

Thursday, January 07, 2010

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number: 10-1132

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 1/7/2010

TURNAROUND/REPORT DUE: 2/6/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

Jeffery L. St. John

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846-6020		1	RE12-10-7633	R	1/5/2010	
		1	RE12-10-7634	R	1/5/2010	
		1	RE12-10-7635	R	1/5/2010	
		1	RE12-10-7636	R	1/5/2010	
		1	RE12-10-7637	R	1/5/2010	
		1	RE12-10-7638	R	1/5/2010	
		1	RE12-10-7639	R	1/5/2010	
		1	RE12-10-7640	R	1/5/2010	
		1	RE12-10-7641	R	1/5/2010	

Thursday, January 07, 2010

Page 2 of 4
REQUEST NUMBER: 10-1132

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:6020						
		1	RE12-10-7642	R	1/5/2010	
		1	RE12-10-7643	R	1/5/2010	
		1	RE12-10-7644	R	1/5/2010	
		1	RE12-10-7645	R	1/5/2010	
		1	RE12-10-7646	R	1/5/2010	
		1	RE12-10-7647	R	1/5/2010	
		1	RE12-10-7648	R	1/5/2010	
		1	RE12-10-7649	R	1/5/2010	
		1	RE12-10-7650	R	1/5/2010	
		1	RE12-10-7657	R	1/5/2010	
		1	RE12-10-7658	R	1/5/2010	
		1	RE12-10-7659	W	1/5/2010	
		1	RE12-10-7660	W	1/5/2010	
		1	RE12-10-7661	W	1/5/2010	
SW-846:6850						
		1	RE12-10-7633	R	1/5/2010	
		1	RE12-10-7634	R	1/5/2010	
		1	RE12-10-7635	R	1/5/2010	
		1	RE12-10-7636	R	1/5/2010	
		1	RE12-10-7637	R	1/5/2010	
		1	RE12-10-7638	R	1/5/2010	
		1	RE12-10-7639	R	1/5/2010	
		1	RE12-10-7640	R	1/5/2010	
		1	RE12-10-7641	R	1/5/2010	
		1	RE12-10-7642	R	1/5/2010	
		1	RE12-10-7643	R	1/5/2010	
		1	RE12-10-7644	R	1/5/2010	
		1	RE12-10-7645	R	1/5/2010	
		1	RE12-10-7646	R	1/5/2010	

Thursday, January 07, 2010

REQUEST NUMBER: 10-1132

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:6850						
		1	RE12-10-7647	R	1/5/2010	
		1	RE12-10-7648	R	1/5/2010	
		1	RE12-10-7649	R	1/5/2010	
		1	RE12-10-7650	R	1/5/2010	
		1	RE12-10-7657	R	1/5/2010	
		1	RE12-10-7658	R	1/5/2010	
		1	RE12-10-7659	W	1/5/2010	
		1	RE12-10-7660	W	1/5/2010	
		1	RE12-10-7661	W	1/5/2010	
SW-846:7470A						
		1	RE12-10-7659	W	1/5/2010	
		1	RE12-10-7660	W	1/5/2010	
		1	RE12-10-7661	W	1/5/2010	
SW-846:7471A						
		1	RE12-10-7633	R	1/5/2010	
		1	RE12-10-7634	R	1/5/2010	
		1	RE12-10-7635	R	1/5/2010	
		1	RE12-10-7636	R	1/5/2010	
		1	RE12-10-7637	R	1/5/2010	
		1	RE12-10-7638	R	1/5/2010	
		1	RE12-10-7639	R	1/5/2010	
		1	RE12-10-7640	R	1/5/2010	
		1	RE12-10-7641	R	1/5/2010	
		1	RE12-10-7642	R	1/5/2010	
		1	RE12-10-7643	R	1/5/2010	
		1	RE12-10-7644	R	1/5/2010	
		1	RE12-10-7645	R	1/5/2010	
		1	RE12-10-7646	R	1/5/2010	
		1	RE12-10-7647	R	1/5/2010	
		1	RE12-10-7648	R	1/5/2010	

Thursday, January 07, 2010

REQUEST NUMBER: 10-1132

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:9012A	SW-846:7471A	1	RE12-10-7649	R	1/5/2010	
		1	RE12-10-7650	R	1/5/2010	
		1	RE12-10-7657	R	1/5/2010	
		1	RE12-10-7658	R	1/5/2010	
		1	RE12-10-7633	R	1/5/2010	
		1	RE12-10-7634	R	1/5/2010	
		1	RE12-10-7635	R	1/5/2010	
		1	RE12-10-7636	R	1/5/2010	
		1	RE12-10-7637	R	1/5/2010	
		1	RE12-10-7638	R	1/5/2010	
		1	RE12-10-7639	R	1/5/2010	
		1	RE12-10-7640	R	1/5/2010	
		1	RE12-10-7641	R	1/5/2010	
		1	RE12-10-7642	R	1/5/2010	
		1	RE12-10-7643	R	1/5/2010	
		1	RE12-10-7644	R	1/5/2010	
		1	RE12-10-7645	R	1/5/2010	
		1	RE12-10-7646	R	1/5/2010	
		1	RE12-10-7647	R	1/5/2010	
		1	RE12-10-7648	R	1/5/2010	
		1	RE12-10-7649	R	1/5/2010	
		1	RE12-10-7650	R	1/5/2010	
		1	RE12-10-7657	R	1/5/2010	
		1	RE12-10-7658	R	1/5/2010	
		1	RE12-10-7659	W	1/5/2010	
		1	RE12-10-7660	W	1/5/2010	
		1	RE12-10-7661	W	1/5/2010	

Thursday, January 07, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1132

LOS ALAMOS

REQUEST NUMBER: 10-1132

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/6/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE12-10-7634	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7648	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7638	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7639	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7633	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7647	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7644	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7637	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7635	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7642	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7649	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7650	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7641	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7643	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7640	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7645	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7646	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7636	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7657	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7658	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7659	1	POLY	METALS+U-GEL	Nitric Acid	W
RE12-10-7659	1	POLY	SW-846:6850	Ice	W
RE12-10-7659	1	POLY	TCN	Sodium Hydroxide	W
RE12-10-7661	1	POLY	METALS+U-GEL	Nitric Acid	W
RE12-10-7661	1	POLY	SW-846:6850	Ice	W
RE12-10-7661	1	POLY	TCN	Sodium Hydroxide	W
RE12-10-7660	1	POLY	METALS+U-GEL	Nitric Acid	W
RE12-10-7660	1	POLY	SW-846:6850	Ice	W
RE12-10-7660	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:

Date

Time

Received By:

Date

Time

[Signature] 1/7/10 1400

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7633

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/05/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		9:42		SUB-MEDIA:		TUFF 1	
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:		HA	
LOCATION ID:	12-610647	OK		FIELD QC TYPE:		NA	
LOCATION TYPE:	GENERIC	OK		FIELD PREP:		NA	
TOP DEPTH:	0	0.0		SAMPLE USAGE:		INV	
BOTTOM DEPTH:	0	0.7		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA		NA	
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		NA	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA		NA	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY 73m 01/04/2010	None	y	
1		Met+U+CLO4+C N	1 GAL POLY 1 Liter	Ice	y	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	y	

SAMPLE DESC: Brown sandy silt roots and rock

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-11, sw of firing pt

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 16$ dpm $88 \leq 2060$ dpmPID $\frac{\text{ambient}}{\text{reading}}$

HE negative

0.0 ppm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) <i>TLMcFarland</i>	Date/Time 01/05/2010 1540	RECEIVED BY (Printed Name) <i>M. L. M. M.</i> (Signature) <i>M. L. M. M.</i>	Date/Time 1/5/10 1540
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7634

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/05/2010		MEDIA:	OBT3		ALL H
TIME COLLECTED (HH:MM)		9:51		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610647	OK		FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC	OK		FIELD PREP:	NA		
TOP DEPTH:	0	2.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	3.0		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA	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 Tm 01/04/2010	None	Y	
1		Met+U+CLO4+C N	LEGAL POLY 1 Liter	Ice	Y	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1	✓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown sandy soil

SAMPLE COMMENTS:

NA

LOCATION DESC: 1a-11, Sw of firing Point

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 27 \text{ dpm}$
 $\text{BY} \leq 2280 \text{ dpm}$
PID $\frac{\text{ambient}}{\text{reading}}$ $\frac{2.0}{0.0} \text{ ppm}$

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) <i>TLMcFarland</i>	Date/Time 01/05/2010 1540	RECEIVED BY (Printed Name) <i>Tracy M...</i> (Signature) <i>Tracy M...</i>	Date/Time 1/5/10 1540
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7635

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/05/2010		MEDIA:	OBT3		ALLH
TIME COLLECTED (HH:MM)		1023		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610648	OK		FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC	OK		FIELD PREP:	NA		
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	0.7		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA				WATER FLOWING: YES/NO/NA			
BOREHOLE DECLINATION:	NA			BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	AM241+GS+ISO PU+ISOU	1 LITER POLY 12m 01/04/2010	None	Yes	
1		Met+U+CLO4+C N	1 GAL POLY 1 L	Ice	Yes	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: Brown sandy silt few roots
and some rocks

SAMPLE COMMENTS:

NA

LOCATION DESC: 1a-35

South of firing point

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 22$ dpmPID ambient
reading $\frac{0.0}{0.0}$ ppmBY ≤ 2340 dpm

HE Neg.

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

Th McFarlane

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/05/2010 1540	RECEIVED BY (Printed Name) [Signature] (Signature) [Signature]	Date/Time 1/5/10 1540
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7636

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/05/2010		MEDIA:	QBT3		ALLH
TIME COLLECTED (HH:MM)		1031		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610648			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	2.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	3.0		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				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 2nd 01/04/2010	None	Yes	
1		Met+U+CLO4+C N	1 GAL POLY 1 L	Ice	Yes	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	✓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: Brown sandy silt, few Tuff peaces

SAMPLE COMMENTS:

2.8 hit tuff

LOCATION DESC:

PS 01/05/10
2.8 hit Tuff 1a-35 South of firing point

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 55$ dpmPID ambient
reading 8.8 ppm $\text{BY} \leq 2390$ dpm

COLLECTED BY (PRINT)

Rebecca Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/05/2010 1540	RECEIVED BY (Printed Name) M. L. Martin (Signature) M. L. Martin	Date/Time 1/5/10 1540
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7637

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/05/2010		MEDIA:		QBT3	
TIME COLLECTED(HH:MM)		1111		SUB-MEDIA:		TUFF 1	
PRS ID: 12-001(b)		OK		SAMPLE TECH CODE:		HA	
LOCATION ID: 12-610649		↓		FIELD QC TYPE:		NA	
LOCATION TYPE: GENERIC		↓		FIELD PREP:		NA	
TOP DEPTH: 0		2.0		SAMPLE USAGE:		INV	
BOTTOM DEPTH: 0		3.0		SCREEN/PORT DESC:		NA	
FIELD MATRIX: R		S		EXCAVATED: YES/NO/NA		NO/NA	
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		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 01/04/2010	None	Y	
1	↓	Met+U+CLO4+C N	1 LITER POLY 1L	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 and pinkish grey weathered tuff, few roots

FD: RE12-10-7658

SAMPLE COMMENTS:

NA

LOCATION DESC: 1a-33

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 33 dpm PID reading 0.0 ppm
 ambient 0.0 ppm
 βγ ≤ 2330 dpm

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

TLMcFarland

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/05/2010 1540	RECEIVED BY (Printed Name) <i>Theresa Montez</i> (Signature) <i>Theresa Montez</i>	Date/Time 1/5/10 1540
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7638

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/05/2010		MEDIA:	OBT3		Nilh
TIME COLLECTED (HH:MM)		1050		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	12-610649			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 01/04/2010	None	Yes	
1		Met+U+CLO4+C N	1 GAL POLY 1 L	Ice	Yes	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	✓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC:

Dark brown sandy loam, some roots

SAMPLE COMMENTS: NA

LOCATION DESC:

1a-33

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 22 dpm

BY ≤ 2450 dpm

PID

ambicab
reading0.0
0.0 ppm

HE neg

COLLECTED BY (PRINT)

Th McFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/05/2010 1540	RECEIVED BY (Printed Name) Philip Manta (Signature) [Signature]	Date/Time 1/5/10 [Signature]
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7639

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/05/2010		MEDIA:	OBT3		ALLH
TIME COLLECTED (HH:MM)		1124		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610650	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	0.7		SCREEN/PORT DESC:		NA	↓
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY 12m 01/04/2010	None	Yes	
1		Met+U+CLO4+C N	1 GAL POLY 1 L	Ice	Yes	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: brown loamy sand, some silt, rocks and roots, some wood

SAMPLE COMMENTS:

NA

LOCATION DESC:

1a-34

FIELD SCREENING/MEASUREMENT RESULTS:

L ≤ 27 dpm

PID

ambient
reading

0.0 ppm

HE Neg.

BY ≤ 2320 dpm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) T L McFarland

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/05/2010 1540	RECEIVED BY (Printed Name) M. L. McFarland (Signature) M. L. McFarland	Date/Time 1/5/10 1540
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7640

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/05/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		1133		SUB-MEDIA:	TUFF 1		OK
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610650			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	2.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	3.0		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	OK		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 72N 01/04/2010	None	Yes	
1		Met+U+CLO4+C N	1 GAL POLY 1 L	Ice	Yes	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: pinkish grey tuff, brown sandy silt

SAMPLE COMMENTS:

NA

LOCATION DESC: 1a-34

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq 16$ dpm
 $\text{BY} \leq 2520$ dpm
 PID ambient reading 0.0 ppm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

TLMcFarlane

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) R. Saunders	01/05/2010	(Printed Name) M. B. Martin	1/5/10
(Signature) R. Saunders	1540	(Signature) M. B. Martin	1540
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7641

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/05/2010		MEDIA:	OBT3		ALLH
TIME COLLECTED (HH:MM)		1200		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610651	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	0.9		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	NO			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 01/05/2010	None	Yes	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 L	Ice	Yes	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	✓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC:

Brown sandy silt

FR: RE12-10-7659

SAMPLE COMMENTS:

NA

LOCATION DESC: 1a-46 northeast of firing Point

FIELD SCREENING/MEASUREMENT RESULTS:

AL ≤ 38 dpm

PID

ambient
reading0.0 7pm
0.0

BY ≤ 2110 dpm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

Larry A Lopez

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/05/2010 1540	RECEIVED BY (Printed Name) M. Lisk (Signature) M. Lisk	Date/Time 1/5/10 1540
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7642

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/05/2010		MEDIA:	QBT3		ALLH
TIME COLLECTED(HH:MM)		1307		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610651	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	2.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	3.0		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	3		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 13M 01/04/2010	None	Yes	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 L	Ice	Yes	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: Light brown silty sand some rocks

SAMPLE COMMENTS:

NA

LOCATION DESC: 1a-46 northeast of firing Pit

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 55$ dpmPID ambient reading 0.0 Ppm
0.0BY ≤ 2180 dpm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) <i>TLMcFarland</i>	Date/Time 01/05/2010 1540	RECEIVED BY (Printed Name) <i>Mike Muth</i> (Signature) <i>Mike Muth</i>	Date/Time 1/5/10 1540
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7643

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/05/2010		MEDIA:	OBT3		ALLH
TIME COLLECTED (HH:MM)		1310		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610652	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	0.5		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA	NO/NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA	NO/NA			BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY 42m 01/04/2010	None	Yes	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1L	Ice	Yes	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: brown sandy silt

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-47

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq 44$ dpm PID ^{ambient} reading
 $\text{BY} \leq 2170$ dpm
 0.0 ppm
 HE Neg.

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

TL McFarland

RELINQUISHED BY (Printed Name) TL McFarland (Signature) <i>TL McFarland</i>	Date/Time 01/05/2010 1540	RECEIVED BY (Printed Name) <i>Theresa Montz</i> (Signature) <i>Theresa Montz</i>	Date/Time 1/5/10 1540
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7644

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/05/2010		MEDIA:	QBT3		ALLH
TIME COLLECTED (HH:MM)		1314		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610652			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	2.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	3.0		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY Tam 01/04/2010	None	Yes	
1		Met+U+CLO4+C N	1 GAL POLY 1 L	Ice	Yes	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: brown sandy silt, some weathered tuff

SAMPLE COMMENTS:

2.8 kit tuff

LOCATION DESC: 1a-47

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 11$ dpm
 $\text{BX} \leq 2350$ dpm

 PID ambient
 reading 0.0
 4.1 ppm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

TL McFarland

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) <i>Tony L</i>	Date/Time 01/05/2010 1540	RECEIVED BY (Printed Name) <i>Mike White</i> (Signature) <i>Mike White</i>	Date/Time 1/5/10 1540
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7645

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/05/2010		MEDIA:	QBT3		ALLH
TIME COLLECTED (HH:MM)		1324		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610653	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	1.0		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA	NO		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA	NO			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 1Ltr 01/04/2010	None	Yes	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 Liter	Ice	Yes	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: brown silty sand, few rocks

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-45

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 38$ dpmPID ambient
reading 0.0 ppm $\text{BY} \leq 1969$ dpm

HE NEG

COLLECTED BY (PRINT)

REVIEWED BY (PRINT)

R Saunders

TL McFarland

RELINQUISHED BY (Printed Name) TL McFarland (Signature) <i>TL McFarland</i>	Date/Time 01/05/2010 1540	RECEIVED BY (Printed Name) <i>Alia Martin</i> (Signature) <i>Alia Martin</i>	Date/Time 1/5/10 1540
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7646

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/05/2010		MEDIA:	QBT3		ALLH
TIME COLLECTED (HH:MM)		1350		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(b)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	12-610653	↓		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:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA	NO/NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA	NO/NA			BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY 72m 01/04/2010	None	Yes	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 L	Ice	yes	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: Brown sandy silt, some gray buff

FD: RE12-10-7657

SAMPLE COMMENTS:

Hit tuff at 3.2

LOCATION DESC: 1a-45, northeast of firing site

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 16$ dpm
 $\beta \leq 2340$ dpm

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

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) TL McFarland (Signature) <i>TL McFarland</i>	Date/Time 01/05/2010 1540	RECEIVED BY (Printed Name) <i>Michael Montoya</i> (Signature) <i>Michael Montoya</i>	Date/Time 1/5/10 1540
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7647

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/05/2010		MEDIA:	OBT3		ALLH
TIME COLLECTED (HH:MM)		1400		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610654	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	1.0		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY 72m 01/04/2010	None	Yes	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 L	Ice	Yes	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: brown clayey silt, moist, few roots, few rocks

SAMPLE COMMENTS:

NA

LOCATION DESC: 1a-38, east of firing site

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 33$ dpm
 $\text{BX} \leq 2270$ dpm
PID $\frac{\text{reading}}{\text{ambient}}$

8.8 ppm

HE NEG.

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

TL McFarland

RELINQUISHED BY (Printed Name) TL McFarland (Signature) <i>TL McFarland</i>	Date/Time 01/05/2010 1540	RECEIVED BY (Printed Name) <i>TL McFarland</i> (Signature) <i>TL McFarland</i>	Date/Time 1/5/10 1540
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7648

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/05/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		1405		SUB-MEDIA:	TUFF 1		
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		
LOCATION ID:	12-610654	↓		FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		
TOP DEPTH:	0	2.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	3.0		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	OK		EXCAVATED: YES/NO	NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO	NA			WATER FLOWING: YES/NO	NA		
BOREHOLE DECLINATION:	NA			BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	AM241+GS+ISO PU+ISOU	1 LITER POLY 700 01/04/2010	None	Yes	
1		Met+U+CLO4+C N	1 GAL POLY 1L	Ice	Yes	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: pinkish grey, dry, some wood, few rocks

SAMPLE COMMENTS:

RS HA Hit tuff at 1.0
01/05/10

LOCATION DESC: 1a-38, east of firing site

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 22$ dpmPID $\frac{\text{reading}}{\text{ambient}} = \frac{0.0}{0.0}$ ppm $\text{Bx} \leq 2600$ dpm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) [Signature]	Date/Time 01/05/2010 1540	RECEIVED BY (Printed Name) [Signature] (Signature) [Signature]	Date/Time 1/5/10 1541
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7649

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/05/2010		MEDIA:	QBT3		ALLH
TIME COLLECTED (HH:MM)		1423		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610655	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	RS 01/05/10 0.9 0.7		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA	NO/NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA	NO/NA			BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	AM241+GS+ISO PU+ISOU	1 LITER POLY 12m 01/04/2010	None	Yes	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 L	Ice	Yes	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: Dark brown moist silty clay RS 01/05/10 recontaminated numerous roots, few rocks

SAMPLE COMMENTS: NA

LOCATION DESC: 1a - 44 north of firing Point

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 55$ dpm

PID

 $\text{BY} \leq 2066$ dpmambient
reading

8.8 ppm

HE NEG

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

TLMcFarland

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) Tracy M. [Signature]	Date/Time 01/05/2010 1540	RECEIVED BY (Printed Name) [Signature] (Signature) [Signature]	Date/Time 4/5/10 1540
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7650

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/05/2010		MEDIA: QBT3		ALL H	
TIME COLLECTED (HH:MM)		1429		SUB-MEDIA: TUFF 1		NA	
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID:	12-610655	↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE:	GENERIC	↓		FIELD PREP: NA		↓	
TOP DEPTH:	0	1.5		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+ISO PU+ISOU	1 LITER POLY 7mm 01/04/2010	None	Yes	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 L	Ice	Yes	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: Brown silty sand slightly moist

FR RE12-10-7660

SAMPLE COMMENTS:

NA

LOCATION DESC: 1a-44 north of firing point

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq 22$ dpm
16 1969
7mm 1/5/10
BY ≤ 2100 dpm
7mm 1/5/10

PID ambient
reading 0.0 ppm

COLLECTED BY (PRINT)
R Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) TLMcFarland (Signature)	Date/Time 01/05/2010 1540	RECEIVED BY (Printed Name) (Signature)	Date/Time 1/5/10 1540
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7657

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/05/2010		MEDIA:	QBT3		ALLH
TIME COLLECTED (HH:MM)		1324 1350		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	UNK	RS 01/05/10		FIELD QC TYPE:	FD		
LOCATION TYPE:	GENERIC	12-10-7653 12-10-7653		FIELD PREP:	NA		
TOP DEPTH:	0	OK		SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0	2.0		SCREEN/PORT DESC:			
FIELD MATRIX:	R	3.6		EXCAVATED: YES/NO/NA		NA	
COMPOSITE TYPE:	NA	S					
COMPOSITE TIME INTERVAL:	NA						
WATER FLOWING: YES/NO/NA							
BOREHOLE: YES/NO/NA	NO						
BOREHOLE DECLINATION:	NA						
BOREHOLE DIRECTION:	NA						

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	739 1/05/2010 8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE12-10-7646

Brownsandy silt, some gray stuff

SAMPLE COMMENTS:

Hit tuff at 3.2

LOCATION DESC: 1a-45, northeast of firing site

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 16$ dpmPID ambient
reading $\frac{0.0}{0.0}$ ppmB8 ≤ 2340 dpm

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) TL McFarland (Signature) Tracy M	Date/Time 01/05/2010 1540	RECEIVED BY (Printed Name) M. L. McIntyre (Signature) M. L. McIntyre	Date/Time 1/5/10 1540
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7658

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/05/2010		MEDIA:	QBT3		ALLH
TIME COLLECTED (HH:MM)		1111		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	UNK	12-610649		FIELD QC TYPE:	FD		
LOCATION TYPE:	GENERIC	OK		FIELD PREP:	NA		
TOP DEPTH:	0	2.0		SAMPLE USAGE:	QC		✓
BOTTOM DEPTH:	0	3.0		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA	NO		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA	NO			BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	73m 1/5/10 8082-NMED-HEXP	250 ML AMBER GLASS	Ice	Yes	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Yes	
1		Met+U+CLO4+C N	1 GAL POLY	Ice	Yes	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: QC Sample of RE12-10-7637

brown sandy silt and pinkish grey weathered tuff, few roots

SAMPLE COMMENTS:

NA

LOCATION DESC: 1a-33

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 33 dpm

PID

ambient
reading

0.0 ppm

BY ≤ 2330 dpm

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/05/2010 1540	RECEIVED BY (Printed Name) TLMcFarland (Signature) TLMcFarland	Date/Time 1/5/10 1540
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7659

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/05/2010		MEDIA:	NA		OK
TIME COLLECTED (HH:MM)		1207		SUB-MEDIA:	OTHER		↓
PRS ID:	12-001(b)			SAMPLE TECH CODE:	DC		OK
LOCATION ID:	UNK	RS 01-05-10 12-610649		FIELD QC TYPE:	FR		↓
LOCATION TYPE:	GENERIC			FIELD PREP:	UF		↓
TOP DEPTH:	0	OK		SAMPLE USAGE:	QC		↓
BOTTOM DEPTH:	0	↓		SCREEN/PORT DESC:			NA
FIELD MATRIX:	W	W		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA				WATER FLOWING: YES/NO/NA			
BOREHOLE DECLINATION:	NA			BOREHOLE DIRECTION:	NA		

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

SAMPLE DESC: QC Sample of RE12-10-7637 RE12-10-7641
RS 01-05-10

SAMPLE COMMENTS: Rinse be

LOCATION DESC: 1a-33 1a-46
RS 01-05-10

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq$ dpm NA

$\beta \leq$ dpm

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) R. Saunders	01/05/2010	(Printed Name) R. Saunders	5/10
(Signature) R. Saunders	1540	(Signature) [Signature]	1540
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7660

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/05/2010		MEDIA:	NA		ok
TIME COLLECTED (HH:MM)		1444		SUB-MEDIA:	OTHER		
PRS ID:	12-001(b)	ok		SAMPLE TECH CODE:	DC		
LOCATION ID:	UNK	12-610655		FIELD QC TYPE:	ER		
LOCATION TYPE:	GENERIC	ok		FIELD PREP:	UP		
TOP DEPTH:	0			SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0			SCREEN/PORT DESC:		NA	
FIELD MATRIX:	W	W		EXCAVATED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NA		BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION:	NA		

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

SAMPLE DESC: QC Sample of RE-12-10-7650

FR RE12-10-7650

SAMPLE COMMENTS: Rinsate

LOCATION DESC: 1a-44 north of firing point

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) R Saunders

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) <i>Troy Z...</i>	Date/Time 01/05/2010 1540	RECEIVED BY (Printed Name) <i>Whitney Madry</i> (Signature) <i>Whitney Madry</i>	Date/Time 1/5/10 1540
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7661

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>	<u>AS PLANNED</u>	<u>AS COLLECTED</u>
DATE COLLECTED(MM/DD/YYYY):		01/05/2010	MEDIA:	NA
TIME COLLECTED (HH:MM)		1052	SUB-MEDIA:	OTHER
PRS ID:	12-001(b)	OK	SAMPLE TECH CODE:	DC
LOCATION ID:	UNK	12-610648	FIELD QC TYPE:	FR
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF
TOP DEPTH:	0	↓	SAMPLE USAGE:	QC
BOTTOM DEPTH:	0	↓	SCREEN/PORT DESC:	NA
FIELD MATRIX:	W	↓	EXCAVATED: YES/NO	NA
COMPOSITE TYPE:	NA	COMPOSITE TIME INTERVAL:	NA	WATER FLOWING: YES/NO
BOREHOLE: YES/NO	NA	BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION:
			NA	

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

SAMPLE DESC: QC Sample of RE12-10-7636

SAMPLE COMMENTS: Rinsete

LOCATION DESC: 1a-35

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq$ NA dpmPID ambient NA ppm
readingBX \leq NA dpm

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) TLM cFarlang

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/05/2010 1540	RECEIVED BY (Printed Name) M. Martinez (Signature) M. Martinez	Date/Time 1/5/10 1540
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

Rad Screening Data Release Form

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

RE12-10-7646
7657
7647
7638
7704
7637
7658
7639
7640
7641
7703
7636
7635

RE12-10-7698
7647
7648
7645
7644
7642
7643
7633
7634
7649
7650

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

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

RE12-10-7660
-7661
7659

Reason: Rinsate

.....
Print Last Name McFarland

Signature Tracy

Date 01/05/2010

Rad Screening Data Release Form

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

RE12-10-7646
7657
7647
7638
7704
7637
7658
7639
7640
7641
7703
7636
7635

RE12-10-7698
7647
7648
7645
7644
7642
7643
7633
7634
7649
7650

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

.....

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

RE12-10-7660
-7661
7659

Reason: Rinsatec

.....

Print Last Name McFarland

Signature Tracy [Signature]

Date 01/05/2010



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00003

Request or PO Number:

Client Sample ID: RE12-10-7633

ARS Sample ID: ARS2-10-00003-001

Sample Collection Date: 01/05/10 09:42

Date Received: 01/06/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/06/10 21:16

Analysis Description	Analysis Results	Analysis Error +/- 1 s	MDC	YPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	38.53	22.69	27.01	23.17		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
GROSS BETA	41.06	11.06	12.49	12.16		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
NA-22	0.00	0.00	0.13	0.00		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
K-40	19.66	8.61	2.09	8.63		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CO-60	0.00	13.68	0.14	13.68		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-134	0.31	0.26	0.10	0.26		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-137	0.04	0.10	0.09	0.10		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
EU-152	0.15	0.29	0.21	0.29		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
PB-212	0.91	0.48	0.17	0.48		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
RA-226	2.30	1.02	0.36	1.03		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-235	1.70	0.88	0.41	0.88		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-238	4.43	4.05	1.78	4.16		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
AM-241	0.72	0.60	0.19	0.60		pCi/g	EPA 901.1M	1/6/2010	ME	N/A

NOTES: % Moisture: 1.31

Mattie L. Edin
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658

NELAP Certificate # EB7558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: AR52-10-00003

Client Sample ID: RE12-10-7634

Sample Collection Date: 01/05/10 09:51

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: AR52-10-00003-002

Date Received: 01/06/10 00:00

Report Date: 01/06/10 21:16

Analysis Description	Analysis Results	Analysis error +/- %	MDC	TPU	Total	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	22.58	17.31	22.94	17.53		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
GROSS BETA	34.50	10.49	12.66	11.31		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
NA-22	0.21	0.25	0.12	0.25		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
K-40	21.12	8.31	1.84	8.34		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CO-60	0.00	12.08	0.12	12.06		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-134	0.05	0.12	0.09	0.12		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-137	0.13	0.16	0.08	0.10		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
EU-152	0.00	12.53	0.14	12.53		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
PB-212	1.71	0.59	0.18	0.59		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
RA-228	0.86	0.52	0.52	0.52		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-235	1.41	0.94	0.29	0.93		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-238	3.27	3.27	1.40	3.35		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
AM-241	0.01	33.40	0.07	33.40		pCi/g	EPA 901.1M	1/5/2010	ME	N/A

NOTES: % Moisture: 0.86

Matthew J. Eder
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report is less than full requires the written consent of the client.

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00003

Request or PO Number:

Client Sample ID: RE12-10-7635

ARS Sample ID: ARS2-10-00003-003

Sample Collection Date: 01/05/10 10:23

Date Received: 01/06/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/06/10 21:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	YPLI	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	18.71	15.22	19.92	15.39		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
GROSS BETA	34.19	11.07	13.71	11.84		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
NA-22	0.00	0.00	0.11	0.00		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
K-40	18.59	7.46	1.68	7.49		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-40	0.00	11.01	0.11	11.01		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-134	0.13	0.11	0.08	0.11		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-137	0.08	0.12	0.07	0.12		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
EU-152	0.00	58.19	0.13	58.19		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
PB-212	1.44	0.51	0.14	0.51		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
RA-228	1.49	0.70	0.29	0.71		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-235	0.66	0.70	0.42	0.70		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-238	1.47	4.71	1.44	4.74		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
AM-241	0.05	0.17	0.09	0.17		pCi/g	EPA 901.1M	1/6/2010	ME	N/A

NOTES: % Moisture: 1.39

Matthew J. Eden
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

NELAP Certificate # 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00003

Request or PO Number:

Client Sample ID: RE12-10-7636

ARS Sample ID: ARS2-10-00003-004

Sample Collection Date: 01/05/10 10:31

Date Received: 01/06/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/06/10 21:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	YPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysts Technician	Tracer/Chem Recovery
GROSS ALPHA	28.00	18.96	23.98	19.27		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
GROSS BETA	34.72	10.72	13.00	11.84		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
NA-22	0.00	0.00	0.11	0.00		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
K-40	17.65	7.56	1.80	7.58		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CO-60	0.00	11.77	0.12	11.77		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-134	0.44	0.31	0.09	0.31		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-137	0.04	0.09	0.07	0.09		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
EU-152	0.00	12.24	0.14	12.24		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
PB-212	1.40	0.55	0.19	0.56		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
RA-228	1.97	0.88	0.31	0.88		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-235	-0.07	104.95	0.24	104.95		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-238	0.99	2.71	1.49	2.72		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
AM-241	0.05	0.18	0.10	0.18		pCi/g	EPA 901.1M	1/6/2010	ME	N/A

NOTES: % Moisture: 0.98

Matthew J. Eden
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate # 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00003

Request or PO Number:

Client Sample ID: RE12-10-7637

ARS Sample ID: ARS2-10-00003-005

Sample Collection Date: 01/05/10 11:11

Date Received: 01/06/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/06/10 21:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	137.40	38.20	27.01	41.74		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
GROSS BETA	115.27	16.42	12.49	21.65		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
NA-22	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
K-40	12.62	6.54	1.82	6.35		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CO-60	0.00	11.02	0.12	11.02		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-134	0.34	0.26	0.09	0.26		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-137	-0.01	15.59	0.08	15.59		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
EU-152	0.13	0.21	0.14	0.21		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
PB-212	1.75	0.62	0.20	0.62		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
RA-228	2.44	1.35	0.12	1.35		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-235	1.24	1.01	0.35	1.01		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-238	6.10	3.45	1.27	3.72		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
AM-241	0.60	0.46	0.15	0.46		pCi/g	EPA 901.1M	1/6/2010	ME	N/A

NOTES: % Moisture: 1.00

Matthew A. Eden
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate # 30658

NELAP Certificate # E87558



123 State Road 4, White Rock, NM 87544

805-672-2770 FAX 805-672-9334

ARS Sample Delivery Group: ARS2-10-00003

Client Sample ID: NE12-10-7638

Sample Collection Date: 01/05/10 10:30

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00003-006

Date Received: 01/06/10 00:00

Report Date: 01/06/10 21:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MNR	TRU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	54.86	24.21	22.94	25.12		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
GROSS BETA	52.49	13.18	12.66	13.77		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
NA-22	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
K-40	18.42	8.07	1.96	8.09		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CO-60	0.00	12.81	0.11	12.81		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-134	0.27	0.20	0.09	0.20		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-137	0.58	0.34	0.08	0.34		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
RU-112	0.00	13.32	0.15	13.32		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
PB-212	1.63	0.57	0.13	0.58		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
RA-228	1.10	0.60	0.78	0.60		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-235	1.09	1.04	0.40	1.04		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-238	5.44	3.82	1.31	4.02		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
AM-241	0.32	0.26	0.09	0.26		pCi/g	EPA 901.1M	1/6/2010	ME	N/A

NOTES: % Moisture: 1.20

Matt Eden
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate # 30658

NE LAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00003

Client Sample ID: RE12-10-7639

Sample Collection Date: 01/05/10 11:24

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00003-007

Date Received: 01/06/10 00:00

Report Date: 01/06/10 21:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MNC	TBIT	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	79.08	28.14	19.32	29.75		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
GROSS BETA	54.86	13.43	13.71	15.02		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
NA-22	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
K-40	20.65	8.46	1.94	8.49		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-40	0.00	12.70	0.14	12.70		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-134	0.10	0.13	0.09	0.13		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-137	-0.01	16.62	0.08	16.62		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
EU-152	0.76	0.58	0.15	0.58		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
PB-212	1.78	0.61	0.17	0.61		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
RA-228	1.50	1.16	0.34	1.17		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-235	1.64	0.82	0.20	0.82		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-238	5.01	4.21	1.74	4.36		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
AM-241	0.26	0.35	0.15	0.35		pCi/g	EPA 901.1M	1/6/2010	ME	N/A

NOTES: % Moisture: 1.41

Matthew J. Edwards
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate # 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-872-2770 FAX 505-872-9534

ARS Sample Delivery Group: ARS2-10-00003

Request or PU Number:

Client Sample ID: RE12-10-7640

ARS Sample ID: ARS2-10-00003-008

Sample Collection Date: 01/05/10 11:33

Date Received: 01/06/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/06/10 21:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	Mnrc	TDH	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	64.73	26.15	23.98	27.33		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
GROSS BETA	62.57	13.09	13.00	15.17		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
NA-22	0.16	0.22	0.13	0.22		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
K-40	23.98	9.16	2.02	9.29		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CO-60	0.00	13.21	0.13	13.21		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-134	0.00	43.36	0.10	43.36		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-137	-0.01	17.29	0.08	17.29		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
EU-152	0.45	0.47	0.15	0.47		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
PR-212	1.59	0.63	0.22	0.63		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
RA-228	1.62	1.03	0.35	1.03		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-235	1.31	1.17	0.38	1.17		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-238	1.81	4.12	1.80	4.14		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
AM-241	0.38	0.36	0.12	0.36		pCi/g	EPA 901.1M	1/6/2010	ME	N/A

NOTES: % Moisture: 0.73

M. A. F. Edm
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

NELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00003
 Client Sample ID: RE12-10-7641
 Sample Collection Date: 01/05/10 12:00
 Sample Matrix: Soil/Solid

Request or PO Number:
 ARS Sample ID: ARS2-10-00003-009
 Date Received: 01/06/10 00:00
 Report Date: 01/06/10 21:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	MDL	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	167.13	41.73	27.01	46.48		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
GROSS BETA	104.87	15.12	12.49	20.61		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
NA-22	0.00	0.00	0.11	0.00		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
K-40	16.66	7.13	1.70	7.15		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CO-60	0.00	11.11	0.11	11.11		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-134	0.18	0.17	0.08	0.17		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-137	0.01	0.03	0.07	0.03		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
EU-152	0.00	58.72	0.13	58.72		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
PB-212	1.65	0.55	0.15	0.55		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
RA-228	7.48	1.01	0.30	1.02		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-235	2.00	1.56	0.61	1.56		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-238	8.87	3.75	1.22	4.27		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
AM-241	0.04	0.15	0.09	0.15		pCi/g	EPA 901.1M	1/6/2010	ME	N/A

NOTES: % Moisture: 1.26

Matthew J. Eden
 Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00003

Request or PO Number:

Client Sample ID: RE12-10-7642

ARS Sample ID: ARS2-10-00003-010

Sample Collection Date: 01/05/10 13:07

Date Received: 01/06/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/06/10 21:16

Analysis Description	Analysis Results	Analysis Error +/- 1 s	MDC	YPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	98.68	31.22	22.94	33.48		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
GROSS BETA	74.49	14.03	12.66	16.75		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
NA-22	0.07	0.14	0.12	0.14		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
K-40	19.19	8.03	1.88	8.05		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CO-60	0.00	13.78	0.12	13.98		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-134	0.24	0.22	0.09	0.22		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-137	0.01	0.04	0.08	0.04		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
EU-152	0.37	0.36	0.14	0.36		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
PB-212	1.86	0.61	0.17	0.61		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
BA-228	-0.14	191.16	0.43	191.16		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-235	2.01	0.90	0.27	0.90		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-238	2.30	3.56	1.64	3.59		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
AM-241	-0.01	48.99	0.10	48.99		pCi/g	EPA 901.1M	1/6/2010	ME	N/A

NOTES: % Moisture: 0.99

Mattman J. Felt
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate # 30658

NEIAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00003

Request or PO Number:

Client Sample ID: RE12-10-7643

ARS Sample ID: ARS2-10-00003-011

Sample Collection Date: 01/05/10 13:10

Date Received: 01/06/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/06/10 21:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TRU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	88.74	29.68	19.32	31.61		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
GROSS BETA	76.25	14.90	13.71	17.58		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
NA-22	0.00	0.00	0.11	0.00		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
K-40	17.88	7.48	1.73	7.50		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CO-60	0.00	11.44	0.12	11.44		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-134	0.00	0.00	0.08	0.00		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-137	-0.01	14.96	0.07	14.96		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
EU-152	0.40	0.49	0.22	0.49		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
PB-212	1.74	0.58	0.17	0.58		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
BA-228	1.50	1.01	0.31	1.01		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-235	2.04	1.19	0.32	1.19		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-238	3.48	2.65	1.18	2.76		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
AM-241	0.32	0.29	0.10	0.29		pCi/g	EPA 901.1M	1/6/2010	ME	N/A

NOTES: % Moisture: 1.49

Matthew A. Edin
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87344

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00003

Client Sample ID: RE12-10-7644

Sample Collection Date: 01/05/10 13:14

Sample Matrix: Soil/Solid

Request or PQ Number:

ARS Sample ID: ARS2-10-00603-012

Date Received: 01/06/10 00:00

Report Date: 01/06/10 21:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TEH	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	76.20	28.02	23.98	29.54		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
GROSS BETA	70.63	13.71	13.00	16.21		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
NA-22	0.07	0.14	0.12	0.14		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
K-40	17.25	7.56	1.83	7.57		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CO-60	0.00	12.00	0.12	12.00		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-134	0.07	0.13	0.09	0.13		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-137	-0.01	15.70	0.08	15.70		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
EU-152	0.59	0.45	0.14	0.45		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
PB-212	1.57	0.52	0.10	0.52		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
RA-228	1.81	1.23	0.32	1.23		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-235	0.09	0.49	0.34	0.49		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-238	2.93	2.31	1.03	2.40		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
AM-241	0.02	0.17	0.09	0.17		pCi/g	EPA 901.1M	1/5/2010	ME	N/A

NOTES: % Moisture: 0.95

Matthew J. Edman
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate # 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00003

Client Sample ID: RE12-10-7645

Sample Collection Date: 01/05/10 13:24

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00003-013

Date Received: 01/06/10 00:00

Report Date: 01/06/10 21:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDL	TRU	Quot	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	128.10	36.61	27.01	39.69		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
GROSS BETA	81.11	14.50	12.49	17.38		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
NA-22	0.00	0.00	0.11	0.00		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
K-40	-0.07	-23.92	4.05	-23.92		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CO-60	0.00	11.69	0.12	11.69		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-134	0.18	0.16	0.09	0.16		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-137	-0.01	15.29	0.07	15.29		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
SU-152	0.69	0.57	0.14	0.57		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
PB-212	1.87	0.55	0.10	0.56		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
RA-226	2.32	0.05	0.31	0.44		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-235	-0.07	104.23	0.23	104.23		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-238	3.56	2.89	1.27	3.00		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
AM-241	0.39	0.39	0.15	0.39		pCi/g	EPA 901.1M	1/6/2010	ME	N/A

NOTES: % Moisture: 0.80

Matthew A. Eden
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate # 30658

NELAP Certificate # E97558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00003

Client Sample ID: RE12-10-7646

Sample Collection Date: 01/05/10 13:50

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00003-014

Date Received: 01/06/10 00:00

Report Date: 01/06/10 21:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chan Recovery
GROSS ALPHA	107.91	32.50	22.94	35.09		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
GROSS BETA	67.06	13.67	12.66	15.94		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
NA-22	0.00	0.00	0.13	0.00		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
K-40	23.11	9.28	2.09	9.30		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CO-60	0.08	0.17	0.14	0.17		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-134	0.12	0.13	0.10	0.13		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-137	0.04	0.10	0.09	0.10		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
EU-152	0.00	72.32	0.16	72.32		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
PB-212	2.54	0.73	0.18	0.74		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
RA-228	2.94	1.22	0.36	1.23		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-235	1.41	0.86	0.21	0.86		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-238	3.07	3.47	1.91	3.54		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
AM-241	0.09	0.20	0.10	0.20		pCi/g	EPA 901.1M	1/6/2010	ME	N/A

NOTES: % Moisture: 1.01

Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658

NELAP Certificate # E87556



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00003

Client Sample ID: RE12-10-7647

Sample Collection Date: 01/05/10 14:00

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00003-015

Date Received: 01/06/10 00:00

Report Date: 01/06/10 21:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MFC	TPH	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	156.35	38.84	19.32	43.30		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
GROSS BETA	97.15	16.81	13.71	29.59		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
NA-22	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
K-40	15.10	6.61	1.61	6.63		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CO-60	0.00	0.00	0.11	0.00		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-134	0.04	0.08	0.08	0.08		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-137	0.27	0.21	0.07	0.21		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
EU-152	0.24	0.31	0.12	0.31		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
PB-212	1.24	0.50	0.18	0.51		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
RA-228	1.80	0.82	0.28	0.82		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-235	1.72	0.84	0.16	0.84		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-238	3.30	4.42	1.98	4.98		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
AM-241	0.16	0.22	0.09	0.22		pCi/g	EPA 901.1M	1/6/2010	ME	N/A

NOTES: % Moisture: 1.39

Matt A. Eden
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate # 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00003

Request of PO Number:

Client Sample ID: RE12-10-7648

ARS Sample ID: ARS2-10-00003-016

Sample Collection Date: 01/05/10 14:05

Date Received: 01/06/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/06/10 21:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPH	Unit	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	204.79	43.83	23.98	50.49		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
GROSS BETA	124.22	17.68	13.00	23.32		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
NA-22	0.00	0.00	0.11	0.00		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
K-40	25.52	8.78	1.73	8.82		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-60	0.14	0.20	0.11	0.20		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-134	0.17	0.16	0.08	8.16		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-137	0.03	0.09	0.07	0.09		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
EU-152	0.33	0.38	0.13	0.38		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
PB-212	1.20	0.45	0.11	0.45		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
RA-228	1.22	0.73	0.53	0.73		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-235	1.10	0.71	0.18	0.71		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-238	3.33	2.87	1.26	2.97		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
AM-241	-0.01	31.35	0.07	31.35		pCi/g	EPA 901.1M	1/6/2010	ME	N/A

NOTES: % Moisture: 0.49

Matthew J. Eder
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate # 30658

NEIAP Certificate # 587558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00003

Client Sample ID: RE12-10-7649

Sample Collection Date: 01/05/10 14:23

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00003-017

Date Received: 01/06/10 00:00

Report Date: 01/08/10 21:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDL	TPU	Q-Val	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	122.63	36.29	27.01	39.27		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
GROSS BETA	78.73	14.35	12.49	17.28		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
NA-22	0.03	0.07	0.11	0.07		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
K-40	13.01	6.34	1.68	6.35		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CO-60	0.00	10.08	0.11	10.08		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-134	0.09	0.13	0.08	0.13		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-137	0.08	0.12	0.07	0.12		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
EU-152	0.31	0.31	0.13	0.31		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
PB-212	0.99	0.45	0.16	0.45		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
RA-226	1.41	1.23	0.20	1.24		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-235	2.08	1.17	0.27	1.17		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-238	4.22	3.05	1.30	3.20		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
AM-241	0.13	0.20	0.09	0.20		pCi/g	EPA 901.1M	1/6/2010	ME	N/A

NOTES: % MOISTURE: 2.22

Matthew A. Eden
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658

NELAP Certificate # EB7558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00003

Client Sample ID: RE12-10-7650

Sample Collection Date: 01/05/10 14:29

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00003-018

Date Received: 01/06/10 06:00

Report Date: 01/06/10 21:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TRU	Quel	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	75.63	27.73	22.94	29.23		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
GROSS BETA	82.08	12.38	12.66	13.93		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
NA-22	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
K-40	17.00	6.45	1.38	6.47		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CO-60	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-134	0.00	0.00	0.07	0.00		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-137	-0.01	28.12	0.06	28.12		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
EU-152	0.70	0.49	0.11	0.49		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
PB-212	1.65	0.49	0.13	0.49		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
RA-228	2.11	0.79	0.24	0.80		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-235	2.15	0.92	0.31	0.92		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-238	1.00	2.34	1.21	2.35		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
AM-241	0.17	0.21	0.09	0.21		pCi/g	EPA 901.1M	1/6/2010	ME	N/A

NOTES: % Moisture: 1.3%

Matthew J. Eden
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate # 30658

NELAP Certificate # 697558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00003

Request or PO Number:

Client Sample ID: RE12-10-7657

ARS Sample ID: ARS2-10-00003-019

Sample Collection Date: 01/05/10 13:50

Date Received: 01/06/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/06/10 21:16

Analysis Description	Analysis Results	Analysis Error +/- 2σ	MDR	You	Quot	Analyte Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	88.74	29.68	19.32	31.61		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
GROSS BETA	31.60	13.34	13.71	14.76		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
NA-22	0.03	0.08	0.11	0.08		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
K-40	21.04	8.13	1.77	8.13		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CO-60	0.09	0.17	0.12	0.12		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-134	0.27	0.22	0.09	0.22		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-137	-0.01	15.17	0.07	15.17		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
EU-182	0.31	0.32	0.14	0.32		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
PB-212	1.82	0.54	0.10	0.55		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
RA-228	-0.13	227.16	0.51	227.16		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-235	1.19	1.22	0.36	1.22		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-238	8.85	3.64	1.31	3.68		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
AM-241	0.27	0.28	0.10	0.28		pCi/g	EPA 901.1M	1/6/2010	ME	N/A

NOTES: % Moisture: 0.90

Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

NELAP Certificate # 30658

NELAP Certificate # EB7558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00003

Client Sample ID: RE12-10-7658

Sample Collection Date: 01/05/10 11:11

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00003-020

Date Received: 01/05/10 00:00

Report Date: 01/06/10 21:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDL	YPU	QAL	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	147.40	37.60	23.98	41.71		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
GROSS BETA	74.89	14.66	13.00	17.29		pCi/g	EPA 900.0M	1/6/2010	ME	N/A
NA-22	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
K-40	15.86	6.37	1.43	6.39		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CO-60	0.00	0.00	0.10	0.39		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-134	0.16	0.13	0.07	0.13		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
CS-137	-0.01	12.29	0.06	12.29		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
EU-152	0.00	9.77	0.11	9.77		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
PB-212	1.45	0.47	0.13	0.48		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
RA-228	0.52	0.46	0.41	0.46		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-235	2.66	1.00	0.36	1.00		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
U-238	4.18	3.16	1.19	3.30		pCi/g	EPA 901.1M	1/6/2010	ME	N/A
AM-241	0.02	0.07	0.04	0.07		pCi/g	EPA 901.1M	1/6/2010	ME	N/A

NOTES: % Moisture: 1.07

Matthew A. Edm
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate # 30659

NELAP Certificate # E87558

DATA VALIDATION COVER SHEET

5121-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1132 VALIDATION DATE: 2/18/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check


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

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


1. It should be noted that the aqueous MS/MSD analyses were performed on a LANL sample from a different RN. Also, the raw data for the parent sample was not provided in the data package. No sample data were qualified.

Reviewed by: Monica Dymerski Level I Date: 02/18/10


VALIDATOR'S SIGNATURE: Eric T. Mink DATE: 2/18/10

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

Yes No N/A (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The Internal Standard (IS) relative retention time has shifted by more than 0.98 to 1.02 seconds.	R, PERC0	J, PERC0
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC0b	R, PERC0b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. The IS are count is <25% of the expected value.	UJ, PERC1a	J, PERC1a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. The IS area count is <70% but >25% of the average of that obtained from the calibration standards.	UJ, PERC1b	J, PERC1b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. The IS area count is >130% of the average of that obtained from the calibration standards.	UJ, PERC1c	J, PERC1c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC1d	R, PERC1d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The sample result is $\leq 5X$ the concentration of the related analyte in the method blank.	U, PERC4	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $>5X$.	N/A	J+, PERC4a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, PERC4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC4e	R, PERC4e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, PERC7	J, PERC7
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.99 .	UJ, R, PERC7a	J, PERC7a

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

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. The ICV and/or CCV were recovered outside the method limits.	UJ, R, PERC7c	J, PERC7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, R, PERC7d	J, PERC7d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, PERC7f	R, PERC7f
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. The affected analyte is considered not detected because ion abundance ratios did not meet specifications.	N/A	R, PERC8
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. The ion ratio documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	N/A	R, PERC8a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ PERC9	J-, PERC9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. The holding time was > 2 times the applicable holding time requirement.	R, PERC9a	J-, PERC9a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20. The LCS percent recovery was <10%. Follow the external laboratory limits.	R, PERC12	J-, PERC12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.	UJ, PERC12a	J-, PERC12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, PERC12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC12c	R, PERC12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. The MS/MSD percent recovery was <10%	R, PERC12d	R, PERC12d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. The MS/MSD percent recovery was >10% but <75%	UJ, PERC12e	J, PERC12e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. The MS/MSD percent recovery was >125%.	N/A	J+, PERC12f

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

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

Form 1

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940133

Extraction Type: Solid Prep

Client Sample No.

RE12-10-7634

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128001

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

% Solids: 90

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.558	2.23	0.558	ug/kg	U	1	18-JAN-10 22:50	per0118040a
	Perchlorate Isotope Ratio						1	18-JAN-10 22:50	per0118040a
14797-73-0	Perchlorate-101	.558	2.23	0.558	ug/kg	U	1	18-JAN-10 22:50	per0118040a
	Perchlorate-O(18)			5.61	ug/kg		1	18-JAN-10 22:50	per0118040a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 940133
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7648
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128002
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 %Solids: 94.8

CAS No.	Analyte ^A	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.527	2.11	0.527	ug/kg	U	1	18-JAN-10 23:15	per0118043a
	Perchlorate Isotope Ratio						1	18-JAN-10 23:15	per0118043a
14797-73-0	Perchlorate-101	.527	2.11	0.527	ug/kg	U	1	18-JAN-10 23:15	per0118043a
	Perchlorate-O(18)			5.37	ug/kg		1	18-JAN-10 23:15	per0118043a

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

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940133

Extraction Type: Solid Prep

Client Sample No.

RE12-10-7638

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128003

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

% Solids: 89

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.564	2.26	0.564	ug/kg	U	1	18-JAN-10 23:24	per0118044a
	Perchlorate Isotope Ratio						1	18-JAN-10 23:24	per0118044a
14797-73-0	Perchlorate-101	.564	2.26	0.564	ug/kg	U	1	18-JAN-10 23:24	per0118044a
	Perchlorate-O(18)			5.54	ug/kg		1	18-JAN-10 23:24	per0118044a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940133

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7639

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128004

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

% Solids: 85

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.587	2.35	0.587	ug/kg	U	1	18-JAN-10 23:32	per0118045a
	Perchlorate Isotope Ratio						1	18-JAN-10 23:32	per0118045a
14797-73-0	Perchlorate-101	.587	2.35	0.587	ug/kg	U	1	18-JAN-10 23:32	per0118045a
	Perchlorate-O(18)			5.92	ug/kg		1	18-JAN-10 23:32	per0118045a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 940133
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7633
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128005
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 %Solids: 84

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.596	2.38	0.809	ug/kg	J	1	19-JAN-10 00:07	per0118049a
	Perchlorate Isotope Ratio			2.93			1	19-JAN-10 00:07	per0118049a
14797-73-0	Perchlorate-101	.596	2.38	0.839	ug/kg	J	1	19-JAN-10 00:07	per0118049a
	Perchlorate-O(18)			6.21	ug/kg		1	19-JAN-10 00:07	per0118049a

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

*Concentration =

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

Form 1

Pernchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940133

Extraction Type: Solid Prep

Client Sample No.

RE12-10-7647

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128006

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

%Solids: 83

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Pernchlorate	.604	2.42	0.604	ug/kg	U	1	19-JAN-10 00:15	per0118050a
	Pernchlorate Isotope Ratio						1	19-JAN-10 00:15	per0118050a
14797-73-0	Pernchlorate-101	.604	2.42	0.604	ug/kg	U	1	19-JAN-10 00:15	per0118050a
	Pernchlorate-O(18)			6.11	ug/kg		1	19-JAN-10 00:15	per0118050a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940133

Extraction Type: Solid Prep

Client Sample No.

RE12-10-7644

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128007

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

% Solids: 90

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.555	2.22	0.555	ug/kg	U	1	19-JAN-10 00:24	per0118051a
	Perchlorate Isotope Ratio						1	19-JAN-10 00:24	per0118051a
14797-73-0	Perchlorate-101	.555	2.22	0.555	ug/kg	U	1	19-JAN-10 00:24	per0118051a
	Perchlorate-O(18)			5.70	ug/kg		1	19-JAN-10 00:24	per0118051a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Client Sample No.

RE12-10-7637

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Date Received: 08-JAN-10

Instrument: LCMSMS

GEL Job No (SDG): 10-1132

Method: SW846 6850 Modified

GEL Sample ID: 244128008

Matrix: SOIL

Date Filtered: 14-JAN-10

Extraction Batch ID: 240133

Injection Volume (uL): 20

Extraction Type: Solid Prep

%Solids: 90.3

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.554	2.22	0.554	ug/kg	U	1	19-JAN-10 00:32	per0118052a
	Perchlorate Isotope Ratio						1	19-JAN-10 00:32	per0118052a
14797-73-0	Perchlorate-101	.554	2.22	0.554	ug/kg	U	1	19-JAN-10 00:32	per0118052a
	Perchlorate-O(18)			5.66	ug/kg		1	19-JAN-10 00:32	per0118052a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 940133
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7635
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128009
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 %Solids: 85

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.585	2.34	0.585	ug/kg	U	1	19-JAN-10 00:41	per0118053a
	Perchlorate Isotope Ratio						1	19-JAN-10 00:41	per0118053a
14797-73-0	Perchlorate-101	.585	2.34	0.585	ug/kg	U	1	19-JAN-10 00:41	per0118053a
	Perchlorate-O(18)			5.91	ug/kg		1	19-JAN-10 00:41	per0118053a

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

*Concentration =

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

ETM
2/18/10

Form I

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 940133
 Extraction Type: Solid Prep
 Client Sample No. RE12-10-7642
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128010
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 % Solids: 89
 Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.564	2.26	0.564	ug/kg	U	1	19-JAN-10 00:50	per0118054a
	Perchlorate Isotope Ratio						1	19-JAN-10 00:50	per0118054a
14797-73-0	Perchlorate-101	.564	2.26	0.564	ug/kg	U	1	19-JAN-10 00:50	per0118054a
	Perchlorate-O(18)			5.58	ug/kg		1	19-JAN-10 00:50	per0118054a

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

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

Form 1

Perchlorate Analysis Data Sheet

Client Sample No.
RE12-10-7649

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128011

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

%Solids: 78

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940133

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.641	2.56	0.641	ug/kg	U	1	19-JAN-10 00:58	per0118055a
	Perchlorate Isotope Ratio						1	19-JAN-10 00:58	per0118055a
14797-73-0	Perchlorate-101	.641	2.56	0.641	ug/kg	U	1	19-JAN-10 00:58	per0118055a
	Perchlorate-O(18)			7.08	ug/kg		1	19-JAN-10 00:58	per0118055a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940133

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7650

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128012

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.575	2.3	0.645	ug/kg	J	1	19-JAN-10 01:07	per0118056a
	Perchlorate Isotope Ratio			3.05			1	19-JAN-10 01:07	per0118056a
14797-73-0	Perchlorate-101	.575	2.3	0.640	ug/kg	J	1	19-JAN-10 01:07	per0118056a
	Perchlorate-O(18)			6.11	ug/kg		1	19-JAN-10 01:07	per0118056a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 940133
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7641
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128013
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 % Solids: 86

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.584	2.34	0.584	ug/kg	U	1	19-JAN-10 01:41	per0118060a
	Perchlorate Isotope Ratio						1	19-JAN-10 01:41	per0118060a
14797-73-0	Perchlorate-101	.584	2.34	0.584	ug/kg	U	1	19-JAN-10 01:41	per0118060a
	Perchlorate-O(18)			6.04	ug/kg		1	19-JAN-10 01:41	per0118060a

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

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 940133
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7643
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128014
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 %Solids: 84

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.597	2.39	0.597	ug/kg	U	1	19-JAN-10 01:50	per0118061a
	Perchlorate Isotope Ratio						1	19-JAN-10 01:50	per0118061a
14797-73-0	Perchlorate-101	.597	2.39	0.597	ug/kg	U	1	19-JAN-10 01:50	per0118061a
	Perchlorate-O(18)			6.05	ug/kg		1	19-JAN-10 01:50	per0118061a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
 Aliquot

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940133

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7640

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128015

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

%Solids: 92.4

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.541	2.17	0.541	ug/kg	U	1	19-JAN-10 01:59	per0118062a
	Perchlorate Isotope Ratio						1	19-JAN-10 01:59	per0118062a
14797-73-0	Perchlorate-101	.541	2.17	0.541	ug/kg	U	1	19-JAN-10 01:59	per0118062a
	Perchlorate-O(18)			5.55	ug/kg		1	19-JAN-10 01:59	per0118062a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Form 1

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 940133
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7645
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128016
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 %Solids: 90

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.558	2.23	0.558	ug/kg	U	1	19-JAN-10 02:07	per0118063a
	Perchlorate Isotope Ratio						1	19-JAN-10 02:07	per0118063a
14797-73-0	Perchlorate-101	.558	2.23	0.558	ug/kg	U	1	19-JAN-10 02:07	per0118063a
	Perchlorate-O(18)			5.61	ug/kg		1	19-JAN-10 02:07	per0118063a

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

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

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 240133

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7646

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128017

Date Filtered: 14-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	19-JAN-10 02:16	per0118064a
	Perchlorate Isotope Ratio						1	19-JAN-10 02:16	per0118064a
14797-73-0	Perchlorate-101	.559	2.24	0.559	ug/kg	U	1	19-JAN-10 02:16	per0118064a
	Perchlorate-O(18)			5.51	ug/kg		1	19-JAN-10 02:16	per0118064a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940133

Extraction Type: Solid Prep

Client Sample No.

RE12-10-7636

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128018

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

%Solids: 90.2

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.554	2.22	0.554	ug/kg	U	1	19-JAN-10 02:24	per0118065a
	Perchlorate Isotope Ratio						1	19-JAN-10 02:24	per0118065a
14797-73-0	Perchlorate-101	.554	2.22	0.554	ug/kg	U	1	19-JAN-10 02:24	per0118065a
	Perchlorate-O(18)			5.59	ug/kg		1	19-JAN-10 02:24	per0118065a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 940133Extraction Type: Solid PrepSample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7657Date Received: 08-JAN-10GEL Job No (SDG): 10-1132GEL Sample ID: 244128019Date Filtered: 14-JAN-10Injection Volume (uL): 20%Solids: 90

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.556	2.23	0.556	ug/kg	U	1	19-JAN-10 02:33	per0118066a
	Perchlorate Isotope Ratio						1	19-JAN-10 02:33	per0118066a
14797-73-0	Perchlorate-101	.556	2.23	0.556	ug/kg	U	1	19-JAN-10 02:33	per0118066a
	Perchlorate-O(18)			5.62	ug/kg		1	19-JAN-10 02:33	per0118066a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940133

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7658

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128020

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.558	2.23	0.558	ug/kg	U	1	19-JAN-10 02:41	per0118067a
	Perchlorate Isotope Ratio						1	19-JAN-10 02:41	per0118067a
14797-73-0	Perchlorate-101	.558	2.23	0.558	ug/kg	U	1	19-JAN-10 02:41	per0118067a
	Perchlorate-O(18)			5.69	ug/kg		1	19-JAN-10 02:41	per0118067a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: WATER
 Extraction Batch ID: 940153
 Extraction Type: Filter/DAI
 Sample Volume/Weight: 10.0 mL
 Concentrated Extract Volume: 10.0
 Client Sample No. RE12-10-7659
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132-1
 GEL Sample ID: 244129001
 Date Filtered: 13-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	15-JAN-10 21:41	per0115031a
	Perchlorate Isotope Ratio						1	15-JAN-10 21:41	per0115031a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	15-JAN-10 21:41	per0115031a
	Perchlorate-O(18)			0.513	ug/L		1	15-JAN-10 21:41	per0115031a

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

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

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: 940153

Extraction Type: Filter/DAI

Client Sample No.

