ppb	17:44:27
2	Sb 206.836†	40.4	5.9	2.0154 ug/L	2.0154 ppb	17:44:27
2	Se 196.026†	-24.2	8.5	5.3056 ug/L	5.3056 ppb	17:44:27
2	Si 251.611†	491.5	17.7	0.5582 ug/L	0.5582 ppb	17:44:27
2	Sn 189.927†	6.1	4.3	0.7396 ug/L	0.7396 ppb	17:44:27
2	Ti 334.940†	-1327.2	42.3	0.0719 ug/L	0.0719 ppb	17:44:07
2	Tl 190.801†	-19.8	14.8	4.4751 ug/L	4.4751 ppb	17:44:27
2	U 409.014†	-1899.3	15.1	0.4453 ug/L	0.4453 ppb	17:44:02
2	V 292.402†	-1337.9	57.4	0.3946 ug/L	0.3946 ppb	17:44:07
2	Zn 213.857†	637.6	-4.0	-0.0357 ug/L	-0.0357 ppb	17:44:27
2	SiO2†	542.4	68.9	4.6424 ug/L	4.6424 ppb	17:45:08
3	Sc Radial	5248.9	5248.9	102 %		17:43:05
3	Y RADIAL	5624.0	5624.0	102.2 %		17:43:05
3	Al 396.153Radial†	-3.8	2.5	2.0017 ug/L	2.0017 ppb	17:43:05
3	Ca 317.933Radial†	18.8	-0.8	-1.3525 ug/L	-1.3525 ppb	17:43:25
3	Fe 238.204 Radial†	10.0	-1.8	-15.108 ug/L	-15.108 ppb	17:43:25
3	K 766.490 Radial†	2706.3	128.8	23.451 ug/L	23.451 ppb	17:43:05
3	Mg 279.077 IEC†	1.5	-1.6	-51.823 ug/L	-51.823 ppb	17:43:25
3	Na 589.592 Radial†	-1276.1	63.9	18.308 ug/L	18.308 ppb	17:43:05
3	Sr 421.552†	6.4	-3.5	-0.0226 ug/L	-0.0226 ppb	17:43:05
3	Sc 361.383	887100.9	887100.9	103.38 %		17:44:32
3	Y 371.029	750211.5	750211.5	103.10 %		17:44:32
3	Ag 328.068†	345.2	-23.2	-0.1088 ug/L	-0.1088 ppb	17:44:37
3	As 188.979†	-21.4	3.3	1.3974 ug/L	1.3974 ppb	17:44:57
3	B 249.677†	-412.0	216.6	4.8645 ug/L	4.8645 ppb	17:44:57
3	Ba 233.527†	-20.9	-11.7	-0.0908 ug/L	-0.0908 ppb	17:44:57
3	Be 313.107†	-4514.0	108.4	0.0413 ug/L	0.0413 ppb	17:44:37
3	Cd 226.502†	-194.6	13.4	0.1480 ug/L	0.1480 ppb	17:44:57
3	Co 228.616†	-77.9	1.9	0.0380 ug/L	0.0380 ppb	17:44:57
3	Cr 267.716†	83.8	2.1	0.0245 ug/L	0.0245 ppb	17:44:57
3	Cu 324.752†	6467.6	-146.5	-0.4361 ug/L	-0.4361 ppb	17:44:37
3	Mn 257.610†	418.0	-25.5	-0.0273 ug/L	-0.0273 ppb	17:44:57
3	Mo 202.031†	17.1	-5.1	-0.3550 ug/L	-0.3550 ppb	17:44:57
3	Ni 231.604†	57.3	-11.6	-0.2871 ug/L	-0.2871 ppb	17:44:57
3	P 214.914†	231.8	3.9	2.4672 ug/L	2.4672 ppb	17:44:57
3	Pb 220.353†	-57.2	6.8	0.8276 ug/L	0.8276 ppb	17:44:57
3	S 181.975 Axial†	48.5	3.1	4.2674 ug/L	4.2674 ppb	17:44:57
3	Sb 206.836†	40.0	5.3	1.7777 ug/L	1.7777 ppb	17:44:57
3	Se 196.026†	-28.5	4.5	2.7927 ug/L	2.7927 ppb	17:44:57
3	Si 251.611†	481.3	4.9	0.1590 ug/L	0.1590 ppb	17:44:57
3	Sn 189.927†	1.7	-0.0	-0.0038 ug/L	-0.0038 ppb	17:44:57
3	Ti 334.940†	-1289.3	87.0	0.1447 ug/L	0.1447 ppb	17:44:37
3	Tl 190.801†	-19.4	15.3	4.6263 ug/L	4.6263 ppb	17:44:57
3	U 409.014†	-2034.3	-103.9	-3.0568 ug/L	-3.0568 ppb	17:44:32
3	V 292.402†	-1407.4	-1.6	-0.0205 ug/L	-0.0205 ppb	17:44:37
3	Zn 213.857†	637.9	-7.7	-0.0682 ug/L	-0.0682 ppb	17:44:57
3	SiO2†	509.5	33.8	2.2893 ug/L	2.2893 ppb	17:45:13

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	891042.9	103.84	%	1.397				1.35%
Sc Radial	5043.5	98.5	%	4.08				4.14%
Y 371.029	753011.8	103.48	%	1.181				1.14%
Y RADIAL	5410.7	98.28	%	3.679				3.74%
Ag 328.068†	-9.5	-0.0448	ug/L	0.06581	-0.0448	ppb	0.06581	146.98%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	8.3	6.6431	ug/L	4.16422	6.6431	ppb	4.16422	62.68%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.3	0.5611	ug/L	0.82104	0.5611	ppb	0.82104	146.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	212.7	4.7760	ug/L	0.82848	4.7760	ppb	0.82848	17.35%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-11.9	-0.0918	ug/L	0.01986	-0.0918	ppb	0.01986	21.63%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	150.7	0.0572	ug/L	0.02068	0.0572	ppb	0.02068	36.18%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-3.5	-5.6346	ug/L	3.75269	-5.6346	ppb	3.75269	66.60%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                18.7      0.2062 ug/L       0.09703      0.2062 ppb        0.09703  47.06%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 8.5      0.1722 ug/L       0.14611      0.1722 ppb        0.14611  84.86%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -0.7     -0.0075 ug/L       0.11031     -0.0075 ppb        0.11031 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -212.1     -0.6335 ug/L       0.20082     -0.6335 ppb        0.20082  31.70%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -0.9     -7.7575 ug/L       9.54148     -7.7575 ppb        9.54148 123.00%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        208.6      37.996 ug/L       13.9798      37.996 ppb        13.9798  36.79%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.9     -29.941 ug/L       52.7948     -29.941 ppb        52.7948 176.33%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              -27.0     -0.0291 ug/L       0.00906     -0.0291 ppb        0.00906  31.09%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -2.0     -0.1381 ug/L       0.37343     -0.1381 ppb        0.37343 270.40%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -4.8     -1.3822 ug/L      17.75775     -1.3822 ppb       17.75775 >999.9%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -3.4     -0.0851 ug/L       0.17577     -0.0851 ppb        0.17577 206.59%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 0.3      0.3709 ug/L       1.92623      0.3709 ppb        1.92623 519.28%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                7.3      0.8898 ug/L       0.08204      0.8898 ppb        0.08204   9.22%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           5.0      6.9857 ug/L       7.81975      6.9857 ppb        7.81975 111.94%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                4.3      1.4722 ug/L       0.74448      1.4722 ppb        0.74448  50.57%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                5.3      3.3017 ug/L       1.80405      3.3017 ppb        1.80405  54.64%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                8.1      0.2566 ug/L       0.26658      0.2566 ppb        0.26658 103.90%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                5.5      0.9620 ug/L       1.09412      0.9620 ppb        1.09412 113.73%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                6.2      0.0393 ug/L       0.09889      0.0393 ppb        0.09889 251.53%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               69.1      0.1119 ug/L       0.03694      0.1119 ppb        0.03694  33.00%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               12.1      3.6589 ug/L       1.54662      3.6589 ppb        1.54662  42.27%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                25.7      0.7582 ug/L       3.98074      0.7582 ppb        3.98074 524.99%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                55.1      0.3737 ug/L       0.38417      0.3737 ppb        0.38417 102.81%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -8.2     -0.0747 ug/L       0.04269     -0.0747 ppb        0.04269  57.11%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     35.3      2.3866 ug/L       2.20882      2.3866 ppb        2.20882  92.55%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Sunday, January 03, 2010 14:14:04
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1646
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	4529.7	4529.718	79.085	1.7
	Mg	24.0	48383.4	48383.404	575.294	1.2
	Co	58.9	93399.2	93399.174	1332.998	1.4
	Rh	102.9	177381.9	177381.878	885.008	0.5
	In	114.9	233658.3	233658.280	2035.639	0.9
	Pb	208.0	265884.5	265884.502	3858.984	1.5
⌈>	Ba	137.9	237479.3	237479.332	1260.587	0.5
⌊	Ba++	69.0	5196.0	0.022	0.000	0.9
⌈>	Ce	139.9	293550.0	293549.998	3117.206	1.1
⌊	CeO	155.9	6435.4	0.022	0.000	1.2
	Bkgd	220.0	18.2	18.200	2.564	14.1

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
7.00	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	13	8.3	5205.6
Co	59	13	8.8	90127.4
In	115	13	10.3	227698.6

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	595	2065	0.579
Be	9.0	9.0	2059	2070	0.620
Mg	24.0	24.0	5695	2070	0.648
Mg	25.0	25.0	5935	2070	0.610
Mg	26.0	25.9	6172	2070	0.628
Co	58.9	58.9	14188	2105	0.608
Rh	102.9	102.9	24884	2165	0.604
In	114.9	114.9	27798	2185	0.599
Ce	139.9	139.9	33870	2200	0.627
Pb	206.0	206.0	49948	2270	0.665
Pb	207.0	207.0	50171	2235	0.674
Pb	208.0	208.0	50451	2260	0.711
U	238.1	238.1	57736	2275	0.727

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Sunday, January 03, 2010 18:25:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\Blank.081

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		74	
	Be	9		ug/L		16	
	B	11		ug/L		667	
	Na	23		ug/L		17679	
	Mg	24		ug/L		2000	
	Al	27		ug/L		4334	
	P	31		ug/L		7059	
	K	39		ug/L		629926	
	Ca	43		ug/L		259	
>	Sc	45		ug/L		1413157	
	Ti	47		ug/L		356	
	V	51		ug/L		11568	
	Cr	52		ug/L		-1762	
	Cr	53		ug/L		157290	
	Mn	55		ug/L		1160	
	Fe	57		ug/L		5195	
	Co	59		ug/L		93	
	Ni	60		ug/L		70	
	Cu	63		ug/L		290	
	Cu	65		ug/L		131	
	Zn	66		ug/L		253	
	Zn	67		ug/L		18419	
	Zn	68		ug/L		2081	
>	Ge	74		ug/L		469831	
	As	75		ug/L		-410	
	Se	77		ug/L		8356	
	Se	82		ug/L		-27	
	Kr	83		ug/L		124	
	Sr	88		ug/L		186	
	Y	89		ug/L		64	
	Mo	98		ug/L		95	
	Ag	107		ug/L		49	
	Cd	111		ug/L		29	
	Cd	114		ug/L		39	
>	In	115		ug/L		296035	
	Sn	120		ug/L		381	
	Sb	121		ug/L		423	
	Sb	123		ug/L		338	
	Ba	135		ug/L		36	
	Ba	137		ug/L		46	
	Ho	165		ug/L		24	
>	Lu	175		ug/L		600437	
	Tl	205		ug/L		4030	
	Pb	208		ug/L		399	
	Bi	209		ug/L		187	
	Th	232		ug/L		916	
	U	238		ug/L		379	

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	0.9999
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	
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	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Sunday, January 03, 2010 18:32:05
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\Standard 1.082

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	1.896	20432	0.015
	Be	9	10.000	ug/L	3.466	4855	0.003
	B	11	20.000	ug/L	3.247	10642	0.007
	Na	23	1000.000	ug/L	2.255	4965016	3.533
	Mg	24	1000.000	ug/L	3.039	3242789	2.314
	Al	27	1000.000	ug/L	3.564	4817858	3.438
	P	31	1000.000	ug/L	1.596	286170	0.199
	K	39	1000.000	ug/L	8.140	6522832	4.215
	Ca	43	1000.000	ug/L	2.529	14765	0.010
>	Sc	45		ug/L		1400292	1400291.854
	Ti	47	10.000	ug/L	2.330	7747	0.005
	V	51	10.000	ug/L	0.826	95271	0.060
	Cr	52	10.000	ug/L	1.463	64949	0.048
	Cr	53		ug/L		151989	-0.003
	Mn	55	10.000	ug/L	0.577	108278	0.077
	Fe	57	1000.000	ug/L	2.137	218547	0.152
	Co	59	10.000	ug/L	1.525	81915	0.058
	Ni	60	10.000	ug/L	1.689	17834	0.013
	Cu	63		ug/L		43243	0.031
	Cu	65	10.000	ug/L	0.782	21060	0.015
	Zn	66	10.000	ug/L	2.101	14669	0.031
	Zn	67		ug/L		19901	0.004
	Zn	68		ug/L		12428	0.022
>	Ge	74		ug/L		463616	463616.444
	As	75	10.000	ug/L	4.450	14171	0.031
	Se	77		ug/L		8800	0.001
	Se	82	10.000	ug/L	3.250	1354	0.003
	Kr	83		ug/L		107	-0.000
	Sr	88	10.000	ug/L	0.972	171806	0.586
	Y	89		ug/L		79	0.000
	Mo	98	10.000	ug/L	1.970	41016	0.140
	Ag	107	10.000	ug/L	1.871	73385	0.250
	Cd	111	10.000	ug/L	2.753	17556	0.060
	Cd	114		ug/L		42197	0.144
>	In	115		ug/L		292880	292880.285
	Sn	120	10.000	ug/L	2.646	75463	0.256
	Sb	121	10.000	ug/L	2.759	66902	0.227
	Sb	123		ug/L		52496	0.178
	Ba	135		ug/L		19734	0.033
	Ba	137	10.000	ug/L	1.504	34947	0.058
	Ho	165		ug/L		36	0.000
>	Lu	175		ug/L		604378	604377.944
	Tl	205	10.000	ug/L	1.552	310706	0.507
	Pb	208	10.000	ug/L	2.216	481966	0.797
	Bi	209		ug/L		230	0.000
	Th	232	10.000	ug/L	1.153	598983	0.990
	U	238	10.000	ug/L	0.707	638638	1.056

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	
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 % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Sunday, January 03, 2010 18:38:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\Standard 2.083

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**100.020**	**ug/L**	0.385	201279	0.148
	Be	9	**99.990**	**ug/L**	1.523	46443	0.034
	B	11	**199.927**	**ug/L**	2.724	93898	0.069
	Na	23	**9994.494**	**ug/L**	6.989	45418461	33.472
	Mg	24	**10002.554**	**ug/L**	9.336	32229946	23.752
	Al	27	**9993.938**	**ug/L**	5.498	43937890	32.391
	P	31	**10003.816**	**ug/L**	2.345	2819521	2.074
	K	39	**9997.205**	**ug/L**	5.449	56196706	40.991
	Ca	43	**9997.865**	**ug/L**	1.905	137844	0.101
>	Sc	45		**ug/L**		1356427	1356427.282
	Ti	47	**99.998**	**ug/L**	2.602	71838	0.053
	V	51	**99.958**	**ug/L**	0.576	789498	0.574
	Cr	52	**99.939**	**ug/L**	0.121	606612	0.448
	Cr	53		**ug/L**		185910	0.026
	Mn	55	**99.927**	**ug/L**	3.206	967741	0.713
	Fe	57	**9985.553**	**ug/L**	1.433	1808682	1.330
	Co	59	**99.940**	**ug/L**	1.299	747640	0.551
	Ni	60	**99.967**	**ug/L**	1.884	166684	0.123
	Cu	63		**ug/L**		395778	0.292
	Cu	65	**99.955**	**ug/L**	2.588	194010	0.143
	Zn	66	**99.944**	**ug/L**	1.597	133003	0.294
	Zn	67		**ug/L**		37506	0.044
	Zn	68		**ug/L**		97947	0.213
>	Ge	74		**ug/L**		450891	450891.334
	As	75	**99.951**	**ug/L**	2.579	134595	0.299
	Se	77		**ug/L**		16067	0.018
	Se	82	**99.990**	**ug/L**	1.342	13258	0.029
	Kr	83		**ug/L**		123	0.000
	Sr	88	**99.878**	**ug/L**	1.553	1493282	5.218
	Y	89		**ug/L**		208	0.001
	Mo	98	**99.984**	**ug/L**	0.274	393804	1.376
	Ag	107	**99.919**	**ug/L**	2.746	662581	2.315
	Cd	111	**99.988**	**ug/L**	1.787	169374	0.592
	Cd	114		**ug/L**		397994	1.391
>	In	115		**ug/L**		286198	286197.846
	Sn	120	**99.957**	**ug/L**	1.463	704008	2.459
	Sb	121	**99.954**	**ug/L**	2.183	621244	2.170
	Sb	123		**ug/L**		490297	1.712
	Ba	135		**ug/L**		186331	0.321
	Ba	137	**99.973**	**ug/L**	1.919	326928	0.562
	Ho	165		**ug/L**		35	0.000
>	Lu	175		**ug/L**		581333	581332.669
	Tl	205	**99.879**	**ug/L**	4.100	2630572	4.520
	Pb	208	**99.867**	**ug/L**	1.890	4084454	7.027
	Bi	209		**ug/L**		543	0.001
	Th	232	**99.854**	**ug/L**	3.887	5013521	8.626
	U	238	**99.888**	**ug/L**	2.417	5512100	9.483

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	0.9999
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	0.9999
Y	89	Linear Thru Zero	
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	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Sunday, January 03, 2010 18:44:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 1.084

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.148**	**ug/L**	1.195	104865	0.076
	Be	9	**49.885**	**ug/L**	0.499	23608	0.017
	B	11	**101.099**	**ug/L**	1.884	48686	0.035
	Na	23	**4835.803**	**ug/L**	2.700	22393824	16.195
	Mg	24	**4951.492**	**ug/L**	3.957	16240143	11.758
	Al	27	**5094.158**	**ug/L**	3.313	22822550	16.511
	P	31	**4287.216**	**ug/L**	1.432	1234615	0.889
	K	39	**5321.226**	**ug/L**	6.371	30741752	21.818
	Ca	43	**4859.379**	**ug/L**	1.952	68365	0.049
>	Sc	45		**ug/L**		1381607	1381606.605
	Ti	47	**48.934**	**ug/L**	1.475	35986	0.026
	V	51	**49.529**	**ug/L**	2.378	404100	0.284
	Cr	52	**51.095**	**ug/L**	2.048	314990	0.229
	Cr	53		**ug/L**		149475	-0.003
	Mn	55	**51.162**	**ug/L**	2.809	505126	0.365
	Fe	57	**5250.154**	**ug/L**	2.916	970765	0.699
	Co	59	**50.830**	**ug/L**	1.659	387287	0.280
	Ni	60	**51.392**	**ug/L**	1.402	87302	0.063
	Cu	63		**ug/L**		205376	0.148
	Cu	65	**51.082**	**ug/L**	0.737	101054	0.073
	Zn	66	**51.152**	**ug/L**	1.366	70101	0.151
	Zn	67		**ug/L**		27260	0.020
	Zn	68		**ug/L**		52982	0.110
>	Ge	74		**ug/L**		463459	463458.993
	As	75	**48.148**	**ug/L**	0.191	66450	0.144
	Se	77		**ug/L**		10822	0.006
	Se	82	**48.607**	**ug/L**	1.261	6612	0.014
	Kr	83		**ug/L**		118	-0.000
	Sr	88	**51.907**	**ug/L**	3.989	799326	2.712
	Y	89		**ug/L**		102	0.000
	Mo	98	**49.560**	**ug/L**	2.751	201128	0.682
	Ag	107	**51.107**	**ug/L**	2.477	349174	1.184
	Cd	111	**49.212**	**ug/L**	4.260	85861	0.291
	Cd	114		**ug/L**		202172	0.686
>	In	115		**ug/L**		294959	294958.712
	Sn	120	**50.679**	**ug/L**	3.568	367798	1.247
	Sb	121	**49.705**	**ug/L**	2.468	318514	1.079
	Sb	123		**ug/L**		251681	0.853
	Ba	135		**ug/L**		94499	0.160
	Ba	137	**49.920**	**ug/L**	2.152	165928	0.281
	Ho	165		**ug/L**		59	0.000
>	Lu	175		**ug/L**		590805	590804.957
	Tl	205	**49.617**	**ug/L**	0.805	1330592	2.245
	Pb	208	**53.015**	**ug/L**	2.461	2203668	3.730
	Bi	209		**ug/L**		621	0.001
	Th	232	**50.186**	**ug/L**	0.861	2562252	4.336
	U	238	**51.848**	**ug/L**	3.353	2907723	4.922

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	0.9999
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	0.9999
Y	89	Linear Thru Zero	
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	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	102.297				
	Be	9	99.771				
	B	11	101.099				
	Na	23	96.716				
	Mg	24	99.030				
	Al	27	100.874				
	P	31	85.744				
	K	39	106.425				
	Ca	43	97.188				
>	Sc	45		97.8			
	Ti	47	97.869				
	V	51	99.058				
	Cr	52	102.189				
	Cr	53					
	Mn	55	102.323				
	Fe	57	105.003				
	Co	59	101.659				
	Ni	60	102.783				
	Cu	63					
	Cu	65	102.164				
	Zn	66	102.305				
	Zn	67					
	Zn	68					
>	Ge	74		98.6			
	As	75	96.297				
	Se	77					
	Se	82	97.214				
	Kr	83					
	Sr	88	103.814				
	Y	89					
	Mo	98	99.120				
	Ag	107	102.214				
	Cd	111	98.424				
	Cd	114					
>	In	115		99.6			
	Sn	120	101.358				
	Sb	121	99.409				
	Sb	123					
	Ba	135					
	Ba	137	99.841				
	Ho	165					
>	Lu	175		98.4			
	Tl	205	99.234				
	Pb	208	106.029				
	Bi	209					
	Th	232	100.372				
	U	238	103.696				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	P	31	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Sunday, January 03, 2010 18:50:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 2.085

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.013**	**ug/L**	26.933	98	0.000
	Be	9	**0.003**	**ug/L**	283.538	17	0.000
	B	11	**2.633**	**ug/L**	20.710	1875	0.001
	Na	23	**-0.447**	**ug/L**	123.871	15008	-0.001
	Mg	24	**-0.082**	**ug/L**	573.538	1667	-0.000
	Al	27	**0.489**	**ug/L**	53.490	6335	0.002
	P	31	**-0.390**	**ug/L**	47.694	6692	-0.000
	K	39	**-8.651**	**ug/L**	40.516	558730	-0.035
	Ca	43	**2.224**	**ug/L**	32.792	280	0.000
>	Sc	45		**ug/L**		1361537	1361536.770
	Ti	47	**-0.022**	**ug/L**	49.515	327	-0.000
	V	51	**-0.262**	**ug/L**	71.685	9087	-0.002
	Cr	52	**0.303**	**ug/L**	6.697	154	0.001
	Cr	53		**ug/L**		117207	-0.025
	Mn	55	**-0.012**	**ug/L**	25.238	1002	-0.000
	Fe	57	**-0.731**	**ug/L**	71.825	4872	-0.000
	Co	59	**0.004**	**ug/L**	33.153	119	0.000
	Ni	60	**0.009**	**ug/L**	38.657	82	0.000
	Cu	63		**ug/L**		652	0.000
	Cu	65	**0.009**	**ug/L**	107.731	145	0.000
	Zn	66	**0.012**	**ug/L**	68.398	262	0.000
	Zn	67		**ug/L**		15962	-0.004
	Zn	68		**ug/L**		1695	-0.001
>	Ge	74		**ug/L**		457304	457304.486
	As	75	**0.304**	**ug/L**	27.825	18	0.001
	Se	77		**ug/L**		5886	-0.005
	Se	82	**0.199**	**ug/L**	49.862	1	0.000
	Kr	83		**ug/L**		111	-0.000
	Sr	88	**0.002**	**ug/L**	48.367	213	0.000
	Y	89		**ug/L**		59	-0.000
	Mo	98	**0.042**	**ug/L**	26.308	259	0.001
	Ag	107	**0.004**	**ug/L**	30.187	73	0.000
	Cd	111	**0.001**	**ug/L**	1142.711	30	0.000
	Cd	114		**ug/L**		52	0.000
>	In	115		**ug/L**		289411	289410.821
	Sn	120	**0.136**	**ug/L**	15.066	1338	0.003
	Sb	121	**0.296**	**ug/L**	16.351	2274	0.006
	Sb	123		**ug/L**		1759	0.005
	Ba	135		**ug/L**		46	0.000
	Ba	137	**0.001**	**ug/L**	44.013	50	0.000
	Ho	165		**ug/L**		28	0.000
>	Lu	175		**ug/L**		594485	594485.014
	Tl	205	**0.400**	**ug/L**	22.190	14739	0.018
	Pb	208	**0.004**	**ug/L**	41.827	558	0.000
	Bi	209		**ug/L**		189	0.000
	Th	232	**0.055**	**ug/L**	19.830	3708	0.005
	U	238	**0.007**	**ug/L**	20.413	778	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	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	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		96.3			
	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		97.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Sunday, January 03, 2010 18:56:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 3.086

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.840**	ug/L	1.509	22195	0.016
	Be	9	**0.526**	ug/L	9.828	263	0.000
	B	11	**16.608**	ug/L	2.712	8508	0.006
	Na	23	**264.355**	ug/L	10.565	1234775	0.885
	Mg	24	**18.299**	ug/L	22.480	61805	0.043
	Al	27	**33.901**	ug/L	15.240	155522	0.110
	P	31	**47.205**	ug/L	5.895	20335	0.010
	K	39	**298.570**	ug/L	8.943	2297677	1.224
	Ca	43	**216.427**	ug/L	1.619	3274	0.002
>	Sc	45		ug/L		1375985	1375985.006
	Ti	47	**8.508**	ug/L	2.292	6519	0.004
	V	51	**10.691**	ug/L	2.315	95712	0.061
	Cr	52	**11.034**	ug/L	1.900	66410	0.050
	Cr	53		ug/L		127372	-0.019
	Mn	55	**5.871**	ug/L	1.024	58748	0.042
	Fe	57	**120.409**	ug/L	2.346	27120	0.016
	Co	59	**1.126**	ug/L	1.233	8634	0.006
	Ni	60	**2.214**	ug/L	1.902	3812	0.003
	Cu	63		ug/L		4920	0.003
	Cu	65	**1.158**	ug/L	1.773	2406	0.002
	Zn	66	**11.127**	ug/L	0.907	15102	0.033
	Zn	67		ug/L		18849	0.002
	Zn	68		ug/L		12489	0.023
>	Ge	74		ug/L		453207	453206.512
	As	75	**5.737**	ug/L	4.338	7394	0.017
	Se	77		ug/L		6626	-0.003
	Se	82	**5.557**	ug/L	1.521	716	0.002
	Kr	83		ug/L		117	-0.000
	Sr	88	**11.754**	ug/L	0.934	180253	0.614
	Y	89		ug/L		54	-0.000
	Mo	98	**0.545**	ug/L	3.015	2293	0.008
	Ag	107	**1.059**	ug/L	0.682	7249	0.025
	Cd	111	**1.075**	ug/L	3.084	1894	0.006
	Cd	114		ug/L		4410	0.015
>	In	115		ug/L		293304	293303.702
	Sn	120	**5.424**	ug/L	3.048	39493	0.133
	Sb	121	**3.333**	ug/L	2.989	21627	0.072
	Sb	123		ug/L		17202	0.058
	Ba	135		ug/L		4010	0.007
	Ba	137	**2.128**	ug/L	2.005	7034	0.012
	Ho	165		ug/L		29	0.000
>	Lu	175		ug/L		583848	583848.263
	Tl	205	**1.270**	ug/L	3.770	37475	0.057
	Pb	208	**2.420**	ug/L	1.173	99786	0.170
	Bi	209		ug/L		194	0.000
	Th	232	**1.290**	ug/L	2.482	65932	0.111
	U	238	**0.262**	ug/L	2.088	14879	0.025

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	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	108.403				
	Be	9	105.102				
	B	11	110.719				
	Na	23	105.742				
	Mg	24	121.992				
	Al	27	113.004				
	P	31	94.410				
	K	39	99.523				
	Ca	43	108.213				
>	Sc	45		97.4			
	Ti	47	85.084				
	V	51	106.906				
	Cr	52	110.342				
	Cr	53					
	Mn	55	117.429				
	Fe	57	120.409				
	Co	59	112.607				
	Ni	60	110.708				
	Cu	63					
	Cu	65	115.753				
	Zn	66	111.271				
	Zn	67					
	Zn	68					
>	Ge	74		96.5			
	As	75	114.749				
	Se	77					
	Se	82	111.147				
	Kr	83					
	Sr	88	117.539				
	Y	89					
	Mo	98	109.029				
	Ag	107	105.944				
	Cd	111	107.470				
	Cd	114					
>	In	115		99.1			
	Sn	120	108.471				
	Sb	121	111.088				
	Sb	123					
	Ba	135					
	Ba	137	106.413				
	Ho	165					
>	Lu	175		97.2			
	Tl	205	127.043				
	Pb	208	120.994				
	Bi	209					
	Th	232	128.983				
	U	238	130.921				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	U	238	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Sunday, January 03, 2010 19:02:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 4.087

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.136**	ug/L	8.560	307	0.000
	Be	9	**0.077**	ug/L	20.620	45	0.000
	B	11	**1.954**	ug/L	5.633	1377	0.001
	Na	23	**91668.464**	ug/L	3.169	369403480	307.003
	Mg	24	**95603.087**	ug/L	4.975	273302490	227.018
	Al	27	**100369.919**	ug/L	3.749	391552701	325.307
	P	31	**92583.900**	ug/L	1.452	23102005	19.193
	K	39	**99289.639**	ug/L	2.273	490497382	407.111
	Ca	43	**93306.584**	ug/L	0.739	1139680	0.947
>	Sc	45		ug/L		1203508	1203508.234
	Ti	47	**1380.818**	ug/L	2.287	876196	0.728
	V	51	**-0.253**	ug/L	68.295	8095	-0.001
	Cr	52	**3.013**	ug/L	2.924	14767	0.014
	Cr	53		ug/L		85333	-0.040
	Mn	55	**6.259**	ug/L	2.151	54710	0.045
	Fe	57	**102046.217**	ug/L	1.813	16357381	13.590
	Co	59	**0.350**	ug/L	7.101	2398	0.002
	Ni	60	**3.094**	ug/L	3.024	4634	0.004
	Cu	63		ug/L		7748	0.006
	Cu	65	**3.067**	ug/L	4.752	5390	0.004
	Zn	66	**3.672**	ug/L	2.078	4635	0.011
	Zn	67		ug/L		13818	-0.005
	Zn	68		ug/L		2264	0.001
>	Ge	74		ug/L		408162	408162.445
	As	75	**0.184**	ug/L	167.508	-131	0.001
	Se	77		ug/L		6659	-0.001
	Se	82	**-1.054**	ug/L	21.632	-150	-0.000
	Kr	83		ug/L		316	0.001
	Sr	88	**1.301**	ug/L	1.902	17622	0.068
	Y	89		ug/L		572	0.002
	Mo	98	**2023.875**	ug/L	0.314	7154333	27.847
	Ag	107	**0.088**	ug/L	13.790	569	0.002
	Cd	111	**0.395**	ug/L	23.127	626	0.002
	Cd	114		ug/L		11143	0.043
>	In	115		ug/L		256918	256917.835
	Sn	120	**0.155**	ug/L	4.670	1308	0.004
	Sb	121	**0.065**	ug/L	16.042	732	0.001
	Sb	123		ug/L		587	0.001
	Ba	135		ug/L		1202	0.002
	Ba	137	**0.685**	ug/L	1.698	2072	0.004
	Ho	165		ug/L		1306	0.002
>	Lu	175		ug/L		527394	527394.369
	Tl	205	**0.057**	ug/L	25.869	4890	0.003
	Pb	208	**0.194**	ug/L	0.472	7540	0.014
	Bi	209		ug/L		1664	0.003
	Th	232	**0.045**	ug/L	34.543	2860	0.004
	U	238	**-0.002**	ug/L	52.917	227	-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	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	0.9999
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	0.9999
Y	89	Linear Thru Zero	
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	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23	91.668				
	Mg	24	95.603				
	Al	27	100.370				
	P	31	92.584				
	K	39	99.290				
	Ca	43	93.307				
>	Sc	45		85.2			
	Ti	47	69.041				
	V	51					
	Cr	52	81.433				
	Cr	53					
	Mn	55	107.919				
	Fe	57	102.046				
	Co	59	139.862				
	Ni	60	114.583				
	Cu	63					
	Cu	65	105.743				
	Zn	66	101.993				
	Zn	67					
	Zn	68					
>	Ge	74		86.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	108.411				
	Y	89					
	Mo	98	101.194				
	Ag	107					
	Cd	111	98.688				
	Cd	114					
>	In	115		86.8			
	Sn	120					
	Sb	121	65.365				
	Sb	123					
	Ba	135					
	Ba	137	102.218				
	Ho	165					
>	Lu	175		87.8			
	Tl	205					
	Pb	208	96.871				
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Ti	47	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Sunday, January 03, 2010 19:08:39
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 5.088

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**21.479**	ug/L	2.050	37687	0.032
	Be	9	**19.207**	ug/L	2.295	7779	0.007
	B	11	**18.113**	ug/L	1.240	7917	0.006
	Na	23	**88023.919**	ug/L	4.504	348544631	294.798
	Mg	24	**89721.967**	ug/L	4.000	251691659	213.053
	Al	27	**96325.822**	ug/L	5.168	369000510	312.199
	P	31	**90999.014**	ug/L	3.574	22284335	18.864
	K	39	**104502.784**	ug/L	7.122	506161970	428.486
	Ca	43	**91704.387**	ug/L	1.901	1099335	0.930
>	Sc	45		ug/L		1181556	1181556.071
	Ti	47	**1348.092**	ug/L	1.535	839759	0.711
	V	51	**20.147**	ug/L	3.012	146269	0.116
	Cr	52	**23.181**	ug/L	2.737	121398	0.104
	Cr	53		ug/L		95673	-0.030
	Mn	55	**27.403**	ug/L	2.111	231825	0.195
	Fe	57	**100334.395**	ug/L	2.546	15784798	13.362
	Co	59	**20.800**	ug/L	2.232	135553	0.115
	Ni	60	**22.402**	ug/L	2.821	32566	0.028
	Cu	63		ug/L		73012	0.062
	Cu	65	**21.854**	ug/L	2.614	37021	0.031
	Zn	66	**21.332**	ug/L	0.930	25753	0.063
	Zn	67		ug/L		16735	0.002
	Zn	68		ug/L		17923	0.040
>	Ge	74		ug/L		406272	406271.840
	As	75	**20.445**	ug/L	1.205	24531	0.061
	Se	77		ug/L		8302	0.003
	Se	82	**19.154**	ug/L	2.552	2270	0.006
	Kr	83		ug/L		291	0.000
	Sr	88	**23.517**	ug/L	1.190	312500	1.229
	Y	89		ug/L		548	0.002
	Mo	98	**2009.080**	ug/L	2.999	7028378	27.643
	Ag	107	**19.927**	ug/L	1.351	117444	0.462
	Cd	111	**19.716**	ug/L	1.577	29694	0.117
	Cd	114		ug/L		79444	0.312
>	In	115		ug/L		254259	254258.924
	Sn	120	**20.993**	ug/L	0.964	131621	0.516
	Sb	121	**21.162**	ug/L	1.563	117153	0.459
	Sb	123		ug/L		92287	0.362
	Ba	135		ug/L		33964	0.065
	Ba	137	**20.343**	ug/L	1.618	60155	0.114
	Ho	165		ug/L		1298	0.002
>	Lu	175		ug/L		525340	525339.927
	Tl	205	**20.412**	ug/L	2.011	488823	0.924
	Pb	208	**21.152**	ug/L	0.727	782200	1.488
	Bi	209		ug/L		2083	0.004
	Th	232	**22.389**	ug/L	0.713	1016887	1.934
	U	238	**22.308**	ug/L	0.551	1112956	2.118

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	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	107.395				
	Be	9	96.036				
	B	11	90.566				
	Na	23	88.024				
	Mg	24	89.722				
	Al	27	96.326				
	P	31	90.999				
	K	39	104.503				
	Ca	43	91.704				
>	Sc	45		83.6			
	Ti	47	67.405				
	V	51	100.734				
	Cr	52	97.811				
	Cr	53					
	Mn	55	106.213				
	Fe	57	100.334				
	Co	59	102.718				
	Ni	60	98.687				
	Cu	63					
	Cu	65	95.431				
	Zn	66	90.390				
	Zn	67					
	Zn	68					
>	Ge	74		86.5			
	As	75	102.224				
	Se	77					
	Se	82	95.769				
	Kr	83					
	Sr	88	110.930				
	Y	89					
	Mo	98	100.454				
	Ag	107	99.637				
	Cd	111	96.647				
	Cd	114					
>	In	115		85.9			
	Sn	120	104.967				
	Sb	121	105.285				
	Sb	123					
	Ba	135					
	Ba	137	98.417				
	Ho	165					
>	Lu	175		87.5			
	Tl	205	102.058				
	Pb	208	104.715				
	Bi	209					
	Th	232	111.946				
	U	238	111.542				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Ti	47	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, January 03, 2010 19:14:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 6.089

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**55.396**	**ug/L**	2.224	102800	0.082
	Be	9	**52.167**	**ug/L**	3.017	22341	0.018
	B	11	**96.376**	**ug/L**	5.072	42020	0.033
	Na	23	**4431.551**	**ug/L**	7.306	18561642	14.842
	Mg	24	**4706.139**	**ug/L**	3.697	13975431	11.175
	Al	27	**5104.433**	**ug/L**	3.298	20690056	16.544
	P	31	**4270.691**	**ug/L**	1.847	1113249	0.885
	K	39	**5122.515**	**ug/L**	1.805	26825605	21.004
	Ca	43	**4953.774**	**ug/L**	2.221	63074	0.050
>	Sc	45		**ug/L**		1250651	1250651.066
	Ti	47	**50.068**	**ug/L**	0.812	33321	0.026
	V	51	**50.358**	**ug/L**	4.240	371640	0.289
	Cr	52	**52.011**	**ug/L**	2.386	290252	0.233
	Cr	53		**ug/L**		136683	-0.002
	Mn	55	**53.706**	**ug/L**	1.310	480005	0.383
	Fe	57	**5493.888**	**ug/L**	2.459	919347	0.732
	Co	59	**53.053**	**ug/L**	0.613	365938	0.293
	Ni	60	**53.759**	**ug/L**	1.975	82658	0.066
	Cu	63		**ug/L**		190784	0.152
	Cu	65	**52.737**	**ug/L**	0.527	94447	0.075
	Zn	66	**51.496**	**ug/L**	1.766	65615	0.152
	Zn	67		**ug/L**		25140	0.019
	Zn	68		**ug/L**		48895	0.109
>	Ge	74		**ug/L**		430964	430964.419
	As	75	**49.965**	**ug/L**	0.335	64134	0.150
	Se	77		**ug/L**		9961	0.005
	Se	82	**50.021**	**ug/L**	1.034	6327	0.015
	Kr	83		**ug/L**		111	-0.000
	Sr	88	**53.339**	**ug/L**	1.468	772623	2.786
	Y	89		**ug/L**		97	0.000
	Mo	98	**50.171**	**ug/L**	0.906	191476	0.690
	Ag	107	**52.724**	**ug/L**	0.632	338752	1.222
	Cd	111	**50.515**	**ug/L**	0.909	82910	0.299
	Cd	114		**ug/L**		195464	0.705
>	In	115		**ug/L**		277241	277240.697
	Sn	120	**51.551**	**ug/L**	1.709	351886	1.268
	Sb	121	**50.958**	**ug/L**	2.396	307017	1.106
	Sb	123		**ug/L**		242424	0.873
	Ba	135		**ug/L**		89621	0.157
	Ba	137	**49.364**	**ug/L**	0.652	158304	0.278
	Ho	165		**ug/L**		55	0.000
>	Lu	175		**ug/L**		569921	569921.118
	Tl	205	**49.430**	**ug/L**	1.267	1278703	2.237
	Pb	208	**52.709**	**ug/L**	0.610	2114016	3.709
	Bi	209		**ug/L**		591	0.001
	Th	232	**50.212**	**ug/L**	0.532	2473075	4.338
	U	238	**51.949**	**ug/L**	1.436	2811095	4.932

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	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	110.792				
	Be	9	104.334				
	B	11	96.376				
	Na	23	88.631				
	Mg	24	94.123				
	Al	27	101.078				
	P	31	85.414				
	K	39	102.450				
	Ca	43	99.075				
>	Sc	45		88.5			
	Ti	47	100.136				
	V	51	100.717				
	Cr	52	104.023				
	Cr	53					
	Mn	55	107.412				
	Fe	57	109.878				
	Co	59	106.106				
	Ni	60	107.518				
	Cu	63					
	Cu	65	105.473				
	Zn	66	102.992				
	Zn	67					
	Zn	68					
>	Ge	74		91.7			
	As	75	99.929				
	Se	77					
	Se	82	100.041				
	Kr	83					
	Sr	88	106.679				
	Y	89					
	Mo	98	100.341				
	Ag	107	105.448				
	Cd	111	101.030				
	Cd	114					
>	In	115		93.7			
	Sn	120	103.103				
	Sb	121	101.916				
	Sb	123					
	Ba	135					
	Ba	137	98.727				
	Ho	165					
>	Lu	175		94.9			
	Tl	205	98.860				
	Pb	208	105.418				
	Bi	209					
	Th	232	100.424				
	U	238	103.898				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	CCV is out of limits (+/- 10%)
QC Std 6	Na	23	CCV is out of limits (+/- 10%)
QC Std 6	P	31	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, January 03, 2010 19:20:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 7.090

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.006**	**ug/L**	66.051	81	0.000
	Be	9	**0.008**	**ug/L**	70.833	18	0.000
	B	11	**1.552**	**ug/L**	29.187	1312	0.001
	Na	23	**1.992**	**ug/L**	152.464	25026	0.007
	Mg	24	**0.803**	**ug/L**	92.991	4334	0.002
	Al	27	**1.104**	**ug/L**	54.128	8669	0.004
	P	31	**-2.600**	**ug/L**	21.882	5815	-0.001
	K	39	**-8.359**	**ug/L**	38.557	536910	-0.034
	Ca	43	**3.412**	**ug/L**	29.694	284	0.000
>	Sc	45		**ug/L**		1304807	1304807.014
	Ti	47	**0.183**	**ug/L**	36.811	455	0.000
	V	51	**-0.545**	**ug/L**	47.834	6600	-0.003
	Cr	52	**0.014**	**ug/L**	711.949	-1545	0.000
	Cr	53		**ug/L**		109543	-0.027
	Mn	55	**-0.014**	**ug/L**	32.547	945	-0.000
	Fe	57	**2.519**	**ug/L**	32.013	5234	0.000
	Co	59	**0.003**	**ug/L**	52.712	109	0.000
	Ni	60	**0.005**	**ug/L**	85.369	73	0.000
	Cu	63		**ug/L**		333	0.000
	Cu	65	**0.034**	**ug/L**	30.774	184	0.000
	Zn	66	**0.023**	**ug/L**	115.129	273	0.000
	Zn	67		**ug/L**		14764	-0.006
	Zn	68		**ug/L**		1487	-0.001
>	Ge	74		**ug/L**		449717	449716.711
	As	75	**0.178**	**ug/L**	96.277	-153	0.001
	Se	77		**ug/L**		5756	-0.005
	Se	82	**0.080**	**ug/L**	256.945	-15	0.000
	Kr	83		**ug/L**		116	-0.000
	Sr	88	**0.002**	**ug/L**	66.785	207	0.000
	Y	89		**ug/L**		56	-0.000
	Mo	98	**0.105**	**ug/L**	10.078	508	0.001
	Ag	107	**0.003**	**ug/L**	40.439	66	0.000
	Cd	111	**0.001**	**ug/L**	378.937	30	0.000
	Cd	114		**ug/L**		54	0.000
>	In	115		**ug/L**		287909	287909.480
	Sn	120	**0.103**	**ug/L**	12.941	1101	0.003
	Sb	121	**0.209**	**ug/L**	22.901	1719	0.005
	Sb	123		**ug/L**		1365	0.004
	Ba	135		**ug/L**		32	-0.000
	Ba	137	**0.001**	**ug/L**	312.535	48	0.000
	Ho	165		**ug/L**		29	0.000
>	Lu	175		**ug/L**		584730	584729.624
	Tl	205	**0.277**	**ug/L**	27.681	11264	0.013
	Pb	208	**0.002**	**ug/L**	44.343	488	0.000
	Bi	209		**ug/L**		159	-0.000
	Th	232	**0.061**	**ug/L**	24.946	3970	0.005
	U	238	**0.006**	**ug/L**	37.030	694	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	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	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		92.3			
	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		95.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Sunday, January 03, 2010 19:27:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 10.091

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**1008.878**	**ug/L**	1.946	1763818	1.496
	Be	9	**999.986**	**ug/L**	0.492	403593	0.342
	B	11	**2.965**	**ug/L**	5.180	1758	0.001
	Na	23	**46678.072**	**ug/L**	2.799	184365307	156.328
	Mg	24	**46500.492**	**ug/L**	5.839	130223886	110.420
	Al	27	**50879.841**	**ug/L**	10.844	194609858	164.905
	P	31	**23565.498**	**ug/L**	2.409	5765692	4.885
	K	39	**53994.367**	**ug/L**	2.934	261598604	221.390
	Ca	43	**48003.310**	**ug/L**	1.866	574376	0.487
>	Sc	45		**ug/L**		1178971	1178970.607
	Ti	47	**41.961**	**ug/L**	1.230	26378	0.022
	V	51	**918.855**	**ug/L**	1.950	6229724	5.275
	Cr	52	**920.759**	**ug/L**	1.378	4870295	4.132
	Cr	53		**ug/L**		691480	0.475
	Mn	55	**947.277**	**ug/L**	2.665	7968191	6.756
	Fe	57	**51182.266**	**ug/L**	0.915	8040690	6.816
	Co	59	**893.775**	**ug/L**	1.907	5811093	4.929
	Ni	60	**872.147**	**ug/L**	1.798	1263313	1.072
	Cu	63		**ug/L**		3066182	2.600
	Cu	65	**845.113**	**ug/L**	0.144	1425053	1.209
	Zn	66	**2371.550**	**ug/L**	2.599	2803780	6.988
	Zn	67		**ug/L**		437316	1.051
	Zn	68		**ug/L**		1757684	4.377
>	Ge	74		**ug/L**		401209	401208.508
	As	75	**871.916**	**ug/L**	1.668	1047719	2.612
	Se	77		**ug/L**		47549	0.101
	Se	82	**468.514**	**ug/L**	0.610	55366	0.138
	Kr	83		**ug/L**		173	0.000
	Sr	88	**1007.708**	**ug/L**	2.442	13172564	52.642
	Y	89		**ug/L**		523	0.002
	Mo	98	**1042.186**	**ug/L**	3.333	3588073	14.340
	Ag	107	**232.828**	**ug/L**	1.470	1350120	5.395
	Cd	111	**902.667**	**ug/L**	1.819	1336828	5.342
	Cd	114		**ug/L**		3440439	13.749
>	In	115		**ug/L**		250243	250243.237
	Sn	120	**1004.863**	**ug/L**	3.352	6185048	24.718
	Sb	121	**242.494**	**ug/L**	1.075	1317427	5.263
	Sb	123		**ug/L**		1069281	4.272
	Ba	135		**ug/L**		1457002	2.666
	Ba	137	**920.422**	**ug/L**	4.582	2828781	5.178
	Ho	165		**ug/L**		468	0.001
>	Lu	175		**ug/L**		546805	546805.380
	Tl	205	**472.269**	**ug/L**	5.164	11678358	21.373
	Pb	208	**4851.901**	**ug/L**	3.691	186539735	341.391
	Bi	209		**ug/L**		5282	0.009
	Th	232	**2507.477**	**ug/L**	5.055	118329973	216.621
	U	238	**5246.491**	**ug/L**	4.336	272126377	498.100

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	0.9999
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	0.9999
Y	89	Linear Thru Zero	
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	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	100.888				
	Be	9	99.999				
	B	11					
	Na	23	93.356				
	Mg	24	93.001				
	Al	27	101.760				
	P	31	94.262				
	K	39	107.989				
	Ca	43	96.007				
>	Sc	45		83.4			
	Ti	47					
	V	51	91.886				
	Cr	52	92.076				
	Cr	53					
	Mn	55	94.728				
	Fe	57	102.365				
	Co	59	89.378				
	Ni	60	87.215				
	Cu	63					
	Cu	65	84.511				
	Zn	66	94.862				
	Zn	67					
	Zn	68					
>	Ge	74		85.4			
	As	75	87.192				
	Se	77					
	Se	82	93.703				
	Kr	83					
	Sr	88	100.771				
	Y	89					
	Mo	98	104.219				
	Ag	107	93.131				
	Cd	111	90.267				
	Cd	114					
>	In	115		84.5			
	Sn	120	100.486				
	Sb	121	96.998				
	Sb	123					
	Ba	135					
	Ba	137	92.042				
	Ho	165					
>	Lu	175		91.1			
	Tl	205	94.454				
	Pb	208	97.038				
	Bi	209					
	Th	232	100.299				
	U	238	104.930				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Co	59	LRS is out of limits (+/- 10%)
QC Std 10	Ni	60	LRS is out of limits (+/- 10%)
QC Std 10	Cu	65	LRS is out of limits (+/- 10%)
QC Std 10	As	75	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Sunday, January 03, 2010 19:33:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 11.092