RE12-10-7661

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132-1

GEL Sample ID: 244129002

Date Filtered: 13-JAN-10

Injection Volume (uL): 20

%Solids:

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

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	15-JAN-10 21:50	per0115032a
	Perchlorate Isotope Ratio						1	15-JAN-10 21:50	per0115032a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	15-JAN-10 21:50	per0115032a
	Perchlorate-O(18)			0.478	ug/L		1	15-JAN-10 21:50	per0115032a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

ETM
2/18/10

Form 1

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: WATER
 Extraction Batch ID: 940153
 Extraction Type: Filter/DAI
 Client Sample No. RE12-10-7660
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132-1
 GEL Sample ID: 244129003
 Date Filtered: 13-JAN-10
 Injection Volume (uL): 20
 % Solids:


Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0


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	15-JAN-10 22:00	per0115033a
	Perchlorate Isotope Ratio						1	15-JAN-10 22:00	per0115033a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	15-JAN-10 22:00	per0115033a
	Perchlorate-O(18)			0.479	ug/L		1	15-JAN-10 22:00	per0115033a


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

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


DATA VALIDATION COVER SHEET	
5118-1 <p style="text-align: center;">Data Validation Cover Sheet</p>	Records Use only 

Section I.							
REQUEST NUMBER: <u>10-1132</u>		VALIDATION DATE: <u>2/18/10</u>		LAB CODE: <u>GEL</u>			
CONTRACT LABORATORY NAME: <u>GEL Laboratories LLC</u>							
VALIDATOR: <u>Eric T. Mink</u>		ORGANIZATION: <u>Analytical Quality Associates, Inc.</u>					
ANALYTICAL SUITE (CHECK ALL THAT APPLY):							
<input type="checkbox"/> TPH-GRO	<input type="checkbox"/> HIGH EXPLOSIVES	<input type="checkbox"/> DIOXIN FURANS	<input type="checkbox"/> LCMSMS PERCHLORATES				
<input type="checkbox"/> TPH-DRO	<input checked="" type="checkbox"/> METALS	<input type="checkbox"/> PCB CONGENERS	<input type="checkbox"/> ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS				
<input type="checkbox"/> GENERAL CHEMISTRY	<input type="checkbox"/> RADIOCHEMISTRY	<input type="checkbox"/> LCMSMS HIGH EXPLOSIVES					
<input type="checkbox"/> OTHER (DESCRIBE): _____							
Section II. Completeness Check							
YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. CHAIN-OF-CUSTODY FORM(S)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. RAW/BSS DATA
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. CASE NARRATIVE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7. QUALITY CONTROL FORMS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. SAMPLE RESULT FORMS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8. QUANTITATION REPORTS
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. SAMPLE CHROMATOGRAMS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. TICS FORMS
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. STANDARD CHROMATOGRAMS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. TICS MASS SPECTRA
Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):							
<ol style="list-style-type: none"> 1. In the MB associated with soil samples RE12-10-7634, -7648, -7638, -7639 and -7633, U was detected. All the associated sample results were detects >50X the blank concentration and, thus, were not qualified, based on professional judgment. 2. In the CCB associated with soil samples -7634, -7648, -7638, -7639 and -7633, Pb was detected. In the CCB associated with the aqueous samples, Se was detected. The Se results for sample -7660 and -7661 were detects ≤5X the blank concentration and, thus, were qualified U,I4b. All the other associated sample results were either detects >5X the blank concentration or NDs and, thus, were not qualified. 3. In the FR blanks, samples -7659, -7660 and -7661, associated with all the soil samples, Ba, Mn, K and Na were detected. The Na results for samples -7638, -7639, -7633, -7647, -7635, -7649, -7641, -7643, -7645 and -7636 were detects ≤5X the blank concentration and, thus, were qualified U,I4d. All the other associated sample results were 							


DATA VALIDATION COVER SHEET	
5118-1	Records Use only
<p align="center">Data Validation Cover Sheet</p> <p align="right">  </p>	
<p>detects >5X the blank concentrations and, thus, were not qualified.</p> <ol style="list-style-type: none"> The soils LCS %R was < the laboratory's LAL but $\geq 10\%$ for Sb. The associated sample results were NDs and, thus, were qualified UJ,I12a. In the MS associated with soil samples -7634, -7648, -7638, -7639 and -7633, the %R was > the laboratory's UAL for U. The associated sample results were detects and, thus, were qualified J+,I6b. In the MS associated with all the other soil samples, the %R was < the laboratory's LAL but $\geq 10\%$ for Se. The associated sample results were NDs and, thus, were qualified UJ,I6a. The soil MS %R was > the laboratory's UAL for K. The associated sample results were detects and, thus, were qualified J+,I6b. The soil MS %Rs were < the laboratory's LAL but $\geq 10\%$ for Sb and Co. The associated Sb sample results were NDs and, thus, were qualified UJ,I6a. The associated Co sample results were detects and, thus, were qualified J-,I6a. The soil MS %Rs were also > the laboratory's UAL for Al, and < the laboratory's LAL but $\geq 10\%$ for Ca and <10% for Ba and Mn. However, the associated parent sample concentrations were >4X the spike concentrations. Thus, the associated sample results were not qualified, based on professional judgment. The soil duplicate RPDs were >35% for Ba, Co and Mn, and both the parent sample and duplicate results were $\geq 5X$ the PQL. The associated sample results were detects and, thus, were qualified J,I10a. It should be noted that all the aqueous matrix QC analyses and the soil CVAA QC analyses were performed on LANL samples from different RNs. No sample data were qualified. <p>Reviewed by: <u>Monica Dymerski</u> Level I Date: <u>02/18/10</u></p>	
<p>VALIDATOR'S SIGNATURE: <u>Eric T. Mich</u> DATE: <u>2/18/10</u></p>	
Form 5118-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

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


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

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

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. Metals interference check sample percent recovery value is $\geq 50\%$ and $< 80\%$	UJ, I2a	J-, I2a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. Metals interference check sample percent recovery value is $> 120\%$.	N/A	J+, I2b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15. Metals interference check sample was not analyzed with the samples.	R, I2c	R, I2c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. The sample result is $\leq 5X$ the concentration of the related analyte in the method blank.	U, I4	N/A
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $> 5X$.	N/A	J, I4a
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18. The sample result is $\leq 5X$ the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	22. The associated matrix spike recovery was $< 10\%$. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	23. The associated matrix spike recovery was $< \text{the LAL}$ but $> 10\%$. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J+, I6a
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24. The associated matrix spike recovery was $> \text{the UAL}$. Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b

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

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

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
5118-2 Metals Analytical Data Validation Checklist	Records Use only  Los Alamos NATIONAL LABORATORY EST 1942

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

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128001

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7634

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	18000000	ug/Kg		7490	22000	22000	1	P	HSC	01/26/10 19:50	012610-1	940124
7440-36-0	Antimony UJ,112a	1100	ug/Kg	UN	364	1100	1100	1	P	HSC	01/26/10 19:50	012610-1	940124
7440-38-2	Arsenic	2.12	mg/kg		0.213	1.06	1.06	2	MS	BAJ	01/23/10 11:05	100123-6	940077
7440-39-3	Barium J,110a	334000	ug/Kg	*	110	551	551	1	P	HSC	01/26/10 19:50	012610-1	940124
7440-41-7	Beryllium	1.36	mg/kg		0.0213	0.106	0.106	2	MS	BAJ	01/24/10 12:58	100124-11	940077
7440-43-9	Cadmium	233	ug/Kg	J	110	551	551	1	P	HSC	01/26/10 19:50	012610-1	940124
7440-70-2	Calcium	2550000	ug/Kg		8820	27600	27600	1	P	HSC	01/26/10 19:50	012610-1	940124
7440-47-3	Chromium	12800	ug/Kg		165	551	551	1	P	HSC	01/26/10 19:50	012610-1	940124
7440-48-4	Cobalt J-,16a	15200	ug/Kg	*N	165	551	551	1	P	HSC	01/26/10 19:50	012610-1	940124
7440-50-8	Copper	8230	ug/Kg		331	1100	1100	1	P	HSC	01/26/10 19:50	012610-1	940124
7439-89-6	Iron	16800000	ug/Kg		8820	27600	27600	1	P	HSC	01/26/10 19:50	012610-1	940124
7439-92-1	Lead	18100	ug/Kg	*	276	1100	1100	1	P	HSC	01/26/10 19:50	012610-1	940124
7439-95-4	Magnesium	2710000	ug/Kg		9370	33100	33100	1	P	HSC	01/26/10 19:50	012610-1	940124
7439-96-5	Manganese J,110a	1380000	ug/Kg	*E	1100	5510	5510	5	P	HSC	01/27/10 14:44	012710-2	940124
7439-97-6	Mercury	17.6	ug/kg		4.25	12.5	12.5	1	AV	ETL	01/22/10 08:36	102210S1-13	943262
7440-02-0	Nickel	8.91	mg/kg		0.106	0.426	0.426	2	MS	BAJ	01/23/10 11:05	100123-6	940077
7440-09-7	Potassium J+,16b	2010000	ug/Kg	N	35300	138000	138000	5	P	HSC	01/27/10 14:44	012710-2	940124
7782-49-2	Selenium	1.06	mg/kg	UN	0.532	1.06	1.06	2	MS	BAJ	01/23/10 11:05	100123-6	940077
7440-22-4	Silver	1110	ug/Kg		110	551	551	1	P	HSC	01/26/10 19:50	012610-1	940124
7440-23-5	Sodium	143000	ug/Kg	*	7720	27600	27600	1	P	HSC	01/26/10 19:50	012610-1	940124
7440-28-0	Thallium	0.283	mg/kg		0.0639	0.213	0.213	2	MS	BAJ	01/23/10 19:42	100123-10	940077
7440-61-1	Uranium J+,16b	0.970	mg/kg		0.014	0.0426	0.0426	2	MS	SKJ	01/25/10 11:14	100125-4	940077
7440-62-2	Vanadium	32300	ug/Kg		110	551	551	1	P	HSC	01/26/10 19:50	012610-1	940124
7440-66-6	Zinc	27100	ug/Kg		364	1100	1100	1	P	HSC	01/26/10 19:50	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940077	940076	SW846 3050B	0.524	g	50	mL	01/11/10	FGA
940124	940120	SW846 3050B	0.506	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.535	g	30	mL	01/21/10	TXB3

ETM
2/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128002

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7648

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 94.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6640000	ug/Kg		7000	20600	20600	1	P	HSC	01/26/10 20:26	012610-1	940124
7440-36-0	Antimony UJ,112a	1030	ug/Kg	UN	340	1030	1030	1	P	HSC	01/26/10 20:26	012610-1	940124
7440-38-2	Arsenic	1.13	mg/kg		0.203	1.01	1.01	2	MS	BAJ	01/23/10 11:09	100123-6	940077
7440-39-3	Barium J,110a	140000	ug/Kg	*	103	515	515	1	P	HSC	01/26/10 20:26	012610-1	940124
7440-41-7	Beryllium	0.608	mg/kg		0.0203	0.101	0.101	2	MS	BAJ	01/24/10 13:00	100124-11	940077
7440-43-9	Cadmium	515	ug/Kg	U	103	515	515	1	P	HSC	01/26/10 20:26	012610-1	940124
7440-70-2	Calcium	3240000	ug/Kg		8240	25800	25800	1	P	HSC	01/26/10 20:26	012610-1	940124
7440-47-3	Chromium	7260	ug/Kg		155	515	515	1	P	HSC	01/26/10 20:26	012610-1	940124
7440-48-4	Cobalt J-,16a	1870	ug/Kg	*N	155	515	515	1	P	HSC	01/26/10 20:26	012610-1	940124
7440-50-8	Copper	3960	ug/Kg		309	1030	1030	1	P	HSC	01/26/10 20:26	012610-1	940124
7439-89-6	Iron	11700000	ug/Kg		8240	25800	25800	1	P	HSC	01/26/10 20:26	012610-1	940124
7439-92-1	Lead	4660	ug/Kg	*	258	1030	1030	1	P	HSC	01/26/10 20:26	012610-1	940124
7439-95-4	Magnesium	1490000	ug/Kg		8760	30900	30900	1	P	HSC	01/26/10 20:26	012610-1	940124
7439-96-5	Manganese J,110a	203000	ug/Kg	*E	206	1030	1030	1	P	HSC	01/26/10 20:26	012610-1	940124
7439-97-6	Mercury	10	ug/kg	J	4.11	12.1	12.1	1	AV	ETL	01/22/10 08:45	102210S1-13	943262
7440-02-0	Nickel	5.38	mg/kg		0.101	0.406	0.406	2	MS	BAJ	01/23/10 11:09	100123-6	940077
7440-09-7	Potassium J+,16b	1070000	ug/Kg	N	6590	25800	25800	1	P	HSC	01/26/10 20:26	012610-1	940124
7782-49-2	Selenium	1.01	mg/kg	UN	0.507	1.01	1.01	2	MS	BAJ	01/23/10 11:09	100123-6	940077
7440-22-4	Silver	700	ug/Kg		103	515	515	1	P	HSC	01/26/10 20:26	012610-1	940124
7440-23-5	Sodium	135000	ug/Kg	*	7210	25800	25800	1	P	HSC	01/26/10 20:26	012610-1	940124
7440-28-0	Thallium	0.146	mg/kg	J	0.0609	0.203	0.203	2	MS	BAJ	01/23/10 19:47	100123-10	940077
7440-61-1	Uranium J+,16b	1.45	mg/kg		0.0134	0.0406	0.0406	2	MS	SKJ	01/25/10 11:16	100125-4	940077
7440-62-2	Vanadium	10700	ug/Kg		103	515	515	1	P	HSC	01/26/10 20:26	012610-1	940124
7440-66-6	Zinc	31300	ug/Kg		340	1030	1030	1	P	HSC	01/26/10 20:26	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940077	940076	SW846 3050B	0.52	g	50	mL	01/11/10	FGA
940124	940120	SW846 3050B	0.512	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.524	g	30	mL	01/21/10	TXB3

ETM
2/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128003

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7638

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9090000	ug/Kg		7670	22600	22600	1	P	HSC	01/26/10 20:33	012610-1	940124
7440-36-0	Antimony U,112a	1130	ug/Kg	UN	372	1130	1130	1	P	HSC	01/26/10 20:33	012610-1	940124
7440-38-2	Arsenic	1.67	mg/kg		0.209	1.05	1.05	2	MS	BAJ	01/23/10 11:12	100123-6	940077
7440-39-3	Barium J,110a	178000	ug/Kg	*	113	564	564	1	P	HSC	01/26/10 20:33	012610-1	940124
7440-41-7	Beryllium	0.899	mg/kg		0.0209	0.105	0.105	2	MS	BAJ	01/24/10 13:01	100124-11	940077
7440-43-9	Cadmium	192	ug/Kg	J	113	564	564	1	P	HSC	01/26/10 20:33	012610-1	940124
7440-70-2	Calcium	2210000	ug/Kg		9030	28200	28200	1	P	HSC	01/26/10 20:33	012610-1	940124
7440-47-3	Chromium	10000	ug/Kg		169	564	564	1	P	HSC	01/26/10 20:33	012610-1	940124
7440-48-4	Cobalt J-,16a	5770	ug/Kg	*N	169	564	564	1	P	HSC	01/26/10 20:33	012610-1	940124
7440-50-8	Copper	10800	ug/Kg		338	1130	1130	1	P	HSC	01/26/10 20:33	012610-1	940124
7439-89-6	Iron	12600000	ug/Kg		9030	28200	28200	1	P	HSC	01/26/10 20:33	012610-1	940124
7439-92-1	Lead	14400	ug/Kg	*	282	1130	1130	1	P	HSC	01/26/10 20:33	012610-1	940124
7439-95-4	Magnesium	1820000	ug/Kg		9590	33800	33800	1	P	HSC	01/26/10 20:33	012610-1	940124
7439-96-5	Manganese J,110a	387000	ug/Kg	*E	226	1130	1130	1	P	HSC	01/26/10 20:33	012610-1	940124
7439-97-6	Mercury	16.1	ug/kg		4.39	12.9	12.9	1	AV	ETL	01/22/10 08:50	10221051-13	943262
7440-02-0	Nickel	6.62	mg/kg		0.105	0.419	0.419	2	MS	BAJ	01/23/10 11:12	100123-6	940077
7440-09-7	Potassium J+,16b	1740000	ug/Kg	N	7220	28200	28200	1	P	HSC	01/26/10 20:33	012610-1	940124
7782-49-2	Selenium	1.05	mg/kg	UN	0.523	1.05	1.05	2	MS	BAJ	01/23/10 11:12	100123-6	940077
7440-22-4	Silver	787	ug/Kg		113	564	564	1	P	HSC	01/26/10 20:33	012610-1	940124
7440-23-5	Sodium U,14d	47400	ug/Kg	*	7900	28200	28200	1	P	HSC	01/26/10 20:33	012610-1	940124
7440-28-0	Thallium	0.184	mg/kg	J	0.0628	0.209	0.209	2	MS	BAJ	01/23/10 19:51	100123-10	940077
7440-61-1	Uranium J+,16b	8.68	mg/kg		0.0138	0.0419	0.0419	2	MS	SKJ	01/25/10 11:18	100125-4	940077
7440-62-2	Vanadium	25500	ug/Kg		113	564	564	1	P	HSC	01/26/10 20:33	012610-1	940124
7440-66-6	Zinc	30300	ug/Kg		372	1130	1130	1	P	HSC	01/26/10 20:33	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol	Units	Final wt./vol.	Units	Date	Analyst
940077	940076	SW846 3050B	0.539	g	50	mL	01/11/10	FGA
940124	940120	SW846 3050B	0.5	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.524	g	30	mL	01/21/10	TXB3

ETM
2/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128004

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7639

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 85

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	15600000	ug/Kg		7910	23300	23300	1	P	HSC	01/26/10 20:55	012610-1	940124
7440-36-0	Antimony UJ,112a	1160	ug/Kg	UN	384	1160	1160	1	P	HSC	01/26/10 20:55	012610-1	940124
7440-38-2	Arsenic	2.36	mg/kg		0.224	1.12	1.12	2	MS	BAJ	01/23/10 11:16	100123-6	940077
7440-39-3	Barium J,110a	172000	ug/Kg	*	116	581	581	1	P	HSC	01/26/10 20:55	012610-1	940124
7440-41-7	Beryllium	1.19	mg/kg		0.0224	0.112	0.112	2	MS	BAJ	01/24/10 13:03	100124-11	940077
7440-43-9	Cadmium	172	ug/Kg	J	116	581	581	1	P	HSC	01/26/10 20:55	012610-1	940124
7440-70-2	Calcium	22000000	ug/Kg		9300	29100	29100	1	P	HSC	01/26/10 20:55	012610-1	940124
7440-47-3	Chromium	13700	ug/Kg		174	581	581	1	P	HSC	01/26/10 20:55	012610-1	940124
7440-48-4	Cobalt J-,16a	5880	ug/Kg	*N	174	581	581	1	P	HSC	01/26/10 20:55	012610-1	940124
7440-50-8	Copper	7920	ug/Kg		349	1160	1160	1	P	HSC	01/26/10 20:55	012610-1	940124
7439-89-6	Iron	15000000	ug/Kg		9300	29100	29100	1	P	HSC	01/26/10 20:55	012610-1	940124
7439-92-1	Lead	15200	ug/Kg	*	291	1160	1160	1	P	HSC	01/26/10 20:55	012610-1	940124
7439-95-4	Magnesium	2190000	ug/Kg		9880	34900	34900	1	P	HSC	01/26/10 20:55	012610-1	940124
7439-96-5	Manganese J,110a	360000	ug/Kg	*E	233	1160	1160	1	P	HSC	01/26/10 20:55	012610-1	940124
7439-97-6	Mercury	16.2	ug/kg		4.69	13.8	13.8	1	AV	ETL	01/22/10 08:51	102210S1-13	943262
7440-02-0	Nickel	7.94	mg/kg		0.112	0.448	0.448	2	MS	BAJ	01/23/10 11:16	100123-6	940077
7440-09-7	Potassium J+,16b	2070000	ug/Kg	N	7440	29100	29100	1	P	HSC	01/26/10 20:55	012610-1	940124
7782-49-2	Selenium	1.12	mg/kg	UN	0.56	1.12	1.12	2	MS	BAJ	01/23/10 11:16	100123-6	940077
7440-22-4	Silver	834	ug/Kg		116	581	581	1	P	HSC	01/26/10 20:55	012610-1	940124
7440-23-5	Sodium U,14d	65900	ug/Kg	*	8140	29100	29100	1	P	HSC	01/26/10 20:55	012610-1	940124
7440-28-0	Thallium	0.228	mg/kg		0.0672	0.224	0.224	2	MS	BAJ	01/23/10 19:56	100123-10	940077
7440-61-1	Uranium J+,16b	1.9	mg/kg		0.0148	0.0448	0.0448	2	MS	SKJ	01/25/10 11:21	100125-4	940077
7440-62-2	Vanadium	29600	ug/Kg		116	581	581	1	P	HSC	01/26/10 20:55	012610-1	940124
7440-66-6	Zinc	27400	ug/Kg		384	1160	1160	1	P	HSC	01/26/10 20:55	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940077	940076	SW846 3050B	0.524	g	50	mL	01/11/10	FGA
940124	940120	SW846 3050B	0.505	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.511	g	30	mL	01/21/10	1XB3

ETM
2/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128005

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7633

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 84

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9350000	ug/Kg		8040	23600	23600	1	P	HSC	01/26/10 21:02	012610-1	940124
7440-36-0	Antimony UJ,112a	1180	ug/Kg	UN	390	1180	1180	1	P	HSC	01/26/10 21:02	012610-1	940124
7440-38-2	Arsenic	2.3	mg/kg		0.229	1.15	1.15	2	MS	BAJ	01/23/10 11:20	100123-6	940077
7440-39-3	Barium J,110a	161000	ug/Kg	*	118	591	591	1	P	HSC	01/26/10 21:02	012610-1	940124
7440-41-7	Beryllium	1.25	mg/kg		0.0229	0.115	0.115	2	MS	BAJ	01/24/10 13:05	100124-11	940077
7440-43-9	Cadmium	152	ug/Kg	J	118	591	591	1	P	HSC	01/26/10 21:02	012610-1	940124
7440-70-2	Calcium	2540000	ug/Kg		9460	29600	29600	1	P	HSC	01/26/10 21:02	012610-1	940124
7440-47-3	Chromium	12000	ug/Kg		177	591	591	1	P	HSC	01/26/10 21:02	012610-1	940124
7440-48-4	Cobalt J-,16a	4650	ug/Kg	*N	177	591	591	1	P	HSC	01/26/10 21:02	012610-1	940124
7440-50-8	Copper	6580	ug/Kg		355	1180	1180	1	P	HSC	01/26/10 21:02	012610-1	940124
7439-89-6	Iron	10900000	ug/Kg		9460	29600	29600	1	P	HSC	01/26/10 21:02	012610-1	940124
7439-92-1	Lead	12000	ug/Kg	*	296	1180	1180	1	P	HSC	01/26/10 21:02	012610-1	940124
7439-95-4	Magnesium	1740000	ug/Kg		10000	35500	35500	1	P	HSC	01/26/10 21:02	012610-1	940124
7439-96-5	Manganese J,110a	337000	ug/Kg	*E	236	1180	1180	1	P	HSC	01/26/10 21:02	012610-1	940124
7439-97-6	Mercury	17.1	ug/kg		4.08	12	12	1	AV	ETL	01/22/10 08:53	102210S1-13	943262
7440-02-0	Nickel	7.95	mg/kg		0.115	0.458	0.458	2	MS	BAJ	01/23/10 11:20	100123-6	940077
7440-09-7	Potassium J+,16b	1670000	ug/Kg	N	7570	29600	29600	1	P	HSC	01/26/10 21:02	012610-1	940124
7782-49-2	Selenium	1.15	mg/kg	UN	0.573	1.15	1.15	2	MS	BAJ	01/23/10 11:20	100123-6	940077
7440-22-4	Silver	624	ug/Kg		118	591	591	1	P	HSC	01/26/10 21:02	012610-1	940124
7440-23-5	Sodium U,14d	55100	ug/Kg	*	8280	29600	29600	1	P	HSC	01/26/10 21:02	012610-1	940124
7440-28-0	Thallium	0.222	mg/kg	J	0.0688	0.229	0.229	2	MS	BAJ	01/23/10 20:00	100123-10	940077
7440-61-1	Uranium J+,16b	2.24	mg/kg		0.0151	0.0458	0.0458	2	MS	SKJ	01/25/10 11:23	100125-4	940077
7440-62-2	Vanadium	21200	ug/Kg		118	591	591	1	P	HSC	01/26/10 21:02	012610-1	940124
7440-66-6	Zinc	23300	ug/Kg		390	1180	1180	1	P	HSC	01/26/10 21:02	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940077	940076	SW846 3050B	0.52	g	50	mL	01/11/10	FGA
940124	940120	SW846 3050B	0.504	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.596	g	30	mL	01/21/10	TXB3

ETM
2/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128006

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7647

LEVEL: Low

DATE RECEIVED 08-JAN-10

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	13000000	ug/Kg		8130	23900	23900	1	P	HSC	01/26/10 21:09	012610-1	940124
7440-36-0	Antimony UJ,112a	1200	ug/Kg	UN	395	1200	1200	1	P	HSC	01/26/10 21:09	012610-1	940124
7440-38-2	Arsenic	2.17	mg/kg		0.238	1.19	1.19	2	MS	PRB	01/19/10 19:19	100119-5	940107
7440-39-3	Barium J,110a	233000	ug/Kg	*	120	598	598	1	P	HSC	01/26/10 21:09	012610-1	940124
7440-41-7	Beryllium	1.22	mg/kg		0.0238	0.119	0.119	2	MS	PRB	01/19/10 19:19	100119-5	940107
7440-43-9	Cadmium	598	ug/Kg	U	120	598	598	1	P	HSC	01/26/10 21:09	012610-1	940124
7440-70-2	Calcium	2390000	ug/Kg		9560	29900	29900	1	P	HSC	01/26/10 21:09	012610-1	940124
7440-47-3	Chromium	15400	ug/Kg		179	598	598	1	P	HSC	01/26/10 21:09	012610-1	940124
7440-48-4	Cobalt J-,16a	5060	ug/Kg	*N	179	598	598	1	P	HSC	01/26/10 21:09	012610-1	940124
7440-50-8	Copper	8250	ug/Kg		359	1200	1200	1	P	HSC	01/26/10 21:09	012610-1	940124
7439-89-6	Iron	14400000	ug/Kg		9560	29900	29900	1	P	HSC	01/26/10 21:09	012610-1	940124
7439-92-1	Lead	13100	ug/Kg	*	299	1200	1200	1	P	HSC	01/26/10 21:09	012610-1	940124
7439-95-4	Magnesium	2110000	ug/Kg		10200	35900	35900	1	P	HSC	01/26/10 21:09	012610-1	940124
7439-96-5	Manganese J,110a	331000	ug/Kg	*E	239	1200	1200	1	P	HSC	01/26/10 21:09	012610-1	940124
7439-97-6	Mercury	17.3	ug/kg		4.59	13.5	13.5	1	AV	ETL	01/22/10 08:55	102210S1-13	943262
7440-02-0	Nickel	9.34	mg/kg		0.119	0.475	0.475	2	MS	PRB	01/16/10 02:36	100115-3	940107
7440-09-7	Potassium J+,16b	1830000	ug/Kg	N	7650	29900	29900	1	P	HSC	01/26/10 21:09	012610-1	940124
7782-49-2	Selenium UJ,16a	1.19	mg/kg	UN	0.594	1.19	1.19	2	MS	PRB	01/16/10 02:36	100115-3	940107
7440-22-4	Silver	744	ug/Kg		120	598	598	1	P	HSC	01/26/10 21:09	012610-1	940124
7440-23-5	Sodium U,14d	74700	ug/Kg	*	8370	29900	29900	1	P	HSC	01/26/10 21:09	012610-1	940124
7440-28-0	Thallium	0.264	mg/kg		0.0713	0.238	0.238	2	MS	PRB	01/16/10 02:36	100115-3	940107
7440-61-1	Uranium	3.58	mg/kg		0.0157	0.0475	0.0475	2	MS	PRB	01/16/10 02:36	100115-3	940107
7440-62-2	Vanadium	25500	ug/Kg		120	598	598	1	P	HSC	01/26/10 21:09	012610-1	940124
7440-66-6	Zinc	31000	ug/Kg		395	1200	1200	1	P	HSC	01/26/10 21:09	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.508	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.505	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.537	g	30	mL	01/21/10	TXB3

ETM
2/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128007

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7644

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	18500000	ug/Kg		7520	22100	22100	1	P	HSC	01/26/10 21:17	012610-1	940124
7440-36-0	Antimony UJ,112a	1110	ug/Kg	UN	365	1110	1110	1	P	HSC	01/26/10 21:17	012610-1	940124
7440-38-2	Arsenic	2.34	mg/kg		0.219	1.09	1.09	2	MS	PRB	01/19/10 19:46	100119-5	940107
7440-39-3	Barium J,110a	206000	ug/Kg	*	111	553	553	1	P	HSC	01/26/10 21:17	012610-1	940124
7440-41-7	Beryllium	1.55	mg/kg		0.0219	0.109	0.109	2	MS	PRB	01/19/10 19:46	100119-5	940107
7440-43-9	Cadmium	553	ug/Kg	U	111	553	553	1	P	HSC	01/26/10 21:17	012610-1	940124
7440-70-2	Calcium	2190000	ug/Kg		8850	27700	27700	1	P	HSC	01/26/10 21:17	012610-1	940124
7440-47-3	Chromium	10800	ug/Kg		166	553	553	1	P	HSC	01/26/10 21:17	012610-1	940124
7440-48-4	Cobalt J-,16a	5370	ug/Kg	*N	166	553	553	1	P	HSC	01/26/10 21:17	012610-1	940124
7440-50-8	Copper	6650	ug/Kg		332	1110	1110	1	P	HSC	01/26/10 21:17	012610-1	940124
7439-89-6	Iron	15000000	ug/Kg		8850	27700	27700	1	P	HSC	01/26/10 21:17	012610-1	940124
7439-92-1	Lead	14200	ug/Kg	*	277	1110	1110	1	P	HSC	01/26/10 21:17	012610-1	940124
7439-95-4	Magnesium	2300000	ug/Kg		9400	33200	33200	1	P	HSC	01/26/10 21:17	012610-1	940124
7439-96-5	Manganese J,110a	330000	ug/Kg	*E	221	1110	1110	1	P	HSC	01/26/10 21:17	012610-1	940124
7439-97-6	Mercury	19.8	ug/kg		4.33	12.7	12.7	1	AV	ETL	01/22/10 08:56	10221081-13	943262
7440-02-0	Nickel	8.86	mg/kg		0.109	0.437	0.437	2	MS	PRB	01/16/10 02:50	100115-3	940107
7440-09-7	Potassium J+,16b	1890000	ug/Kg	N	7080	27700	27700	1	P	HSC	01/26/10 21:17	012610-1	940124
7782-49-2	Selenium UJ,16a	1.09	mg/kg	UN	0.547	1.09	1.09	2	MS	PRB	01/16/10 02:50	100115-3	940107
7440-22-4	Silver	823	ug/Kg		111	553	553	1	P	HSC	01/26/10 21:17	012610-1	940124
7440-23-5	Sodium	96000	ug/Kg	*	7740	27700	27700	1	P	HSC	01/26/10 21:17	012610-1	940124
7440-28-0	Thallium	0.243	mg/kg		0.0656	0.219	0.219	2	MS	PRB	01/16/10 02:50	100115-3	940107
7440-61-1	Uranium	1.08	mg/kg		0.0144	0.0437	0.0437	2	MS	PRB	01/16/10 02:50	100115-3	940107
7440-62-2	Vanadium	27200	ug/Kg		111	553	553	1	P	HSC	01/26/10 21:17	012610-1	940124
7440-66-6	Zinc	23500	ug/Kg		365	1110	1110	1	P	HSC	01/26/10 21:17	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.508	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.502	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.523	g	30	mL	01/21/10	TXB3

ETM
2/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128008

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7637

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 90.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	16100000	ug/Kg		7520	22100	22100	1	P	HSC	01/26/10 21:24	012610-1	940124
7440-36-0	Antimony UJ,112a	1110	ug/Kg	UN	365	1110	1110	1	P	HSC	01/26/10 21:24	012610-1	940124
7440-38-2	Arsenic	2.28	mg/kg		0.221	1.1	1.1	2	MS	PRB	01/19/10 19:50	100119-5	940107
7440-39-3	Barium J,110a	193000	ug/Kg	*	111	553	553	1	P	HSC	01/26/10 21:24	012610-1	940124
7440-41-7	Beryllium	1.32	mg/kg		0.0221	0.11	0.11	2	MS	PRB	01/19/10 19:50	100119-5	940107
7440-43-9	Cadmium	553	ug/Kg	U	111	553	553	1	P	HSC	01/26/10 21:24	012610-1	940124
7440-70-2	Calcium	2180000	ug/Kg		8840	27600	27600	1	P	HSC	01/26/10 21:24	012610-1	940124
7440-47-3	Chromium	10900	ug/Kg		166	553	553	1	P	HSC	01/26/10 21:24	012610-1	940124
7440-48-4	Cobalt J-,16a	5900	ug/Kg	*N	166	553	553	1	P	HSC	01/26/10 21:24	012610-1	940124
7440-50-8	Copper	7610	ug/Kg		332	1110	1110	1	P	HSC	01/26/10 21:24	012610-1	940124
7439-89-6	Iron	14900000	ug/Kg		8840	27600	27600	1	P	HSC	01/26/10 21:24	012610-1	940124
7439-92-1	Lead	12900	ug/Kg	*	276	1110	1110	1	P	HSC	01/26/10 21:24	012610-1	940124
7439-95-4	Magnesium	2530000	ug/Kg		9400	33200	33200	1	P	HSC	01/26/10 21:24	012610-1	940124
7439-96-5	Manganese J,110a	343000	ug/Kg	*E	221	1110	1110	1	P	HSC	01/26/10 21:24	012610-1	940124
7439-97-6	Mercury	19.8	ug/kg		4.06	12	12	1	AV	ETL	01/22/10 08:58	102210S1-13	943262
7440-02-0	Nickel	8.56	mg/kg		0.11	0.441	0.441	2	MS	PRB	01/16/10 02:53	100115-3	940107
7440-09-7	Potassium J+,16b	2040000	ug/Kg	N	7080	27600	27600	1	P	HSC	01/26/10 21:24	012610-1	940124
7782-49-2	Selenium UJ,16a	1.1	mg/kg	UN	0.552	1.1	1.1	2	MS	PRB	01/16/10 02:53	100115-3	940107
7440-22-4	Silver	909	ug/Kg		111	553	553	1	P	HSC	01/26/10 21:24	012610-1	940124
7440-23-5	Sodium	102000	ug/Kg	*	7740	27600	27600	1	P	HSC	01/26/10 21:24	012610-1	940124
7440-28-0	Thallium	0.233	mg/kg		0.0662	0.221	0.221	2	MS	PRB	01/16/10 02:53	100115-3	940107
7440-61-1	Uranium	1.35	mg/kg		0.0146	0.0441	0.0441	2	MS	PRB	01/16/10 02:53	100115-3	940107
7440-62-2	Vanadium	26600	ug/Kg		111	553	553	1	P	HSC	01/26/10 21:24	012610-1	940124
7440-66-6	Zinc	26200	ug/Kg		365	1110	1110	1	P	HSC	01/26/10 21:24	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.502	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.501	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.556	g	30	mL	01/21/10	TXB3

ETM
2/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128009

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7635

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 85

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11000000	ug/Kg		7860	23100	23100	1	P	HSC	01/26/10 21:31	012610-1	940124
7440-36-0	Antimony UJ,112a	1160	ug/Kg	UN	382	1160	1160	1	P	HSC	01/26/10 21:31	012610-1	940124
7440-38-2	Arsenic	2.39	mg/kg		0.228	1.14	1.14	2	MS	PRB	01/19/10 20:01	100119-5	940107
7440-39-3	Barium J,110a	175000	ug/Kg	*	116	578	578	1	P	HSC	01/26/10 21:31	012610-1	940124
7440-41-7	Beryllium	1.24	mg/kg		0.0228	0.114	0.114	2	MS	PRB	01/19/10 20:01	100119-5	940107
7440-43-9	Cadmium	183	ug/Kg	J	116	578	578	1	P	HSC	01/26/10 21:31	012610-1	940124
7440-70-2	Calcium	2120000	ug/Kg		9250	28900	28900	1	P	HSC	01/26/10 21:31	012610-1	940124
7440-47-3	Chromium	13900	ug/Kg		173	578	578	1	P	HSC	01/26/10 21:31	012610-1	940124
7440-48-4	Cobalt J-,16a	6710	ug/Kg	*N	173	578	578	1	P	HSC	01/26/10 21:31	012610-1	940124
7440-50-8	Copper	7820	ug/Kg		347	1160	1160	1	P	HSC	01/26/10 21:31	012610-1	940124
7439-89-6	Iron	13800000	ug/Kg		9250	28900	28900	1	P	HSC	01/26/10 21:31	012610-1	940124
7439-92-1	Lead	14900	ug/Kg	*	289	1160	1160	1	P	HSC	01/26/10 21:31	012610-1	940124
7439-95-4	Magnesium	1940000	ug/Kg		9830	34700	34700	1	P	HSC	01/26/10 21:31	012610-1	940124
7439-96-5	Manganese J,110a	415000	ug/Kg	*E	231	1160	1160	1	P	HSC	01/26/10 21:31	012610-1	940124
7439-97-6	Mercury	13.4	ug/kg		4.23	12.5	12.5	1	AV	ETL	01/22/10 09:00	102210S1-13	943262
7440-02-0	Nickel	7.84	mg/kg		0.114	0.455	0.455	2	MS	PRB	01/16/10 02:55	100115-3	940107
7440-09-7	Potassium J+,16b	1850000	ug/Kg	N	7400	28900	28900	1	P	HSC	01/26/10 21:31	012610-1	940124
7782-49-2	Selenium UJ,16a	1.14	mg/kg	UN	0.569	1.14	1.14	2	MS	PRB	01/16/10 02:55	100115-3	940107
7440-22-4	Silver	803	ug/Kg		116	578	578	1	P	HSC	01/26/10 21:31	012610-1	940124
7440-23-5	Sodium U,14d	49300	ug/Kg	*	8100	28900	28900	1	P	HSC	01/26/10 21:31	012610-1	940124
7440-28-0	Thallium	0.218	mg/kg	J	0.0683	0.228	0.228	2	MS	PRB	01/16/10 02:55	100115-3	940107
7440-61-1	Uranium	2.15	mg/kg		0.015	0.0455	0.0455	2	MS	PRB	01/16/10 02:55	100115-3	940107
7440-62-2	Vanadium	27400	ug/Kg		116	578	578	1	P	HSC	01/26/10 21:31	012610-1	940124
7440-66-6	Zinc	30100	ug/Kg		382	1160	1160	1	P	HSC	01/26/10 21:31	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.514	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.506	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.564	g	30	mL	01/21/10	TXB3

ETM
2/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128010

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7642

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	19900000	ug/Kg		7590	22300	22300	1	P	HSC	01/26/10 21:38	012610-1	940124
7440-36-0	Antimony UJ,112a	1120	ug/Kg	UN	368	1120	1120	1	P	HSC	01/26/10 21:38	012610-1	940124
7440-38-2	Arsenic	2.37	mg/kg		0.225	1.12	1.12	2	MS	PRB	01/19/10 20:05	100119-5	940107
7440-39-3	Barium J,110a	218000	ug/Kg	*	112	558	558	1	P	HSC	01/26/10 21:38	012610-1	940124
7440-41-7	Beryllium	1.66	mg/kg		0.0225	0.112	0.112	2	MS	PRB	01/19/10 20:05	100119-5	940107
7440-43-9	Cadmium	197	ug/Kg	J	112	558	558	1	P	HSC	01/26/10 21:38	012610-1	940124
7440-70-2	Calcium	2400000	ug/Kg		8920	27900	27900	1	P	HSC	01/26/10 21:38	012610-1	940124
7440-47-3	Chromium	12500	ug/Kg		167	558	558	1	P	HSC	01/26/10 21:38	012610-1	940124
7440-48-4	Cobalt J-,16a	5350	ug/Kg	*N	167	558	558	1	P	HSC	01/26/10 21:38	012610-1	940124
7440-50-8	Copper	8280	ug/Kg		335	1120	1120	1	P	HSC	01/26/10 21:38	012610-1	940124
7439-89-6	Iron	15900000	ug/Kg		8920	27900	27900	1	P	HSC	01/26/10 21:38	012610-1	940124
7439-92-1	Lead	15000	ug/Kg	*	279	1120	1120	1	P	HSC	01/26/10 21:38	012610-1	940124
7439-95-4	Magnesium	2560000	ug/Kg		9480	33500	33500	1	P	HSC	01/26/10 21:38	012610-1	940124
7439-96-5	Manganese J,110a	320000	ug/Kg	*E	223	1120	1120	1	P	HSC	01/26/10 21:38	012610-1	940124
7439-97-6	Mercury	23.6	ug/kg		4.44	13.1	13.1	1	AV	ETL	01/22/10 09:01	102210S1-13	943262
7440-02-0	Nickel	8.52	mg/kg		0.112	0.45	0.45	2	MS	PRB	01/16/10 02:58	100115-3	940107
7440-09-7	Potassium J+,16b	2110000	ug/Kg	N	7140	27900	27900	1	P	HSC	01/26/10 21:38	012610-1	940124
7782-49-2	Selenium UJ,16a	1.12	mg/kg	UN	0.562	1.12	1.12	2	MS	PRB	01/16/10 02:58	100115-3	940107
7440-22-4	Silver	538	ug/Kg	J	112	558	558	1	P	HSC	01/26/10 21:38	012610-1	940124
7440-23-5	Sodium	90300	ug/Kg	*	7810	27900	27900	1	P	HSC	01/26/10 21:38	012610-1	940124
7440-28-0	Thallium	0.235	mg/kg		0.0675	0.225	0.225	2	MS	PRB	01/16/10 02:58	100115-3	940107
7440-61-1	Uranium	1.16	mg/kg		0.0148	0.045	0.045	2	MS	PRB	01/16/10 02:58	100115-3	940107
7440-62-2	Vanadium	30600	ug/Kg		112	558	558	1	P	HSC	01/26/10 21:38	012610-1	940124
7440-66-6	Zinc	28400	ug/Kg		368	1120	1120	1	P	HSC	01/26/10 21:38	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.502	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.506	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.519	g	30	mL	01/21/10	TXB3

ETM
2/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128011

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7649

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 78

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11000000	ug/Kg		8600	25300	25300	1	P	HSC	01/26/10 21:45	012610-1	940124
7440-36-0	Antimony UJ,112a	1260	ug/Kg	UN	417	1260	1260	1	P	HSC	01/26/10 21:45	012610-1	940124
7440-38-2	Arsenic	3	mg/kg		0.246	1.23	1.23	2	MS	PRB	01/19/10 20:09	100119-5	940107
7440-39-3	Barium J,110a	155000	ug/Kg	*	126	632	632	1	P	HSC	01/26/10 21:45	012610-1	940124
7440-41-7	Beryllium	1.41	mg/kg		0.0246	0.123	0.123	2	MS	PRB	01/19/10 20:09	100119-5	940107
7440-43-9	Cadmium	126	ug/Kg	J	126	632	632	1	P	HSC	01/26/10 21:45	012610-1	940124
7440-70-2	Calcium	1880000	ug/Kg		10100	31600	31600	1	P	HSC	01/26/10 21:45	012610-1	940124
7440-47-3	Chromium	11100	ug/Kg		190	632	632	1	P	HSC	01/26/10 21:45	012610-1	940124
7440-48-4	Cobalt J-,16a	6110	ug/Kg	*N	190	632	632	1	P	HSC	01/26/10 21:45	012610-1	940124
7440-50-8	Copper	5950	ug/Kg		379	1260	1260	1	P	HSC	01/26/10 21:45	012610-1	940124
7439-89-6	Iron	13900000	ug/Kg		10100	31600	31600	1	P	HSC	01/26/10 21:45	012610-1	940124
7439-92-1	Lead	14100	ug/Kg	*	316	1260	1260	1	P	HSC	01/26/10 21:45	012610-1	940124
7439-95-4	Magnesium	1940000	ug/Kg		10700	37900	37900	1	P	HSC	01/26/10 21:45	012610-1	940124
7439-96-5	Manganese J,110a	372000	ug/Kg	*E	253	1260	1260	1	P	HSC	01/26/10 21:45	012610-1	940124
7439-97-6	Mercury	17.7	ug/kg		4.52	13.3	13.3	1	AV	ETL	01/22/10 09:03	102210S1-13	943262
7440-02-0	Nickel	8.72	mg/kg		0.123	0.491	0.491	2	MS	PRB	01/16/10 03:06	100115-3	940107
7440-09-7	Potassium J+,16b	2020000	ug/Kg	N	8090	31600	31600	1	P	HSC	01/26/10 21:45	012610-1	940124
7782-49-2	Selenium UJ,16a	1.23	mg/kg	UN	0.614	1.23	1.23	2	MS	PRB	01/16/10 03:06	100115-3	940107
7440-22-4	Silver	927	ug/Kg		126	632	632	1	P	HSC	01/26/10 21:45	012610-1	940124
7440-23-5	Sodium U,14d	78100	ug/Kg	*	8850	31600	31600	1	P	HSC	01/26/10 21:45	012610-1	940124
7440-28-0	Thallium	0.270	mg/kg		0.0737	0.246	0.246	2	MS	PRB	01/16/10 03:06	100115-3	940107
7440-61-1	Uranium	1.92	mg/kg		0.0162	0.0491	0.0491	2	MS	PRB	01/16/10 03:06	100115-3	940107
7440-62-2	Vanadium	28000	ug/Kg		126	632	632	1	P	HSC	01/26/10 21:45	012610-1	940124
7440-66-6	Zinc	26600	ug/Kg		417	1260	1260	1	P	HSC	01/26/10 21:45	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.522	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.507	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.579	g	30	mL	01/21/10	TXB3

ETM
2/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128012

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7650

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	23200000	ug/Kg		7720	22700	22700	1	P	HSC	01/26/10 21:52	012610-1	940124
7440-36-0	Antimony UJ,112a	1140	ug/Kg	UN	375	1140	1140	1	P	HSC	01/26/10 21:52	012610-1	940124
7440-38-2	Arsenic	3.1	mg/kg		0.219	1.09	1.09	2	MS	PRB	01/19/10 20:13	100119-5	940107
7440-39-3	Barium J,110a	213000	ug/Kg	*	114	568	568	1	P	HSC	01/26/10 21:52	012610-1	940124
7440-41-7	Beryllium	1.76	mg/kg		0.0219	0.109	0.109	2	MS	PRB	01/19/10 20:13	100119-5	940107
7440-43-9	Cadmium	186	ug/Kg	J	114	568	568	1	P	HSC	01/26/10 21:52	012610-1	940124
7440-70-2	Calcium	2670000	ug/Kg		9090	28400	28400	1	P	HSC	01/26/10 21:52	012610-1	940124
7440-47-3	Chromium	13100	ug/Kg		170	568	568	1	P	HSC	01/26/10 21:52	012610-1	940124
7440-48-4	Cobalt J-,16a	5690	ug/Kg	*N	170	568	568	1	P	HSC	01/26/10 21:52	012610-1	940124
7440-50-8	Copper	8130	ug/Kg		341	1140	1140	1	P	HSC	01/26/10 21:52	012610-1	940124
7439-89-6	Iron	16800000	ug/Kg		9090	28400	28400	1	P	HSC	01/26/10 21:52	012610-1	940124
7439-92-1	Lead	17300	ug/Kg	*	284	1140	1140	1	P	HSC	01/26/10 21:52	012610-1	940124
7439-95-4	Magnesium	2690000	ug/Kg		9660	34100	34100	1	P	HSC	01/26/10 21:52	012610-1	940124
7439-96-5	Manganese J,110a	354000	ug/Kg	*E	227	1140	1140	1	P	HSC	01/26/10 21:52	012610-1	940124
7439-97-6	Mercury	25.3	ug/kg		4.02	11.8	11.8	1	AV	ETL	01/22/10 09:05	102210S1-13	943262
7440-02-0	Nickel	10.3	mg/kg		0.109	0.438	0.438	2	MS	PRB	01/16/10 03:09	100115-3	940107
7440-09-7	Potassium J+,16b	2200000	ug/Kg	N	7270	28400	28400	1	P	HSC	01/26/10 21:52	012610-1	940124
7782-49-2	Selenium UJ,16a	1.09	mg/kg	UN	0.547	1.09	1.09	2	MS	PRB	01/16/10 03:09	100115-3	940107
7440-22-4	Silver	658	ug/Kg		114	568	568	1	P	HSC	01/26/10 21:52	012610-1	940124
7440-23-5	Sodium	128000	ug/Kg	*	7950	28400	28400	1	P	HSC	01/26/10 21:52	012610-1	940124
7440-28-0	Thallium	0.258	mg/kg		0.0657	0.219	0.219	2	MS	PRB	01/16/10 03:09	100115-3	940107
7440-61-1	Uranium	1.25	mg/kg		0.0145	0.0438	0.0438	2	MS	PRB	01/16/10 03:09	100115-3	940107
7440-62-2	Vanadium	31200	ug/Kg		114	568	568	1	P	HSC	01/26/10 21:52	012610-1	940124
7440-66-6	Zinc	28500	ug/Kg		375	1140	1140	1	P	HSC	01/26/10 21:52	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.525	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.506	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.584	g	30	mL	01/21/10	TXB3

ETM
2/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128013

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7641

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 86

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12000000	ug/Kg		7790	22900	22900	1	P	HSC	01/26/10 22:14	012610-1	940124
7440-36-0	Antimony UJ,112a	1150	ug/Kg	UN	378	1150	1150	1	P	HSC	01/26/10 22:14	012610-1	940124
7440-38-2	Arsenic	2.41	mg/kg		0.225	1.13	1.13	2	MS	PRB	01/19/10 20:25	100119-5	940107
7440-39-3	Barium J,110a	215000	ug/Kg	*	115	573	573	1	P	HSC	01/26/10 22:14	012610-1	940124
7440-41-7	Beryllium	1.21	mg/kg		0.0225	0.113	0.113	2	MS	PRB	01/19/10 20:25	100119-5	940107
7440-43-9	Cadmium	168	ug/Kg	J	115	573	573	1	P	HSC	01/26/10 22:14	012610-1	940124
7440-70-2	Calcium	2310000	ug/Kg		9170	28600	28600	1	P	HSC	01/26/10 22:14	012610-1	940124
7440-47-3	Chromium	19600	ug/Kg		172	573	573	1	P	HSC	01/26/10 22:14	012610-1	940124
7440-48-4	Cobalt J-,16a	6510	ug/Kg	*N	172	573	573	1	P	HSC	01/26/10 22:14	012610-1	940124
7440-50-8	Copper	11300	ug/Kg		344	1150	1150	1	P	HSC	01/26/10 22:14	012610-1	940124
7439-89-6	Iron	13900000	ug/Kg		9170	28600	28600	1	P	HSC	01/26/10 22:14	012610-1	940124
7439-92-1	Lead	15000	ug/Kg	*	286	1150	1150	1	P	HSC	01/26/10 22:14	012610-1	940124
7439-95-4	Magnesium	2010000	ug/Kg		9740	34400	34400	1	P	HSC	01/26/10 22:14	012610-1	940124
7439-96-5	Manganese J,110a	471000	ug/Kg	*E	229	1150	1150	1	P	HSC	01/26/10 22:14	012610-1	940124
7439-97-6	Mercury	14.2	ug/kg		4.4	12.9	12.9	1	AV	ETL	01/22/10 09:10	10221051-13	943262
7440-02-0	Nickel	9.16	mg/kg		0.113	0.45	0.45	2	MS	PRB	01/16/10 03:12	100115-3	940107
7440-09-7	Potassium J+,16b	1960000	ug/Kg	N	7330	28600	28600	1	P	HSC	01/26/10 22:14	012610-1	940124
7782-49-2	Selenium UJ,16a	1.13	mg/kg	UN	0.563	1.13	1.13	2	MS	PRB	01/16/10 03:12	100115-3	940107
7440-22-4	Silver	964	ug/Kg		115	573	573	1	P	HSC	01/26/10 22:14	012610-1	940124
7440-23-5	Sodium U,14d	60400	ug/Kg	*	8020	28600	28600	1	P	HSC	01/26/10 22:14	012610-1	940124
7440-28-0	Thallium	0.225	mg/kg		0.0676	0.225	0.225	2	MS	PRB	01/16/10 03:12	100115-3	940107
7440-61-1	Uranium	7.42	mg/kg		0.0149	0.045	0.045	2	MS	PRB	01/16/10 03:12	100115-3	940107
7440-62-2	Vanadium	26300	ug/Kg		115	573	573	1	P	HSC	01/26/10 22:14	012610-1	940124
7440-66-6	Zinc	47500	ug/Kg		378	1150	1150	1	P	HSC	01/26/10 22:14	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.519	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.51	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.542	g	30	mL	01/21/10	TXB3

ETM
2/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128014

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7643

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 84

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	10800000	ug/Kg		7840	23100	23100	1	P	HSC	01/26/10 22:22	012610-1	940124
7440-36-0	Antimony UJ,112a	1150	ug/Kg	UN	380	1150	1150	1	P	HSC	01/26/10 22:22	012610-1	940124
7440-38-2	Arsenic	2.11	mg/kg		0.23	1.15	1.15	2	MS	PRB	01/19/10 20:29	100119-5	940107
7440-39-3	Barium J,110a	196000	ug/Kg	*	115	576	576	1	P	HSC	01/26/10 22:22	012610-1	940124
7440-41-7	Beryllium	1.18	mg/kg		0.023	0.115	0.115	2	MS	PRB	01/19/10 20:29	100119-5	940107
7440-43-9	Cadmium	196	ug/Kg	J	115	576	576	1	P	HSC	01/26/10 22:22	012610-1	940124
7440-70-2	Calcium	2350000	ug/Kg		9220	28800	28800	1	P	HSC	01/26/10 22:22	012610-1	940124
7440-47-3	Chromium	17600	ug/Kg		173	576	576	1	P	HSC	01/26/10 22:22	012610-1	940124
7440-48-4	Cobalt J-,16a	6480	ug/Kg	*N	173	576	576	1	P	HSC	01/26/10 22:22	012610-1	940124
7440-50-8	Copper	8060	ug/Kg		346	1150	1150	1	P	HSC	01/26/10 22:22	012610-1	940124
7439-89-6	Iron	13200000	ug/Kg		9220	28800	28800	1	P	HSC	01/26/10 22:22	012610-1	940124
7439-92-1	Lead	15400	ug/Kg	*	288	1150	1150	1	P	HSC	01/26/10 22:22	012610-1	940124
7439-95-4	Magnesium	1820000	ug/Kg		9800	34600	34600	1	P	HSC	01/26/10 22:22	012610-1	940124
7439-96-5	Manganese J,110a	464000	ug/Kg	*E	231	1150	1150	1	P	HSC	01/26/10 22:22	012610-1	940124
7439-97-6	Mercury	15.5	ug/kg		4.27	12.6	12.6	1	AV	ETL	01/22/10 09:11	102210S1-13	943262
7440-02-0	Nickel	7.86	mg/kg		0.115	0.459	0.459	2	MS	PRB	01/16/10 03:15	100115-3	940107
7440-09-7	Potassium J+,16b	1710000	ug/Kg	N	7380	28800	28800	1	P	HSC	01/26/10 22:22	012610-1	940124
7782-49-2	Selenium UJ,16a	1.15	mg/kg	UN	0.574	1.15	1.15	2	MS	PRB	01/16/10 03:15	100115-3	940107
7440-22-4	Silver	761	ug/Kg		115	576	576	1	P	HSC	01/26/10 22:22	012610-1	940124
7440-23-5	Sodium U,14d	58000	ug/Kg	*	8070	28800	28800	1	P	HSC	01/26/10 22:22	012610-1	940124
7440-28-0	Thallium	0.208	mg/kg	J	0.0689	0.23	0.23	2	MS	PRB	01/16/10 03:15	100115-3	940107
7440-61-1	Uranium	4.48	mg/kg		0.0152	0.0459	0.0459	2	MS	PRB	01/16/10 03:15	100115-3	940107
7440-62-2	Vanadium	26500	ug/Kg		115	576	576	1	P	HSC	01/26/10 22:22	012610-1	940124
7440-66-6	Zinc	31500	ug/Kg		380	1150	1150	1	P	HSC	01/26/10 22:22	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.52	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.518	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.571	g	30	mL	01/21/10	TXB3

ETM
2/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128015

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7640

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 92.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11700000	ug/Kg		7300	21500	21500	1	P	HSC	01/26/10 22:29	012610-1	940124
7440-36-0	Antimony UJ,112a	1070	ug/Kg	UN	354	1070	1070	1	P	HSC	01/26/10 22:29	012610-1	940124
7440-38-2	Arsenic	2.17	mg/kg		0.212	1.06	1.06	2	MS	PRB	01/19/10 20:33	100119-5	940107
7440-39-3	Barium J,110a	130000	ug/Kg	*	107	537	537	1	P	HSC	01/26/10 22:29	012610-1	940124
7440-41-7	Beryllium	1.11	mg/kg		0.0212	0.106	0.106	2	MS	PRB	01/19/10 20:33	100119-5	940107
7440-43-9	Cadmium	537	ug/Kg	U	107	537	537	1	P	HSC	01/26/10 22:29	012610-1	940124
7440-70-2	Calcium	1690000	ug/Kg		8590	26800	26800	1	P	HSC	01/26/10 22:29	012610-1	940124
7440-47-3	Chromium	13200	ug/Kg		161	537	537	1	P	HSC	01/26/10 22:29	012610-1	940124
7440-48-4	Cobalt J-,16a	5300	ug/Kg	*N	161	537	537	1	P	HSC	01/26/10 22:29	012610-1	940124
7440-50-8	Copper	5810	ug/Kg		322	1070	1070	1	P	HSC	01/26/10 22:29	012610-1	940124
7439-89-6	Iron	14600000	ug/Kg		8590	26800	26800	1	P	HSC	01/26/10 22:29	012610-1	940124
7439-92-1	Lead	9910	ug/Kg	*	268	1070	1070	1	P	HSC	01/26/10 22:29	012610-1	940124
7439-95-4	Magnesium	2080000	ug/Kg		9130	32200	32200	1	P	HSC	01/26/10 22:29	012610-1	940124
7439-96-5	Manganese J,110a	291000	ug/Kg	*E	215	1070	1070	1	P	HSC	01/26/10 22:29	012610-1	940124
7439-97-6	Mercury	15.7	ug/kg		4.17	12.3	12.3	1	AV	ETL	01/22/10 09:13	102210S1-13	943262
7440-02-0	Nickel	7.19	mg/kg		0.106	0.425	0.425	2	MS	PRB	01/16/10 03:17	100115-3	940107
7440-09-7	Potassium J+,16b	1740000	ug/Kg	N	6870	26800	26800	1	P	HSC	01/26/10 22:29	012610-1	940124
7782-49-2	Selenium UJ,16a	1.06	mg/kg	UN	0.531	1.06	1.06	2	MS	PRB	01/16/10 03:17	100115-3	940107
7440-22-4	Silver	725	ug/Kg		107	537	537	1	P	HSC	01/26/10 22:29	012610-1	940124
7440-23-5	Sodium	79400	ug/Kg	*	7520	26800	26800	1	P	HSC	01/26/10 22:29	012610-1	940124
7440-28-0	Thallium	0.236	mg/kg		0.0637	0.212	0.212	2	MS	PRB	01/16/10 03:17	100115-3	940107
7440-61-1	Uranium	0.634	mg/kg		0.014	0.0425	0.0425	2	MS	PRB	01/16/10 03:17	100115-3	940107
7440-62-2	Vanadium	23100	ug/Kg		107	537	537	1	P	HSC	01/26/10 22:29	012610-1	940124
7440-66-6	Zinc	30900	ug/Kg		354	1070	1070	1	P	HSC	01/26/10 22:29	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.51	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.504	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.529	g	30	mL	01/21/10	TXB3

ETM
2/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128016

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7645

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11700000	ug/Kg		7370	21700	21700	1	P	HSC	01/26/10 22:36	012610-1	940124
7440-36-0	Antimony UJ,112a	1080	ug/Kg	UN	358	1080	1080	1	P	HSC	01/26/10 22:36	012610-1	940124
7440-38-2	Arsenic	2.37	mg/kg		0.217	1.08	1.08	2	MS	PRB	01/19/10 20:37	100119-5	940107
7440-39-3	Barium J,110a	179000	ug/Kg	*	108	542	542	1	P	HSC	01/26/10 22:36	012610-1	940124
7440-41-7	Beryllium	1.19	mg/kg		0.0217	0.108	0.108	2	MS	PRB	01/19/10 20:37	100119-5	940107
7440-43-9	Cadmium	542	ug/Kg	U	108	542	542	1	P	HSC	01/26/10 22:36	012610-1	940124
7440-70-2	Calcium	2150000	ug/Kg		8670	27100	27100	1	P	HSC	01/26/10 22:36	012610-1	940124
7440-47-3	Chromium	17800	ug/Kg		163	542	542	1	P	HSC	01/26/10 22:36	012610-1	940124
7440-48-4	Cobalt J-,16a	6610	ug/Kg	*N	163	542	542	1	P	HSC	01/26/10 22:36	012610-1	940124
7440-50-8	Copper	6060	ug/Kg		325	1080	1080	1	P	HSC	01/26/10 22:36	012610-1	940124
7439-89-6	Iron	14000000	ug/Kg		8670	27100	27100	1	P	HSC	01/26/10 22:36	012610-1	940124
7439-92-1	Lead	14300	ug/Kg	*	271	1080	1080	1	P	HSC	01/26/10 22:36	012610-1	940124
7439-95-4	Magnesium	2120000	ug/Kg		9210	32500	32500	1	P	HSC	01/26/10 22:36	012610-1	940124
7439-96-5	Manganese J,110a	416000	ug/Kg	*E	217	1080	1080	1	P	HSC	01/26/10 22:36	012610-1	940124
7439-97-6	Mercury	13.8	ug/kg		4.02	11.8	11.8	1	AV	ETL	01/22/10 09:15	102210S1-13	943262
7440-02-0	Nickel	8.39	mg/kg		0.108	0.434	0.434	2	MS	PRB	01/16/10 03:20	100115-3	940107
7440-09-7	Potassium J+,16b	1900000	ug/Kg	N	6940	27100	27100	1	P	HSC	01/26/10 22:36	012610-1	940124
7782-49-2	Selenium UJ,16a	1.08	mg/kg	UN	0.542	1.08	1.08	2	MS	PRB	01/16/10 03:20	100115-3	940107
7440-22-4	Silver	831	ug/Kg		108	542	542	1	P	HSC	01/26/10 22:36	012610-1	940124
7440-23-5	Sodium U,14d	58200	ug/Kg	*	7590	27100	27100	1	P	HSC	01/26/10 22:36	012610-1	940124
7440-28-0	Thallium	0.229	mg/kg		0.065	0.217	0.217	2	MS	PRB	01/16/10 03:20	100115-3	940107
7440-61-1	Uranium	1.52	mg/kg		0.0143	0.0434	0.0434	2	MS	PRB	01/16/10 03:20	100115-3	940107
7440-62-2	Vanadium	28100	ug/Kg		108	542	542	1	P	HSC	01/26/10 22:36	012610-1	940124
7440-66-6	Zinc	24500	ug/Kg		358	1080	1080	1	P	HSC	01/26/10 22:36	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.515	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.515	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.566	g	30	mL	01/21/10	TXB3

ETM
2/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128017

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7646

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	17800000	ug/Kg		7600	22400	22400	1	P	HSC	01/26/10 22:43	012610-1	940124
7440-36-0	Antimony UJ,112a	1120	ug/Kg	UN	369	1120	1120	1	P	HSC	01/26/10 22:43	012610-1	940124
7440-38-2	Arsenic	2.41	mg/kg		0.215	1.08	1.08	2	MS	PRB	01/19/10 20:48	100119-5	940107
7440-39-3	Barium J,110a	224000	ug/Kg	*	112	559	559	1	P	HSC	01/26/10 22:43	012610-1	940124
7440-41-7	Beryllium	1.51	mg/kg		0.0215	0.108	0.108	2	MS	PRB	01/19/10 20:48	100119-5	940107
7440-43-9	Cadmium	559	ug/Kg	U	112	559	559	1	P	HSC	01/26/10 22:43	012610-1	940124
7440-70-2	Calcium	2490000	ug/Kg		8940	27900	27900	1	P	HSC	01/26/10 22:43	012610-1	940124
7440-47-3	Chromium	11900	ug/Kg		168	559	559	1	P	HSC	01/26/10 22:43	012610-1	940124
7440-48-4	Cobalt J-,16a	5090	ug/Kg	*N	168	559	559	1	P	HSC	01/26/10 22:43	012610-1	940124
7440-50-8	Copper	6590	ug/Kg		335	1120	1120	1	P	HSC	01/26/10 22:43	012610-1	940124
7439-89-6	Iron	14400000	ug/Kg		8940	27900	27900	1	P	HSC	01/26/10 22:43	012610-1	940124
7439-92-1	Lead	12000	ug/Kg	*	279	1120	1120	1	P	HSC	01/26/10 22:43	012610-1	940124
7439-95-4	Magnesium	2290000	ug/Kg		9500	33500	33500	1	P	HSC	01/26/10 22:43	012610-1	940124
7439-96-5	Manganese J,110a	308000	ug/Kg	*E	224	1120	1120	1	P	HSC	01/26/10 22:43	012610-1	940124
7439-97-6	Mercury	23.4	ug/kg		4.12	12.1	12.1	1	AV	ETL	01/22/10 09:16	10221051-13	943262
7440-02-0	Nickel	7.55	mg/kg		0.108	0.431	0.431	2	MS	PRB	01/16/10 03:23	100115-3	940107
7440-09-7	Potassium J+,16b	1810000	ug/Kg	N	7150	27900	27900	1	P	HSC	01/26/10 22:43	012610-1	940124
7782-49-2	Selenium UJ,16a	1.08	mg/kg	UN	0.538	1.08	1.08	2	MS	PRB	01/16/10 03:23	100115-3	940107
7440-22-4	Silver	761	ug/Kg		112	559	559	1	P	HSC	01/26/10 22:43	012610-1	940124
7440-23-5	Sodium	152000	ug/Kg	*	7830	27900	27900	1	P	HSC	01/26/10 22:43	012610-1	940124
7440-28-0	Thallium	0.243	mg/kg		0.0646	0.215	0.215	2	MS	PRB	01/16/10 03:23	100115-3	940107
7440-61-1	Uranium	0.756	mg/kg		0.0142	0.0431	0.0431	2	MS	PRB	01/16/10 03:23	100115-3	940107
7440-62-2	Vanadium	23800	ug/Kg		112	559	559	1	P	HSC	01/26/10 22:43	012610-1	940124
7440-66-6	Zinc	25600	ug/Kg		369	1120	1120	1	P	HSC	01/26/10 22:43	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.519	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.5	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.553	g	30	mL	01/21/10	TXB3

ETM
2/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128018

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7636

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 90.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	14900000	ug/Kg		7210	21200	21200	1	P	HSC	01/26/10 22:50	012610-1	940124
7440-36-0	Antimony UJ,112a	1060	ug/Kg	UN	350	1060	1060	1	P	HSC	01/26/10 22:50	012610-1	940124
7440-38-2	Arsenic	2.63	mg/kg		0.22	1.1	1.1	2	MS	PRB	01/19/10 20:52	100119-5	940107
7440-39-3	Barium J,110a	166000	ug/Kg	*	106	530	530	1	P	HSC	01/26/10 22:50	012610-1	940124
7440-41-7	Beryllium	1.46	mg/kg		0.022	0.11	0.11	2	MS	PRB	01/19/10 20:52	100119-5	940107
7440-43-9	Cadmium	530	ug/Kg	U	106	530	530	1	P	HSC	01/26/10 22:50	012610-1	940124
7440-70-2	Calcium	2140000	ug/Kg		8480	26500	26500	1	P	HSC	01/26/10 22:50	012610-1	940124
7440-47-3	Chromium	10100	ug/Kg		159	530	530	1	P	HSC	01/26/10 22:50	012610-1	940124
7440-48-4	Cobalt J-,16a	5620	ug/Kg	*N	159	530	530	1	P	HSC	01/26/10 22:50	012610-1	940124
7440-50-8	Copper	6930	ug/Kg		318	1060	1060	1	P	HSC	01/26/10 22:50	012610-1	940124
7439-89-6	Iron	14100000	ug/Kg		8480	26500	26500	1	P	HSC	01/26/10 22:50	012610-1	940124
7439-92-1	Lead	13100	ug/Kg	*	265	1060	1060	1	P	HSC	01/26/10 22:50	012610-1	940124
7439-95-4	Magnesium	2230000	ug/Kg		9010	31800	31800	1	P	HSC	01/26/10 22:50	012610-1	940124
7439-96-5	Manganesec J,110a	336000	ug/Kg	*E	212	1060	1060	1	P	HSC	01/26/10 22:50	012610-1	940124
7439-97-6	Mercury	14	ug/kg		4.24	12.5	12.5	1	AV	ETL	01/22/10 09:18	102210S1-13	943262
7440-02-0	Nickel	7.49	mg/kg		0.11	0.439	0.439	2	MS	PRB	01/16/10 03:26	100115-3	940107
7440-09-7	Potassium J+,16b	2130000	ug/Kg	N	6780	26500	26500	1	P	HSC	01/26/10 22:50	012610-1	940124
7782-49-2	Selenium UJ,16a	1.1	mg/kg	UN	0.549	1.1	1.1	2	MS	PRB	01/16/10 03:26	100115-3	940107
7440-22-4	Silver	668	ug/Kg		106	530	530	1	P	HSC	01/26/10 22:50	012610-1	940124
7440-23-5	Sodium U,14d	65100	ug/Kg	*	7420	26500	26500	1	P	HSC	01/26/10 22:50	012610-1	940124
7440-28-0	Thallium	0.219	mg/kg	J	0.0659	0.22	0.22	2	MS	PRB	01/16/10 03:26	100115-3	940107
7440-61-1	Uranium	1.97	mg/kg		0.0145	0.0439	0.0439	2	MS	PRB	01/16/10 03:26	100115-3	940107
7440-62-2	Vanadium	25000	ug/Kg		106	530	530	1	P	HSC	01/26/10 22:50	012610-1	940124
7440-66-6	Zinc	25800	ug/Kg		350	1060	1060	1	P	HSC	01/26/10 22:50	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.505	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.523	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.534	g	30	mL	01/21/10	TXB3

ETM
2/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128019

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7657

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	18400000	ug/Kg		7400	21800	21800	1	P	HSC	01/26/10 22:57	012610-1	940124
7440-36-0	Antimony UJ,112a	1090	ug/Kg	UN	359	1090	1090	1	P	HSC	01/26/10 22:57	012610-1	940124
7440-38-2	Arsenic	2.24	mg/kg		0.216	1.08	1.08	2	MS	PRB	01/19/10 20:56	100119-5	940107
7440-39-3	Barium J,110a	224000	ug/Kg	*	109	544	544	1	P	HSC	01/26/10 22:57	012610-1	940124
7440-41-7	Beryllium	1.49	mg/kg		0.0216	0.108	0.108	2	MS	PRB	01/19/10 20:56	100119-5	940107
7440-43-9	Cadmium	544	ug/Kg	U	109	544	544	1	P	HSC	01/26/10 22:57	012610-1	940124
7440-70-2	Calcium	2460000	ug/Kg		8710	27200	27200	1	P	HSC	01/26/10 22:57	012610-1	940124
7440-47-3	Chromium	13700	ug/Kg		163	544	544	1	P	HSC	01/26/10 22:57	012610-1	940124
7440-48-4	Cobalt J-,16a	5310	ug/Kg	*N	163	544	544	1	P	HSC	01/26/10 22:57	012610-1	940124
7440-50-8	Copper	6840	ug/Kg		327	1090	1090	1	P	HSC	01/26/10 22:57	012610-1	940124
7439-89-6	Iron	15200000	ug/Kg		8710	27200	27200	1	P	HSC	01/26/10 22:57	012610-1	940124
7439-92-1	Lead	12700	ug/Kg	*	272	1090	1090	1	P	HSC	01/26/10 22:57	012610-1	940124
7439-95-4	Magnesium	2320000	ug/Kg		9260	32700	32700	1	P	HSC	01/26/10 22:57	012610-1	940124
7439-96-5	Manganese J,110a	317000	ug/Kg	*E	218	1090	1090	1	P	HSC	01/26/10 22:57	012610-1	940124
7439-97-6	Mercury	21.4	ug/kg		4.16	12.2	12.2	1	AV	ETL	01/22/10 09:20	102210S1-13	943262
7440-02-0	Nickel	7.79	mg/kg		0.108	0.431	0.431	2	MS	PRB	01/16/10 03:28	100115-3	940107
7440-09-7	Potassium J+,16b	1810000	ug/Kg	N	6970	27200	27200	1	P	HSC	01/26/10 22:57	012610-1	940124
7782-49-2	Selenium UJ,16a	1.08	mg/kg	UN	0.539	1.08	1.08	2	MS	PRB	01/16/10 03:28	100115-3	940107
7440-22-4	Silver	833	ug/Kg		109	544	544	1	P	HSC	01/26/10 22:57	012610-1	940124
7440-23-5	Sodium	167000	ug/Kg	*	7620	27200	27200	1	P	HSC	01/26/10 22:57	012610-1	940124
7440-28-0	Thallium	0.221	mg/kg		0.0647	0.216	0.216	2	MS	PRB	01/16/10 03:28	100115-3	940107
7440-61-1	Uranium	0.754	mg/kg		0.0142	0.0431	0.0431	2	MS	PRB	01/16/10 03:28	100115-3	940107
7440-62-2	Vanadium	24900	ug/Kg		109	544	544	1	P	HSC	01/26/10 22:57	012610-1	940124
7440-66-6	Zinc	26300	ug/Kg		359	1090	1090	1	P	HSC	01/26/10 22:57	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.516	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.511	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.546	g	30	mL	01/21/10	TXB3

ETM
2/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128020

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7658

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	17800000	ug/Kg		7590	22300	22300	1	P	HSC	01/26/10 23:05	012610-1	940124
7440-36-0	Antimony UJ,112a	1120	ug/Kg	UN	368	1120	1120	1	P	HSC	01/26/10 23:05	012610-1	940124
7440-38-2	Arsenic	2.18	mg/kg		0.216	1.08	1.08	2	MS	PRB	01/19/10 21:00	100119-5	940107
7440-39-3	Barium J,110a	201000	ug/Kg	*	112	558	558	1	P	HSC	01/26/10 23:05	012610-1	940124
7440-41-7	Beryllium	1.38	mg/kg		0.0216	0.108	0.108	2	MS	PRB	01/19/10 21:00	100119-5	940107
7440-43-9	Cadmium	558	ug/Kg	U	112	558	558	1	P	HSC	01/26/10 23:05	012610-1	940124
7440-70-2	Calcium	2290000	ug/Kg		8930	27900	27900	1	P	HSC	01/26/10 23:05	012610-1	940124
7440-47-3	Chromium	12000	ug/Kg		167	558	558	1	P	HSC	01/26/10 23:05	012610-1	940124
7440-48-4	Cobalt J,16a	5670	ug/Kg	*N	167	558	558	1	P	HSC	01/26/10 23:05	012610-1	940124
7440-50-8	Copper	7760	ug/Kg		335	1120	1120	1	P	HSC	01/26/10 23:05	012610-1	940124
7439-89-6	Iron	16500000	ug/Kg		8930	27900	27900	1	P	HSC	01/26/10 23:05	012610-1	940124
7439-92-1	Lead	14100	ug/Kg	*	279	1120	1120	1	P	HSC	01/26/10 23:05	012610-1	940124
7439-95-4	Magnesium	2630000	ug/Kg		9490	33500	33500	1	P	HSC	01/26/10 23:05	012610-1	940124
7439-96-5	Manganese J,110a	352000	ug/Kg	*E	223	1120	1120	1	P	HSC	01/26/10 23:05	012610-1	940124
7439-97-6	Mercury	20.4	ug/kg		4.33	12.7	12.7	1	AV	ETL	01/22/10 09:21	102210S1-13	943262
7440-02-0	Nickel	7.16	mg/kg		0.108	0.432	0.432	2	MS	PRB	01/16/10 03:31	100115-3	940107
7440-09-7	Potassium J+,16b	2090000	ug/Kg	N	7150	27900	27900	1	P	HSC	01/26/10 23:05	012610-1	940124
7782-49-2	Selenium UJ,16a	1.08	mg/kg	UN	0.54	1.08	1.08	2	MS	PRB	01/16/10 03:31	100115-3	940107
7440-22-4	Silver	968	ug/Kg		112	558	558	1	P	HSC	01/26/10 23:05	012610-1	940124
7440-23-5	Sodium	98900	ug/Kg	*	7820	27900	27900	1	P	HSC	01/26/10 23:05	012610-1	940124
7440-28-0	Thallium	0.224	mg/kg		0.0648	0.216	0.216	2	MS	PRB	01/16/10 03:31	100115-3	940107
7440-61-1	Uranium	0.705	mg/kg		0.0143	0.0432	0.0432	2	MS	PRB	01/16/10 03:31	100115-3	940107
7440-62-2	Vanadium	29300	ug/Kg		112	558	558	1	P	HSC	01/26/10 23:05	012610-1	940124
7440-66-6	Zinc	27200	ug/Kg		368	1120	1120	1	P	HSC	01/26/10 23:05	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.517	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.5	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.526	g	30	mL	01/21/10	TXB3

ETM
2/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244129001

BASIS: As Received

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7659

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: WATER

%SOLIDS: 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	01/18/10 17:09	011810-1	940084
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	SKJ	01/14/10 00:38	100113-2	940082
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	01/18/10 17:09	011810-1	940084
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:09	011810-1	940084
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	01/21/10 16:25	100121-5	940082
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	SKJ	01/14/10 00:38	100113-2	940082
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	01/18/10 17:09	011810-1	940084
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:09	011810-1	940084
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:09	011810-1	940084
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	01/18/10 17:09	011810-1	940084
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	01/18/10 17:09	011810-1	940084
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	SKJ	01/14/10 00:38	100113-2	940082
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	01/18/10 17:09	011810-1	940084
7439-96-5	Manganese	1.15	ug/L	J	1	5	5	1	MS	SKJ	01/14/10 00:38	100113-2	940082
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	01/15/10 11:46	011510W1-6	941142
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	01/18/10 17:09	011810-1	940084
7440-09-7	Potassium	132	ug/L	J	50	150	150	1	P	HSC	01/18/10 17:09	011810-1	940084
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	01/18/10 17:09	011810-1	940084
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:09	011810-1	940084
7440-23-5	Sodium	128	ug/L	J	100	300	300	1	P	HSC	01/18/10 17:09	011810-1	940084
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	SKJ	01/14/10 22:43	100114-3	940082
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	SKJ	01/14/10 00:38	100113-2	940082
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:09	011810-1	940084
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	01/18/10 17:09	011810-1	940084

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940082	940079	SW846 3005A	50	mL	50	mL	01/11/10	FGA
940084	940083	SW846 3005A	50	mL	50	mL	01/11/10	FGA
941142	941141	SW846 7470A Prep	20	mL	20	mL	01/14/10	TXB3

ETM
2/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244129002

BASIS: As Received

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7661

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: WATER

%SOLIDS: 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	01/18/10 17:16	011810-1	940084
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	SKJ	01/14/10 00:44	100113-2	940082
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	01/18/10 17:16	011810-1	940084
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:16	011810-1	940084
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	01/21/10 16:26	100121-5	940082
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	SKJ	01/14/10 00:44	100113-2	940082
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	01/18/10 17:16	011810-1	940084
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:16	011810-1	940084
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:16	011810-1	940084
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	01/18/10 17:16	011810-1	940084
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	01/18/10 17:16	011810-1	940084
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	SKJ	01/14/10 00:44	100113-2	940082
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	01/18/10 17:16	011810-1	940084
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	SKJ	01/14/10 00:44	100113-2	940082
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL	01/15/10 11:48	011510W1-6	941142
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	01/18/10 17:16	011810-1	940084
7440-09-7	Potassium	132	ug/L	J	50	150	150	1	P	HSC	01/18/10 17:16	011810-1	940084
7782-49-2	Selenium U,14b	8.23	ug/L	J	5	30	30	1	P	HSC	01/18/10 17:16	011810-1	940084
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:16	011810-1	940084
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	01/18/10 17:16	011810-1	940084
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	SKJ	01/14/10 22:47	100114-3	940082
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	SKJ	01/14/10 00:44	100113-2	940082
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:16	011810-1	940084
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	01/18/10 17:16	011810-1	940084

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940082	940079	SW846 3005A	50	mL	50	mL	01/11/10	FGA
940084	940083	SW846 3005A	50	mL	50	mL	01/11/10	FGA
941142	941141	SW846 7470A Prep	20	mL	20	mL	01/14/10	TXB3

ETM
2/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244129003

BASIS: As Received

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7660

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: WATER


%SOLIDS: 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	01/18/10 17:23	011810-1	940084
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	SKJ	01/14/10 00:51	100113-2	940082
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	01/18/10 17:23	011810-1	940084
7440-39-3	Barium	1.14	ug/L	J	1	5	5	1	P	HSC	01/18/10 17:23	011810-1	940084
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	01/21/10 16:28	100121-5	940082
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	SKJ	01/14/10 00:51	100113-2	940082
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	01/18/10 17:23	011810-1	940084
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:23	011810-1	940084
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:23	011810-1	940084
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	01/18/10 17:23	011810-1	940084
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	01/18/10 17:23	011810-1	940084
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	SKJ	01/14/10 00:51	100113-2	940082
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	01/18/10 17:23	011810-1	940084
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	SKJ	01/14/10 00:51	100113-2	940082
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL	01/15/10 11:50	011510W1-6	941142
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	01/18/10 17:23	011810-1	940084
7440-09-7	Potassium	136	ug/L	J	50	150	150	1	P	HSC	01/18/10 17:23	011810-1	940084
7782-49-2	Selenium U,14b	7.56	ug/L	J	5	30	30	1	P	HSC	01/18/10 17:23	011810-1	940084
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:23	011810-1	940084
7440-23-5	Sodium	112	ug/L	J	100	300	300	1	P	HSC	01/18/10 17:23	011810-1	940084
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	SKJ	01/14/10 22:52	100114-3	940082
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	SKJ	01/14/10 00:51	100113-2	940082
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:23	011810-1	940084
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	01/18/10 17:23	011810-1	940084

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940082	940079	SW846 3005A	50	mL	50	mL	01/11/10	FGA
940084	940083	SW846 3005A	50	mL	50	mL	01/11/10	FGA
941142	941141	SW846 7470A Prep	20	mL	20	mL	01/14/10	TXB3

ETM
2/18/10

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

Section I.		
REQUEST NUMBER: <u>10-1132</u>	VALIDATION DATE: <u>2/18/10</u>	LAB CODE: <u>GEL</u>
CONTRACT LABORATORY NAME: <u>GEL Laboratories LLC</u>		
VALIDATOR: <u>Eric T. Mink</u> ORGANIZATION: <u>Analytical Quality Associates, Inc.</u>		
ANALYTICAL SUITE (CHECK ALL THAT APPLY):		
<input type="checkbox"/> TPH-GRO	<input type="checkbox"/> HIGH EXPLOSIVES	<input type="checkbox"/> DIOXIN FURANS
<input type="checkbox"/> TPH-DRO	<input type="checkbox"/> METALS	<input type="checkbox"/> PCB CONGENERS
<input checked="" type="checkbox"/> GENERAL CHEMISTRY	<input type="checkbox"/> RADIOCHEMISTRY	<input type="checkbox"/> LCMSMS HIGH EXPLOSIVES
		<input type="checkbox"/> LCMSMS PERCHLORATES
		<input type="checkbox"/> ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
<input type="checkbox"/> OTHER (DESCRIBE): <u>Total CN only</u>		


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

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


1. In the aqueous CCB, total CN was detected. The associated sample results were NDs and, thus, were not qualified.
2. The aqueous MS %R was < the laboratory's LAL but $\geq 10\%$ for total CN. The associated sample results were NDs and, thus, were qualified UJ,I6a.
3. It should be noted that the aqueous QC analyses and the QC analyses associated with all the soil samples except RE12-10-7640, -7645, -7646, -7636, -7657 and -7658 were performed on LANL samples from different RNs. No sample data were qualified.

Reviewed by: Monica Dymerski **Level I** **Date:** 02/18/10


VALIDATOR'S SIGNATURE: <u>Eric T. Mink</u>	DATE: <u>2/18/10</u>
Form 5120-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

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

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

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

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

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

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

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7637
Sample ID: 244128008
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 9.73%

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	73.9	272	ug/kg	1	AXC2	01/14/10	1159	940234	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
2/18/10

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 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7635
Sample ID: 244128009
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 14.6%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total Federal "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	79.6	293	ug/kg	1	AXC2	01/14/10	1200	940234	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
2/18/10

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 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7642
Sample ID: 244128010
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 11.4%

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	75.3	277	ug/kg	1	AXC2	01/14/10	1201	940234	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
2/18/10

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 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7649
Sample ID: 244128011
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 22%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total Federal "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	83.8	308	ug/kg	1	AXC2	01/14/10	1202	940234	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
2/18/10

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 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7650
Sample ID: 244128012
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 13%

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	78.2	287	ug/kg	1	AXC2	01/14/10	1203	940234	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
2/18/10

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 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7641
Sample ID: 244128013
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 14.4%

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	76.4	281	ug/kg	1	AXC2	01/14/10	1204	940234	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
2/18/10

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 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7643
Sample ID: 244128014
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 16.3%

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	81.2	299	ug/kg	1	AXC2	01/14/10	1205	940234	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
2/18/10

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 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7640
Sample ID: 244128015
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 7.63%

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	68.2	251	ug/kg	1	AXC2	01/14/10	1112	940238	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1529	940236

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
2/18/10

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 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7645
Sample ID: 244128016
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 10.4%

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	65.5	241	ug/kg	1	AXC2	01/14/10	1116	940238	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1529	940236

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
2/18/10

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 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7646
Sample ID: 244128017
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 10.5%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total Federal "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	74.5	274	ug/kg	1	AXC2	01/14/10	1123	940238	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1529	940236

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
2/18/10

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 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7636
Sample ID: 244128018
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 9.79%

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	69.8	257	ug/kg	1	AXC2	01/14/10	1124	940238	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1529	940236

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
2/18/10

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 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7657
Sample ID: 244128019
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 10.1%

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	70.1	258	ug/kg	1	AXC2	01/14/10	1124	940238	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1529	940236

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
2/18/10

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 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7658
Sample ID: 244128020
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 10.4%

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	74.4	274	ug/kg	1	AXC2	01/14/10	1125	940238	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1529	940236

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
2/18/10

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 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7634
Sample ID: 244128001
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 10.3%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total Federal "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	72.9	268	ug/kg	1	AXC2	01/14/10	1149	940234	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
2/18/10

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 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7648
Sample ID: 244128002
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 5.2%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total Federal "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	71.7	264	ug/kg	1	AXC2	01/14/10	1150	940234	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
2/18/10

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 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7638
Sample ID: 244128003
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 11.4%

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	J	198	76.7	282	ug/kg	1	AXC2	01/14/10	1151	940234	1
----------------	---	-----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
2/18/10

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 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7639
Sample ID: 244128004
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 14.8%

Project: LANL01004
Client ID: LANL010

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

Flow Injection Analysis

SW9012A Cyanide, Total Federal "Dry Weight Corrected"

Cyanide, Total	U	ND	76.8	282	ug/kg	1	AXC2	01/14/10	1152	940234	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
2/18/10

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 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7633
Sample ID: 244128005
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 16.1%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total Federal "Dry Weight Corrected"</i>											
Cyanide, Total	J	263	76.5	281	ug/kg	1	AXC2	01/14/10	1153	940234	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst	Comments
1	SW846 9012A		

ETM
2/18/10

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 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7647
Sample ID: 244128006
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 17.2%

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	74.6	274	ug/kg	1	AXC2	01/14/10	1157	940234	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
2/18/10

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 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7644
Sample ID: 244128007
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 9.98%

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	71.3	262	ug/kg	1	AXC2	01/14/10	1158	940234	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
2/18/10

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 15, 2010

Client SDG: 10-1132-1

Client Sample ID: RE12-10-7659
Sample ID: 244129001
Matrix: W
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	U	ND	UJ,16a	1.66	5.00	ug/L	1	AXC2	01/12/10	1218 939574	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/11/10	1322	939573

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
2/18/10

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 15, 2010

Client SDG: 10-1132-1

Client Sample ID: RE12-10-7661
Sample ID: 244129002
Matrix: W
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	U	ND	UJ,16a	1.66	5.00	ug/L	1	AXC2	01/12/10	1219	939574 1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/11/10	1322	939573

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
2/18/10

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 15, 2010

Client SDG: 10-1132-1

Client Sample ID: RE12-10-7660
Sample ID: 244129003
Matrix: W
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	U	ND	UJ,16a	1.66	5.00	ug/L	1	AXC2	01/12/10	1341	939574 1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/11/10	1322	939573

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
2/18/10

Thursday, January 07, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1132

LOS ALAMOS

REQUEST NUMBER: 10-1132

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/6/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

244128, 244129%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE12-10-7634	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7648	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7638	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7639	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7633	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7647	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7644	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7637	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7635	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7642	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7649	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7650	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7641	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7643	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7640	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7645	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7646	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7636	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7657	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7658	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7659	1	POLY	METALS+U-GEL	Nitric Acid	W
RE12-10-7659	1	POLY	SW-846:6850	Ice	W
RE12-10-7659	1	POLY	TCN	Sodium Hydroxide	W
RE12-10-7661	1	POLY	METALS+U-GEL	Nitric Acid	W
RE12-10-7661	1	POLY	SW-846:6850	Ice	W
RE12-10-7661	1	POLY	TCN	Sodium Hydroxide	W
RE12-10-7660	1	POLY	METALS+U-GEL	Nitric Acid	W
RE12-10-7660	1	POLY	SW-846:6850	Ice	W
RE12-10-7660	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:

Date

Time

Received By:

Date

Time

Gregory Way 1/7/10 1400 Patricia Dover-Dent P. D. Dent 1-8-10 09:05

Thursday, January 07, 2010
LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number: 10-1132
Per Agreement Number: 126310011
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 1/7/2010
TURNAROUND/REPORT DUE: 2/6/2010
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	RE12-10-7633	R	1/5/2010	
		1	RE12-10-7634	R	1/5/2010	
		1	RE12-10-7635	R	1/5/2010	
		1	RE12-10-7636	R	1/5/2010	
		1	RE12-10-7637	R	1/5/2010	
		1	RE12-10-7638	R	1/5/2010	
		1	RE12-10-7639	R	1/5/2010	
		1	RE12-10-7640	R	1/5/2010	
		1	RE12-10-7641	R	1/5/2010	

Thursday, January 07, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846.6020	1	RE12-10-7642	R	1/5/2010	
		1	RE12-10-7643	R	1/5/2010	
		1	RE12-10-7644	R	1/5/2010	
		1	RE12-10-7645	R	1/5/2010	
		1	RE12-10-7646	R	1/5/2010	
		1	RE12-10-7647	R	1/5/2010	
		1	RE12-10-7648	R	1/5/2010	
		1	RE12-10-7649	R	1/5/2010	
		1	RE12-10-7650	R	1/5/2010	
		1	RE12-10-7657	R	1/5/2010	
		1	RE12-10-7658	R	1/5/2010	
		1	RE12-10-7659	W	1/5/2010	
		1	RE12-10-7660	W	1/5/2010	
		1	RE12-10-7661	W	1/5/2010	
	SW-846.6850	1	RE12-10-7633	R	1/5/2010	
		1	RE12-10-7634	R	1/5/2010	
		1	RE12-10-7635	R	1/5/2010	
		1	RE12-10-7636	R	1/5/2010	
		1	RE12-10-7637	R	1/5/2010	
		1	RE12-10-7638	R	1/5/2010	
		1	RE12-10-7639	R	1/5/2010	
		1	RE12-10-7640	R	1/5/2010	
		1	RE12-10-7641	R	1/5/2010	
		1	RE12-10-7642	R	1/5/2010	
		1	RE12-10-7643	R	1/5/2010	
		1	RE12-10-7644	R	1/5/2010	
		1	RE12-10-7645	R	1/5/2010	
		1	RE12-10-7646	R	1/5/2010	

PRIORITY	METHOD CODE	CNTR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6650	1	RE12-10-7647	R	1/5/2010	
		1	RE12-10-7648	R	1/5/2010	
		1	RE12-10-7649	R	1/5/2010	
		1	RE12-10-7650	R	1/5/2010	
		1	RE12-10-7657	R	1/5/2010	
		1	RE12-10-7658	R	1/5/2010	
		1	RE12-10-7659	W	1/5/2010	
		1	RE12-10-7660	W	1/5/2010	
		1	RE12-10-7661	W	1/5/2010	
	SW-846:7470A	1	RE12-10-7659	W	1/5/2010	
		1	RE12-10-7660	W	1/5/2010	
		1	RE12-10-7661	W	1/5/2010	
	SW-846:7471A	1	RE12-10-7633	R	1/5/2010	
		1	RE12-10-7634	R	1/5/2010	
		1	RE12-10-7635	R	1/5/2010	
		1	RE12-10-7636	R	1/5/2010	
		1	RE12-10-7637	R	1/5/2010	
		1	RE12-10-7638	R	1/5/2010	
		1	RE12-10-7639	R	1/5/2010	
		1	RE12-10-7640	R	1/5/2010	
		1	RE12-10-7641	R	1/5/2010	
		1	RE12-10-7642	R	1/5/2010	
		1	RE12-10-7643	R	1/5/2010	
		1	RE12-10-7644	R	1/5/2010	
		1	RE12-10-7645	R	1/5/2010	
		1	RE12-10-7646	R	1/5/2010	
		1	RE12-10-7647	R	1/5/2010	
		1	RE12-10-7648	R	1/5/2010	

Thursday, January 07, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846.7471A	1	RE12-10-7649	R	1/5/2010	
		1	RE12-10-7650	R	1/5/2010	
		1	RE12-10-7657	R	1/5/2010	
		1	RE12-10-7658	R	1/5/2010	
	SW-846.9012A	1	RE12-10-7633	R	1/5/2010	
		1	RE12-10-7634	R	1/5/2010	
		1	RE12-10-7635	R	1/5/2010	
		1	RE12-10-7636	R	1/5/2010	
		1	RE12-10-7637	R	1/5/2010	
		1	RE12-10-7638	R	1/5/2010	
		1	RE12-10-7639	R	1/5/2010	
		1	RE12-10-7640	R	1/5/2010	
		1	RE12-10-7641	R	1/5/2010	
		1	RE12-10-7642	R	1/5/2010	
		1	RE12-10-7643	R	1/5/2010	
		1	RE12-10-7644	R	1/5/2010	
		1	RE12-10-7645	R	1/5/2010	
		1	RE12-10-7646	R	1/5/2010	
		1	RE12-10-7647	R	1/5/2010	
		1	RE12-10-7648	R	1/5/2010	
		1	RE12-10-7649	R	1/5/2010	
		1	RE12-10-7650	R	1/5/2010	
		1	RE12-10-7657	R	1/5/2010	
		1	RE12-10-7658	R	1/5/2010	
		1	RE12-10-7659	W	1/5/2010	
		1	RE12-10-7660	W	1/5/2010	
		1	RE12-10-7661	W	1/5/2010	

REQUEST NUMBER: 10-1132



January 12, 2010

www.gel.com

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

Re: LANL ER Project
Work Orders: 244128 244129
SDG: 10-1132

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on January 08, 2010, and analyzed for General Chemistry, Metals and Perchlorates by LCMSMS. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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

Sincerely,

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-1132
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 244128 and 244129
SDG: 10-1132

Table of Contents

Case Narrative.....	1
Chain of Custody and Supporting Documentation	5
Data Review Qualifier Flag Definition Sheet	15
LC/MS/MS Perchlorate Analysis.....	17
Sample Data Summary	23
Quality Control Summary.....	44
Sample Data	74
Standards Data.....	115
Quality Control	137
Miscellaneous Data	146
LC/MS/MS Perchlorate Analysis.....	152
Sample Data Summmary.....	157
Quality Control Summary.....	161
Sample Data	184
Standards Data.....	191
Quality Control	208
Miscellaneous Data	213
Metals Analysis	221
Case Narrative	222
Sample Data Summary	229
Quality Control Summary.....	250
Standards	335
Raw Data	349
Miscellaneous	1011
Metals Analysis	1080
Case Narrative	1081
Sample Data Summary	1087
Quality Control Summary.....	1091
Standards	1136
Raw Data	1149
Miscellaneous	1433
General Chemistry Analysis	1478
Case Narrative	1479
Sample Data Summary	1485

Quality Control Summary.....	1507
Instrument QC Data Summary	1510
Cyanide, Total	1512
Miscellaneous	1524
General Chemistry Analysis	1526
Case Narrative.....	1527
Sample Data Summary	1532
Quality Control Summary.....	1537
Instrument QC Data Summary	1540
Cyanide, Total	1542
Miscellaneous	1556

Case Narrative

**Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 244128 and 244129
SDG # : 10-1132**

January 12, 2010

Laboratory Identification:

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

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on January 08, 2010 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:


<u>Laboratory ID</u>	<u>Client ID</u>
244128001	RE12-10-7634
244128002	RE12-10-7648
244128003	RE12-10-7638
244128004	RE12-10-7639
244128005	RE12-10-7633
244128006	RE12-10-7647
244128007	RE12-10-7644
244128008	RE12-10-7637
244128009	RE12-10-7635
244128010	RE12-10-7642
244128011	RE12-10-7649
244128012	RE12-10-7650
244128013	RE12-10-7641
244128014	RE12-10-7643
244128015	RE12-10-7640
244128016	RE12-10-7645
244128017	RE12-10-7646
244128018	RE12-10-7636
244128019	RE12-10-7657
244128020	RE12-10-7658
244129001	RE12-10-7659
244129002	RE12-10-7661
244129003	RE12-10-7660

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: General Chemistry, Metals and Perchlorates by LCMSMS.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.



Valerie Davis

Project Manager

List of current GEL Certifications as of 12 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, January 07, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1132

LOS ALAMOS

REQUEST NUMBER: 10-1132

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/6/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

244128, 244129%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE12-10-7634	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7648	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7638	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7639	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7633	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7647	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7644	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7637	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7635	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7642	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7649	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7650	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7641	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7643	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7640	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7645	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7646	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7636	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7657	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7658	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7659	1	POLY	METALS+U-GEL	Nitric Acid	W
RE12-10-7659	1	POLY	SW-846:6850	Ice	W
RE12-10-7659	1	POLY	TCN	Sodium Hydroxide	W
RE12-10-7661	1	POLY	METALS+U-GEL	Nitric Acid	W
RE12-10-7661	1	POLY	SW-846:6850	Ice	W
RE12-10-7661	1	POLY	TCN	Sodium Hydroxide	W
RE12-10-7660	1	POLY	METALS+U-GEL	Nitric Acid	W
RE12-10-7660	1	POLY	SW-846:6850	Ice	W
RE12-10-7660	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:

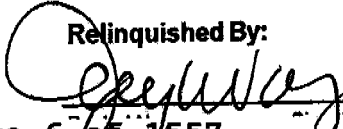
Date

Time

Received By:

Date

Time



1/7/10

1400

Patricia Dover-Dent

P. D. Dent

1-810 09:05

Thursday, January 07, 2010

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

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

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 1/7/2010

TURNAROUND/REPORT DUE: 2/6/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

These Samples are on:
LANL Request Number:10-1132
Per Agreement Number:126310011
Project Cost Code: MR3A05529E00

Page 1 of 4
REQUEST NUMBER: 10-1132

PRIORITY	METHOD CODE	CNTR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8020	1	RE12-10-7633	R	1/5/2010	
		1	RE12-10-7634	R	1/5/2010	
		1	RE12-10-7635	R	1/5/2010	
		1	RE12-10-7636	R	1/5/2010	
		1	RE12-10-7637	R	1/5/2010	
		1	RE12-10-7638	R	1/5/2010	
		1	RE12-10-7639	R	1/5/2010	
		1	RE12-10-7640	R	1/5/2010	
		1	RE12-10-7641	R	1/5/2010	

Thursday, January 07, 2010

Page 2 of 4

REQUEST NUMBER: 10-1132

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE12-10-7642	R	1/5/2010	
		1	RE12-10-7643	R	1/5/2010	
		1	RE12-10-7644	R	1/5/2010	
		1	RE12-10-7645	R	1/5/2010	
		1	RE12-10-7646	R	1/5/2010	
		1	RE12-10-7647	R	1/5/2010	
		1	RE12-10-7648	R	1/5/2010	
		1	RE12-10-7649	R	1/5/2010	
		1	RE12-10-7650	R	1/5/2010	
		1	RE12-10-7657	R	1/5/2010	
		1	RE12-10-7658	R	1/5/2010	
		1	RE12-10-7659	W	1/5/2010	
		1	RE12-10-7660	W	1/5/2010	
		1	RE12-10-7661	W	1/5/2010	
	SW-846:6850	1	RE12-10-7633	R	1/5/2010	
		1	RE12-10-7634	R	1/5/2010	
		1	RE12-10-7635	R	1/5/2010	
		1	RE12-10-7636	R	1/5/2010	
		1	RE12-10-7637	R	1/5/2010	
		1	RE12-10-7638	R	1/5/2010	
		1	RE12-10-7639	R	1/5/2010	
		1	RE12-10-7640	R	1/5/2010	
		1	RE12-10-7641	R	1/5/2010	
		1	RE12-10-7642	R	1/5/2010	
		1	RE12-10-7643	R	1/5/2010	
		1	RE12-10-7644	R	1/5/2010	
		1	RE12-10-7645	R	1/5/2010	
		1	RE12-10-7646	R	1/5/2010	

Thursday, January 07, 2010

Page 3 of 4

REQUEST NUMBER: 10-1132

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8850	1	RE12-10-7647	R	1/5/2010	
		1	RE12-10-7648	R	1/5/2010	
		1	RE12-10-7649	R	1/5/2010	
		1	RE12-10-7650	R	1/5/2010	
		1	RE12-10-7657	R	1/5/2010	
		1	RE12-10-7658	R	1/5/2010	
		1	RE12-10-7659	W	1/5/2010	
		1	RE12-10-7660	W	1/5/2010	
		1	RE12-10-7661	W	1/5/2010	
	SW-846:7470A	1	RE12-10-7659	W	1/5/2010	
		1	RE12-10-7660	W	1/5/2010	
		1	RE12-10-7661	W	1/5/2010	
	SW-846:7471A	1	RE12-10-7633	R	1/5/2010	
		1	RE12-10-7634	R	1/5/2010	
		1	RE12-10-7635	R	1/5/2010	
		1	RE12-10-7636	R	1/5/2010	
		1	RE12-10-7637	R	1/5/2010	
		1	RE12-10-7638	R	1/5/2010	
		1	RE12-10-7639	R	1/5/2010	
		1	RE12-10-7640	R	1/5/2010	
		1	RE12-10-7641	R	1/5/2010	
		1	RE12-10-7642	R	1/5/2010	
		1	RE12-10-7643	R	1/5/2010	
		1	RE12-10-7644	R	1/5/2010	
		1	RE12-10-7645	R	1/5/2010	
		1	RE12-10-7646	R	1/5/2010	
		1	RE12-10-7647	R	1/5/2010	
		1	RE12-10-7648	R	1/5/2010	

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:7471A	1	RE12-10-7649	R	1/5/2010	
		1	RE12-10-7650	R	1/5/2010	
		1	RE12-10-7657	R	1/5/2010	
		1	RE12-10-7658	R	1/5/2010	
	SW-846:9012A	1	RE12-10-7633	R	1/5/2010	
		1	RE12-10-7634	R	1/5/2010	
		1	RE12-10-7635	R	1/5/2010	
		1	RE12-10-7636	R	1/5/2010	
		1	RE12-10-7637	R	1/5/2010	
		1	RE12-10-7638	R	1/5/2010	
		1	RE12-10-7639	R	1/5/2010	
		1	RE12-10-7640	R	1/5/2010	
		1	RE12-10-7641	R	1/5/2010	
		1	RE12-10-7642	R	1/5/2010	
		1	RE12-10-7643	R	1/5/2010	
		1	RE12-10-7644	R	1/5/2010	
		1	RE12-10-7645	R	1/5/2010	
		1	RE12-10-7646	R	1/5/2010	
		1	RE12-10-7647	R	1/5/2010	
		1	RE12-10-7648	R	1/5/2010	
		1	RE12-10-7649	R	1/5/2010	
		1	RE12-10-7650	R	1/5/2010	
		1	RE12-10-7657	R	1/5/2010	
		1	RE12-10-7658	R	1/5/2010	
		1	RE12-10-7659	W	1/5/2010	
		1	RE12-10-7660	W	1/5/2010	
		1	RE12-10-7661	W	1/5/2010	

645
650
655
660
665
670
675
680
685
690
695
700
705
710
715
720
725
730
735
740
745
750
755
760
765
770
775
780
785
790
795
800
805
810
815
820
825
830
835
840
845
850
855
860
865
870
875
880
885
890
895
900
905
910
915
920
925
930
935
940
945
950
955
960
965
970
975
980
985
990
995
1000

SAMPLE RECEIPT & REVIEW FORM

Client:LANL			SDG/ARCOC/Work Order:10-1132		
Received By:Patricia Dover-Dent			Date Received: JANUARY 8, 2009		
Suspected Hazard Information	Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further		
COC/Samples marked as radioactive?		X	Maximum Counts Observed*:20CPM		
Classified Radioactive II by RSO?		X			
COC/Samples marked containing PCBs?		X			
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:		
Samples identified as Foreign Soil?		X			

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2 Samples requiring cold preservation within (0 < 6 deg. C?	X			Preservation Method: ice bags BLUE ICE dry ice NONE other (describe) 1,2,9,13,14
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 Preservative 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 #'S
7209 7849 4203 1C 7209 7849 4122 14C
7209 7849 4188 1C
7209 7849 4166 2C
7209 7849 4155 2C
7209 7849 4199 2C
7209 7849 4177 2C
7209 7849 4144 9C
7209 7849 4133 13C

PM (or PMA) review: Initials

Date

1/11/10

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 07JAN10
ACTNGT: 56.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

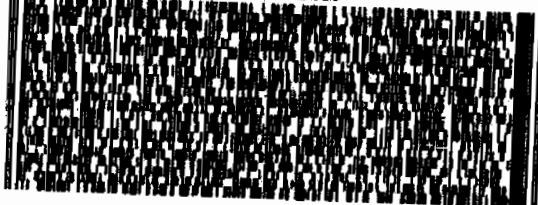
VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A05529E00

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



FedEx
Express



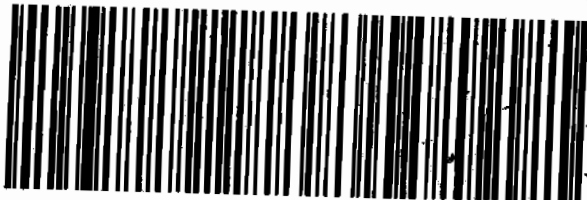
1002001130223

2 of 2
PSN 263 7209 7849 4203
strn 7209 7849 4199 0201

FRI - 08JAN A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A05529E00

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



FedEx
Express



1002001130223

2 of 2
PSN 263 7209 7849 4166
strn 7209 7849 4155 0201

FRI - 08JAN A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



ORIGIN ID: SAFA (505) 665-9969
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 07JAN10
ACTNGT: 56.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A05529E00

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



FedEx
Express



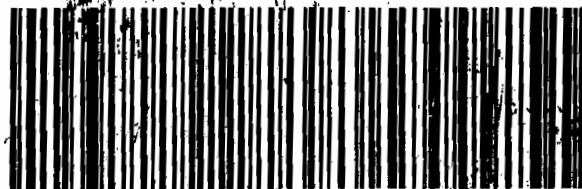
1002001130223

2 of 2
PSN 0263 7209 7849 4188
Matr-A 7209 7849 4177 0201

FRI - 08JAN A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

ACTNGT: 56.0 LB MAN
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

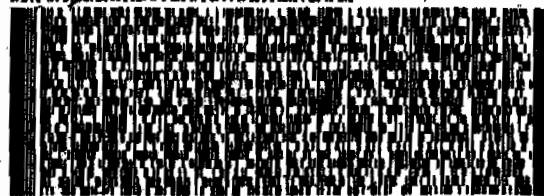
TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A05529E00

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



FedEx
Express



1002001130223

1 of 2
TRK# 0261 7209 7849 4155
NN MASTER NN

FRI - 08JAN A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



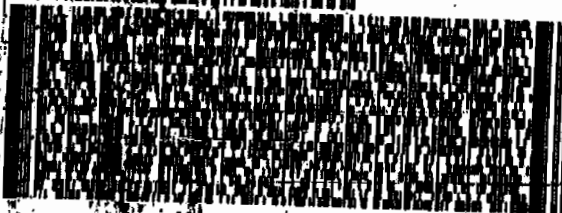
V3 00-00

ORIGIN ID: SAFA (505) 865-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 07JAN10
ACTWGT: 55.0 LB MAX
CAD: 0014176/CAFE2449
BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 555-8171
REF: 68010AMR3A05529E00

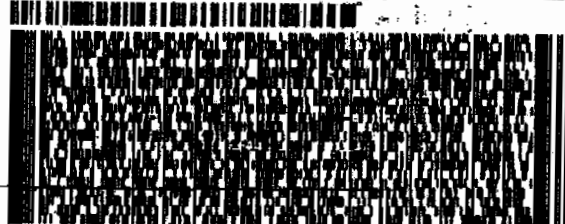


ORIGIN ID: SAFA (505) 865-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 07JAN10
ACTWGT: 55.0 LB MAX
CAD: 0014176/CAFE2449
BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 555-8171
REF: 68010AMR3A05529E00



1 of 2
TRK# 7209 7849 4177
0201
NN MASTER NN

FRI - 08JAN A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

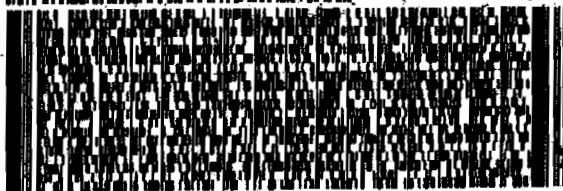


ORIGIN ID: SAFA (505) 865-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 07JAN10
ACTWGT: 23.8 LB MAX
CAD: 0014176/CAFE2449
BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 555-8171
REF: 68010AMR2A0515BYD0



TRK# 7209 7849 4144
0201

FRI - 08JAN A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

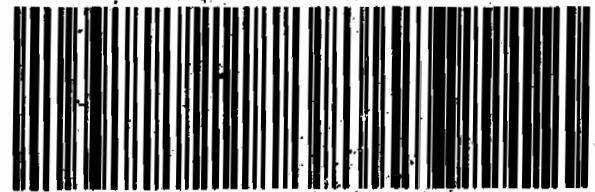
XX CHSA

1 of 2
TRK# 7209 7849 4177
0201
NN MASTER NN

FRI - 08JAN A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



ORIGIN ID: SAFA (505) 865-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 08JAN10
ACTWGT: 55.0 LB MAX
CAD: 0014176/CAFE2449
BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 555-8171
REF: 68010AMR2A0515BYD0

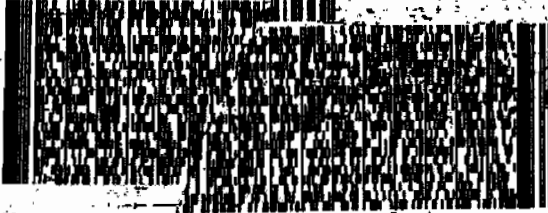



3 of 3
TRK# 7209 7849 4133
0201

FRI - 08JAN A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

ORIGIN ID: 56FA (505) 655-9968 JOYLENE VALDEZ LOS ALAMOS NATL LAB TAD0 BLDG 1237 DPU 03 LOS ALAMOS, NM 87545 UNITED STATES US		SHIP DATE: 07 JAN 18 WGT: 57.0 LB MAN 0014176/CAFE2449
TO VALERIE DAVIS GENERAL ENGINEERING LAB 2040 SAVAGE RD CHARLESTON SC 29 (843) 556-8171 REF: 68010AMR2A0515		WILL SENDER 14C
		
NPSN 7209 3 0263 MATR-N 72 7849 4122 09 7849 4111 0201		FRI - 08 JAN 01 PRIORITY OVERNIGHT 29407 CHS
		

Part # 156148-434 NRT Y3

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier Explanation

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
- A The TIC is a suspected aldol-condensation product
- B Target analyte was detected in the associated blank
- B Metals-Either presence of analyte detected in the associated blank, or
MDL/IDL < sample value < PQL
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- d 5-day BOD-The 2:1 depletion requirement was not met for this sample
- E Organics-Concentration of the target analyte exceeds the instrument calibration range
- E Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- H Analytical holding time was exceeded
- h Preparation or preservation holding time was exceeded
- J Value is estimated
- N Metals-The Matrix spike sample recovery is not within specified control limits
- N Organics-Presumptive evidence based on mass spectral library search to make a tentative
identification of the analyte (TIC). Quantitation is based on nearest internal standard
response factor
- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration
by 4X or more
- ND Analyte concentration is not detected above the reporting limit
- UI Gamma Spectroscopy-Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- Z Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

LC/MS/MS PERCHLORATE ANALYSIS

**Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-1132**

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: 940136

Prep Batch Number: 940133

Sample Analysis

Sample ID	Client ID
244128001	RE12-10-7634
244128002	RE12-10-7648
244128003	RE12-10-7638
244128004	RE12-10-7639
244128005	RE12-10-7633
244128006	RE12-10-7647
244128007	RE12-10-7644
244128008	RE12-10-7637
244128009	RE12-10-7635
244128010	RE12-10-7642
244128011	RE12-10-7649
244128012	RE12-10-7650
244128013	RE12-10-7641
244128014	RE12-10-7643
244128015	RE12-10-7640

10-1132-PERLCMS

Page 1 of 5

244128016	RE12-10-7645
244128017	RE12-10-7646
244128018	RE12-10-7636
244128019	RE12-10-7657
244128020	RE12-10-7658
1202011818	Interference Check Sample (ICS)
1202011812	Method Blank (MB)
1202011813	Laboratory Control Sample (LCS)
1202011814	244128001(RE12-10-7634) Matrix Spike (MS)
1202011815	244128001(RE12-10-7634) Matrix Spike Duplicate (MSD)

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

Preparation/Analytical Method Verification

SOP Reference

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

Calibration Information

Initial Calibration

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

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.

10-1132-PERLCMS

Page 2 of 5

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 244128001 (RE12-10-7634) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

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

Retention Time Standard Area Acceptance

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

Retention Time

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

Technical Information**Holding Time Specifications**

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

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

Miscellaneous Information

Data Exception (DER) Documentation

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

Manual Integrations

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

Method Comments

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

Additional Comments

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

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

Perchlorate Isotope Ratio

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

System Configuration

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

Chromatographic Columns

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

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

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

Review Validation:

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

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

Reviewer: Herbert M. Mauer Date: 01/21/10

SAMPLE DATA SUMMARY

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940133

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7634

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128001

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.558	2.23	0.558	ug/kg	U	1	18-JAN-10 22:50	per0118040a
	Perchlorate Isotope Ratio						1	18-JAN-10 22:50	per0118040a
14797-73-0	Perchlorate-101	.558	2.23	0.558	ug/kg	U	1	18-JAN-10 22:50	per0118040a
	Perchlorate-O(18)			5.61	ug/kg		1	18-JAN-10 22:50	per0118040a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 940133
 Extraction Type: Solid Prep
 Client Sample No. RE12-10-7648
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128002
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 %Solids: 94.8

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.527	2.11	0.527	ug/kg	U	1	18-JAN-10 23:15	per0118043a
	Perchlorate Isotope Ratio						1	18-JAN-10 23:15	per0118043a
14797-73-0	Perchlorate-101	.527	2.11	0.527	ug/kg	U	1	18-JAN-10 23:15	per0118043a
	Perchlorate-O(18)			5.37	ug/kg		1	18-JAN-10 23:15	per0118043a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC Client Sample No. RE12-10-7638

Lab Code: GEL Date Received: 08-JAN-10

Instrument: LCMSMS GEL Job No (SDG): 10-1132

Method: SW846 6850 Modified GEL Sample ID: 244128003

Matrix: SOIL Date Filtered: 14-JAN-10

Extraction Batch ID: 940133 Injection Volume (uL): 20

Extraction Type: Solid Prep %Solids: 89

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.564	2.26	0.564	ug/kg	U	1	18-JAN-10 23:24	per0118044a
	Perchlorate Isotope Ratio						1	18-JAN-10 23:24	per0118044a
14797-73-0	Perchlorate-101	.564	2.26	0.564	ug/kg	U	1	18-JAN-10 23:24	per0118044a
	Perchlorate-O(18)			5.54	ug/kg		1	18-JAN-10 23:24	per0118044a

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

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 240133

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7639

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128004

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.587	2.35	0.587	ug/kg	U	1	18-JAN-10 23:32	per0118045a
	Perchlorate Isotope Ratio						1	18-JAN-10 23:32	per0118045a
14797-73-0	Perchlorate-101	.587	2.35	0.587	ug/kg	U	1	18-JAN-10 23:32	per0118045a
	Perchlorate-O(18)			5.92	ug/kg		1	18-JAN-10 23:32	per0118045a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940133

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7633

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128005

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.596	2.38	0.809	ug/kg	J	1	19-JAN-10 00:07	per0118049a
	Perchlorate Isotope Ratio			2.93			1	19-JAN-10 00:07	per0118049a
14797-73-0	Perchlorate-101	.596	2.38	0.839	ug/kg	J	1	19-JAN-10 00:07	per0118049a
	Perchlorate-O(18)			6.21	ug/kg		1	19-JAN-10 00:07	per0118049a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC Client Sample No. RE12-10-7647

Lab Code: GEL Date Received: 08-JAN-10

Instrument: LCMSMS GEL Job No (SDG): 10-1132

Method: SW846 6850 Modified GEL Sample ID: 244128006

Matrix: SOIL Date Filtered: 14-JAN-10

Extraction Batch ID: 240133 Injection Volume (uL): 20

Extraction Type: Solid Prep %Solids: 83

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.604	2.42	0.604	ug/kg	U	1	19-JAN-10 00:15	per0118050a
	Perchlorate Isotope Ratio						1	19-JAN-10 00:15	per0118050a
14797-73-0	Perchlorate-101	.604	2.42	0.604	ug/kg	U	1	19-JAN-10 00:15	per0118050a
	Perchlorate-O(18)			6.11	ug/kg		1	19-JAN-10 00:15	per0118050a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 940133
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7644
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128007
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 %Solids: 90

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.555	2.22	0.555	ug/kg	U	1	19-JAN-10 00:24	per0118051a
	Perchlorate Isotope Ratio						1	19-JAN-10 00:24	per0118051a
14797-73-0	Perchlorate-101	.555	2.22	0.555	ug/kg	U	1	19-JAN-10 00:24	per0118051a
	Perchlorate-O(18)			5.70	ug/kg		1	19-JAN-10 00:24	per0118051a

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

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 940133
 Extraction Type: Solid Prep
 Client Sample No. RE12-10-7637
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128008
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 %Solids: 90.3

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.554	2.22	0.554	ug/kg	U	1	19-JAN-10 00:32	per0118052a
	Perchlorate Isotope Ratio						1	19-JAN-10 00:32	per0118052a
14797-73-0	Perchlorate-101	.554	2.22	0.554	ug/kg	U	1	19-JAN-10 00:32	per0118052a
	Perchlorate-O(18)			5.66	ug/kg		1	19-JAN-10 00:32	per0118052a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
 Aliquot %Solids

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 240133
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7635
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128009
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 %Solids: 85

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.585	2.34	0.585	ug/kg	U	1	19-JAN-10 00:41	per0118053a
	Perchlorate Isotope Ratio						1	19-JAN-10 00:41	per0118053a
14797-73-0	Perchlorate-101	.585	2.34	0.585	ug/kg	U	1	19-JAN-10 00:41	per0118053a
	Perchlorate-O(18)			5.91	ug/kg		1	19-JAN-10 00:41	per0118053a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 240133
 Extraction Type: Solid Prep
 Client Sample No. RE12-10-7642
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128010
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 %Solids: 89

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.564	2.26	0.564	ug/kg	U	1	19-JAN-10 00:50	per0118054a
	Perchlorate Isotope Ratio						1	19-JAN-10 00:50	per0118054a
14797-73-0	Perchlorate-101	.564	2.26	0.564	ug/kg	U	1	19-JAN-10 00:50	per0118054a
	Perchlorate-O(18)			5.58	ug/kg		1	19-JAN-10 00:50	per0118054a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
 Aliquot

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 240133
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7649
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128011
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 %Solids: 78

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.641	2.56	0.641	ug/kg	U	1	19-JAN-10 00:58	per0118055a
	Perchlorate Isotope Ratio						1	19-JAN-10 00:58	per0118055a
14797-73-0	Perchlorate-101	.641	2.56	0.641	ug/kg	U	1	19-JAN-10 00:58	per0118055a
	Perchlorate-O(18)			7.08	ug/kg		1	19-JAN-10 00:58	per0118055a

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

*Concentration =

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

Form 1

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 240133
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7650
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128012
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 %Solids: 87

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.575	2.3	0.645	ug/kg	J	1	19-JAN-10 01:07	per0118056a
	Perchlorate Isotope Ratio			3.05			1	19-JAN-10 01:07	per0118056a
14797-73-0	Perchlorate-101	.575	2.3	0.640	ug/kg	J	1	19-JAN-10 01:07	per0118056a
	Perchlorate-O(18)			6.11	ug/kg		1	19-JAN-10 01:07	per0118056a

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

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 940133
 Extraction Type: Solid Prep
 Client Sample No. RE12-10-7641
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128013
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 % Solids: 86

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.584	2.34	0.584	ug/kg	U	1	19-JAN-10 01:41	per0118060a
	Perchlorate Isotope Ratio						1	19-JAN-10 01:41	per0118060a
14797-73-0	Perchlorate-101	.584	2.34	0.584	ug/kg	U	1	19-JAN-10 01:41	per0118060a
	Perchlorate-O(18)			6.04	ug/kg		1	19-JAN-10 01:41	per0118060a

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

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 940133
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7643
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128014
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 %Solids: 84

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.597	2.39	0.597	ug/kg	U	1	19-JAN-10 01:50	per0118061a
	Perchlorate Isotope Ratio						1	19-JAN-10 01:50	per0118061a
14797-73-0	Perchlorate-101	.597	2.39	0.597	ug/kg	U	1	19-JAN-10 01:50	per0118061a
	Perchlorate-O(18)			6.05	ug/kg		1	19-JAN-10 01:50	per0118061a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 940133
 Extraction Type: Solid Prep
 Client Sample No. RE12-10-7640
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128015
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 %Solids: 92.4

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.541	2.17	0.541	ug/kg	U	1	19-JAN-10 01:59	per0118062a
	Perchlorate Isotope Ratio						1	19-JAN-10 01:59	per0118062a
14797-73-0	Perchlorate-101	.541	2.17	0.541	ug/kg	U	1	19-JAN-10 01:59	per0118062a
	Perchlorate-O(18)			5.55	ug/kg		1	19-JAN-10 01:59	per0118062a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940133

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7645

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128016

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.558	2.23	0.558	ug/kg	U	1	19-JAN-10 02:07	per0118063a
	Perchlorate Isotope Ratio						1	19-JAN-10 02:07	per0118063a
14797-73-0	Perchlorate-101	.558	2.23	0.558	ug/kg	U	1	19-JAN-10 02:07	per0118063a
	Perchlorate-O(18)			5.61	ug/kg		1	19-JAN-10 02:07	per0118063a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
Lab Code: GEL
Instrument: LCMSMS
Method: SW846 6850 Modified
Matrix: SOIL
Extraction Batch ID: 940133
Extraction Type: Solid Prep
Client Sample No. RE12-10-7646
Date Received: 08-JAN-10
GEL Job No (SDG): 10-1132
GEL Sample ID: 244128017
Date Filtered: 14-JAN-10
Injection Volume (uL): 20
%Solids: 89

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.559	2.24	0.559	ug/kg	U	1	19-JAN-10 02:16	per0118064a
	Perchlorate Isotope Ratio						1	19-JAN-10 02:16	per0118064a
14797-73-0	Perchlorate-101	.559	2.24	0.559	ug/kg	U	1	19-JAN-10 02:16	per0118064a
	Perchlorate-O(18)			5.51	ug/kg		1	19-JAN-10 02:16	per0118064a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC Client Sample No. RE12-10-7636

Lab Code: GEL Date Received: 08-JAN-10

Instrument: LCMSMS GEL Job No (SDG): 10-1132

Method: SW846 6850 Modified GEL Sample ID: 244128018

Matrix: SOIL Date Filtered: 14-JAN-10

Extraction Batch ID: 240133 Injection Volume (uL): 20

Extraction Type: Solid Prep %Solids: 90.2

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.554	2.22	0.554	ug/kg	U	1	19-JAN-10 02:24	per0118065a
	Perchlorate Isotope Ratio						1	19-JAN-10 02:24	per0118065a
14797-73-0	Perchlorate-101	.554	2.22	0.554	ug/kg	U	1	19-JAN-10 02:24	per0118065a
	Perchlorate-O(18)			5.59	ug/kg		1	19-JAN-10 02:24	per0118065a

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

*Concentration = Instrument Value X Concentrated Extract Volume X Aliquot %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: 240133
 Extraction Type: Solid Prep
 Client Sample No. RE12-10-7657
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128019
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 %Solids: 20

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.556	2.23	0.556	ug/kg	U	1	19-JAN-10 02:33	per0118066a
	Perchlorate Isotope Ratio						1	19-JAN-10 02:33	per0118066a
14797-73-0	Perchlorate-101	.556	2.23	0.556	ug/kg	U	1	19-JAN-10 02:33	per0118066a
	Perchlorate-O(18)			5.62	ug/kg		1	19-JAN-10 02:33	per0118066a

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

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 940133
 Extraction Type: Solid Prep
 Client Sample No. RE12-10-7658
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128020
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 %Solids: 90

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.558	2.23	0.558	ug/kg	U	1	19-JAN-10 02:41	per0118067a
	Perchlorate Isotope Ratio								
14797-73-0	Perchlorate-101	.558	2.23	0.558	ug/kg	U	1	19-JAN-10 02:41	per0118067a
	Perchlorate-O(18)			5.69	ug/kg		1	19-JAN-10 02:41	per0118067a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
 Aliquot %Solids

QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL GEL Job No. (SDG): 10-1132

Extract Batch Code: 940133 Date Filtered: 14-JAN-10

Matrix: SOIL Sample ID: 1202011813

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	1.9	ug/kg	94.9		70 - 130
Perchlorate Isotope Ratio		3.12				-
Perchlorate-101	2.00	1.84	ug/kg	92.1		70 - 130
Perchlorate-O(18)		4.77	ug/kg			-

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

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1132

Extract Batch Code: 940133

Date Filtered: 14-JAN-10

Matrix: SOIL

Sample ID: 1202011818

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.04	ug/kg	102		70 - 130
Perchlorate Isotope Ratio		3.09				
Perchlorate-101	2.00	2	ug/kg	99.8		70 - 130
Perchlorate-O(18)		5.08	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.

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

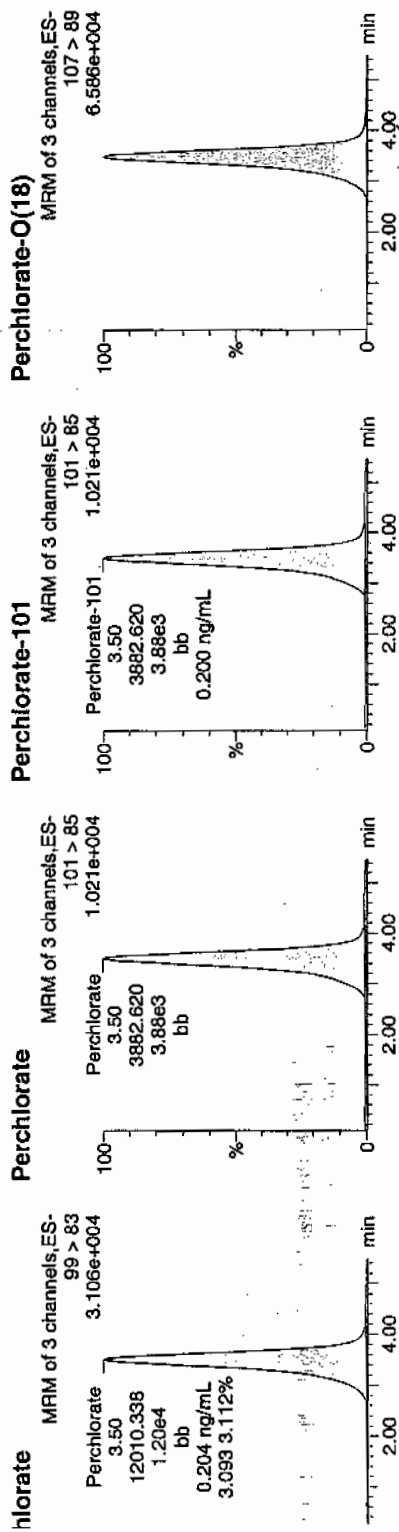
set: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
ad: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

e: per0118039a
: 18-Jan-2010
: 22:41:37
202011818
2:1,C

623
01-19-10

LANC | 940136 | 3020 | 125 | 1 |



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
11818	Perchlorate	99 > 83	3.50	12010.338	bb			0.2035	101.77	-1.77	825.132	3.09
11818	Perchlorate-101	101 > 85	3.50	3882.620	bb			0.1996	99.79	-0.21	474.572	
11818	Perchlorate-O(18)	107 > 89	3.48	25434.932	bb			0.5080	101.60	1.60	2075.5...	

Handwritten: 11/20/10

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering LaboratoriesLab Code: GELGEL Job No (SDG): 10-1132Extract Batch Code: 940133Date Extracted: 14-JAN-10GEL MS/PS ID: 1202011814Client ID: RE12-10-7634GEL MSD/PSD ID: 1202011815QC Type: MS

Compound [^]	Spike Added	Sample Conc	Units	MS Conc	MS Rec	#	MSD Conc	MSD Rec	#	RPD	#	RPD Limit	Recovery Limit
Perchlorate	2.23	0.314	ug/kg	2.48	97		2.62	103		5.38		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		2.95			3.13			0			-
Perchlorate-101	2.23	0.308	ug/kg	2.55	100		2.53	99.7		.556		30	75 - 125
Perchlorate-O(18)	0	5.61	ug/kg	5.32			5.57			4.55			-

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

Comments:

Perchlorate Initial Calibration Blank

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

GEL Job No.(SDG): 10-1132

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	18-JAN-10	per0118001a	IPB001
Perchlorate-101	0.00	0	NA	18-JAN-10	per0118001a	IPB001
Perchlorate	0.00	0	NA	18-JAN-10	per0118002a	IPB001
Perchlorate-101	0.00	0	NA	18-JAN-10	per0118002a	IPB001

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

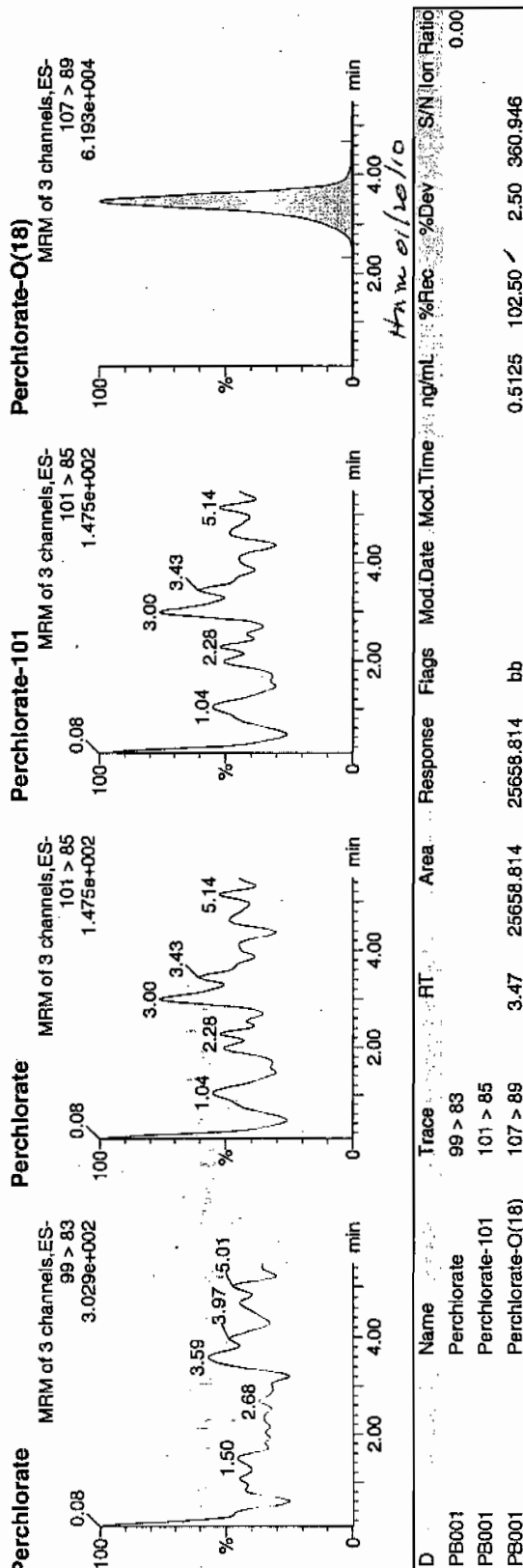
Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per011810a.mdb 19 Jan 2010 07:54:21
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per011810a.cdb 19 Jan 2010 07:54:38

Name: per0118001a
Date: 18-Jan-2010
Time: 17:15:12
D: (PB001
Vial: 1:1,A

CWJ
01-19-10



ntify Sample Report MassLynx 4.0 SP4

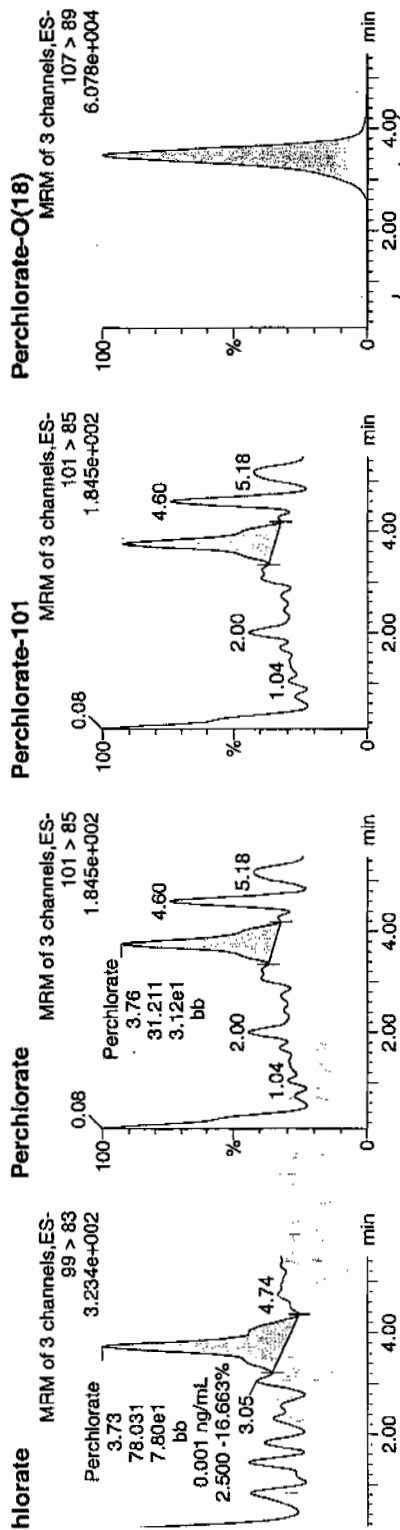
GEL Group, LLC Analyst: Charlers W. Wilson

set: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
ed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

e: per0118002a
: 18-Jan-2010
: 17:23:45
B001
1:1,A

01-19-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83	3.73	78.031	bb			0.0013	10.085	2.50		
1	Perchlorate-101	101 > 85	3.76	31.211	bb			0.0016	11.802			
1	Perchlorate-O(18)	107 > 89	3.47	25199.514	bb			0.5033	100.66	0.66	2725.7...	

Perchlorate Continuing Calibration Blank

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

GEL Job No.(SDG): 10-1132

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	18-JAN-10	per0118008a	IPB002
Perchlorate-101	0.00	0	NA	18-JAN-10	per0118008a	IPB002
Perchlorate	0.00	0	NA	18-JAN-10	per0118010a	IPB003
Perchlorate-101	0.00	0	NA	18-JAN-10	per0118010a	IPB003
Perchlorate	0.00	0	NA	18-JAN-10	per0118022a	IPB004
Perchlorate-101	0.00	0	NA	18-JAN-10	per0118022a	IPB004
Perchlorate	0.00	0	NA	18-JAN-10	per0118027a	IPB005
Perchlorate-101	0.00	0	NA	18-JAN-10	per0118027a	IPB005
Perchlorate	0.00	0	NA	18-JAN-10	per0118035a	IPB006
Perchlorate-101	0.00	0	NA	18-JAN-10	per0118035a	IPB006
Perchlorate	0.00	0	NA	18-JAN-10	per0118047a	IPB007
Perchlorate-101	0.00	0	NA	18-JAN-10	per0118047a	IPB007
Perchlorate	0.00	0	NA	19-JAN-10	per0118058a	IPB008

Perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-1132

Lab Name: General Engineering Laboratories

Lab Code: GEL

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

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate-101	0.00	0	NA	19-JAN-10	per0118058a	IPB008
Perchlorate	0.00	0	NA	19-JAN-10	per0118069a	IPB009
Perchlorate-101	0.00	0	NA	19-JAN-10	per0118069a	IPB009

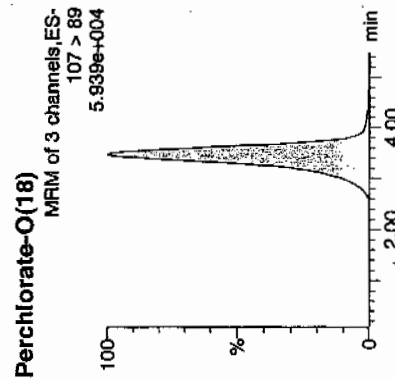
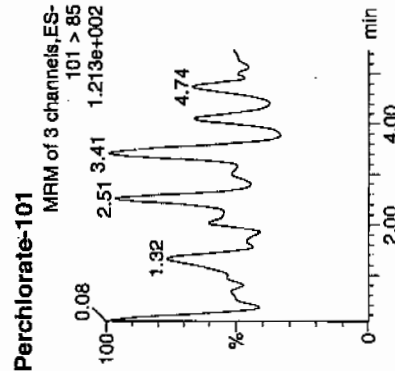
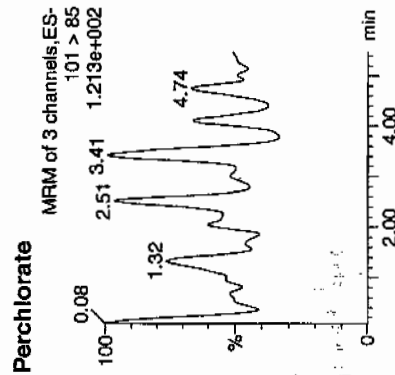
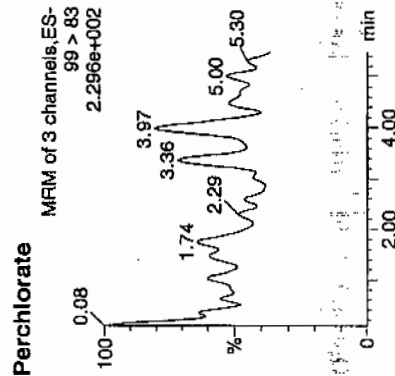
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

Name: per0118008a
Date: 18-Jan-2010
Time: 18:15:15
ID: IPB002
Vial: 1:1,A

01-19-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB002	Perchlorate	99 > 83											0.00
IPB002	Perchlorate-101	101 > 85											
IPB002	Perchlorate-O(18)	107 > 89	3.47	24661.912	24661.912	bb			0.4926	98.52	-1.48	1912.5...	

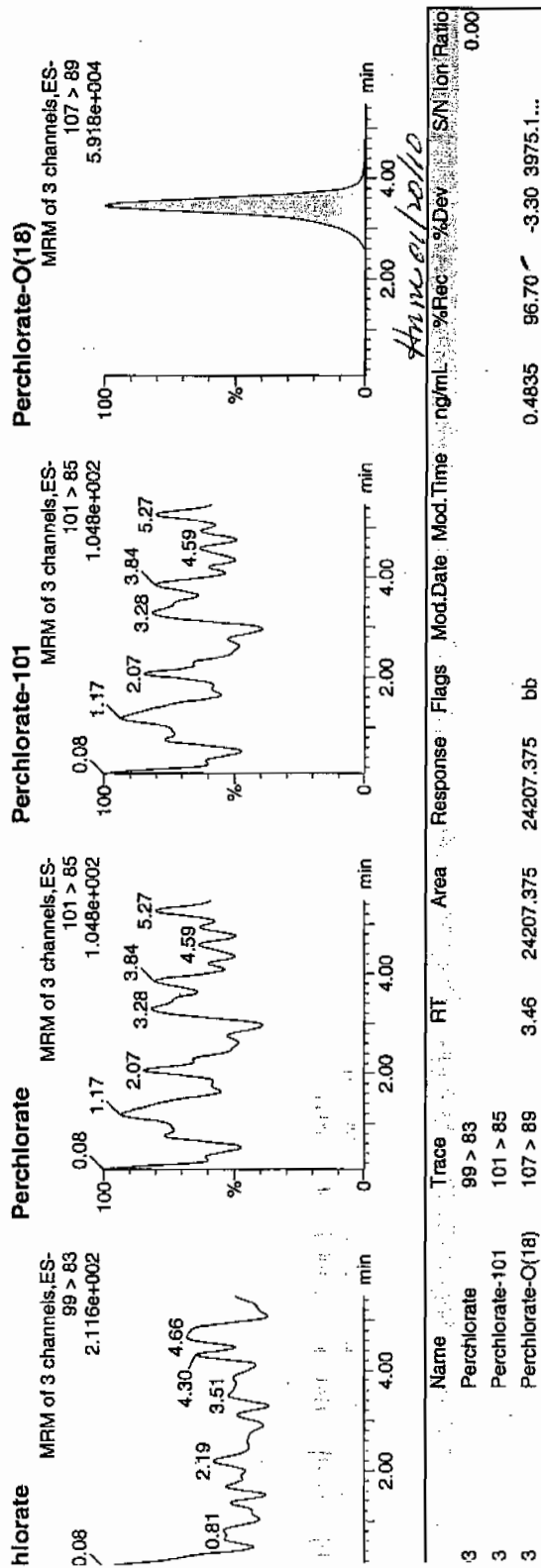
ntify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charlers W. Wilson

set: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
ed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

e: per0118010a
: 18-Jan-2010
: 18:32:35
B003
1:1,A

01-19-10



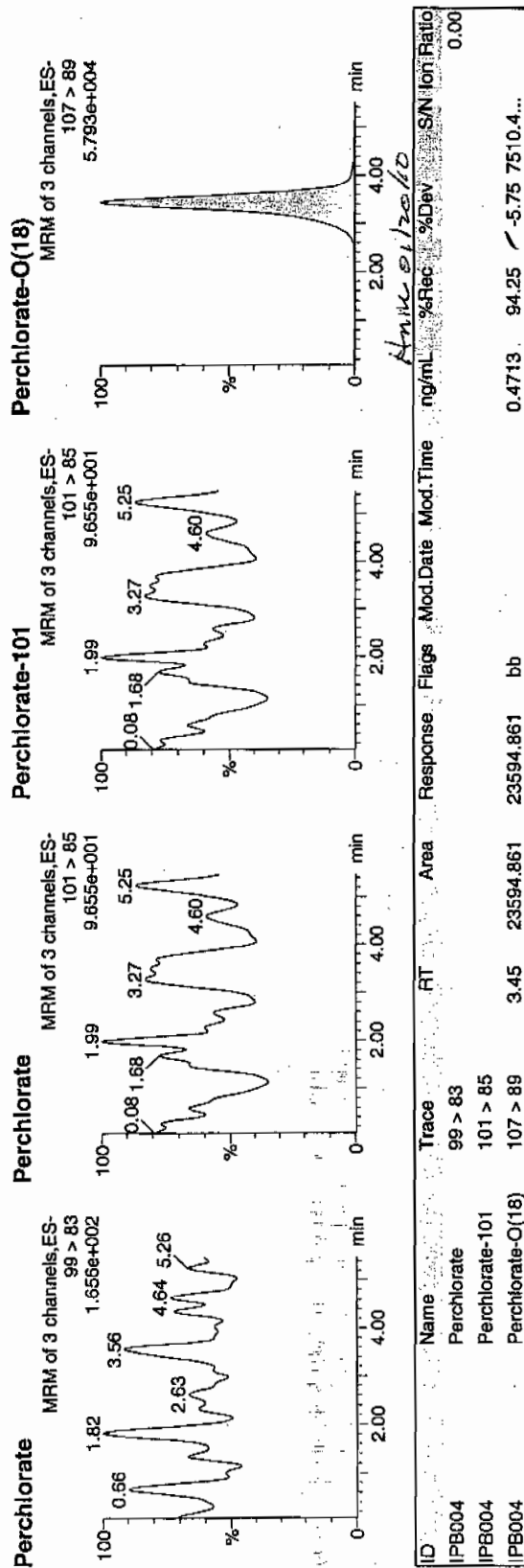
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

Name: per0118022a
Date: 18-Jan-2010
Time: 20:15:28
ID: IPB004
Vial: 1:1,A

Di-19-10



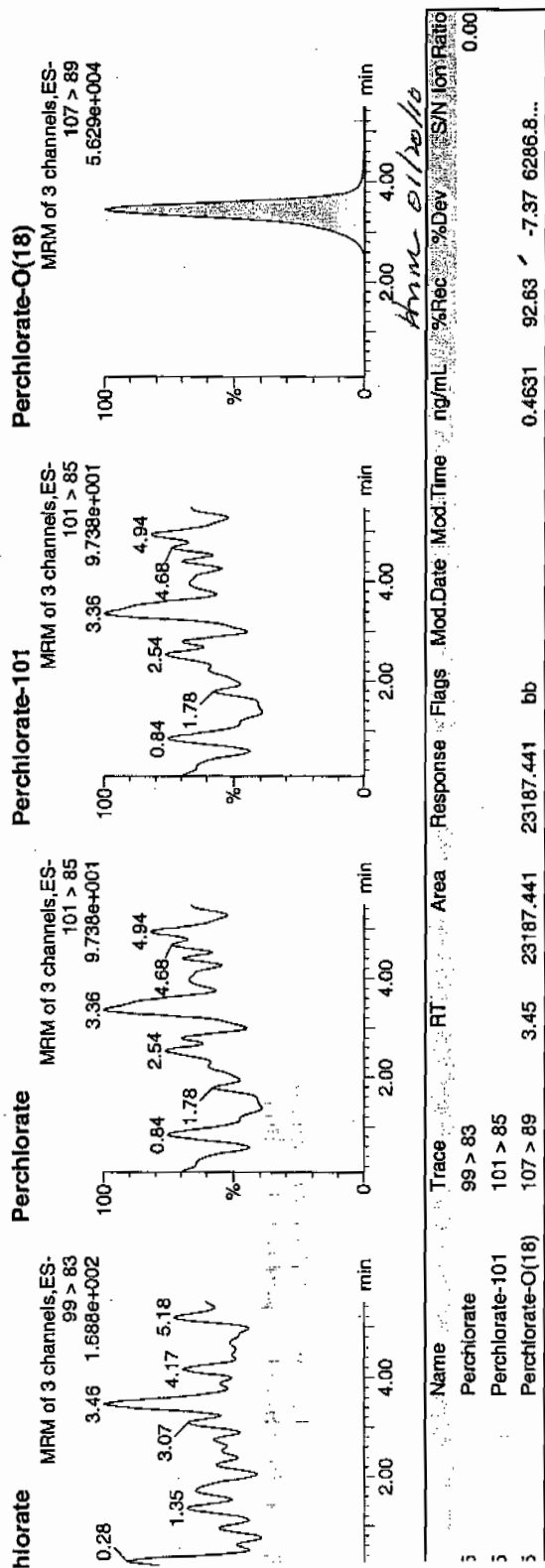
ntify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charles W. Wilson

set: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
ed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

e: per0118027a
: 18-Jan-2010
: 20:58:15
B005
1:1,A

01-14-10



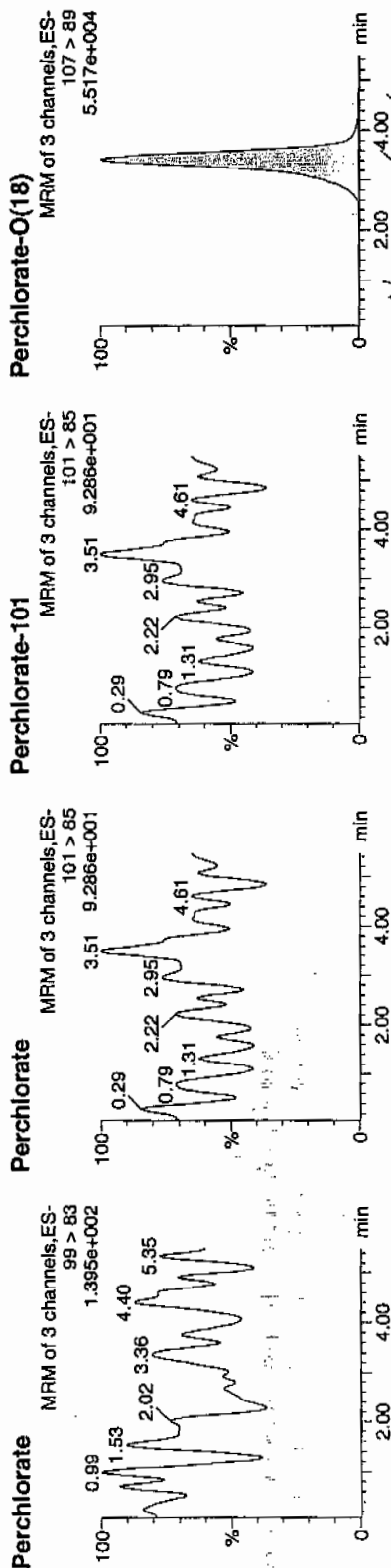
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

Name: per0118035a
Date: 18-Jan-2010
Time: 22:06:53
ID: IPB006
Vial: 1:1,A

01-10-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB006	Perchlorate	99 > 83											0.00
IPB006	Perchlorate-101	101 > 85											
IPB006	Perchlorate-O(18)	107 > 89	3.42	22622.916	22622.916	bb			0.4519	90.37	-9.63	2897.7...	

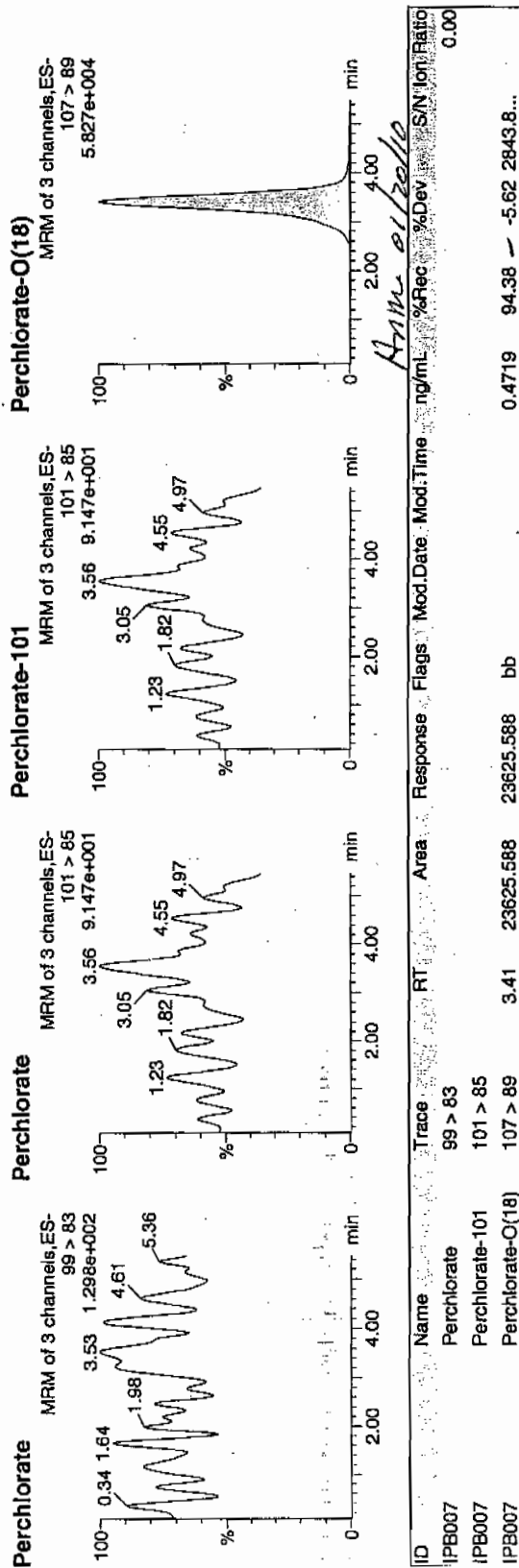
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

Name: per0118047a
Date: 18-Jan-2010
Time: 23:50:11
ID: IPB007
Vial: 1:1,A

020
01-19-10



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	3.41	23625.588	23625.588	bb			0.4719	94.38	-5.62	2843.8...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qid

Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

Name: per0118058a

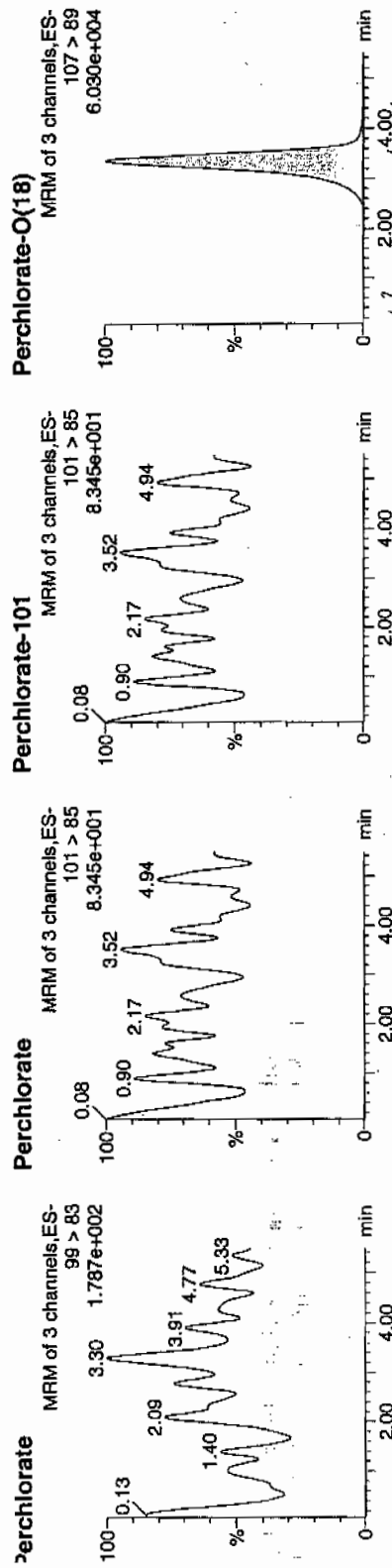
Date: 19-Jan-2010

Time: 01:24:33

D: IPB008

/ial: 1:1,A

01-19-10



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB008	Perchlorate	99 > 83											0.00
PB008	Perchlorate-101	101 > 85	3.36	24288.203	24288.203	bb			0.4851	97.02	-2.98	6677.5...	
PB008	Perchlorate-O(18)	107 > 89											

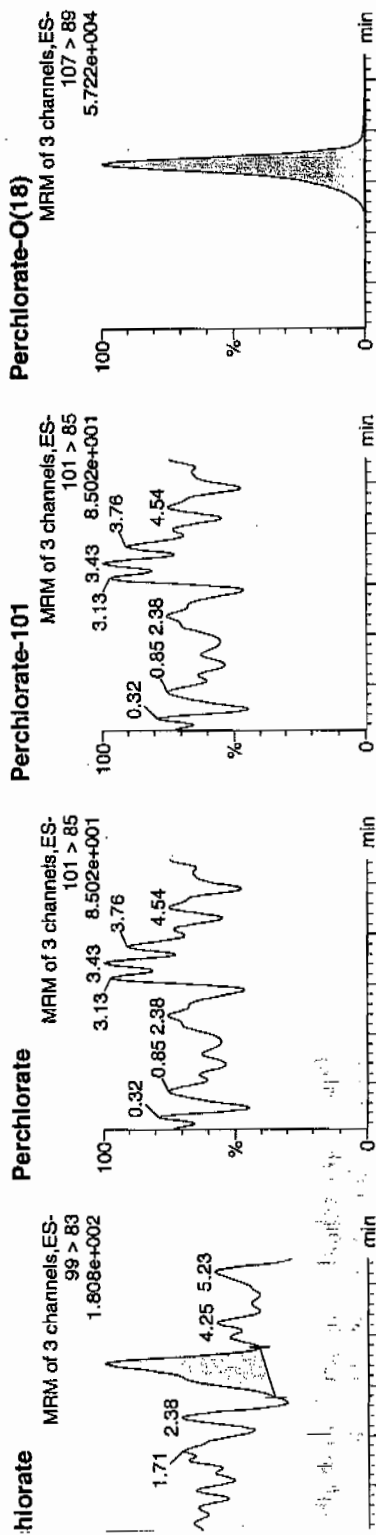
ntify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charlers W. Wilson

iset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
ed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

ie: per0118069a
: 19-Jan-2010
z: 02:59:18
PB009
1:1,A

QMS
01-19-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83	3.45	50.406	50.406	bb			0.0009			13.873	0.00
Perchlorate-101	101 > 85											
Perchlorate-O(18)	107 > 89	3.35	23779.482	23779.482	bb			0.4750	94.99	-5.01	2975.8...	