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.429**	**ug/L**	1.685	102753	0.078
	Be	9	**51.229**	**ug/L**	2.920	23171	0.018
	B	11	**95.771**	**ug/L**	3.007	44115	0.033
	Na	23	**5051.660**	**ug/L**	8.398	22372797	16.918
	Mg	24	**5061.080**	**ug/L**	5.453	15867543	12.018
	Al	27	**5075.141**	**ug/L**	11.970	21707699	16.449
	P	31	**4285.774**	**ug/L**	1.443	1179850	0.888
	K	39	**5098.055**	**ug/L**	3.404	28196257	20.903
	Ca	43	**4895.788**	**ug/L**	1.289	65849	0.050
>	Sc	45		**ug/L**		1320724	1320724.024
	Ti	47	**48.690**	**ug/L**	3.124	34224	0.026
	V	51	**49.840**	**ug/L**	2.578	388635	0.286
	Cr	52	**50.845**	**ug/L**	2.735	299628	0.228
	Cr	53		**ug/L**		140716	-0.005
	Mn	55	**52.478**	**ug/L**	2.726	495305	0.374
	Fe	57	**5390.262**	**ug/L**	1.552	952790	0.718
	Co	59	**51.854**	**ug/L**	1.390	377695	0.286
	Ni	60	**52.023**	**ug/L**	1.403	84481	0.064
	Cu	63		**ug/L**		198327	0.150
	Cu	65	**51.528**	**ug/L**	3.166	97426	0.074
	Zn	66	**51.797**	**ug/L**	1.830	68299	0.153
	Zn	67		**ug/L**		27032	0.021
	Zn	68		**ug/L**		51602	0.111
>	Ge	74		**ug/L**		446010	446009.871
	As	75	**49.551**	**ug/L**	2.610	65809	0.148
	Se	77		**ug/L**		9762	0.004
	Se	82	**49.148**	**ug/L**	1.481	6434	0.014
	Kr	83		**ug/L**		115	-0.000
	Sr	88	**53.505**	**ug/L**	3.063	792069	2.795
	Y	89		**ug/L**		100	0.000
	Mo	98	**50.517**	**ug/L**	3.359	197002	0.695
	Ag	107	**51.807**	**ug/L**	3.409	340138	1.200
	Cd	111	**50.879**	**ug/L**	2.461	85347	0.301
	Cd	114		**ug/L**		201679	0.712
>	In	115		**ug/L**		283445	283444.816
	Sn	120	**53.477**	**ug/L**	3.609	373009	1.315
	Sb	121	**51.910**	**ug/L**	2.742	319654	1.127
	Sb	123		**ug/L**		251869	0.888
	Ba	135		**ug/L**		91928	0.159
	Ba	137	**49.595**	**ug/L**	2.194	161755	0.279
	Ho	165		**ug/L**		67	0.000
>	Lu	175		**ug/L**		579745	579745.045
	Tl	205	**51.059**	**ug/L**	1.222	1343334	2.311
	Pb	208	**53.188**	**ug/L**	1.071	2169777	3.742
	Bi	209		**ug/L**		588	0.001
	Th	232	**51.502**	**ug/L**	1.659	2579873	4.449
	U	238	**53.261**	**ug/L**	2.037	2931595	5.057

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	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	104.857				
	Be	9	102.457				
	B	11	95.771				
	Na	23	101.033				
	Mg	24	101.222				
	Al	27	100.498				
	P	31	85.715				
	K	39	101.961				
	Ca	43	97.916				
>	Sc	45		93.5			
	Ti	47	97.380				
	V	51	99.679				
	Cr	52	101.691				
	Cr	53					
	Mn	55	104.956				
	Fe	57	107.805				
	Co	59	103.709				
	Ni	60	104.046				
	Cu	63					
	Cu	65	103.056				
	Zn	66	103.595				
	Zn	67					
	Zn	68					
>	Ge	74		94.9			
	As	75	99.102				
	Se	77					
	Se	82	98.295				
	Kr	83					
	Sr	88	107.010				
	Y	89					
	Mo	98	101.033				
	Ag	107	103.613				
	Cd	111	101.759				
	Cd	114					
>	In	115		95.7			
	Sn	120	106.953				
	Sb	121	103.820				
	Sb	123					
	Ba	135					
	Ba	137	99.190				
	Ho	165					
>	Lu	175		96.6			
	Tl	205	102.118				
	Pb	208	106.375				
	Bi	209					
	Th	232	103.004				
	U	238	106.523				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	P	31	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Sunday, January 03, 2010 19:39:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 12.093

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.070**	ug/L	6.993	208	0.000
	Be	9	**0.020**	ug/L	13.592	24	0.000
	B	11	**1.674**	ug/L	27.980	1394	0.001
	Na	23	**1.549**	ug/L	79.367	23687	0.005
	Mg	24	**-0.069**	ug/L	527.938	1667	-0.000
	Al	27	**0.362**	ug/L	94.181	5668	0.001
	P	31	**-2.503**	ug/L	86.431	5962	-0.001
	K	39	**-4.721**	ug/L	102.570	568431	-0.019
	Ca	43	**3.450**	ug/L	25.468	291	0.000
>	Sc	45		ug/L		1333740	1333740.396
	Ti	47	**-0.021**	ug/L	35.487	321	-0.000
	V	51	**-0.538**	ug/L	46.099	6824	-0.003
	Cr	52	**0.150**	ug/L	73.372	-758	0.001
	Cr	53		ug/L		109912	-0.029
	Mn	55	**-0.009**	ug/L	77.765	1012	-0.000
	Fe	57	**0.448**	ug/L	274.202	4980	0.000
	Co	59	**0.010**	ug/L	12.669	161	0.000
	Ni	60	**0.014**	ug/L	37.410	89	0.000
	Cu	63		ug/L		468	0.000
	Cu	65	**0.061**	ug/L	12.438	240	0.000
	Zn	66	**0.019**	ug/L	61.688	268	0.000
	Zn	67		ug/L		15454	-0.005
	Zn	68		ug/L		1619	-0.001
>	Ge	74		ug/L		451384	451383.714
	As	75	**0.336**	ug/L	118.470	60	0.001
	Se	77		ug/L		5436	-0.006
	Se	82	**0.194**	ug/L	44.783	0	0.000
	Kr	83		ug/L		102	-0.000
	Sr	88	**0.008**	ug/L	43.683	291	0.000
	Y	89		ug/L		58	-0.000
	Mo	98	**0.128**	ug/L	6.190	593	0.002
	Ag	107	**0.006**	ug/L	24.054	86	0.000
	Cd	111	**0.003**	ug/L	244.666	33	0.000
	Cd	114		ug/L		62	0.000
>	In	115		ug/L		285603	285602.840
	Sn	120	**0.588**	ug/L	8.555	4496	0.014
	Sb	121	**0.443**	ug/L	16.035	3147	0.010
	Sb	123		ug/L		2466	0.008
	Ba	135		ug/L		48	0.000
	Ba	137	**0.007**	ug/L	28.070	67	0.000
	Ho	165		ug/L		34	0.000
>	Lu	175		ug/L		578086	578085.887
	Tl	205	**0.768**	ug/L	13.189	23981	0.035
	Pb	208	**0.038**	ug/L	8.593	1946	0.003
	Bi	209		ug/L		167	-0.000
	Th	232	**0.124**	ug/L	10.019	7063	0.011
	U	238	**0.064**	ug/L	7.285	3906	0.006

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	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		94.4			
	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		96.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	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		96.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Sunday, January 03, 2010 20:28:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 8.101

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.670**	**ug/L**	0.737	101667	0.078
	Be	9	**50.250**	**ug/L**	3.242	22384	0.017
	B	11	**94.622**	**ug/L**	4.485	42932	0.033
	Na	23	**4427.060**	**ug/L**	12.804	19281819	14.826
	Mg	24	**4708.241**	**ug/L**	5.071	14540154	11.180
	Al	27	**4932.106**	**ug/L**	11.662	20784226	15.985
	P	31	**4238.786**	**ug/L**	2.140	1149492	0.879
	K	39	**5178.946**	**ug/L**	4.090	28196257	21.235
	Ca	43	**4822.867**	**ug/L**	0.541	63887	0.049
>	Sc	45		**ug/L**		1300735	1300735.320
	Ti	47	**48.148**	**ug/L**	2.935	33334	0.025
	V	51	**48.369**	**ug/L**	2.222	371788	0.278
	Cr	52	**49.853**	**ug/L**	1.582	289330	0.224
	Cr	53		**ug/L**		159996	0.012
	Mn	55	**51.506**	**ug/L**	3.250	478758	0.367
	Fe	57	**5292.430**	**ug/L**	2.742	921320	0.705
	Co	59	**51.108**	**ug/L**	1.529	366635	0.282
	Ni	60	**51.520**	**ug/L**	0.577	82404	0.063
	Cu	63		**ug/L**		194698	0.149
	Cu	65	**51.159**	**ug/L**	1.480	95280	0.073
	Zn	66	**50.544**	**ug/L**	0.662	65792	0.149
	Zn	67		**ug/L**		28696	0.026
	Zn	68		**ug/L**		50178	0.110
>	Ge	74		**ug/L**		440168	440168.049
	As	75	**49.090**	**ug/L**	1.826	64347	0.147
	Se	77		**ug/L**		11316	0.008
	Se	82	**49.719**	**ug/L**	1.214	6424	0.015
	Kr	83		**ug/L**		126	0.000
	Sr	88	**52.147**	**ug/L**	1.830	769974	2.724
	Y	89		**ug/L**		101	0.000
	Mo	98	**48.666**	**ug/L**	2.240	189289	0.670
	Ag	107	**50.876**	**ug/L**	1.477	333188	1.179
	Cd	111	**49.400**	**ug/L**	1.701	82643	0.292
	Cd	114		**ug/L**		196317	0.695
>	In	115		**ug/L**		282619	282618.804
	Sn	120	**50.832**	**ug/L**	2.231	353658	1.250
	Sb	121	**49.895**	**ug/L**	2.718	306388	1.083
	Sb	123		**ug/L**		240929	0.851
	Ba	135		**ug/L**		90765	0.158
	Ba	137	**49.355**	**ug/L**	0.700	159761	0.278
	Ho	165		**ug/L**		60	0.000
>	Lu	175		**ug/L**		575258	575258.206
	Tl	205	**47.160**	**ug/L**	2.325	1231526	2.134
	Pb	208	**52.532**	**ug/L**	0.244	2126706	3.696
	Bi	209		**ug/L**		588	0.001
	Th	232	**49.757**	**ug/L**	1.379	2473491	4.298
	U	238	**51.452**	**ug/L**	1.604	2810427	4.885

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	0.9999
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	0.9999
Y	89	Linear Thru Zero	
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	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	105.341				
	Be	9	100.501				
	B	11	94.622				
	Na	23	88.541				
	Mg	24	94.165				
	Al	27	97.665				
	P	31	84.776				
	K	39	103.579				
	Ca	43	96.457				
>	Sc	45		92.0			
	Ti	47	96.296				
	V	51	96.738				
	Cr	52	99.706				
	Cr	53					
	Mn	55	103.011				
	Fe	57	105.849				
	Co	59	102.215				
	Ni	60	103.040				
	Cu	63					
	Cu	65	102.319				
	Zn	66	101.088				
	Zn	67					
	Zn	68					
>	Ge	74		93.7			
	As	75	98.180				
	Se	77					
	Se	82	99.437				
	Kr	83					
	Sr	88	104.295				
	Y	89					
	Mo	98	97.333				
	Ag	107	101.752				
	Cd	111	98.800				
	Cd	114					
>	In	115		95.5			
	Sn	120	101.664				
	Sb	121	99.789				
	Sb	123					
	Ba	135					
	Ba	137	98.710				
	Ho	165					
>	Lu	175		95.8			
	Tl	205	94.321				
	Pb	208	105.064				
	Bi	209					
	Th	232	99.514				
	U	238	102.905				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Na	23	CCV is out of limits (+/- 10%)
QC Std 8	P	31	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Sunday, January 03, 2010 20:34:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 9.102

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.010**	**ug/L**	21.744	88	0.000
	Be	9	**0.007**	**ug/L**	90.368	18	0.000
	B	11	**1.594**	**ug/L**	30.197	1344	0.001
	Na	23	**0.417**	**ug/L**	74.768	18345	0.001
	Mg	24	**0.041**	**ug/L**	761.733	2000	0.000
	Al	27	**-0.166**	**ug/L**	218.569	3334	-0.001
	P	31	**-0.922**	**ug/L**	41.387	6335	-0.000
	K	39	**3.770**	**ug/L**	157.760	608019	0.015
	Ca	43	**1.652**	**ug/L**	159.116	263	0.000
>	Sc	45		**ug/L**		1318709	1318709.122
	Ti	47	**0.000**	**ug/L**	12106.485	333	0.000
	V	51	**-0.478**	**ug/L**	128.807	7156	-0.003
	Cr	52	**0.079**	**ug/L**	81.426	-1176	0.000
	Cr	53		**ug/L**		122724	-0.018
	Mn	55	**-0.010**	**ug/L**	36.403	987	-0.000
	Fe	57	**0.232**	**ug/L**	215.254	4888	0.000
	Co	59	**0.004**	**ug/L**	75.910	118	0.000
	Ni	60	**0.009**	**ug/L**	34.619	81	0.000
	Cu	63		**ug/L**		307	0.000
	Cu	65	**0.019**	**ug/L**	29.039	158	0.000
	Zn	66	**0.005**	**ug/L**	228.469	247	0.000
	Zn	67		**ug/L**		16670	-0.002
	Zn	68		**ug/L**		1759	-0.000
>	Ge	74		**ug/L**		447928	447927.558
	As	75	**0.177**	**ug/L**	146.213	-149	0.001
	Se	77		**ug/L**		6302	-0.004
	Se	82	**0.089**	**ug/L**	24.311	-14	0.000
	Kr	83		**ug/L**		119	0.000
	Sr	88	**0.002**	**ug/L**	7.979	215	0.000
	Y	89		**ug/L**		59	-0.000
	Mo	98	**0.034**	**ug/L**	23.951	227	0.000
	Ag	107	**0.003**	**ug/L**	42.589	70	0.000
	Cd	111	**0.001**	**ug/L**	336.940	30	0.000
	Cd	114		**ug/L**		38	0.000
>	In	115		**ug/L**		288959	288958.682
	Sn	120	**0.095**	**ug/L**	27.461	1045	0.002
	Sb	121	**0.233**	**ug/L**	26.012	1868	0.005
	Sb	123		**ug/L**		1499	0.004
	Ba	135		**ug/L**		34	-0.000
	Ba	137	**0.004**	**ug/L**	54.356	56	0.000
	Ho	165		**ug/L**		29	0.000
>	Lu	175		**ug/L**		586067	586066.777
	Tl	205	**0.882**	**ug/L**	17.428	27328	0.040
	Pb	208	**0.006**	**ug/L**	25.653	619	0.000
	Bi	209		**ug/L**		163	-0.000
	Th	232	**0.058**	**ug/L**	20.216	3815	0.005
	U	238	**0.009**	**ug/L**	21.474	847	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	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	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.3			
	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		95.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202006053
Sample Date/Time: Sunday, January 03, 2010 20:40:41
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 937496|1|ba|
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\1202006053.103

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.048**	ug/L	2.988	162	0.000
	Be	9	**0.007**	ug/L	90.254	18	0.000
	B	11	**0.616**	ug/L	10.844	894	0.000
	Na	23	**8.479**	ug/L	20.557	53434	0.028
	Mg	24	**0.693**	ug/L	46.002	4001	0.002
	Al	27	**0.633**	ug/L	122.127	6668	0.002
	P	31	**-1.134**	ug/L	73.138	6222	-0.000
	K	39	**9.373**	ug/L	29.057	633068	0.038
	Ca	43	**19.327**	ug/L	13.051	495	0.000
>	Sc	45		ug/L		1307207	1307206.685
	Ti	47	**0.373**	ug/L	5.699	587	0.000
	V	51	**-2.568**	ug/L	20.737	-8589	-0.015
	Cr	52	**-1.258**	ug/L	24.705	-8994	-0.006
	Cr	53		ug/L		313134	0.128
	Mn	55	**0.138**	ug/L	10.821	2355	0.001
	Fe	57	**1.313**	ug/L	53.157	5033	0.000
	Co	59	**0.001**	ug/L	106.874	92	0.000
	Ni	60	**0.035**	ug/L	16.406	120	0.000
	Cu	63		ug/L		1114	0.001
	Cu	65	**0.237**	ug/L	8.443	565	0.000
	Zn	66	**0.705**	ug/L	1.074	1131	0.002
	Zn	67		ug/L		67332	0.117
	Zn	68		ug/L		4926	0.007
>	Ge	74		ug/L		432510	432510.204
	As	75	**0.372**	ug/L	134.240	101	0.001
	Se	77		ug/L		17801	0.023
	Se	82	**0.090**	ug/L	70.209	-13	0.000
	Kr	83		ug/L		124	0.000
	Sr	88	**0.030**	ug/L	3.314	602	0.002
	Y	89		ug/L		65	0.000
	Mo	98	**0.008**	ug/L	56.755	116	0.000
	Ag	107	**0.001**	ug/L	154.090	52	0.000
	Cd	111	**-0.004**	ug/L	91.445	20	-0.000
	Cd	114		ug/L		20	-0.000
>	In	115		ug/L		270912	270911.753
	Sn	120	**0.199**	ug/L	20.830	1674	0.005
	Sb	121	**0.078**	ug/L	24.065	846	0.002
	Sb	123		ug/L		664	0.001
	Ba	135		ug/L		53	0.000
	Ba	137	**0.011**	ug/L	42.510	78	0.000
	Ho	165		ug/L		25	0.000
>	Lu	175		ug/L		567044	567043.755
	Tl	205	**0.283**	ug/L	6.717	11078	0.013
	Pb	208	**0.001**	ug/L	114.712	401	0.000
	Bi	209		ug/L		114	-0.000
	Th	232	**0.037**	ug/L	26.509	2697	0.003
	U	238	**-0.003**	ug/L	5.227	205	-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	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	0.9999
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	0.9999
Y	89	Linear Thru Zero	
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	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		92.5			
	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		92.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		91.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		94.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202006054
Sample Date/Time: Sunday, January 03, 2010 20:46:52
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 937496|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\1202006054.104

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.257**	ug/L	1.495	99360	0.076
	Be	9	**51.859**	ug/L	1.594	23201	0.018
	B	11	**95.546**	ug/L	4.061	43527	0.033
	Na	23	**1674.569**	ug/L	0.702	7341074	5.608
	Mg	24	**1850.520**	ug/L	2.910	5740377	4.394
	Al	27	**2138.848**	ug/L	6.254	9055507	6.932
	P	31	**1754.984**	ug/L	4.095	481602	0.364
	K	39	**2121.429**	ug/L	4.624	11941188	8.698
	Ca	43	**1960.488**	ug/L	1.058	26219	0.020
>	Sc	45		ug/L		1306069	1306069.417
	Ti	47	**43.087**	ug/L	2.249	29992	0.023
	V	51	**42.983**	ug/L	4.596	332924	0.247
	Cr	52	**47.395**	ug/L	2.340	276113	0.213
	Cr	53		ug/L		336609	0.146
	Mn	55	**49.708**	ug/L	0.749	464098	0.355
	Fe	57	**2134.067**	ug/L	0.593	375976	0.284
	Co	59	**49.446**	ug/L	1.610	356179	0.273
	Ni	60	**49.836**	ug/L	1.548	80041	0.061
	Cu	63		ug/L		192594	0.147
	Cu	65	**50.465**	ug/L	1.224	94387	0.072
	Zn	66	**56.870**	ug/L	1.422	72771	0.168
	Zn	67		ug/L		81665	0.150
	Zn	68		ug/L		56444	0.126
>	Ge	74		ug/L		432931	432931.046
	As	75	**48.874**	ug/L	1.624	63018	0.146
	Se	77		ug/L		21365	0.032
	Se	82	**50.039**	ug/L	1.587	6358	0.015
	Kr	83		ug/L		132	0.000
	Sr	88	**51.886**	ug/L	1.649	745494	2.710
	Y	89		ug/L		98	0.000
	Mo	98	**48.223**	ug/L	2.478	182535	0.664
	Ag	107	**51.358**	ug/L	3.887	327254	1.190
	Cd	111	**49.285**	ug/L	2.147	80233	0.292
	Cd	114		ug/L		190486	0.693
>	In	115		ug/L		274989	274989.414
	Sn	120	**50.241**	ug/L	1.103	340181	1.236
	Sb	121	**49.956**	ug/L	1.690	298549	1.084
	Sb	123		ug/L		234463	0.851
	Ba	135		ug/L		88508	0.154
	Ba	137	**48.167**	ug/L	2.678	155953	0.271
	Ho	165		ug/L		67	0.000
>	Lu	175		ug/L		575619	575619.407
	Tl	205	**45.432**	ug/L	3.509	1186750	2.056
	Pb	208	**51.863**	ug/L	2.659	2100120	3.649
	Bi	209		ug/L		1624115	2.822
	Th	232	**48.111**	ug/L	3.237	2392178	4.156
	U	238	**50.169**	ug/L	1.653	2741455	4.763

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	0.9999
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	0.9999
Y	89	Linear Thru Zero	
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	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		92.4			
	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		92.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		92.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202006055
Sample Date/Time: Sunday, January 03, 2010 21:05:29
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 937496|1|ba|
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\1202006055.107

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.201**	ug/L	3.834	458	0.000
	Be	9	**0.003**	ug/L	372.202	16	0.000
	B	11	**20.020**	ug/L	4.269	9602	0.007
	Na	23	**190.746**	ug/L	9.432	849645	0.639
	Mg	24	**17.410**	ug/L	9.300	55776	0.041
	Al	27	**97.711**	ug/L	10.191	417384	0.317
	P	31	**2.085**	ug/L	56.307	7084	0.000
	K	39	**203.887**	ug/L	1.812	1672871	0.836
	Ca	43	**92.400**	ug/L	2.554	1463	0.001
>	Sc	45		ug/L		1305189	1305188.667
	Ti	47	**2.289**	ug/L	2.858	1903	0.001
	V	51	**-4.126**	ug/L	28.863	-20256	-0.024
	Cr	52	**2.486**	ug/L	9.885	12929	0.011
	Cr	53		ug/L		402794	0.197
	Mn	55	**3.166**	ug/L	2.238	30538	0.023
	Fe	57	**90.941**	ug/L	1.542	20604	0.012
	Co	59	**0.079**	ug/L	3.046	651	0.000
	Ni	60	**1.503**	ug/L	2.271	2476	0.002
	Cu	63		ug/L		4829	0.003
	Cu	65	**1.183**	ug/L	2.271	2329	0.002
	Zn	66	**5.154**	ug/L	1.573	6763	0.015
	Zn	67		ug/L		71753	0.128
	Zn	68		ug/L		9286	0.017
>	Ge	74		ug/L		430170	430170.327
	As	75	**-0.233**	ug/L	188.194	-670	-0.001
	Se	77		ug/L		27503	0.046
	Se	82	**0.007**	ug/L	1442.057	-23	0.000
	Kr	83		ug/L		129	0.000
	Sr	88	**0.478**	ug/L	0.929	6972	0.025
	Y	89		ug/L		1506	0.005
	Mo	98	**0.087**	ug/L	2.036	413	0.001
	Ag	107	**0.006**	ug/L	27.903	81	0.000
	Cd	111	**0.003**	ug/L	88.200	31	0.000
	Cd	114		ug/L		46	0.000
>	In	115		ug/L		272272	272271.934
	Sn	120	**0.502**	ug/L	1.829	3714	0.012
	Sb	121	**0.013**	ug/L	10.139	467	0.000
	Sb	123		ug/L		369	0.000
	Ba	135		ug/L		4028	0.007
	Ba	137	**2.203**	ug/L	1.691	7097	0.012
	Ho	165		ug/L		141	0.000
>	Lu	175		ug/L		569038	569038.137
	Tl	205	**0.212**	ug/L	7.834	9281	0.010
	Pb	208	**0.181**	ug/L	0.777	7621	0.013
	Bi	209		ug/L		443	0.000
	Th	232	**0.032**	ug/L	3.276	2426	0.003
	U	238	**0.006**	ug/L	2.526	703	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	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	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		92.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		91.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		92.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		94.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202006056
Sample Date/Time: Sunday, January 03, 2010 21:11:40
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 937496|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\1202006056.108

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.055**	**ug/L**	1.216	100161	0.076
	Be	9	**51.597**	**ug/L**	2.412	23365	0.018
	B	11	**114.857**	**ug/L**	2.740	52844	0.040
	Na	23	**2029.581**	**ug/L**	6.099	9004841	6.797
	Mg	24	**1873.785**	**ug/L**	3.197	5883013	4.449
	Al	27	**2072.312**	**ug/L**	6.068	8882356	6.717
	P	31	**1732.758**	**ug/L**	2.495	481439	0.359
	K	39	**2218.165**	**ug/L**	2.362	12611216	9.095
	Ca	43	**2055.231**	**ug/L**	1.693	27807	0.021
>	Sc	45		**ug/L**		1321971	1321970.935
	Ti	47	**45.646**	**ug/L**	0.882	32143	0.024
	V	51	**43.021**	**ug/L**	3.233	337294	0.247
	Cr	52	**53.888**	**ug/L**	0.162	318024	0.242
	Cr	53		**ug/L**		376095	0.173
	Mn	55	**52.326**	**ug/L**	0.632	494432	0.373
	Fe	57	**2297.114**	**ug/L**	2.594	409245	0.306
	Co	59	**50.901**	**ug/L**	1.685	371152	0.281
	Ni	60	**51.735**	**ug/L**	1.226	84098	0.064
	Cu	63		**ug/L**		200816	0.152
	Cu	65	**51.912**	**ug/L**	1.777	98261	0.074
	Zn	66	**54.777**	**ug/L**	1.037	69610	0.161
	Zn	67		**ug/L**		82229	0.152
	Zn	68		**ug/L**		54351	0.122
>	Ge	74		**ug/L**		429866	429865.861
	As	75	**78.035**	**ug/L**	1.841	100125	0.234
	Se	77		**ug/L**		23964	0.038
	Se	82	**20.173**	**ug/L**	0.683	2531	0.006
	Kr	83		**ug/L**		139	0.000
	Sr	88	**53.817**	**ug/L**	2.186	755157	2.811
	Y	89		**ug/L**		1578	0.006
	Mo	98	**51.045**	**ug/L**	2.536	188678	0.702
	Ag	107	**53.085**	**ug/L**	1.154	330428	1.230
	Cd	111	**10.714**	**ug/L**	3.428	17052	0.063
	Cd	114		**ug/L**		38025	0.141
>	In	115		**ug/L**		268601	268600.611
	Sn	120	**52.531**	**ug/L**	2.387	347358	1.292
	Sb	121	**194.860**	**ug/L**	2.518	1136105	4.230
	Sb	123		**ug/L**		916344	3.411
	Ba	135		**ug/L**		94113	0.165
	Ba	137	**52.109**	**ug/L**	1.156	167260	0.293
	Ho	165		**ug/L**		442	0.001
>	Lu	175		**ug/L**		570457	570456.862
	Tl	205	**83.355**	**ug/L**	7.452	2154625	3.772
	Pb	208	**42.998**	**ug/L**	1.579	1726067	3.025
	Bi	209		**ug/L**		764	0.001
	Th	232	**48.365**	**ug/L**	3.827	2383749	4.178
	U	238	**50.239**	**ug/L**	0.791	2721112	4.770