Nairb.ref

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

Updated 20 April '95

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

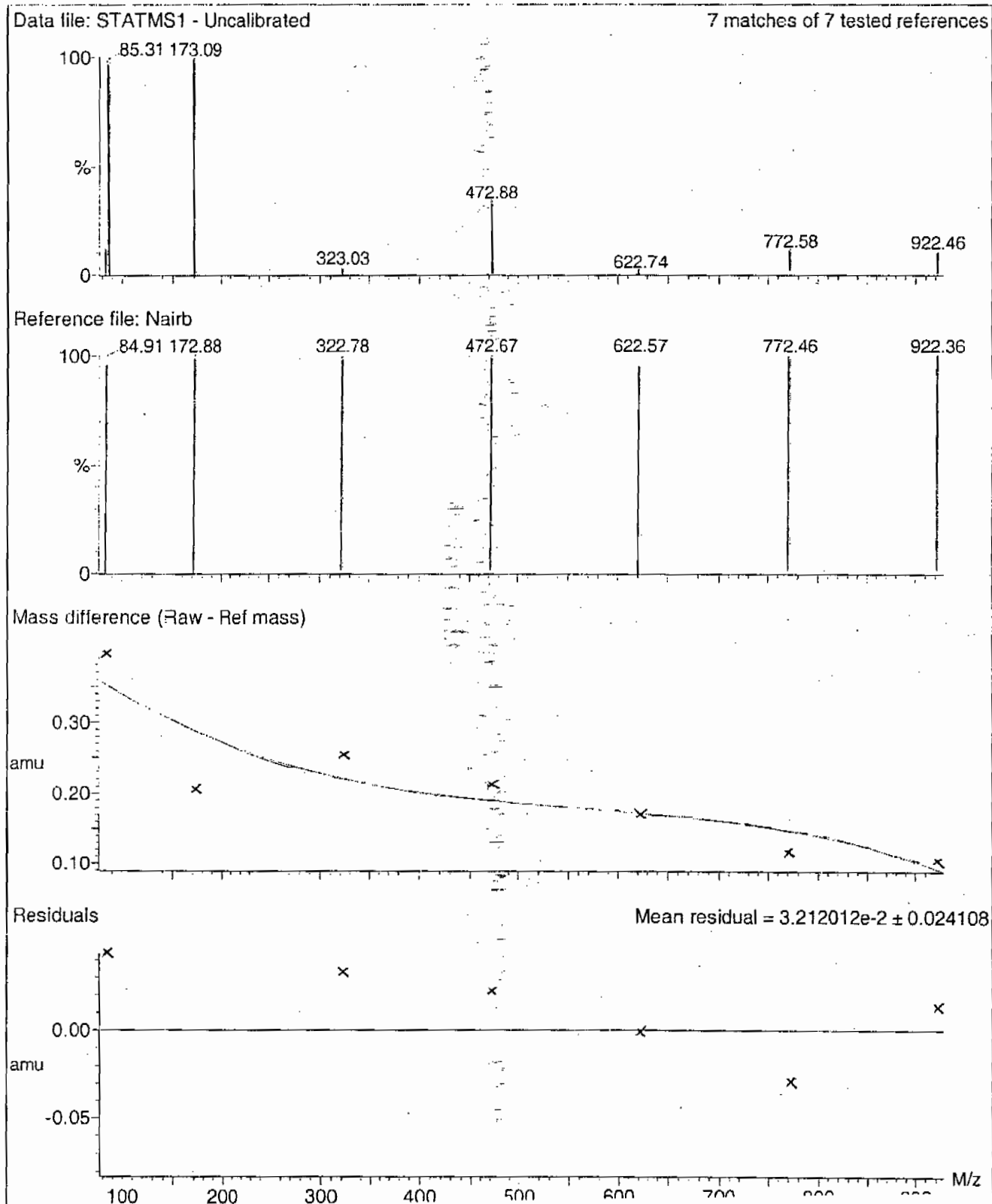
QUATRO ULTIMA: nairb 01_08_08.cal

Calibration Report - MS1 Static

Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

POINTS HIGHLIGHTED BY CURVED 01_08_08



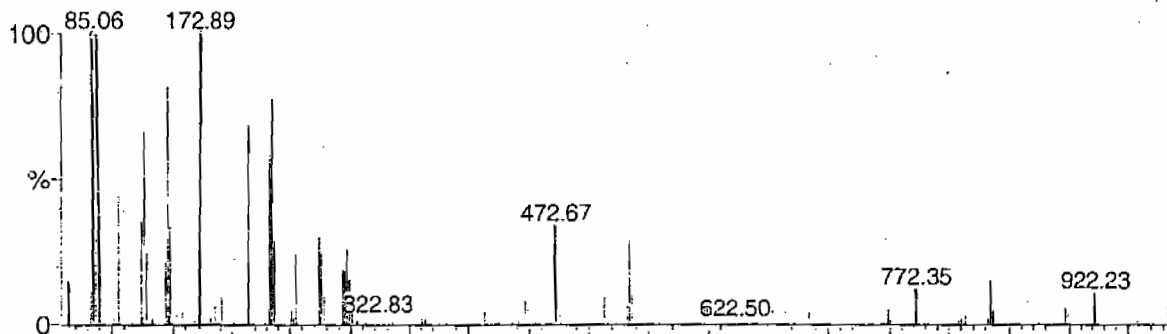
Calibration Report - MS1 Scanning

Page 1 of 1

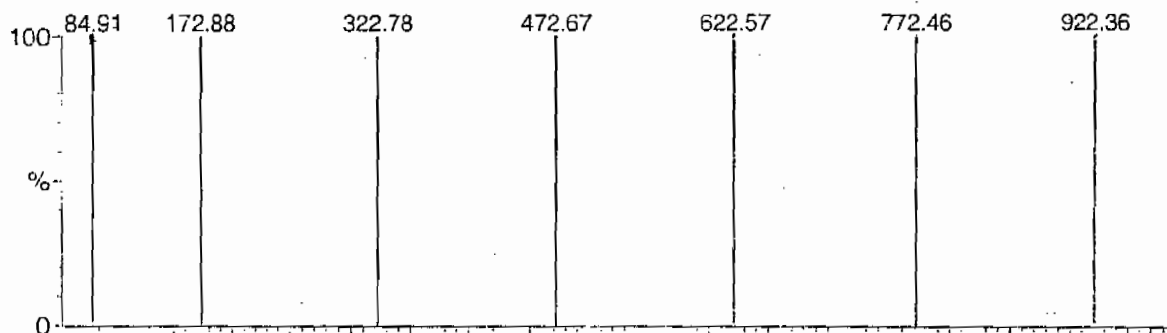
Printed: Tue Jan 08 12:20:09 2008

Data file: SCNMS1 - Uncalibrated

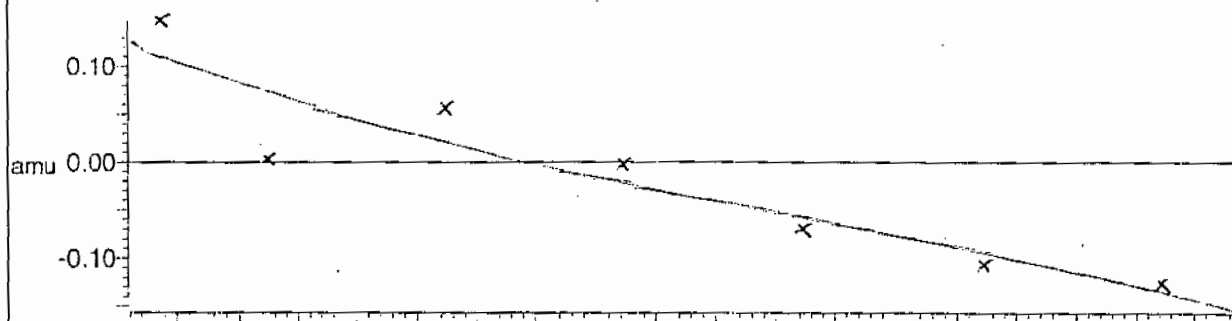
7 matches of 7 tested references



Reference file: Nairb

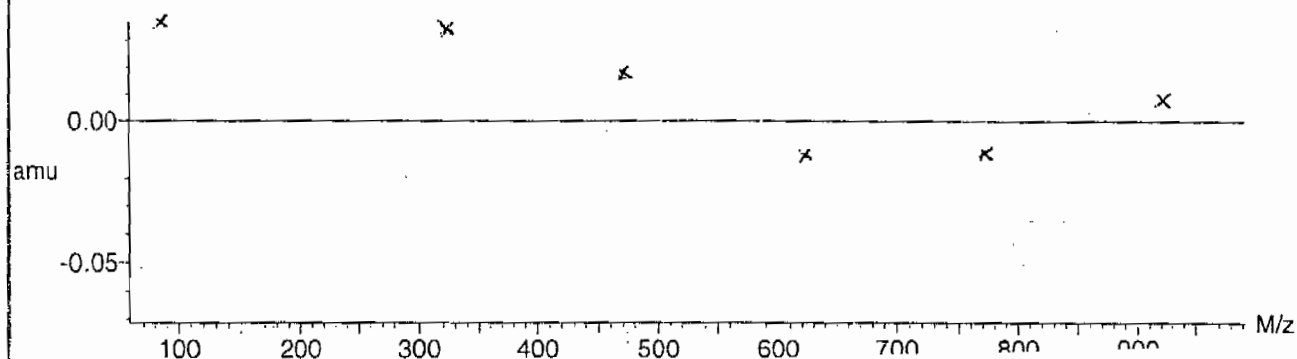


Mass difference (Raw - Ref mass)



Residuals

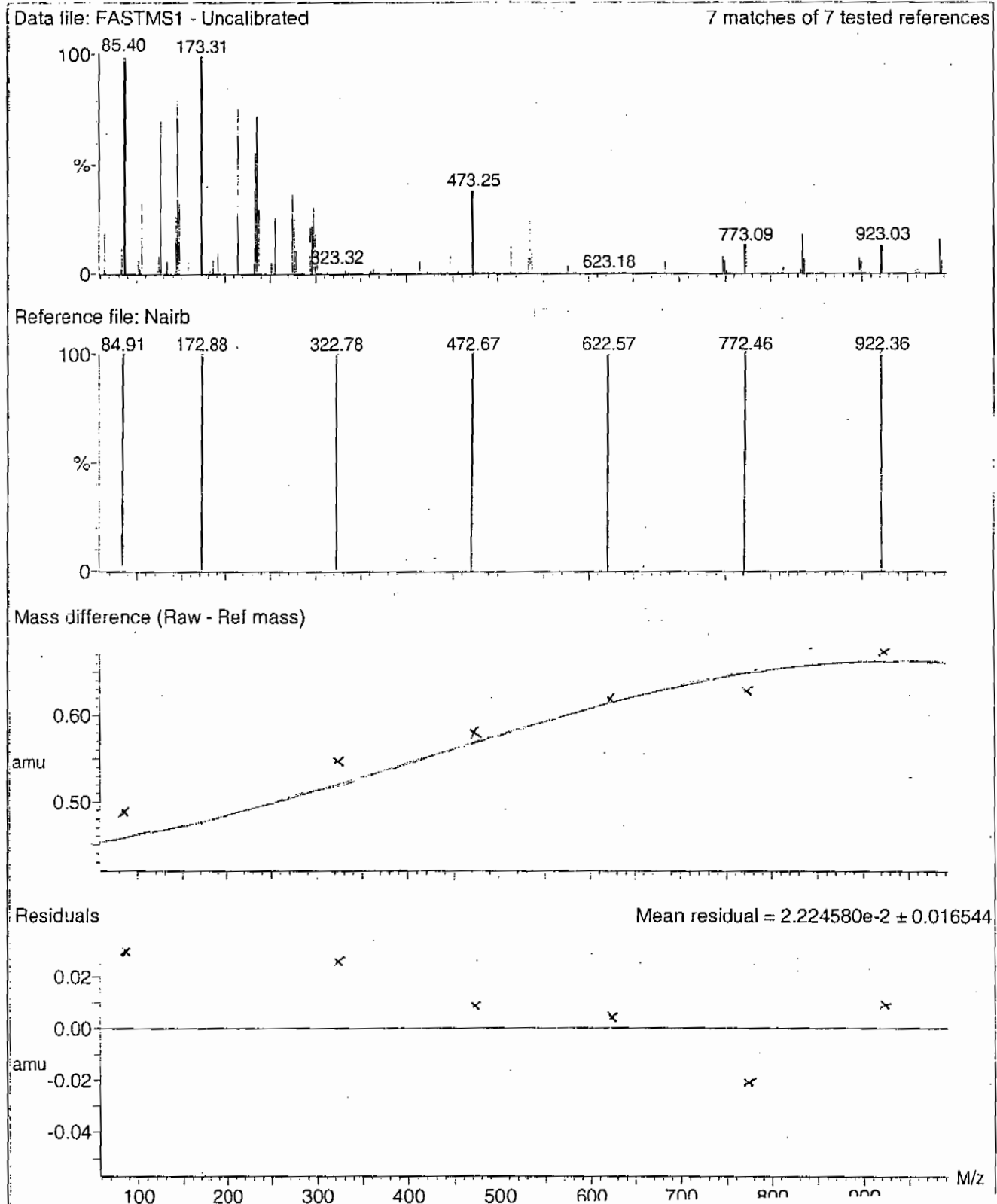
Mean residual = $2.732691 \times 10^{-2} \pm 0.020653$



Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

Printed: Tue Jan 08 12:21:04 2008



Calibration Report - MS2 Scan Speed Compensation

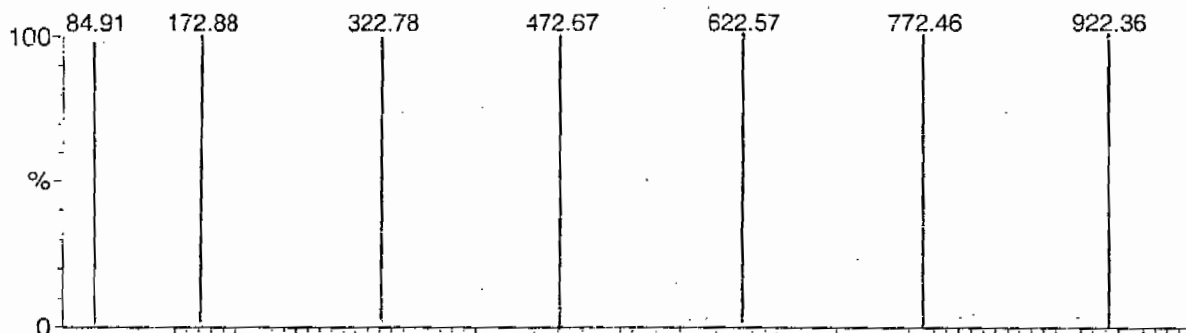
Page 1 of 1

Printed: Tue Jan 08 12:23:51 2008

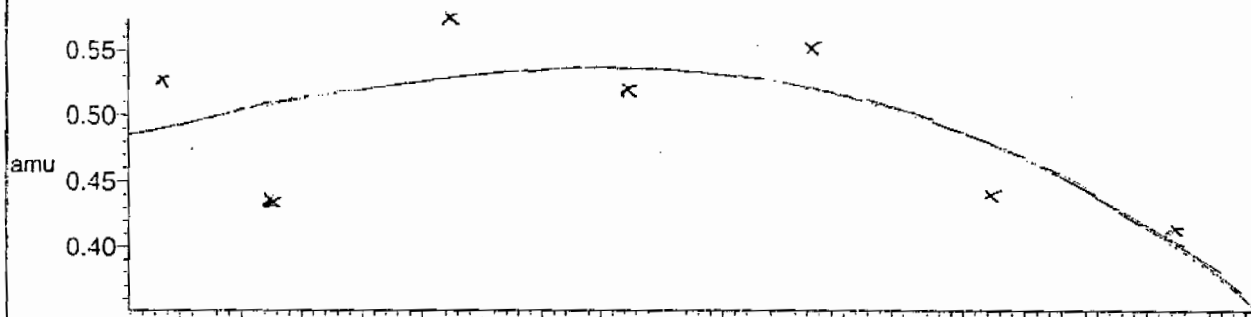
Data file: FASTMS2 - Uncalibrated 7 matches of 7 tested references



Reference file: Nairb

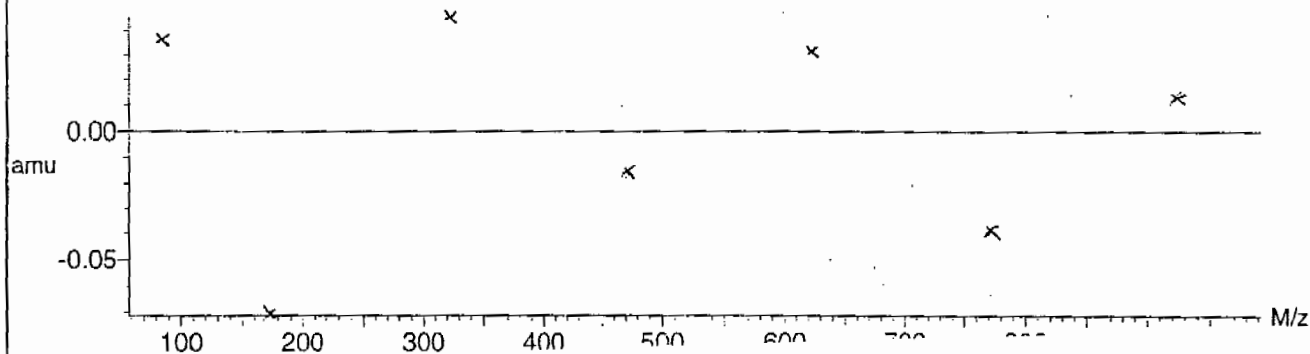


Mass difference (Raw - Ref mass)



Residuals

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



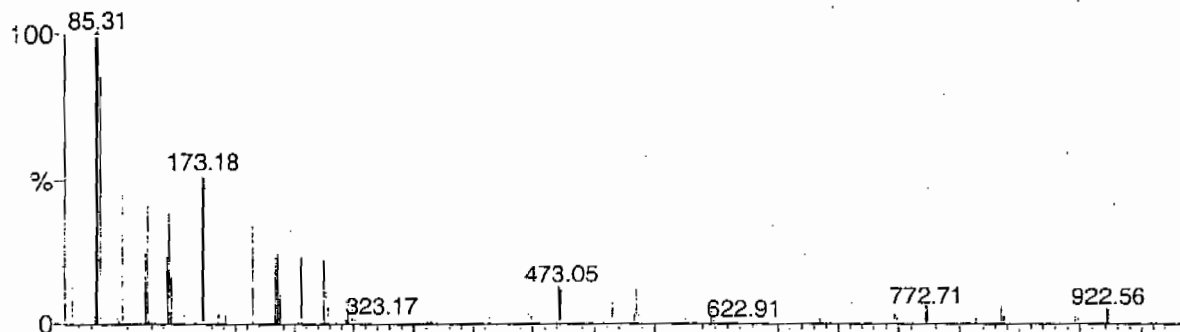
Calibration Report - MS2 Scanning

Page 1 of 1

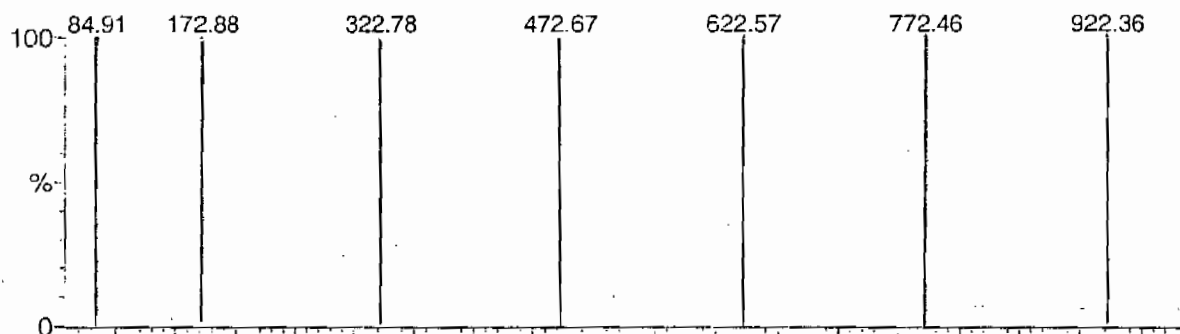
Printed: Tue Jan 08 12:22:56 2008

Data file: SCNMS2 - Uncalibrated

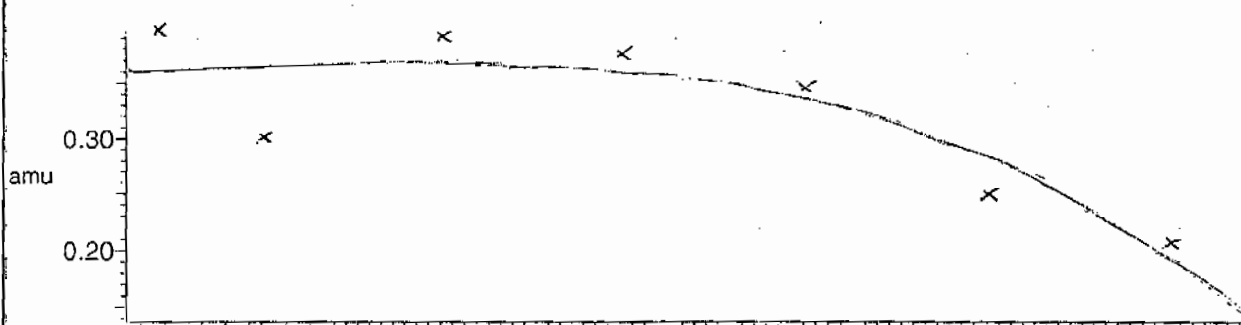
7 matches of 7 tested references



Reference file: Nairb

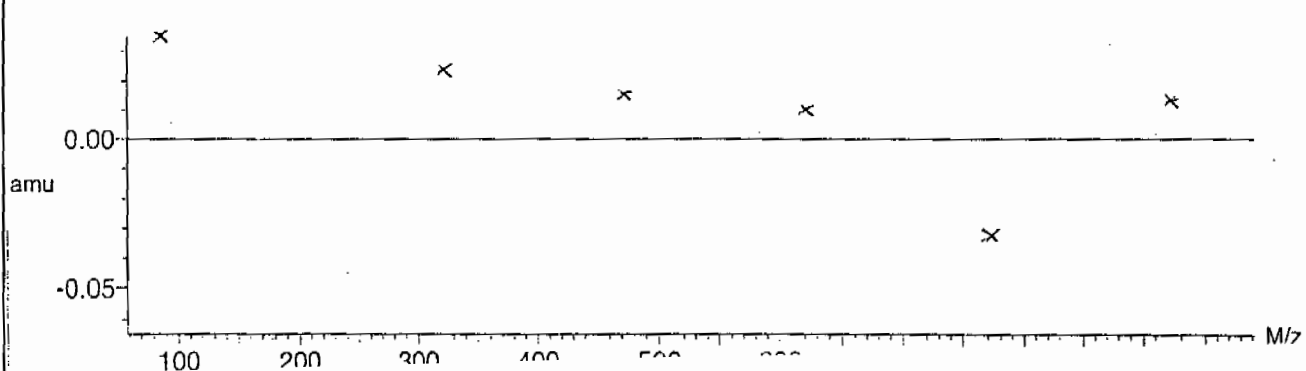


Mass difference (Raw - Ref mass)



Residuals

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



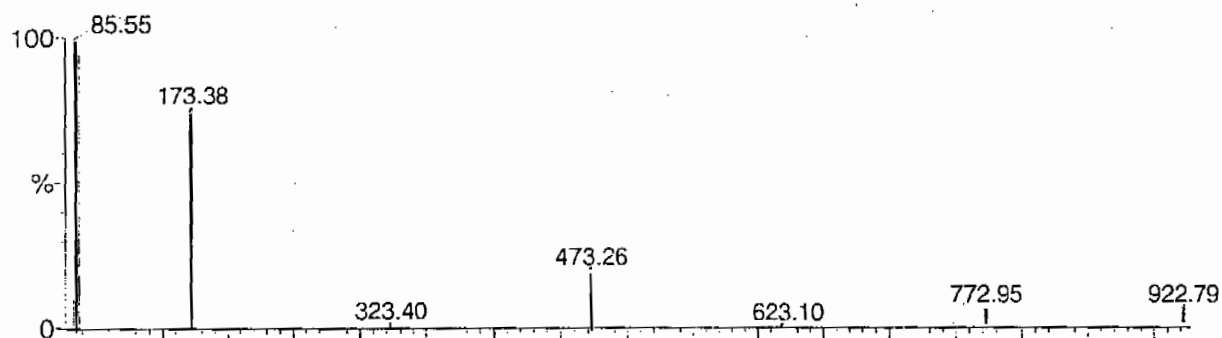
Calibration Report - MS2 Static

Page 1 of 1

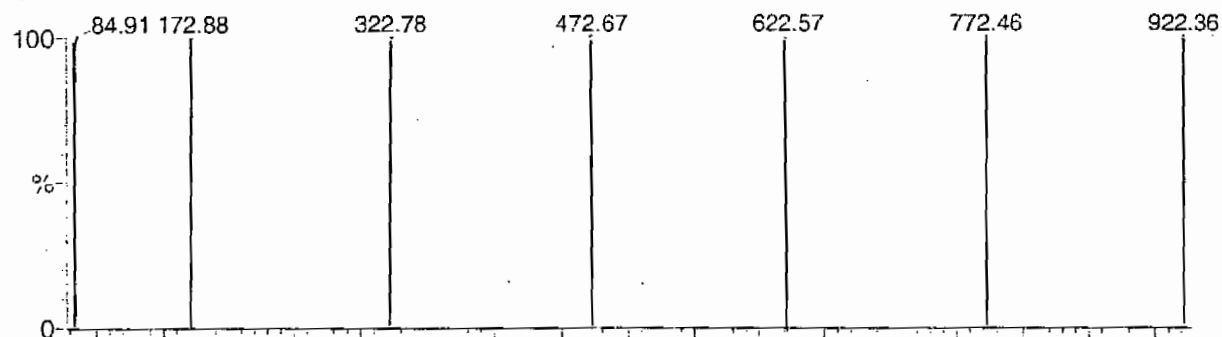
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

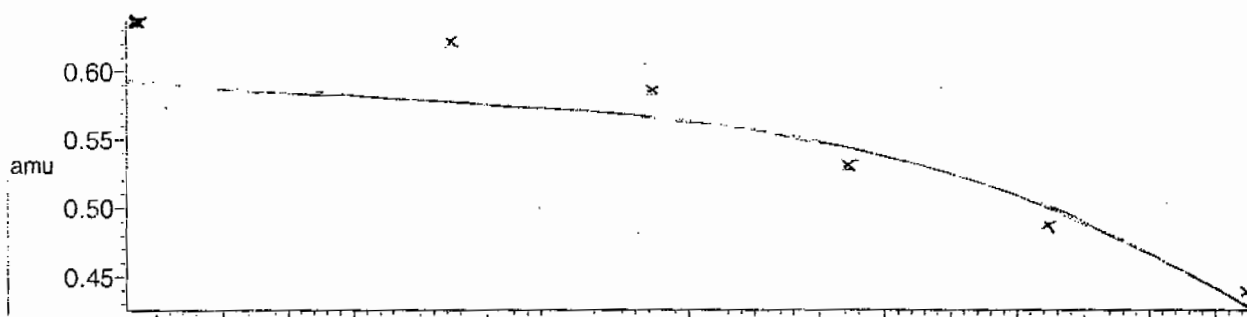
7 matches of 7 tested references



Reference file: Nairb

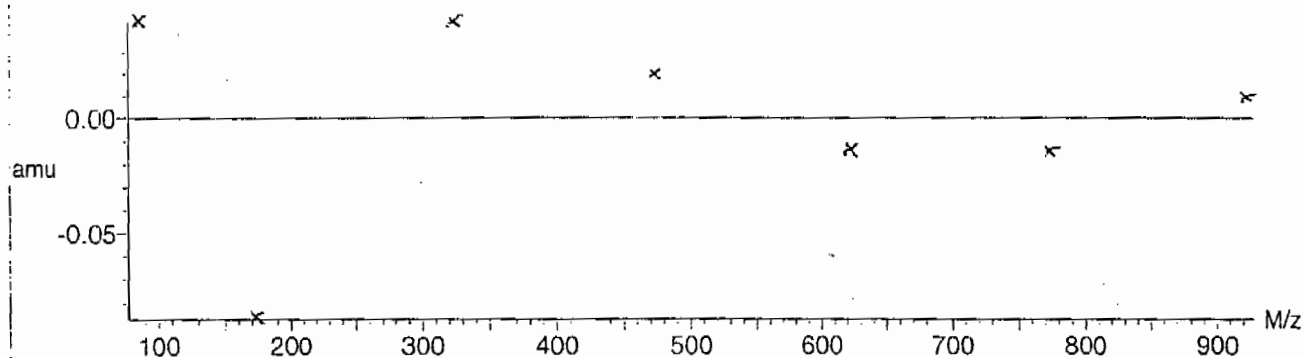


Mass difference (Raw - Ref mass)



Residuals

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



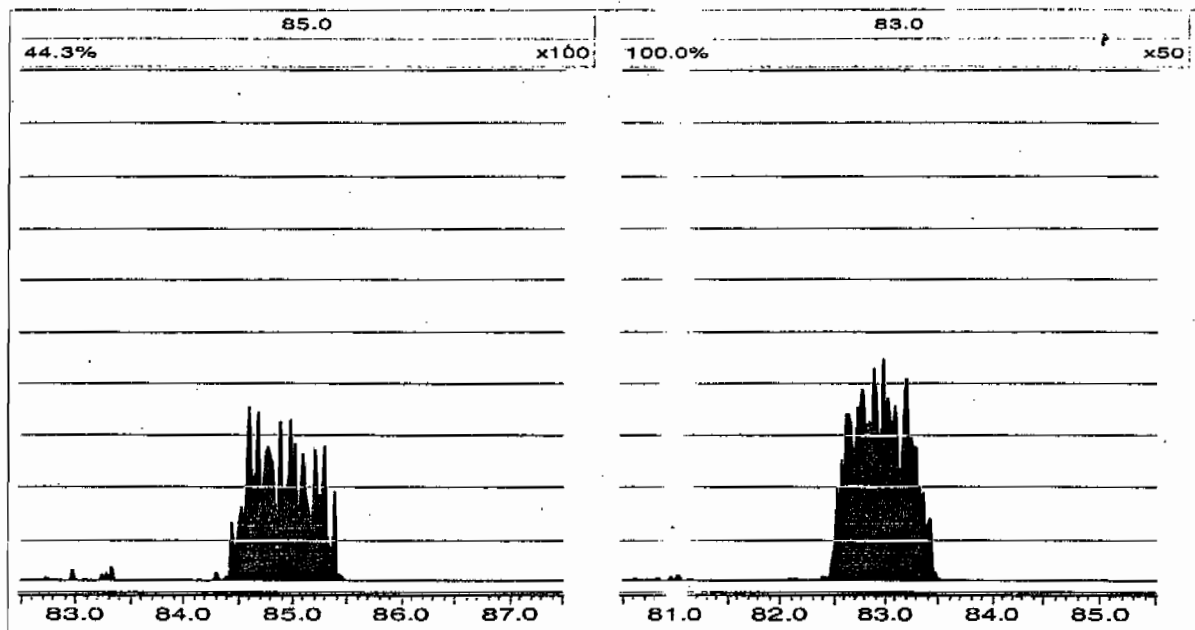
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Monday, January 18, 2010 15:47:32 Eastern Standard Time



Perchlorate RT And Area Summary

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

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1132

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	per0118006a	18-JAN-10	25236.1				
Lower Area Limit			12618.05				
Upper Area Limit			50472.2				
1202011812	per0118037a	18-JAN-10 22:24	23802.3	3.42			
1202011813	per0118038a	18-JAN-10 22:33	23885.6	3.42	3.43315	1.004	
1202011818	per0118039a	18-JAN-10 22:41	25434.9	3.48	3.49523	1.004	
244128001	per0118040a	18-JAN-10 22:50	25197.4	3.42	3.43315	1.004	
1202011814	per0118041a	18-JAN-10 22:58	23881.3	3.52	3.54498	1.007	
1202011815	per0118042a	18-JAN-10 23:07	24993.9	3.41	3.43313	1.007	
244128002	per0118043a	18-JAN-10 23:15	25501	3.42	3.43317	1.004	
244128003	per0118044a	18-JAN-10 23:24	24605	3.41	3.44548	1.01	

Perchlorate RT And Area Summary

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

GEL Job No.(SDG): 10-1132

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS

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

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	per0118006a	18-JAN-10	25236.1				
Lower Area Limit			12618.05				
Upper Area Limit			50472.2				
244128004	per0118045a	18-JAN-10 23:32	25259.5	3.41	3.4207	1.003	
244128005	per0118049a	19-JAN-10 00:07	26085.9	3.41	3.42067	1.003	
244128006	per0118050a	19-JAN-10 00:15	25313.9	3.41	3.42068	1.003	
244128007	per0118051a	19-JAN-10 00:24	25677.2	3.41	3.42068	1.003	
244128008	per0118052a	19-JAN-10 00:32	25596.4	3.41	3.42067	1.003	
244128009	per0118053a	19-JAN-10 00:41	25260.4	3.4	3.4207	1.006	
244128010	per0118054a	19-JAN-10 00:50	24757.2	3.4	3.4082	1.002	
244128011	per0118055a	19-JAN-10 00:58	27628.4	3.4	3.42068	1.006	

Perchlorate RT And Area Summary

GEL Job No.(SDG): 10-1132

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS

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

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	per0118006a	18-JAN-10	25236.1				
Lower Area Limit			12618.05				
Upper Area Limit			50472.2				
244128012	per0118056a	19-JAN-10 01:07	26604.8	3.36	3.38342	1.007	
244128013	per0118060a	19-JAN-10 01:41	25871.5	3.4	3.42067	1.006	
244128014	per0118061a	19-JAN-10 01:50	25367.5	3.37	3.40822	1.011	
244128015	per0118062a	19-JAN-10 01:59	25686.3	3.4	3.42068	1.006	
244128016	per0118063a	19-JAN-10 02:07	25173.2	3.4	3.40823	1.002	
244128017	per0118064a	19-JAN-10 02:16	24688	3.38	3.40822	1.008	
244128018	per0118065a	19-JAN-10 02:24	25245.3	3.37	3.4207	1.015	
244128019	per0118066a	19-JAN-10 02:33	25289.4	3.38	3.40827	1.008	

Perchlorate RT And Area Summary

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

GEL Job No.(SDG): 10-1132Lab Name: General Engineering LaboratoriesLab Code: GELInstrument ID: LCMSMSHPLC 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	per0118006a	18-JAN-10	25236.1				
Lower Area Limit			12618.05				
Upper Area Limit			50472.2				
244128020	per0118067a	19-JAN-10 02:41	25497.2	3.38	3.39588	1.005	

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: 240133
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7634
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128001
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 %Solids: 20

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.558	2.23	0.558	ug/kg	U	1	18-JAN-10 22:50	per0118040a
	Perchlorate Isotope Ratio						1	18-JAN-10 22:50	per0118040a
14797-73-0	Perchlorate-101	.558	2.23	0.558	ug/kg	U	1	18-JAN-10 22:50	per0118040a
	Perchlorate-O(18)			5.61	ug/kg		1	18-JAN-10 22:50	per0118040a

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

*Concentration =

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

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

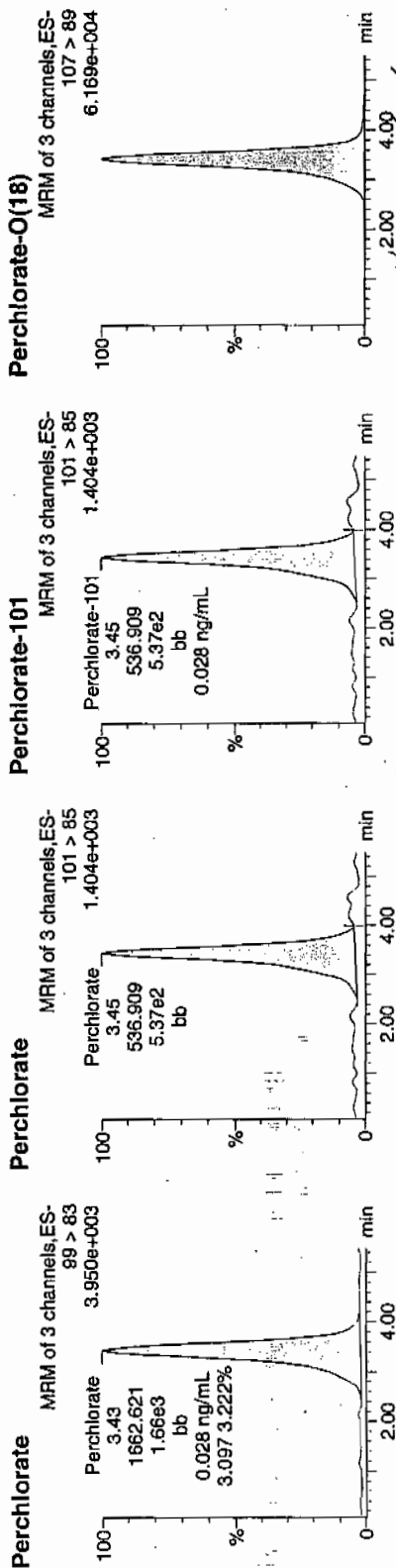
Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

Name: per0118040a
Date: 18-Jan-2010
Time: 22:50:16
ID: 244128001
Vial: 2:1,D

Q1-19-10

1992-194036 | 5025 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
244128001	Perchlorate	99 > 83	3.43	1662.621	1662.621	bb			0.0282			227.483	3.10
244128001	Perchlorate-101	101 > 85	3.45	536.909	536.909	bb			0.0276			159.846	
244128001	Perchlorate-O(18)	107 > 89	3.42	25197.393	25197.393	bb			0.5033	100.66	0.66	5265.3...	

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: 240133

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7648

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128002

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

%Solids: 94.8

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.527	2.11	0.527	ug/kg	U	1	18-JAN-10 23:15	per0118043a
	Perchlorate Isotope Ratio						1	18-JAN-10 23:15	per0118043a
14797-73-0	Perchlorate-101	.527	2.11	0.527	ug/kg	U	1	18-JAN-10 23:15	per0118043a
	Perchlorate-O(18)			5.37	ug/kg		1	18-JAN-10 23:15	per0118043a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Identify Sample Report MassLynx 4.0 SP4
 JEL Group, LLC Analyst: Charles W. Wilson

File: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Acquired: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
 Method: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

File: per0118043a

Date: 18-Jan-2010

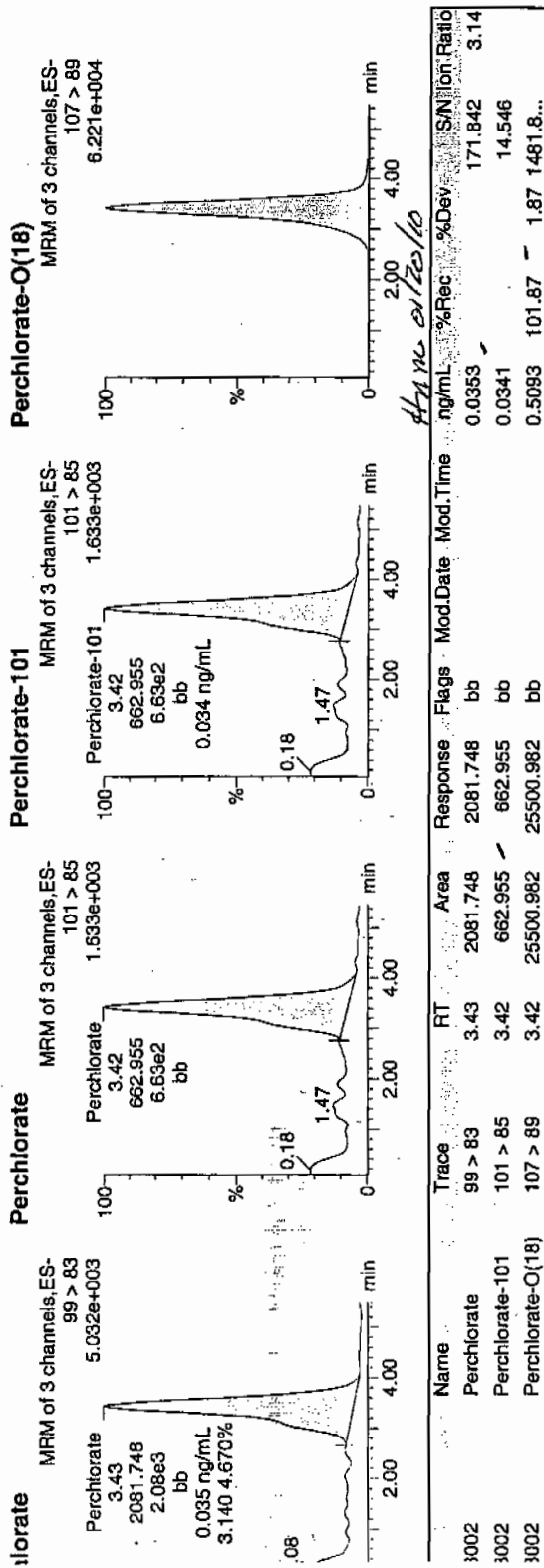
Time: 23:15:47

ID: 14128002

2:2,A

14128002 | 940136 | 5070 | 1 |

01-17-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83	3.43	2081.748	2081.748	bb			0.0353			171.842	3.14
Perchlorate-101	101 > 85	3.42	662.955	662.955	bb			0.0341			14.546	
Perchlorate-O(18)	107 > 89	3.42	25500.982	25500.982	bb			0.5093	101.87	1.87	1481.8...	

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: 940133

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7638

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128003

Date Filtered: 14-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	0.564	ug/kg	U	1	18-JAN-10 23:24	per0118044a
	Perchlorate Isotope Ratio						1	18-JAN-10 23:24	per0118044a
14797-73-0	Perchlorate-101	.564	2.26	0.564	ug/kg	U	1	18-JAN-10 23:24	per0118044a
	Perchlorate-O(18)			5.54	ug/kg		1	18-JAN-10 23:24	per0118044a

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

*Concentration =

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

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

Name: per0118044a

Date: 18-Jan-2010

Time: 23:24:20

D: 244128003

/lat: 2:2,B

Q-14-10

1 LAVU | 940136 | 5025 | 11

Perchlorate

MRM of 3 channels, ES-

99 > 83

2.448e+003

Perchlorate

3.45

966.683

9.67e2

bb

0.016 ng/mL

3.101 3.365%

0.30

min

2.00

4.00

Perchlorate

MRM of 3 channels, ES-

101 > 85

7.754e+002

Perchlorate

3.45

311.737

3.12e2

bb

0.28

min

2.00

4.00

Perchlorate-101

MRM of 3 channels, ES-

101 > 85

7.754e+002

Perchlorate-101

3.45

311.737

3.12e2

bb

0.016 ng/mL

0.28

min

2.00

4.00

Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

5.954e+004

Perchlorate-O(18)

3.45

131.852

41.219

5454.9...

0.4914

98.29

-1.71

min

2.00

4.00

Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
44128003	Perchlorate	99 > 83	3.45	966.683	bb			0.0164			131.852	3.10
44128003	Perchlorate-101	101 > 85	3.45	311.737	bb			0.0160			41.219	
44128003	Perchlorate-O(18)	107 > 89	3.41	24604.971	bb			0.4914	98.29	-1.71	5454.9...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940133

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7639

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128004

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.587	2.35	0.587	ug/kg	U	1	18-JAN-10 23:32	per0118045a
	Perchlorate Isotope Ratio						1	18-JAN-10 23:32	per0118045a
14797-73-0	Perchlorate-101	.587	2.35	0.587	ug/kg	U	1	18-JAN-10 23:32	per0118045a
	Perchlorate-O(18)			5.92	ug/kg		1	18-JAN-10 23:32	per0118045a

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

*Concentration =

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

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

set: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
ed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

ie: per0118045a

: 18-Jan-2010

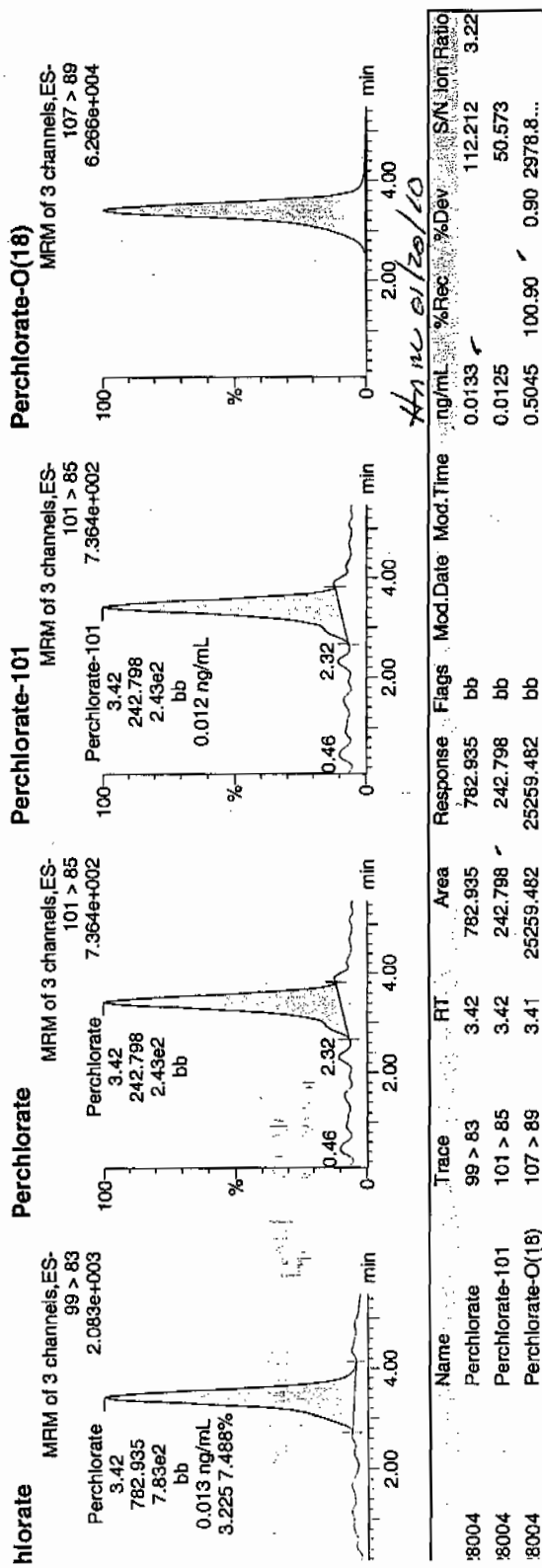
: 23:32:53

44128004

2:2,C

01-19-10

LANC 1940136 | 50120 | 11



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940133

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7633

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128005

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.596	2.38	0.809	ug/kg	J	1	19-JAN-10 00:07	per0118049a
	Perchlorate Isotope Ratio			2.93			1	19-JAN-10 00:07	per0118049a
14797-73-0	Perchlorate-101	.596	2.38	0.839	ug/kg	J	1	19-JAN-10 00:07	per0118049a
	Perchlorate-O(18)			6.21	ug/kg		1	19-JAN-10 00:07	per0118049a

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

*Concentration =

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

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

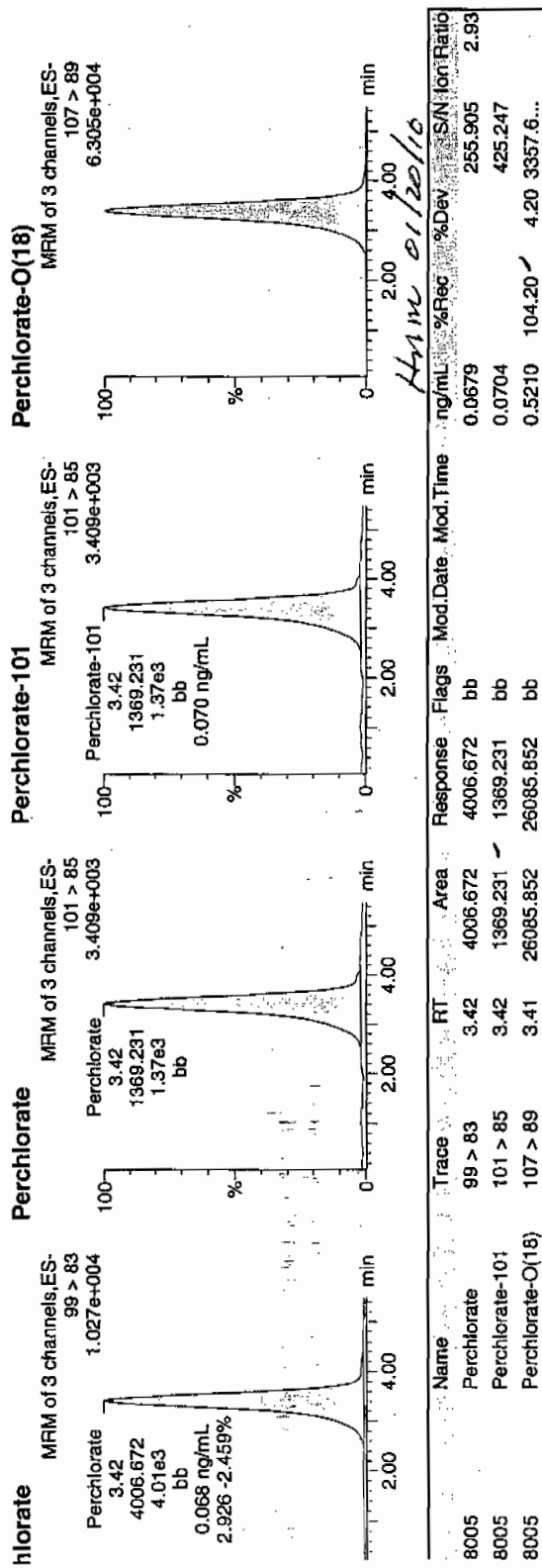
set: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
3d: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

e: per0118049a
: 19-Jan-2010
: 00:07:15
44128005
2:2,D

666
01-19-10

1292-194036 | 5025 | 11



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 940133
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7647
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128006
 Date Filtered: 14-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	2.42	0.604	ug/kg	U	1	19-JAN-10 00:15	per0118050a
	Perchlorate Isotope Ratio						1	19-JAN-10 00:15	per0118050a
14797-73-0	Perchlorate-101	.604	2.42	0.604	ug/kg	U	1	19-JAN-10 00:15	per0118050a
	Perchlorate-O(18)			6.11	ug/kg		1	19-JAN-10 00:15	per0118050a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
 Aliquot %Solids

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

set: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
ed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

ie: per0118050a

: 19-Jan-2010

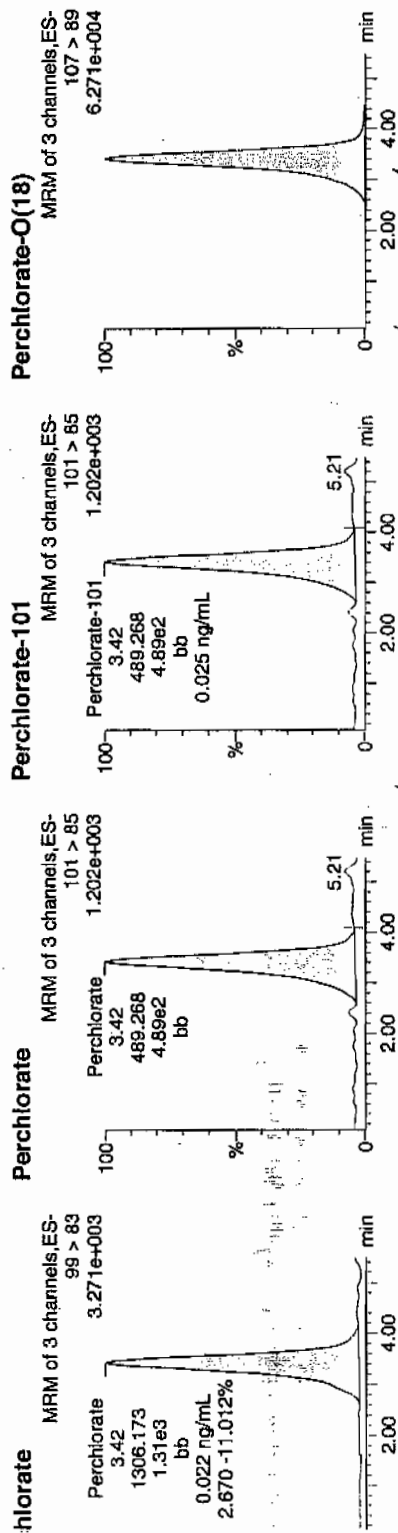
: 00:15:57

44128006

2:2,E

01-19-10

1440-194036 | 5020 | 11



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
28006	Perchlorate	99 > 83	3.42	1306.173	bb			0.0221			116.465	2.67
28006	Perchlorate-101	101 > 85	3.42	489.268	bb			0.0251			60.435	
28006	Perchlorate-O(18)	107 > 89	3.41	25313.871	bb			0.5056	101.12	1.12	3261.0...	

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: 240133

Extraction Type: Solid Prep

Client Sample No.

RE12-10-7644

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128007

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

%Solids: 90

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.555	2.22	0.555	ug/kg	U	1	19-JAN-10 00:24	per0118051a
	Perchlorate Isotope Ratio						1	19-JAN-10 00:24	per0118051a
14797-73-0	Perchlorate-101	.555	2.22	0.555	ug/kg	U	1	19-JAN-10 00:24	per0118051a
	Perchlorate-O(18)			5.70	ug/kg		1	19-JAN-10 00:24	per0118051a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

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

Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

Sample Name: per0118051a

Sample Date: 19-Jan-2010

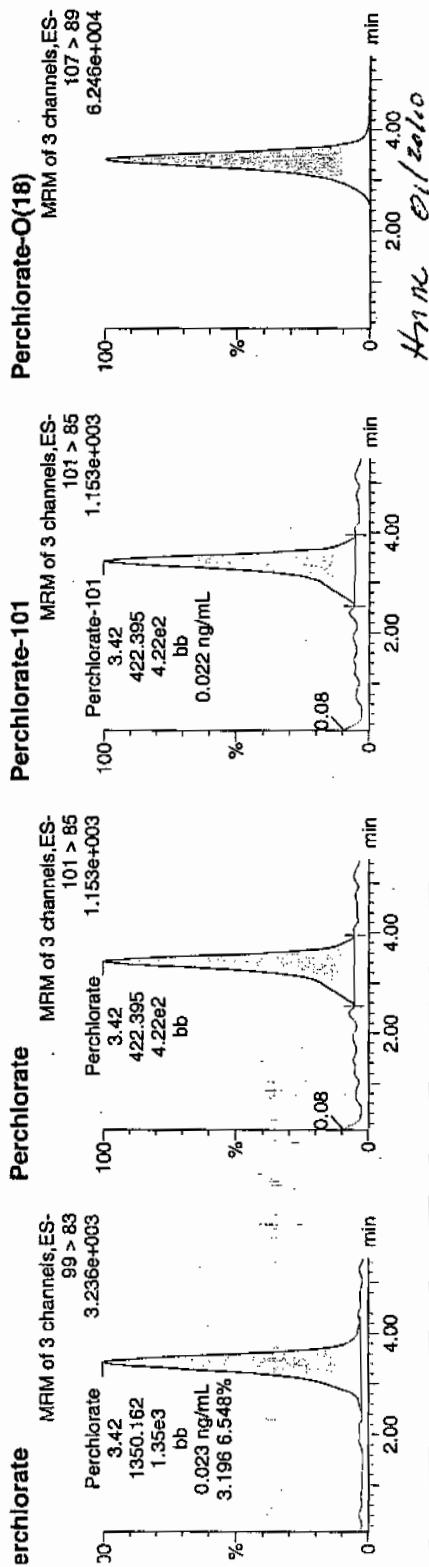
Sample Time: 00:24:28

Sample ID: 244128007

Sample Label: 2:2,F

01-19-10

LANC | 940136 | 5070 | 11



Name	Trace	RT	Area	Flags	Response	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
4128007	Perchlorate	99 > 83	3.42	1350.162	bb			0.0229	102.57	2.57	1879.9...	3.20
4128007	Perchlorate-101	101 > 85	3.42	422.395	bb			0.0217				
4128007	Perchlorate-O(18)	107 > 89	3.41	25677.152	bb			0.5129				

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940133

Extraction Type: Solid Prep

Client Sample No.

RE12-10-7637

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128008

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

%Solids: 90.3

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.554	2.22	0.554	ug/kg	U	1	19-JAN-10 00:32	per0118052a
	Perchlorate Isotope Ratio						1	19-JAN-10 00:32	per0118052a
14797-73-0	Perchlorate-101	.554	2.22	0.554	ug/kg	U	1	19-JAN-10 00:32	per0118052a
	Perchlorate-O(18)			5.66	ug/kg		1	19-JAN-10 00:32	per0118052a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

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

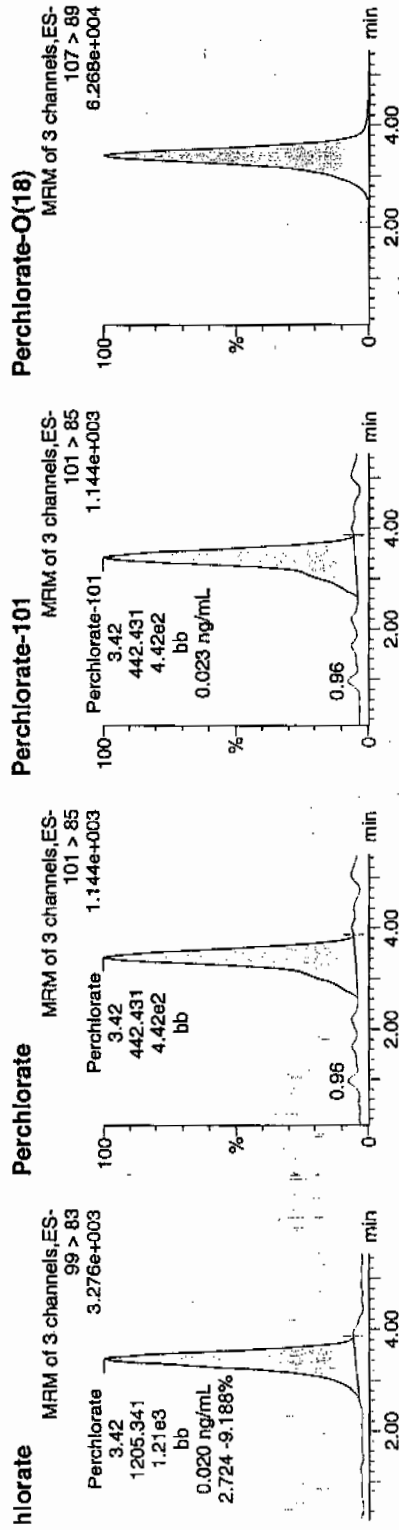
set: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
ed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

e: per0118052a
: 19-Jan-2010
: 00:32:58
44128008
2:3A

01-19-10

LANC | 940136 | 5070 | 11



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
8008	Perchlorate	3.42	1205.341	1205.341	bb			0.0204	0.0204		214.336	2.72
8008	Perchlorate-101	3.42	442.431	442.431	bb			0.0227	0.0227		51.287	
8008	Perchlorate-O(18)	3.41	25596.359	25596.359	bb			0.5112	102.25	2.25	5417.4	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 240133

Extraction Type: Solid Prep

Client Sample No.

RE12-10-7635

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128009

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

%Solids: 85

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.585	2.34	0.585	ug/kg	U	1	19-JAN-10 00:41	per0118053a
	Perchlorate Isotope Ratio						1	19-JAN-10 00:41	per0118053a
14797-73-0	Perchlorate-101	.585	2.34	0.585	ug/kg	U	1	19-JAN-10 00:41	per0118053a
	Perchlorate-O(18)			5.91	ug/kg		1	19-JAN-10 00:41	per0118053a

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

*Concentration =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

Sample Name: per0118053a

Sample Date: 19-Jan-2010

Time: 00:41:31

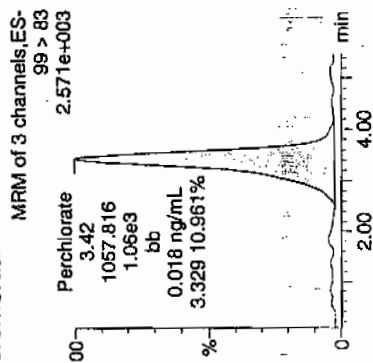
ID: 244128009

Label: 2:3,B

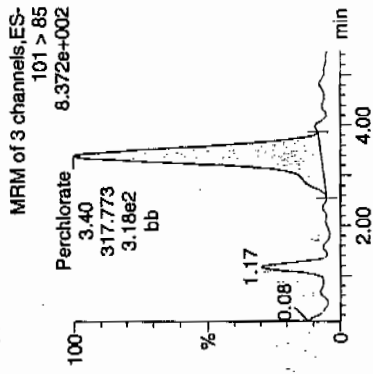
01-19-10

1940136 | 5020 | 11

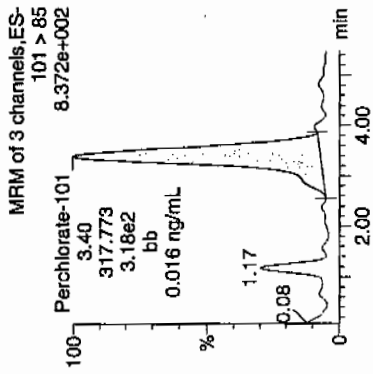
Perchlorate



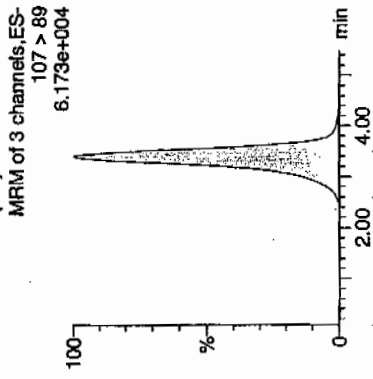
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
I4128009	Perchlorate	99 > 83	3.42	1057.816	bb			0.0179	79.905	3.33		
I4128009	Perchlorate-101	101 > 85	3.40	317.773	bb			0.0163	26.964			
4128009	Perchlorate-O(18)	107 > 89	3.40	25260.365	bb			0.5045	100.91	0.91	2559.4...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940133

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7642

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128010

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

%Solids: 82

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.564	2.26	0.564	ug/kg	U	1	19-JAN-10 00:50	per0118054a
	Perchlorate Isotope Ratio						1	19-JAN-10 00:50	per0118054a
14797-73-0	Perchlorate-101	.564	2.26	0.564	ug/kg	U	1	19-JAN-10 00:50	per0118054a
	Perchlorate-O(18)			5.58	ug/kg		1	19-JAN-10 00:50	per0118054a

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

*Concentration =

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

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

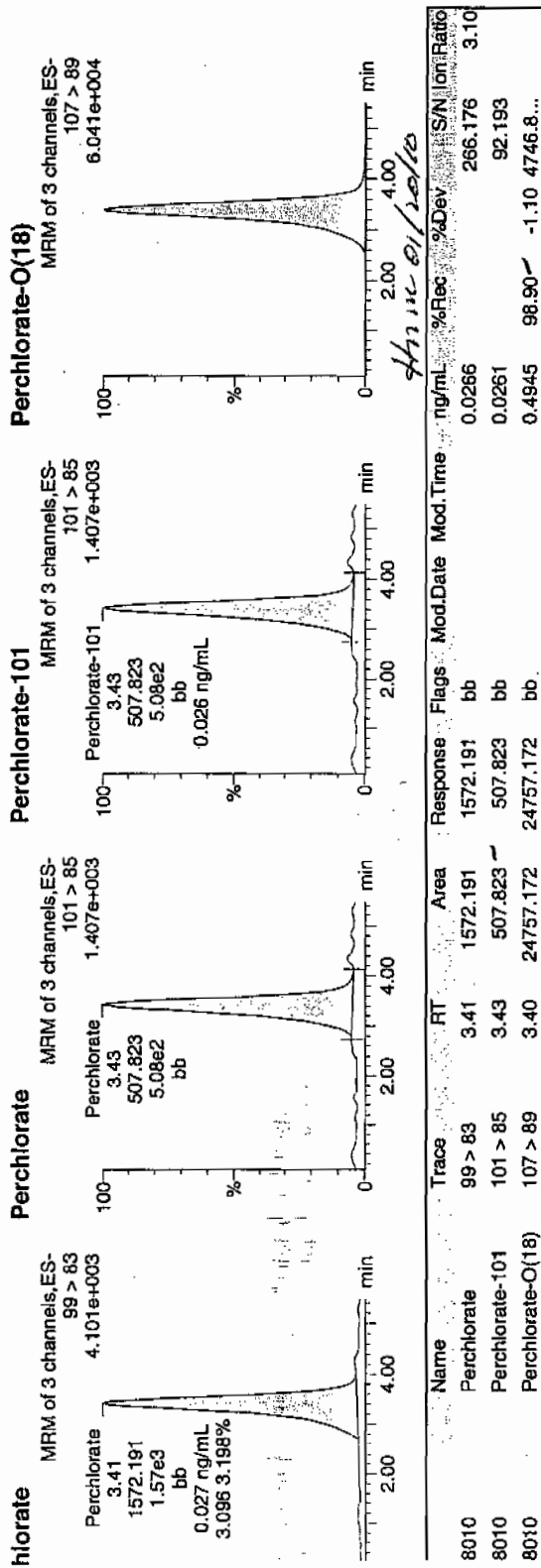
set: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
ed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

e: per0118054a
: 19-Jan-2010
: 00:50:12
44128010
2:3C

and
01-19-10

LANC 1940136 | 3020 | 11



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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940133

Extraction Type: Solid Prep

Client Sample No.

RE12-10-7649

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128011

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

%Solids: 78

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.641	2.56	0.641	ug/kg	U	1	19-JAN-10 00:58	per0118055a
	Perchlorate Isotope Ratio						1	19-JAN-10 00:58	per0118055a
14797-73-0	Perchlorate-101	.641	2.56	0.641	ug/kg	U	1	19-JAN-10 00:58	per0118055a
	Perchlorate-O(18)			7.08	ug/kg		1	19-JAN-10 00:58	per0118055a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

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

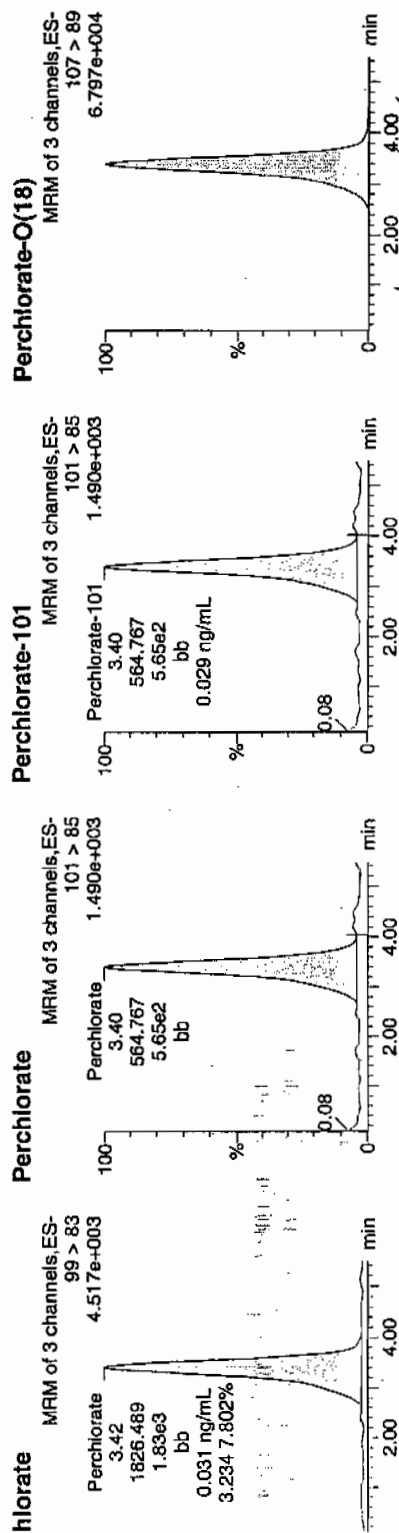
set: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
ed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

e: per0118055a
: 19-Jan-2010
: 00:58:44
44128011
2:3,D

01-19-10

LANC | 946136 | 5020 | 11



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
28011	Perchlorate	99 > 83	3.42	1826.489	bb			0.0310			28.411	3.23
28011	Perchlorate-101	101 > 85	3.40	564.767	bb			0.0290			97.380	
28011	Perchlorate-O(18)	107 > 89	3.40	27628.418	bb			0.5518	110.37	10.37	3551.0...	

Perchlorate Analysis Data Sheet

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

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 240133
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7650
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128012
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 %Solids: 87

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.575	2.3	0.645	ug/kg	J	1	19-JAN-10 01:07	per0118056a
	Perchlorate Isotope Ratio			3.05			1	19-JAN-10 01:07	per0118056a
14797-73-0	Perchlorate-101	.575	2.3	0.640	ug/kg	J	1	19-JAN-10 01:07	per0118056a
	Perchlorate-O(18)			6.11	ug/kg		1	19-JAN-10 01:07	per0118056a

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

*Concentration =

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

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

set: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
ed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

e: per0118056a

: 19-Jan-2010

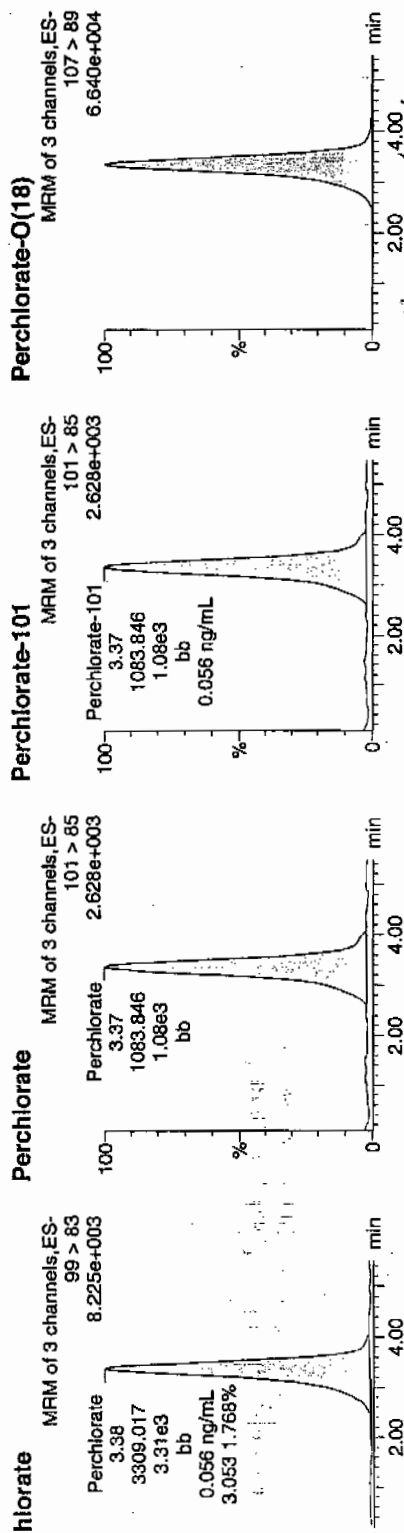
: 01:07:15

44128012

2:3,E

and
01-19-10

14900/940136/5020/11



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83	3.38	3309.017	3309.017	bb			0.0561			448.498	3.05
Perchlorate-101	101 > 85	3.37	1083.846	1083.846	bb			0.0557			135.156	
Perchlorate-O(18)	107 > 89	3.36	26604.813	26604.813	bb			0.5314	106.28	6.28	950.625	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
Lab Code: GEL
Instrument: LCMSMS
Method: SW846 6850 Modified
Matrix: SOIL
Extraction Batch ID: 240133
Extraction Type: Solid Prep
Client Sample No. RE12-10-7641
Date Received: 08-JAN-10
GEL Job No (SDG): 10-1132
GEL Sample ID: 244128013
Date Filtered: 14-JAN-10
Injection Volume (uL): 20
%Solids: 86

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.584	2.34	0.584	ug/kg	U	1	19-JAN-10 01:41	per0118060a
	Perchlorate Isotope Ratio						1	19-JAN-10 01:41	per0118060a
14797-73-0	Perchlorate-101	.584	2.34	0.584	ug/kg	U	1	19-JAN-10 01:41	per0118060a
	Perchlorate-O(18)			6.04	ug/kg		1	19-JAN-10 01:41	per0118060a

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

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

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

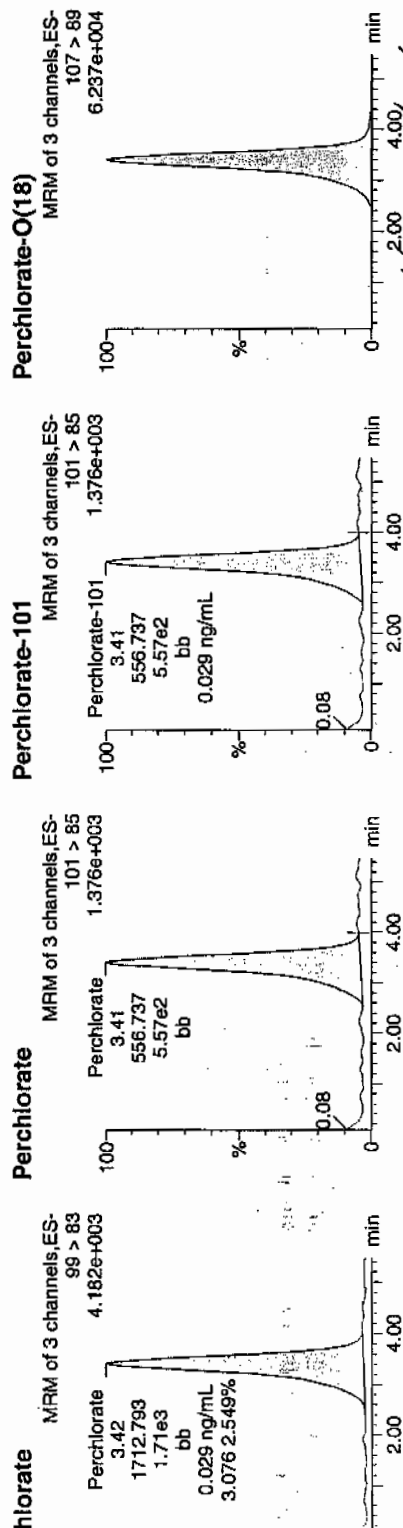
set: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
ed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

e: per0118060a
: 19-Jan-2010
x: 01:41:53
44128013
2:3,F

01-19-10

12426 | 940136 | 5020 | 11



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83	3.42	1712.793	1712.793	bb			0.0290			224.648	3.08
Perchlorate-101	101 > 85	3.41	556.737	556.737	bb			0.0286			18.348	
Perchlorate-O(18)	107 > 89	3.40	25871.500	25871.500	bb			0.5167	103.35	3.35	2404.3...	

Perchlorate Analysis Data Sheet

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

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 240133
 Extraction Type: Solid Prep
 Client Sample No. RE12-10-7643
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128014
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 %Solids: 84

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.597	2.39	0.597	ug/kg	U	1	19-JAN-10 01:50	per0118061a
	Perchlorate Isotope Ratio						1	19-JAN-10 01:50	per0118061a
14797-73-0	Perchlorate-101	.597	2.39	0.597	ug/kg	U	1	19-JAN-10 01:50	per0118061a
	Perchlorate-O(18)			6.05	ug/kg		1	19-JAN-10 01:50	per0118061a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
 Aliquot %Solids

Identify Sample Report MassLynx 4.0 SP4

GEL Group, LLC Analyst: Charles W. Wilson

set: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
 ed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

e: per0118061a

: 19-Jan-2010

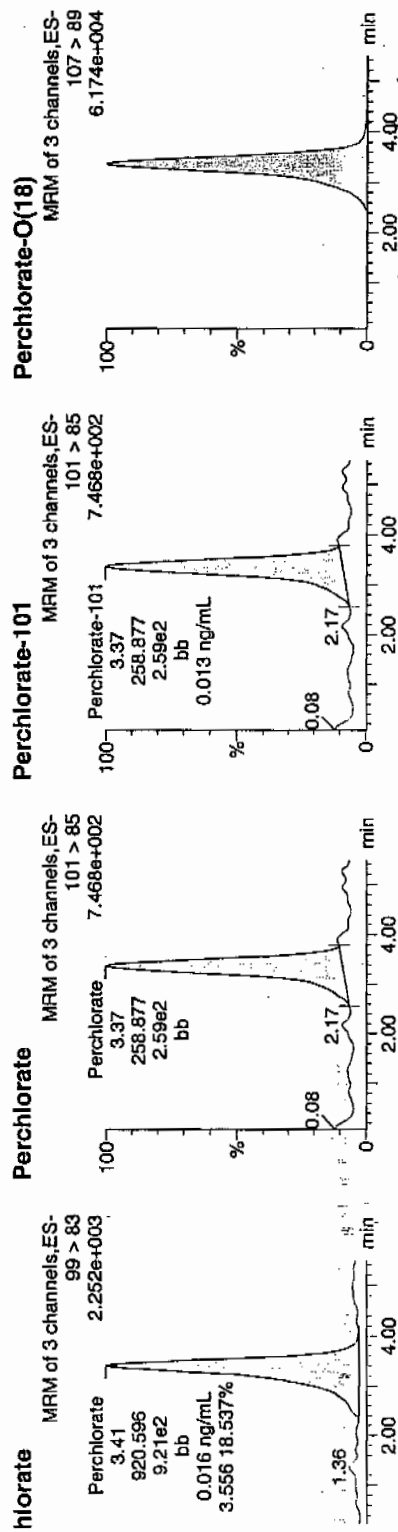
== 01:50:35

44128014

2:4,A

01-19-10

1922-1940136 | 50220 | 11



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	IS/N	Ion Ratio
8014	Perchlorate	99 > 83	3.41	920.596	920.596	bb		0.0156			93.515	3.56
8014	Perchlorate-101	101 > 85	3.37	258.877	258.877	bb		0.0133			125.559	
8014	Perchlorate-O(18)	107 > 89	3.37	25367.531	25367.531	bb		0.5067	101.34	1.34	7264.5...	

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: 240133
 Extraction Type: Solid Prep
 Client Sample No.: RE12-10-7640
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128015
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 %Solids: 92.4

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.541	2.17	0.541	ug/kg	U	1	19-JAN-10 01:59	per0118062a
	Perchlorate Isotope Ratio						1	19-JAN-10 01:59	per0118062a
14797-73-0	Perchlorate-101	.541	2.17	0.541	ug/kg	U	1	19-JAN-10 01:59	per0118062a
	Perchlorate-O(18)			5.55	ug/kg		1	19-JAN-10 01:59	per0118062a

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

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

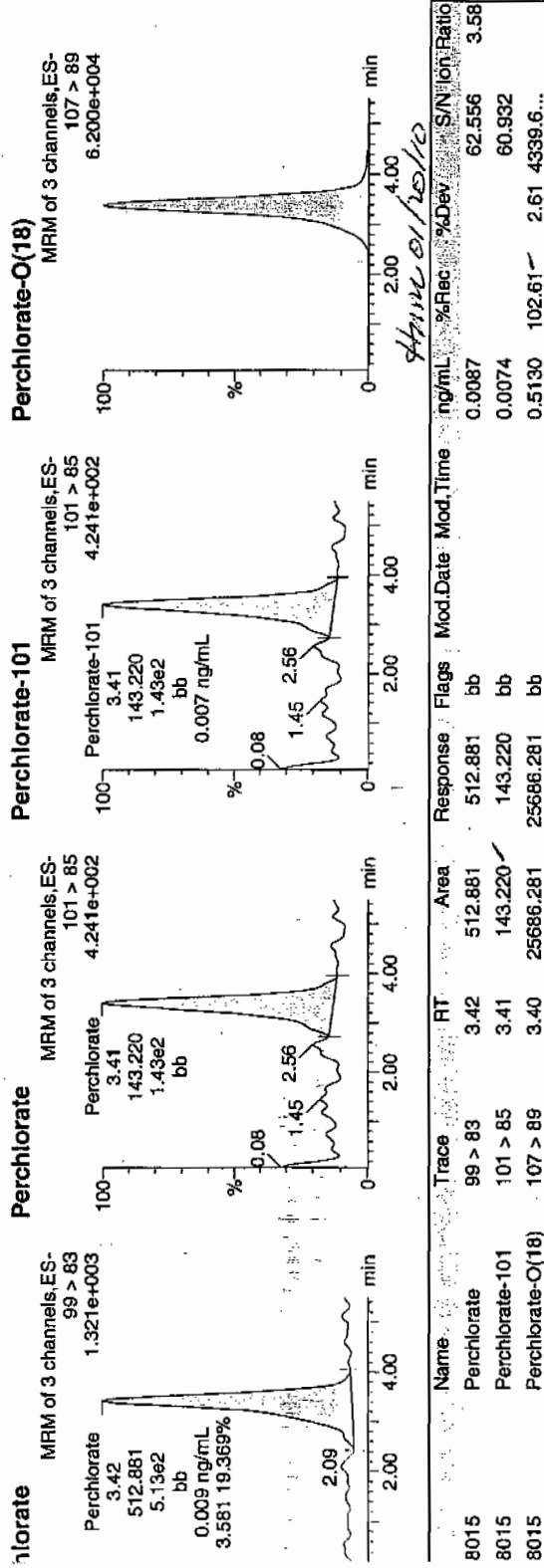
Identify Sample Report MassLynx 4.0 SP4
 GEL Group, LLC Analyst: Charters W. Wilson

set: C:\MassLynx\Perchlorate.PRO\per011810a.qid

Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
 ad: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

a: per0118062a
 : 19-Jan-2010
 : 01:59:09
 44128015
 2:4,B

1920-194030 / 5000 / 11
 01-19-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
8015	Perchlorate	3.42	512.881	512.881	bb			0.0087	62.556	3.58		
8015	Perchlorate-101	3.41	143.220	143.220	bb			0.0074	60.932			
8015	Perchlorate-O(18)	3.40	25686.281	25686.281	bb			0.5130	102.61	2.61	4339.6...	

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC Client Sample No. RE12-10-7645

Lab Code: GEL Date Received: 08-JAN-10

Instrument: LCMSMS GEL Job No (SDG): 10-1132

Method: SW846 6850 Modified GEL Sample ID: 244128016

Matrix: SOIL Date Filtered: 14-JAN-10

Extraction Batch ID: 240133 Injection Volume (uL): 20

Extraction Type: Solid Prep %Solids: 90

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.558	2.23	0.558	ug/kg	U	1	19-JAN-10 02:07	per0118063a
	Perchlorate Isotope Ratio						1	19-JAN-10 02:07	per0118063a
14797-73-0	Perchlorate-101	.558	2.23	0.558	ug/kg	U	1	19-JAN-10 02:07	per0118063a
	Perchlorate-O(18)			5.61	ug/kg		1	19-JAN-10 02:07	per0118063a

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

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

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

set: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
3d: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

e: per0118063a

: 19-Jan-2010

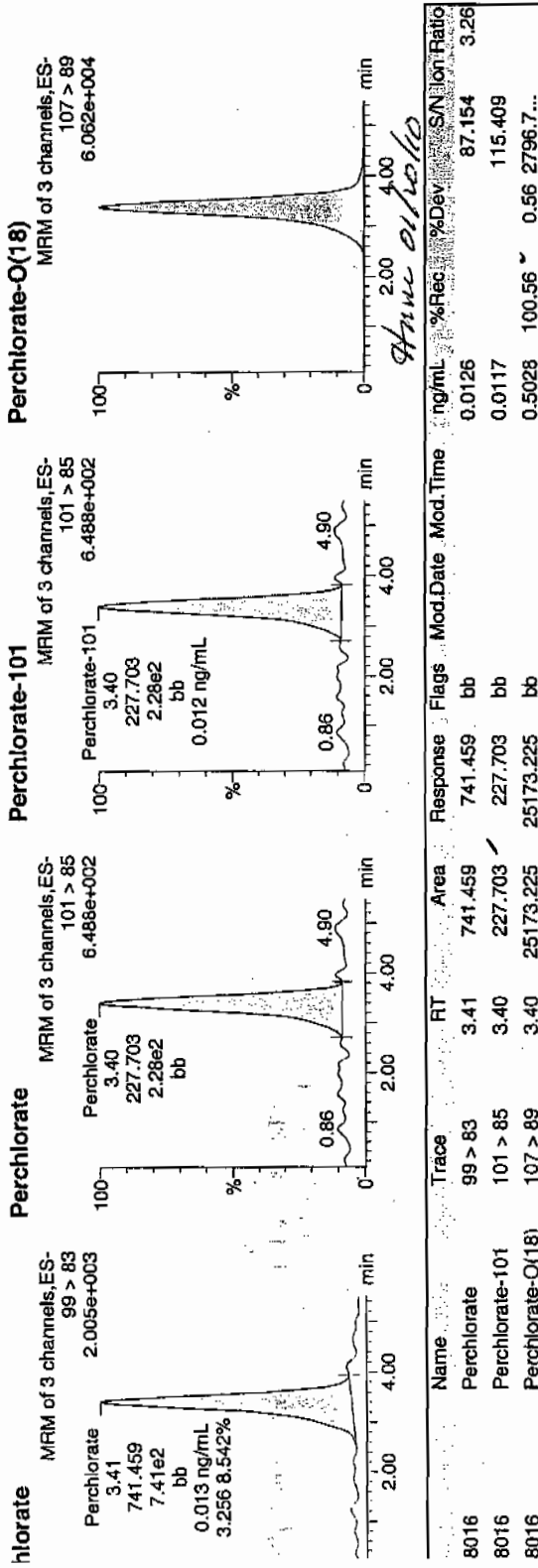
: 02:07:41

44128016

2:4,C

01-19-10

LANC 94036 5020 11



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940133

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7646

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128017

Date Filtered: 14-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	19-JAN-10 02:16	per0118064a
	Perchlorate Isotope Ratio						1	19-JAN-10 02:16	per0118064a
14797-73-0	Perchlorate-101	.559	2.24	0.559	ug/kg	U	1	19-JAN-10 02:16	per0118064a
	Perchlorate-O(18)			5.51	ug/kg		1	19-JAN-10 02:16	per0118064a

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

*Concentration =

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

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

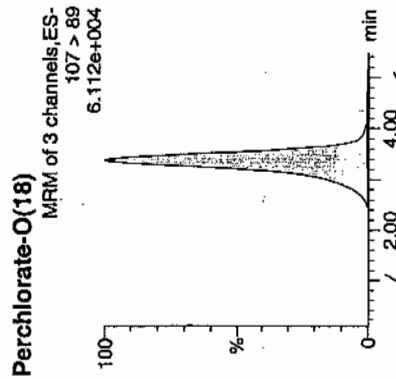
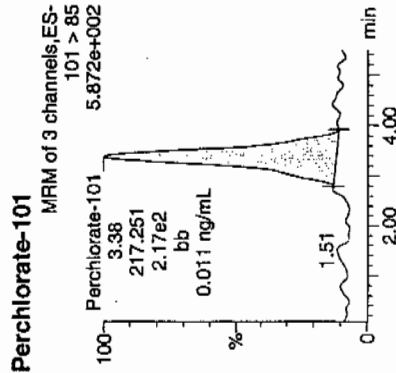
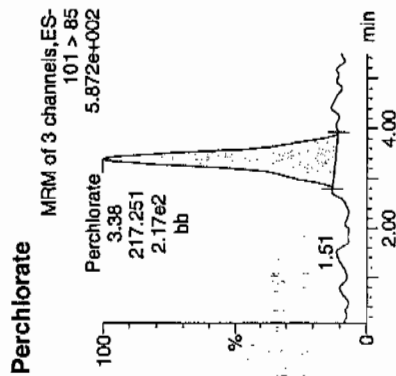
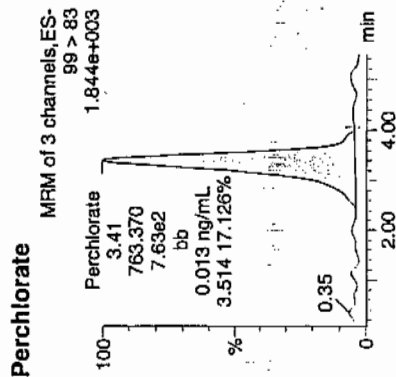
Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

Name: per0118064a
Date: 19-Jan-2010
Time: 02:16:14
ID: 244128017
Vial: 2:4,D

01-19-10

1.844e+003



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
244128017	Perchlorate	99 > 83	3.41	763.370	763.370	bb			0.0129			124.514	3.51
244128017	Perchlorate-101	101 > 85	3.38	217.251	217.251	bb			0.0112			9.208	
244128017	Perchlorate-O(18)	107 > 89	3.38	24688.043	24688.043	bb			0.4931	98.62	-1.38	333.425	

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: 940133
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7636
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128018
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 %Solids: 90.2

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.554	2.22	0.554	ug/kg	U	1	19-JAN-10 02:24	per0118065a
	Perchlorate Isotope Ratio						1	19-JAN-10 02:24	per0118065a
14797-73-0	Perchlorate-101	.554	2.22	0.554	ug/kg	U	1	19-JAN-10 02:24	per0118065a
	Perchlorate-O(18)			5.59	ug/kg		1	19-JAN-10 02:24	per0118065a

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

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

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

File: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Acquired: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Processed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

File: per0118065a

Date: 19-Jan-2010

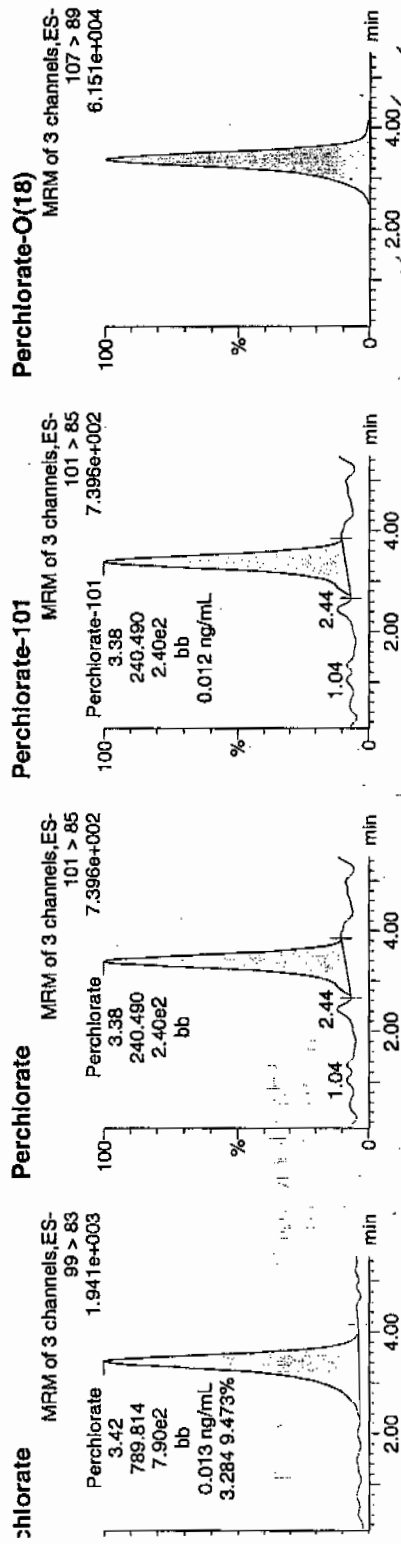
Time: 02:24:47

Sample: 244128018

Conc: 2.4, E

WMS
01-19-10

LANC 194036 | 5020 | 11



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
28018	Perchlorate	99 > 83	3.42	789.814	bb			0.0134	107.054	107.054	81.897	3.28
28018	Perchlorate-101	101 > 85	3.38	240.490	bb			0.0124	100.85	100.85	4926.8...	
28018	Perchlorate-O(18)	107 > 89	3.37	25245.320	bb			0.5042				

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 240133

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7657

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 244128019

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.556	2.23	0.556	ug/kg	U	1	19-JAN-10 02:33	per0118066a
	Perchlorate Isotope Ratio						1	19-JAN-10 02:33	per0118066a
14797-73-0	Perchlorate-101	.556	2.23	0.556	ug/kg	U	1	19-JAN-10 02:33	per0118066a
	Perchlorate-O(18)			5.62	ug/kg		1	19-JAN-10 02:33	per0118066a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Intify Sample Report MassLynx 4.0 SP4

GEL Group, LLC Analyst: Charlers W. Wilson

aset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
ted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

re: per0118066a

3: 19-Jan-2010

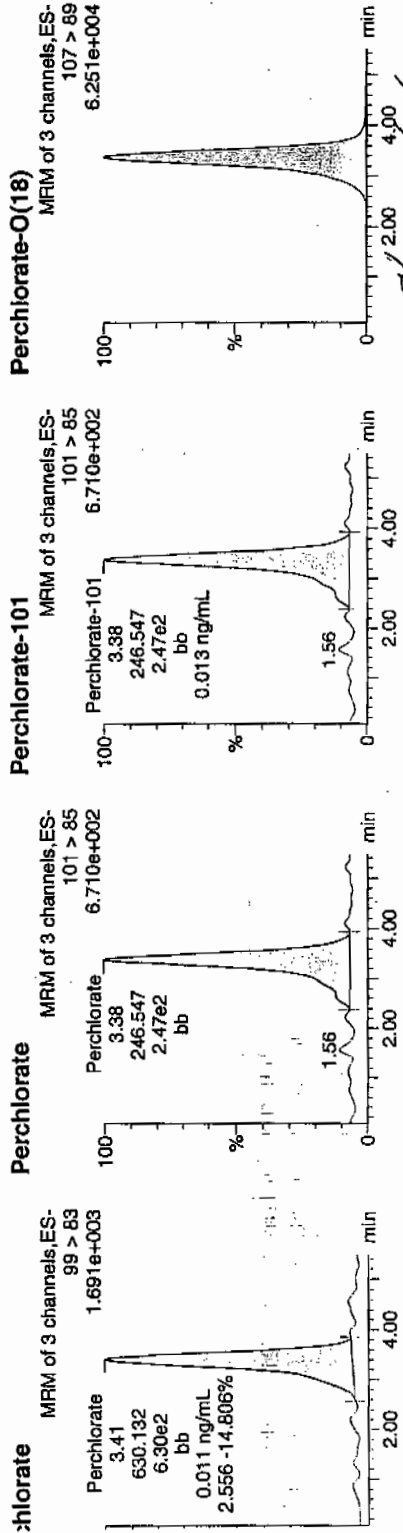
e: 02:33:18

244128019

: 2:4,F

01-19-10

12702 1940136 3000 11



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
28019	Perchlorate	99 > 83	3.41	630.132	bb			0.0107			70.206	2.56
28019	Perchlorate-101	101 > 85	3.38	246.547	bb			0.0127			82.303	
28019	Perchlorate-O(18)	107 > 89	3.38	25289.387	bb			0.5051	101.02	1.02	3214.2...	

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: 940133
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7658
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 244128020
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 % Solids: 90

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.558	2.23	0.558	ug/kg	U	1	19-JAN-10 02:41	per0118067a
	Perchlorate Isotope Ratio						1	19-JAN-10 02:41	per0118067a
14797-73-0	Perchlorate-101	.558	2.23	0.558	ug/kg	U	1	19-JAN-10 02:41	per0118067a
	Perchlorate-O(18)			5.69	ug/kg		1	19-JAN-10 02:41	per0118067a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 % Solids
 Aliquot

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

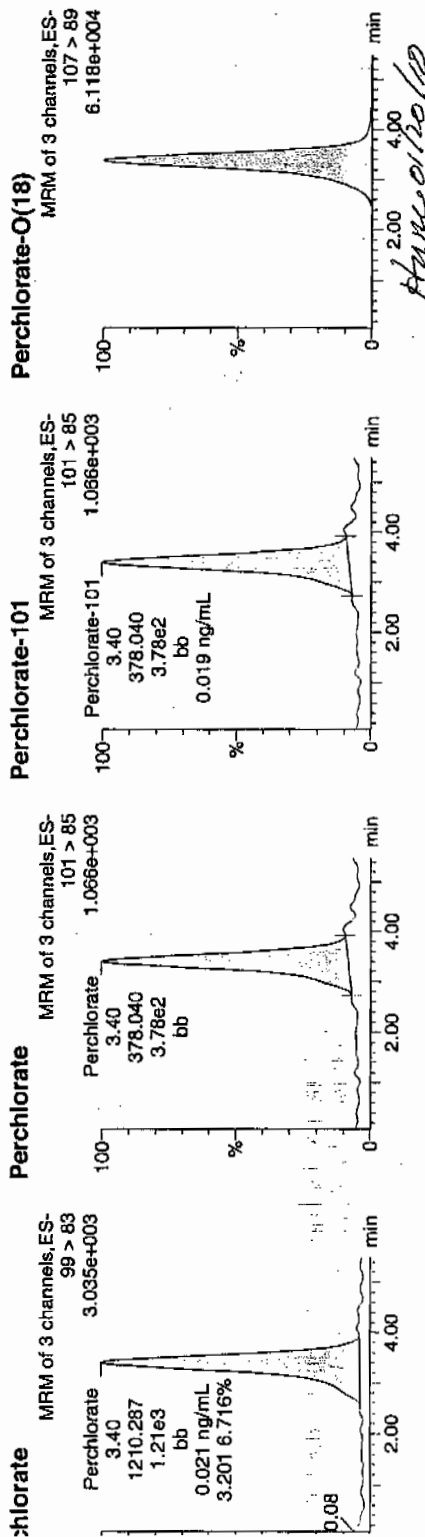
aset: C:\MassLynx\Perchlorate.PRO\per011810a.qtd

Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
ted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

ne: per0118067a
s: 19-Jan-2010
e: 02:41:50
244128020
: 2:5,A

Q1-19-10

LANE 94036 / 5070 (1)



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
28020 Perchlorate	99 > 83	3.40	1210.287	1210.287	bb			0.0205			108.125	3.20
28020 Perchlorate-101	101 > 85	3.40	378.040	378.040	bb			0.0194			40.245	
28020 Perchlorate-O(18)	107 > 89	3.38	25497.209	25497.209	bb			0.5093	101.85	1.85	4365.0...	

STANDARDS DATA

Perchlorate Initial Calibration

GEL Job No.(SDG): 10-1132

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 18-JAN-10

HP/LC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

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

Parname Perchlorate

Coefficient of Determination:

Calibration Curve: 59004.7

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1132

Lab Code: GEL

Instrument ID: LCM SMS Date Analyzed: 18-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

Paramname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 19454.42

Response Type: External Standard

Curve Type: RF

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

set: C:\MassLynx\Perchlorate.PRO\per011810a.qid

Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
ed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

od: C:\MassLynx\Perchlorate.PRO\MethDB\per011810a.mdb 19 Jan 2010 07:54:21
bration: C:\MassLynx\Perchlorate.PRO\CurveDB\per011810a.cdb 19 Jan 2010 07:54:38

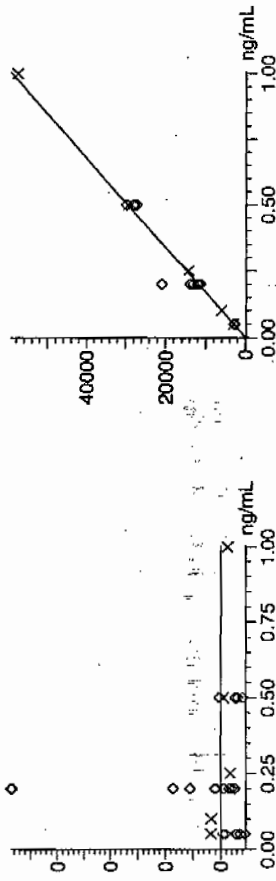
ipound name: Perchlorate

onse Factor: 59004.7

SD: 1951.42, % Relative SD: 3.30723

onse type: External Std, Area

e type: RF



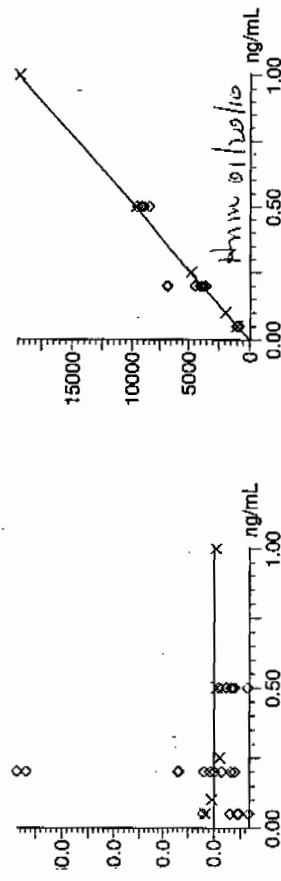
pound name: Perchlorate-101

onse Factor: 19454.4

SD: 414.837, % Relative SD: 2.13235

onse type: External Std, Area

e type: RF



ntify Calibration Report MassLynx 4.0 SP4

GEL Group, LLC Analyst: Charlers W. Wilson

iset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
led: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

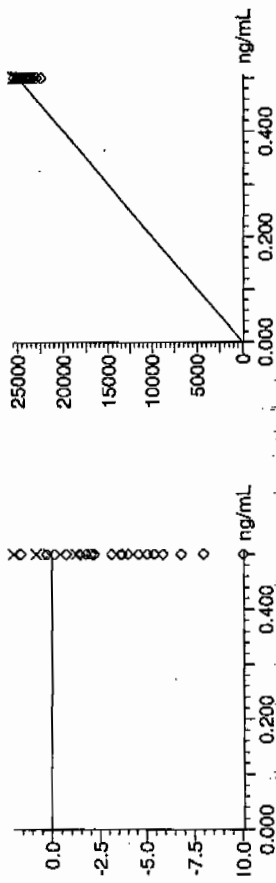
ipound name: Perchlorate-O(18)

onse Factor: 50066.7

SD: 749.985, % Relative SD: 1.49797

onse type: External Std, Area

re type: RF



Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1132

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	100.43	18-JAN-10 18:23	per0118009a
Perchlorate Isotope Ratio		3.11		18-JAN-10 18:23	per0118009a
Perchlorate-101	.5	.49	98.08	18-JAN-10 18:23	per0118009a

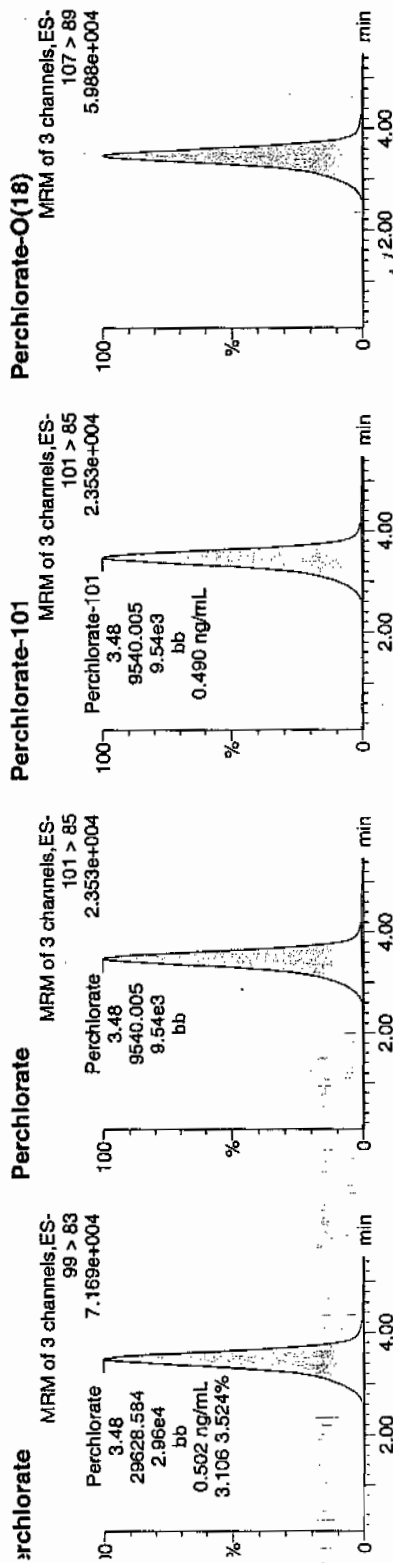
uantify Sample Report MassLynx 4.0 SP4
 re GEL Group, LLC Analyst: Charlers W. Wilson

atasset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

ast Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
 inted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

ame: per0118009a
 ate: 18-Jan-2010
 me: 18:23:55
 : WCL100118-06ICV
 al: 1:2,A

Pass
 CWD
 01-19-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100118-06ICV	99 > 83	3.48	29628.584	29628.584	bb			0.5021	100.43	0.43	5754.5...	3.11
CL100118-06ICV	101 > 85	3.48	9540.005	9540.005	bb			0.4904	98.08	-1.92	755.962	
CL100118-06ICV	107 > 89	3.47	24516.842	24516.842	bb			0.4897	97.94	-2.06	2610.1...	

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1132

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.47	93.83	18-JAN-10 20:06	per0118021a
Perchlorate Isotope Ratio		3.04		18-JAN-10 20:06	per0118021a
Perchlorate-101	.5	.47	93.61	18-JAN-10 20:06	per0118021a
Perchlorate	.5	.46	91.93	18-JAN-10 21:58	per0118034a
Perchlorate Isotope Ratio		3.2		18-JAN-10 21:58	per0118034a
Perchlorate-101	.5	.44	87.18	18-JAN-10 21:58	per0118034a
Perchlorate	.5	.47	93.77	18-JAN-10 23:41	per0118046a
Perchlorate Isotope Ratio		3.09		18-JAN-10 23:41	per0118046a
Perchlorate-101	.5	.46	92.09	18-JAN-10 23:41	per0118046a
Perchlorate	.5	.47	94.69	19-JAN-10 01:15	per0118057a
Perchlorate Isotope Ratio		3.01		19-JAN-10 01:15	per0118057a
Perchlorate-101	.5	.48	95.29	19-JAN-10 01:15	per0118057a
Perchlorate	.5	.47	94.87	19-JAN-10 02:50	per0118068a

Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1132

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate Isotope Ratio		3.1		19-JAN-10 02:50	per0118068a
Perchlorate-101	.5	.46	92.88	19-JAN-10 02:50	per0118068a

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

set: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
ed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

ie: per0118021a

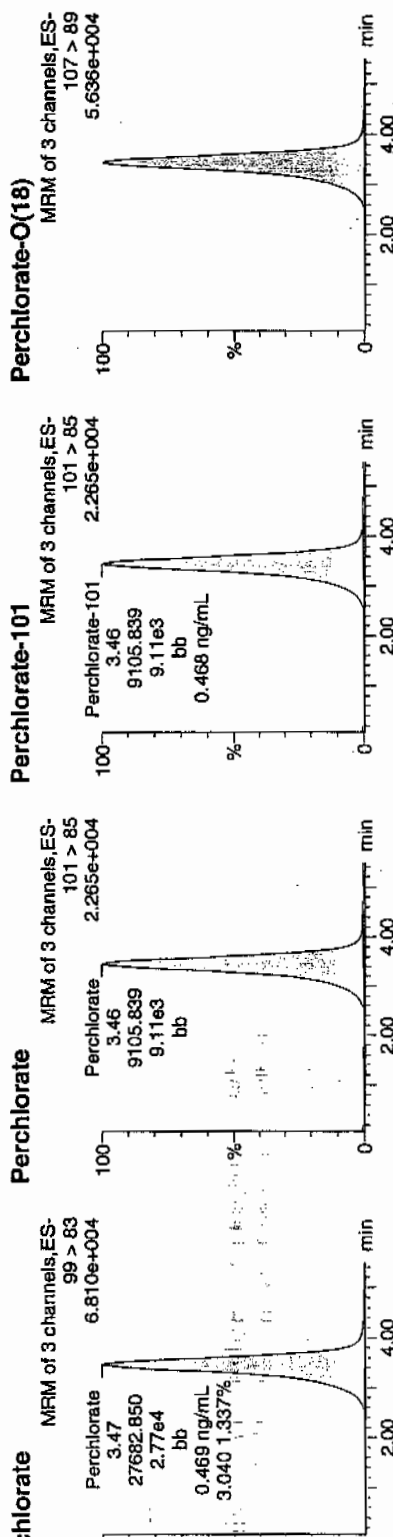
: 18-Jan-2010

9: 20:06:46

WCL100118-06CCV

1:2,A

Pass
CWS
01-19-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
100118-06CCV	Perchlorate	3.47	27682.850	27682.850	bb			0.4692	93.83	-6.17	6142.8...	3.04
100118-06CCV	Perchlorate-101	3.46	9105.839	9105.839	bb			0.4681	93.61	-6.39	1064.3...	
100118-06CCV	Perchlorate-O(18)	3.45	23031.451	23031.451	bb			0.4600	92.00	-8.00	2025.9...	

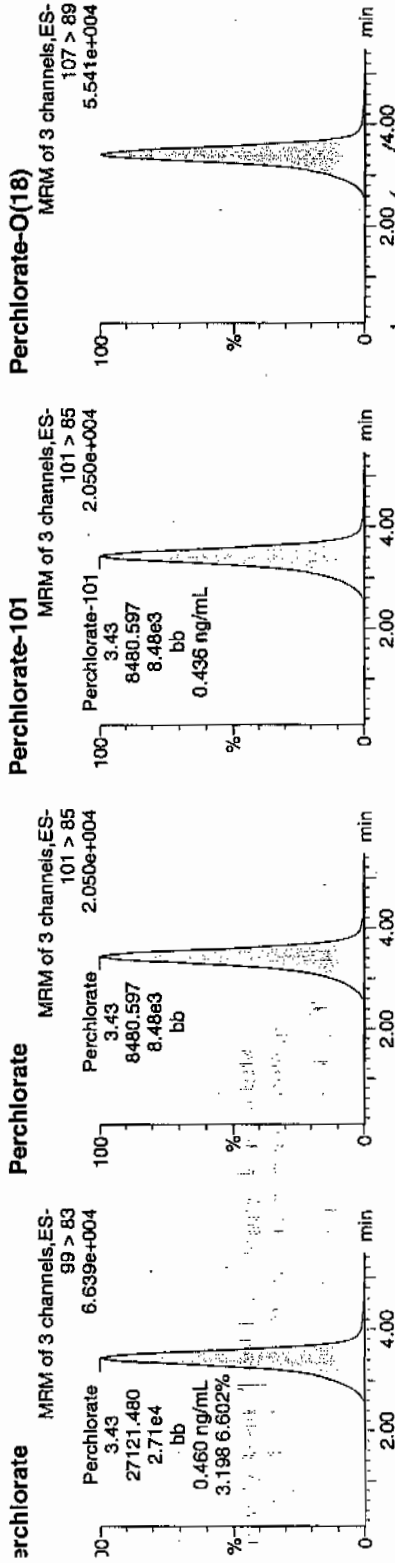
uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

atset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

st Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
rinted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

ame: per0118034a
ate: 18-Jan-2010
ime: 21:58:13
i: WCL100118-06CCV
ial: 1:2,A

Per
Ow
01-19-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
CL100118-06CCV	Perchlorate	99 > 83	3.43	27121.480	bb			0.4596	91.93	-8.07	546.057	3.20
CL100118-06CCV	Perchlorate-101	101 > 85	3.43	8480.597	bb			0.4359	87.18	-12.82	2521.5...	
CL100118-06CCV	Perchlorate-O(18)	107 > 89	3.41	22518.350	bb			0.4498	89.95	-10.05	6237.6...	

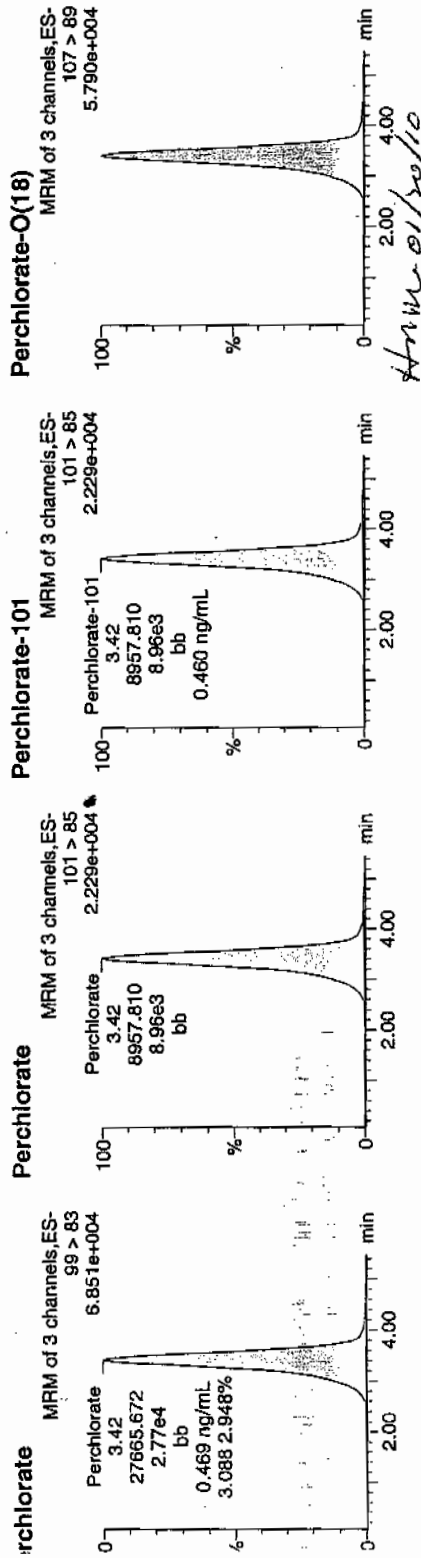
Identify Sample Report MassLynx 4.0 SP4
 GE Group, LLC Analyst: Charters W. Wilson

Fileset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Sample: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
 Date: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

File: per0118046a
 Date: 18-Jan-2010
 Time: 23:41:24
 File: WCL100118-06CCV
 Ali: 1:2,A

*Perchlorate
 01-19-10*



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
XL100118-06CCV	Perchlorate	99 > 83	27665.672	27665.672	bb			0.4689	93.77	-6.23	1009.9...	3.09
XL100118-06CCV	Perchlorate-101	101 > 85	8957.810	8957.810	bb			0.4605	92.09	-7.91	686.190	
XL100118-06CCV	Perchlorate-O(18)	107 > 89	23769.430	23769.430	bb			0.4748	94.95	-5.05	4578.3...	

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

Asset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
ted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

ne: per0118057a

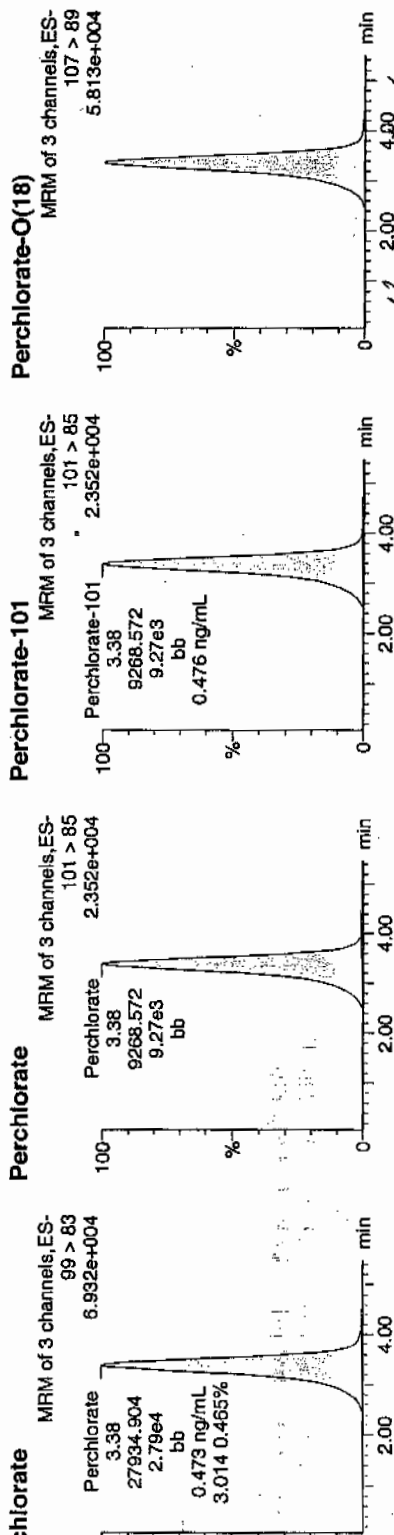
a: 19-Jan-2010

e: 01:15:47

WCL100118-06CCV

: 1:2,A

Pass
and
01-19-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
100118-06CCV	Perchlorate	3.38	27934.904	27934.904	bb			0.4734	94.69	-5.31	3971.9...	3.01
100118-06CCV	Perchlorate-101	3.38	9268.572	9268.572	bb			0.4764	95.29	-4.71	1811.0...	
100118-06CCV	Perchlorate-O(18)	3.37	23671.105	23671.105	bb			0.4728	94.56	-5.44	3243.3...	

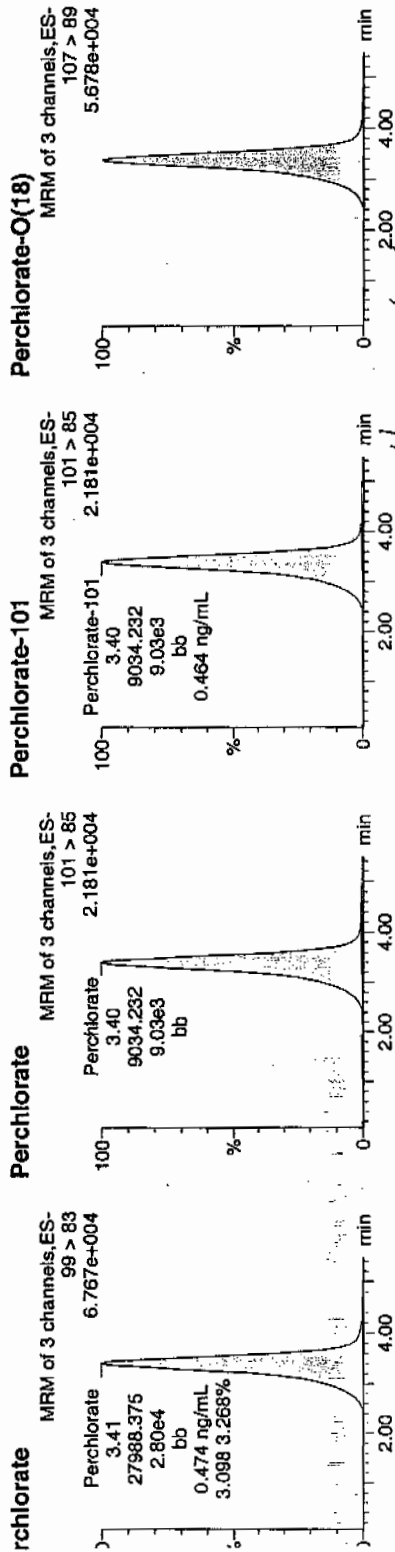
Identify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Sample Name: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Sample Date: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

File: per0118068a
Date: 19-Jan-2010
Time: 02:50:32
WCL100118-06CCV
IL: 1:2,A

Pass
and
01-19-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
L100118-06CCV	Perchlorate	3.41	27988.375	27988.375	bb			0.4743	94.87	-5.13	3287.3...	3.10
L100118-06CCV	Perchlorate-101	3.40	9034.232	9034.232	bb			0.4644	92.88	-7.12	1031.0...	
L100118-06CCV	Perchlorate-O(18)	3.38	23681.799	23681.799	bb			0.4730	94.80	-5.40	2585.0...	

Perchlorate MDL Verification

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

GEL Job No.(SDG): 10-1132

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	99.3	18-JAN-10 18:41	per0118011a
Perchlorate Isotope Ratio		2.89		18-JAN-10 18:41	per0118011a
Perchlorate-101	.05	.05	104.26	18-JAN-10 18:41	per0118011a
Perchlorate	.05	.05	98.29	18-JAN-10 20:23	per0118023a
Perchlorate Isotope Ratio		3.3		18-JAN-10 20:23	per0118023a
Perchlorate-101	.05	.05	90.43	18-JAN-10 20:23	per0118023a
Perchlorate	.05	.05	94.16	18-JAN-10 22:15	per0118036a
Perchlorate Isotope Ratio		3.13		18-JAN-10 22:15	per0118036a
Perchlorate-101	.05	.05	91.22	18-JAN-10 22:15	per0118036a
Perchlorate	.05	.05	92.89	18-JAN-10 23:58	per0118048a
Perchlorate Isotope Ratio		3.09		18-JAN-10 23:58	per0118048a

Perchlorate MDL Verification

GEL Job No.(SDG): 10-1132

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate-101	.05	.05	91.09	18-JAN-10 23:58	per0118048a
Perchlorate	.05	.05	94.52	19-JAN-10 01:33	per0118059a
Perchlorate Isotope Ratio		3.06		19-JAN-10 01:33	per0118059a
Perchlorate-101	.05	.05	93.76	19-JAN-10 01:33	per0118059a
Perchlorate	.05	.05	91.12	19-JAN-10 03:07	per0118070a
Perchlorate Isotope Ratio		3.18		19-JAN-10 03:07	per0118070a
Perchlorate-101	.05	.04	86.79	19-JAN-10 03:07	per0118070a

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

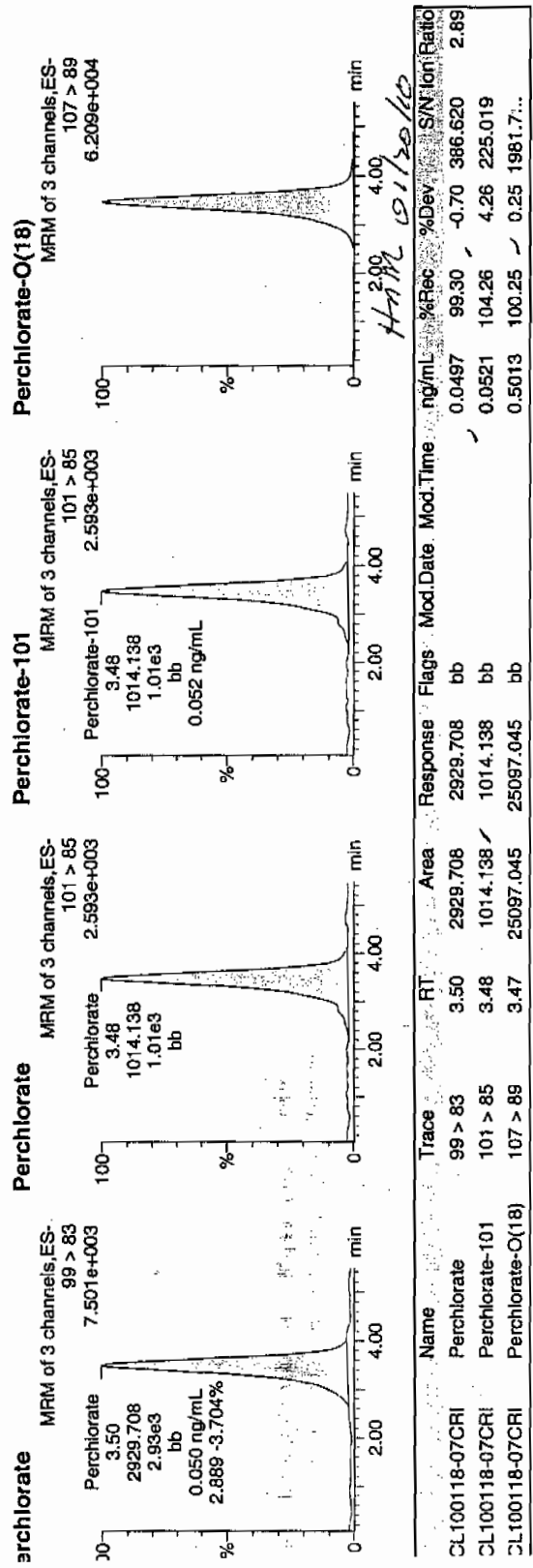
Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
 Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

Sample Name: per0118011a
 Date: 18-Jan-2010
 Time: 18:41:15
 File: WCL100118-07CRI
 Label: 1:2,B

PASS

CWJ
 01-19-10



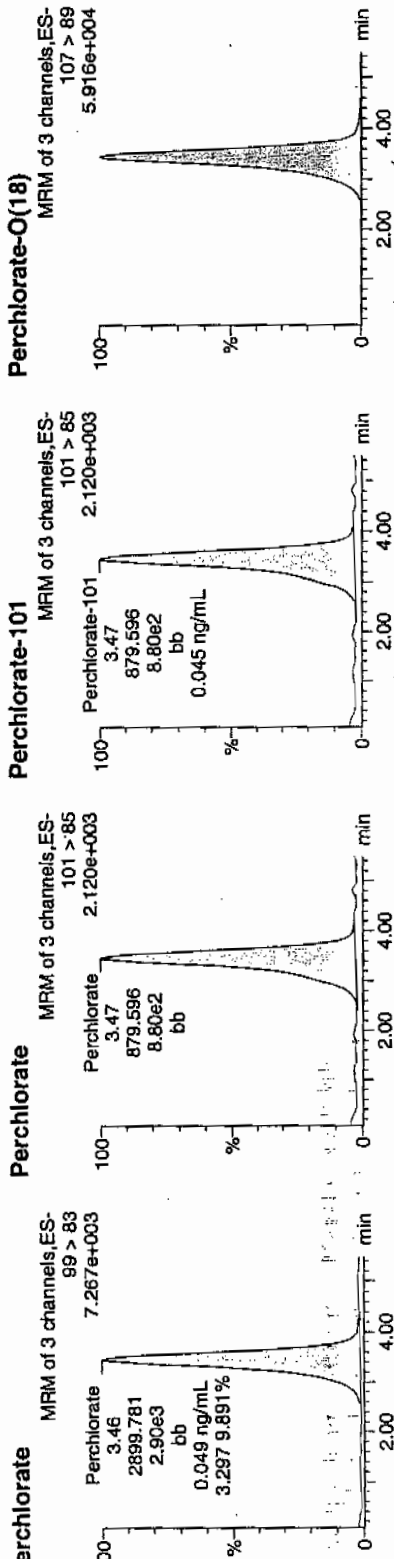
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

Sample Name: per0118023a
Date: 18-Jan-2010
Time: 20:23:59
Job: WCL100118-07CRI
File: 1:2,B

Perp
and
01-19-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100118-07CRI	Perchlorate	3.46	2899.781	2899.781	bb			0.0491	98.29	-1.71	512.658	3.30
CL100118-07CRI	Perchlorate-101	3.47	879.596	879.596	bb			0.0452	90.43	-9.57	137.741	
CL100118-07CRI	Perchlorate-O(18)	3.45	24250.887	24250.887	bb			0.4844	96.87	-3.13	1435.0...	

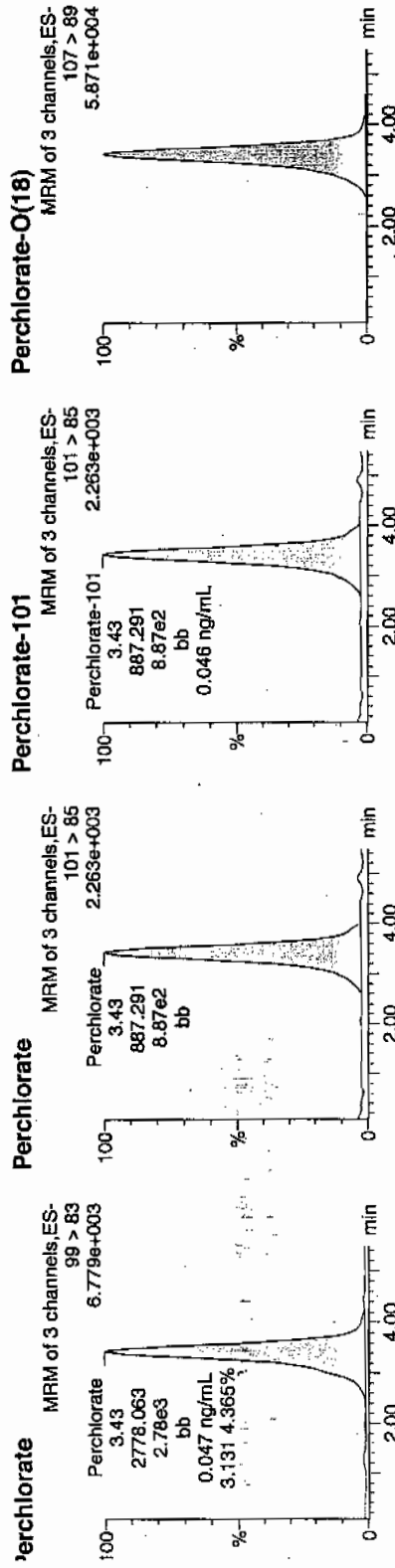
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

Name: per0118036a
Date: 18-Jan-2010
Time: 22:15:34
D: WCL100118-07CRI
Vial: 1:2,B

Pass
Q1-19-10



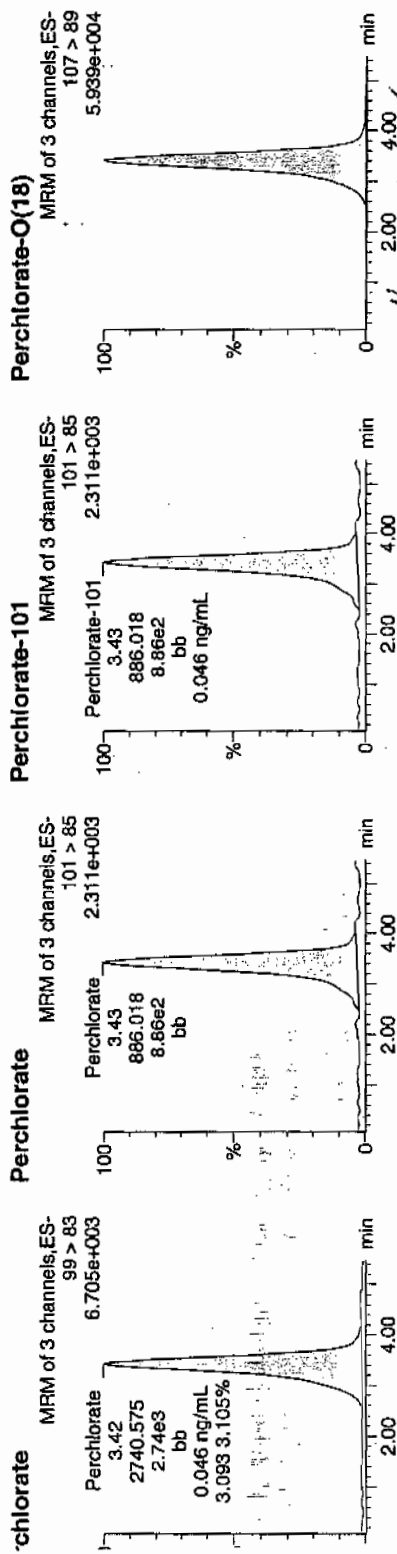
D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
VCL100118-07CRI	Perchlorate	99 > 83	3.43	2778.063	2778.063	bb			0.0471	94.16	-5.84	482.859	3.13
VCL100118-07CRI	Perchlorate-101	101 > 85	3.43	887.291	887.291	bb			0.0456	91.22	-8.78	29.944	
VCL100118-07CRI	Perchlorate-O(18)	107 > 89	3.42	23562.180	23562.180	bb			0.4706	94.12	-5.88	2086.9...	

Identify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charles W. Wilson

File: C:\MassLynx\Perchlorate.PRO\per011810a.qid

Sample Name: per0118048a
Date: 18-Jan-2010
Time: 23:58:43
File: WCL100118-07CRI
L: 1:2,B

Per
and
01-19-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
L100118-07CRI	Perchlorate	99 > 83	3.42	2740.575	bb			0.0464	92.89	-7.11	292.522	3.09
L100118-07CRI	Perchlorate-101	101 > 85	3.43	886.018	bb			0.0455	91.09	-8.91	893.086	
L100118-07CRI	Perchlorate-O(18)	107 > 89	3.41	24106.148	bb			0.4815	96.30	-3.70	2875.5...	

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

File: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Acquired: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Processed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

Sample: per0118059a

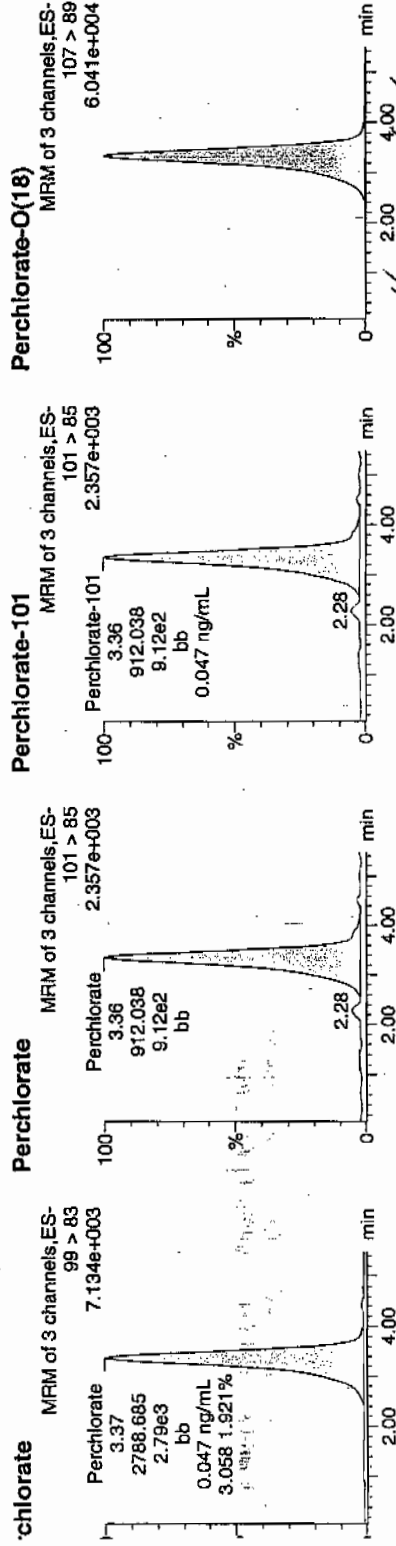
Date: 19-Jan-2010

Time: 01:33:12

File: WCL100118-07CRI

Lot: 1:2,B

Pass
QMS
01-19-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
L100118-07CRI	Perchlorate	99 > 83	3.37	2788.685	bb			0.0473	94.52	-5.48	246.021	3.06
L100118-07CRI	Perchlorate-101	101 > 85	3.36	912.038	bb			0.0469	93.76	-6.24	209.153	
L100118-07CRI	Perchlorate-O(18)	107 > 89	3.35	24130.889	bb			0.4820	96.40	-3.60	2202.8...	

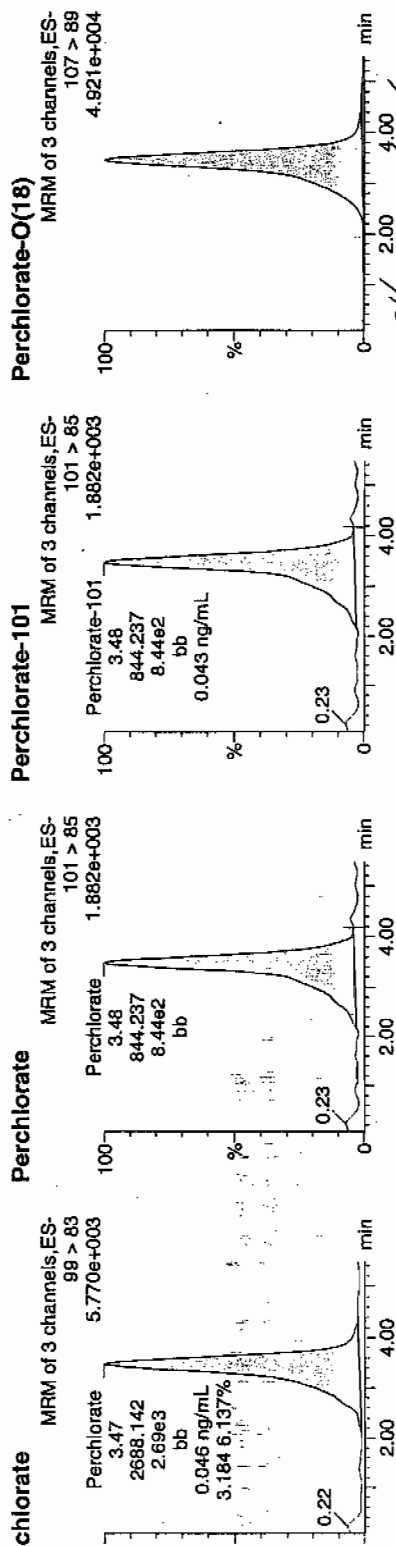
Antify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charlers W. Wilson

Asset: C:\MassLynx\Percchlorate.PRO\per011810a.qld

Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
ited: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

ne: per0118070a
e: 19-Jan-2010
ie: 03:07:58
WCL100118-07CRI
i: 1:2,B

Perchlorate
and
01-18-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
L100118-07CRI	Perchlorate	99 > 83	3.47	2688.142	bb			0.0456	91.12	-8.88	175.062	3.18
L100118-07CRI	Perchlorate-101	101 > 85	3.48	844.237	bb			0.0434	86.79	-13.21	58.542	
L100118-07CRI	Perchlorate-O(18)	107 > 89	3.46	23325.729	bb			0.4659	93.18	-6.82	1230.2...	

QUALITY CONTROL

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: EPA 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 940133
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. MB
 Date Received: 14-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 1202011812
 Date Filtered: 14-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	18-JAN-10 22:24	per0118037a
	Perchlorate Isotope Ratio						1	18-JAN-10 22:24	per0118037a
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	18-JAN-10 22:24	per0118037a
	Perchlorate-O(18)			4.75	ug/kg		1	18-JAN-10 22:24	per0118037a

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

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

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

aset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

1. Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
ited: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

ne: per0118037a

e: 18-Jan-2010

ie: 22:24:14

1202011812

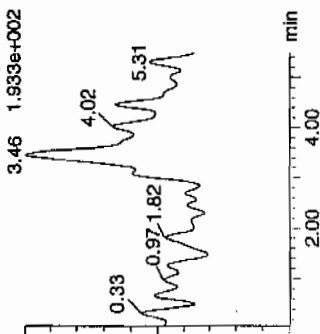
l: 2:1,A

LANC | 940136 | 5020 | MB | 11

01-19-10

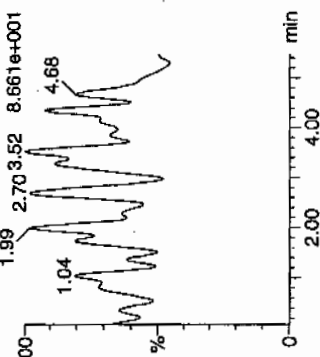
chlorate

MRM of 3 channels, ES-
99 > 83
1.933e+002



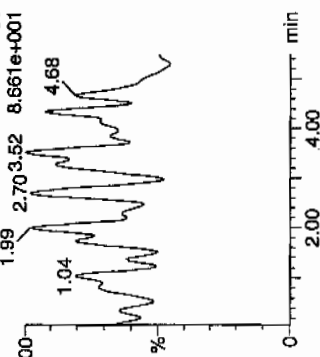
Perchlorate

MRM of 3 channels, ES-
101 > 85
8.661e+001



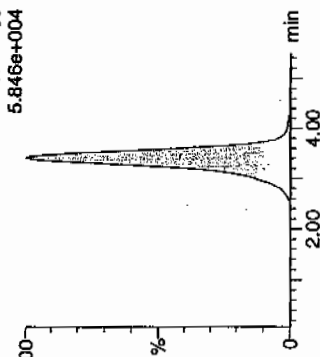
Perchlorate-101

MRM of 3 channels, ES-
101 > 85
8.661e+001



Perchlorate-O(18)

MRM of 3 channels, ES-
107 > 89
5.846e+004



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
2011812	Perchlorate											0.00
2011812	Perchlorate-101											
2011812	Perchlorate-O(18)	3.42	23502.262	23802.262	bb			0.4754	95.08	-4.92	2813.8...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: EPA 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 240133
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. LCS
 Date Received: 14-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 1202011813
 Date Filtered: 14-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	1.90	ug/kg	J	1	18-JAN-10 22:33	per0118038a
	Perchlorate Isotope Ratio			3.12			1	18-JAN-10 22:33	per0118038a
14797-73-0	Perchlorate-101	.5	2	1.84	ug/kg	J	1	18-JAN-10 22:33	per0118038a
	Perchlorate-O(18)			4.77	ug/kg		1	18-JAN-10 22:33	per0118038a

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

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

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

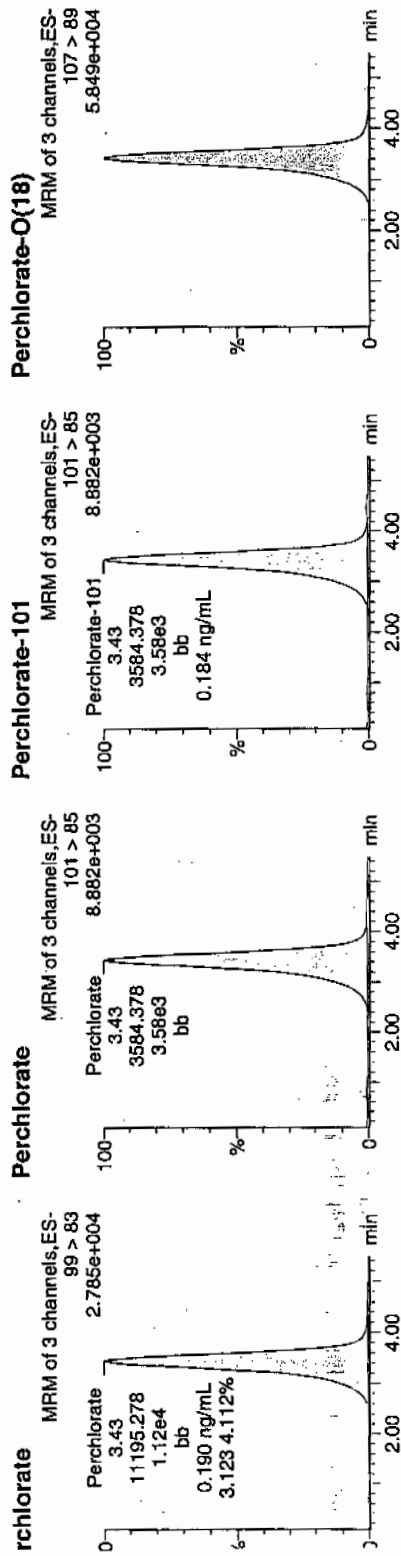
Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Sample Name: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
 Sample Date: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

File Name: per0118038a
 File Date: 18-Jan-2010
 File Time: 22:33:04
 File Path: 1202011813
 File Size: 2:1,B

01-19-10

LANL | 940136 | 3000 | LCS | 11



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
12011813	Perchlorate	3.43	11195.278	11195.278	bb			0.1897	94.87	-5.13	1669.0...	3.12
12011813	Perchlorate-101	3.43	3584.378	3584.378	bb			0.1842	92.12	-7.88	386.192	
12011813	Perchlorate-O(18)	3.42	23885.621	23885.621	bb			0.4771	95.42	-4.58	1169.3...	

11195.278
 3584.378
 23885.621
 = 0.1897
 HNW
 01/20/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 940133
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7634MS
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132
 GEL Sample ID: 1202011814
 Date Filtered: 14-JAN-10
 Injection Volume (uL): 20
 %Solids: 90

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.558	2.23	2.48	ug/kg		1	18-JAN-10 22:58	per0118041a
	Perchlorate Isotope Ratio			2.95			1	18-JAN-10 22:58	per0118041a
14797-73-0	Perchlorate-101	.558	2.23	2.55	ug/kg		1	18-JAN-10 22:58	per0118041a
	Perchlorate-O(18)			5.32	ug/kg		1	18-JAN-10 22:58	per0118041a

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

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

Identify Sample Report MassLynx 4.0 SP4

© GEL Group, LLC Analyst: Charlers W. Wilson

File: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Acquired: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
 Method: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

Sample: me: per0118041a

Date: 18-Jan-2010

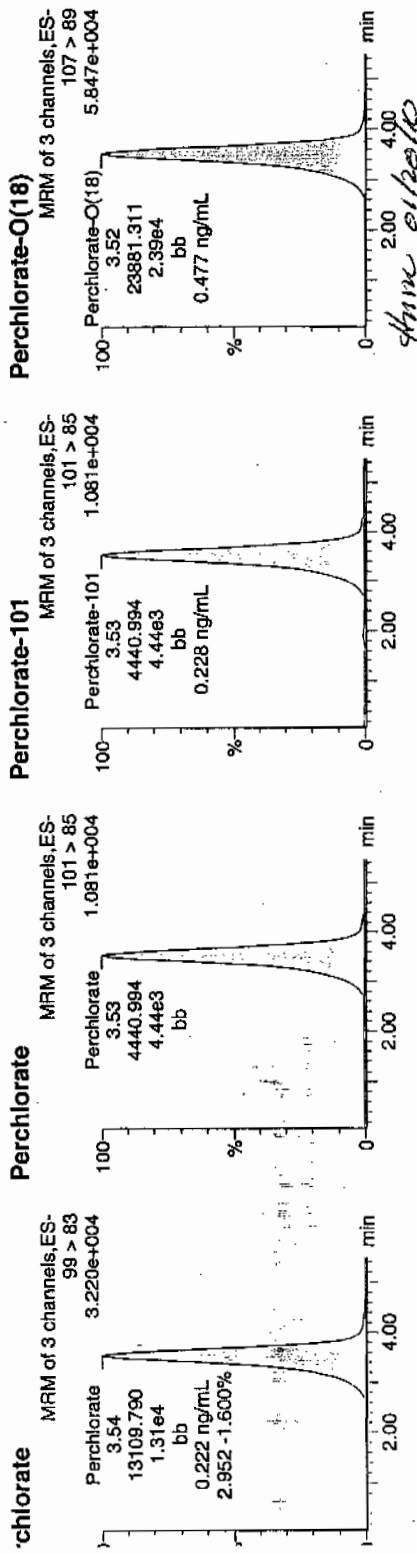
Time: 22:58:47

Sample: 1202011814

Lot: 2:1,E

01-19-10

LANC | 940136 | 5020 | MS | 1 |



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion.Ratio
2011814	Perchlorate	99 > 83	3.54	13109.790	bb			0.222	111.09	11.09	2180.9...	2.95
2011814	Perchlorate-101	101 > 85	3.53	4440.994	bb			0.228	114.14	14.14	112.893	
2011814	Perchlorate-O(18)	107 > 89	3.52	23881.311	bb			0.477	95.40	-4.60	5128.1...	

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: 940133

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7634MSD

Date Received: 08-JAN-10

GEL Job No (SDG): 10-1132

GEL Sample ID: 1202011815

Date Filtered: 14-JAN-10

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.558	2.23	2.62	ug/kg		1	18-JAN-10 23:07	per0118042a
	Perchlorate Isotope Ratio			3.13			1	18-JAN-10 23:07	per0118042a
14797-73-0	Perchlorate-101	.558	2.23	2.53	ug/kg		1	18-JAN-10 23:07	per0118042a
	Perchlorate-O(18)			5.57	ug/kg		1	18-JAN-10 23:07	per0118042a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Identify Sample Report: MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charles W. Wilson

taset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

st Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
nted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

me: per0118042a

te: 18-Jan-2010

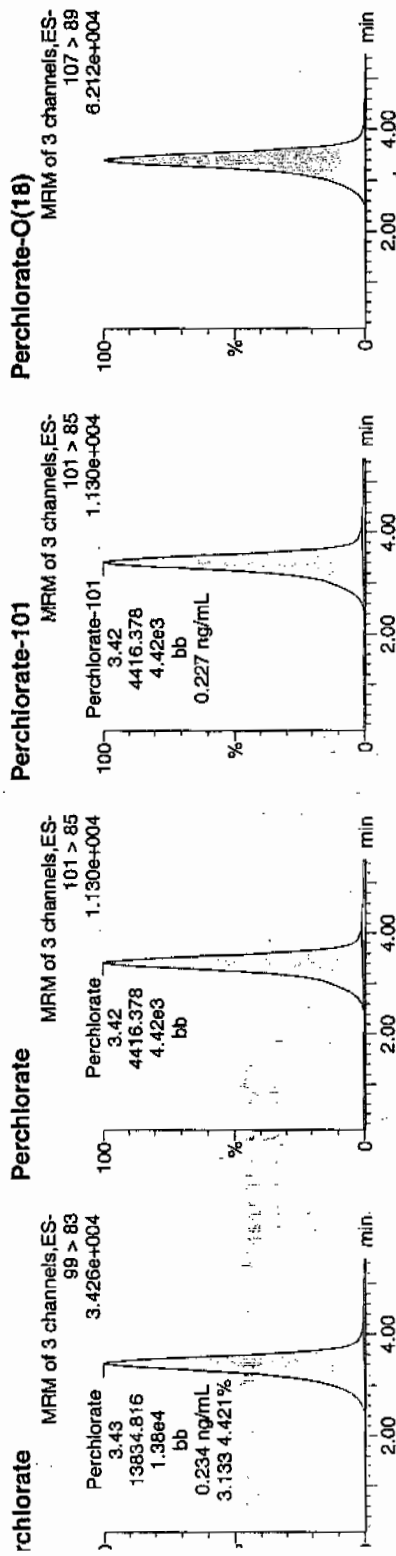
ne: 23:07:17

1202011815

il: 2:1,F

01-19-10

1202011815 | 1940136 | 50120 | 11



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
2011815	Perchlorate	3.43	13834.816	13834.816	bb			0.2345	117.23	17.23	1973.5...	3.13
2011815	Perchlorate-101	3.42	4416.378	4416.378	bb			0.2270	113.51	13.51	165.336	
2011815	Perchlorate-O(18)	3.41	24993.916	24993.916	bb			0.4992	99.84	-0.16	3073.0...	