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	0.9999
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	0.9999
Y	89	Linear Thru Zero	
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	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.5			
	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		91.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202006057
Sample Date/Time: Sunday, January 03, 2010 21:17:49
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 937496|5|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\1202006057.109

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.038**	ug/L	12.060	141	0.000
	Be	9	**0.006**	ug/L	219.801	17	0.000
	B	11	**5.135**	ug/L	6.750	2919	0.002
	Na	23	**37.324**	ug/L	14.068	179467	0.125
	Mg	24	**3.393**	ug/L	24.913	12339	0.008
	Al	27	**19.063**	ug/L	11.097	84585	0.062
	P	31	**0.349**	ug/L	509.733	6611	0.000
	K	39	**31.436**	ug/L	5.093	749496	0.129
	Ca	43	**23.271**	ug/L	3.472	547	0.000
>	Sc	45		ug/L		1304185	1304185.338
	Ti	47	**0.433**	ug/L	11.345	627	0.000
	V	51	**-0.468**	ug/L	151.264	7176	-0.003
	Cr	52	**1.110**	ug/L	15.953	4869	0.005
	Cr	53		ug/L		210670	0.050
	Mn	55	**0.513**	ug/L	4.457	5842	0.004
	Fe	57	**14.768**	ug/L	4.412	7359	0.002
	Co	59	**0.016**	ug/L	10.424	203	0.000
	Ni	60	**0.348**	ug/L	2.928	623	0.000
	Cu	63		ug/L		1288	0.001
	Cu	65	**0.236**	ug/L	3.730	562	0.000
	Zn	66	**0.993**	ug/L	1.358	1492	0.003
	Zn	67		ug/L		26013	0.021
	Zn	68		ug/L		3294	0.003
>	Ge	74		ug/L		430966	430966.039
	As	75	**-0.151**	ug/L	170.342	-569	-0.000
	Se	77		ug/L		13274	0.013
	Se	82	**0.045**	ug/L	203.679	-19	0.000
	Kr	83		ug/L		112	-0.000
	Sr	88	**0.090**	ug/L	1.512	1483	0.005
	Y	89		ug/L		327	0.001
	Mo	98	**0.029**	ug/L	16.896	199	0.000
	Ag	107	**0.001**	ug/L	88.956	50	0.000
	Cd	111	**-0.005**	ug/L	72.170	19	-0.000
	Cd	114		ug/L		31	-0.000
>	In	115		ug/L		276877	276877.172
	Sn	120	**0.109**	ug/L	4.689	1095	0.003
	Sb	121	**0.199**	ug/L	24.204	1591	0.004
	Sb	123		ug/L		1233	0.003
	Ba	135		ug/L		809	0.001
	Ba	137	**0.420**	ug/L	0.490	1401	0.002
	Ho	165		ug/L		51	0.000
>	Lu	175		ug/L		574759	574758.576
	Tl	205	**2.426**	ug/L	18.109	66993	0.110
	Pb	208	**0.035**	ug/L	3.378	1814	0.002
	Bi	209		ug/L		182	0.000
	Th	232	**0.027**	ug/L	29.857	2223	0.002
	U	238	**0.000**	ug/L	825.719	370	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	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	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		92.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		91.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		93.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.7			
	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

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Sunday, January 03, 2010 21:23:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 8.110

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**54.665**	**ug/L**	1.381	100954	0.081
	Be	9	**52.535**	**ug/L**	0.970	22396	0.018
	B	11	**94.494**	**ug/L**	1.624	41035	0.032
	Na	23	**4257.176**	**ug/L**	2.453	17765242	14.258
	Mg	24	**4503.960**	**ug/L**	2.983	13311736	10.695
	Al	27	**4558.806**	**ug/L**	3.094	18387448	14.775
	P	31	**4195.219**	**ug/L**	2.290	1088361	0.870
	K	39	**5304.701**	**ug/L**	9.661	27608835	21.751
	Ca	43	**4897.980**	**ug/L**	0.832	62082	0.050
>	Sc	45		**ug/L**		1244614	1244614.189
	Ti	47	**48.215**	**ug/L**	3.326	31939	0.025
	V	51	**49.408**	**ug/L**	3.595	363118	0.284
	Cr	52	**50.429**	**ug/L**	3.166	280002	0.226
	Cr	53		**ug/L**		153052	0.012
	Mn	55	**52.270**	**ug/L**	1.606	464939	0.373
	Fe	57	**5334.489**	**ug/L**	1.231	888640	0.710
	Co	59	**51.244**	**ug/L**	3.314	351653	0.283
	Ni	60	**51.724**	**ug/L**	1.370	79153	0.064
	Cu	63		**ug/L**		186718	0.150
	Cu	65	**50.776**	**ug/L**	1.495	90482	0.073
	Zn	66	**49.853**	**ug/L**	2.299	63023	0.147
	Zn	67		**ug/L**		26746	0.023
	Zn	68		**ug/L**		47839	0.107
>	Ge	74		**ug/L**		427627	427627.258
	As	75	**48.099**	**ug/L**	2.876	61227	0.144
	Se	77		**ug/L**		11011	0.008
	Se	82	**50.287**	**ug/L**	2.739	6310	0.015
	Kr	83		**ug/L**		115	0.000
	Sr	88	**50.957**	**ug/L**	2.579	736671	2.662
	Y	89		**ug/L**		102	0.000
	Mo	98	**48.727**	**ug/L**	2.482	185592	0.670
	Ag	107	**50.665**	**ug/L**	2.811	324867	1.174
	Cd	111	**49.460**	**ug/L**	1.444	81026	0.293
	Cd	114		**ug/L**		190133	0.687
>	In	115		**ug/L**		276732	276732.281
	Sn	120	**50.904**	**ug/L**	1.012	346837	1.252
	Sb	121	**50.169**	**ug/L**	1.654	301706	1.089
	Sb	123		**ug/L**		236649	0.854
	Ba	135		**ug/L**		87019	0.151
	Ba	137	**48.107**	**ug/L**	4.467	156099	0.271
	Ho	165		**ug/L**		55	0.000
>	Lu	175		**ug/L**		577038	577037.634
	Tl	205	**46.438**	**ug/L**	1.708	1216637	2.102
	Pb	208	**51.376**	**ug/L**	3.019	2085400	3.615
	Bi	209		**ug/L**		590	0.001
	Th	232	**47.973**	**ug/L**	1.204	2391951	4.144
	U	238	**49.553**	**ug/L**	2.259	2714178	4.705

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	0.9999
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	0.9999
Y	89	Linear Thru Zero	
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	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	109.329				
	Be	9	105.069				
	B	11	94.494				
	Na	23	85.144				
	Mg	24	90.079				
	Al	27	90.273				
	P	31	83.904				
	K	39	106.094				
	Ca	43	97.960				
>	Sc	45		88.1			
	Ti	47	96.429				
	V	51	98.816				
	Cr	52	100.858				
	Cr	53					
	Mn	55	104.540				
	Fe	57	106.690				
	Co	59	102.487				
	Ni	60	103.449				
	Cu	63					
	Cu	65	101.553				
	Zn	66	99.705				
	Zn	67					
	Zn	68					
>	Ge	74		91.0			
	As	75	96.198				
	Se	77					
	Se	82	100.575				
	Kr	83					
	Sr	88	101.914				
	Y	89					
	Mo	98	97.453				
	Ag	107	101.331				
	Cd	111	98.920				
	Cd	114					
>	In	115		93.5			
	Sn	120	101.809				
	Sb	121	100.338				
	Sb	123					
	Ba	135					
	Ba	137	96.213				
	Ho	165					
>	Lu	175		96.1			
	Tl	205	92.875				
	Pb	208	102.752				
	Bi	209					
	Th	232	95.947				
	U	238	99.107				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Na	23	CCV is out of limits (+/- 10%)
QC Std 8	P	31	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Sunday, January 03, 2010 21:30:05
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 9.111

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.016**	**ug/L**	23.410	95	0.000
	Be	9	**0.014**	**ug/L**	52.113	20	0.000
	B	11	**1.768**	**ug/L**	28.999	1351	0.001
	Na	23	**-0.459**	**ug/L**	265.514	13674	-0.002
	Mg	24	**0.072**	**ug/L**	454.137	2000	0.000
	Al	27	**0.282**	**ug/L**	80.735	5001	0.001
	P	31	**-2.025**	**ug/L**	38.093	5734	-0.000
	K	39	**2.514**	**ug/L**	175.414	571551	0.010
	Ca	43	**5.940**	**ug/L**	34.093	305	0.000
>	Sc	45		**ug/L**		1253674	1253673.646
	Ti	47	**0.004**	**ug/L**	1299.825	318	0.000
	V	51	**-0.637**	**ug/L**	43.352	5681	-0.004
	Cr	52	**0.203**	**ug/L**	50.599	-414	0.001
	Cr	53		**ug/L**		118805	-0.016
	Mn	55	**-0.003**	**ug/L**	127.834	1000	-0.000
	Fe	57	**1.129**	**ug/L**	107.817	4797	0.000
	Co	59	**0.003**	**ug/L**	48.107	103	0.000
	Ni	60	**0.008**	**ug/L**	43.015	75	0.000
	Cu	63		**ug/L**		289	0.000
	Cu	65	**0.013**	**ug/L**	40.702	140	0.000
	Zn	66	**0.005**	**ug/L**	178.604	235	0.000
	Zn	67		**ug/L**		15712	-0.002
	Zn	68		**ug/L**		1678	-0.000
>	Ge	74		**ug/L**		424110	424109.894
	As	75	**0.430**	**ug/L**	54.783	176	0.001
	Se	77		**ug/L**		6302	-0.003
	Se	82	**0.159**	**ug/L**	63.663	-4	0.000
	Kr	83		**ug/L**		108	-0.000
	Sr	88	**0.003**	**ug/L**	41.577	224	0.000
	Y	89		**ug/L**		61	0.000
	Mo	98	**0.034**	**ug/L**	35.500	216	0.000
	Ag	107	**0.004**	**ug/L**	26.396	69	0.000
	Cd	111	**0.002**	**ug/L**	181.181	30	0.000
	Cd	114		**ug/L**		46	0.000
>	In	115		**ug/L**		275832	275831.809
	Sn	120	**0.099**	**ug/L**	22.306	1031	0.002
	Sb	121	**0.256**	**ug/L**	19.824	1927	0.006
	Sb	123		**ug/L**		1516	0.004
	Ba	135		**ug/L**		40	0.000
	Ba	137	**0.002**	**ug/L**	39.977	50	0.000
	Ho	165		**ug/L**		31	0.000
>	Lu	175		**ug/L**		569539	569539.123
	Tl	205	**1.475**	**ug/L**	13.084	41819	0.067
	Pb	208	**0.006**	**ug/L**	21.923	628	0.000
	Bi	209		**ug/L**		163	-0.000
	Th	232	**0.058**	**ug/L**	23.302	3724	0.005
	U	238	**0.009**	**ug/L**	17.821	860	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	0.9999
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	0.9999
Y	89	Linear Thru Zero	
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	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		88.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		90.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		93.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		94.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 9	Tl	205CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 243629001
Sample Date/Time: Sunday, January 03, 2010 21:48:39
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 937496|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\243629001.114

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.107**	ug/L	7.474	274	0.000
	Be	9	**-0.000**	ug/L	19513.387	15	-0.000
	B	11	**18.659**	ug/L	0.896	8932	0.006
	Na	23	**66.092**	ug/L	1.128	303184	0.221
	Mg	24	**3.972**	ug/L	34.945	14007	0.009
	Al	27	**11.843**	ug/L	3.751	53768	0.038
	P	31	**0.677**	ug/L	142.291	6658	0.000
	K	39	**127.417**	ug/L	10.667	1256066	0.522
	Ca	43	**36.844**	ug/L	0.834	722	0.000
>	Sc	45		ug/L		1296613	1296613.409
	Ti	47	**0.774**	ug/L	6.402	856	0.000
	V	51	**-7.499**	ug/L	24.599	-45393	-0.043
	Cr	52	**-0.148**	ug/L	72.650	-2486	-0.001
	Cr	53		ug/L		411128	0.206
	Mn	55	**0.438**	ug/L	2.091	5110	0.003
	Fe	57	**8.004**	ug/L	12.102	6147	0.001
	Co	59	**0.007**	ug/L	10.924	136	0.000
	Ni	60	**0.221**	ug/L	8.736	416	0.000
	Cu	63		ug/L		3874	0.003
	Cu	65	**0.975**	ug/L	2.253	1927	0.001
	Zn	66	**1.481**	ug/L	4.074	2101	0.004
	Zn	67		ug/L		68851	0.121
	Zn	68		ug/L		5765	0.009
>	Ge	74		ug/L		428694	428693.787
	As	75	**-1.049**	ug/L	97.814	-1725	-0.003
	Se	77		ug/L		29235	0.050
	Se	82	**0.291**	ug/L	44.541	12	0.000
	Kr	83		ug/L		95	-0.000
	Sr	88	**0.120**	ug/L	1.310	1852	0.006
	Y	89		ug/L		183	0.000
	Mo	98	**-0.001**	ug/L	278.557	81	-0.000
	Ag	107	**0.002**	ug/L	46.219	59	0.000
	Cd	111	**-0.001**	ug/L	481.731	24	-0.000
	Cd	114		ug/L		46	0.000
>	In	115		ug/L		267520	267520.220
	Sn	120	**0.162**	ug/L	1.153	1411	0.004
	Sb	121	**-0.006**	ug/L	44.721	350	-0.000
	Sb	123		ug/L		290	-0.000
	Ba	135		ug/L		701	0.001
	Ba	137	**0.393**	ug/L	4.340	1283	0.002
	Ho	165		ug/L		37	0.000
>	Lu	175		ug/L		561803	561802.706
	Tl	205	**0.275**	ug/L	2.776	10773	0.012
	Pb	208	**0.064**	ug/L	0.753	2916	0.005
	Bi	209		ug/L		116	-0.000
	Th	232	**0.005**	ug/L	25.789	1076	0.000
	U	238	**0.000**	ug/L	329.128	360	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	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	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		91.8			
	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		91.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		93.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Sunday, January 03, 2010 22:07:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 8.117

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**55.419**	**ug/L**	3.019	98446	0.082
	Be	9	**52.258**	**ug/L**	4.036	21427	0.018
	B	11	**95.508**	**ug/L**	1.997	39893	0.033
	Na	23	**4325.369**	**ug/L**	6.997	17342072	14.486
	Mg	24	**4923.343**	**ug/L**	7.803	13995807	11.691
	Al	27	**4724.130**	**ug/L**	5.708	18326693	15.311
	P	31	**4185.519**	**ug/L**	2.490	1044661	0.868
	K	39	**5087.719**	**ug/L**	4.500	25503906	20.861
	Ca	43	**4797.898**	**ug/L**	1.326	58508	0.049
>	Sc	45		**ug/L**		1197621	1197620.585
	Ti	47	**48.699**	**ug/L**	3.151	31031	0.026
	V	51	**48.760**	**ug/L**	2.593	344916	0.280
	Cr	52	**50.321**	**ug/L**	2.733	268808	0.226
	Cr	53		**ug/L**		157816	0.021
	Mn	55	**52.855**	**ug/L**	2.380	452311	0.377
	Fe	57	**5487.318**	**ug/L**	3.882	878973	0.731
	Co	59	**51.772**	**ug/L**	3.556	341767	0.285
	Ni	60	**52.052**	**ug/L**	3.068	76617	0.064
	Cu	63		**ug/L**		179746	0.150
	Cu	65	**51.784**	**ug/L**	3.321	88758	0.074
	Zn	66	**50.012**	**ug/L**	3.155	60993	0.147
	Zn	67		**ug/L**		26819	0.026
	Zn	68		**ug/L**		46184	0.108
>	Ge	74		**ug/L**		412649	412648.596
	As	75	**48.464**	**ug/L**	4.095	59535	0.145
	Se	77		**ug/L**		11238	0.009
	Se	82	**49.500**	**ug/L**	1.785	5994	0.015
	Kr	83		**ug/L**		113	0.000
	Sr	88	**51.570**	**ug/L**	0.825	714338	2.694
	Y	89		**ug/L**		91	0.000
	Mo	98	**49.347**	**ug/L**	1.084	180063	0.679
	Ag	107	**51.438**	**ug/L**	1.404	316002	1.192
	Cd	111	**50.116**	**ug/L**	2.015	78645	0.297
	Cd	114		**ug/L**		185052	0.698
>	In	115		**ug/L**		265094	265094.180
	Sn	120	**51.485**	**ug/L**	1.744	336028	1.266
	Sb	121	**50.694**	**ug/L**	0.278	292063	1.100
	Sb	123		**ug/L**		229292	0.864
	Ba	135		**ug/L**		86251	0.154
	Ba	137	**48.026**	**ug/L**	3.423	150998	0.270
	Ho	165		**ug/L**		53	0.000
>	Lu	175		**ug/L**		559101	559100.530
	Tl	205	**42.261**	**ug/L**	3.869	1073202	1.913
	Pb	208	**52.262**	**ug/L**	2.772	2055289	3.677
	Bi	209		**ug/L**		607	0.001
	Th	232	**49.361**	**ug/L**	2.558	2384101	4.264
	U	238	**50.312**	**ug/L**	3.414	2669300	4.777

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	0.9999
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	0.9999
Y	89	Linear Thru Zero	
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	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	110.837				
	Be	9	104.517				
	B	11	95.508				
	Na	23	86.507				
	Mg	24	98.467				
	Al	27	93.547				
	P	31	83.710				
	K	39	101.754				
	Ca	43	95.958				
>	Sc	45		84.7			
	Ti	47	97.398				
	V	51	97.521				
	Cr	52	100.642				
	Cr	53					
	Mn	55	105.710				
	Fe	57	109.746				
	Co	59	103.543				
	Ni	60	104.104				
	Cu	63					
	Cu	65	103.567				
	Zn	66	100.023				
	Zn	67					
	Zn	68					
>	Ge	74		87.8			
	As	75	96.929				
	Se	77					
	Se	82	99.000				
	Kr	83					
	Sr	88	103.140				
	Y	89					
	Mo	98	98.694				
	Ag	107	102.876				
	Cd	111	100.232				
	Cd	114					
>	In	115		89.5			
	Sn	120	102.970				
	Sb	121	101.387				
	Sb	123					
	Ba	135					
	Ba	137	96.052				
	Ho	165					
>	Lu	175		93.1			
	Tl	205	84.522				
	Pb	208	104.524				
	Bi	209					
	Th	232	98.722				
	U	238	100.624				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 8	Li	7CCV is out of limits (+/- 10%)
QC Std 8	Na	23CCV is out of limits (+/- 10%)
QC Std 8	P	31CCV is out of limits (+/- 10%)
QC Std 8	Tl	205CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Sunday, January 03, 2010 22:13:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 9.118

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.004**	**ug/L**	60.869	71	0.000
	Be	9	**0.012**	**ug/L**	52.297	19	0.000
	B	11	**1.665**	**ug/L**	29.590	1276	0.001
	Na	23	**-0.812**	**ug/L**	233.940	12007	-0.003
	Mg	24	**-0.365**	**ug/L**	54.985	667	-0.001
	Al	27	**-0.022**	**ug/L**	1251.087	3667	-0.000
	P	31	**-0.759**	**ug/L**	63.222	5911	-0.000
	K	39	**4.000**	**ug/L**	211.388	564290	0.016
	Ca	43	**4.698**	**ug/L**	26.950	282	0.000
>	Sc	45		**ug/L**		1221863	1221863.107
	Ti	47	**-0.021**	**ug/L**	209.606	294	-0.000
	V	51	**-0.736**	**ug/L**	108.870	4814	-0.004
	Cr	52	**0.143**	**ug/L**	34.461	-745	0.001
	Cr	53		**ug/L**		122610	-0.011
	Mn	55	**0.000**	**ug/L**	983.537	1005	0.000
	Fe	57	**1.640**	**ug/L**	105.980	4755	0.000
	Co	59	**0.003**	**ug/L**	45.784	103	0.000
	Ni	60	**0.007**	**ug/L**	137.160	71	0.000
	Cu	63		**ug/L**		287	0.000
	Cu	65	**0.021**	**ug/L**	54.090	150	0.000
	Zn	66	**0.011**	**ug/L**	295.187	239	0.000
	Zn	67		**ug/L**		15843	-0.001
	Zn	68		**ug/L**		1759	-0.000
>	Ge	74		**ug/L**		418641	418641.475
	As	75	**0.640**	**ug/L**	19.036	436	0.002
	Se	77		**ug/L**		6523	-0.002
	Se	82	**0.193**	**ug/L**	78.887	-0	0.000
	Kr	83		**ug/L**		104	-0.000
	Sr	88	**0.002**	**ug/L**	48.066	203	0.000
	Y	89		**ug/L**		54	-0.000
	Mo	98	**0.037**	**ug/L**	24.767	221	0.001
	Ag	107	**0.004**	**ug/L**	48.336	72	0.000
	Cd	111	**0.003**	**ug/L**	184.458	31	0.000
	Cd	114		**ug/L**		46	0.000
>	In	115		**ug/L**		268613	268613.106
	Sn	120	**0.104**	**ug/L**	15.704	1031	0.003
	Sb	121	**0.215**	**ug/L**	27.470	1634	0.005
	Sb	123		**ug/L**		1339	0.004
	Ba	135		**ug/L**		39	0.000
	Ba	137	**0.001**	**ug/L**	117.343	46	0.000
	Ho	165		**ug/L**		29	0.000
>	Lu	175		**ug/L**		562568	562568.061
	Tl	205	**1.477**	**ug/L**	15.538	41352	0.067
	Pb	208	**0.006**	**ug/L**	12.473	605	0.000
	Bi	209		**ug/L**		150	-0.000
	Th	232	**0.056**	**ug/L**	28.662	3557	0.005
	U	238	**0.008**	**ug/L**	19.780	804	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	0.9999
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	0.9999
Y	89	Linear Thru Zero	
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	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		86.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		89.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		93.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 9	Tl	205	CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Monday, January 04, 2010 03:00:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: c:\elandata\Dataset\100103\Blank.165

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		**ug/L**		596146	
⌊	Tl	205		**ug/L**		7880	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175					
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Monday, January 04, 2010 03:05:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: c:\elandata\Dataset\100103\Standard 1.166

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		**ug/L**		605505	605504.907
	Tl	205	**10.000**	**ug/L**	0.671	277145	0.444

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175					
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Monday, January 04, 2010 03:09:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: c:\elandata\Dataset\100103\Standard 2.167

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		596316	596315.906
	Tl	205	99.932	ug/L	0.643	2488601	4.160

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175					
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Monday, January 04, 2010 03:14:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 1.168

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		598574	598573.597
⌊	Tl	205	50.602	ug/L	2.935	1268364	2.106

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		100.4			
⌊	Tl	205	101.204				

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: Monday, January 04, 2010 03:18:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 2.169

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		601493	601493.184
⌊	Tl	205	0.280	ug/L	2.707	14961	0.012

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		100.9			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Monday, January 04, 2010 03:23:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 3.170

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		**ug/L**		599565	599565.431
	Tl	205	**1.079**	**ug/L**	3.158	34851	0.045

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		100.6			
	Tl	205	107.888				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Monday, January 04, 2010 03:27:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 4.171

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		**ug/L**		534642	534642.011
⌊	Tl	205	**0.001**	**ug/L**	1094.628	7082	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		89.7			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Monday, January 04, 2010 03:32:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 5.172

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		**ug/L**		537331	537330.943
⌊	Tl	205	**19.883**	**ug/L**	1.610	451842	0.828

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈>	Lu	175		90.1			
⌊	Tl	205	99.415				

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: Monday, January 04, 2010 03:36:36
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 6.173

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		589465	589465.449
⌊	Tl	205	49.939	ug/L	1.296	1233125	2.079

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		98.9			
⌊	Tl	205	99.878				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, January 04, 2010 03:41:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 7.174

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		**ug/L**		599306	599305.501
	Tl	205	**0.178**	**ug/L**	4.831	12370	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		100.5			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Monday, January 04, 2010 04:17:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 8.182