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: 940133 Verified by: _____ Lab SOP: GL-OA-E-067 REV# 6
 Analyst: Charles Wilson Instrument: MicroMass Quattro Ultima
 Method: SW846 6850 Modified

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202011812 MB	14-JAN-2010 11:13:53	2	20	10
1202011813 LCS	14-JAN-2010 11:13:53	2	20	10
244128001	14-JAN-2010 11:13:53	2	20	10
1202011814 MS (244128001)	14-JAN-2010 11:13:53	2	20	10
1202011815 MSD (244128001)	14-JAN-2010 11:13:53	2	20	10
244128002	14-JAN-2010 11:13:53	2	20	10
244128003	14-JAN-2010 11:13:53	2	20	10
244128004	14-JAN-2010 11:13:53	2	20	10
244128005	14-JAN-2010 11:13:53	2	20	10
244128006	14-JAN-2010 11:13:53	2	20	10
244128007	14-JAN-2010 11:13:53	2	20	10
244128008	14-JAN-2010 11:13:53	2	20	10
244128009	14-JAN-2010 11:13:53	2	20	10
244128010	14-JAN-2010 11:13:53	2	20	10
244128011	14-JAN-2010 11:13:53	2	20	10
244128012	14-JAN-2010 11:13:53	2	20	10
244128013	14-JAN-2010 11:13:53	2	20	10
244128014	14-JAN-2010 11:13:53	2	20	10
244128015	14-JAN-2010 11:13:53	2	20	10
244128016	14-JAN-2010 11:13:53	2	20	10
244128017	14-JAN-2010 11:13:53	2	20	10
244128018	14-JAN-2010 11:13:53	2	20	10
244128019	14-JAN-2010 11:13:53	2	20	10
244128020	14-JAN-2010 11:13:53	2	20	10
1202011818 ICS	14-JAN-2010 11:13:53	2	20	10

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
ICS	1202011818	10 ug/L ICS/CCV Second Source	UCL091230-01.1	.4	mL	Desalting cartridges used: 091006-1-H & 090810-1-Ba
LCS	1202011813	10 ug/L ICS/CCV Second Source	UCL091230-01.1	.4	mL	
MS	1202011814	10 ug/L ICS/CCV Second Source	UCL091230-01.1	.4	mL	
MSD	1202011815	10 ug/L ICS/CCV Second Source	UCL091230-01.1	.4	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCM SMS#2

Date: 01/18/10
 Extr. Injection Volume: 20ul
 Sequence Number: per011810a
 Initial Calibration Date: 01/18/10
 Method: EPA 6850-Modified
 Int. Std.: UCL091019-03.2
 Mobile Phase Lot#: 1254342, 1246195
 Standard-Samp Reagent Lot#: 1233976

Reviewed BY: *WCL*
 Date: 01/20/10
 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
per0118001a	IPB001	CWW	1/18/2010 17:15			1		USE	B
per0118002a	IPB001	CWW	1/18/2010 17:23			1		USE	B
per0118003a	WCLICAL-01	CWW	1/18/2010 17:32			1		USE	I
per0118004a	WCLICAL-02	CWW	1/18/2010 17:40			1		USE	I
per0118005a	WCLICAL-03	CWW	1/18/2010 17:49			1		USE	I
per0118006a	WCLICAL-04	CWW	1/18/2010 17:58			1		USE	I
per0118007a	WCLICAL-05	CWW	1/18/2010 18:06			1		USE	I
per0118008a	IPB002	CWW	1/18/2010 18:15			1		USE	B
per0118009a	WCLICV	CWW	1/18/2010 18:23			1		USE	C
per0118010a	IPB003	CWW	1/18/2010 18:32			1		USE	B
per0118011a	WCLCRI	CWW	1/18/2010 18:41			1		USE	C
per0118012a	244213001	CWW	1/18/2010 18:49	940158	10-1154	1	LANL	USE	S
per0118013a	244217001	CWW	1/18/2010 18:58	940158	10-1152	1	LANL	USE	S
per0118014a	244217002	CWW	1/18/2010 19:07	940158	10-1152	1	LANL	USE	S
per0118015a	244226001	CWW	1/18/2010 19:15	940158	10-1161	1	LANL	USE	S
per0118016a	1202011854	CWW	1/18/2010 19:24	940158	10-1161	1	LANL	USE	S
per0118017a	1202011855	CWW	1/18/2010 19:32	940158	10-1161	1	LANL	USE	S
per0118018a	244226002	CWW	1/18/2010 19:41	940158	10-1161	1	LANL	USE	S
per0118019a	244236002	CWW	1/18/2010 19:49	940158	10-1169	1	LANL	USE	S
per0118020a	244236003	CWW	1/18/2010 19:58	940158	10-1169	1	LANL	USE	S
per0118021a	WCLCCV	CWW	1/18/2010 20:06			1		USE	C
per0118022a	IPB004	CWW	1/18/2010 20:15			1		USE	B
per0118023a	WCLCRI	CWW	1/18/2010 20:23			1		USE	C
per0118024a	244240001	CWW	1/18/2010 20:32	940158	10-1172	1	LANL	USE	S
per0118025a	1202011856	CWW	1/18/2010 20:41	940158	10-1172	1	LANL	USE	S
per0118026a	1202011857	CWW	1/18/2010 20:49	940158	10-1172	1	LANL	USE	S
per0118027a	IPB005	CWW	1/18/2010 20:58			1		USE	B
per0118028a	1202011832	CWW	1/18/2010 21:06	940145	VARIOUS	1	LANL	USE	S
per0118029a	1202011833	CWW	1/18/2010 21:15	940145	VARIOUS	1	LANL	USE	S

per0118030a	1202011836	CWW	1/18/2010 21:24	940145	VARIOUS	1	LANL	USE	S
per0118031a	244222001	CWW	1/18/2010 21:32	940145	10-1150	1	LANL	USE	S
per0118032a	244222002	CWW	1/18/2010 21:41	940145	10-1150	1	LANL	USE	S
per0118033a	244222003	CWW	1/18/2010 21:49	940145	10-1150	1	LANL	USE	S
per0118034a	WCLCCV	CWW	1/18/2010 21:58			1		USE	C
per0118035a	IPB006	CWW	1/18/2010 22:06			1		USE	B
per0118036a	WCLCRI	CWW	1/18/2010 22:15			1		USE	C
per0118037a	1202011812	CWW	1/18/2010 22:24	940136	10-1132	1	LANL	USE	S
per0118038a	1202011813	CWW	1/18/2010 22:33	940136	10-1132	1	LANL	USE	S
per0118039a	1202011818	CWW	1/18/2010 22:41	940136	10-1132	1	LANL	USE	S
per0118040a	244128001	CWW	1/18/2010 22:50	940136	10-1132	1	LANL	USE	S
per0118041a	1202011814	CWW	1/18/2010 22:58	940136	10-1132	1	LANL	USE	S
per0118042a	1202011815	CWW	1/18/2010 23:07	940136	10-1132	1	LANL	USE	S
per0118043a	244128002	CWW	1/18/2010 23:15	940136	10-1132	1	LANL	USE	S
per0118044a	244128003	CWW	1/18/2010 23:24	940136	10-1132	1	LANL	USE	S
per0118045a	244128004	CWW	1/18/2010 23:32	940136	10-1132	1	LANL	USE	S
per0118046a	WCLCCV	CWW	1/18/2010 23:41			1		USE	C
per0118047a	IPB007	CWW	1/18/2010 23:50			1		USE	B
per0118048a	WCLCRI	CWW	1/18/2010 23:58			1		USE	C
per0118049a	244128005	CWW	1/19/2010 0:07	940136	10-1132	1	LANL	USE	S
per0118050a	244128006	CWW	1/19/2010 0:15	940136	10-1132	1	LANL	USE	S
per0118051a	244128007	CWW	1/19/2010 0:24	940136	10-1132	1	LANL	USE	S
per0118052a	244128008	CWW	1/19/2010 0:32	940136	10-1132	1	LANL	USE	S
per0118053a	244128009	CWW	1/19/2010 0:41	940136	10-1132	1	LANL	USE	S
per0118054a	244128010	CWW	1/19/2010 0:50	940136	10-1132	1	LANL	USE	S
per0118055a	244128011	CWW	1/19/2010 0:58	940136	10-1132	1	LANL	USE	S
per0118056a	244128012	CWW	1/19/2010 1:07	940136	10-1132	1	LANL	USE	S
per0118057a	WCLCCV	CWW	1/19/2010 1:15			1		USE	C
per0118058a	IPB008	CWW	1/19/2010 1:24			1		USE	B
per0118059a	WCLCRI	CWW	1/19/2010 1:33			1		USE	C
per0118060a	244128013	CWW	1/19/2010 1:41	940136	10-1132	1	LANL	USE	S
per0118061a	244128014	CWW	1/19/2010 1:50	940136	10-1132	1	LANL	USE	S
per0118062a	244128015	CWW	1/19/2010 1:59	940136	10-1132	1	LANL	USE	S
per0118063a	244128016	CWW	1/19/2010 2:07	940136	10-1132	1	LANL	USE	S
per0118064a	244128017	CWW	1/19/2010 2:16	940136	10-1132	1	LANL	USE	S
per0118065a	244128018	CWW	1/19/2010 2:24	940136	10-1132	1	LANL	USE	S
per0118066a	244128019	CWW	1/19/2010 2:33	940136	10-1132	1	LANL	USE	S

per0118067a	244128020	CWW	1/19/2010 2:41	940136	10-1132	1	LANL	USE	S
per0118068a	WCLCCV	CWW	1/19/2010 2:50			1		USE	C
per0118069a	IPB009	CWW	1/19/2010 2:59			1		USE	B
per0118070a	WCLCRI	CWW	1/19/2010 3:07			1		USE	C

Isotope Ratio Criteria

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

2.31-3.85

Tune Criteria

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

LC/MS/MS PERCHLORATE ANALYSIS

**Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-1132-1**

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: 940158

Prep Batch Number: 940153

Sample Analysis

Sample ID	Client ID
244129001	RE12-10-7659
244129002	RE12-10-7661
244129003	RE12-10-7660
1202011858	Interference Check Sample (ICS)
1202011852	Method Blank (MB)
1202011853	Laboratory Control Sample (LCS)
1202011854	244226001(RE12-10-7738) Matrix Spike (MS)
1202011855	244226001(RE12-10-7738) 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.

10-1132-1-PERLCMS

Page 1 of 4

Calibration Information

Initial Calibration

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

CCV Requirements

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

CCB Requirements

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

CCV Requirements

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

Low Level Standard (CRI) Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

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

Interference Check Sample (ICS)

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Client sample 244226001 (RE12-10-7738) from SDG 10-1161 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

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

Retention Time Standard Area Acceptance

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

10-1132-1-PERLCMS

Page 2 of 4

Retention Time

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

Technical Information

Holding Time Specifications

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

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

Miscellaneous Information

Data Exception (DER) Documentation

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

Manual Integrations

The following files required manual integrations. The software could not correctly integrate all of the chromatographic and/or signal peaks on the primary analysis. 244129003 (RE12-10-7660).

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.

10-1132-1-PERLCMS

Page 3 of 4

Perchlorate Isotope Ratio

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

System Configuration

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

Chromatographic Columns

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

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

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

Review Validation:

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

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

Reviewer: Herbert M. Marx Date: 01/12/10

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: 240153
 Extraction Type: Filter/DAI
 Client Sample No. RE12-10-7659
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132-1
 GEL Sample ID: 244129001
 Date Filtered: 13-JAN-10
 Injection Volume (uL): 20
 %Solids:

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

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	15-JAN-10 21:41	per0115031a
	Perchlorate Isotope Ratio						1	15-JAN-10 21:41	per0115031a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	15-JAN-10 21:41	per0115031a
	Perchlorate-O(18)			0.513	ug/L		1	15-JAN-10 21:41	per0115031a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: WATER
 Extraction Batch ID: 240153
 Extraction Type: Filter/DAI
 Client Sample No. RE12-10-7661
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132-1
 GEL Sample ID: 244129002
 Date Filtered: 13-JAN-10
 Injection Volume (uL): 20

%Solids:

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

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	15-JAN-10 21:50	per0115032a
	Perchlorate Isotope Ratio						1	15-JAN-10 21:50	per0115032a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	15-JAN-10 21:50	per0115032a
	Perchlorate-O(18)			0.478	ug/L		1	15-JAN-10 21:50	per0115032a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
 Aliquot %Solids

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: WATER
 Extraction Batch ID: 240153
 Extraction Type: Filter/DAI
 Sample Volume/Weight: 10.0 mL
 Concentrated Extract Volume: 10.0
 Client Sample No. RE12-10-7660
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132-1
 GEL Sample ID: 244129003
 Date Filtered: 13-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	15-JAN-10 22:00	per0115033a
	Perchlorate Isotope Ratio						1	15-JAN-10 22:00	per0115033a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	15-JAN-10 22:00	per0115033a
	Perchlorate-O(18)			0.479	ug/L		1	15-JAN-10 22:00	per0115033a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X ¹ %Solids
 Aliquot

QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1132-1

Extract Batch Code: 940153

Date Filtered: 13-JAN-10

Matrix: WATER

Sample ID: 1202011853

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.192	ug/L	95.9		85 - 115
Perchlorate Isotope Ratio		3				-
Perchlorate-101	0.200	.198	ug/L	98.9		85 - 115
Perchlorate-O(18)		.48	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): 10-1132-1

Extract Batch Code: 940153

Date Filtered: 13-JAN-10

Matrix: GROUND WATER

Sample ID: 1202011858

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.202	ug/L	101		70 - 130
Perchlorate Isotope Ratio		3.14				
Perchlorate-101	0.200	.198	ug/L	99.2		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.

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

atset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

st Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
nted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ame: per0115030a

ate: 15-Jan-2010

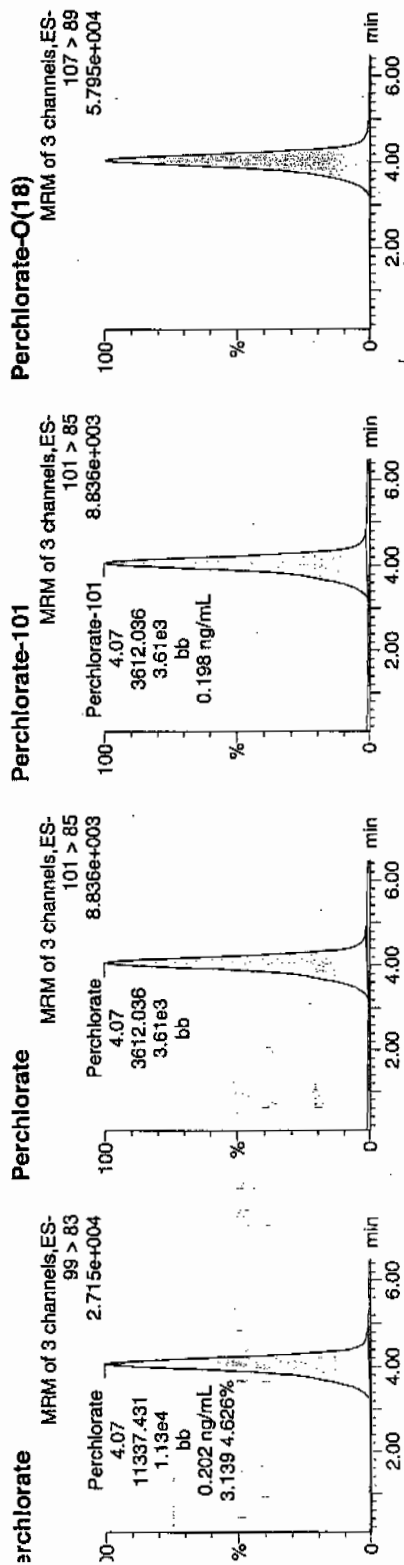
me: 21:31:30

i: 1202011858

al: 1:5,C

6666
01-18-10

LAJW | 940158 | L22 | ICS | 11



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
02011858	Perchlorate	99 > 83	4.07	11337.431	bb			0.2015	100.77	0.77	2258.4...	3.14
02011858	Perchlorate-101	101 > 85	4.07	3612.036	bb			0.1984	99.21	-0.79	572.606	
02011858	Perchlorate-O(18)	107 > 89	4.05	24359.219	bb			0.5051	101.02	1.02	3657.5...	

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

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

Extract Batch Code: 240153

GEL MS/PS ID: 1202011854

GEL MSD/PSD ID: 1202011855

GEL Job No (SDG): 10-1132-1

Date Extracted: 13-JAN-10

Client ID: RE12-10-7738

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	0.00164	ug/L	0.192	95.1		.198	98.2		3.13		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3			2.96			0			-
Perchlorate-101	0.200	0.000696	ug/L	0.194	96.8		.203	101		4.35		30	75 - 125
Perchlorate-O(18)	0	0.490	ug/L	0.489			.496			1.49			-

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

Comments:

Perchlorate Initial Calibration Blank

GEL Job No.(SDG): 10-1132-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	15-JAN-10	per0115001a	IPB001
Perchlorate-101	0.00	0	NA	15-JAN-10	per0115001a	IPB001
Perchlorate	0.00	0	NA	15-JAN-10	per0115002a	IPB001
Perchlorate-101	0.00	0	NA	15-JAN-10	per0115002a	IPB001

Identify Sample Report MassLynx 4.0 SP4
 e GEL Group, LLC Analyst: Charlers W. Wilson

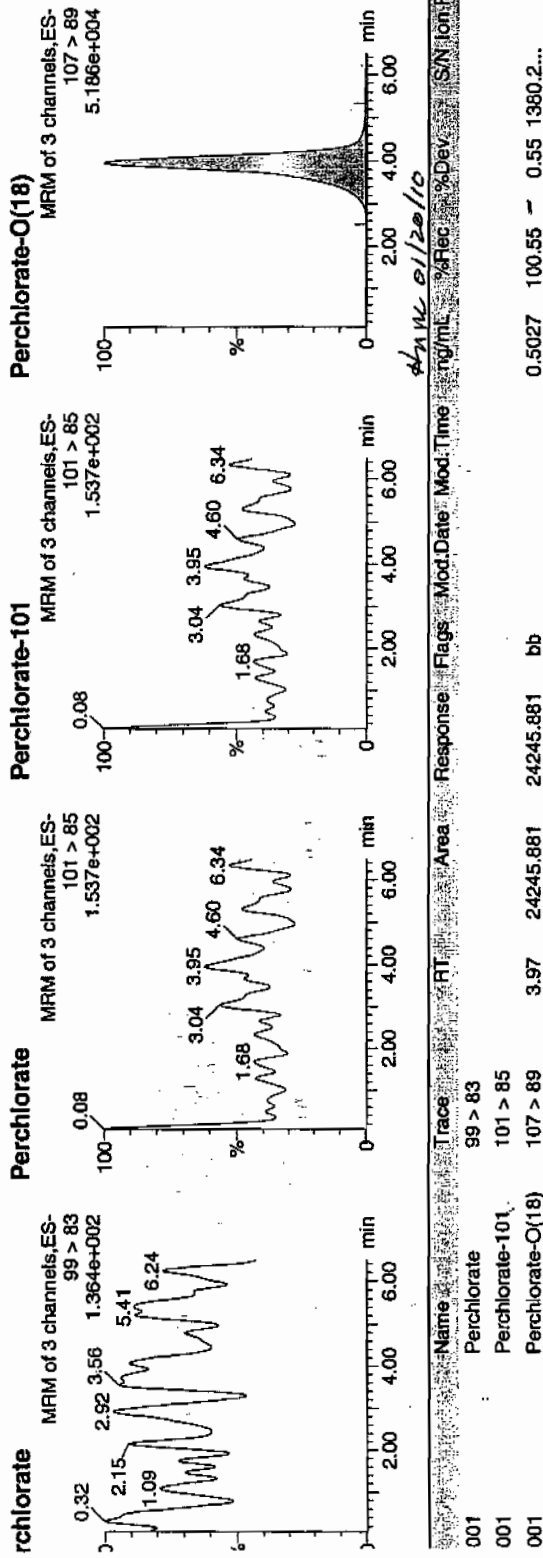
Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

Sample Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
 Sample Acquired: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per011510a.mdb 18 Jan 2010 08:43:34
 File: C:\MassLynx\Perchlorate.PRO\CurveDB\per011510a.cdb 18 Jan 2010 08:43:48

Sample Name: per0115001a
 Date: 15-Jan-2010
 Time: 16:54:54
 IPB001
 Ali: 1:1,A

01-13-10



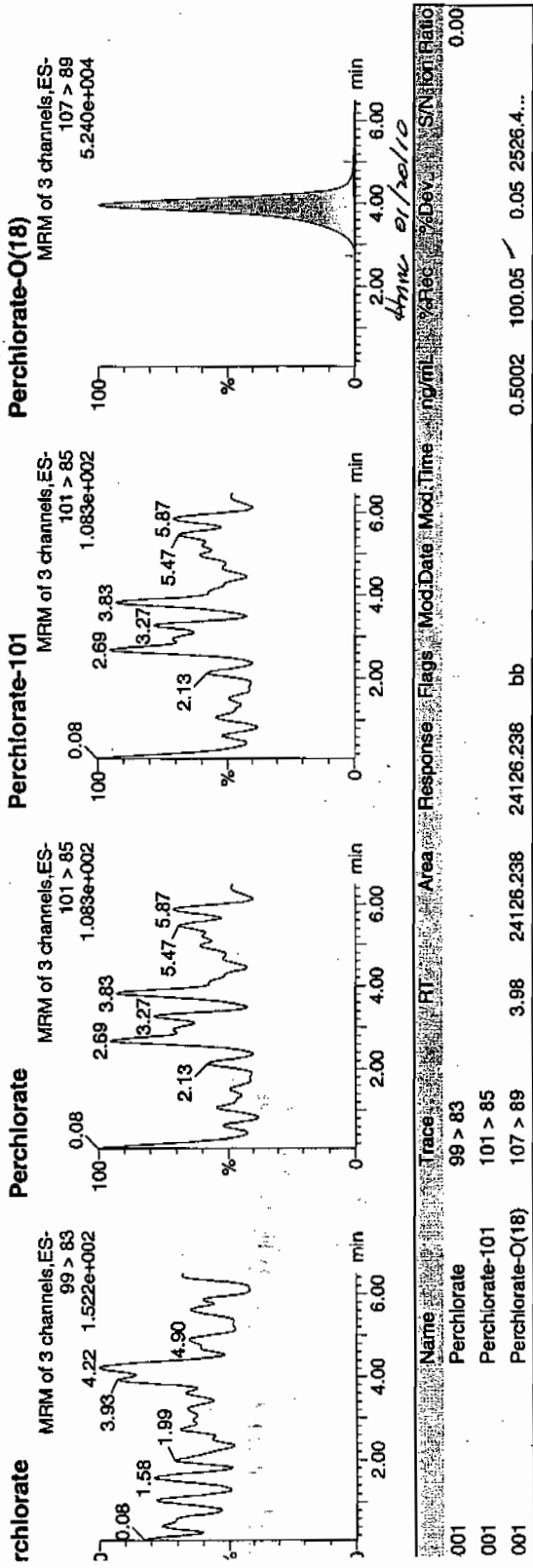
Identify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

st Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
inted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ime: per0115002a
ite: 15-Jan-2010
ne: 17:04:26
: IPB001
al: 1:1,A

01-18-10



Form 4

Perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-1132-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	15-JAN-10	per0115008a	IPB002
Perchlorate-101	0.00	0	NA	15-JAN-10	per0115008a	IPB002
Perchlorate	0.00	0	NA	15-JAN-10	per0115010a	IPB003
Perchlorate-101	0.00	0	NA	15-JAN-10	per0115010a	IPB003
Perchlorate	0.00	0	NA	15-JAN-10	per0115017a	IPB004
Perchlorate-101	0.00	0	NA	15-JAN-10	per0115017a	IPB004
Perchlorate	0.00	0	NA	15-JAN-10	per0115026a	IPB005
Perchlorate-101	0.00	0	NA	15-JAN-10	per0115026a	IPB005
Perchlorate	0.00	0	NA	15-JAN-10	per0115039a	IPB006
Perchlorate-101	0.00	0	NA	15-JAN-10	per0115039a	IPB006

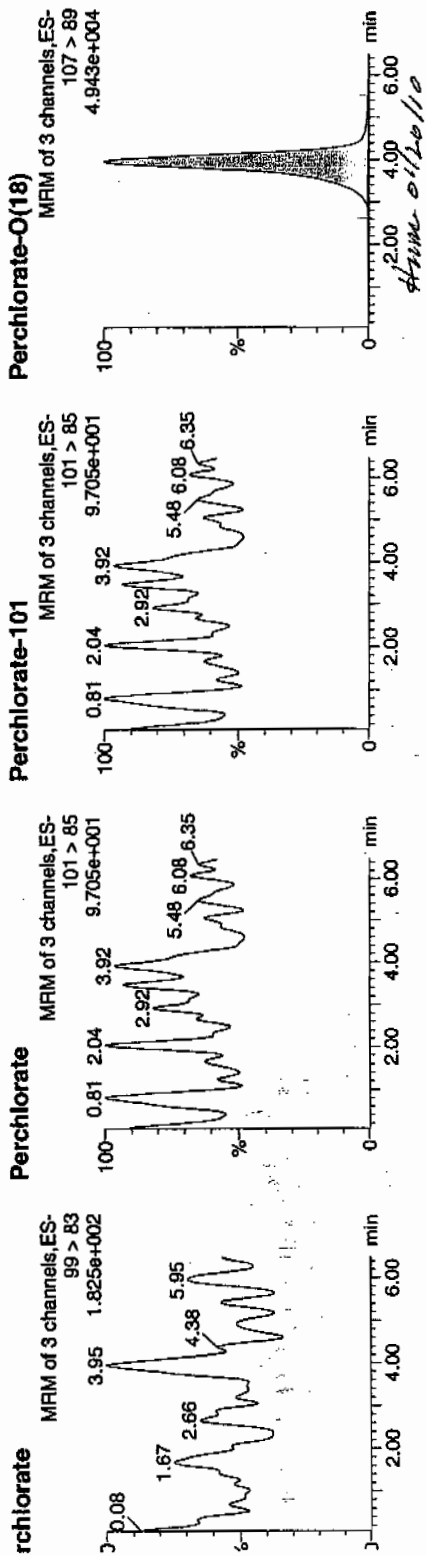
Identify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charlers W. Wilson

taset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

st Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
nted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

me: per0115008a
te: 15-Jan-2010
ne: 18:01:34
IPB002
il: 1:1,A

01-18-10



Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	Conc	% Rec	% Dev	S/N	Ion Ratio
Perchlorate	99 > 83											0.00
Perchlorate-101	101 > 85											
Perchlorate-O(18)	107 > 89	3.95	23728.619	23728.619	bb			0.4920	98.40	-1.60	1073.2...	

Identify Sample Report MassLynx 4.0 SP4

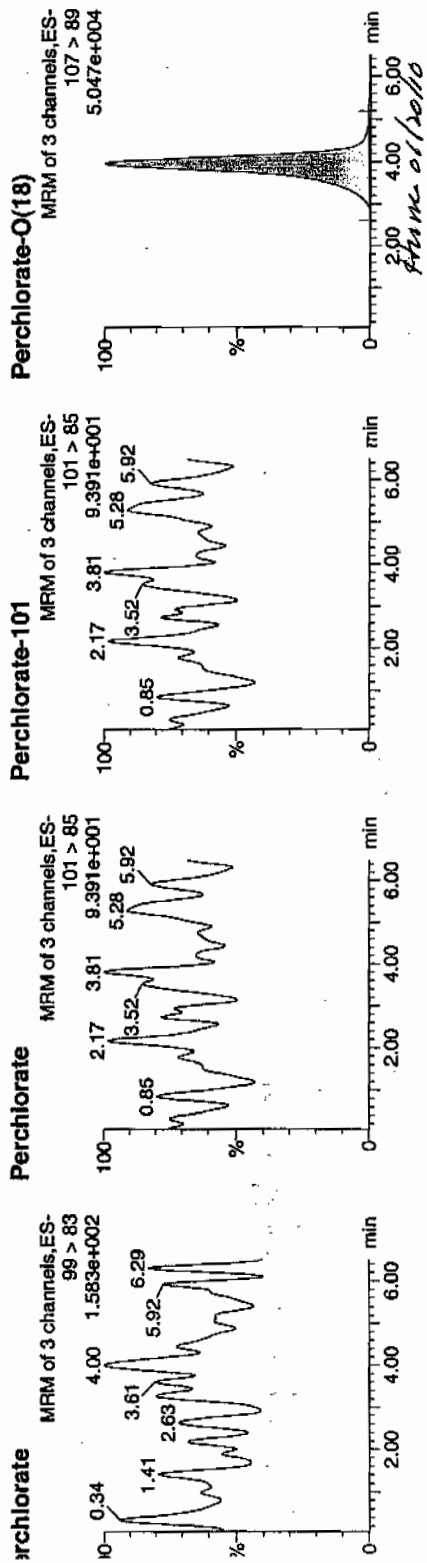
the GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

First Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
 Printed: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

Sample Name: per0115010a
 Date: 15-Jan-2010
 Time: 18:20:39
 File: IPB003
 Ratio: 1:1,A

01-18-10



Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3003	Perchlorate											0.00
3003	Perchlorate-101											
3003	Perchlorate-O(18)	3.95	23370.221	23370.221	bb			0.4846	96.91	-	3.09	2094.0...

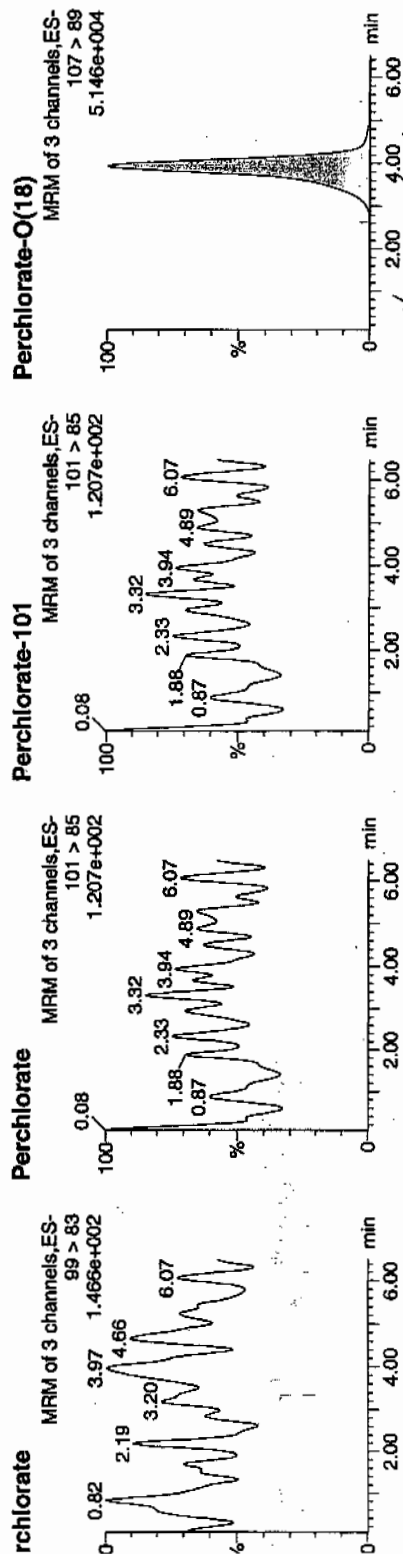
Identify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

Sample Name: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
Sample ID: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

File Name: per0115017a
Date: 15-Jan-2010
Time: 19:27:27
IPB004
Alt: 1:1,A

01-18-10



Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
Perchlorate	99 > 83											0.00
Perchlorate-101	101 > 85											
Perchlorate-O(18)	107 > 89	3.93	23882.883	23882.883	bb			0.4952	99.04	-0.96	4428.4...	

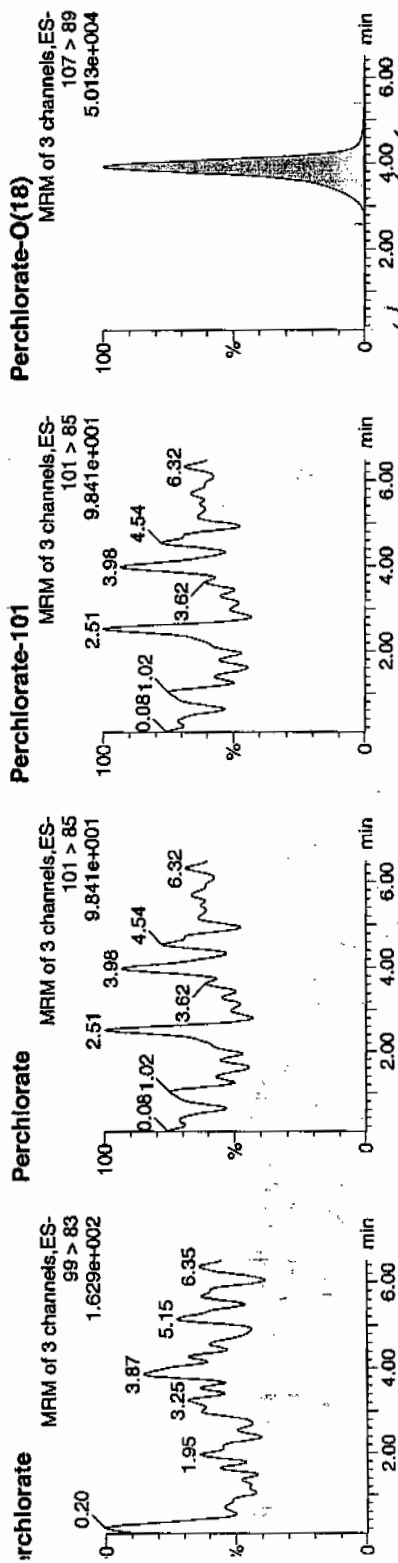
Quantify Sample Report MassLynx 4.0 SP4
 re GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

First Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
 Intended: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

Sample Name: per0115026a
 Date: 15-Jan-2010
 Time: 20:53:19
 : IPB005
 al: 1:1,A

Q-18-10



Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/ml	%Rec	%Dev	S/N	Ion Ratio
1005	Perchlorate	99 > 83										0.00
1005	Perchlorate-101	101 > 85										
1005	Perchlorate-O(18)	107 > 89	3.92	23051.479	23051.479	bb		0.4780	95.59	-4.41	581.734	

Identify Sample Report MassLynx 4.0 SP4
 ie GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

Sample Name: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
 Date Acquired: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

File Name: per0115039a

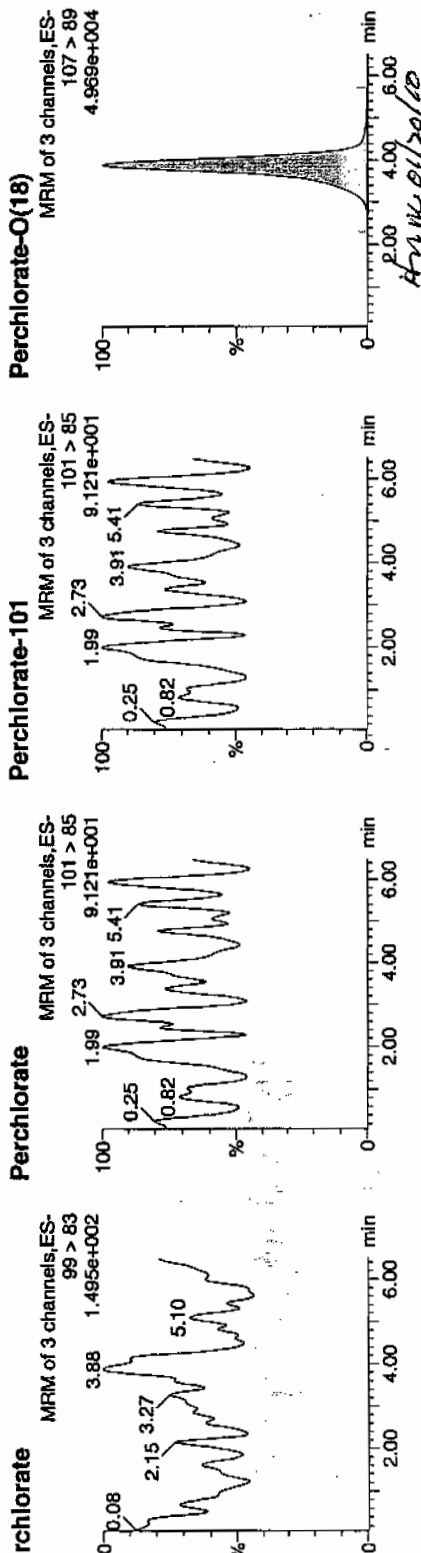
Sample Date: 15-Jan-2010

Time: 22:57:27

Sample ID: IPB006

Sample Aliquot: 1:1,A

0.00
 0.18-1.0



Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	% Rec	% Dev	S/N	Ion Ratio
Perchlorate	99 > 83											0.00
Perchlorate-101	101 > 85	3.89	22828.760	22828.760	bb			0.4733	94.67	-5.33	3583.8...	
Perchlorate-O(18)	107 > 89											

Nairb.ref

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

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

QUATRO ULTIMA: nairb_01_08_08.ca

Calibration Report - MS1 Static

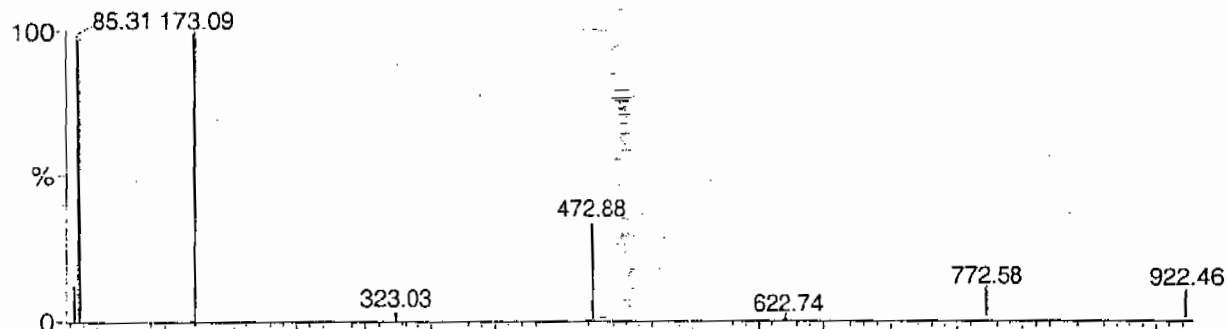
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

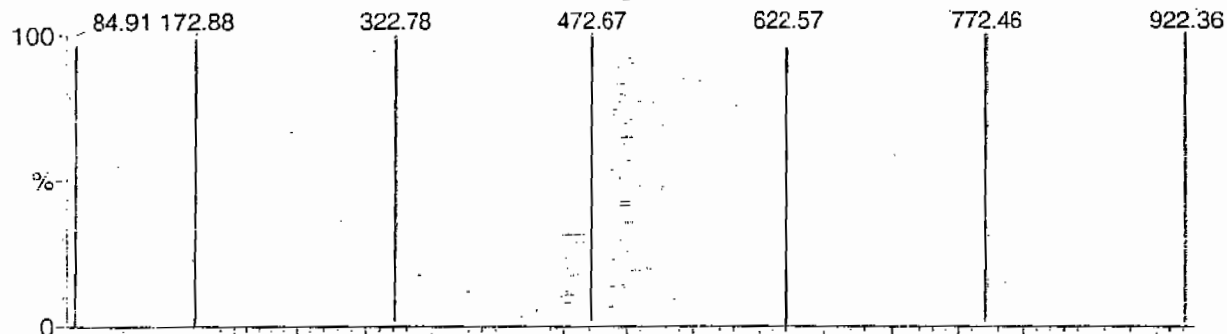
DATA HIGHLIGHTED BY CURSOR 01-09-03

Data file: STATMS1 - Uncalibrated

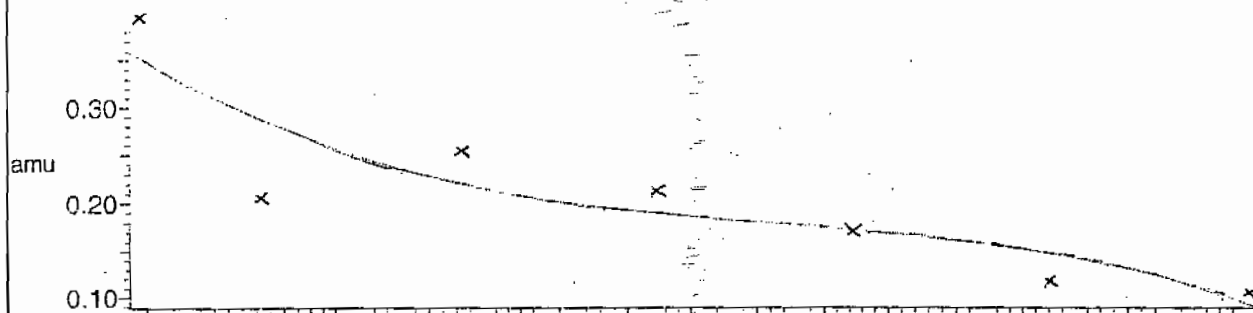
7 matches of 7 tested references



Reference file: Nairb

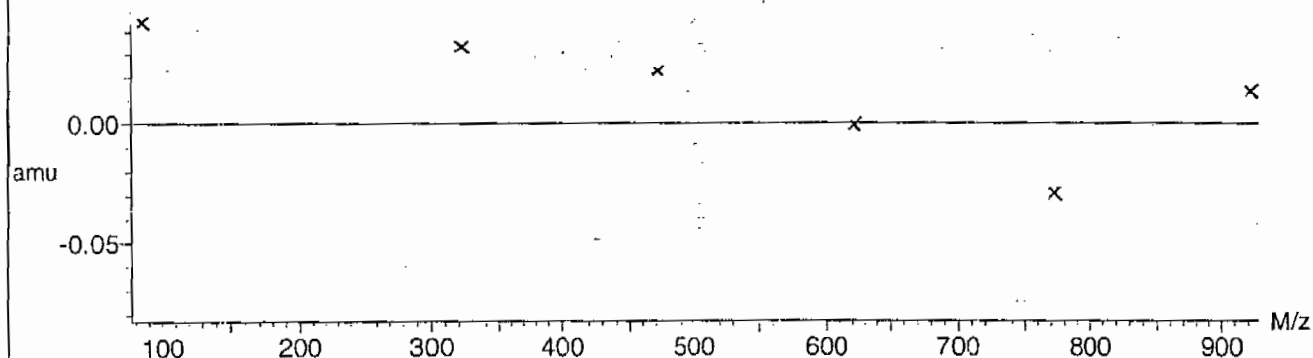


Mass difference (Raw - Ref mass)



Residuals

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



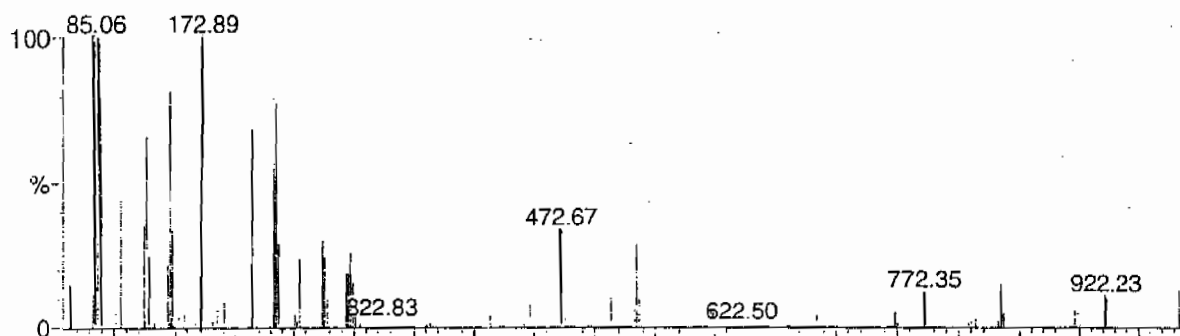
Calibration Report - MS1 Scanning

Page 1 of 1

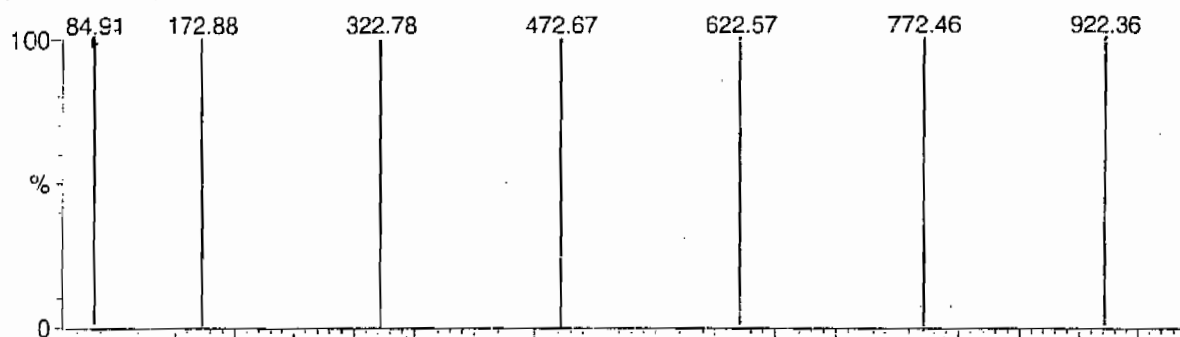
Printed: Tue Jan 08 12:20:09 2008

Data file: SCNMS1 - Uncalibrated

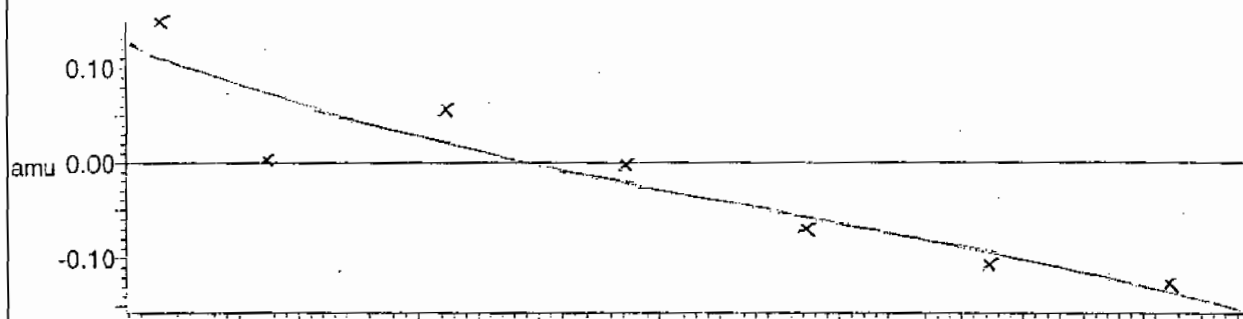
7 matches of 7 tested references



Reference file: Nairb

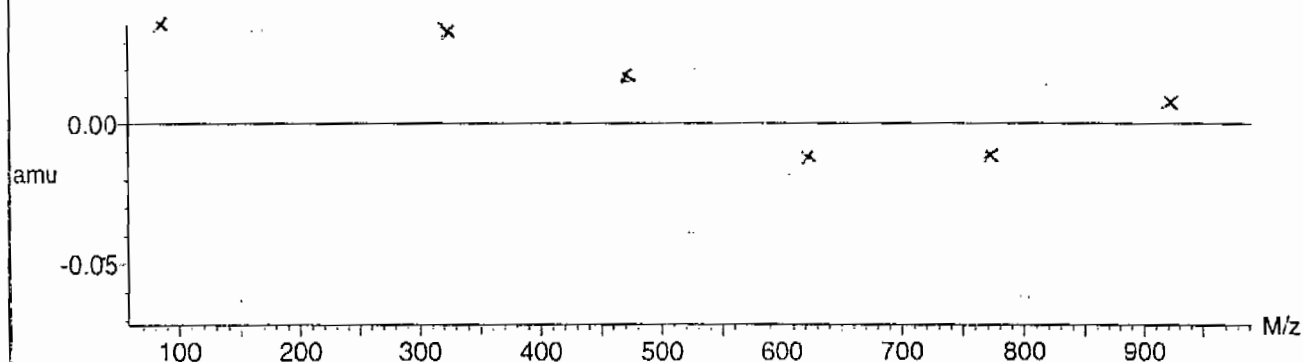


Mass difference (Raw - Ref mass)



Residuals

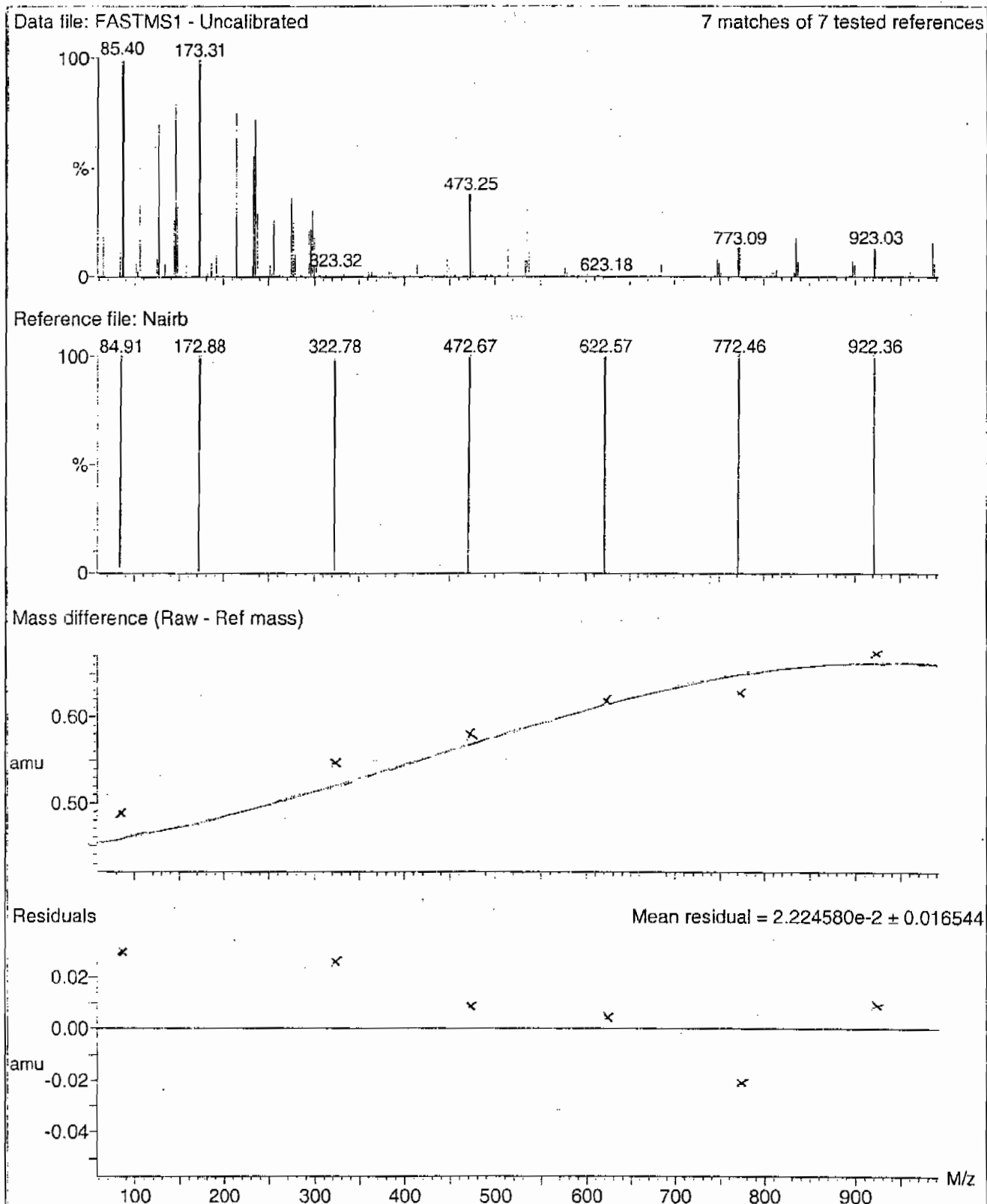
Mean residual = $2.732691 \times 10^{-2} \pm 0.020653$



Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

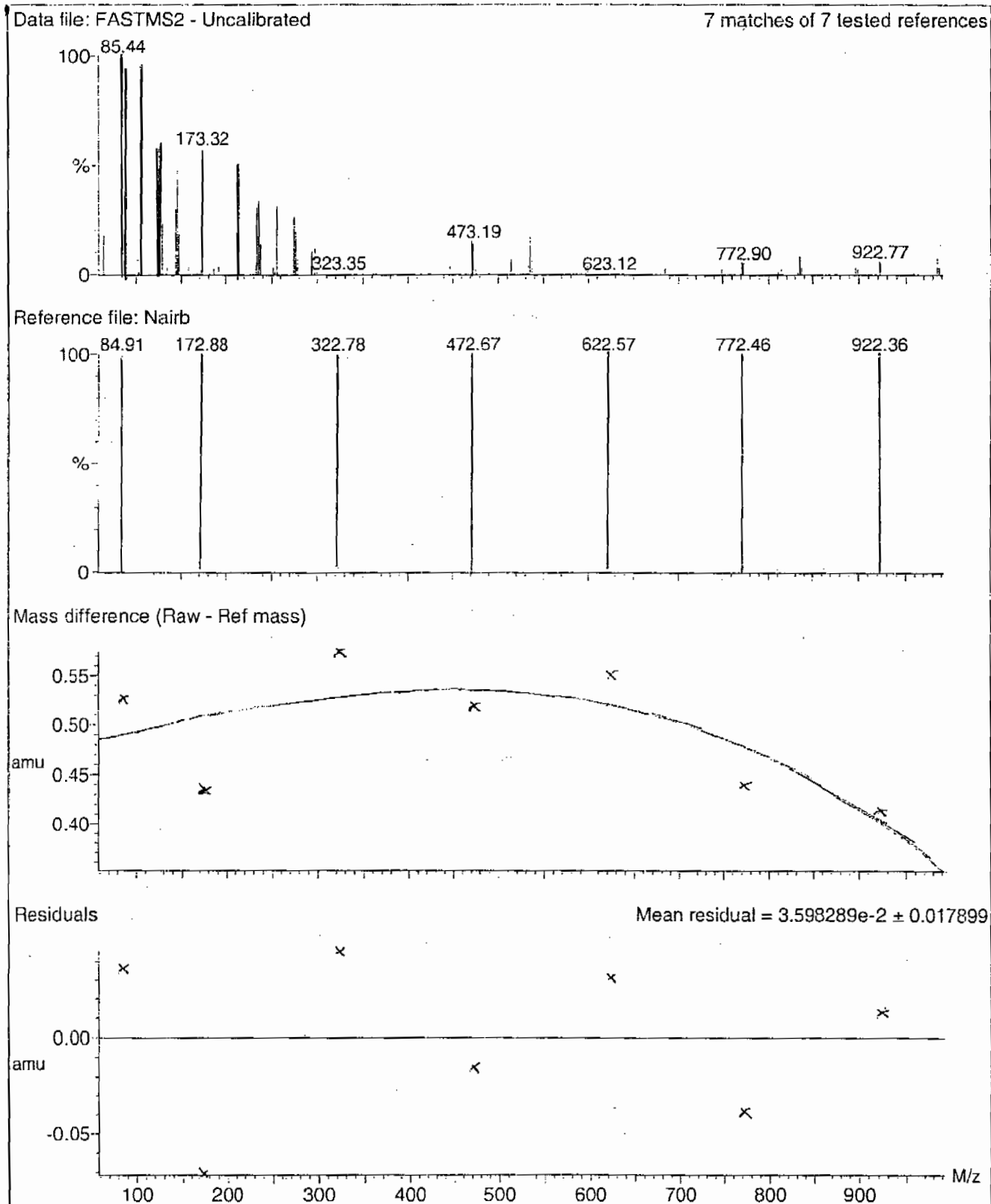
Printed: Tue Jan 08 12:21:04 2008



Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

Printed: Tue Jan 08 12:23:51 2008



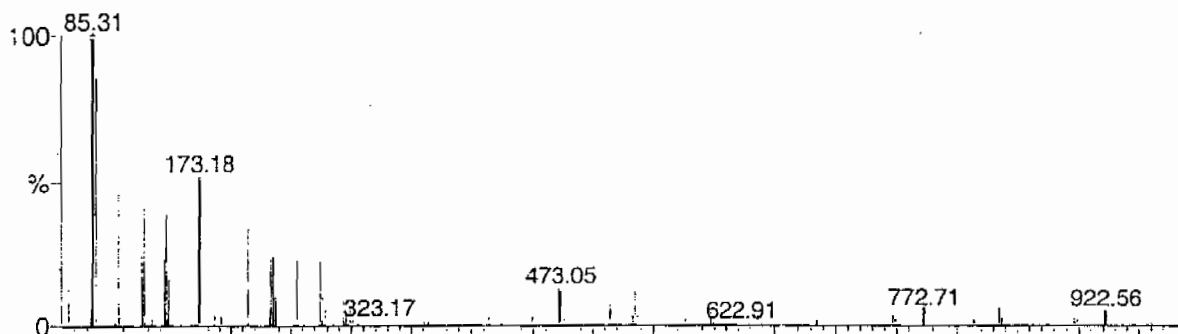
Calibration Report - MS2 Scanning

Page 1 of 1

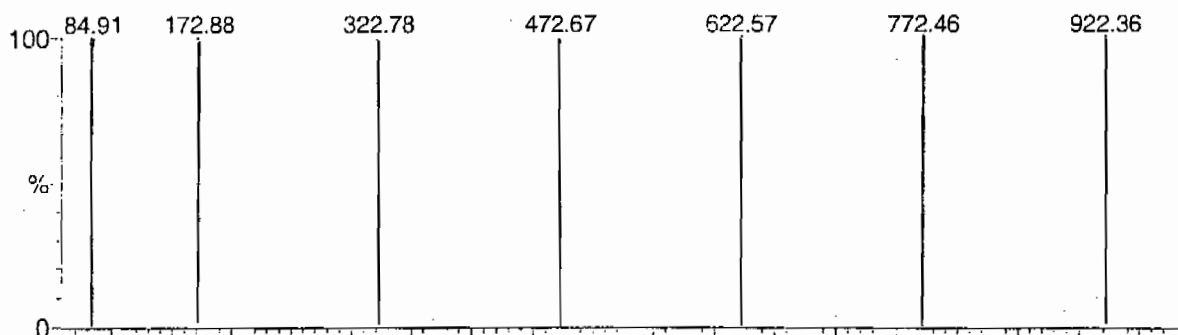
Printed: Tue Jan 08 12:22:56 2008

Data file: SCNMS2 - Uncalibrated

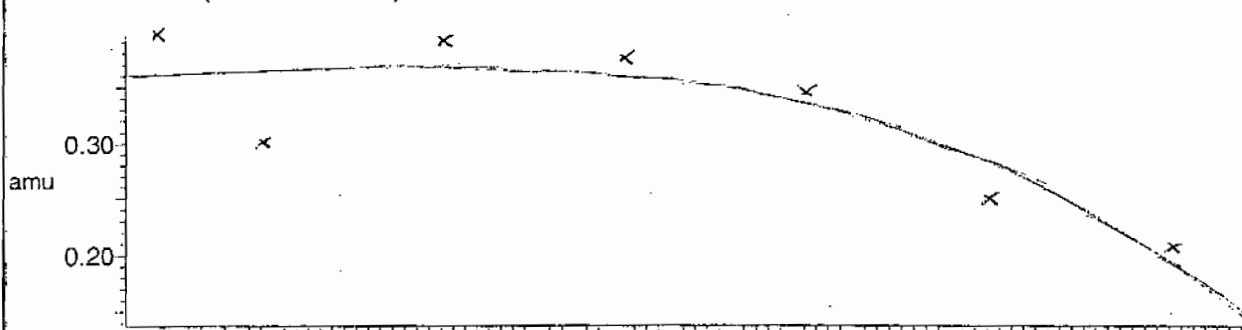
7 matches of 7 tested references



Reference file: Nairb

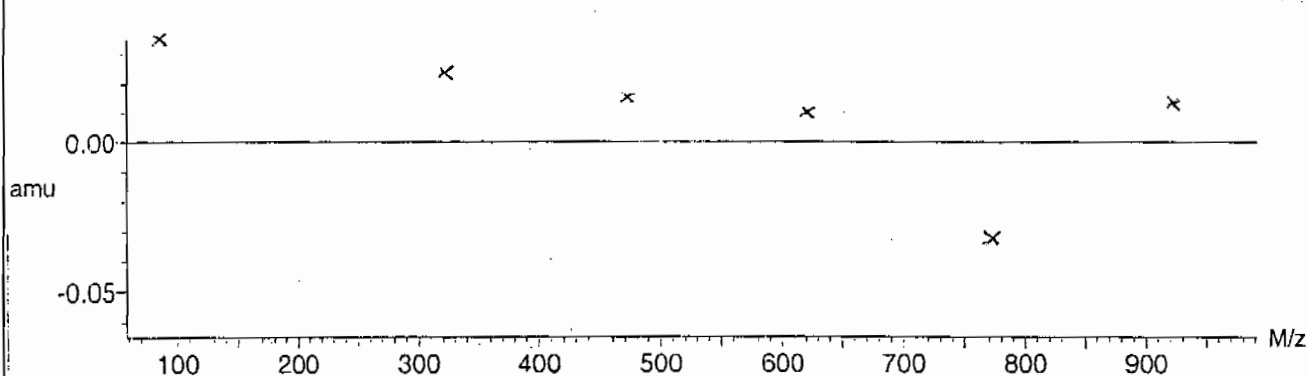


Mass difference (Raw - Ref mass)



Residuals

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



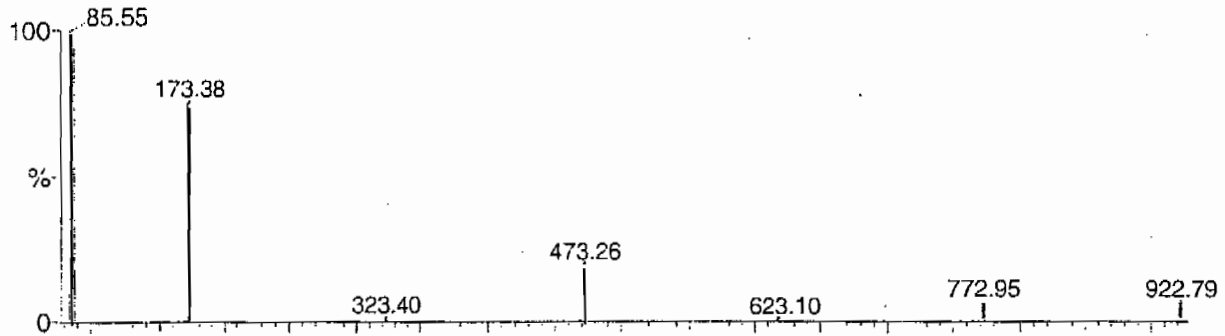
Calibration Report - MS2 Static

Page 1 of 1

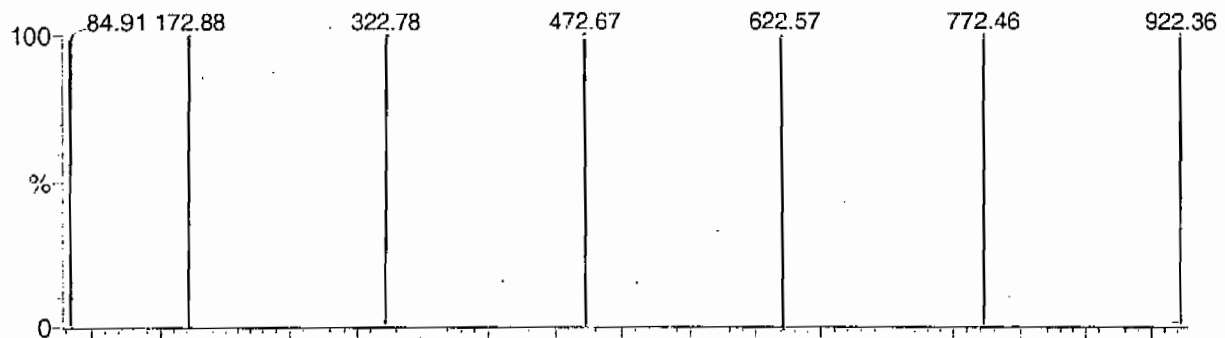
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

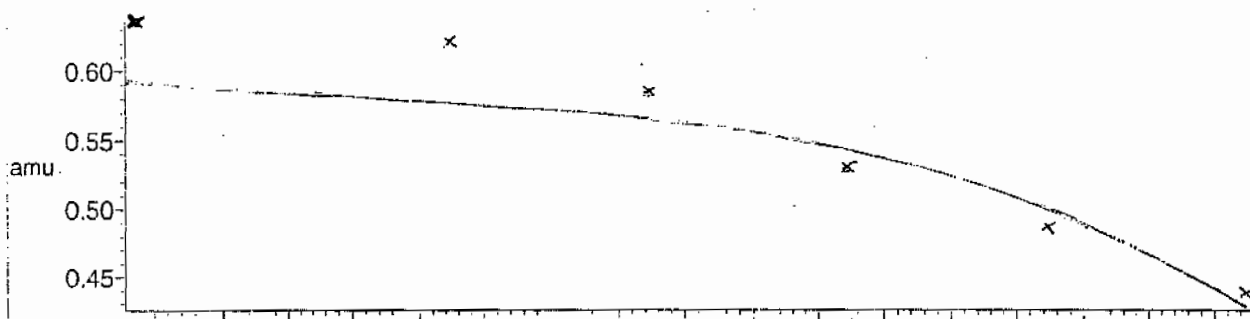
7 matches of 7 tested references



Reference file: Nairb

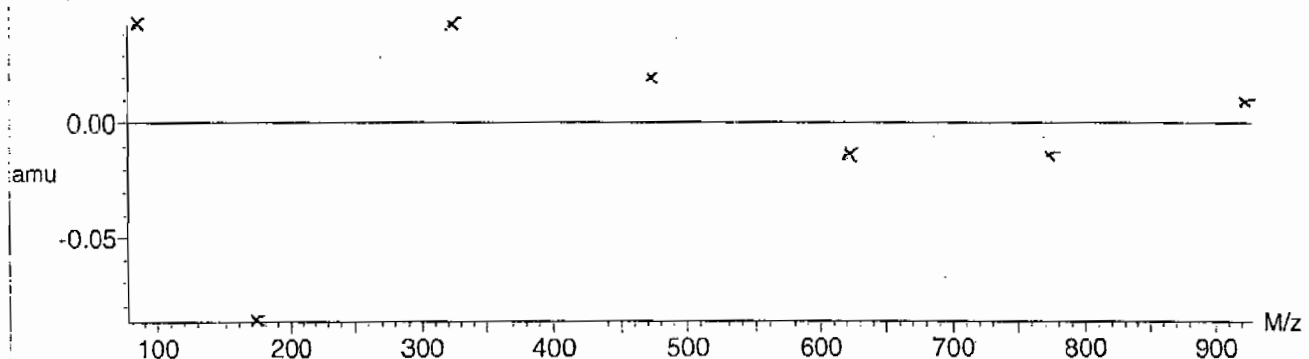


Mass difference (Raw - Ref mass)



Residuals

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



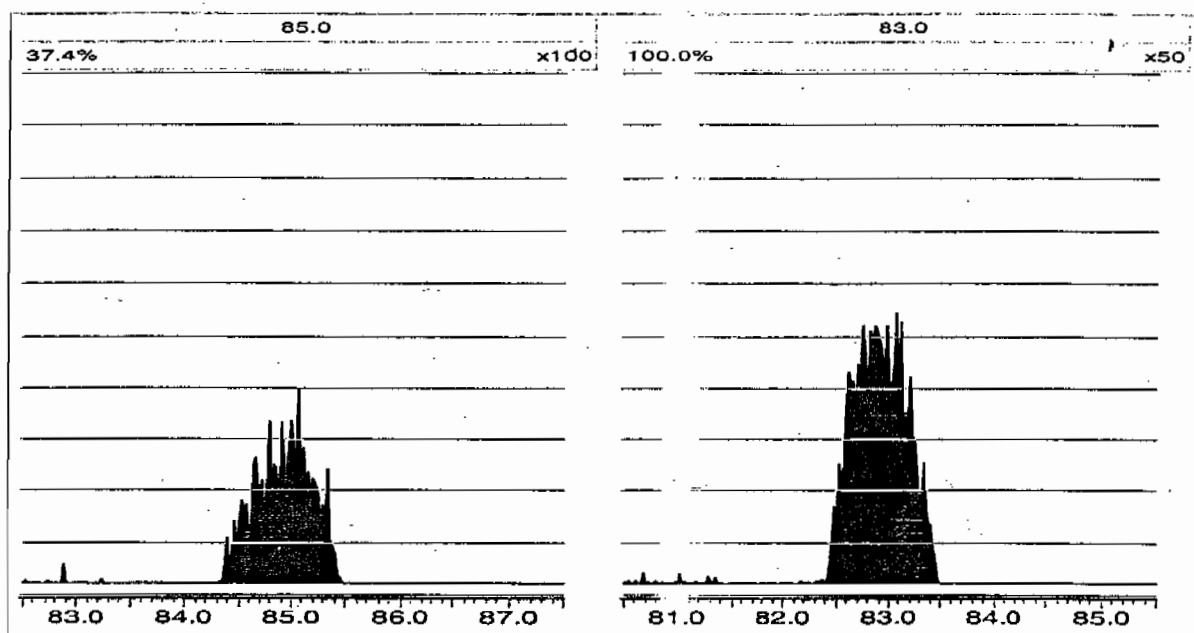
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Friday, January 15, 2010 13:21:37 Eastern Standard Time



Perchlorate RT And Area Summary

GEL Job No.(SDG): 10-1132-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS

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

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	per0115006a	15-JAN-10	24342.3				
Lower Area Limit			12171.15				
Upper Area Limit			48684.6				
1202011852	per0115028a	15-JAN-10 21:12	22490.7	3.92	3.99218	1.018	
1202011853	per0115029a	15-JAN-10 21:21	23148.6	3.92	3.94247	1.006	
1202011858	per0115030a	15-JAN-10 21:31	24359.2	4.05	4.0667	1.004	
244129001	per0115031a	15-JAN-10 21:41	24724.7	3.92	3.97975	1.015	
244129002	per0115032a	15-JAN-10 21:50	23055.5	3.92	3.85548	.984	
244129003	per0115033a	15-JAN-10 22:00	23095.1	3.91	3.92997	1.005	

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: 240153
 Extraction Type: Filter/DAI
 Sample Volume/Weight: 10.0 mL
 Concentrated Extract Volume: 10.0
 Client Sample No. RE12-10-7659
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132-1
 GEL Sample ID: 244129001
 Date Filtered: 13-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	15-JAN-10 21:41	per0115031a
	Perchlorate Isotope Ratio						1	15-JAN-10 21:41	per0115031a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	15-JAN-10 21:41	per0115031a
	Perchlorate-O(18)			0.513	ug/L		1	15-JAN-10 21:41	per0115031a

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

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

Identify Sample Report MassLynx 4.0 SP4

re GEL Group, LLC Analyst: Charfers W. Wilson

atset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ist Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time

inted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ame: per0115031a

ate: 15-Jan-2010

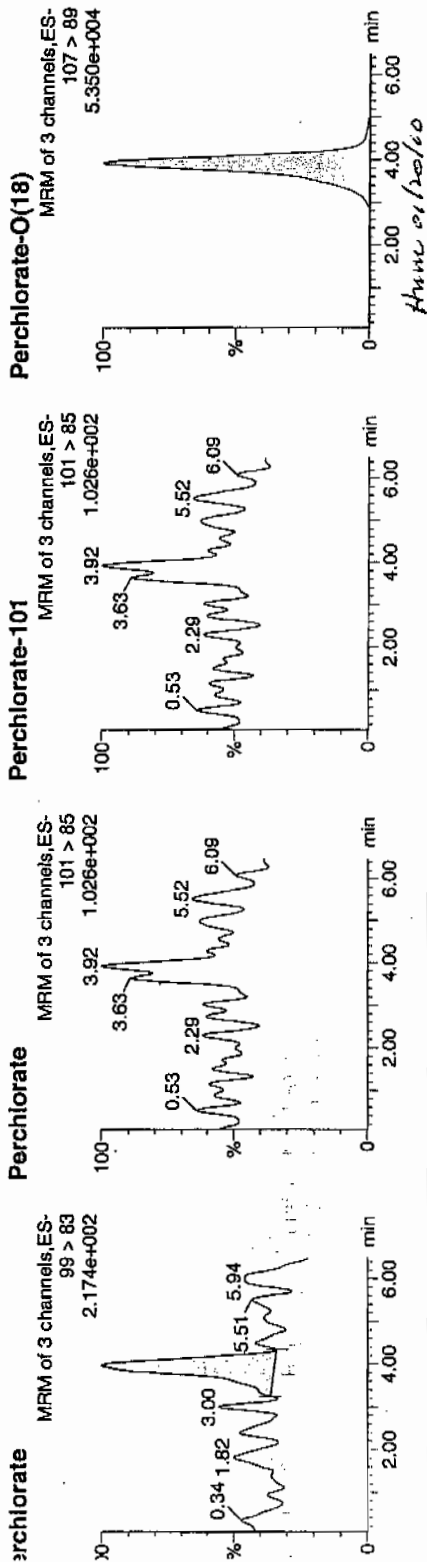
me: 21:41:03

: 244129001

al: 1:5,D

www
0-13-10

LANU-1940158/1202/11



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
4129001	Perchlorate	99 > 83	3.98	64.262	bb			0.0011			14.357	0.00
4129001	Perchlorate-101	101 > 85										
4129001	Perchlorate-O(18)	107 > 89	3.92	24724.697	bb			0.5127	102.53	2.53	3246.6...	

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: 240153
 Extraction Type: Filter/DAI
 Sample Volume/Weight: 10.0 mL
 Concentrated Extract Volume: 10.0
 Client Sample No. RE12-10-7661
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132-1
 GEL Sample ID: 244129002
 Date Filtered: 13-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	15-JAN-10 21:50	per0115032a
	Perchlorate Isotope Ratio						1	15-JAN-10 21:50	per0115032a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	15-JAN-10 21:50	per0115032a
	Perchlorate-O(18)			0.478	ug/L		1	15-JAN-10 21:50	per0115032a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X %Solids
 Aliquot

Quantify Sample Report MassLynx 4.0 SP4

the GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

Last Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
Printed: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

Sample Name: per0115032a

Sample Date: 15-Jan-2010

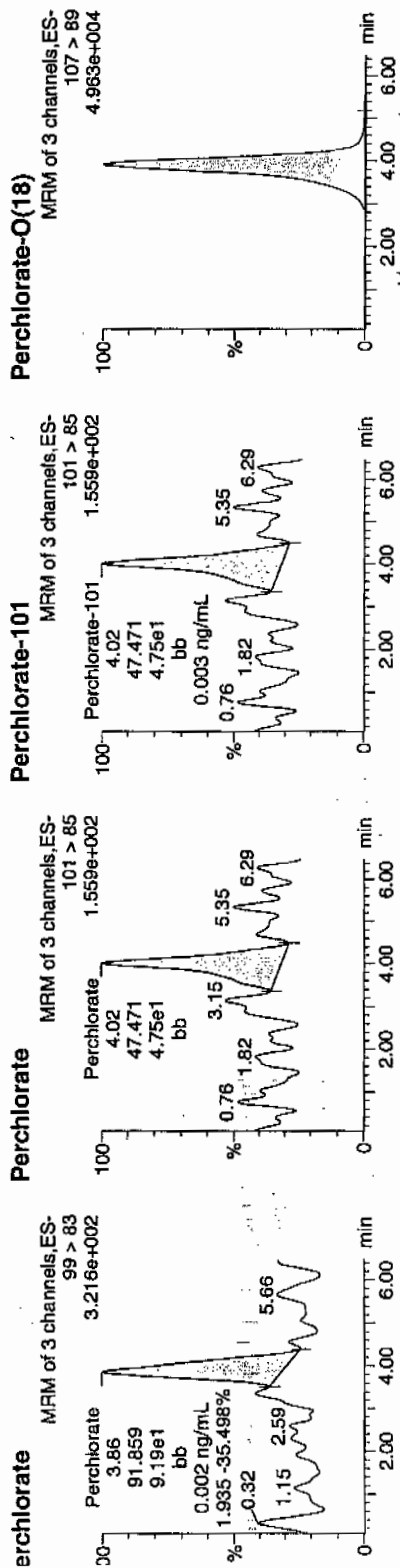
Sample Time: 21:50:36

Sample ID: 244129002

Sample Label: 1:5,E

6663
01-18-10

122111
122111



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83	3.86	91.859	91.859	bb			0.0016			11.766	1.94
Perchlorate-101	101 > 85	4.02	47.471	47.471	bb			0.0026			20.675	
Perchlorate-O(18)	107 > 89	3.92	23055.533	23055.533	bb			0.4780	95.51	-4.39	3098.1...	

OK 44
600500

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: WATER
 Extraction Batch ID: 240153
 Extraction Type: Filter/DAI
 Sample Volume/Weight: 10.0 mL
 Concentrated Extract Volume: 10.0
 Client Sample No. RE12-10-7660
 Date Received: 08-JAN-10
 GEL Job No (SDG): 10-1132-1
 GEL Sample ID: 244129003
 Date Filtered: 13-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	15-JAN-10 22:00	per0115033a
	Perchlorate Isotope Ratio						1	15-JAN-10 22:00	per0115033a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	15-JAN-10 22:00	per0115033a
	Perchlorate-O(18)			0.479	ug/L		1	15-JAN-10 22:00	per0115033a

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

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

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

atset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ist Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
 inted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

MANUAL

ame: per0115033a

ate: 15-Jan-2010

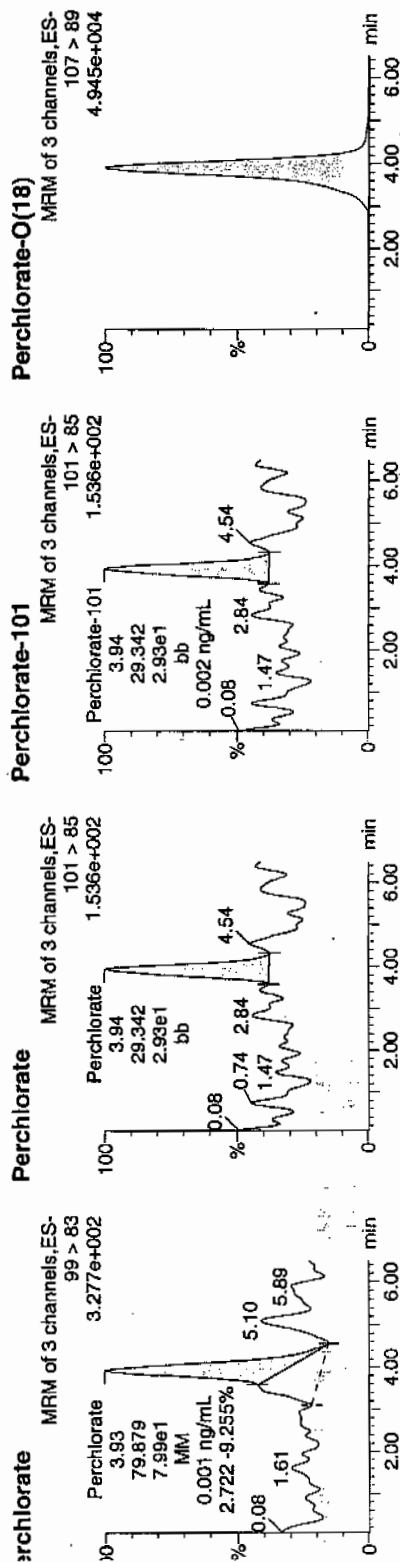
me: 22:00:07

: 244129003

al: 1:5,F

9-18-10

16421940158 | 1722 | 11



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
4129003	Perchlorate	99 > 83	3.93	79.879	MM	16-Jan-10	09:03:33	0.0014			7.845	2.72
4129003	Perchlorate-101	101 > 85	3.94	29.342	bb			0.0016			9.139	
4129003	Perchlorate-O(18)	107 > 89	3.91	23095.125	bb			0.4789	95.77	-4.23	3036.2...	

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

STANDARDS DATA

Perchlorate Initial Calibration

GEL Job No.(SDG): 10-1132-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 15-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

Parname Perchlorate

Coefficient of Determination:

Calibration Curve: 56254

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1132-1

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 15-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

Parname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 18203.38

Response Type: External Standard

Curve Type: RF

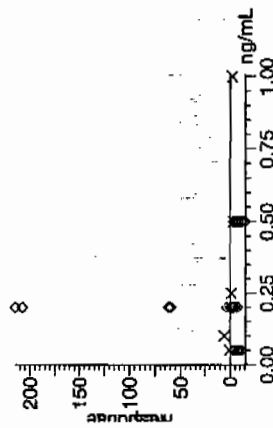
Quantify Calibration Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

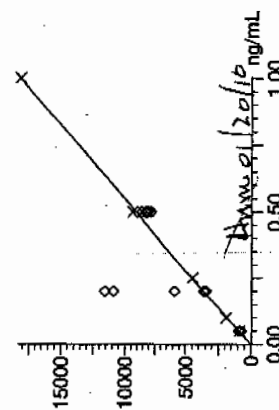
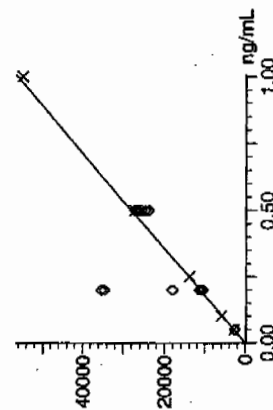
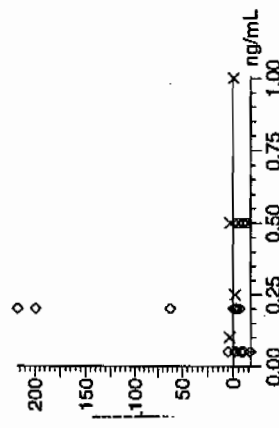
List Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
Listed: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per011510a.mdb 18 Jan 2010 08:43:34
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per011510a.cdb 18 Jan 2010 08:43:48

Compound name: Perchlorate
Response Factor: 56254
RF SD: 2113.01, % Relative SD: 3.75619
Response type: External Std, Area
Response type: RF



Compound name: Perchlorate-101
Response Factor: 18203.4
RF SD: 580.647, % Relative SD: 3.18977
Response type: External Std, Area
Response type: RF



01-18-10

Identify Calibration Report MassLynx 4.0 SP4
 ie GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

st Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
 inted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

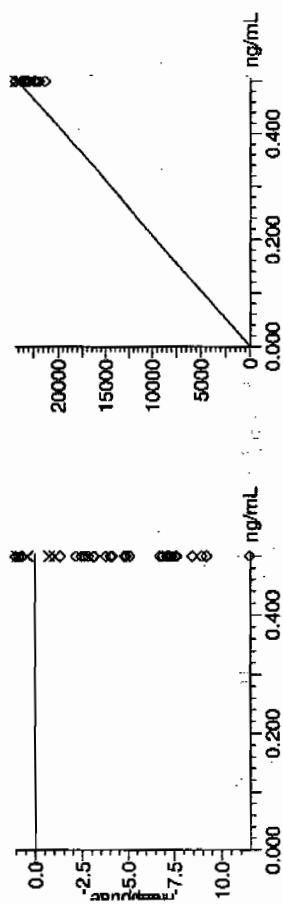
Compound name: Perchlorate-O(18)

Response Factor: 48228.8

RF SD: 404.995, % Relative SD: 0.839737

Response type: External Std, Area

Curve type: RF



Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1132-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.48	96.93	15-JAN-10 18:11	per0115009a
Perchlorate Isotope Ratio		3.03		15-JAN-10 18:11	per0115009a
Perchlorate-101	.5	.49	98.8	15-JAN-10 18:11	per0115009a

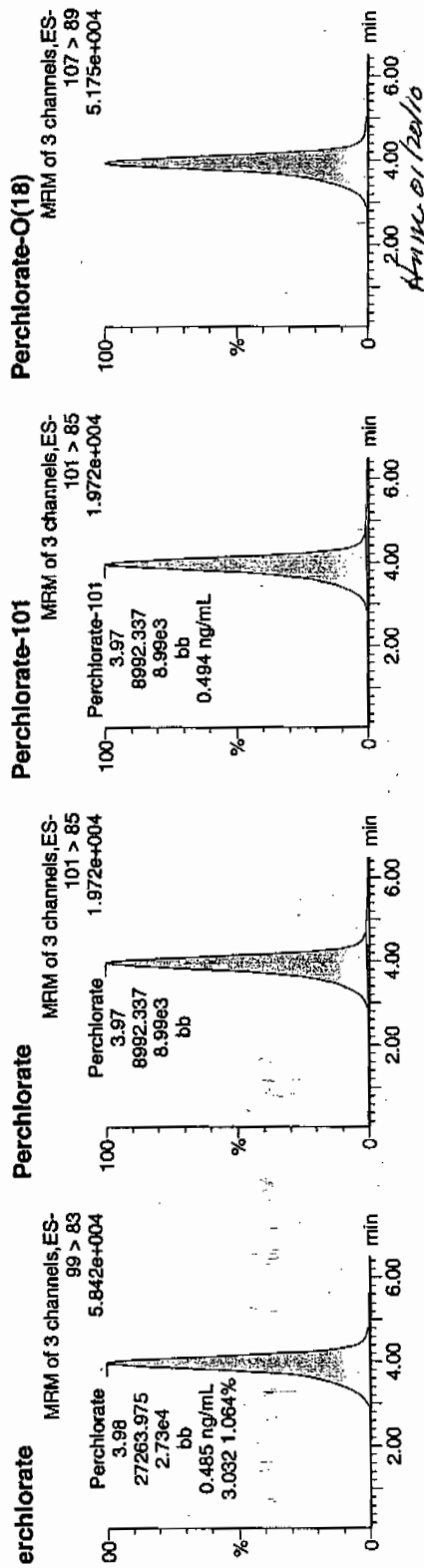
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

Acquired: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
Printed: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

Sample Name: per0115009a
Date: 15-Jan-2010
Time: 18:11:06
File: WCL100104-06ICV
Label: 1:2,A

Per
W
01-18-10



Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100104-06ICV	Perchlorate	3.98	27263.975	27263.975	bb			0.4847	96.93	-3.07	1669.1...	3.03
CL100104-06ICV	Perchlorate-101	3.97	8992.337	8992.337	bb			0.4940	98.80	-1.20	430.961	
CL100104-06ICV	Perchlorate-Q(18)	3.95	24367.420	24367.420	bb			0.5052	101.05	-1.05	2663.2...	

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

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1132-1

Lab Code: GEL

Reporting Units: ug/L

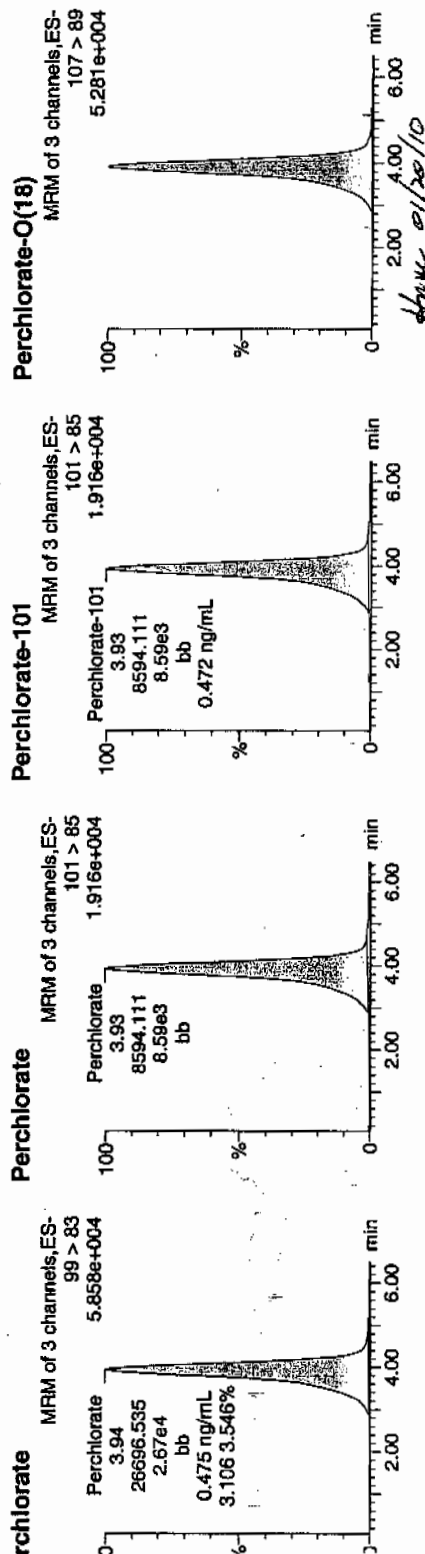
Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.47	94.91	15-JAN-10 19:17	per0115016a
Perchlorate Isotope Ratio		3.11		15-JAN-10 19:17	per0115016a
Perchlorate-101	.5	.47	94.42	15-JAN-10 19:17	per0115016a
Perchlorate	.5	.45	90.92	15-JAN-10 20:43	per0115025a
Perchlorate Isotope Ratio		3.13		15-JAN-10 20:43	per0115025a
Perchlorate-101	.5	.45	89.68	15-JAN-10 20:43	per0115025a
Perchlorate	.5	.47	93.21	15-JAN-10 22:47	per0115038a
Perchlorate Isotope Ratio		3.18		15-JAN-10 22:47	per0115038a
Perchlorate-101	.5	.45	90.5	15-JAN-10 22:47	per0115038a

Identify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

Sample Name: per0115016a
Date: 15-Jan-2010
Time: 19:17:55
File: WCL100104-06CCV
Inlet: 1:2,A

Pass
CWS
01-18-10



Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	% Rec	% Dev	SN	Ion Ratio
L100104-06CCV	Perchlorate	3.94	26696.535	26696.535	bb			0.4746	94.91	-5.09	3449.1...	3.11
L100104-06CCV	Perchlorate-101	3.93	8594.111	8594.111	bb			0.4721	94.42	-5.58	579.361	
L100104-06CCV	Perchlorate-O(18)	3.92	24366.004	24366.004	bb			0.5052	101.04	1.04	6703.9...	

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

Sample Name: per0115025a
Date: 15-Jan-2010
Time: 20:43:46
File: WCL100104-06CCV
Sample: 1:2,A

Sample Name: per0115025a

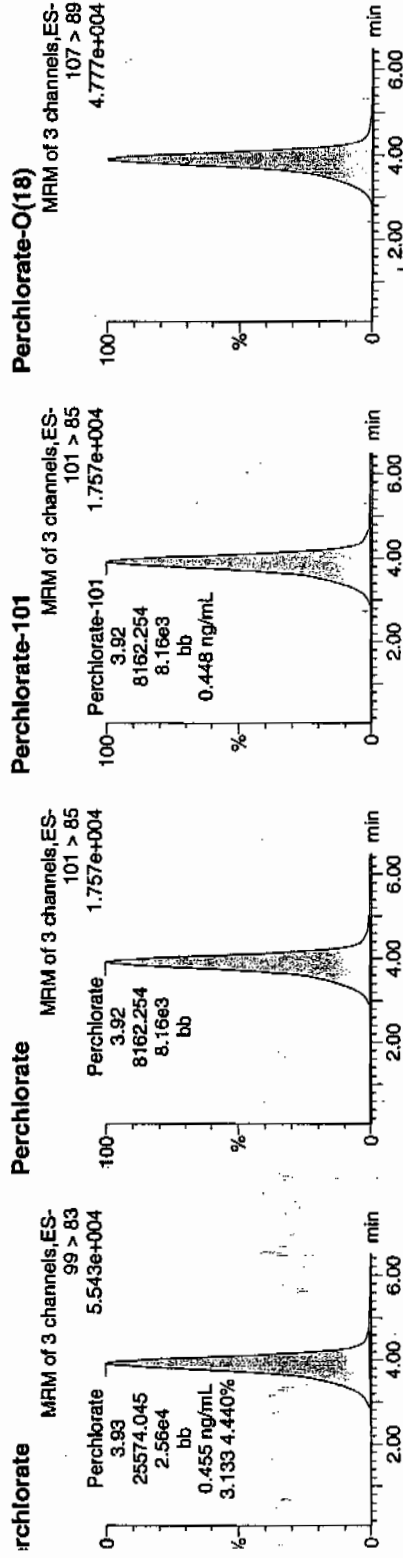
Date: 15-Jan-2010

Time: 20:43:46

File: WCL100104-06CCV

Sample: 1:2,A

Pass
and
01-18-10



Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	Dev	S/N	Ion Ratio
2L100104-06CCV	Perchlorate	3.93	25574.045	25574.045	bb			0.4546	90.92	-8.08	751.918	3.13
2L100104-06CCV	Perchlorate-101	3.92	8162.254	8162.254	bb			0.4484	89.68	-10.32	469.738	
2L100104-06CCV	Perchlorate-O(18)	3.91	22330.109	22330.109	bb			0.4630	92.60	-7.40	1588.6...	

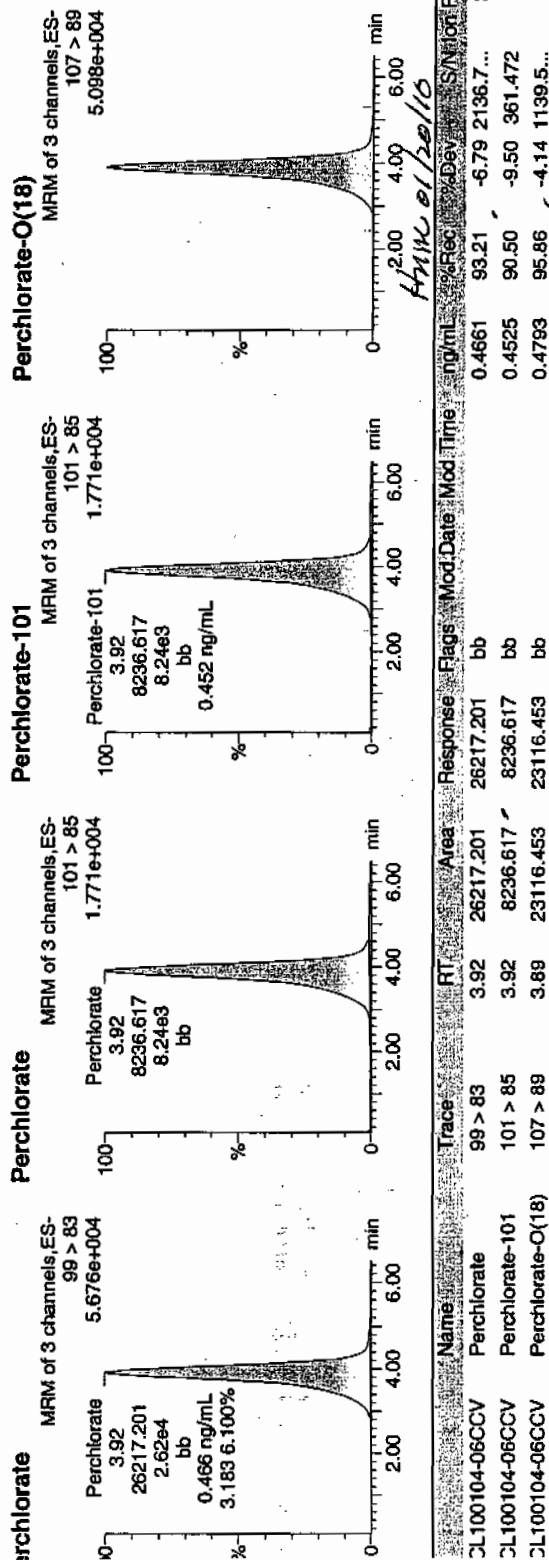
Identify Sample Report MassLynx 4.0 SP4
 ie GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

First Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
 Entered: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

Time: per0115038a
 Date: 15-Jan-2010
 Time: 22:47:54
 File: WCL100104-06CCV
 Alt: 1:2,A

Pass
 and
 01-18-10



Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1132-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	95.18	15-JAN-10 18:30	per0115011a
Perchlorate Isotope Ratio		2.8		15-JAN-10 18:30	per0115011a
Perchlorate-101	.05	.05	105.09	15-JAN-10 18:30	per0115011a
Perchlorate	.05	.05	96.83	15-JAN-10 19:36	per0115018a
Perchlorate Isotope Ratio		3.23		15-JAN-10 19:36	per0115018a
Perchlorate-101	.05	.05	92.61	15-JAN-10 19:36	per0115018a
Perchlorate	.05	.05	90.97	15-JAN-10 21:02	per0115027a
Perchlorate Isotope Ratio		2.84		15-JAN-10 21:02	per0115027a
Perchlorate-101	.05	.05	98.99	15-JAN-10 21:02	per0115027a
Perchlorate	.05	.04	88.68	15-JAN-10 23:07	per0115040a
Perchlorate Isotope Ratio		2.94		15-JAN-10 23:07	per0115040a

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1132-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate-101	.05	.05	93.11	15-JAN-10 23:07	per0115040a
-----------------	-----	-----	-------	-----------------	-------------

Quantify Sample Report MassLynx 4.0 SP4

he GEL Group, LLC Analyst: Charlers W. Wilson

atasset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ame: per0115011a

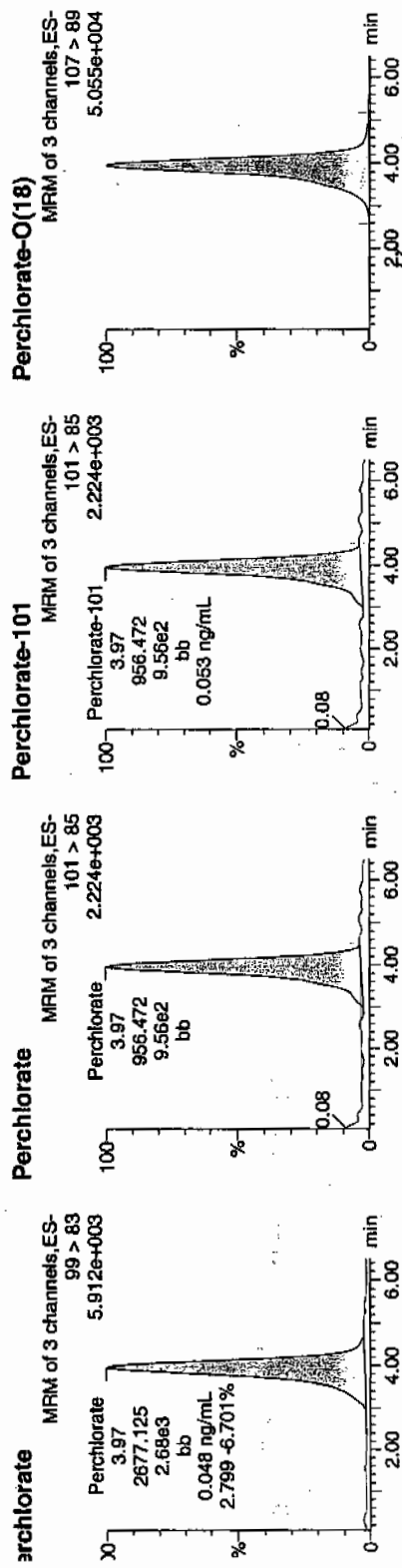
ate: 15-Jan-2010

ime: 18:30:12

i: WCL100104-07CRI

ial: 1:2,B

Page
and
01-18-10



Name	Trace	RT	Area	Response	Flags	Mod	Date	Time	ng/mL	%Rec	%Dev	SN	Ratio
CL100104-07CRI	Perchlorate	99 > 83	3.97	2677.125	bb				0.0476	95.18	-4.82	233.778	2.80
CL100104-07CRI	Perchlorate-101	101 > 85	3.97	956.472	bb				0.0525	105.09	5.09	322.926	
CL100104-07CRI	Perchlorate-O(18)	107 > 89	3.95	23597.420	bb				0.4893	97.86	-2.14	3376.5...	

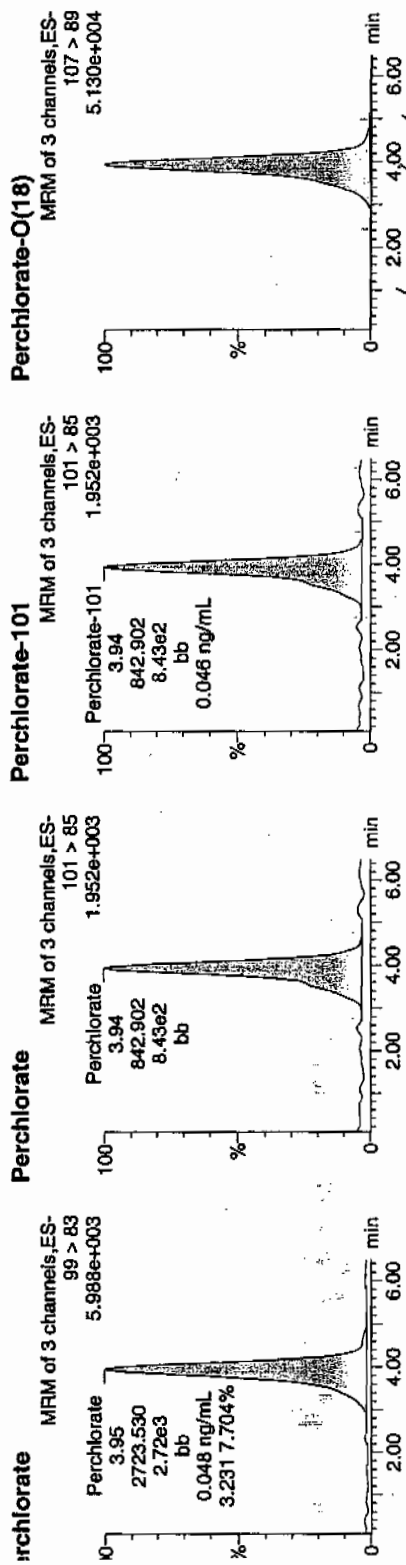
uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

at aset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ist Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
inted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ime: per0115018a
ite: 15-Jan-2010
me: 19:36:59
: WCL100104-07CRI
al: 1:2,B

*Per
and
0-18-10*



Name	Trace	RT	Area	Response	Flags	Mod	Date	Mod	Time	ng/mL	%Rec	%Dev	SN	Ratio
CL100104-07CRI	Perchlorate	99 > 83	3.95	2723.530	bb					0.0484	96.83	-3.17	130.049	3.23
CL100104-07CRI	Perchlorate-101	101 > 85	3.94	842.902	bb					0.0463	92.61	-7.39	52.552	
CL100104-07CRI	Perchlorate-O(18)	107 > 89	3.93	23520.729	bb					0.4877	97.54	-2.46	3968.1...	

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

at aset: C:\MassLynx\Perchlorate.PRO\per011510a.qtd

ist Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
 ifted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ame: per0115027a

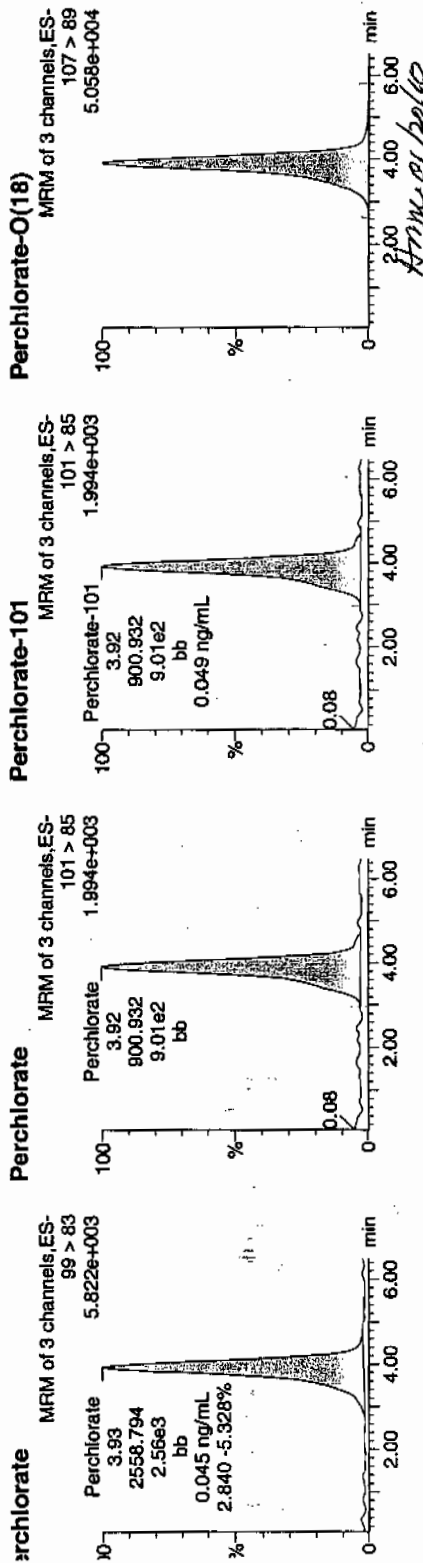
ite: 15-Jan-2010

me: 21:02:51

: WCL100104-07CRI

al: 1:2,B

Pass
and
01-18-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100104-07CRI	Perchlorate	3.93	2558.794	2558.794	bb			0.0455	90.97	-9.03	133.718	2.84
CL100104-07CRI	Perchlorate-101	3.92	900.932	900.932	bb			0.0495	98.99	-1.01	22.594	
CL100104-07CRI	Perchlorate-O(18)	3.92	23482.980	23482.980	bb			0.4869	97.38	-2.62	612.804	

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

atataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

st Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
 inted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ame: per0115040a

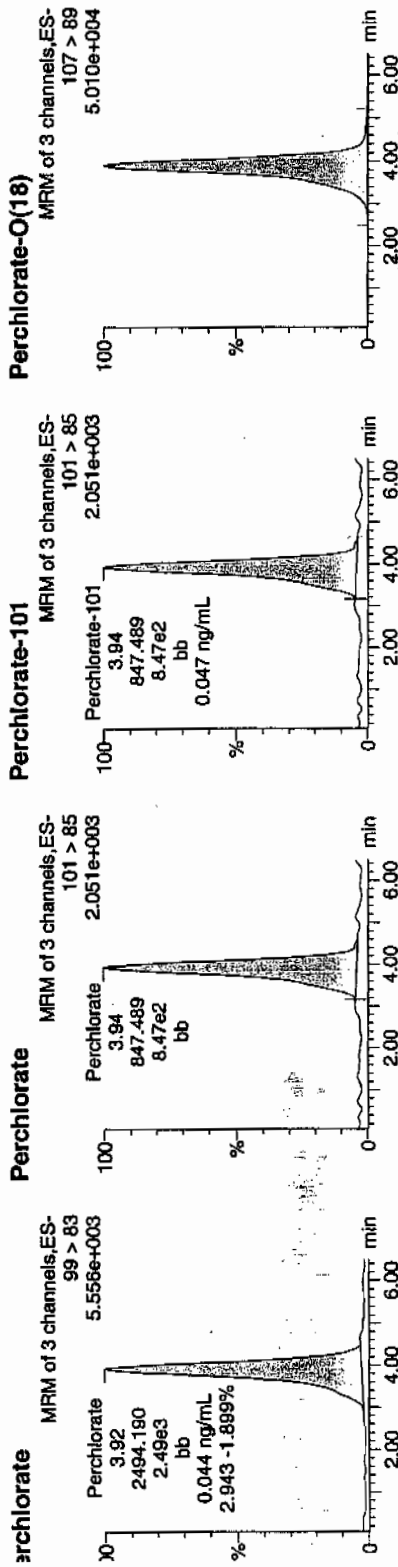
ate: 15-Jan-2010

me: 23:07:00

i: WCL100104-07CRI

al: 1:2,B

Pass
 and
 01-18-10



Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
CL100104-07CRI	Perchlorate	3.92	2494.190	2494.190	bb			0.0443	88.68	-11.32	146.232	2.94
CL100104-07CRI	Perchlorate-101	3.94	847.489	847.489	bb			0.0466	93.11	-6.89	50.462	
CL100104-07CRI	Perchlorate-O(18)	3.89	22963.768	22963.768	bb			0.4761	95.23	-4.77	771.020	

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

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: 940153
 Extraction Type: Filter/DAI
 Sample Volume/Weight: 10.0 mL
 Concentrated Extract Volume: 10.0
 Client Sample No. MB
 Date Received: 13-JAN-10
 GEL Job No (SDG): 10-1132-1
 GEL Sample ID: 1202011852
 Date Filtered: 13-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	15-JAN-10 21:12	per0115028a
	Perchlorate Isotope Ratio						1	15-JAN-10 21:12	per0115028a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	15-JAN-10 21:12	per0115028a
	Perchlorate-O(18)			0.466	ug/L		1	15-JAN-10 21:12	per0115028a

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

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

uantify Sample Report MassLynx 4.0 SP4
ne GEL Group, LLC Analyst: Charles W. Wilson

atset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ist Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
inted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ame: per0115028a

ate: 15-Jan-2010

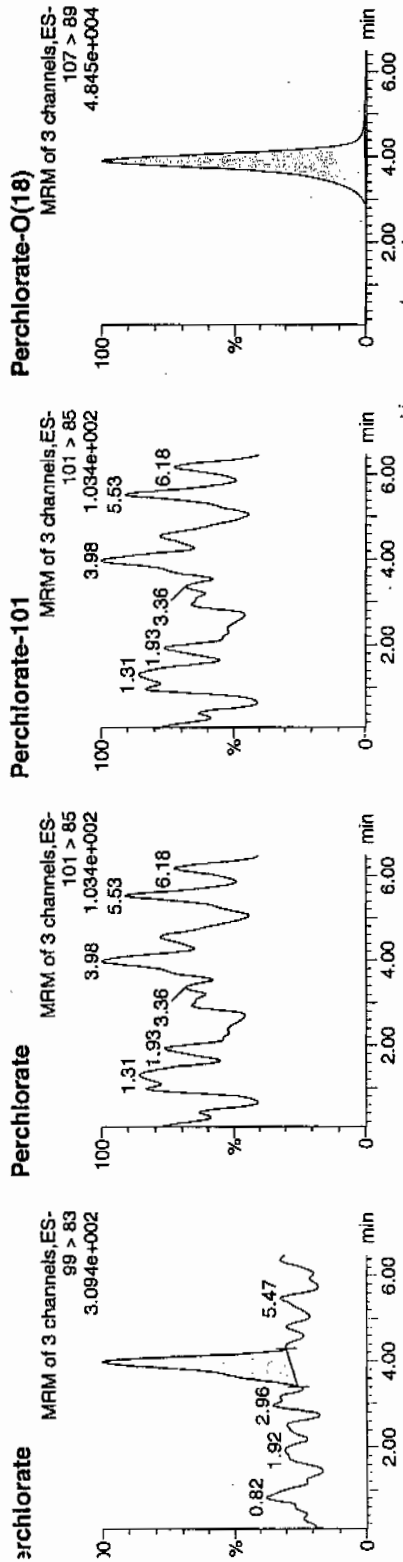
me: 21:12:23

i: 1202011852

al: 1:5,A

01-18-10

LANC 1940153 / L22 / M3 / 11



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: EPA 6850 Modified
 Matrix: WATER
 Extraction Batch ID: 240153
 Extraction Type: Filter/DAI
 Sample Volume/Weight: 10.0 mL
 Concentrated Extract Volume: 10.0
 Client Sample No. LCS
 Date Received: 13-JAN-10
 GEL Job No (SDG): 10-1132-1
 GEL Sample ID: 1202011853
 Date Filtered: 13-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	0.192	ug/L	J	1	15-JAN-10 21:21	per0115029a
	Perchlorate Isotope Ratio			3			1	15-JAN-10 21:21	per0115029a
14797-73-0	Perchlorate-101	.05	.2	0.198	ug/L	J	1	15-JAN-10 21:21	per0115029a
	Perchlorate-O(18)			0.480	ug/L		1	15-JAN-10 21:21	per0115029a

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

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

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

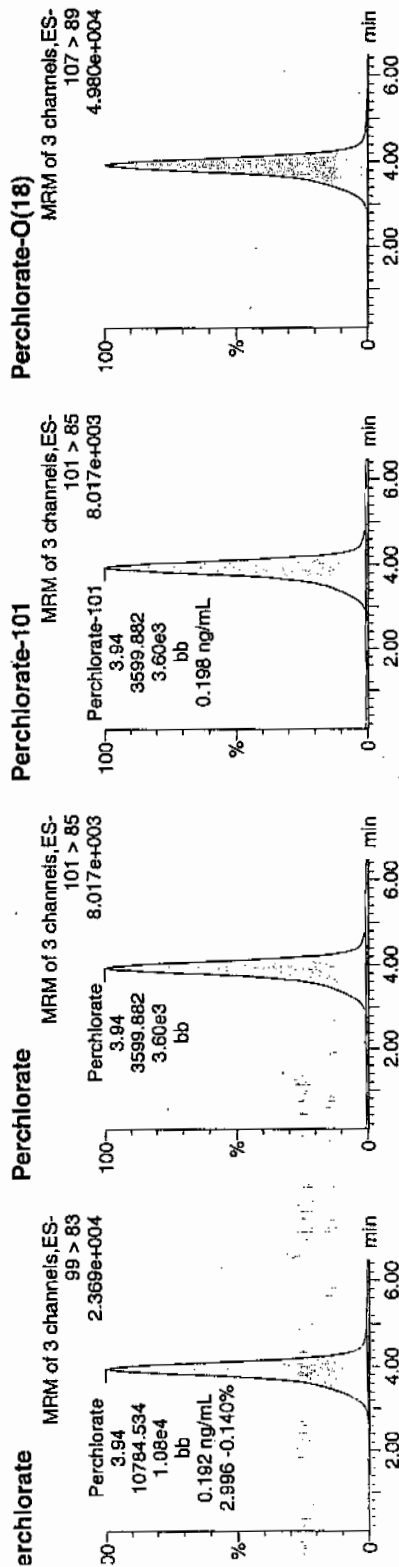
atasset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ame: per0115029a
ate: 15-Jan-2010
ime: 21:21:57
): 1202011853
ial: 1:5,B

LANC | 940188 | 1222 | 105 | 11

Q-18-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83	3.94	10784.534	10784.534	bb			0.1917	95.86	-4.14	549.462	3.00
Perchlorate-101	101 > 85	3.94	3599.882	3599.882	bb			0.1978	98.88	-1.12	634.866	
Perchlorate-O(18)	107 > 89	3.92	23148.611	23148.611	bb			0.4800	95.99	-4.01	3521.6...	

10784.534
56254 = 0.1917
Hmw 01/20/10

MISCELLANEOUS DATA

Prep Logbook

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

Batch ID: 940153 Verified by: _____
 Analyst: Charles Wilson
 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)
1202011852 MB	13-JAN-2010 11:06:01	10	10	1
1202011853 LCS	13-JAN-2010 11:06:01	10	10	1
244129001	13-JAN-2010 11:06:01	10	10	1
244129002	13-JAN-2010 11:06:01	10	10	1
244129003	13-JAN-2010 11:06:01	10	10	1
244145001	13-JAN-2010 11:06:01	10	10	1
244149001	13-JAN-2010 11:06:01	10	10	1
244208001	13-JAN-2010 11:06:01	10	10	1
244208002	13-JAN-2010 11:06:01	10	10	1
244213001	13-JAN-2010 11:06:01	10	10	1
244217001	13-JAN-2010 11:06:01	10	10	1
244217002	13-JAN-2010 11:06:01	10	10	1
244226001	13-JAN-2010 11:06:01	10	10	1
1202011854 MS (244226001)	13-JAN-2010 11:06:01	10	10	1
1202011855 MSD (244226001)	13-JAN-2010 11:06:01	10	10	1
244226002	13-JAN-2010 11:06:01	10	10	1
244236002	13-JAN-2010 11:06:01	10	10	1
244236003	13-JAN-2010 11:06:01	10	10	1
244240001	13-JAN-2010 11:06:01	10	10	1
1202011856 MS (244240001)	13-JAN-2010 11:06:01	10	10	1
1202011857 MSD (244240001)	13-JAN-2010 11:06:01	10	10	1
1202011858 ICS	13-JAN-2010 11:06:01	10	10	1

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments
ICS	1202011858	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.2	mL	Desalting cartridges used: 091006-1-H & 090810-1-Ba
LCS	1202011853	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.2	mL	
MS	1202011854	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.2	mL	
MS	1202011856	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.2	mL	
MSD	1202011855	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.2	mL	
MSD	1202011857	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.2	mL	
RGNT	All	500 ppm Carbonate, Bicarbonate, Chloride, Sulfate	1236492	10	mL	
RGNT	All	0251 HPLC Grade Water	1246195	10	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 01/15/10
 Extr. Injection Volume: 20uL
 Sequence Number: per011510a
 Initial Calibration Date: 01/15/10

Method: EPA 6850-Modified
 Int. Std.: UCL091019-03.2
 Mobile Phase Lot#: 1254342, 1246195
 Standard-Samp Reagent Lot#: 1233976

Reviewed BY: *hmc*
 Date: 01/20/10
 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
per0115001a	IPB001	CWW	1/15/2010 16:54			1		USE	B
per0115002a	IPB001	CWW	1/15/2010 17:04			1		USE	B
per0115003a	WCLICAL-01	CWW	1/15/2010 17:13			1		USE	I
per0115004a	WCLICAL-02	CWW	1/15/2010 17:23			1		USE	I
per0115005a	WCLICAL-03	CWW	1/15/2010 17:33			1		USE	I
per0115006a	WCLICAL-04	CWW	1/15/2010 17:42			1		USE	I
per0115007a	WCLICAL-05	CWW	1/15/2010 17:52			1		USE	I
per0115008a	IPB002	CWW	1/15/2010 18:01			1		USE	B
per0115009a	WCLICV	CWW	1/15/2010 18:11			1		USE	C
per0115010a	IPB003	CWW	1/15/2010 18:20			1		USE	B
per0115011a	WCLCRI	CWW	1/15/2010 18:30			1		USE	C
per0115012a	1202016608	CWW	1/15/2010 18:39	942037	WS-162	1	PTQA	USE	S
per0115013a	1202016610	CWW	1/15/2010 18:49	942037	WS-162	1	PTQA	USE	S
per0115014a	244609019	CWW	1/15/2010 18:58	942037	WS-162	10	PTQA	USE	S
per0115015a	1202016609	CWW	1/15/2010 19:08	942037	WS-162	10	PTQA	USE	S
per0115016a	WCLCCV	CWW	1/15/2010 19:17			1		USE	C
per0115017a	IPB004	CWW	1/15/2010 19:27			1		USE	B
per0115018a	WCLCRI	CWW	1/15/2010 19:36			1		USE	C
per0115019a	1202016599	CWW	1/15/2010 19:46	942034	244603	1	EMAX	USE	S
per0115020a	1202016600	CWW	1/15/2010 19:56	942034	244603	1	EMAX	USE	S
per0115021a	1202016603	CWW	1/15/2010 20:05	942034	244603	1	EMAX	USE	S
per0115022a	244603001	CWW	1/15/2010 20:15	942034	244603	1	EMAX	USE	S
per0115023a	1202016601	CWW	1/15/2010 20:24	942034	244603	1	EMAX	USE	S
per0115024a	1202016602	CWW	1/15/2010 20:34	942034	244603	1	EMAX	USE	S
per0115025a	WCLCCV	CWW	1/15/2010 20:43			1		USE	C
per0115026a	IPB005	CWW	1/15/2010 20:53			1		USE	B
per0115027a	WCLCRI	CWW	1/15/2010 21:02			1		USE	C
per0115028a	1202011852	CWW	1/15/2010 21:12	940158	VARIOUS	1	LANL	USE	S
per0115029a	1202011853	CWW	1/15/2010 21:21	940158	VARIOUS	1	LANL	USE	S

per0115030a	1202011858	CWW	1/15/2010 21:31	940158	VARIOUS	1	LANL	USE	S
per0115031a	244129001	CWW	1/15/2010 21:41	940158	10-1132-1	1	LANL	USE	S
per0115032a	244129002	CWW	1/15/2010 21:50	940158	10-1132-1	1	LANL	USE	S
per0115033a	244129003	CWW	1/15/2010 22:00	940158	10-1132-1	1	LANL	USE	S
per0115034a	244145001	CWW	1/15/2010 22:09	940158	10-1128-1	1	LANL	USE	S
per0115035a	244149001	CWW	1/15/2010 22:19	940158	10-1147	1	LANL	USE	S
per0115036a	244208001	CWW	1/15/2010 22:28	940158	10-1159-1	1	LANL	USE	S
per0115037a	244208002	CWW	1/15/2010 22:38	940158	10-1159-1	1	LANL	USE	S
per0115038a	WCLCCV	CWW	1/15/2010 22:47			1		USE	C
per0115039a	IPB006	CWW	1/15/2010 22:57			1		USE	B
per0115040a	WCLCRI	CWW	1/15/2010 23:07			1		USE	C
per0115041a	244213001	CWW	1/15/2010 23:16	940158	10-1154	1	LANL	DUSE-RA	S
per0115042a	244217001	CWW	1/15/2010 23:26	940158	10-1152	1	LANL	DUSE-RA	S
per0115043a	244217002	CWW	1/15/2010 23:35	940158	10-1152	1	LANL	DUSE-RA	S
per0115044a	244226001	CWW	1/15/2010 23:45	940158	10-1161	1	LANL	DUSE-RA	S
per0115045a	1202011854	CWW	1/15/2010 23:54	940158	10-1161	1	LANL	DUSE-RA	S
per0115046a	1202011855	CWW	1/16/2010 0:04	940158	10-1161	1	LANL	DUSE-RA	S
per0115047a	244226002	CWW	1/16/2010 0:13	940158	10-1161	1	LANL	DUSE-RA	S
per0115048a	244236002	CWW	1/16/2010 0:23	940158	10-1169	1	LANL	DUSE-RA	S
per0115049a	244236003	CWW	1/16/2010 0:33	940158	10-1169	1	LANL	DUSE-RA	S
per0115050a	WCLCCV	CWW	1/16/2010 0:42			1		USE	C
per0115051a	IPB007	CWW	1/16/2010 0:52			1		USE	B
per0115052a	WCLCRI	CWW	1/16/2010 1:01			1		USE	C
per0115053a	244240001	CWW	1/16/2010 1:11	940158	10-1172	1	LANL	DUSE-RA	S
per0115054a	1202011856	CWW	1/16/2010 1:20	940158	10-1172	1	LANL	DUSE-RA	S
per0115055a	1202011857	CWW	1/16/2010 1:30	940158	10-1172	1	LANL	DUSE-RA	S
per0115056a	IPB008	CWW	1/16/2010 1:39			1		USE	B
per0115057a	1202011832	CWW	1/16/2010 1:49	940145	VARIOUS	1	LANL	DUSE-RA	S
per0115058a	1202011833	CWW	1/16/2010 1:59	940145	VARIOUS	1	LANL	DUSE-RA	S
per0115059a	1202011836	CWW	1/16/2010 2:08	940145	VARIOUS	1	LANL	DUSE-RA	S
per0115060a	244222001	CWW	1/16/2010 2:18	940145	10-1150	1	LANL	DUSE-RA	S
per0115061a	244222002	CWW	1/16/2010 2:27	940145	10-1150	1	LANL	DUSE-RA	S
per0115062a	244222003	CWW	1/16/2010 2:37	940145	10-1150	1	LANL	DUSE-RA	S
per0115063a	WCLCCV	CWW	1/16/2010 2:46			1		USE	C
per0115064a	IPB009	CWW	1/16/2010 2:56			1		USE	B
per0115065a	WCLCRI	CWW	1/16/2010 3:06			1		USE	C
per0115066a	244222004	CWW	1/16/2010 3:15	940145	10-1150	1	LANL	USE	S

Handwritten: Hmw 01/20/10

Handwritten: FAIL - Data C

per0115067a	244222005	CWW	1/16/2010 3:25	940145	10-1150	1	LANL	USE	S
per0115068a	244227001	CWW	1/16/2010 3:34	940145	10-1161-1	1	LANL	USE	S
per0115069a	1202011834	CWW	1/16/2010 3:44	940145	10-1161-1	1	LANL	USE	S
per0115070a	1202011835	CWW	1/16/2010 3:53	940145	10-1161-1	1	LANL	USE	S
per0115071a	244227002	CWW	1/16/2010 4:03	940145	10-1161-1	1	LANL	USE	S
per0115072a	244227003	CWW	1/16/2010 4:13	940145	10-1161-1	1	LANL	USE	S
per0115073a	244227004	CWW	1/16/2010 4:22	940145	10-1161-1	1	LANL	USE	S
per0115074a	244227005	CWW	1/16/2010 4:32	940145	10-1161-1	1	LANL	USE	S
per0115075a	244227006	CWW	1/16/2010 4:41	940145	10-1161-1	1	LANL	USE	S
per0115076a	WCLCCV	CWW	1/16/2010 4:51			1		USE	C
per0115077a	IPB010	CWW	1/16/2010 5:00			1		USE	B
per0115078a	WCLCRI	CWW	1/16/2010 5:10			1		USE	C
per0115079a	244227007	CWW	1/16/2010 5:20	940145	10-1161-1	1	LANL	USE	S
per0115080a	244227008	CWW	1/16/2010 5:29	940145	10-1161-1	1	LANL	USE	S
per0115081a	244227009	CWW	1/16/2010 5:39	940145	10-1161-1	1	LANL	USE	S
per0115082a	244227010	CWW	1/16/2010 5:48	940145	10-1161-1	1	LANL	USE	S
per0115083a	244227011	CWW	1/16/2010 5:58	940145	10-1161-1	1	LANL	USE	S
per0115084a	244227012	CWW	1/16/2010 6:07	940145	10-1161-1	1	LANL	USE	S
per0115085a	244227013	CWW	1/16/2010 6:17	940145	10-1161-1	1	LANL	USE	S
per0115086a	244227014	CWW	1/16/2010 6:26	940145	10-1161-1	1	LANL	USE	S
per0115087a	244227015	CWW	1/16/2010 6:36	940145	10-1161-1	1	LANL	USE	S
per0115088a	WCLCCV	CWW	1/16/2010 6:46			1		USE	C
per0115089a	IPB011	CWW	1/16/2010 6:55			1		USE	B
per0115090a	WCLCRI	CWW	1/16/2010 7:05			1		USE	C

Identify Sample Report MassLynx 4.0 SP4

ie GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Sample Name: Perchlorate
 Date Acquired: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
 Date Processed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

File Name: per0118016a

Date: 18-Jan-2010

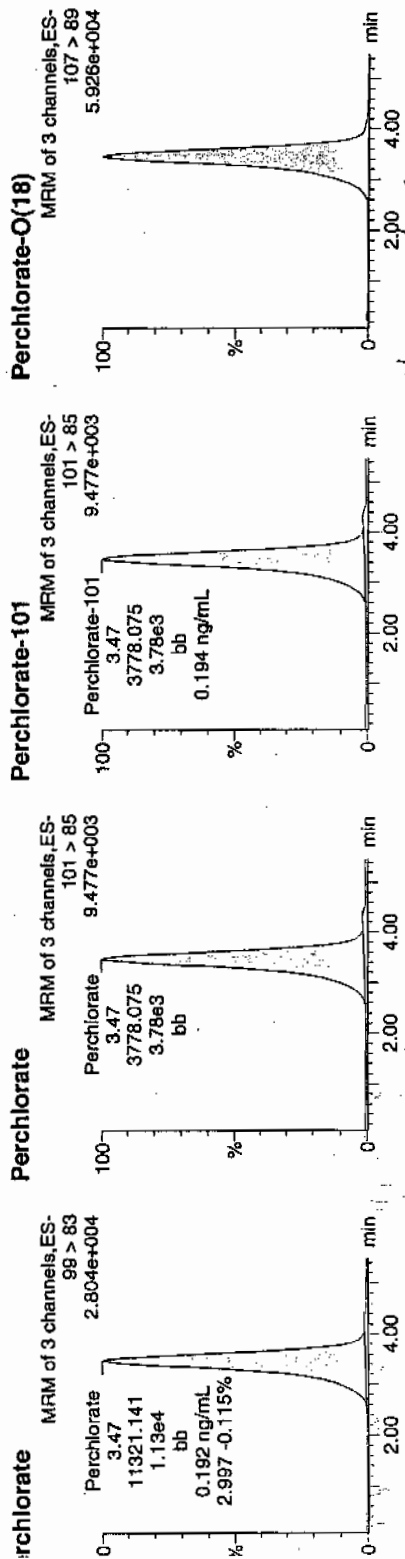
Time: 19:24:05

Sample ID: 1202011854

Lot: 1:3,E

01-18-10

1202011854 | 1202011854 | 1202011854



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
120211854	Perchlorate	99 > 83	3.47	11321.141	11321.141	bb		0.1919	95.93	-4.07	1012.6...	3.00
120211854	Perchlorate-101	101 > 85	3.47	3778.075	3778.075	bb		0.1942	97.10	-2.90	555.456	
120211854	Perchlorate-O(18)	107 > 89	3.45	24482.922	24482.922	bb		0.4890	97.80	-2.20	1301.5...	

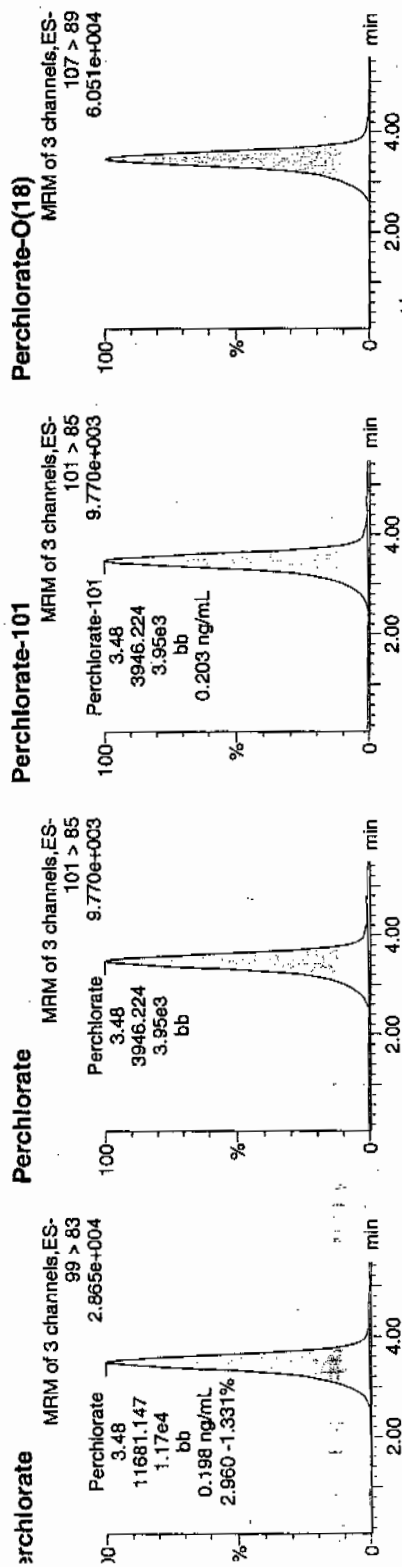
uantify Sample Report MassLynx 4.0 SP4
ne GEL Group, LLC Analyst: Charles W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

st Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
nted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

ame: per0118017a
ate: 18-Jan-2010
me: 19:32:37
: 1202011855
al: 1:3,F

1202011855 1202011855 1202011855
1202011855 1202011855 1202011855



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
02011855	Perchlorate	3.48	11681.147	11681.147	bb			0.1960	98.98	-1.02	573.180	2.96
02011855	Perchlorate-101	3.48	3946.224	3946.224	bb			0.2028	101.42	1.42	436.014	
02011855	Perchlorate-O(18)	3.47	24850.814	24850.814	bb			0.4964	99.27	-0.73	6032.6...	

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

Isotope Ratio Criteria

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

2.31-3.85

Tune Criteria

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

Metals Analysis

Case Narrative

**Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1132**

Sample Analysis

Sample ID	Client ID
244128001	RE12-10-7634
244128002	RE12-10-7648
244128003	RE12-10-7638
244128004	RE12-10-7639
244128005	RE12-10-7633
244128006	RE12-10-7647
244128007	RE12-10-7644
244128008	RE12-10-7637
244128009	RE12-10-7635
244128010	RE12-10-7642
244128011	RE12-10-7649
244128012	RE12-10-7650
244128013	RE12-10-7641
244128014	RE12-10-7643
244128015	RE12-10-7640
244128016	RE12-10-7645
244128017	RE12-10-7646
244128018	RE12-10-7636
244128019	RE12-10-7657
244128020	RE12-10-7658

1202011791	Method Blank (MB) ICP
1202011792	Laboratory Control Sample (LCS)
1202011795	244128001(RE12-10-7634L) Serial Dilution (SD)
1202011793	244128001(RE12-10-7634D) Sample Duplicate (DUP)
1202011794	244128001(RE12-10-7634S) Matrix Spike (MS)
1202011796	244128001(RE12-10-7634SD) Matrix Spike Duplicate (MSD)
1202011693	Method Blank (MB) ICP-MS
1202011760	Method Blank (MB) ICP-MS
1202011694	Laboratory Control Sample (LCS)
1202011761	Laboratory Control Sample (LCS)
1202011764	244128006(RE12-10-7647L) Serial Dilution (SD)
1202011697	244207001(RE16-10-415L) Serial Dilution (SD)
1202011762	244128006(RE12-10-7647D) Sample Duplicate (DUP)
1202011695	244207001(RE16-10-415D) Sample Duplicate (DUP)
1202011763	244128006(RE12-10-7647S) Matrix Spike (MS)
1202011696	244207001(RE16-10-415S) Matrix Spike (MS)
1202011771	244128006(RE12-10-7647SD) Matrix Spike Duplicate (MSD)
1202011698	244207001(RE16-10-415SD) Matrix Spike Duplicate (MSD)
1202019637	Method Blank (MB) CVAA
1202019638	Laboratory Control Sample (LCS)
1202019646	244128001(RE12-10-7634L) Serial Dilution (SD)
1202019639	244128001(RE12-10-7634D) Sample Duplicate (DUP)
1202019640	244128001(RE12-10-7634S) Matrix Spike (MS)
1202019647	244128001(RE12-10-7634SD) Matrix Spike Duplicate (MSD)

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

Method/Analysis Information

Analytical Batch: 940124, 940077, 940107 and 943262
Prep Batch : 940120, 940076, 940101 and 943258
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 - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen

carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements

All CRDL standard(s) met the referenced advisory control limits with the exception of potassium, which recovered outside of the advisory limits of 70-130%.

ICSA/ICSAB Statement

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

Continuing Calibration Blank (CCB) Requirements

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

Continuing Calibration Verification (CCV) Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The laboratory control sample (LCS) met the recommended acceptance criteria for percent recovery (%R) for all elements of interest, with the exception of antimony. Silver and/or antimony did not meet the recovery acceptance criteria for the LCS. Per the DOE-AL statement of work, page forty, silver and antimony are exempt from the re-digestion requirement for LCS failures.

Quality Control (QC) Sample Statement

The following samples were selected as the quality control (QC) samples for this SDG: 244128001, 244207001 and 244128006.

Matrix Spike (MS) Recovery Statement

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

Matrix Spike Duplicate (MSD) Recovery Statement

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

MS/MSD Relative Percent Difference (RPD) Statement

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

Duplicate Relative Percent Difference (RPD) Statement

The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exception of uranium, barium, cobalt, lead, manganese and sodium, 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 exception of manganese, as indicated by 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 sample 244128001 and associated QC required dilutions for manganese and potassium because manganese was over the linear range that affects potassium. The samples in this SDG were diluted the standard 2x for solids on the ICPMS.

Preparation Information

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

Miscellaneous Information

Electronic Packaging Comment

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

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

Data Exception (DER) Documentation

Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following DERs were generated for this SDG: 781601, 783189 and 784656. A copy of each DER is included in the Miscellaneous Data section of this package.

Additional Comments

Additional comments were not required for this SDG.

Certification Statement

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

Review Validation:

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

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

Reviewer: Kristen Hanson Date: 2/3/10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128001

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7634

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	18000000	ug/Kg		7490	22000	22000	1	P	HSC	01/26/10 19:50	012610-1	940124
7440-36-0	Antimony	1100	ug/Kg	UN	364	1100	1100	1	P	HSC	01/26/10 19:50	012610-1	940124
7440-38-2	Arsenic	2.12	mg/kg		0.213	1.06	1.06	2	MS	BAJ	01/23/10 11:05	100123-6	940077
7440-39-3	Barium	334000	ug/Kg	*	110	551	551	1	P	HSC	01/26/10 19:50	012610-1	940124
7440-41-7	Beryllium	1.36	mg/kg		0.0213	0.106	0.106	2	MS	BAJ	01/24/10 12:58	100124-11	940077
7440-43-9	Cadmium	233	ug/Kg	J	110	551	551	1	P	HSC	01/26/10 19:50	012610-1	940124
7440-70-2	Calcium	2550000	ug/Kg		8820	27600	27600	1	P	HSC	01/26/10 19:50	012610-1	940124
7440-47-3	Chromium	12800	ug/Kg		165	551	551	1	P	HSC	01/26/10 19:50	012610-1	940124
7440-48-4	Cobalt	15200	ug/Kg	*N	165	551	551	1	P	HSC	01/26/10 19:50	012610-1	940124
7440-50-8	Copper	8230	ug/Kg		331	1100	1100	1	P	HSC	01/26/10 19:50	012610-1	940124
7439-89-6	Iron	16800000	ug/Kg		8820	27600	27600	1	P	HSC	01/26/10 19:50	012610-1	940124
7439-92-1	Lead	18100	ug/Kg	*	276	1100	1100	1	P	HSC	01/26/10 19:50	012610-1	940124
7439-95-4	Magnesium	2710000	ug/Kg		9370	33100	33100	1	P	HSC	01/26/10 19:50	012610-1	940124
7439-96-5	Manganese	1380000	ug/Kg	*E	1100	5510	5510	5	P	HSC	01/27/10 14:44	012710-2	940124
7439-97-6	Mercury	17.6	ug/kg		4.25	12.5	12.5	1	AV	ETL	01/22/10 08:36	102210S1-13	943262
7440-02-0	Nickel	8.91	mg/kg		0.106	0.426	0.426	2	MS	BAJ	01/23/10 11:05	100123-6	940077
7440-09-7	Potassium	2010000	ug/Kg	N	35300	138000	138000	5	P	HSC	01/27/10 14:44	012710-2	940124
7782-49-2	Selenium	1.06	mg/kg	UN	0.532	1.06	1.06	2	MS	BAJ	01/23/10 11:05	100123-6	940077
7440-22-4	Silver	1110	ug/Kg		110	551	551	1	P	HSC	01/26/10 19:50	012610-1	940124
7440-23-5	Sodium	143000	ug/Kg	*	7720	27600	27600	1	P	HSC	01/26/10 19:50	012610-1	940124
7440-28-0	Thallium	0.283	mg/kg		0.0639	0.213	0.213	2	MS	BAJ	01/23/10 19:42	100123-10	940077
7440-61-1	Uranium	0.970	mg/kg		0.014	0.0426	0.0426	2	MS	SKJ	01/25/10 11:14	100125-4	940077
7440-62-2	Vanadium	32300	ug/Kg		110	551	551	1	P	HSC	01/26/10 19:50	012610-1	940124
7440-66-6	Zinc	27100	ug/Kg		364	1100	1100	1	P	HSC	01/26/10 19:50	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940077	940076	SW846 3050B	0.524	g	50	mL	01/11/10	FGA
940124	940120	SW846 3050B	0.506	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.535	g	30	mL	01/21/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128002

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7648

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 94.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6640000	ug/Kg		7000	20600	20600	1	P	HSC	01/26/10 20:26	012610-1	940124
7440-36-0	Antimony	1030	ug/Kg	UN	340	1030	1030	1	P	HSC	01/26/10 20:26	012610-1	940124
7440-38-2	Arsenic	1.13	mg/kg		0.203	1.01	1.01	2	MS	BAJ	01/23/10 11:09	100123-6	940077
7440-39-3	Barium	140000	ug/Kg	*	103	515	515	1	P	HSC	01/26/10 20:26	012610-1	940124
7440-41-7	Beryllium	0.608	mg/kg		0.0203	0.101	0.101	2	MS	BAJ	01/24/10 13:00	100124-11	940077
7440-43-9	Cadmium	515	ug/Kg	U	103	515	515	1	P	HSC	01/26/10 20:26	012610-1	940124
7440-70-2	Calcium	3240000	ug/Kg		8240	25800	25800	1	P	HSC	01/26/10 20:26	012610-1	940124
7440-47-3	Chromium	7260	ug/Kg		155	515	515	1	P	HSC	01/26/10 20:26	012610-1	940124
7440-48-4	Cobalt	1870	ug/Kg	*N	155	515	515	1	P	HSC	01/26/10 20:26	012610-1	940124
7440-50-8	Copper	3960	ug/Kg		309	1030	1030	1	P	HSC	01/26/10 20:26	012610-1	940124
7439-89-6	Iron	11700000	ug/Kg		8240	25800	25800	1	P	HSC	01/26/10 20:26	012610-1	940124
7439-92-1	Lead	4660	ug/Kg	*	258	1030	1030	1	P	HSC	01/26/10 20:26	012610-1	940124
7439-95-4	Magnesium	1490000	ug/Kg		8760	30900	30900	1	P	HSC	01/26/10 20:26	012610-1	940124
7439-96-5	Manganese	203000	ug/Kg	*E	206	1030	1030	1	P	HSC	01/26/10 20:26	012610-1	940124
7439-97-6	Mercury	10	ug/kg	J	4.11	12.1	12.1	1	AV	ETL	01/22/10 08:45	102210S1-13	943262
7440-02-0	Nickel	5.38	mg/kg		0.101	0.406	0.406	2	MS	BAJ	01/23/10 11:09	100123-6	940077
7440-09-7	Potassium	1070000	ug/Kg	N	6590	25800	25800	1	P	HSC	01/26/10 20:26	012610-1	940124
7782-49-2	Selenium	1.01	mg/kg	UN	0.507	1.01	1.01	2	MS	BAJ	01/23/10 11:09	100123-6	940077
7440-22-4	Silver	700	ug/Kg		103	515	515	1	P	HSC	01/26/10 20:26	012610-1	940124
7440-23-5	Sodium	135000	ug/Kg	*	7210	25800	25800	1	P	HSC	01/26/10 20:26	012610-1	940124
7440-28-0	Thallium	0.146	mg/kg	J	0.0609	0.203	0.203	2	MS	BAJ	01/23/10 19:47	100123-10	940077
7440-61-1	Uranium	1.45	mg/kg		0.0134	0.0406	0.0406	2	MS	SKJ	01/25/10 11:16	100125-4	940077
7440-62-2	Vanadium	10700	ug/Kg		103	515	515	1	P	HSC	01/26/10 20:26	012610-1	940124
7440-66-6	Zinc	31300	ug/Kg		340	1030	1030	1	P	HSC	01/26/10 20:26	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940077	940076	SW846 3050B	0.52	g	50	mL	01/11/10	FGA
940124	940120	SW846 3050B	0.512	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.524	g	30	mL	01/21/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128003

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7638

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9090000	ug/Kg		7670	22600	22600	1	P	HSC	01/26/10 20:33	012610-1	940124
7440-36-0	Antimony	1130	ug/Kg	UN	372	1130	1130	1	P	HSC	01/26/10 20:33	012610-1	940124
7440-38-2	Arsenic	1.67	mg/kg		0.209	1.05	1.05	2	MS	BAJ	01/23/10 11:12	100123-6	940077
7440-39-3	Barium	178000	ug/Kg	*	113	564	564	1	P	HSC	01/26/10 20:33	012610-1	940124
7440-41-7	Beryllium	0.899	mg/kg		0.0209	0.105	0.105	2	MS	BAJ	01/24/10 13:01	100124-11	940077
7440-43-9	Cadmium	192	ug/Kg	J	113	564	564	1	P	HSC	01/26/10 20:33	012610-1	940124
7440-70-2	Calcium	2210000	ug/Kg		9030	28200	28200	1	P	HSC	01/26/10 20:33	012610-1	940124
7440-47-3	Chromium	10000	ug/Kg		169	564	564	1	P	HSC	01/26/10 20:33	012610-1	940124
7440-48-4	Cobalt	5770	ug/Kg	*N	169	564	564	1	P	HSC	01/26/10 20:33	012610-1	940124
7440-50-8	Copper	10800	ug/Kg		338	1130	1130	1	P	HSC	01/26/10 20:33	012610-1	940124
7439-89-6	Iron	12600000	ug/Kg		9030	28200	28200	1	P	HSC	01/26/10 20:33	012610-1	940124
7439-92-1	Lead	14400	ug/Kg	*	282	1130	1130	1	P	HSC	01/26/10 20:33	012610-1	940124
7439-95-4	Magnesium	1820000	ug/Kg		9590	33800	33800	1	P	HSC	01/26/10 20:33	012610-1	940124
7439-96-5	Manganese	387000	ug/Kg	*E	226	1130	1130	1	P	HSC	01/26/10 20:33	012610-1	940124
7439-97-6	Mercury	16.1	ug/kg		4.39	12.9	12.9	1	AV	ETL	01/22/10 08:50	102210S1-13	943262
7440-02-0	Nickel	6.62	mg/kg		0.105	0.419	0.419	2	MS	BAJ	01/23/10 11:12	100123-6	940077
7440-09-7	Potassium	1740000	ug/Kg	N	7220	28200	28200	1	P	HSC	01/26/10 20:33	012610-1	940124
7782-49-2	Selenium	1.05	mg/kg	UN	0.523	1.05	1.05	2	MS	BAJ	01/23/10 11:12	100123-6	940077
7440-22-4	Silver	787	ug/Kg		113	564	564	1	P	HSC	01/26/10 20:33	012610-1	940124
7440-23-5	Sodium	47400	ug/Kg	*	7900	28200	28200	1	P	HSC	01/26/10 20:33	012610-1	940124
7440-28-0	Thallium	0.184	mg/kg	J	0.0628	0.209	0.209	2	MS	BAJ	01/23/10 19:51	100123-10	940077
7440-61-1	Uranium	8.68	mg/kg		0.0138	0.0419	0.0419	2	MS	SKJ	01/25/10 11:18	100125-4	940077
7440-62-2	Vanadium	25500	ug/Kg		113	564	564	1	P	HSC	01/26/10 20:33	012610-1	940124
7440-66-6	Zinc	30300	ug/Kg		372	1130	1130	1	P	HSC	01/26/10 20:33	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
940077	940076	SW846 3050B	0.539	g	50	mL	01/11/10	FGA
940124	940120	SW846 3050B	0.5	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.524	g	30	mL	01/21/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128004