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		596539	596538.623
	Tl	205	47.359	ug/L	1.528	1183986	1.971

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		100.1			
	Tl	205	94.718				

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: Monday, January 04, 2010 04:21:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 9.183

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		**ug/L**		603204	603204.213
⌊	Tl	205	**0.211**	**ug/L**	4.952	13275	0.009

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		101.2			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202006053
Sample Date/Time: Monday, January 04, 2010 04:26:24
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 937496|1|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: c:\elandata\Dataset\100103\1202006053.184

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		578748	578747.932
	Tl	205	-0.027	ug/L	14.025	7001	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		97.1			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202006054
Sample Date/Time: Monday, January 04, 2010 04:30:58
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 937496|1|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: c:\elandata\Dataset\100103\1202006054.185

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		**ug/L**		574321	574320.510
⌊	Tl	205	**43.679**	**ug/L**	0.096	1051865	1.818

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		96.3			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202006055
Sample Date/Time: Monday, January 04, 2010 04:44:42
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 937496|1|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: c:\elandata\Dataset\100103\1202006055.188

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		575607	575606.900
⌊	Tl	205	-0.062	ug/L	8.957	6112	-0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		96.6			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202006056
Sample Date/Time: Monday, January 04, 2010 04:49:17
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 937496|1|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: c:\elandata\Dataset\100103\1202006056.189

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		580468	580468.333
⌊	Tl	205	81.733	ug/L	1.225	1982568	3.402

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		97.4			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202006057
Sample Date/Time: Monday, January 04, 2010 04:53:50
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 937496|5|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: c:\elandata\Dataset\100103\1202006057.190

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		600864	600863.575
	Tl	205	0.650	ug/L	0.793	24210	0.027

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		100.8			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Monday, January 04, 2010 04:58:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 8.191

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		596768	596767.600
	Tl	205	47.212	ug/L	0.859	1180761	1.965

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		100.1			
	Tl	205	94.424				

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: Monday, January 04, 2010 05:02:53
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 9.192

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		604894	604894.389
	Tl	205	0.327	ug/L	1.303	16231	0.014

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		101.5			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 243629001
Sample Date/Time: Monday, January 04, 2010 05:16:35
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 937496|1|baj
Method File: c:\elandata\Method\tl only.mth
Dataset File: c:\elandata\Dataset\100103\243629001.195

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		577575	577575.182
⌊	Tl	205	-0.093	ug/L	5.908	5391	-0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		96.9			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Monday, January 04, 2010 05:30:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 8.198

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		593405	593405.412
⌊	Tl	205	45.103	ug/L	1.547	1121952	1.878

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		99.5			
⌊	Tl	205	90.207				

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: Monday, January 04, 2010 05:34:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl only.mth
Dataset File: c:\elandata\Dataset\100103\QC Std 9.199

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		**ug/L**		598966	598965.639
⌊	Tl	205	**0.211**	**ug/L**	2.239	13181	0.009

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		100.5			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Monday, January 04, 2010 10:41:22
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1649
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	3512.2	3512.232	128.283	3.7
	Mg	24.0	47233.8	47233.766	549.550	1.2
	Co	58.9	91025.3	91025.285	607.526	0.7
	Rh	102.9	159862.9	159862.908	854.487	0.5
	In	114.9	235956.6	235956.608	2146.407	0.9
	Pb	208.0	253887.3	253887.313	2157.230	0.8
⌈>	Ba	137.9	224624.4	224624.356	2155.436	1.0
⌊	Ba++	69.0	4388.7	0.020	0.000	1.4
⌈>	Ce	139.9	272378.1	272378.061	2256.038	0.8
⌊	CeO	155.9	6598.6	0.024	0.000	0.5
	Bkgd	220.0	17.5	17.500	4.373	25.0

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
7.00	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	17	7.3	4566.4
Co	59	17	8.3	89391.5
In	115	17	9.5	240006.3

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	599	2065	0.576
Be	9.0	9.0	2054	2070	0.606
Mg	24.0	24.0	5691	2070	0.612
Mg	25.0	25.0	5943	2070	0.610
Mg	26.0	25.9	6158	2070	0.637
Co	58.9	58.9	14184	2105	0.603
Rh	102.9	102.9	24870	2165	0.605
In	114.9	114.9	27796	2185	0.592
Ce	139.9	139.9	33868	2200	0.621
Pb	206.0	206.0	49948	2270	0.640
Pb	207.0	207.0	50171	2235	0.676
Pb	208.0	208.0	50439	2260	0.704
U	238.1	238.0	57722	2275	0.705

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Monday, January 04, 2010 16:23:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100104\Blank.114

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		586177	
	U	238		ug/L		1220	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Monday, January 04, 2010 16:24:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100104\Standard 1.115

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		585004	585004.384
	U	238	10.000	ug/L	1.183	562031	0.959

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Monday, January 04, 2010 16:26:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100104\Standard 2.116

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		583259	583258.924
	U	238	99.822	ug/L	0.380	4737625	8.121

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Monday, January 04, 2010 16:28:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100104\QC Std 1.117

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		583537	583537.048
	U	238	53.585	ug/L	2.136	2544741	4.359

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		99.5			
	U	238	107.171				

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: Monday, January 04, 2010 16:29:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100104\QC Std 2.118

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		588345	588345.375
	U	238	0.025	ug/L	0.731	2398	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		100.4			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Monday, January 04, 2010 16:31:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100104\QC Std 3.119

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		**ug/L**		590298	590297.995
⌊	U	238	**0.257**	**ug/L**	1.625	13592	0.021

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		100.7			
⌊	U	238	128.713				

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: Monday, January 04, 2010 16:33:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100104\QC Std 4.120

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		522438	522438.443
⌊	U	238	-0.017	ug/L	0.827	345	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		89.1			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Monday, January 04, 2010 16:34:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100104\QC Std 5.121

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		520311	520311.255
⌊	U	238	**23.875**	ug/L	0.369	1011667	1.942

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		88.8			
⌊	U	238	119.374				

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: Monday, January 04, 2010 16:36:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100104\QC Std 6.122

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		**ug/L**		580507	580507.106
⌊	U	238	**52.699**	**ug/L**	0.348	2489978	4.287

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		99.0			
⌊	U	238	105.397				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, January 04, 2010 16:38:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100104\QC Std 7.123

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		**ug/L**		595661	595660.731
⌊	U	238	**0.018**	**ug/L**	2.469	2134	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		101.6			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202006053
Sample Date/Time: Monday, January 04, 2010 16:39:50
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 937496|1|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100104\1202006053.124

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		**ug/L**		570389	570389.292
	U	238	**-0.019**	**ug/L**	2.904	311	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		97.3			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202006054
Sample Date/Time: Monday, January 04, 2010 16:41:33
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 937496|1|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100104\1202006054.125

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		**ug/L**		573970	573969.546
	U	238	**54.373**	**ug/L**	2.422	2539347	4.423

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		97.9			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202006055
Sample Date/Time: Monday, January 04, 2010 16:46:48
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 937496|1|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100104\1202006055.128

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		576530	576530.449
	U	238	-0.010	ug/L	3.607	719	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		98.4			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202006056
Sample Date/Time: Monday, January 04, 2010 16:48:32
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 937496|1|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100104\1202006056.129

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		578122	578121.593
	U	238	55.382	ug/L	2.790	2605685	4.506

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		98.6			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202006057
Sample Date/Time: Monday, January 04, 2010 16:50:15
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 937496|5|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100104\1202006057.130

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		**ug/L**		587244	587244.187
	U	238	**-0.005**	**ug/L**	17.089	964	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
>	Lu	175		100.2			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Monday, January 04, 2010 16:51:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100104\QC Std 8.131

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		**ug/L**		583515	583514.717
⌊	U	238	**54.035**	**ug/L**	0.152	2566294	4.396

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Lu	175		99.5			
⌊	U	238	108.069				

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: Monday, January 04, 2010 16:53:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100104\QC Std 9.132

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		584261	584261.120
	U	238	0.021	ug/L	3.611	2232	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		99.7			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 243629001
Sample Date/Time: Monday, January 04, 2010 16:58:47
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 937496|1|baj
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100104\243629001.135

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		576189	576188.865
⌊	U	238	-0.017	ug/L	3.469	403	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		98.3			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Monday, January 04, 2010 17:04:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100104\QC Std 8.138

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		583804	583803.943
[	U	238	53.852	ug/L	0.393	2558871	4.381

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		99.6			
[	U	238	107.705				

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: Monday, January 04, 2010 17:05:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100104\QC Std 9.139

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Lu	175		ug/L		586424	586424.060
U	238	0.019	ug/L	6.121	2127	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Lu	175		100.0			
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

==========

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\010810W1.SIF
Batch ID:
Results Data Set: 010810W1
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: 1/8/2010 09:05:01**
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]	0.0004	0.0012	0.0004	09:06:03	Yes
2		[0.00]	0.0004	0.0012	0.0004	09:06:38	Yes
Mean:		[0.00]	0.0004				
SD:		0.00	0.0000				
%RSD:		0.00	3.39				

Auto-zero performed.

==========

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S0.2 **Date Collected: 1/8/2010 09:06:57**
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]	0.0020	0.0107	0.0024	09:07:58	Yes
2		[0.2]	0.0019	0.0101	0.0023	09:08:33	Yes
Mean:		[0.2]	0.0019				
SD:		0.0	0.0001				
%RSD:		0.0	4.18				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00956 Intercept: 0.00000

==========

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S0.5 **Date Collected: 1/8/2010 09:08:52**
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	0.0241	0.0053	09:09:53	Yes
2		[0.5]	0.0048	0.0235	0.0052	09:10:28	Yes
Mean:		[0.5]	0.0048				
SD:		0.0	0.0000				
%RSD:		0.0	0.75				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999993 Slope: 0.00964 Intercept: -0.00001

==========

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S2.0 **Date Collected: 1/8/2010 09:10:47**
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]	0.0200	0.0952	0.0204	09:11:49	Yes
2		[2.0]	0.0198	0.0946	0.0203	09:12:23	Yes
Mean:		[2.0]	0.0199				
SD:		0.0	0.0001				
%RSD:		0.0	0.46				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999970 Slope: 0.00997 Intercept: -0.00008

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 1/8/2010 09:12:43**
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]	0.0509	0.2400	0.0513	09:13:45	Yes
2		[5.0]	0.0505	0.2386	0.0510	09:14:20	Yes
Mean:		[5.0]	0.0507				
SD:		0.0	0.0002				
%RSD:		0.0	0.45				

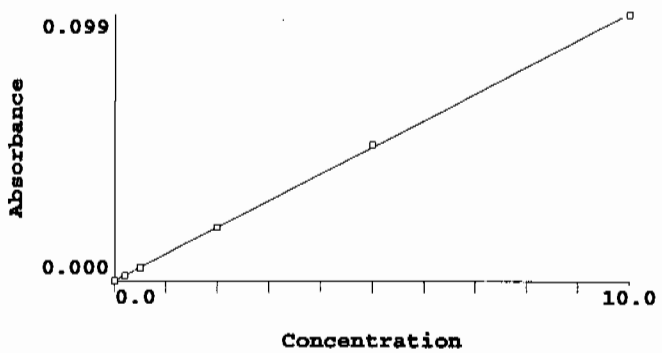
Standard number 4 applied. [5.0]
Correlation Coef.: 0.999969 Slope: 0.01016 Intercept: -0.00017

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 1/8/2010 09:14:40**
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]	0.0992	0.4709	0.0996	09:15:40	Yes
2		[10.0]	0.0992	0.4684	0.0997	09:16:15	Yes
Mean:		[10.0]	0.0992				
SD:		0.0	0.0001				
%RSD:		0.0	0.06				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999934 Slope: 0.00996 Intercept: 0.00005



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	-0.005	0.00	3.4
S0.2	0.0019	0.2	0.187	0.00	4.2
S0.5	0.0048	0.5	0.479	0.00	0.8
S2.0	0.0199	2.0	1.993	0.00	0.5

S5.0	0.0507	5.0	5.088	0.00	0.5
S10.0	0.0992	10.0	9.959	0.00	0.1

Correlation Coef.: 0.999934 Slope: 0.00996 Intercept: 0.00005

==========

Sequence No.: 7 **Autosampler Location: 9**
Sample ID: ICV **Date Collected: 1/8/2010 09:16:34**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.242	5.242	0.0522	0.2467	0.0527	09:17:35	Yes
2	5.230	5.230	0.0521	0.2432	0.0526	09:18:11	Yes
Mean:	5.236	5.236	0.0522				
SD:	0.009	0.009	0.0001				
%RSD:	0.164	0.164	0.16				

QC value within limits for Hg 253.7 Recovery = 104.71%
All analyte(s) passed QC.

==========

Sequence No.: 8 **Autosampler Location: 10**
Sample ID: ICB **Date Collected: 1/8/2010 09:18:30**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.005	0.005	0.0001	0.0017	0.0005	09:19:32	Yes
2	0.006	0.006	0.0001	0.0014	0.0005	09:20:06	Yes
Mean:	0.005	0.005	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	10.31	10.31	5.22				

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: 1/8/2010 09:20:26**
Analyst: **Data Type: Original**

Replicate Data: CRDL

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.212	0.212	0.0022	0.0115	0.0026	09:21:28	Yes
2	0.205	0.205	0.0021	0.0114	0.0025	09:22:03	Yes
Mean:	0.209	0.209	0.0021				
SD:	0.005	0.005	0.0001				
%RSD:	2.471	2.471	2.41				

QC value within limits for Hg 253.7 Recovery = 104.26%
All analyte(s) passed QC.

==========

Sequence No.: 10 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/8/2010 09:22:23**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.214	5.214	0.0520	0.2452	0.0524	09:23:23	Yes
2	5.196	5.196	0.0518	0.2428	0.0522	09:23:59	Yes
Mean:	5.205	5.205	0.0519				
SD:	0.012	0.012	0.0001				
%RSD:	0.234	0.234	0.23				

QC value within limits for Hg 253.7 Recovery = 104.10%
All analyte(s) passed QC.

==========

Sequence No.: 11 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 1/8/2010 09:24:18**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	0.0000	0.0015	0.0004	09:25:19	Yes
2	0.001	0.001	0.0001	0.0019	0.0005	09:25:54	Yes
Mean:	-0.001	-0.001	0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	314.5	314.5	91.78				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.
User canceled analysis.

Replicate Data: 243478001|937649|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.008	0.008	0.0001	0.0027	0.0006	09:43:21	Yes
2	0.014	0.014	0.0002	0.0032	0.0006	09:43:56	Yes
Mean:	0.011	0.011	0.0002				
SD:	0.004	0.004	0.0000				
%RSD:	35.60	35.60	24.00				

Sequence No.: 10
Sample ID: 1202006482|937649|1
Analyst: JXL
Autosampler Location: 21
Date Collected: 1/8/2010 09:44:16
Data Type: Original

Replicate Data: 1202006482|937649|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.010	0.010	0.0002	0.0040	0.0006	09:45:17	Yes
2	0.012	0.012	0.0002	0.0049	0.0006	09:45:51	Yes
Mean:	0.011	0.011	0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	12.00	12.00	8.16				

Sequence No.: 11
Sample ID: CCV
Analyst:
Autosampler Location: 7
Date Collected: 1/8/2010 09:46:11
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.203	5.203	0.0519	0.2471	0.0523	09:47:12	Yes
2	5.204	5.204	0.0519	0.2453	0.0523	09:47:46	Yes
Mean:	5.204	5.204	0.0519				
SD:	0.000	0.000	0.0000				
%RSD:	0.008	0.008	0.01				

QC value within limits for Hg 253.7 Recovery = 104.07%
All analyte(s) passed QC.

Sequence No.: 12
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 1/8/2010 09:48:05
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	0.0000	0.0019	0.0005	09:49:06	Yes
2	-0.006	-0.006	-0.0000	0.0017	0.0004	09:49:41	Yes
Mean:	-0.005	-0.005	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	42.25	42.25	633.13				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 13
Sample ID: 1202006483|937649|1
Analyst: JXL
Autosampler Location: 22
Date Collected: 1/8/2010 09:50:00
Data Type: Original

Replicate Data: 1202006483|937649|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.048	2.048	0.0204	0.0984	0.0209	09:51:02	Yes
2	2.041	2.041	0.0204	0.0977	0.0208	09:51:37	Yes
Mean:	2.045	2.045	0.0204				

SD:	0.005	0.005	0.0001
%RSD:	0.269	0.269	0.27

Sequence No.: 14
Sample ID: 1202006484|937649|5
Analyst: JXL
Autosampler Location: 23
Date Collected: 1/8/2010 09:51:57
Data Type: Original

Replicate Data: 1202006484|937649|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.006	-0.006	-0.0000	0.0015	0.0004	09:52:58	Yes
2	0.000	0.000	0.0001	0.0019	0.0005	09:53:33	Yes
Mean:	-0.003	-0.003	0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	134.4	134.4	219.53				

Sequence No.: 15
Sample ID: 243478003|937649|1
Analyst: JXL
Autosampler Location: 24
Date Collected: 1/8/2010 09:53:53
Data Type: Original

Replicate Data: 243478003|937649|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0000	0.0019	0.0005	09:54:55	Yes
2	0.001	0.001	0.0001	0.0025	0.0005	09:55:30	Yes
Mean:	0.000	0.000	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	>999.9%	>999.9%	34.18				

Sequence No.: 16
Sample ID: 1202006475|937647|1
Analyst: JXL
Autosampler Location: 25
Date Collected: 1/8/2010 09:55:50
Data Type: Original

Replicate Data: 1202006475|937647|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.006	-0.006	-0.0000	0.0023	0.0004	09:56:52	Yes
2	0.003	0.003	0.0001	0.0027	0.0005	09:57:27	Yes
Mean:	-0.001	-0.001	0.0000				
SD:	0.006	0.006	0.0001				
%RSD:	502.3	502.3	149.83				

Sequence No.: 17
Sample ID: 1202006479|937647|1
Analyst: JXL
Autosampler Location: 26
Date Collected: 1/8/2010 09:57:47
Data Type: Original

Replicate Data: 1202006479|937647|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.031	2.031	0.0203	0.1003	0.0207	09:58:48	Yes
2	2.024	2.024	0.0202	0.0986	0.0206	09:59:23	Yes
Mean:	2.027	2.027	0.0202				
SD:	0.005	0.005	0.0000				
%RSD:	0.245	0.245	0.24				

Sequence No.: 18
Sample ID: 243627001|937647|1
Analyst: JXL
Autosampler Location: 27
Date Collected: 1/8/2010 09:59:42
Data Type: Original

Replicate Data: 243627001|937647|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.017	0.017	0.0002	0.0051	0.0007	10:00:42	Yes
2	0.011	0.011	0.0002	0.0038	0.0006	10:01:17	Yes
Mean:	0.014	0.014	0.0002				
SD:	0.004	0.004	0.0000				
%RSD:	30.50	30.50	22.27				

Sequence No.: 19 **Autosampler Location: 28**
Sample ID: 1202006476|937647|1 **Date Collected: 1/8/2010 10:01:37**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202006476|937647|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.007	-0.007	-0.0000	0.0018	0.0004	10:02:37	Yes
2	0.001	0.001	0.0001	0.0020	0.0005	10:03:12	Yes
Mean:	-0.003	-0.003	0.0000				
SD:	0.006	0.006	0.0001				
%RSD:	173.3	173.3	293.14				

Sequence No.: 20 **Autosampler Location: 29**
Sample ID: 1202006478|937647|1 **Date Collected: 1/8/2010 10:03:31**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202006478|937647|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.043	2.043	0.0204	0.0986	0.0208	10:04:32	Yes
2	2.033	2.033	0.0203	0.0979	0.0207	10:05:07	Yes
Mean:	2.038	2.038	0.0203				
SD:	0.007	0.007	0.0001				
%RSD:	0.327	0.327	0.33				

Sequence No.: 21 **Autosampler Location: 30**
Sample ID: 1202006477|937647|5 **Date Collected: 1/8/2010 10:05:26**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202006477|937647|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.007	-0.007	-0.0000	0.0016	0.0004	10:06:26	Yes
2	0.000	0.000	0.0000	0.0021	0.0005	10:07:01	Yes
Mean:	-0.004	-0.004	0.0000				
SD:	0.005	0.005	0.0000				
%RSD:	128.6	128.6	343.06				

Sequence No.: 22 **Autosampler Location: 31**
Sample ID: 243629001|937647|1 **Date Collected: 1/8/2010 10:07:20**
Analyst: JXL **Data Type: Original**

Replicate Data: 243629001|937647|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0000	0.0022	0.0005	10:08:21	Yes
2	-0.008	-0.008	-0.0000	0.0018	0.0004	10:08:56	Yes
Mean:	-0.004	-0.004	0.0000				
SD:	0.005	0.005	0.0000				
%RSD:	115.1	115.1	480.08				

Sequence No.: 23 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/8/2010 10:09:15**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.267	5.267	0.0525	0.2501	0.0529	10:10:16	Yes
2	5.256	5.256	0.0524	0.2477	0.0528	10:10:51	Yes
Mean:	5.261	5.261	0.0524				
SD:	0.008	0.008	0.0001				
%RSD:	0.148	0.148	0.15				

QC value within limits for Hg 253.7 Recovery = 105.23%
All analyte(s) passed QC.

Sequence No.: 24 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 1/8/2010 10:11:10**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0000	0.0023	0.0005	10:12:10	Yes
2	-0.004	-0.004	0.0000	0.0022	0.0004	10:12:45	Yes
Mean:	-0.002	-0.002	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	85.54	85.54	64.33				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 25 **Autosampler Location: 32**
Sample ID: 243631001|937647|1 **Date Collected: 1/8/2010 10:13:04**
Analyst: JXL **Data Type: Original**

Replicate Data: 243631001|937647|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	0.0000	0.0021	0.0004	10:14:05	Yes
2	-0.007	-0.007	-0.0000	0.0022	0.0004	10:14:40	Yes
Mean:	-0.005	-0.005	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	38.91	38.91	>999.9%				

Sequence No.: 26 **Autosampler Location: 33**
Sample ID: 243632001|937647|1 **Date Collected: 1/8/2010 10:15:00**
Analyst: JXL **Data Type: Original**

Replicate Data: 243632001|937647|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.003	-0.003	0.0000	0.0023	0.0005	10:16:01	Yes
2	-0.001	-0.001	0.0000	0.0025	0.0005	10:16:35	Yes
Mean:	-0.002	-0.002	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	67.97	67.97	36.18				

Sequence No.: 27 **Autosampler Location: 34**
Sample ID: 1202006469|937645|1 **Date Collected: 1/8/2010 10:16:55**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202006469|937645|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0001	0.0026	0.0005	10:17:56	Yes
2	0.000	0.000	0.0001	0.0023	0.0005	10:18:31	Yes

Miscellaneous

Prep LogBook

Analyst: BXA1 Verified by:_____

Batch: 937495

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202006054	UI091124-A00	.5	mL
LCS	1202006054	UI091124-B	.5	mL
MS	1202006056	UI090828-A	.5	mL
MS	1202006056	UI090828-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202006053		SW846 3005A	31-DEC-2009 07:20	<2	50 mL	50 mL	1	WATER
LCS	1202006054		SW846 3005A	31-DEC-2009 07:20	<2	50 mL	50 mL	1	WATER
SAMPLE	243601001		SW846 3005A	31-DEC-2009 07:20	<2	50 mL	50 mL	1	WATER
SAMPLE	243608001		SW846 3005A	31-DEC-2009 07:20	<2	50 mL	50 mL	1	WATER
DUP	1202006055	243608001	SW846 3005A	31-DEC-2009 07:20	<2	50 mL	50 mL	1	WATER
MS	1202006056	243608001	SW846 3005A	31-DEC-2009 07:20	<2	50 mL	50 mL	1	WATER
SDILT	1202006057	243608001	SW846 3005A	31-DEC-2009 07:20	<2	50 mL	50 mL	1	WATER
SAMPLE	243621001		SW846 3005A	31-DEC-2009 07:20	<2	50 mL	50 mL	1	WATER
SAMPLE	243627001		SW846 3005A	31-DEC-2009 07:20	<2	50 mL	50 mL	1	WATER
SAMPLE	243629001		SW846 3005A	31-DEC-2009 07:20	<2	50 mL	50 mL	1	WATER
SAMPLE	243631001		SW846 3005A	31-DEC-2009 07:20	<2	50 mL	50 mL	1	WATER
SAMPLE	243632001		SW846 3005A	31-DEC-2009 07:20	<2	50 mL	50 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1244970	2.5 mL	HYDROCHLORIC ACID
1234886	1 mL	Nitric Acid CONC.

Comments.

Prep LogBook

Analyst: BXA1 Verified by:_____

Batch: 937468

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202006003	UI091124-01	.25	mL
LCS	1202006003	UI091124-06	.25	mL
MS	1202006005	UI091124-01	.25	mL
MS	1202006005	UI091124-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202006002		SW846 3005A	31-DEC-2009 07:29	<2	50 mL	50 mL	1	WATER
LCS	1202006003		SW846 3005A	31-DEC-2009 07:29	<2	50 mL	50 mL	1	WATER
SAMPLE	243601001		SW846 3005A	31-DEC-2009 07:29	<2	50 mL	50 mL	1	WATER
SAMPLE	243608001		SW846 3005A	31-DEC-2009 07:29	<2	50 mL	50 mL	1	WATER
SAMPLE	243621001		SW846 3005A	31-DEC-2009 07:29	<2	50 mL	50 mL	1	WATER
SAMPLE	243627001		SW846 3005A	31-DEC-2009 07:29	<2	50 mL	50 mL	1	WATER
SAMPLE	243629001		SW846 3005A	31-DEC-2009 07:29	<2	50 mL	50 mL	1	WATER
SAMPLE	243631001		SW846 3005A	31-DEC-2009 07:29	<2	50 mL	50 mL	1	WATER
SAMPLE	243632001		SW846 3005A	31-DEC-2009 07:29	<2	50 mL	50 mL	1	WATER
DUP	1202006004	243632001	SW846 3005A	31-DEC-2009 07:29	<2	50 mL	50 mL	1	WATER
MS	1202006005	243632001	SW846 3005A	31-DEC-2009 07:29	<2	50 mL	50 mL	1	WATER
SDILT	1202006006	243632001	SW846 3005A	31-DEC-2009 07:29	<2	50 mL	50 mL	1	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: 937646

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202006479	WHG100107-13	.2	mL
MS	1202006478	WHG100107-13	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202006475		SW846 7470A Prep	07-JAN-2010 11:30	<2	20 mL	20 mL	1	WATER
LCS	1202006479		SW846 7470A Prep	07-JAN-2010 11:30	<2	20 mL	20 mL	1	WATER
SAMPLE	243627001		SW846 7470A Prep	07-JAN-2010 11:30	<2	20 mL	20 mL	1	WATER
DUP	1202006476	243627001	SW846 7470A Prep	07-JAN-2010 11:30	<2	20 mL	20 mL	1	WATER
SDILT	1202006477	243627001	SW846 7470A Prep	07-JAN-2010 11:30	<2	20 mL	20 mL	1	WATER
MS	1202006478	243627001	SW846 7470A Prep	07-JAN-2010 11:30	<2	20 mL	20 mL	1	WATER
SAMPLE	243629001		SW846 7470A Prep	07-JAN-2010 11:30	<2	20 mL	20 mL	1	WATER
SAMPLE	243631001		SW846 7470A Prep	07-JAN-2010 11:30	<2	20 mL	20 mL	1	WATER
SAMPLE	243632001		SW846 7470A Prep	07-JAN-2010 11:30	<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
WHG100107-06	500 uL	Mercury Working 2nd Source 5.0/ICV
WHG100107-01a	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG100107-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG100107-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG100107-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG100107-04	500 uL	Mercury Working 1st Source CAL 5.0/CCV

Comments Digestion Start Date: 07-JAN-10 11:30
Digestion End Date: 07-JAN-10 13:30

Standard Logbook

Serial ID:	UHG1167639-01	**Opened:**	13-AUG-09	**Amount :**	125 mL
Name:	MHGSTOCK1	**Received:**	13-AUG-09	**Catalog Number :**	PLHG4-2Y
Type:	Source Material	**Expires:**	13-AUG-10	**Lot Number :**	15-37HG
Employee:	Bryan Davis			**Solvent :**	10% HNO3
Supplier:	Spex				

Description: Mercury Source Standard #1 1,000 mg/L

Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID:	UHG1167641-02	**Opened:**	13-AUG-09	**Amount :**	100 mL
Name:	MHGSTOCK2	**Received:**	13-AUG-09	**Catalog Number :**	AHG1KN-100
Type:	Source Material	**Expires:**	13-AUG-10	**Lot Number :**	4905530
Employee:	Bryan Davis			**Solvent :**	3% HNO3
Supplier:	Ricca Chemical Company				

Description: Mercury Source Standard #2 1,000 mg/L

Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID:	UI090422-40	**Opened:**	04-MAY-09	**Amount :**	500 mL
Name:	TRACE ICP ICSA SOLN A	**Received:**	22-APR-09	**Catalog Number :**	160005-01-03
Type:	Source Material	**Expires:**	04-MAY-10	**Lot Number :**	1013357
Employee:	Helen Camello			**Solvent :**	5%HNO3
Supplier:	o2si				

Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%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		

Standard Logbook

Serial ID:	UI090701-09	**Opened:**	01-JUL-09	**Amount :**	250 mL
Name:	ICP-MS CRDL Master #1	**Received:**	01-JUL-09	**Catalog Number :**	160044-09-02
Type:	Source Material	**Expires:**	01-JUL-10	**Lot Number :**	1016477
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% IN 2% HNO3
Supplier:	02SI				
Description:	ICPMS CRDL Master Soln #1				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID:	UI090701-10	**Opened:**	01-JUL-09	**Amount :**	250 mL
Name:	ICP-MS CRDL Master #2	**Received:**	01-JUL-09	**Catalog Number :**	160044-08-02
Type:	Source Material	**Expires:**	01-JUL-10	**Lot Number :**	1016476
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% IN 2% HNO3
Supplier:	02SI				
Description:	ICPMS CRDL Soln #2				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID:	UI090701-40	**Opened:**	01-JUL-09	**Amount :**	500 mL
Name:	TRACE ICP Stock PQL Sta	**Received:**	30-JUN-09	**Catalog Number :**	160543-01-03
Type:	Source Material	**Expires:**	01-JUL-10	**Lot Number :**	1016475
Employee:	Helen Camello			**Solvent :**	+/-0.5%in2%HNO3+TrHF
Supplier:	02si				
Description:	TRACE ICP Stock PQL Standard				
Comments:	None				

Analyte	Concentration	Analyte	Concentration

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: O2SI
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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
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

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
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

Standard Logbook

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** 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

Standard Logbook

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

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

Standard Logbook

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

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 Standa **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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
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		

Standard Logbook

Serial ID: UI091217-07 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 17-DEC-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018210
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI091217-13 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 17-DEC-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
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

Standard Logbook

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
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		

Standard Logbook

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: 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: WHG100107-01a **Opened:** 07-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **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 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100107-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Standard Logbook

Serial ID: WHG100107-02 **Opened:** 07-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **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 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100107-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG100107-03 **Opened:** 07-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **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 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100107-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG100107-04 **Opened:** 07-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **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 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100107-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100107-05 **Opened:** 07-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **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 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100107-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Standard Logbook

Serial ID: WHG100107-06 **Opened:** 07-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORK5.0ICV **Received:** 07-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 08-JAN-10
Employee: Jason Loy
Supplier: GEL
Description: Mercury Working 2nd Source 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100107-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100107-13 **Opened:** 07-JAN-10 **Pipet Id :** Hg1289245
Name: MHGLIQLCSMSSPIKE **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 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: WI100112-42 **Opened:** 12-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 13-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1253514
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.
WI100112-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100112-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100112-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100112-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100112-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100112-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100112-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100112-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100112-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100112-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100112-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100112-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100112-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100112-43 **Opened:** 12-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 13-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1253514
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI100112-44 **Opened:** 12-JAN-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 13-JAN-10 **Solvent :** 3%HCL and 1 %HNO3-1253514
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI100112-45 **Opened:** 12-JAN-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 13-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1253514
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: WI100112-46 **Opened:** 12-JAN-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 13-JAN-10 **Solvent :** 3%HCL AND 1%HNO3-1253514
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI100112-47 **Opened:** 12-JAN-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 13-JAN-10 **Solvent :** 3%HCL &1%HNO3-1253514
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS100103-04 **Opened:** 03-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 03-JAN-10 **Balance Id :** 4025216
Type: Working **Expires:** 04-JAN-10 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl-1247304
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100103-04A **Opened:** 03-JAN-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 03-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 04-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1247304
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100103-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100103-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100103-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100103-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100103-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100103-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100103-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100103-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100103-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100103-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100103-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100103-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100103-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100103-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100103-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100103-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100103-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100103-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100103-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100103-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100103-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100103-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100103-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100103-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100103-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100103-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100103-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100103-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100103-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100103-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100103-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100103-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100103-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100103-05 **Opened:** 03-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 03-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 04-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1247304
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100103-06 **Opened:** 03-JAN-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 03-JAN-10 **Pipet Id :** 3820544
Type: Working **Expires:** 04-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1247304
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100103-07 **Opened:** 03-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 03-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 04-JAN-10 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl - 1247304
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: WMS100103-08 **Opened:** 03-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 03-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 04-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1247304
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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
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: WMS100103-70 **Opened:** 03-JAN-10 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 03-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 04-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1247304
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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
UI091212-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS100104-04 **Opened:** 04-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 04-JAN-10 **Balance Id :** 4025216
Type: Working **Expires:** 05-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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100104-04A **Opened:** 04-JAN-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 04-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 05-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.
WMS100104-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100104-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100104-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100104-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100104-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100104-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100104-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100104-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100104-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100104-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100104-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100104-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100104-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100104-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100104-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100104-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100104-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100104-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100104-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100104-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100104-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100104-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100104-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100104-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100104-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100104-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100104-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100104-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100104-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100104-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100104-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100104-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100104-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100104-05 **Opened:** 04-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 04-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 05-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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100104-06 **Opened:** 04-JAN-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 04-JAN-10 **Pipet Id :** 3820544
Type: Working **Expires:** 05-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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100104-07 **Opened:** 04-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 04-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 05-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

Standard Logbook

Serial ID: WMS100104-08 **Opened:** 04-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 04-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 05-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
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

Standard Logbook

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 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:** 15-JAN-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

Standard Logbook

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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 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: 1247304 **Opened:** 28-DEC-09 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 28-DEC-09
Type: Reagent/Solvent **Expires:** 04-JAN-10
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

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

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: 1253514 **Opened:** 11-JAN-10 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 11-JAN-10 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 17-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 10-1103

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	937572	**Method:**	SW846 9012A
Prep Batch :	937571	**Method:**	SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
243628001	RE12-10-7675
243628002	RE12-10-7663
243628003	RE12-10-7664
243628004	RE12-10-7672
243628005	RE12-10-7667
243628006	RE12-10-7666
243628007	RE12-10-7665
243628008	RE12-10-7670
243628009	RE12-10-7668
243628010	RE12-10-7671
243628011	RE12-10-7669
1202006256	Method Blank (MB)
1202006257	243628001(RE12-10-7675) Sample Duplicate (DUP)
1202006258	243628002(RE12-10-7663) Sample Duplicate (DUP)
1202006259	243628001(RE12-10-7675) Matrix Spike (MS)
1202006260	243628002(RE12-10-7663) Matrix Spike (MS)
1202006261	243628001(RE12-10-7675) Matrix Spike Duplicate (MSD)
1202006262	243628002(RE12-10-7663) Matrix Spike Duplicate (MSD)
1202006263	Laboratory Control Sample (LCS)

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

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

The following samples were selected for QC analysis: 243628001 (RE12-10-7675) and 243628002 (RE12-10-7663).

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. 1202006257 (RE12-10-7675), 1202006258 (RE12-10-7663), 243628001 (RE12-10-7675) and 243628002 (RE12-10-7663).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The following sample in this sample group was diluted due to high concentration: 1202006263 (LCS).

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:** 22Jan10

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: 10-1103 GEL Work Order: 243628

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 6, 2010

Client SDG: 10-1103

Client Sample ID:	RE12-10-7675	Project:	LANL01004
Sample ID:	243628001	Client ID:	LANL010
Matrix:	R		
Collect Date:	22-DEC-09 12:00		
Receive Date:	29-DEC-09		
Collector:	Client		
Moisture:	10.7%		

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	76.1	280	ug/kg	1	AXC2 01/05/10	1326	937572	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/05/10	1217	937571

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Report Date: January 6, 2010

Client SDG: 10-1103

Client Sample ID:	RE12-10-7663	Project:	LANL01004
Sample ID:	243628002	Client ID:	LANL010
Matrix:	R		
Collect Date:	22-DEC-09 12:00		
Receive Date:	29-DEC-09		
Collector:	Client		
Moisture:	25%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total Federal "Dry Weight Corrected"										
Cyanide, Total	J	239	80.9	297	ug/kg	1	AXC2 01/05/10	1329	937572	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/05/10	1217	937571

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: January 6, 2010

Client SDG: 10-1103

Client Sample ID:	RE12-10-7664	Project:	LANL01004
Sample ID:	243628003	Client ID:	LANL010
Matrix:	R		
Collect Date:	22-DEC-09 12:00		
Receive Date:	29-DEC-09		
Collector:	Client		
Moisture:	10.8%		

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	65.7	242	ug/kg	1	AXC2 01/05/10	1333	937572	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/05/10	1217	937571

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: January 6, 2010

Client SDG: 10-1103

Client Sample ID:	RE12-10-7672	Project:	LANL01004
Sample ID:	243628004	Client ID:	LANL010
Matrix:	R		
Collect Date:	22-DEC-09 12:00		
Receive Date:	29-DEC-09		
Collector:	Client		
Moisture:	11.7%		

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	74.0	272	ug/kg	1	AXC2 01/05/10	1334	937572	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/05/10	1217	937571

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: January 6, 2010

Client SDG: 10-1103

Client Sample ID:	RE12-10-7667	Project:	LANL01004
Sample ID:	243628005	Client ID:	LANL010
Matrix:	R		
Collect Date:	22-DEC-09 12:00		
Receive Date:	29-DEC-09		
Collector:	Client		
Moisture:	17.2%		

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	74.6	274	ug/kg	1	AXC2 01/05/10	1338	937572	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/05/10	1217	937571

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: January 6, 2010

Client SDG: 10-1103

Client Sample ID:	RE12-10-7666	Project:	LANL01004
Sample ID:	243628006	Client ID:	LANL010
Matrix:	R		
Collect Date:	22-DEC-09 12:00		
Receive Date:	29-DEC-09		
Collector:	Client		
Moisture:	10.6%		

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	76.1	280	ug/kg	1	AXC2 01/05/10	1339	937572	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/05/10	1217	937571

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: January 6, 2010

Client SDG: 10-1103

Client Sample ID:	RE12-10-7665	Project:	LANL01004
Sample ID:	243628007	Client ID:	LANL010
Matrix:	R		
Collect Date:	22-DEC-09 12:00		
Receive Date:	29-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	107	71.1	261	ug/kg	1	AXC2 01/05/10	1340	937572	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/05/10	1217	937571

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: January 6, 2010

Client SDG: 10-1103

Client Sample ID:	RE12-10-7670	Project:	LANL01004
Sample ID:	243628008	Client ID:	LANL010
Matrix:	R		
Collect Date:	22-DEC-09 12:00		
Receive Date:	29-DEC-09		
Collector:	Client		
Moisture:	11.4%		

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	75.3	277	ug/kg	1	AXC2 01/05/10	1341	937572	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/05/10	1217	937571

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: January 6, 2010

Client SDG: 10-1103

Client Sample ID:	RE12-10-7668	Project:	LANL01004
Sample ID:	243628009	Client ID:	LANL010
Matrix:	R		
Collect Date:	22-DEC-09 12:00		
Receive Date:	29-DEC-09		
Collector:	Client		
Moisture:	9.06%		

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	64.5	237	ug/kg	1	AXC2 01/05/10	1342	937572	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/05/10	1217	937571

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 6, 2010

Client SDG: 10-1103

Client Sample ID: RE12-10-7671
Sample ID: 243628010
Matrix: R
Collect Date: 22-DEC-09 12:00
Receive Date: 29-DEC-09
Collector: Client
Moisture: 19.2%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
SW9012A Cyanide, Total Federal "Dry Weight Corrected"											
Cyanide, Total	U	ND	84.2	310	ug/kg	1	AXC2	01/05/10	1343	937572	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/05/10	1217	937571

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 6, 2010

Client SDG: 10-1103

Client Sample ID:	RE12-10-7669	Project:	LANL01004
Sample ID:	243628011	Client ID:	LANL010
Matrix:	R		
Collect Date:	22-DEC-09 12:00		
Receive Date:	29-DEC-09		
Collector:	Client		
Moisture:	24.8%		

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	83.8	308	ug/kg	1	AXC2 01/05/10	1344	937572	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/05/10	1217	937571

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

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

QC Summary

Report Date: January 6, 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: 243628

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis											
Batch 937572											
QC1202006257 243628001 DUP											
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			AXC2	01/05/10 13:27
QC1202006258 243628002 DUP											
Cyanide, Total		J	239	J	131	ug/kg	58.2 ^		(+/-309)		01/05/10 13:30
QC1202006263 LCS											
Cyanide, Total	67900				73000	ug/kg		108	(46%-145%)		01/05/10 13:20
QC1202006256 MB											
Cyanide, Total				U	250	ug/kg					01/05/10 13:19
QC1202006259 243628001 MS											
Cyanide, Total	5490	U	ND		5820	ug/kg		106	(50%-130%)		01/05/10 13:28
QC1202006260 243628002 MS											
Cyanide, Total	6170	J	239		6480	ug/kg		101	(50%-130%)		01/05/10 13:31
QC1202006261 243628001 MSD											
Cyanide, Total	5380	U	ND		5710	ug/kg	1.94	106	(0%-30%)		01/05/10 13:28
QC1202006262 243628002 MSD											
Cyanide, Total	6060	J	239		5720	ug/kg	12.5	90.5	(0%-30%)		01/05/10 13:32

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- 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

QC Summary

Workorder: 243628

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

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: 06-JAN-2010 08:57

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1103

Flow Injection Analysis

Method: SW846 9012A Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**05-JAN-2010 10:04:33**	**OM_1-5-2010_09-54-02**	**139**	**150**	**93**	**(90%-110%)**	**Yes**
CCV	05-JAN-2010 13:10:09	OM_1-5-2010_12-29-33	106	100	106	(90%-110%)	Yes
CCV	05-JAN-2010 13:22:39	OM_1-5-2010_12-29-33	104	100	104	(90%-110%)	Yes
CCV	05-JAN-2010 13:35:07	OM_1-5-2010_12-29-33	106	100	106	(90%-110%)	Yes
CCV	05-JAN-2010 13:47:35	OM_1-5-2010_12-29-33	107	100	107	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**05-JAN-2010 10:06:23**	**OM_1-5-2010_09-54-02**	**-1.15**	**5**	**Yes**
CCB	05-JAN-2010 13:12:00	OM_1-5-2010_12-29-33	-0.936	5	Yes
CCB	05-JAN-2010 13:24:29	OM_1-5-2010_12-29-33	-1.26	5	Yes
CCB	05-JAN-2010 13:36:58	OM_1-5-2010_12-29-33	-1.75	5	Yes
CCB	05-JAN-2010 13:49:25	OM_1-5-2010_12-29-33	-1.32	5	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 937571

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202006263	URF1200957-01	.25	g
MS	1202006259	URF1184831-02	.025	mL
MS	1202006260	URF1184831-02	.025	mL
MSD	1202006261	URF1184831-02	.025	mL
MSD	1202006262	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202006256		SW846 9010B Prep	05-JAN-2010 12:17	>12	0.5 g	25 mL	50	SOIL
LCS	1202006263		SW846 9010B Prep	05-JAN-2010 12:17	>12	0.25 g	25 mL	100	SOIL
SAMPLE	243550014		SW846 9010B Prep	05-JAN-2010 12:17	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	243550015		SW846 9010B Prep	05-JAN-2010 12:17	>12	0.58 g	25 mL	43.10345	SOIL
SAMPLE	243628001		SW846 9010B Prep	05-JAN-2010 12:17	>12	0.5 g	25 mL	50	SOIL
DUP	1202006257	243628001	SW846 9010B Prep	05-JAN-2010 12:17	>12	0.55 g	25 mL	45.45455	SOIL
MS	1202006259	243628001	SW846 9010B Prep	05-JAN-2010 12:17	>12	0.51 g	25 mL	49.01961	SOIL
MSD	1202006261	243628001	SW846 9010B Prep	05-JAN-2010 12:17	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	243628002		SW846 9010B Prep	05-JAN-2010 12:17	>12	0.56 g	25 mL	44.64286	SOIL
DUP	1202006258	243628002	SW846 9010B Prep	05-JAN-2010 12:17	>12	0.54 g	25 mL	46.2963	SOIL
MS	1202006260	243628002	SW846 9010B Prep	05-JAN-2010 12:17	>12	0.54 g	25 mL	46.2963	SOIL
MSD	1202006262	243628002	SW846 9010B Prep	05-JAN-2010 12:17	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	243628003		SW846 9010B Prep	05-JAN-2010 12:17	>12	0.58 g	25 mL	43.10345	SOIL
SAMPLE	243628004		SW846 9010B Prep	05-JAN-2010 12:17	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	243628005		SW846 9010B Prep	05-JAN-2010 12:17	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	243628006		SW846 9010B Prep	05-JAN-2010 12:17	>12	0.5 g	25 mL	50	SOIL
SAMPLE	243628007		SW846 9010B Prep	05-JAN-2010 12:17	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	243628008		SW846 9010B Prep	05-JAN-2010 12:17	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	243628009		SW846 9010B Prep	05-JAN-2010 12:17	>12	0.58 g	25 mL	43.10345	SOIL
SAMPLE	243628010		SW846 9010B Prep	05-JAN-2010 12:17	>12	0.5 g	25 mL	50	SOIL
SAMPLE	243628011		SW846 9010B Prep	05-JAN-2010 12:17	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	243675001		SW846 9010C Distillation	05-JAN-2010 12:17	>12	0.54 g	25 mL	46.2963	SOLID
SAMPLE	243687001		SW846 9010C Distillation	05-JAN-2010 12:17	>12	0.549 g	25 mL	45.53734	SOLID
SAMPLE	243708001		SW846 9010B Prep	05-JAN-2010 12:17	>12	0.567 g	25 mL	44.09171	MISC SOLID

Reagent/Solvent Lot ID	Amount	Description
091211-C	25 mL	0.25N Sodium Hydroxide Solution
WCN100105-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S

Comments:

Prep LogBook

1238146-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1238142-C	1.25 mL	Bismuth Nitrate Solution

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	1/5/2010 9:57:24	OM_1-5-2010_09-54-02
150 ppb		1	axc2	1/5/2010 9:58:16	OM_1-5-2010_09-54-02
100 ppb		1	axc2	1/5/2010 9:59:08	OM_1-5-2010_09-54-02
50 ppb		1	axc2	1/5/2010 10:00:01	OM_1-5-2010_09-54-02
10 ppb		1	axc2	1/5/2010 10:00:55	OM_1-5-2010_09-54-02
CRDL 5.0 ppb		1	axc2	1/5/2010 10:01:48	OM_1-5-2010_09-54-02
ICAL-00		1	axc2	1/5/2010 10:02:43	OM_1-5-2010_09-54-02
ICV		1	axc2	1/5/2010 10:04:33	OM_1-5-2010_09-54-02
ICB		1	axc2	1/5/2010 10:06:23	OM_1-5-2010_09-54-02
CRDL		1	axc2	1/5/2010 10:08:13	OM_1-5-2010_09-54-02
1202007819	938324	1	axc2	1/5/2010 10:10:02	OM_1-5-2010_09-54-02
1202007820	938324	25	axc2	1/5/2010 10:10:56	OM_1-5-2010_09-54-02
1202007821	938324	25	axc2	1/5/2010 10:11:49	OM_1-5-2010_09-54-02
243711001	938324	1	axc2	1/5/2010 10:12:42	OM_1-5-2010_09-54-02
243711002	938324	1	axc2	1/5/2010 10:13:35	OM_1-5-2010_09-54-02
243711003	938324	1	axc2	1/5/2010 10:14:28	OM_1-5-2010_09-54-02
243711004	938324	1	axc2	1/5/2010 10:15:21	OM_1-5-2010_09-54-02
243711005	938324	1	axc2	1/5/2010 10:16:13	OM_1-5-2010_09-54-02
243711006	938324	1	axc2	1/5/2010 10:17:06	OM_1-5-2010_09-54-02
243711007	938324	1	axc2	1/5/2010 10:17:58	OM_1-5-2010_09-54-02
CCV		1	axc2	1/5/2010 10:18:50	OM_1-5-2010_09-54-02
CCB		1	axc2	1/5/2010 10:20:40	OM_1-5-2010_09-54-02
243711008	938324	1	axc2	1/5/2010 10:22:29	OM_1-5-2010_09-54-02
243711009	938324	1	axc2	1/5/2010 10:23:21	OM_1-5-2010_09-54-02
243711010	938324	1	axc2	1/5/2010 10:24:13	OM_1-5-2010_09-54-02
243712001	938324	1	axc2	1/5/2010 10:25:05	OM_1-5-2010_09-54-02
243712002	938324	1	axc2	1/5/2010 10:25:56	OM_1-5-2010_09-54-02
243714001	938324	1	axc2	1/5/2010 10:26:50	OM_1-5-2010_09-54-02
243714002	938324	1	axc2	1/5/2010 10:27:44	OM_1-5-2010_09-54-02
243714003	938324	1	axc2	1/5/2010 10:28:37	OM_1-5-2010_09-54-02
1202007018	937905	1	axc2	1/5/2010 10:29:31	OM_1-5-2010_09-54-02
1202007020	937905	250	axc2	1/5/2010 10:30:24	OM_1-5-2010_09-54-02
CCV		1	axc2	1/5/2010 10:31:16	OM_1-5-2010_09-54-02
CCB		1	axc2	1/5/2010 10:33:06	OM_1-5-2010_09-54-02
243679001	937905	1	axc2	1/5/2010 10:34:55	OM_1-5-2010_09-54-02
1202007019	937905	1	axc2	1/5/2010 10:35:48	OM_1-5-2010_09-54-02
243680001	937905	1	axc2	1/5/2010 10:36:41	OM_1-5-2010_09-54-02
243681001	937905	1	axc2	1/5/2010 10:37:33	OM_1-5-2010_09-54-02
243723001	937905	1	axc2	1/5/2010 10:38:25	OM_1-5-2010_09-54-02
CCV		1	axc2	1/5/2010 10:39:18	OM_1-5-2010_09-54-02
CCB		1	axc2	1/5/2010 10:41:09	OM_1-5-2010_09-54-02

Author: axc2 Date : 1/5/2010

Original Run Filename: OM_1-5-2010_09-54-02.OMN created 1/5/2010 09:54:02
Original Run Author's Signature: [axc2]
Current Run Filename: OM_1-5-2010_09-54-02.OMN last modified 1/5/2010 10:42:13
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
WCN100105-01	1	S1	200	7.38	1/5/2010@09:57:24			200 ppb
WCN100105-02	1	S2	150	5.60	1/5/2010@09:58:16			150 ppb
WCN100105-03	1	S3	100	3.59	1/5/2010@09:59:08			100 ppb
WCN100105-04	1	S4	50.0	1.96	1/5/2010@10:00:01			50 ppb
WCN100105-05	1	S5	10.0	0.446	1/5/2010@10:00:55			10 ppb
WCN100105-06	1	S6	5.00	0.284	1/5/2010@10:01:48			CRDL 5.0 ppb
WCN100105-08	1	S7	0.00	0.0165	1/5/2010@10:02:43			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99970 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN100105-07	1	S8	139	5.13	1/5/2010@10:04:33			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	-7.5 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-7.5 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN100105-08	1	S7	-1.15	0.0224	1/5/2010@10:06:23			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.15 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.15 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN100105-06	1	S6	5.54	0.267	1/5/2010@10:08:13			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	5.54 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	5.54 > 2.50					
		Message	Pass					
		Action	None					
1202007819|938324|MB	1	1	-1.35	0.0149	1/5/2010@10:10:02			
1202007820||LCS	1	2	31.2	1.21	1/5/2010@10:10:56		25.00	
1202007821||LCSD	1	3	35.5	1.36	1/5/2010@10:11:49		25.00	
243711001	1	4	8.52	0.376	1/5/2010@10:12:42			
243711002	1	5	0.350	0.0772	1/5/2010@10:13:35			
243711003	1	6	10.3	0.440	1/5/2010@10:14:28			
243711004	1	7	12.6	0.524	1/5/2010@10:15:21			
243711005	1	8	11.3	0.476	1/5/2010@10:16:13			
243711006	1	9	13.0	0.539	1/5/2010@10:17:06			
243711007	1	10	7.86	0.352	1/5/2010@10:17:58			
WCN100105-03	1	S3	104	3.85	1/5/2010@10:18:50			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					
WCN100105-08	1	S7	-0.915	0.0310	1/5/2010@10:20:40			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.915 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.915 > -5.00					
		Message	CCB Passed					
		Action	Continue					
243711008	1	11	7.10	0.324	1/5/2010@10:22:29			
243711009	1	12	8.34	0.369	1/5/2010@10:23:21			
243711010	1	13	11.6	0.488	1/5/2010@10:24:13			
243712001	1	14	13.1	0.542	1/5/2010@10:25:05			
243712002	1	15	1.36	0.114	1/5/2010@10:25:56			
243714001	1	16	13.7	0.567	1/5/2010@10:26:50			
243714002	1	17	12.7	0.529	1/5/2010@10:27:44			
243714003	1	18	11.8	0.496	1/5/2010@10:28:37			
1202007018|937905|MB	1	19	-0.688	0.0393	1/5/2010@10:29:31			
1202007020||LCS	1	20	96.2	3.58	1/5/2010@10:30:24		250.00	
WCN100105-03	1	S3	105	3.89	1/5/2010@10:31:16			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					
WCN100105-08	1	S7	-1.74	8.27e-4	1/5/2010@10:33:06			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.74 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.74 > -5.00					
		Message	CCB Passed					
		Action	Continue					
243679001	1	21	-1.27	0.0180	1/5/2010@10:34:55			
1202007019||DUP	1	22	-1.57	0.00689	1/5/2010@10:35:48			
243680001	1	23	-1.55	0.00793	1/5/2010@10:36:41			
243681001	1	24	0.766	0.0924	1/5/2010@10:37:33			
243723001	1	25	-0.360	0.0513	1/5/2010@10:38:25			
WCN100105-03	1	S3	106	3.94	1/5/2010@10:39:18			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	6.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100105-08	1	S7	-1.77	-2.03e-4	1/5/2010@10:41:09			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.77 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								

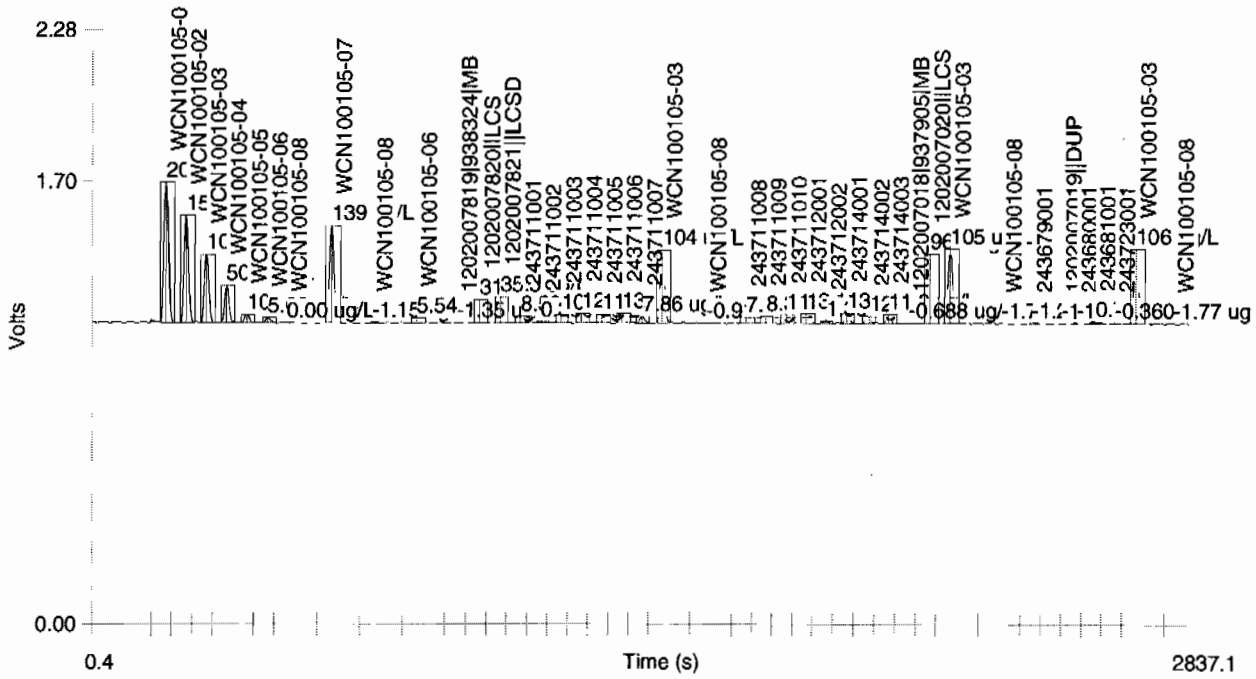
Author: axc2 Date : 1/5/2010

Result:	-1.77 > -5.00					
Message	CCB Passed					
Action	Continue					

Analyte Properties Table for OM_1-5-2010_09-54-02.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

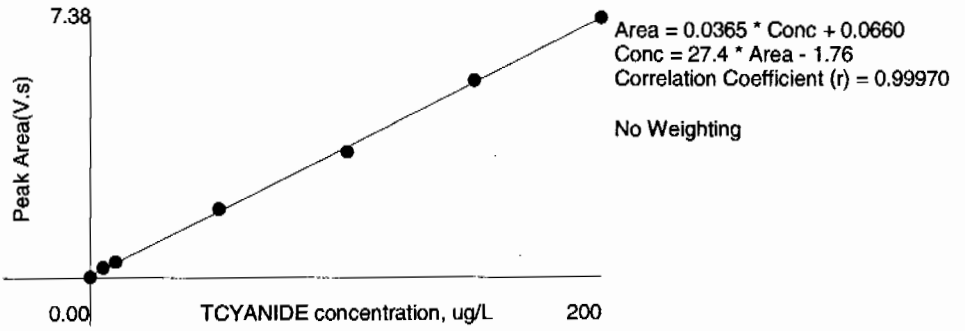


Author: axc2 Date : 1/5/2010

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.38	0.540	-0.1	1/5/2010	09:58:27
2	150	1	5.60	0.412	-1.0	1/5/2010	09:59:19
3	100	1	3.59	0.264	3.6	1/5/2010	10:00:11
4	50.0	1	1.96	0.144	-3.7	1/5/2010	10:01:04
5	10.0	1	0.446	0.0322	-3.4	1/5/2010	10:01:58
6	5.00	1	0.284	0.0191	-14.4	1/5/2010	10:02:51
7	0.00	1	0.0165	0.00115		1/5/2010	10:03:46

Figure 1: TCYANIDE



This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	1/5/2010 12:32:54	OM_1-5-2010_12-29-33
CCB		1	axc2	1/5/2010 12:34:44	OM_1-5-2010_12-29-33
1202006248	937569	1	axc2	1/5/2010 12:36:34	OM_1-5-2010_12-29-33
1202006249	937569	25	axc2	1/5/2010 12:37:27	OM_1-5-2010_12-29-33
243623001	937569	1	axc2	1/5/2010 12:38:20	OM_1-5-2010_12-29-33
1202006250	937569	1	axc2	1/5/2010 12:39:14	OM_1-5-2010_12-29-33
1202006251	937569	1	axc2	1/5/2010 12:40:06	OM_1-5-2010_12-29-33
1202006255	937569	1	axc2	1/5/2010 12:40:59	OM_1-5-2010_12-29-33
243623002	937569	1	axc2	1/5/2010 12:41:52	OM_1-5-2010_12-29-33
1202006252	937569	1	axc2	1/5/2010 12:42:45	OM_1-5-2010_12-29-33
1202006253*	937569	1	axc2	1/5/2010 12:43:37	OM_1-5-2010_12-29-33
1202006254	937569	1	axc2	1/5/2010 12:44:29	OM_1-5-2010_12-29-33
CCV		1	axc2	1/5/2010 12:45:22	OM_1-5-2010_12-29-33
CCB		1	axc2	1/5/2010 12:47:11	OM_1-5-2010_12-29-33
1202006253	937569	1	axc2	1/5/2010 12:49:00	OM_1-5-2010_12-29-33
243623003	937569	1	axc2	1/5/2010 12:49:52	OM_1-5-2010_12-29-33
243623004	937569	1	axc2	1/5/2010 12:50:44	OM_1-5-2010_12-29-33
243623005	937569	1	axc2	1/5/2010 12:51:36	OM_1-5-2010_12-29-33
243623006	937569	1	axc2	1/5/2010 12:52:28	OM_1-5-2010_12-29-33
243623007	937569	1	axc2	1/5/2010 12:53:19	OM_1-5-2010_12-29-33
243623008	937569	1	axc2	1/5/2010 12:54:13	OM_1-5-2010_12-29-33
243623009	937569	1	axc2	1/5/2010 12:55:06	OM_1-5-2010_12-29-33
243626001	937569	1	axc2	1/5/2010 12:56:00	OM_1-5-2010_12-29-33
243626002	937569	1	axc2	1/5/2010 12:56:53	OM_1-5-2010_12-29-33
CCV		1	axc2	1/5/2010 12:57:45	OM_1-5-2010_12-29-33
CCB		1	axc2	1/5/2010 12:59:36	OM_1-5-2010_12-29-33
243626003	937569	1	axc2	1/5/2010 13:01:25	OM_1-5-2010_12-29-33
243626004	937569	1	axc2	1/5/2010 13:02:18	OM_1-5-2010_12-29-33
243626005	937569	1	axc2	1/5/2010 13:03:11	OM_1-5-2010_12-29-33
243626006	937569	1	axc2	1/5/2010 13:04:04	OM_1-5-2010_12-29-33
243626007	937569	1	axc2	1/5/2010 13:04:56	OM_1-5-2010_12-29-33
243626008	937569	1	axc2	1/5/2010 13:05:48	OM_1-5-2010_12-29-33
243626009	937569	1	axc2	1/5/2010 13:06:41	OM_1-5-2010_12-29-33
243626010	937569	1	axc2	1/5/2010 13:07:33	OM_1-5-2010_12-29-33
243626011	937569	1	axc2	1/5/2010 13:08:25	OM_1-5-2010_12-29-33
1202007538*	938216	1	axc2	1/5/2010 13:09:17	OM_1-5-2010_12-29-33
CCV		1	axc2	1/5/2010 13:10:09	OM_1-5-2010_12-29-33
CCB		1	axc2	1/5/2010 13:12:00	OM_1-5-2010_12-29-33
1202007545	938216	1	axc2	1/5/2010 13:13:48	OM_1-5-2010_12-29-33
243724003	938216	1	axc2	1/5/2010 13:14:42	OM_1-5-2010_12-29-33
1202007540	938216	1	axc2	1/5/2010 13:15:35	OM_1-5-2010_12-29-33
1202007542	938216	1	axc2	1/5/2010 13:16:29	OM_1-5-2010_12-29-33
1202007544	938216	1	axc2	1/5/2010 13:17:22	OM_1-5-2010_12-29-33
1202007538	938216	1	axc2	1/5/2010 13:18:14	OM_1-5-2010_12-29-33
1202006256	937572	1	axc2	1/5/2010 13:19:08	OM_1-5-2010_12-29-33
1202006263	937572	25	axc2	1/5/2010 13:20:01	OM_1-5-2010_12-29-33
243550014	937572	1	axc2	1/5/2010 13:20:54	OM_1-5-2010_12-29-33
243550015	937572	1	axc2	1/5/2010 13:21:47	OM_1-5-2010_12-29-33
CCV		1	axc2	1/5/2010 13:22:39	OM_1-5-2010_12-29-33
CCB		1	axc2	1/5/2010 13:24:29	OM_1-5-2010_12-29-33
243628001	937572	1	axc2	1/5/2010 13:26:19	OM_1-5-2010_12-29-33
1202006257	937572	1	axc2	1/5/2010 13:27:11	OM_1-5-2010_12-29-33
1202006259	937572	1	axc2	1/5/2010 13:28:04	OM_1-5-2010_12-29-33
1202006261	937572	1	axc2	1/5/2010 13:28:56	OM_1-5-2010_12-29-33
243628002	937572	1	axc2	1/5/2010 13:29:48	OM_1-5-2010_12-29-33
1202006258	937572	1	axc2	1/5/2010 13:30:40	OM_1-5-2010_12-29-33
1202006260	937572	1	axc2	1/5/2010 13:31:32	OM_1-5-2010_12-29-33
1202006262	937572	1	axc2	1/5/2010 13:32:27	OM_1-5-2010_12-29-33

243628003	937572	1	axc2	1/5/2010	13:33:21	OM_1-5-2010_12-29-33
243628004	937572	1	axc2	1/5/2010	13:34:14	OM_1-5-2010_12-29-33
CCV		1	axc2	1/5/2010	13:35:07	OM_1-5-2010_12-29-33
CCB		1	axc2	1/5/2010	13:36:58	OM_1-5-2010_12-29-33
243628005	937572	1	axc2	1/5/2010	13:38:47	OM_1-5-2010_12-29-33
243628006	937572	1	axc2	1/5/2010	13:39:40	OM_1-5-2010_12-29-33
243628007	937572	1	axc2	1/5/2010	13:40:34	OM_1-5-2010_12-29-33
243628008	937572	1	axc2	1/5/2010	13:41:27	OM_1-5-2010_12-29-33
243628009	937572	1	axc2	1/5/2010	13:42:20	OM_1-5-2010_12-29-33
243628010	937572	1	axc2	1/5/2010	13:43:13	OM_1-5-2010_12-29-33
243628011	937572	1	axc2	1/5/2010	13:44:06	OM_1-5-2010_12-29-33
243675001	937572	1	axc2	1/5/2010	13:44:58	OM_1-5-2010_12-29-33
243687001	937572	1	axc2	1/5/2010	13:45:50	OM_1-5-2010_12-29-33
243708001	937572	1	axc2	1/5/2010	13:46:43	OM_1-5-2010_12-29-33
CCV		1	axc2	1/5/2010	13:47:35	OM_1-5-2010_12-29-33
CCB		1	axc2	1/5/2010	13:49:25	OM_1-5-2010_12-29-33

Author: axc2 Date : 1/5/2010

Original Run Filename: OM_1-5-2010_12-29-33.OMN created 1/5/2010 12:29:33
Original Run Author's Signature: [axc2]
Current Run Filename: OM_1-5-2010_12-29-33.OMN last modified 1/5/2010 13:50:31
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
WCN100105-03	1	S3	99.9	3.72	1/5/2010@12:32:54			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-0.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-0.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN100105-08	1	S7	-1.58	0.00675	1/5/2010@12:34:44			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.58 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.58 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202006248|937569|MB	1	1	-1.68	0.00288	1/5/2010@12:36:34			
1202006249||LCS	1	2	28.9	1.12	1/5/2010@12:37:27		25.00	
243623001	1	3	0.0538	0.0664	1/5/2010@12:38:20			
1202006250||DUP	1	4	0.436	0.0804	1/5/2010@12:39:14			
1202006251||MS	1	5	93.9	3.50	1/5/2010@12:40:06			
1202006255||MSD	1	6	77.9	2.91	1/5/2010@12:40:59			
243623002	1	7	0.0244	0.0653	1/5/2010@12:41:52			
1202006252||DUP	1	8	0.124	0.0690	1/5/2010@12:42:45			
1202006253||MS	1	9	35.6	1.36	1/5/2010@12:43:37			
1202006254||MSD	1	10	70.6	2.64	1/5/2010@12:44:29			
WCN100105-03	1	S3	104	3.87	1/5/2010@12:45:22			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					
WCN100105-08	1	S7	-0.951	0.0297	1/5/2010@12:47:11			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.951 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.951 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202006253||MS	1	9	71.2	2.67	1/5/2010@12:49:00			
243623003	1	11	0.853	0.0956	1/5/2010@12:49:52			
243623004	1	12	0.353	0.0773	1/5/2010@12:50:44			
243623005	1	13	-0.724	0.0379	1/5/2010@12:51:36			
243623006	1	14	0.685	0.0895	1/5/2010@12:52:28			

243623007	1	15	0.141	0.0696	1/5/2010@12:53:19			
243623008	1	16	-0.318	0.0528	1/5/2010@12:54:13			
243623009	1	17	-1.07	0.0254	1/5/2010@12:55:06			
243626001	1	18	0.662	0.0886	1/5/2010@12:56:00			
243626002	1	19	0.367	0.0778	1/5/2010@12:56:53			
WCN100105-03	1	S3	106	3.93	1/5/2010@12:57:45			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	5.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	5.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100105-08	1	S7	-1.20	0.0205	1/5/2010@12:59:36			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					
243626003	1	20	0.240	0.0732	1/5/2010@13:01:25			
243626004	1	21	0.579	0.0856	1/5/2010@13:02:18			
243626005	1	22	1.08	0.104	1/5/2010@13:03:11			
243626006	1	23	1.01	0.101	1/5/2010@13:04:04			
243626007	1	24	0.996	0.101	1/5/2010@13:04:56			
243626008	1	25	0.305	0.0756	1/5/2010@13:05:48			
243626009	1	26	1.80	0.130	1/5/2010@13:06:41			
243626010	1	27	0.541	0.0842	1/5/2010@13:07:33			
243626011	1	28	0.0326	0.0656	1/5/2010@13:08:25			
1202007538|938216|MB	1	29	37.2	1.43	1/5/2010@13:09:17			
WCN100105-03	1	S3	106	3.95	1/5/2010@13:10:09			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	6.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	6.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100105-08	1	S7	-0.936	0.0302	1/5/2010@13:12:00			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.936 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.936 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202007545||LCS	1	30	54.3	2.05	1/5/2010@13:13:48			
243724003	1	31	-0.655	0.0405	1/5/2010@13:14:42			
1202007540||DUP	1	32	-1.43	0.0120	1/5/2010@13:15:35			
1202007542||MS	1	33	109	4.03	1/5/2010@13:16:29			
1202007544||MSD	1	34	113	4.21	1/5/2010@13:17:22			
1202007538|938216|MB	1	29	-1.01	0.0274	1/5/2010@13:18:14			
1202006256|937572|MB	1	35	-1.53	0.00850	1/5/2010@13:19:08			
1202006263||LCS	1	36	29.2	1.13	1/5/2010@13:20:01		25.00	
243550014	1	37	-0.709	0.0385	1/5/2010@13:20:54			
243550015	1	38	0.231	0.0729	1/5/2010@13:21:47			
WCN100105-03	1	S3	104	3.87	1/5/2010@13:22:39			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					
WCN100105-08	1	S7	-1.26	0.0183	1/5/2010@13:24:29			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.26 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.26 > -5.00					
		Message	CCB Passed					
		Action	Continue					
243628001	1	39	-0.401	0.0498	1/5/2010@13:26:19			
1202006257||DUP	1	40	-0.598	0.0426	1/5/2010@13:27:11			
1202006259||MS	1	41	106	3.95	1/5/2010@13:28:04			
1202006261||MSD	1	42	106	3.92	1/5/2010@13:28:56			
243628002	1	43	4.02	0.211	1/5/2010@13:29:48			
1202006258||DUP	1	44	2.13	0.142	1/5/2010@13:30:40			
1202006260||MS	1	45	105	3.89	1/5/2010@13:31:32			
1202006262||MSD	1	46	94.4	3.51	1/5/2010@13:32:27			
243628003	1	47	0.854	0.0956	1/5/2010@13:33:21			
243628004	1	48	-0.356	0.0514	1/5/2010@13:34:14			
WCN100105-03	1	S3	106	3.94	1/5/2010@13:35:07			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					
WCN100105-08	1	S7	-1.75	2.92e-4	1/5/2010@13:36:58			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.75 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.75 > -5.00					
		Message	CCB Passed					
		Action	Continue					
243628005	1	49	0.894	0.0971	1/5/2010@13:38:47			
243628006	1	50	-0.0214	0.0636	1/5/2010@13:39:40			
243628007	1	51	2.04	0.139	1/5/2010@13:40:34			
243628008	1	52	0.0864	0.0676	1/5/2010@13:41:27			
243628009	1	53	0.258	0.0738	1/5/2010@13:42:20			
243628010	1	54	0.506	0.0829	1/5/2010@13:43:13			
243628011	1	55	0.430	0.0801	1/5/2010@13:44:06			
243675001	1	56	0.885	0.0968	1/5/2010@13:44:58			
243687001	1	57	-0.113	0.0603	1/5/2010@13:45:50			
243708001	1	58	-1.36	0.0147	1/5/2010@13:46:43			
WCN100105-03	1	S3	107	3.96	1/5/2010@13:47:35			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	6.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	6.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100105-08	1	S7	-1.32	0.0161	1/5/2010@13:49:25			CCB

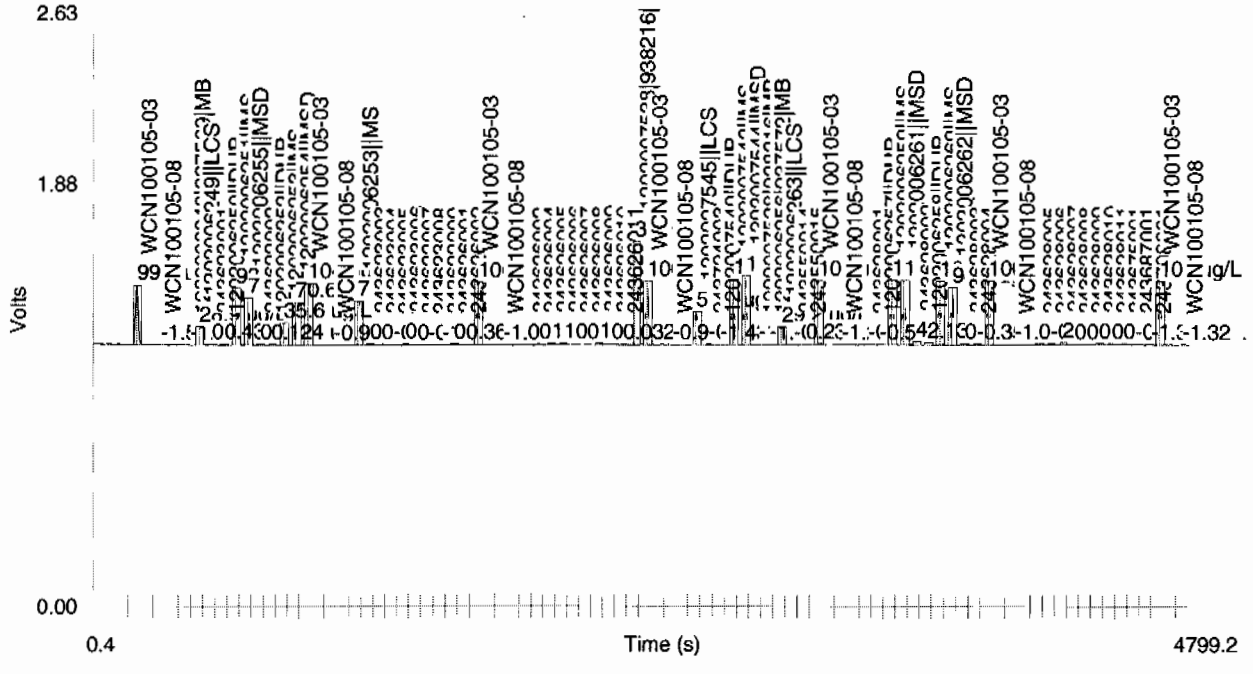
Author: axc2 Date : 1/5/2010

Known Conc:	0.00					
DQM Test: > + Concentration Limit						
Result:	-1.32 < 5.00					
Message	CCB Passed					
Action	Continue					
DQM Test: < - Concentration Limit						
Result:	-1.32 > -5.00					
Message	CCB Passed					
Action	Continue					

Analyte Properties Table for OM_1-5-2010_12-29-33.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

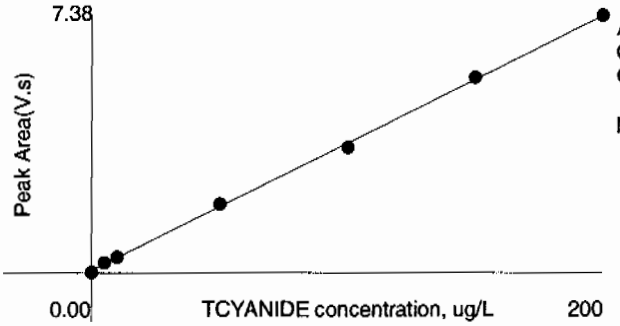


Author: axc2 Date : 1/5/2010

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.38	0.540	-0.1	1/5/2010	09:58:27
2	150	1	5.60	0.412	-1.0	1/5/2010	09:59:19
3	100	1	3.59	0.264	3.6	1/5/2010	10:00:11
4	50.0	1	1.96	0.144	-3.7	1/5/2010	10:01:04
5	10.0	1	0.446	0.0322	-3.4	1/5/2010	10:01:58
6	5.00	1	0.284	0.0191	-14.4	1/5/2010	10:02:51
7	0.00	1	0.0165	0.00115		1/5/2010	10:03:46

Figure 1: TCYANIDE



Area = 0.0365 * Conc + 0.0660
Conc = 27.4 * Area - 1.76
Correlation Coefficient (r) = 0.99970

No Weighting

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1103-1

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	937245	**Method:**	SW846 9012A
Prep Batch :	937244	**Method:**	SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
243629001	RE12-10-7677
1202005554	Method Blank (MB)
1202005555	243608001(RE16-10-372) Sample Duplicate (DUP)
1202005556	243608001(RE16-10-372) Matrix Spike (MS)
1202005557	243608001(RE16-10-372) Matrix Spike Duplicate (MSD)
1202005558	Laboratory Control Sample (LCS)

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

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule
The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

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

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

Quality Control (QC) Designation
The following sample was selected for QC analysis: 243608001 (RE16-10-372).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recovery for this sample set was within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recovery for this sample set was within the required acceptance limits.

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

Duplicate Relative Percent Difference (RPD) Statement
The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1202005555 (RE16-10-372).

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 following sample was re-analyzed due to instrument failure: 1202005558 (LCS).

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:** 25Jan10

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: 10-1103-1 GEL Work Order: 243629

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 Tom Lewis, Jr.

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 6, 2010

Client SDG: 10-1103-1

Client Sample ID:	RE12-10-7677	Project:	LANL01004
Sample ID:	243629001	Client ID:	LANL010
Matrix:	W		
Collect Date:	22-DEC-09 12:00		
Receive Date:	29-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 01/04/10	1049	937245	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	12/31/09	1507	937244

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

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

QC Summary

Report Date: January 6, 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: 243629

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis											
Batch 937245											
QC1202005555 243608001 DUP											
Cyanide, Total		U	ND	U	ND	ug/L	N/A			AXC2	01/04/10 10:45
QC1202005558 LCS											
Cyanide, Total	50.0				45.4	ug/L		90.8	(90%-110%)		01/04/10 10:54
QC1202005554 MB											
Cyanide, Total				U	5.00	ug/L					01/04/10 10:42
QC1202005556 243608001 MS											
Cyanide, Total	100	U	ND		94.9	ug/L		94.9	(60%-127%)		01/04/10 10:46
QC1202005557 243608001 MSD											
Cyanide, Total	100	U	ND		100	ug/L	5.23	100	(0%-20%)		01/04/10 10:47

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
- 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

QC Summary

Workorder: 243629

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

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: 06-JAN-2010 08:57

GEL Laboratories LLC

Contract: **LANL01004**

SDG #: **10-1103-1**

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	**04-JAN-2010 10:36:47**	**OM_1-4-2010_10-26-17**	**137**	**150**	**91**	**(90%-110%)**	**Yes**
CCV	04-JAN-2010 10:51:04	OM_1-4-2010_10-26-17	109	100	109	(90%-110%)	Yes
CCV	04-JAN-2010 11:03:30	OM_1-4-2010_10-26-17	103	100	103	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**04-JAN-2010 10:38:37**	**OM_1-4-2010_10-26-17**	**-3.1**	**5**	**Yes**
CCB	04-JAN-2010 10:52:55	OM_1-4-2010_10-26-17	-2.04	5	Yes
CCB	04-JAN-2010 11:05:20	OM_1-4-2010_10-26-17	-2.7	5	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 937244

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202005558	URF1184831-02	.0125	mL
MS	1202005556	URF1184831-02	.025	mL
MS	1202006218	URF1184831-02	.025	mL
MSD	1202005557	URF1184831-02	.025	mL
MSD	1202006219	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202005554		SW846 9010B Prep	31-DEC-2009 15:07	>12	25 mL	25 mL	1	WATER
LCS	1202005558		SW846 9010B Prep	31-DEC-2009 15:07	>12	25 mL	25 mL	1	WATER
SAMPLE	243585002		EPA 335.4	31-DEC-2009 15:07	>12	25 mL	25 mL	1	WASTE WATER
SAMPLE	243608001		SW846 9010B Prep	31-DEC-2009 15:07	>12	25 mL	25 mL	1	WATER
DUP	1202005555	243608001	SW846 9010B Prep	31-DEC-2009 15:07	>12	25 mL	25 mL	1	WATER
MS	1202005556	243608001	SW846 9010B Prep	31-DEC-2009 15:07	>12	25 mL	25 mL	1	WATER
MSD	1202005557	243608001	SW846 9010B Prep	31-DEC-2009 15:07	>12	25 mL	25 mL	1	WATER
SAMPLE	243627001		SW846 9010B Prep	31-DEC-2009 15:07	>12	25 mL	25 mL	1	WATER
SAMPLE	243629001		SW846 9010B Prep	31-DEC-2009 15:07	>12	25 mL	25 mL	1	WATER
SAMPLE	243631001		SW846 9010B Prep	31-DEC-2009 15:07	>12	25 mL	25 mL	1	WATER
SAMPLE	243632001		SW846 9010B Prep	31-DEC-2009 15:07	>12	25 mL	25 mL	1	WATER
SAMPLE	243633001		EPA 335.4	31-DEC-2009 15:07	>12	25 mL	25 mL	1	WATER
SAMPLE	243633002		EPA 335.4	31-DEC-2009 15:07	>12	25 mL	25 mL	1	WATER
SAMPLE	243633006		EPA 335.4	31-DEC-2009 15:07	>12	25 mL	25 mL	1	WATER
DUP	1202006217	243633006	EPA 335.4	31-DEC-2009 15:07	>12	25 mL	25 mL	1	WATER
MS	1202006218	243633006	EPA 335.4	31-DEC-2009 15:07	>12	25 mL	25 mL	1	WATER
MSD	1202006219	243633006	EPA 335.4	31-DEC-2009 15:07	>12	25 mL	25 mL	1	WATER
SAMPLE	243633009		EPA 335.4	31-DEC-2009 15:07	>12	25 mL	25 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
091211-C	25 mL	0.25N Sodium Hydroxide Solution
WCN091231-07	.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	1/4/2010 10:29:37	OM_1-4-2010_10-26-17
150 ppb		1	axc2	1/4/2010 10:30:29	OM_1-4-2010_10-26-17
100 ppb		1	axc2	1/4/2010 10:31:22	OM_1-4-2010_10-26-17
50 ppb		1	axc2	1/4/2010 10:32:15	OM_1-4-2010_10-26-17
10 ppb		1	axc2	1/4/2010 10:33:08	OM_1-4-2010_10-26-17
CRDL 5.0 ppb		1	axc2	1/4/2010 10:34:02	OM_1-4-2010_10-26-17
ICAL-00		1	axc2	1/4/2010 10:34:56	OM_1-4-2010_10-26-17
ICV		1	axc2	1/4/2010 10:36:47	OM_1-4-2010_10-26-17
ICB		1	axc2	1/4/2010 10:38:37	OM_1-4-2010_10-26-17
CRDL		1	axc2	1/4/2010 10:40:27	OM_1-4-2010_10-26-17
1202005554	937245	1	axc2	1/4/2010 10:42:17	OM_1-4-2010_10-26-17
1202005558*	937245	1	axc2	1/4/2010 10:43:10	OM_1-4-2010_10-26-17
243585002	937245	1	axc2	1/4/2010 10:44:03	OM_1-4-2010_10-26-17
243608001	937245	1	axc2	1/4/2010 10:44:56	OM_1-4-2010_10-26-17
1202005555	937245	1	axc2	1/4/2010 10:45:49	OM_1-4-2010_10-26-17
1202005556	937245	1	axc2	1/4/2010 10:46:42	OM_1-4-2010_10-26-17
1202005557	937245	1	axc2	1/4/2010 10:47:34	OM_1-4-2010_10-26-17
243627001	937245	1	axc2	1/4/2010 10:48:27	OM_1-4-2010_10-26-17
243629001	937245	1	axc2	1/4/2010 10:49:19	OM_1-4-2010_10-26-17
243631001	937245	1	axc2	1/4/2010 10:50:12	OM_1-4-2010_10-26-17
CCV		1	axc2	1/4/2010 10:51:04	OM_1-4-2010_10-26-17
CCB		1	axc2	1/4/2010 10:52:55	OM_1-4-2010_10-26-17
1202005558	937245	1	axc2	1/4/2010 10:54:44	OM_1-4-2010_10-26-17
243632001	937245	1	axc2	1/4/2010 10:55:36	OM_1-4-2010_10-26-17
243633001	937245	1	axc2	1/4/2010 10:56:28	OM_1-4-2010_10-26-17
243633002	937245	1	axc2	1/4/2010 10:57:20	OM_1-4-2010_10-26-17
243633006	937245	1	axc2	1/4/2010 10:58:12	OM_1-4-2010_10-26-17
1202006217	937245	1	axc2	1/4/2010 10:59:04	OM_1-4-2010_10-26-17
1202006218	937245	1	axc2	1/4/2010 10:59:57	OM_1-4-2010_10-26-17
1202006219	937245	1	axc2	1/4/2010 11:00:51	OM_1-4-2010_10-26-17
243633009	937245	1	axc2	1/4/2010 11:01:44	OM_1-4-2010_10-26-17
1202004497	936843	1	axc2	1/4/2010 11:02:37	OM_1-4-2010_10-26-17
CCV		1	axc2	1/4/2010 11:03:30	OM_1-4-2010_10-26-17
CCB		1	axc2	1/4/2010 11:05:20	OM_1-4-2010_10-26-17
1202004504	936843	25	axc2	1/4/2010 11:07:10	OM_1-4-2010_10-26-17
243517008	936843	1	axc2	1/4/2010 11:08:03	OM_1-4-2010_10-26-17
1202004498	936843	1	axc2	1/4/2010 11:08:56	OM_1-4-2010_10-26-17
1202004500	936843	1	axc2	1/4/2010 11:09:48	OM_1-4-2010_10-26-17
1202004502	936843	1	axc2	1/4/2010 11:10:41	OM_1-4-2010_10-26-17
243517009	936843	1	axc2	1/4/2010 11:11:34	OM_1-4-2010_10-26-17
1202004499	936843	1	axc2	1/4/2010 11:12:26	OM_1-4-2010_10-26-17
1202004501	936843	1	axc2	1/4/2010 11:13:18	OM_1-4-2010_10-26-17
1202004503	936843	1	axc2	1/4/2010 11:14:10	OM_1-4-2010_10-26-17
243521001	936843	1	axc2	1/4/2010 11:15:02	OM_1-4-2010_10-26-17
CCV		1	axc2	1/4/2010 11:15:55	OM_1-4-2010_10-26-17
CCB		1	axc2	1/4/2010 11:17:45	OM_1-4-2010_10-26-17
243521002	936843	1	axc2	1/4/2010 11:19:33	OM_1-4-2010_10-26-17
243521003	936843	1	axc2	1/4/2010 11:20:27	OM_1-4-2010_10-26-17
243521004	936843	1	axc2	1/4/2010 11:21:21	OM_1-4-2010_10-26-17
243521005	936843	1	axc2	1/4/2010 11:22:14	OM_1-4-2010_10-26-17
243521006	936843	1	axc2	1/4/2010 11:23:08	OM_1-4-2010_10-26-17
243521007	936843	1	axc2	1/4/2010 11:24:01	OM_1-4-2010_10-26-17
243521008	936843	1	axc2	1/4/2010 11:24:54	OM_1-4-2010_10-26-17
243521009	936843	1	axc2	1/4/2010 11:25:47	OM_1-4-2010_10-26-17
243521010	936843	1	axc2	1/4/2010 11:26:40	OM_1-4-2010_10-26-17
243521011	936843	1	axc2	1/4/2010 11:27:33	OM_1-4-2010_10-26-17
CCV		1	axc2	1/4/2010 11:28:25	OM_1-4-2010_10-26-17
CCB		1	axc2	1/4/2010 11:30:15	OM_1-4-2010_10-26-17

243547002	936843	1	axc2	1/4/2010 11:32:04	OM_1-4-2010_10-26-17
243547003	936843	1	axc2	1/4/2010 11:32:56	OM_1-4-2010_10-26-17
243549002	936843	1	axc2	1/4/2010 11:33:49	OM_1-4-2010_10-26-17
243550001	936843	1	axc2	1/4/2010 11:34:41	OM_1-4-2010_10-26-17
243550002	936843	1	axc2	1/4/2010 11:35:33	OM_1-4-2010_10-26-17
243550003	936843	1	axc2	1/4/2010 11:36:25	OM_1-4-2010_10-26-17
243550004	936843	1	axc2	1/4/2010 11:37:19	OM_1-4-2010_10-26-17
CCV		1	axc2	1/4/2010 11:38:11	OM_1-4-2010_10-26-17
CCB		1	axc2	1/4/2010 11:40:02	OM_1-4-2010_10-26-17

Author: axc2 Date : 1/4/2010

Original Run Filename: OM_1-4-2010_10-26-17.OMN created 1/4/2010 10:26:17
Original Run Author's Signature: [axc2]
Current Run Filename: OM_1-4-2010_10-26-17.OMN last modified 1/4/2010 11:41:07
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
WCN100104-01	1	S1	200	7.63	1/4/2010@10:29:37			200 ppb
WCN100104-02	1	S2	150	5.81	1/4/2010@10:30:29			150 ppb
WCN100104-03	1	S3	100	3.99	1/4/2010@10:31:22			100 ppb
WCN100104-04	1	S4	50.0	2.09	1/4/2010@10:32:15			50 ppb
WCN100104-05	1	S5	10.0	0.463	1/4/2010@10:33:08			10 ppb
WCN100104-06	1	S6	5.00	0.277	1/4/2010@10:34:02			CRDL 5.0 ppb
WCN100104-08	1	S7	0.00	0.0108	1/4/2010@10:34:56			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99973 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN100104-07	1	S8	137	5.30	1/4/2010@10:36:47			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	-8.9 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-8.9 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN100104-08	1	S7	-3.10	-0.0205	1/4/2010@10:38:37			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-3.10 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-3.10 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN100104-06	1	S6	5.20	0.295	1/4/2010@10:40:27			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	5.20 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	5.20 > 2.50					
		Message	Pass					
		Action	None					
1202005554|937245|MB	1	1	-1.46	0.0418	1/4/2010@10:42:17			
1202005558||LCS	1	2	44.5	1.79	1/4/2010@10:43:10			
243585002	1	3	-0.484	0.0790	1/4/2010@10:44:03			
243608001	1	4	-2.24	0.0123	1/4/2010@10:44:56			
1202005555||DUP	1	5	-1.58	0.0374	1/4/2010@10:45:49			
1202005556||MS	1	6	94.9	3.71	1/4/2010@10:46:42			
1202005557||MSD	1	7	100	3.91	1/4/2010@10:47:34			
243627001	1	8	-1.51	0.0399	1/4/2010@10:48:27			
243629001	1	9	-1.99	0.0217	1/4/2010@10:49:19			
243631001	1	10	-2.35	0.00803	1/4/2010@10:50:12			
WCN100104-03	1	S3	109	4.23	1/4/2010@10:51:04			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	8.6 < 10.0					

		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	8.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100104-08	1	S7	-2.04	0.0199	1/4/2010@10:52:55			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	-2.04 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	-2.04 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202005558||LCS	1	2	45.4	1.83	1/4/2010@10:54:44			
243632001	1	11	-1.49	0.0405	1/4/2010@10:55:36			
243633001	1	12	-1.66	0.0344	1/4/2010@10:56:28			
243633002	1	13	-1.45	0.0422	1/4/2010@10:57:20			
243633006	1	14	-2.75	-0.00712	1/4/2010@10:58:12			
1202006217||DUP	1	15	-1.99	0.0215	1/4/2010@10:59:04			
1202006218||MS	1	16	96.0	3.75	1/4/2010@10:59:57			
1202006219||MSD	1	17	100	3.91	1/4/2010@11:00:51			
243633009	1	18	-1.26	0.0496	1/4/2010@11:01:44			
1202004497|936843|MB	1	19	-1.90	0.0251	1/4/2010@11:02:37			
WCN100104-03	1	S3	103	4.01	1/4/2010@11:03:30			CCV
		Known Conc:	100					
		DQM Test: > + Percent Relative Difference						
		Result:	2.9 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	2.9 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100104-08	1	S7	-2.70	-0.00550	1/4/2010@11:05:20			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	-2.70 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	-2.70 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202004504||LCS	1	20	30.2	1.25	1/4/2010@11:07:10		25.00	
243517008	1	21	-0.543	0.0767	1/4/2010@11:08:03			
1202004498||DUP	1	22	0.103	0.101	1/4/2010@11:08:56			
1202004500||MS	1	23	91.7	3.59	1/4/2010@11:09:48			
1202004502||MSD	1	24	92.4	3.61	1/4/2010@11:10:41			
243517009	1	25	0.220	0.106	1/4/2010@11:11:34			
1202004499||DUP	1	26	1.82	0.166	1/4/2010@11:12:26			
1202004501||MS	1	27	92.4	3.61	1/4/2010@11:13:18			
1202004503||MSD	1	28	79.5	3.12	1/4/2010@11:14:10			
243521001	1	29	-0.679	0.0715	1/4/2010@11:15:02			
WCN100104-03	1	S3	103	4.02	1/4/2010@11:15:55			CCV
		Known Conc:	100					
		DQM Test: > + Percent Relative Difference						
		Result:	3.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	3.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100104-08	1	S7	-1.79	0.0294	1/4/2010@11:17:45			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit								
Result:			-1.79 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.79 > -5.00					
Message			CCB Passed					
Action			Continue					
243521002	1	30	-1.46	0.0420	1/4/2010@11:19:33			
243521003	1	31	-0.362	0.0836	1/4/2010@11:20:27			
243521004	1	32	1.22	0.144	1/4/2010@11:21:21			
243521005	1	33	-0.936	0.0618	1/4/2010@11:22:14			
243521006	1	34	3.33	0.224	1/4/2010@11:23:08			
243521007	1	35	-1.34	0.0463	1/4/2010@11:24:01			
243521008	1	36	-0.707	0.0705	1/4/2010@11:24:54			
243521009	1	37	-1.63	0.0352	1/4/2010@11:25:47			
243521010	1	38	0.857	0.130	1/4/2010@11:26:40			
243521011	1	39	-1.68	0.0334	1/4/2010@11:27:33			
WCN100104-03	1	S3	103	4.01	1/4/2010@11:28:25			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			2.7 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			2.7 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100104-08	1	S7	-2.53	9.28e-4	1/4/2010@11:30:15			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-2.53 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-2.53 > -5.00					
Message			CCB Passed					
Action			Continue					
243547002	1	40	-1.86	0.0265	1/4/2010@11:32:04			
243547003	1	41	-1.82	0.0282	1/4/2010@11:32:56			
243549002	1	42	1.59	0.158	1/4/2010@11:33:49			
243550001	1	43	-1.68	0.0335	1/4/2010@11:34:41			
243550002	1	44	-1.41	0.0438	1/4/2010@11:35:33			
243550003	1	45	-1.87	0.0261	1/4/2010@11:36:25			
243550004	1	46	-1.49	0.0406	1/4/2010@11:37:19			
WCN100104-03	1	S3	104	4.04	1/4/2010@11:38:11			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			3.5 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			3.5 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100104-08	1	S7	-2.65	-0.00342	1/4/2010@11:40:02			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-2.65 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-2.65 > -5.00					
Message			CCB Passed					
Action			Continue					

Analyte Properties Table for OM_1-4-2010_10-26-17.OMN

Author: axc2

Date : 1/4/2010

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

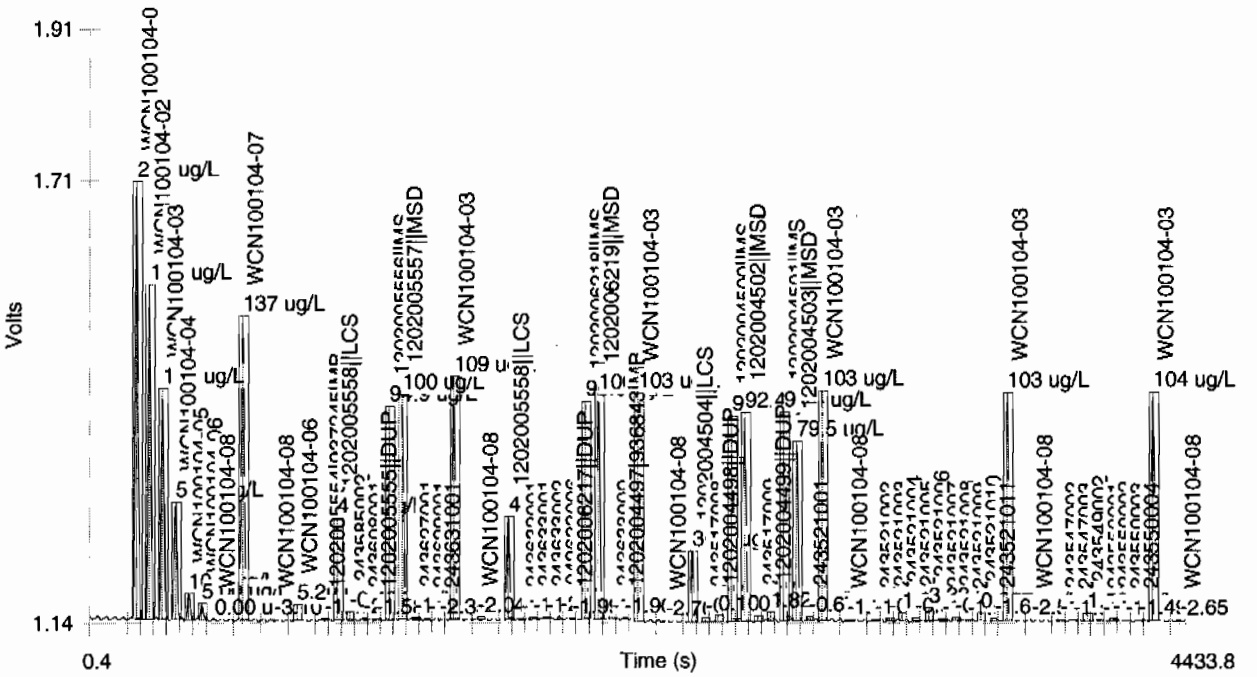


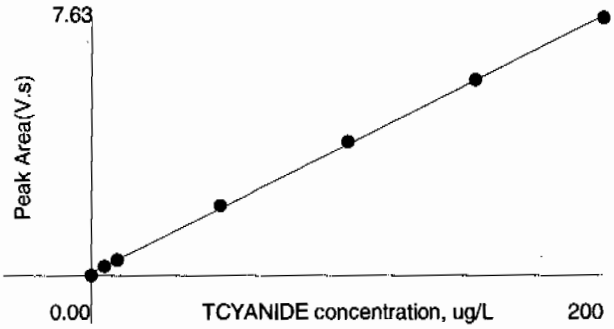
Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.63	0.565	0.9	1/4/2010	10:30:40
2	150	1	5.81	0.432	-0.2	1/4/2010	10:31:33
3	100	1	3.99	0.297	-2.2	1/4/2010	10:32:25
4	50.0	1	2.09	0.153	-4.6	1/4/2010	10:33:18
5	10.0	1	0.463	0.0341	3.3	1/4/2010	10:34:11
6	5.00	1	0.277	0.0211	4.2	1/4/2010	10:35:05
7	0.00	1	0.0108	7.90e-4		1/4/2010	10:35:59

Author: axc2

Date : 1/4/2010

Figure 1: TCYANIDE



Area = 0.0380 * Conc + 0.0989
Conc = 26.3 * Area - 2.56
Correlation Coefficient (r) = 0.99973

No Weighting