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7639

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 85

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	15600000	ug/Kg		7910	23300	23300	1	P	HSC	01/26/10 20:55	012610-1	940124
7440-36-0	Antimony	1160	ug/Kg	UN	384	1160	1160	1	P	HSC	01/26/10 20:55	012610-1	940124
7440-38-2	Arsenic	2.36	mg/kg		0.224	1.12	1.12	2	MS	BAJ	01/23/10 11:16	100123-6	940077
7440-39-3	Barium	172000	ug/Kg	*	116	581	581	1	P	HSC	01/26/10 20:55	012610-1	940124
7440-41-7	Beryllium	1.19	mg/kg		0.0224	0.112	0.112	2	MS	BAJ	01/24/10 13:03	100124-11	940077
7440-43-9	Cadmium	172	ug/Kg	J	116	581	581	1	P	HSC	01/26/10 20:55	012610-1	940124
7440-70-2	Calcium	2200000	ug/Kg		9300	29100	29100	1	P	HSC	01/26/10 20:55	012610-1	940124
7440-47-3	Chromium	13700	ug/Kg		174	581	581	1	P	HSC	01/26/10 20:55	012610-1	940124
7440-48-4	Cobalt	5880	ug/Kg	*N	174	581	581	1	P	HSC	01/26/10 20:55	012610-1	940124
7440-50-8	Copper	7920	ug/Kg		349	1160	1160	1	P	HSC	01/26/10 20:55	012610-1	940124
7439-89-6	Iron	15000000	ug/Kg		9300	29100	29100	1	P	HSC	01/26/10 20:55	012610-1	940124
7439-92-1	Lead	15200	ug/Kg	*	291	1160	1160	1	P	HSC	01/26/10 20:55	012610-1	940124
7439-95-4	Magnesium	2190000	ug/Kg		9880	34900	34900	1	P	HSC	01/26/10 20:55	012610-1	940124
7439-96-5	Manganese	360000	ug/Kg	*E	233	1160	1160	1	P	HSC	01/26/10 20:55	012610-1	940124
7439-97-6	Mercury	16.2	ug/kg		4.69	13.8	13.8	1	AV	ETL	01/22/10 08:51	102210S1-13	943262
7440-02-0	Nickel	7.94	mg/kg		0.112	0.448	0.448	2	MS	BAJ	01/23/10 11:16	100123-6	940077
7440-09-7	Potassium	2070000	ug/Kg	N	7440	29100	29100	1	P	HSC	01/26/10 20:55	012610-1	940124
7782-49-2	Selenium	1.12	mg/kg	UN	0.56	1.12	1.12	2	MS	BAJ	01/23/10 11:16	100123-6	940077
7440-22-4	Silver	834	ug/Kg		116	581	581	1	P	HSC	01/26/10 20:55	012610-1	940124
7440-23-5	Sodium	65900	ug/Kg	*	8140	29100	29100	1	P	HSC	01/26/10 20:55	012610-1	940124
7440-28-0	Thallium	0.228	mg/kg		0.0672	0.224	0.224	2	MS	BAJ	01/23/10 19:56	100123-10	940077
7440-61-1	Uranium	1.9	mg/kg		0.0148	0.0448	0.0448	2	MS	SKJ	01/25/10 11:21	100125-4	940077
7440-62-2	Vanadium	29600	ug/Kg		116	581	581	1	P	HSC	01/26/10 20:55	012610-1	940124
7440-66-6	Zinc	27400	ug/Kg		384	1160	1160	1	P	HSC	01/26/10 20:55	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940077	940076	SW846 3050B	0.524	g	50	mL	01/11/10	FGA
940124	940120	SW846 3050B	0.505	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.511	g	30	mL	01/21/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128005

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7633

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 84

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9350000	ug/Kg		8040	23600	23600	1	P	HSC	01/26/10 21:02	012610-1	940124
7440-36-0	Antimony	1180	ug/Kg	UN	390	1180	1180	1	P	HSC	01/26/10 21:02	012610-1	940124
7440-38-2	Arsenic	2.3	mg/kg		0.229	1.15	1.15	2	MS	BAJ	01/23/10 11:20	100123-6	940077
7440-39-3	Barium	161000	ug/Kg	*	118	591	591	1	P	HSC	01/26/10 21:02	012610-1	940124
7440-41-7	Beryllium	1.25	mg/kg		0.0229	0.115	0.115	2	MS	BAJ	01/24/10 13:05	100124-11	940077
7440-43-9	Cadmium	152	ug/Kg	J	118	591	591	1	P	HSC	01/26/10 21:02	012610-1	940124
7440-70-2	Calcium	2540000	ug/Kg		9460	29600	29600	1	P	HSC	01/26/10 21:02	012610-1	940124
7440-47-3	Chromium	12000	ug/Kg		177	591	591	1	P	HSC	01/26/10 21:02	012610-1	940124
7440-48-4	Cobalt	4650	ug/Kg	*N	177	591	591	1	P	HSC	01/26/10 21:02	012610-1	940124
7440-50-8	Copper	6580	ug/Kg		355	1180	1180	1	P	HSC	01/26/10 21:02	012610-1	940124
7439-89-6	Iron	10900000	ug/Kg		9460	29600	29600	1	P	HSC	01/26/10 21:02	012610-1	940124
7439-92-1	Lead	12000	ug/Kg	*	296	1180	1180	1	P	HSC	01/26/10 21:02	012610-1	940124
7439-95-4	Magnesium	1740000	ug/Kg		10000	35500	35500	1	P	HSC	01/26/10 21:02	012610-1	940124
7439-96-5	Manganese	337000	ug/Kg	*E	236	1180	1180	1	P	HSC	01/26/10 21:02	012610-1	940124
7439-97-6	Mercury	17.1	ug/kg		4.08	12	12	1	AV	ETL	01/22/10 08:53	102210S1-13	943262
7440-02-0	Nickel	7.95	mg/kg		0.115	0.458	0.458	2	MS	BAJ	01/23/10 11:20	100123-6	940077
7440-09-7	Potassium	1670000	ug/Kg	N	7570	29600	29600	1	P	HSC	01/26/10 21:02	012610-1	940124
7782-49-2	Selenium	1.15	mg/kg	UN	0.573	1.15	1.15	2	MS	BAJ	01/23/10 11:20	100123-6	940077
7440-22-4	Silver	624	ug/Kg		118	591	591	1	P	HSC	01/26/10 21:02	012610-1	940124
7440-23-5	Sodium	55100	ug/Kg	*	8280	29600	29600	1	P	HSC	01/26/10 21:02	012610-1	940124
7440-28-0	Thallium	0.222	mg/kg	J	0.0688	0.229	0.229	2	MS	BAJ	01/23/10 20:00	100123-10	940077
7440-61-1	Uranium	2.24	mg/kg		0.0151	0.0458	0.0458	2	MS	SKJ	01/25/10 11:23	100125-4	940077
7440-62-2	Vanadium	21200	ug/Kg		118	591	591	1	P	HSC	01/26/10 21:02	012610-1	940124
7440-66-6	Zinc	23300	ug/Kg		390	1180	1180	1	P	HSC	01/26/10 21:02	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940077	940076	SW846 3050B	0.52	g	50	mL	01/11/10	FGA
940124	940120	SW846 3050B	0.504	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.596	g	30	mL	01/21/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128006

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7647

LEVEL: Low

DATE RECEIVED 08-JAN-10

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	13000000	ug/Kg		8130	23900	23900	1	P	HSC	01/26/10 21:09	012610-1	940124
7440-36-0	Antimony	1200	ug/Kg	UN	395	1200	1200	1	P	HSC	01/26/10 21:09	012610-1	940124
7440-38-2	Arsenic	2.17	mg/kg		0.238	1.19	1.19	2	MS	PRB	01/19/10 19:19	100119-5	940107
7440-39-3	Barium	233000	ug/Kg	*	120	598	598	1	P	HSC	01/26/10 21:09	012610-1	940124
7440-41-7	Beryllium	1.22	mg/kg		0.0238	0.119	0.119	2	MS	PRB	01/19/10 19:19	100119-5	940107
7440-43-9	Cadmium	598	ug/Kg	U	120	598	598	1	P	HSC	01/26/10 21:09	012610-1	940124
7440-70-2	Calcium	2390000	ug/Kg		9560	29900	29900	1	P	HSC	01/26/10 21:09	012610-1	940124
7440-47-3	Chromium	15400	ug/Kg		179	598	598	1	P	HSC	01/26/10 21:09	012610-1	940124
7440-48-4	Cobalt	5060	ug/Kg	*N	179	598	598	1	P	HSC	01/26/10 21:09	012610-1	940124
7440-50-8	Copper	8250	ug/Kg		359	1200	1200	1	P	HSC	01/26/10 21:09	012610-1	940124
7439-89-6	Iron	14400000	ug/Kg		9560	29900	29900	1	P	HSC	01/26/10 21:09	012610-1	940124
7439-92-1	Lead	13100	ug/Kg	*	299	1200	1200	1	P	HSC	01/26/10 21:09	012610-1	940124
7439-95-4	Magnesium	2110000	ug/Kg		10200	35900	35900	1	P	HSC	01/26/10 21:09	012610-1	940124
7439-96-5	Manganese	331000	ug/Kg	*E	239	1200	1200	1	P	HSC	01/26/10 21:09	012610-1	940124
7439-97-6	Mercury	17.3	ug/kg		4.59	13.5	13.5	1	AV	ETL	01/22/10 08:55	102210S1-13	943262
7440-02-0	Nickel	9.34	mg/kg		0.119	0.475	0.475	2	MS	PRB	01/16/10 02:36	100115-3	940107
7440-09-7	Potassium	1830000	ug/Kg	N	7650	29900	29900	1	P	HSC	01/26/10 21:09	012610-1	940124
7782-49-2	Selenium	1.19	mg/kg	UN	0.594	1.19	1.19	2	MS	PRB	01/16/10 02:36	100115-3	940107
7440-22-4	Silver	744	ug/Kg		120	598	598	1	P	HSC	01/26/10 21:09	012610-1	940124
7440-23-5	Sodium	74700	ug/Kg	*	8370	29900	29900	1	P	HSC	01/26/10 21:09	012610-1	940124
7440-28-0	Thallium	0.264	mg/kg		0.0713	0.238	0.238	2	MS	PRB	01/16/10 02:36	100115-3	940107
7440-61-1	Uranium	3.58	mg/kg		0.0157	0.0475	0.0475	2	MS	PRB	01/16/10 02:36	100115-3	940107
7440-62-2	Vanadium	25500	ug/Kg		120	598	598	1	P	HSC	01/26/10 21:09	012610-1	940124
7440-66-6	Zinc	31000	ug/Kg		395	1200	1200	1	P	HSC	01/26/10 21:09	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.508	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.505	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.537	g	30	mL	01/21/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128007

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7644

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	18500000	ug/Kg		7520	22100	22100	1	P	HSC	01/26/10 21:17	012610-1	940124
7440-36-0	Antimony	1110	ug/Kg	UN	365	1110	1110	1	P	HSC	01/26/10 21:17	012610-1	940124
7440-38-2	Arsenic	2.34	mg/kg		0.219	1.09	1.09	2	MS	PRB	01/19/10 19:46	100119-5	940107
7440-39-3	Barium	206000	ug/Kg	*	111	553	553	1	P	HSC	01/26/10 21:17	012610-1	940124
7440-41-7	Beryllium	1.55	mg/kg		0.0219	0.109	0.109	2	MS	PRB	01/19/10 19:46	100119-5	940107
7440-43-9	Cadmium	553	ug/Kg	U	111	553	553	1	P	HSC	01/26/10 21:17	012610-1	940124
7440-70-2	Calcium	2190000	ug/Kg		8850	27700	27700	1	P	HSC	01/26/10 21:17	012610-1	940124
7440-47-3	Chromium	10800	ug/Kg		166	553	553	1	P	HSC	01/26/10 21:17	012610-1	940124
7440-48-4	Cobalt	5370	ug/Kg	*N	166	553	553	1	P	HSC	01/26/10 21:17	012610-1	940124
7440-50-8	Copper	6650	ug/Kg		332	1110	1110	1	P	HSC	01/26/10 21:17	012610-1	940124
7439-89-6	Iron	15000000	ug/Kg		8850	27700	27700	1	P	HSC	01/26/10 21:17	012610-1	940124
7439-92-1	Lead	14200	ug/Kg	*	277	1110	1110	1	P	HSC	01/26/10 21:17	012610-1	940124
7439-95-4	Magnesium	2300000	ug/Kg		9400	33200	33200	1	P	HSC	01/26/10 21:17	012610-1	940124
7439-96-5	Manganese	330000	ug/Kg	*E	221	1110	1110	1	P	HSC	01/26/10 21:17	012610-1	940124
7439-97-6	Mercury	19.8	ug/kg		4.33	12.7	12.7	1	AV	ETL	01/22/10 08:56	102210S1-13	943262
7440-02-0	Nickel	8.86	mg/kg		0.109	0.437	0.437	2	MS	PRB	01/16/10 02:50	100115-3	940107
7440-09-7	Potassium	1890000	ug/Kg	N	7080	27700	27700	1	P	HSC	01/26/10 21:17	012610-1	940124
7782-49-2	Selenium	1.09	mg/kg	UN	0.547	1.09	1.09	2	MS	PRB	01/16/10 02:50	100115-3	940107
7440-22-4	Silver	823	ug/Kg		111	553	553	1	P	HSC	01/26/10 21:17	012610-1	940124
7440-23-5	Sodium	96000	ug/Kg	*	7740	27700	27700	1	P	HSC	01/26/10 21:17	012610-1	940124
7440-28-0	Thallium	0.243	mg/kg		0.0656	0.219	0.219	2	MS	PRB	01/16/10 02:50	100115-3	940107
7440-61-1	Uranium	1.08	mg/kg		0.0144	0.0437	0.0437	2	MS	PRB	01/16/10 02:50	100115-3	940107
7440-62-2	Vanadium	27200	ug/Kg		111	553	553	1	P	HSC	01/26/10 21:17	012610-1	940124
7440-66-6	Zinc	23500	ug/Kg		365	1110	1110	1	P	HSC	01/26/10 21:17	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.508	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.502	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.523	g	30	mL	01/21/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128008

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7637

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 90.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	16100000	ug/Kg		7520	22100	22100	1	P	HSC	01/26/10 21:24	012610-1	940124
7440-36-0	Antimony	1110	ug/Kg	UN	365	1110	1110	1	P	HSC	01/26/10 21:24	012610-1	940124
7440-38-2	Arsenic	2.28	mg/kg		0.221	1.1	1.1	2	MS	PRB	01/19/10 19:50	100119-5	940107
7440-39-3	Barium	193000	ug/Kg	*	111	553	553	1	P	HSC	01/26/10 21:24	012610-1	940124
7440-41-7	Beryllium	1.32	mg/kg		0.0221	0.11	0.11	2	MS	PRB	01/19/10 19:50	100119-5	940107
7440-43-9	Cadmium	553	ug/Kg	U	111	553	553	1	P	HSC	01/26/10 21:24	012610-1	940124
7440-70-2	Calcium	2180000	ug/Kg		8840	27600	27600	1	P	HSC	01/26/10 21:24	012610-1	940124
7440-47-3	Chromium	10900	ug/Kg		166	553	553	1	P	HSC	01/26/10 21:24	012610-1	940124
7440-48-4	Cobalt	5900	ug/Kg	*N	166	553	553	1	P	HSC	01/26/10 21:24	012610-1	940124
7440-50-8	Copper	7610	ug/Kg		332	1110	1110	1	P	HSC	01/26/10 21:24	012610-1	940124
7439-89-6	Iron	14900000	ug/Kg		8840	27600	27600	1	P	HSC	01/26/10 21:24	012610-1	940124
7439-92-1	Lead	12900	ug/Kg	*	276	1110	1110	1	P	HSC	01/26/10 21:24	012610-1	940124
7439-95-4	Magnesium	2530000	ug/Kg		9400	33200	33200	1	P	HSC	01/26/10 21:24	012610-1	940124
7439-96-5	Manganese	343000	ug/Kg	*E	221	1110	1110	1	P	HSC	01/26/10 21:24	012610-1	940124
7439-97-6	Mercury	19.8	ug/kg		4.06	12	12	1	AV	ETL	01/22/10 08:58	102210S1-13	943262
7440-02-0	Nickel	8.56	mg/kg		0.11	0.441	0.441	2	MS	PRB	01/16/10 02:53	100115-3	940107
7440-09-7	Potassium	2040000	ug/Kg	N	7080	27600	27600	1	P	HSC	01/26/10 21:24	012610-1	940124
7782-49-2	Selenium	1.1	mg/kg	UN	0.552	1.1	1.1	2	MS	PRB	01/16/10 02:53	100115-3	940107
7440-22-4	Silver	909	ug/Kg		111	553	553	1	P	HSC	01/26/10 21:24	012610-1	940124
7440-23-5	Sodium	102000	ug/Kg	*	7740	27600	27600	1	P	HSC	01/26/10 21:24	012610-1	940124
7440-28-0	Thallium	0.233	mg/kg		0.0662	0.221	0.221	2	MS	PRB	01/16/10 02:53	100115-3	940107
7440-61-1	Uranium	1.35	mg/kg		0.0146	0.0441	0.0441	2	MS	PRB	01/16/10 02:53	100115-3	940107
7440-62-2	Vanadium	26600	ug/Kg		111	553	553	1	P	HSC	01/26/10 21:24	012610-1	940124
7440-66-6	Zinc	26200	ug/Kg		365	1110	1110	1	P	HSC	01/26/10 21:24	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.502	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.501	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.556	g	30	mL	01/21/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128009

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7635

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 85

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11000000	ug/Kg		7860	23100	23100	1	P	HSC	01/26/10 21:31	012610-1	940124
7440-36-0	Antimony	1160	ug/Kg	UN	382	1160	1160	1	P	HSC	01/26/10 21:31	012610-1	940124
7440-38-2	Arsenic	2.39	mg/kg		0.228	1.14	1.14	2	MS	PRB	01/19/10 20:01	100119-5	940107
7440-39-3	Barium	175000	ug/Kg	*	116	578	578	1	P	HSC	01/26/10 21:31	012610-1	940124
7440-41-7	Beryllium	1.24	mg/kg		0.0228	0.114	0.114	2	MS	PRB	01/19/10 20:01	100119-5	940107
7440-43-9	Cadmium	183	ug/Kg	J	116	578	578	1	P	HSC	01/26/10 21:31	012610-1	940124
7440-70-2	Calcium	2120000	ug/Kg		9250	28900	28900	1	P	HSC	01/26/10 21:31	012610-1	940124
7440-47-3	Chromium	13900	ug/Kg		173	578	578	1	P	HSC	01/26/10 21:31	012610-1	940124
7440-48-4	Cobalt	6710	ug/Kg	*N	173	578	578	1	P	HSC	01/26/10 21:31	012610-1	940124
7440-50-8	Copper	7820	ug/Kg		347	1160	1160	1	P	HSC	01/26/10 21:31	012610-1	940124
7439-89-6	Iron	13800000	ug/Kg		9250	28900	28900	1	P	HSC	01/26/10 21:31	012610-1	940124
7439-92-1	Lead	14900	ug/Kg	*	289	1160	1160	1	P	HSC	01/26/10 21:31	012610-1	940124
7439-95-4	Magnesium	1940000	ug/Kg		9830	34700	34700	1	P	HSC	01/26/10 21:31	012610-1	940124
7439-96-5	Manganese	415000	ug/Kg	*E	231	1160	1160	1	P	HSC	01/26/10 21:31	012610-1	940124
7439-97-6	Mercury	13.4	ug/kg		4.23	12.5	12.5	1	AV	ETL	01/22/10 09:00	102210S1-13	943262
7440-02-0	Nickel	7.84	mg/kg		0.114	0.455	0.455	2	MS	PRB	01/16/10 02:55	100115-3	940107
7440-09-7	Potassium	1850000	ug/Kg	N	7400	28900	28900	1	P	HSC	01/26/10 21:31	012610-1	940124
7782-49-2	Selenium	1.14	mg/kg	UN	0.569	1.14	1.14	2	MS	PRB	01/16/10 02:55	100115-3	940107
7440-22-4	Silver	803	ug/Kg		116	578	578	1	P	HSC	01/26/10 21:31	012610-1	940124
7440-23-5	Sodium	49300	ug/Kg	*	8100	28900	28900	1	P	HSC	01/26/10 21:31	012610-1	940124
7440-28-0	Thallium	0.218	mg/kg	J	0.0683	0.228	0.228	2	MS	PRB	01/16/10 02:55	100115-3	940107
7440-61-1	Uranium	2.15	mg/kg		0.015	0.0455	0.0455	2	MS	PRB	01/16/10 02:55	100115-3	940107
7440-62-2	Vanadium	27400	ug/Kg		116	578	578	1	P	HSC	01/26/10 21:31	012610-1	940124
7440-66-6	Zinc	30100	ug/Kg		382	1160	1160	1	P	HSC	01/26/10 21:31	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.514	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.506	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.564	g	30	mL	01/21/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128010

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7642

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	19900000	ug/Kg		7590	22300	22300	1	P	HSC	01/26/10 21:38	012610-1	940124
7440-36-0	Antimony	1120	ug/Kg	UN	368	1120	1120	1	P	HSC	01/26/10 21:38	012610-1	940124
7440-38-2	Arsenic	2.37	mg/kg		0.225	1.12	1.12	2	MS	PRB	01/19/10 20:05	100119-5	940107
7440-39-3	Barium	218000	ug/Kg	*	112	558	558	1	P	HSC	01/26/10 21:38	012610-1	940124
7440-41-7	Beryllium	1.66	mg/kg		0.0225	0.112	0.112	2	MS	PRB	01/19/10 20:05	100119-5	940107
7440-43-9	Cadmium	197	ug/Kg	J	112	558	558	1	P	HSC	01/26/10 21:38	012610-1	940124
7440-70-2	Calcium	2400000	ug/Kg		8920	27900	27900	1	P	HSC	01/26/10 21:38	012610-1	940124
7440-47-3	Chromium	12500	ug/Kg		167	558	558	1	P	HSC	01/26/10 21:38	012610-1	940124
7440-48-4	Cobalt	5350	ug/Kg	*N	167	558	558	1	P	HSC	01/26/10 21:38	012610-1	940124
7440-50-8	Copper	8280	ug/Kg		335	1120	1120	1	P	HSC	01/26/10 21:38	012610-1	940124
7439-89-6	Iron	15900000	ug/Kg		8920	27900	27900	1	P	HSC	01/26/10 21:38	012610-1	940124
7439-92-1	Lead	15000	ug/Kg	*	279	1120	1120	1	P	HSC	01/26/10 21:38	012610-1	940124
7439-95-4	Magnesium	2560000	ug/Kg		9480	33500	33500	1	P	HSC	01/26/10 21:38	012610-1	940124
7439-96-5	Manganese	320000	ug/Kg	*E	223	1120	1120	1	P	HSC	01/26/10 21:38	012610-1	940124
7439-97-6	Mercury	23.6	ug/kg		4.44	13.1	13.1	1	AV	ETL	01/22/10 09:01	102210S1-13	943262
7440-02-0	Nickel	8.52	mg/kg		0.112	0.45	0.45	2	MS	PRB	01/16/10 02:58	100115-3	940107
7440-09-7	Potassium	2110000	ug/Kg	N	7140	27900	27900	1	P	HSC	01/26/10 21:38	012610-1	940124
7782-49-2	Selenium	1.12	mg/kg	UN	0.562	1.12	1.12	2	MS	PRB	01/16/10 02:58	100115-3	940107
7440-22-4	Silver	538	ug/Kg	J	112	558	558	1	P	HSC	01/26/10 21:38	012610-1	940124
7440-23-5	Sodium	90300	ug/Kg	*	7810	27900	27900	1	P	HSC	01/26/10 21:38	012610-1	940124
7440-28-0	Thallium	0.235	mg/kg		0.0675	0.225	0.225	2	MS	PRB	01/16/10 02:58	100115-3	940107
7440-61-1	Uranium	1.16	mg/kg		0.0148	0.045	0.045	2	MS	PRB	01/16/10 02:58	100115-3	940107
7440-62-2	Vanadium	30600	ug/Kg		112	558	558	1	P	HSC	01/26/10 21:38	012610-1	940124
7440-66-6	Zinc	28400	ug/Kg		368	1120	1120	1	P	HSC	01/26/10 21:38	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.502	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.506	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.519	g	30	mL	01/21/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128011

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7649

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 78

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11000000	ug/Kg		8600	25300	25300	1	P	HSC	01/26/10 21:45	012610-1	940124
7440-36-0	Antimony	1260	ug/Kg	UN	417	1260	1260	1	P	HSC	01/26/10 21:45	012610-1	940124
7440-38-2	Arsenic	3	mg/kg		0.246	1.23	1.23	2	MS	PRB	01/19/10 20:09	100119-5	940107
7440-39-3	Barium	155000	ug/Kg	*	126	632	632	1	P	HSC	01/26/10 21:45	012610-1	940124
7440-41-7	Beryllium	1.41	mg/kg		0.0246	0.123	0.123	2	MS	PRB	01/19/10 20:09	100119-5	940107
7440-43-9	Cadmium	126	ug/Kg	J	126	632	632	1	P	HSC	01/26/10 21:45	012610-1	940124
7440-70-2	Calcium	1880000	ug/Kg		10100	31600	31600	1	P	HSC	01/26/10 21:45	012610-1	940124
7440-47-3	Chromium	11100	ug/Kg		190	632	632	1	P	HSC	01/26/10 21:45	012610-1	940124
7440-48-4	Cobalt	6110	ug/Kg	*N	190	632	632	1	P	HSC	01/26/10 21:45	012610-1	940124
7440-50-8	Copper	5950	ug/Kg		379	1260	1260	1	P	HSC	01/26/10 21:45	012610-1	940124
7439-89-6	Iron	13900000	ug/Kg		10100	31600	31600	1	P	HSC	01/26/10 21:45	012610-1	940124
7439-92-1	Lead	14100	ug/Kg	*	316	1260	1260	1	P	HSC	01/26/10 21:45	012610-1	940124
7439-95-4	Magnesium	1940000	ug/Kg		10700	37900	37900	1	P	HSC	01/26/10 21:45	012610-1	940124
7439-96-5	Manganese	372000	ug/Kg	*E	253	1260	1260	1	P	HSC	01/26/10 21:45	012610-1	940124
7439-97-6	Mercury	17.7	ug/kg		4.52	13.3	13.3	1	AV	ETL	01/22/10 09:03	102210S1-13	943262
7440-02-0	Nickel	8.72	mg/kg		0.123	0.491	0.491	2	MS	PRB	01/16/10 03:06	100115-3	940107
7440-09-7	Potassium	2020000	ug/Kg	N	8090	31600	31600	1	P	HSC	01/26/10 21:45	012610-1	940124
7782-49-2	Selenium	1.23	mg/kg	UN	0.614	1.23	1.23	2	MS	PRB	01/16/10 03:06	100115-3	940107
7440-22-4	Silver	927	ug/Kg		126	632	632	1	P	HSC	01/26/10 21:45	012610-1	940124
7440-23-5	Sodium	78100	ug/Kg	*	8850	31600	31600	1	P	HSC	01/26/10 21:45	012610-1	940124
7440-28-0	Thallium	0.270	mg/kg		0.0737	0.246	0.246	2	MS	PRB	01/16/10 03:06	100115-3	940107
7440-61-1	Uranium	1.92	mg/kg		0.0162	0.0491	0.0491	2	MS	PRB	01/16/10 03:06	100115-3	940107
7440-62-2	Vanadium	28000	ug/Kg		126	632	632	1	P	HSC	01/26/10 21:45	012610-1	940124
7440-66-6	Zinc	26600	ug/Kg		417	1260	1260	1	P	HSC	01/26/10 21:45	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.522	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.507	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.579	g	30	mL	01/21/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128012

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7650

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	23200000	ug/Kg		7720	22700	22700	1	P	HSC	01/26/10 21:52	012610-1	940124
7440-36-0	Antimony	1140	ug/Kg	UN	375	1140	1140	1	P	HSC	01/26/10 21:52	012610-1	940124
7440-38-2	Arsenic	3.1	mg/kg		0.219	1.09	1.09	2	MS	PRB	01/19/10 20:13	100119-5	940107
7440-39-3	Barium	213000	ug/Kg	*	114	568	568	1	P	HSC	01/26/10 21:52	012610-1	940124
7440-41-7	Beryllium	1.76	mg/kg		0.0219	0.109	0.109	2	MS	PRB	01/19/10 20:13	100119-5	940107
7440-43-9	Cadmium	186	ug/Kg	J	114	568	568	1	P	HSC	01/26/10 21:52	012610-1	940124
7440-70-2	Calcium	2670000	ug/Kg		9090	28400	28400	1	P	HSC	01/26/10 21:52	012610-1	940124
7440-47-3	Chromium	13100	ug/Kg		170	568	568	1	P	HSC	01/26/10 21:52	012610-1	940124
7440-48-4	Cobalt	5690	ug/Kg	*N	170	568	568	1	P	HSC	01/26/10 21:52	012610-1	940124
7440-50-8	Copper	8130	ug/Kg		341	1140	1140	1	P	HSC	01/26/10 21:52	012610-1	940124
7439-89-6	Iron	16800000	ug/Kg		9090	28400	28400	1	P	HSC	01/26/10 21:52	012610-1	940124
7439-92-1	Lead	17300	ug/Kg	*	284	1140	1140	1	P	HSC	01/26/10 21:52	012610-1	940124
7439-95-4	Magnesium	2690000	ug/Kg		9660	34100	34100	1	P	HSC	01/26/10 21:52	012610-1	940124
7439-96-5	Manganese	354000	ug/Kg	*E	227	1140	1140	1	P	HSC	01/26/10 21:52	012610-1	940124
7439-97-6	Mercury	25.3	ug/kg		4.02	11.8	11.8	1	AV	ETL	01/22/10 09:05	102210S1-13	943262
7440-02-0	Nickel	10.3	mg/kg		0.109	0.438	0.438	2	MS	PRB	01/16/10 03:09	100115-3	940107
7440-09-7	Potassium	2200000	ug/Kg	N	7270	28400	28400	1	P	HSC	01/26/10 21:52	012610-1	940124
7782-49-2	Selenium	1.09	mg/kg	UN	0.547	1.09	1.09	2	MS	PRB	01/16/10 03:09	100115-3	940107
7440-22-4	Silver	658	ug/Kg		114	568	568	1	P	HSC	01/26/10 21:52	012610-1	940124
7440-23-5	Sodium	128000	ug/Kg	*	7950	28400	28400	1	P	HSC	01/26/10 21:52	012610-1	940124
7440-28-0	Thallium	0.258	mg/kg		0.0657	0.219	0.219	2	MS	PRB	01/16/10 03:09	100115-3	940107
7440-61-1	Uranium	1.25	mg/kg		0.0145	0.0438	0.0438	2	MS	PRB	01/16/10 03:09	100115-3	940107
7440-62-2	Vanadium	31200	ug/Kg		114	568	568	1	P	HSC	01/26/10 21:52	012610-1	940124
7440-66-6	Zinc	28500	ug/Kg		375	1140	1140	1	P	HSC	01/26/10 21:52	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.525	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.506	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.584	g	30	mL	01/21/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128013

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7641

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 86

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12000000	ug/Kg		7790	22900	22900	1	P	HSC	01/26/10 22:14	012610-1	940124
7440-36-0	Antimony	1150	ug/Kg	UN	378	1150	1150	1	P	HSC	01/26/10 22:14	012610-1	940124
7440-38-2	Arsenic	2.41	mg/kg		0.225	1.13	1.13	2	MS	PRB	01/19/10 20:25	100119-5	940107
7440-39-3	Barium	215000	ug/Kg	*	115	573	573	1	P	HSC	01/26/10 22:14	012610-1	940124
7440-41-7	Beryllium	1.21	mg/kg		0.0225	0.113	0.113	2	MS	PRB	01/19/10 20:25	100119-5	940107
7440-43-9	Cadmium	168	ug/Kg	J	115	573	573	1	P	HSC	01/26/10 22:14	012610-1	940124
7440-70-2	Calcium	2310000	ug/Kg		9170	28600	28600	1	P	HSC	01/26/10 22:14	012610-1	940124
7440-47-3	Chromium	19600	ug/Kg		172	573	573	1	P	HSC	01/26/10 22:14	012610-1	940124
7440-48-4	Cobalt	6510	ug/Kg	*N	172	573	573	1	P	HSC	01/26/10 22:14	012610-1	940124
7440-50-8	Copper	11300	ug/Kg		344	1150	1150	1	P	HSC	01/26/10 22:14	012610-1	940124
7439-89-6	Iron	13900000	ug/Kg		9170	28600	28600	1	P	HSC	01/26/10 22:14	012610-1	940124
7439-92-1	Lead	15000	ug/Kg	*	286	1150	1150	1	P	HSC	01/26/10 22:14	012610-1	940124
7439-95-4	Magnesium	2010000	ug/Kg		9740	34400	34400	1	P	HSC	01/26/10 22:14	012610-1	940124
7439-96-5	Manganese	471000	ug/Kg	*E	229	1150	1150	1	P	HSC	01/26/10 22:14	012610-1	940124
7439-97-6	Mercury	14.2	ug/kg		4.4	12.9	12.9	1	AV	ETL	01/22/10 09:10	102210S1-13	943262
7440-02-0	Nickel	9.16	mg/kg		0.113	0.45	0.45	2	MS	PRB	01/16/10 03:12	100115-3	940107
7440-09-7	Potassium	1960000	ug/Kg	N	7330	28600	28600	1	P	HSC	01/26/10 22:14	012610-1	940124
7782-49-2	Selenium	1.13	mg/kg	UN	0.563	1.13	1.13	2	MS	PRB	01/16/10 03:12	100115-3	940107
7440-22-4	Silver	964	ug/Kg		115	573	573	1	P	HSC	01/26/10 22:14	012610-1	940124
7440-23-5	Sodium	60400	ug/Kg	*	8020	28600	28600	1	P	HSC	01/26/10 22:14	012610-1	940124
7440-28-0	Thallium	0.225	mg/kg		0.0676	0.225	0.225	2	MS	PRB	01/16/10 03:12	100115-3	940107
7440-61-1	Uranium	7.42	mg/kg		0.0149	0.045	0.045	2	MS	PRB	01/16/10 03:12	100115-3	940107
7440-62-2	Vanadium	26300	ug/Kg		115	573	573	1	P	HSC	01/26/10 22:14	012610-1	940124
7440-66-6	Zinc	47500	ug/Kg		378	1150	1150	1	P	HSC	01/26/10 22:14	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.519	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.51	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.542	g	30	mL	01/21/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128014

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7643

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 84

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	10800000	ug/Kg		7840	23100	23100	1	P	HSC	01/26/10 22:22	012610-1	940124
7440-36-0	Antimony	1150	ug/Kg	UN	380	1150	1150	1	P	HSC	01/26/10 22:22	012610-1	940124
7440-38-2	Arsenic	2.11	mg/kg		0.23	1.15	1.15	2	MS	PRB	01/19/10 20:29	100119-5	940107
7440-39-3	Barium	196000	ug/Kg	*	115	576	576	1	P	HSC	01/26/10 22:22	012610-1	940124
7440-41-7	Beryllium	1.18	mg/kg		0.023	0.115	0.115	2	MS	PRB	01/19/10 20:29	100119-5	940107
7440-43-9	Cadmium	196	ug/Kg	J	115	576	576	1	P	HSC	01/26/10 22:22	012610-1	940124
7440-70-2	Calcium	2350000	ug/Kg		9220	28800	28800	1	P	HSC	01/26/10 22:22	012610-1	940124
7440-47-3	Chromium	17600	ug/Kg		173	576	576	1	P	HSC	01/26/10 22:22	012610-1	940124
7440-48-4	Cobalt	6480	ug/Kg	*N	173	576	576	1	P	HSC	01/26/10 22:22	012610-1	940124
7440-50-8	Copper	8060	ug/Kg		346	1150	1150	1	P	HSC	01/26/10 22:22	012610-1	940124
7439-89-6	Iron	13200000	ug/Kg		9220	28800	28800	1	P	HSC	01/26/10 22:22	012610-1	940124
7439-92-1	Lead	15400	ug/Kg	*	288	1150	1150	1	P	HSC	01/26/10 22:22	012610-1	940124
7439-95-4	Magnesium	1820000	ug/Kg		9800	34600	34600	1	P	HSC	01/26/10 22:22	012610-1	940124
7439-96-5	Manganese	464000	ug/Kg	*E	231	1150	1150	1	P	HSC	01/26/10 22:22	012610-1	940124
7439-97-6	Mercury	15.5	ug/kg		4.27	12.6	12.6	1	AV	ETL	01/22/10 09:11	102210S1-13	943262
7440-02-0	Nickel	7.86	mg/kg		0.115	0.459	0.459	2	MS	PRB	01/16/10 03:15	100115-3	940107
7440-09-7	Potassium	1710000	ug/Kg	N	7380	28800	28800	1	P	HSC	01/26/10 22:22	012610-1	940124
7782-49-2	Selenium	1.15	mg/kg	UN	0.574	1.15	1.15	2	MS	PRB	01/16/10 03:15	100115-3	940107
7440-22-4	Silver	761	ug/Kg		115	576	576	1	P	HSC	01/26/10 22:22	012610-1	940124
7440-23-5	Sodium	58000	ug/Kg	*	8070	28800	28800	1	P	HSC	01/26/10 22:22	012610-1	940124
7440-28-0	Thallium	0.208	mg/kg	J	0.0689	0.23	0.23	2	MS	PRB	01/16/10 03:15	100115-3	940107
7440-61-1	Uranium	4.48	mg/kg		0.0152	0.0459	0.0459	2	MS	PRB	01/16/10 03:15	100115-3	940107
7440-62-2	Vanadium	26500	ug/Kg		115	576	576	1	P	HSC	01/26/10 22:22	012610-1	940124
7440-66-6	Zinc	31500	ug/Kg		380	1150	1150	1	P	HSC	01/26/10 22:22	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.52	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.518	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.571	g	30	mL	01/21/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128015

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7640

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 92.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11700000	ug/Kg		7300	21500	21500	1	P	HSC	01/26/10 22:29	012610-1	940124
7440-36-0	Antimony	1070	ug/Kg	UN	354	1070	1070	1	P	HSC	01/26/10 22:29	012610-1	940124
7440-38-2	Arsenic	2.17	mg/kg		0.212	1.06	1.06	2	MS	PRB	01/19/10 20:33	100119-5	940107
7440-39-3	Barium	130000	ug/Kg	*	107	537	537	1	P	HSC	01/26/10 22:29	012610-1	940124
7440-41-7	Beryllium	1.11	mg/kg		0.0212	0.106	0.106	2	MS	PRB	01/19/10 20:33	100119-5	940107
7440-43-9	Cadmium	537	ug/Kg	U	107	537	537	1	P	HSC	01/26/10 22:29	012610-1	940124
7440-70-2	Calcium	1690000	ug/Kg		8590	26800	26800	1	P	HSC	01/26/10 22:29	012610-1	940124
7440-47-3	Chromium	13200	ug/Kg		161	537	537	1	P	HSC	01/26/10 22:29	012610-1	940124
7440-48-4	Cobalt	5300	ug/Kg	*N	161	537	537	1	P	HSC	01/26/10 22:29	012610-1	940124
7440-50-8	Copper	5810	ug/Kg		322	1070	1070	1	P	HSC	01/26/10 22:29	012610-1	940124
7439-89-6	Iron	14600000	ug/Kg		8590	26800	26800	1	P	HSC	01/26/10 22:29	012610-1	940124
7439-92-1	Lead	9910	ug/Kg	*	268	1070	1070	1	P	HSC	01/26/10 22:29	012610-1	940124
7439-95-4	Magnesium	2080000	ug/Kg		9130	32200	32200	1	P	HSC	01/26/10 22:29	012610-1	940124
7439-96-5	Manganese	291000	ug/Kg	*E	215	1070	1070	1	P	HSC	01/26/10 22:29	012610-1	940124
7439-97-6	Mercury	15.7	ug/kg		4.17	12.3	12.3	1	AV	ETL	01/22/10 09:13	102210S1-13	943262
7440-02-0	Nickel	7.19	mg/kg		0.106	0.425	0.425	2	MS	PRB	01/16/10 03:17	100115-3	940107
7440-09-7	Potassium	1740000	ug/Kg	N	6870	26800	26800	1	P	HSC	01/26/10 22:29	012610-1	940124
7782-49-2	Selenium	1.06	mg/kg	UN	0.531	1.06	1.06	2	MS	PRB	01/16/10 03:17	100115-3	940107
7440-22-4	Silver	725	ug/Kg		107	537	537	1	P	HSC	01/26/10 22:29	012610-1	940124
7440-23-5	Sodium	79400	ug/Kg	*	7520	26800	26800	1	P	HSC	01/26/10 22:29	012610-1	940124
7440-28-0	Thallium	0.236	mg/kg		0.0637	0.212	0.212	2	MS	PRB	01/16/10 03:17	100115-3	940107
7440-61-1	Uranium	0.634	mg/kg		0.014	0.0425	0.0425	2	MS	PRB	01/16/10 03:17	100115-3	940107
7440-62-2	Vanadium	23100	ug/Kg		107	537	537	1	P	HSC	01/26/10 22:29	012610-1	940124
7440-66-6	Zinc	30900	ug/Kg		354	1070	1070	1	P	HSC	01/26/10 22:29	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.51	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.504	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.529	g	30	mL	01/21/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128016

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7645

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11700000	ug/Kg		7370	21700	21700	1	P	HSC	01/26/10 22:36	012610-1	940124
7440-36-0	Antimony	1080	ug/Kg	UN	358	1080	1080	1	P	HSC	01/26/10 22:36	012610-1	940124
7440-38-2	Arsenic	2.37	mg/kg		0.217	1.08	1.08	2	MS	PRB	01/19/10 20:37	100119-5	940107
7440-39-3	Barium	179000	ug/Kg	*	108	542	542	1	P	HSC	01/26/10 22:36	012610-1	940124
7440-41-7	Beryllium	1.19	mg/kg		0.0217	0.108	0.108	2	MS	PRB	01/19/10 20:37	100119-5	940107
7440-43-9	Cadmium	542	ug/Kg	U	108	542	542	1	P	HSC	01/26/10 22:36	012610-1	940124
7440-70-2	Calcium	2150000	ug/Kg		8670	27100	27100	1	P	HSC	01/26/10 22:36	012610-1	940124
7440-47-3	Chromium	17800	ug/Kg		163	542	542	1	P	HSC	01/26/10 22:36	012610-1	940124
7440-48-4	Cobalt	6610	ug/Kg	*N	163	542	542	1	P	HSC	01/26/10 22:36	012610-1	940124
7440-50-8	Copper	6060	ug/Kg		325	1080	1080	1	P	HSC	01/26/10 22:36	012610-1	940124
7439-89-6	Iron	14000000	ug/Kg		8670	27100	27100	1	P	HSC	01/26/10 22:36	012610-1	940124
7439-92-1	Lead	14300	ug/Kg	*	271	1080	1080	1	P	HSC	01/26/10 22:36	012610-1	940124
7439-95-4	Magnesium	2120000	ug/Kg		9210	32500	32500	1	P	HSC	01/26/10 22:36	012610-1	940124
7439-96-5	Manganese	416000	ug/Kg	*E	217	1080	1080	1	P	HSC	01/26/10 22:36	012610-1	940124
7439-97-6	Mercury	13.8	ug/kg		4.02	11.8	11.8	1	AV	ETL	01/22/10 09:15	102210S1-13	943262
7440-02-0	Nickel	8.39	mg/kg		0.108	0.434	0.434	2	MS	PRB	01/16/10 03:20	100115-3	940107
7440-09-7	Potassium	1900000	ug/Kg	N	6940	27100	27100	1	P	HSC	01/26/10 22:36	012610-1	940124
7782-49-2	Selenium	1.08	mg/kg	UN	0.542	1.08	1.08	2	MS	PRB	01/16/10 03:20	100115-3	940107
7440-22-4	Silver	831	ug/Kg		108	542	542	1	P	HSC	01/26/10 22:36	012610-1	940124
7440-23-5	Sodium	58200	ug/Kg	*	7590	27100	27100	1	P	HSC	01/26/10 22:36	012610-1	940124
7440-28-0	Thallium	0.229	mg/kg		0.065	0.217	0.217	2	MS	PRB	01/16/10 03:20	100115-3	940107
7440-61-1	Uranium	1.52	mg/kg		0.0143	0.0434	0.0434	2	MS	PRB	01/16/10 03:20	100115-3	940107
7440-62-2	Vanadium	28100	ug/Kg		108	542	542	1	P	HSC	01/26/10 22:36	012610-1	940124
7440-66-6	Zinc	24500	ug/Kg		358	1080	1080	1	P	HSC	01/26/10 22:36	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.515	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.515	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.566	g	30	mL	01/21/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128017

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7646

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Rnn	Analytical Batch
7429-90-5	Aluminum	17800000	ug/Kg		7600	22400	22400	1	P	HSC	01/26/10 22:43	012610-1	940124
7440-36-0	Antimony	1120	ug/Kg	UN	369	1120	1120	1	P	HSC	01/26/10 22:43	012610-1	940124
7440-38-2	Arsenic	2.41	mg/kg		0.215	1.08	1.08	2	MS	PRB	01/19/10 20:48	100119-5	940107
7440-39-3	Barium	224000	ug/Kg	*	112	559	559	1	P	HSC	01/26/10 22:43	012610-1	940124
7440-41-7	Beryllium	1.51	mg/kg		0.0215	0.108	0.108	2	MS	PRB	01/19/10 20:48	100119-5	940107
7440-43-9	Cadmium	559	ug/Kg	U	112	559	559	1	P	HSC	01/26/10 22:43	012610-1	940124
7440-70-2	Calcium	2490000	ug/Kg		8940	27900	27900	1	P	HSC	01/26/10 22:43	012610-1	940124
7440-47-3	Chromium	11900	ug/Kg		168	559	559	1	P	HSC	01/26/10 22:43	012610-1	940124
7440-48-4	Cobalt	5090	ug/Kg	*N	168	559	559	1	P	HSC	01/26/10 22:43	012610-1	940124
7440-50-8	Copper	6590	ug/Kg		335	1120	1120	1	P	HSC	01/26/10 22:43	012610-1	940124
7439-89-6	Iron	14400000	ug/Kg		8940	27900	27900	1	P	HSC	01/26/10 22:43	012610-1	940124
7439-92-1	Lead	12000	ug/Kg	*	279	1120	1120	1	P	HSC	01/26/10 22:43	012610-1	940124
7439-95-4	Magnesium	2290000	ug/Kg		9500	33500	33500	1	P	HSC	01/26/10 22:43	012610-1	940124
7439-96-5	Manganese	308000	ug/Kg	*E	224	1120	1120	1	P	HSC	01/26/10 22:43	012610-1	940124
7439-97-6	Mercury	23.4	ug/kg		4.12	12.1	12.1	1	AV	ETL	01/22/10 09:16	102210S1-13	943262
7440-02-0	Nickel	7.55	mg/kg		0.108	0.431	0.431	2	MS	PRB	01/16/10 03:23	100115-3	940107
7440-09-7	Potassium	1810000	ug/Kg	N	7150	27900	27900	1	P	HSC	01/26/10 22:43	012610-1	940124
7782-49-2	Selenium	1.08	mg/kg	UN	0.538	1.08	1.08	2	MS	PRB	01/16/10 03:23	100115-3	940107
7440-22-4	Silver	761	ug/Kg		112	559	559	1	P	HSC	01/26/10 22:43	012610-1	940124
7440-23-5	Sodium	152000	ug/Kg	*	7830	27900	27900	1	P	HSC	01/26/10 22:43	012610-1	940124
7440-28-0	Thallium	0.243	mg/kg		0.0646	0.215	0.215	2	MS	PRB	01/16/10 03:23	100115-3	940107
7440-61-1	Uranium	0.756	mg/kg		0.0142	0.0431	0.0431	2	MS	PRB	01/16/10 03:23	100115-3	940107
7440-62-2	Vanadium	23800	ug/Kg		112	559	559	1	P	HSC	01/26/10 22:43	012610-1	940124
7440-66-6	Zinc	25600	ug/Kg		369	1120	1120	1	P	HSC	01/26/10 22:43	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.519	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.5	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.553	g	30	mL	01/21/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128018

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7636

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 90.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	14900000	ug/Kg		7210	21200	21200	1	P	HSC	01/26/10 22:50	012610-1	940124
7440-36-0	Antimony	1060	ug/Kg	UN	350	1060	1060	1	P	HSC	01/26/10 22:50	012610-1	940124
7440-38-2	Arsenic	2.63	mg/kg		0.22	1.1	1.1	2	MS	PRB	01/19/10 20:52	100119-5	940107
7440-39-3	Barium	166000	ug/Kg	*	106	530	530	1	P	HSC	01/26/10 22:50	012610-1	940124
7440-41-7	Beryllium	1.46	mg/kg		0.022	0.11	0.11	2	MS	PRB	01/19/10 20:52	100119-5	940107
7440-43-9	Cadmium	530	ug/Kg	U	106	530	530	1	P	HSC	01/26/10 22:50	012610-1	940124
7440-70-2	Calcium	2140000	ug/Kg		8480	26500	26500	1	P	HSC	01/26/10 22:50	012610-1	940124
7440-47-3	Chromium	10100	ug/Kg		159	530	530	1	P	HSC	01/26/10 22:50	012610-1	940124
7440-48-4	Cobalt	5620	ug/Kg	*N	159	530	530	1	P	HSC	01/26/10 22:50	012610-1	940124
7440-50-8	Copper	6930	ug/Kg		318	1060	1060	1	P	HSC	01/26/10 22:50	012610-1	940124
7439-89-6	Iron	14100000	ug/Kg		8480	26500	26500	1	P	HSC	01/26/10 22:50	012610-1	940124
7439-92-1	Lead	13100	ug/Kg	*	265	1060	1060	1	P	HSC	01/26/10 22:50	012610-1	940124
7439-95-4	Magnesium	2230000	ug/Kg		9010	31800	31800	1	P	HSC	01/26/10 22:50	012610-1	940124
7439-96-5	Manganese	336000	ug/Kg	*E	212	1060	1060	1	P	HSC	01/26/10 22:50	012610-1	940124
7439-97-6	Mercury	14	ug/kg		4.24	12.5	12.5	1	AV	ETL	01/22/10 09:18	102210S1-13	943262
7440-02-0	Nickel	7.49	mg/kg		0.11	0.439	0.439	2	MS	PRB	01/16/10 03:26	100115-3	940107
7440-09-7	Potassium	2130000	ug/Kg	N	6780	26500	26500	1	P	HSC	01/26/10 22:50	012610-1	940124
7782-49-2	Selenium	1.1	mg/kg	UN	0.549	1.1	1.1	2	MS	PRB	01/16/10 03:26	100115-3	940107
7440-22-4	Silver	668	ug/Kg		106	530	530	1	P	HSC	01/26/10 22:50	012610-1	940124
7440-23-5	Sodium	65100	ug/Kg	*	7420	26500	26500	1	P	HSC	01/26/10 22:50	012610-1	940124
7440-28-0	Thallium	0.219	mg/kg	J	0.0659	0.22	0.22	2	MS	PRB	01/16/10 03:26	100115-3	940107
7440-61-1	Uranium	1.97	mg/kg		0.0145	0.0439	0.0439	2	MS	PRB	01/16/10 03:26	100115-3	940107
7440-62-2	Vanadium	25000	ug/Kg		106	530	530	1	P	HSC	01/26/10 22:50	012610-1	940124
7440-66-6	Zinc	25800	ug/Kg		350	1060	1060	1	P	HSC	01/26/10 22:50	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.505	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.523	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.534	g	30	mL	01/21/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128019

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7657

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	18400000	ug/Kg		7400	21800	21800	1	P	HSC	01/26/10 22:57	012610-1	940124
7440-36-0	Antimony	1090	ug/Kg	UN	359	1090	1090	1	P	HSC	01/26/10 22:57	012610-1	940124
7440-38-2	Arsenic	2.24	mg/kg		0.216	1.08	1.08	2	MS	PRB	01/19/10 20:56	100119-5	940107
7440-39-3	Barium	224000	ug/Kg	*	109	544	544	1	P	HSC	01/26/10 22:57	012610-1	940124
7440-41-7	Beryllium	1.49	mg/kg		0.0216	0.108	0.108	2	MS	PRB	01/19/10 20:56	100119-5	940107
7440-43-9	Cadmium	544	ug/Kg	U	109	544	544	1	P	HSC	01/26/10 22:57	012610-1	940124
7440-70-2	Calcium	2460000	ug/Kg		8710	27200	27200	1	P	HSC	01/26/10 22:57	012610-1	940124
7440-47-3	Chromium	13700	ug/Kg		163	544	544	1	P	HSC	01/26/10 22:57	012610-1	940124
7440-48-4	Cobalt	5310	ug/Kg	*N	163	544	544	1	P	HSC	01/26/10 22:57	012610-1	940124
7440-50-8	Copper	6840	ug/Kg		327	1090	1090	1	P	HSC	01/26/10 22:57	012610-1	940124
7439-89-6	Iron	15200000	ug/Kg		8710	27200	27200	1	P	HSC	01/26/10 22:57	012610-1	940124
7439-92-1	Lead	12700	ug/Kg	*	272	1090	1090	1	P	HSC	01/26/10 22:57	012610-1	940124
7439-95-4	Magnesium	2320000	ug/Kg		9260	32700	32700	1	P	HSC	01/26/10 22:57	012610-1	940124
7439-96-5	Manganese	317000	ug/Kg	*E	218	1090	1090	1	P	HSC	01/26/10 22:57	012610-1	940124
7439-97-6	Mercury	21.4	ug/kg		4.16	12.2	12.2	1	AV	ETL	01/22/10 09:20	102210S1-13	943262
7440-02-0	Nickel	7.79	mg/kg		0.108	0.431	0.431	2	MS	PRB	01/16/10 03:28	100115-3	940107
7440-09-7	Potassium	1810000	ug/Kg	N	6970	27200	27200	1	P	HSC	01/26/10 22:57	012610-1	940124
7782-49-2	Selenium	1.08	mg/kg	UN	0.539	1.08	1.08	2	MS	PRB	01/16/10 03:28	100115-3	940107
7440-22-4	Silver	833	ug/Kg		109	544	544	1	P	HSC	01/26/10 22:57	012610-1	940124
7440-23-5	Sodium	167000	ug/Kg	*	7620	27200	27200	1	P	HSC	01/26/10 22:57	012610-1	940124
7440-28-0	Thallium	0.221	mg/kg		0.0647	0.216	0.216	2	MS	PRB	01/16/10 03:28	100115-3	940107
7440-61-1	Uranium	0.754	mg/kg		0.0142	0.0431	0.0431	2	MS	PRB	01/16/10 03:28	100115-3	940107
7440-62-2	Vanadium	24900	ug/Kg		109	544	544	1	P	HSC	01/26/10 22:57	012610-1	940124
7440-66-6	Zinc	26300	ug/Kg		359	1090	1090	1	P	HSC	01/26/10 22:57	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.516	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.511	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.546	g	30	mL	01/21/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244128020

BASIS: Dry Weight

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7658

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: SOIL

%SOLIDS: 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	17800000	ug/Kg		7590	22300	22300	1	P	HSC	01/26/10 23:05	012610-1	940124
7440-36-0	Antimony	1120	ug/Kg	UN	368	1120	1120	1	P	HSC	01/26/10 23:05	012610-1	940124
7440-38-2	Arsenic	2.18	mg/kg		0.216	1.08	1.08	2	MS	PRB	01/19/10 21:00	100119-5	940107
7440-39-3	Barium	201000	ug/Kg	*	112	558	558	1	P	HSC	01/26/10 23:05	012610-1	940124
7440-41-7	Beryllium	1.38	mg/kg		0.0216	0.108	0.108	2	MS	PRB	01/19/10 21:00	100119-5	940107
7440-43-9	Cadmium	558	ug/Kg	U	112	558	558	1	P	HSC	01/26/10 23:05	012610-1	940124
7440-70-2	Calcium	2290000	ug/Kg		8930	27900	27900	1	P	HSC	01/26/10 23:05	012610-1	940124
7440-47-3	Chromium	12000	ug/Kg		167	558	558	1	P	HSC	01/26/10 23:05	012610-1	940124
7440-48-4	Cobalt	5670	ug/Kg	*N	167	558	558	1	P	HSC	01/26/10 23:05	012610-1	940124
7440-50-8	Copper	7760	ug/Kg		335	1120	1120	1	P	HSC	01/26/10 23:05	012610-1	940124
7439-89-6	Iron	16500000	ug/Kg		8930	27900	27900	1	P	HSC	01/26/10 23:05	012610-1	940124
7439-92-1	Lead	14100	ug/Kg	*	279	1120	1120	1	P	HSC	01/26/10 23:05	012610-1	940124
7439-95-4	Magnesium	2630000	ug/Kg		9490	33500	33500	1	P	HSC	01/26/10 23:05	012610-1	940124
7439-96-5	Manganese	352000	ug/Kg	*E	223	1120	1120	1	P	HSC	01/26/10 23:05	012610-1	940124
7439-97-6	Mercury	20.4	ug/kg		4.33	12.7	12.7	1	AV	ETL	01/22/10 09:21	102210S1-13	943262
7440-02-0	Nickel	7.16	mg/kg		0.108	0.432	0.432	2	MS	PRB	01/16/10 03:31	100115-3	940107
7440-09-7	Potassium	2090000	ug/Kg	N	7150	27900	27900	1	P	HSC	01/26/10 23:05	012610-1	940124
7782-49-2	Selenium	1.08	mg/kg	UN	0.54	1.08	1.08	2	MS	PRB	01/16/10 03:31	100115-3	940107
7440-22-4	Silver	968	ug/Kg		112	558	558	1	P	HSC	01/26/10 23:05	012610-1	940124
7440-23-5	Sodium	98900	ug/Kg	*	7820	27900	27900	1	P	HSC	01/26/10 23:05	012610-1	940124
7440-28-0	Thallium	0.224	mg/kg		0.0648	0.216	0.216	2	MS	PRB	01/16/10 03:31	100115-3	940107
7440-61-1	Uranium	0.705	mg/kg		0.0143	0.0432	0.0432	2	MS	PRB	01/16/10 03:31	100115-3	940107
7440-62-2	Vanadium	29300	ug/Kg		112	558	558	1	P	HSC	01/26/10 23:05	012610-1	940124
7440-66-6	Zinc	27200	ug/Kg		368	1120	1120	1	P	HSC	01/26/10 23:05	012610-1	940124

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940107	940101	SW846 3050B	0.517	g	50	mL	01/11/10	BXA1
940124	940120	SW846 3050B	0.5	g	50	mL	01/12/10	AXG2
943262	943258	SW846 7471A Prep	0.526	g	30	mL	01/21/10	TXB3

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICV01										
	Nickel	50.9	ug/L	50	ug/L	101.7	90.0 – 110.0	MS	16-JAN-10 00:29	100115-3
	Selenium	46.9	ug/L	50	ug/L	93.8	90.0 – 110.0	MS	16-JAN-10 00:29	100115-3
	Thallium	49.4	ug/L	50	ug/L	98.7	90.0 – 110.0	MS	16-JAN-10 00:29	100115-3
	Uranium	54.7	ug/L	50	ug/L	109.3	90.0 – 110.0	MS	16-JAN-10 00:29	100115-3
	Arsenic	47.1	ug/L	50	ug/L	94.1	90.0 – 110.0	MS	19-JAN-10 18:09	100119-5
	Beryllium	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	19-JAN-10 18:09	100119-5
	Mercury	5.08	ug/L	5	ug/L	101.6	90.0 – 110.0	AV	22-JAN-10 08:01	102210S1-13
	Arsenic	49.4	ug/L	50	ug/L	98.7	90.0 – 110.0	MS	23-JAN-10 10:32	100123-6
	Nickel	52.6	ug/L	50	ug/L	105.3	90.0 – 110.0	MS	23-JAN-10 10:32	100123-6
	Selenium	51.4	ug/L	50	ug/L	102.7	90.0 – 110.0	MS	23-JAN-10 10:32	100123-6
	Thallium	51.7	ug/L	50	ug/L	103.4	90.0 – 110.0	MS	23-JAN-10 19:02	100123-10
	Beryllium	51.1	ug/L	50	ug/L	102.2	90.0 – 110.0	MS	24-JAN-10 12:43	100124-11
	Beryllium	50.7	ug/L	50	ug/L	101.4	90.0 – 110.0	MS	25-JAN-10 10:21	100125-12
	Uranium	52.7	ug/L	50	ug/L	105.3	90.0 – 110.0	MS	25-JAN-10 10:54	100125-4
	Aluminum	4910	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	26-JAN-10 09:38	012610-1
	Antimony	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	26-JAN-10 09:38	012610-1
	Barium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	26-JAN-10 09:38	012610-1
	Cadmium	474	ug/L	500	ug/L	94.7	90.0 – 110.0	P	26-JAN-10 09:38	012610-1
	Calcium	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	26-JAN-10 09:38	012610-1
	Chromium	475	ug/L	500	ug/L	95	90.0 – 110.0	P	26-JAN-10 09:38	012610-1
	Cobalt	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	26-JAN-10 09:38	012610-1
	Copper	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	26-JAN-10 09:38	012610-1
	Iron	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	26-JAN-10 09:38	012610-1
	Lead	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	26-JAN-10 09:38	012610-1
	Magnesium	5360	ug/L	5000	ug/L	107.1	90.0 – 110.0	P	26-JAN-10 09:38	012610-1
	Manganese	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	26-JAN-10 09:38	012610-1
	Potassium	2430	ug/L	2500	ug/L	97.2	90.0 – 110.0	P	26-JAN-10 09:38	012610-1
	Silver	255	ug/L	250	ug/L	101.8	90.0 – 110.0	P	26-JAN-10 09:38	012610-1
	Sodium	2360	ug/L	2500	ug/L	94.6	90.0 – 110.0	P	26-JAN-10 09:38	012610-1
	Vanadium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	26-JAN-10 09:38	012610-1

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV01	Zinc	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	26-JAN-10 09:38	012610-1
	Manganese	520	ug/L	500	ug/L	104.1	90.0 – 110.0	P	27-JAN-10 10:52	012710-2
	Potassium	2510	ug/L	2500	ug/L	100.3	90.0 – 110.0	P	27-JAN-10 10:52	012710-2
CCV01	Nickel	49.5	ug/L	50	ug/L	99.1	90.0 – 110.0	MS	16-JAN-10 00:43	100115-3
	Selenium	48.1	ug/L	50	ug/L	96.3	90.0 – 110.0	MS	16-JAN-10 00:43	100115-3
	Thallium	51.1	ug/L	50	ug/L	102.2	90.0 – 110.0	MS	16-JAN-10 00:43	100115-3
	Uranium	51.7	ug/L	50	ug/L	103.3	90.0 – 110.0	MS	16-JAN-10 00:43	100115-3
	Arsenic	46.3	ug/L	50	ug/L	92.7	90.0 – 110.0	MS	19-JAN-10 18:28	100119-5
	Beryllium	52.4	ug/L	50	ug/L	104.9	90.0 – 110.0	MS	19-JAN-10 18:28	100119-5
	Mercury	5.1	ug/L	5	ug/L	102.1	80.0 – 120.0	AV	22-JAN-10 08:06	102210S1-13
	Arsenic	48.6	ug/L	50	ug/L	97.2	90.0 – 110.0	MS	23-JAN-10 10:50	100123-6
	Nickel	51.7	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	23-JAN-10 10:50	100123-6
	Selenium	49.6	ug/L	50	ug/L	99.2	90.0 – 110.0	MS	23-JAN-10 10:50	100123-6
	Thallium	50.8	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	23-JAN-10 19:24	100123-10
	Beryllium	50.9	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	24-JAN-10 12:51	100124-11
	Beryllium	51.7	ug/L	50	ug/L	103.3	90.0 – 110.0	MS	25-JAN-10 10:29	100125-12
	Uranium	50.9	ug/L	50	ug/L	101.7	90.0 – 110.0	MS	25-JAN-10 11:05	100125-4
	Aluminum	4880	ug/L	5000	ug/L	97.6	90.0 – 110.0	P	26-JAN-10 10:38	012610-1
	Antimony	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	26-JAN-10 10:38	012610-1
	Barium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	26-JAN-10 10:38	012610-1
	Cadmium	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	26-JAN-10 10:38	012610-1
	Calcium	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	26-JAN-10 10:38	012610-1
	Chromium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	26-JAN-10 10:38	012610-1
	Cobalt	495	ug/L	500	ug/L	99	90.0 – 110.0	P	26-JAN-10 10:38	012610-1
	Copper	477	ug/L	500	ug/L	95.3	90.0 – 110.0	P	26-JAN-10 10:38	012610-1
	Iron	5140	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	26-JAN-10 10:38	012610-1
	Lead	485	ug/L	500	ug/L	97	90.0 – 110.0	P	26-JAN-10 10:38	012610-1
	Magnesium	5240	ug/L	5000	ug/L	104.9	90.0 – 110.0	P	26-JAN-10 10:38	012610-1
	Manganese	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	26-JAN-10 10:38	012610-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Potassium	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	26-JAN-10 10:38	012610-1
	Silver	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	26-JAN-10 10:38	012610-1
	Sodium	9840	ug/L	10000	ug/L	98.4	90.0 – 110.0	P	26-JAN-10 10:38	012610-1
	Vanadium	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	26-JAN-10 10:38	012610-1
	Zinc	480	ug/L	500	ug/L	96	90.0 – 110.0	P	26-JAN-10 10:38	012610-1
	Manganese	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	27-JAN-10 11:38	012710-2
	Potassium	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	27-JAN-10 11:38	012710-2
CCV02	Nickel	49.9	ug/L	50	ug/L	99.7	90.0 – 110.0	MS	16-JAN-10 01:08	100115-3
	Selenium	49.6	ug/L	50	ug/L	99.2	90.0 – 110.0	MS	16-JAN-10 01:08	100115-3
	Thallium	51	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	16-JAN-10 01:08	100115-3
	Uranium	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	16-JAN-10 01:08	100115-3
	Arsenic	47.2	ug/L	50	ug/L	94.4	90.0 – 110.0	MS	19-JAN-10 18:40	100119-5
	Beryllium	52.6	ug/L	50	ug/L	105.2	90.0 – 110.0	MS	19-JAN-10 18:40	100119-5
	Mercury	5.1	ug/L	5	ug/L	102	80.0 – 120.0	AV	22-JAN-10 08:26	102210S1-13
	Arsenic	48.4	ug/L	50	ug/L	96.7	90.0 – 110.0	MS	23-JAN-10 11:23	100123-6
	Nickel	51	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	23-JAN-10 11:23	100123-6
	Selenium	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	23-JAN-10 11:23	100123-6
	Thallium	49.5	ug/L	50	ug/L	99	90.0 – 110.0	MS	23-JAN-10 20:05	100123-10
	Beryllium	53.1	ug/L	50	ug/L	106.1	90.0 – 110.0	MS	24-JAN-10 13:06	100124-11
	Beryllium	53.1	ug/L	50	ug/L	106.2	90.0 – 110.0	MS	25-JAN-10 10:44	100125-12
	Uranium	49.8	ug/L	50	ug/L	99.6	90.0 – 110.0	MS	25-JAN-10 11:25	100125-4
	Aluminum	4890	ug/L	5000	ug/L	97.8	90.0 – 110.0	P	26-JAN-10 11:00	012610-1
	Antimony	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	26-JAN-10 11:00	012610-1
	Barium	476	ug/L	500	ug/L	95.3	90.0 – 110.0	P	26-JAN-10 11:00	012610-1
	Cadmium	480	ug/L	500	ug/L	96	90.0 – 110.0	P	26-JAN-10 11:00	012610-1
	Calcium	5010	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	26-JAN-10 11:00	012610-1
	Chromium	478	ug/L	500	ug/L	95.6	90.0 – 110.0	P	26-JAN-10 11:00	012610-1
	Cobalt	487	ug/L	500	ug/L	97.5	90.0 – 110.0	P	26-JAN-10 11:00	012610-1
	Copper	468	ug/L	500	ug/L	93.7	90.0 – 110.0	P	26-JAN-10 11:00	012610-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Iron	5200	ug/L	5000	ug/L	103.9	90.0 - 110.0	P	26-JAN-10 11:00	012610-1
	Lead	482	ug/L	500	ug/L	96.5	90.0 - 110.0	P	26-JAN-10 11:00	012610-1
	Magnesium	5220	ug/L	5000	ug/L	104.5	90.0 - 110.0	P	26-JAN-10 11:00	012610-1
	Manganese	475	ug/L	500	ug/L	95	90.0 - 110.0	P	26-JAN-10 11:00	012610-1
	Potassium	5020	ug/L	5000	ug/L	100.5	90.0 - 110.0	P	26-JAN-10 11:00	012610-1
	Silver	478	ug/L	500	ug/L	95.6	90.0 - 110.0	P	26-JAN-10 11:00	012610-1
	Sodium	10000	ug/L	10000	ug/L	100	90.0 - 110.0	P	26-JAN-10 11:00	012610-1
	Vanadium	481	ug/L	500	ug/L	96.2	90.0 - 110.0	P	26-JAN-10 11:00	012610-1
	Zinc	473	ug/L	500	ug/L	94.5	90.0 - 110.0	P	26-JAN-10 11:00	012610-1
	Manganese	503	ug/L	500	ug/L	100.5	90.0 - 110.0	P	27-JAN-10 11:58	012710-2
	Potassium	5070	ug/L	5000	ug/L	101.5	90.0 - 110.0	P	27-JAN-10 11:58	012710-2
CCV03	Nickel	49.9	ug/L	50	ug/L	99.9	90.0 - 110.0	MS	16-JAN-10 01:24	100115-3
	Selenium	47.5	ug/L	50	ug/L	95.1	90.0 - 110.0	MS	16-JAN-10 01:24	100115-3
	Thallium	51.4	ug/L	50	ug/L	102.8	90.0 - 110.0	MS	16-JAN-10 01:24	100115-3
	Uranium	52.2	ug/L	50	ug/L	104.5	90.0 - 110.0	MS	16-JAN-10 01:24	100115-3
	Arsenic	47.5	ug/L	50	ug/L	95	90.0 - 110.0	MS	19-JAN-10 19:03	100119-5
	Beryllium	53.8	ug/L	50	ug/L	107.5	90.0 - 110.0	MS	19-JAN-10 19:03	100119-5
	Mercury	5.01	ug/L	5	ug/L	100.3	80.0 - 120.0	AV	22-JAN-10 08:46	102210S1-13
	Arsenic	48.4	ug/L	50	ug/L	96.8	90.0 - 110.0	MS	23-JAN-10 12:01	100123-6
	Nickel	50	ug/L	50	ug/L	99.9	90.0 - 110.0	MS	23-JAN-10 12:01	100123-6
	Selenium	50.1	ug/L	50	ug/L	100.2	90.0 - 110.0	MS	23-JAN-10 12:01	100123-6
	Thallium	49.6	ug/L	50	ug/L	99.2	90.0 - 110.0	MS	23-JAN-10 20:50	100123-10
	Uranium	49.4	ug/L	50	ug/L	98.8	90.0 - 110.0	MS	25-JAN-10 11:40	100125-4
	Aluminum	4930	ug/L	5000	ug/L	98.6	90.0 - 110.0	P	26-JAN-10 12:13	012610-1
	Antimony	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	26-JAN-10 12:13	012610-1
	Barium	491	ug/L	500	ug/L	98.3	90.0 - 110.0	P	26-JAN-10 12:13	012610-1
	Cadmium	495	ug/L	500	ug/L	99	90.0 - 110.0	P	26-JAN-10 12:13	012610-1
	Calcium	5050	ug/L	5000	ug/L	101	90.0 - 110.0	P	26-JAN-10 12:13	012610-1
	Chromium	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	26-JAN-10 12:13	012610-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Cobalt	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	26-JAN-10 12:13	012610-1
	Copper	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	26-JAN-10 12:13	012610-1
	Iron	5290	ug/L	5000	ug/L	105.8	90.0 – 110.0	P	26-JAN-10 12:13	012610-1
	Lead	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	26-JAN-10 12:13	012610-1
	Magnesium	5330	ug/L	5000	ug/L	106.5	90.0 – 110.0	P	26-JAN-10 12:13	012610-1
	Manganese	488	ug/L	500	ug/L	97.5	90.0 – 110.0	P	26-JAN-10 12:13	012610-1
	Potassium	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	26-JAN-10 12:13	012610-1
	Silver	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	26-JAN-10 12:13	012610-1
	Sodium	10300	ug/L	10000	ug/L	102.6	90.0 – 110.0	P	26-JAN-10 12:13	012610-1
	Vanadium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	26-JAN-10 12:13	012610-1
	Zinc	487	ug/L	500	ug/L	97.5	90.0 – 110.0	P	26-JAN-10 12:13	012610-1
	Manganese	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	27-JAN-10 12:27	012710-2
	Potassium	5000	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	27-JAN-10 12:27	012710-2
CCV04	Nickel	49.5	ug/L	50	ug/L	98.9	90.0 – 110.0	MS	16-JAN-10 01:49	100115-3
	Selenium	50.1	ug/L	50	ug/L	100.1	90.0 – 110.0	MS	16-JAN-10 01:49	100115-3
	Thallium	51.4	ug/L	50	ug/L	102.7	90.0 – 110.0	MS	16-JAN-10 01:49	100115-3
	Uranium	52	ug/L	50	ug/L	104.1	90.0 – 110.0	MS	16-JAN-10 01:49	100115-3
	Arsenic	47.7	ug/L	50	ug/L	95.5	90.0 – 110.0	MS	19-JAN-10 19:30	100119-5
	Beryllium	53.7	ug/L	50	ug/L	107.5	90.0 – 110.0	MS	19-JAN-10 19:30	100119-5
	Mercury	4.98	ug/L	5	ug/L	99.7	80.0 – 120.0	AV	22-JAN-10 09:06	102210S1-13
	Aluminum	4920	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	26-JAN-10 13:02	012610-1
	Antimony	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	26-JAN-10 13:02	012610-1
	Barium	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	26-JAN-10 13:02	012610-1
	Cadmium	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	26-JAN-10 13:02	012610-1
	Calcium	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	26-JAN-10 13:02	012610-1
	Chromium	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	26-JAN-10 13:02	012610-1
	Cobalt	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	26-JAN-10 13:02	012610-1
	Copper	484	ug/L	500	ug/L	96.7	90.0 – 110.0	P	26-JAN-10 13:02	012610-1
	Iron	5220	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	26-JAN-10 13:02	012610-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Lead	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	26-JAN-10 13:02	012610-1
	Magnesium	5310	ug/L	5000	ug/L	106.2	90.0 – 110.0	P	26-JAN-10 13:02	012610-1
	Manganese	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	26-JAN-10 13:02	012610-1
	Potassium	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	26-JAN-10 13:02	012610-1
	Silver	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	26-JAN-10 13:02	012610-1
	Sodium	10100	ug/L	10000	ug/L	101.3	90.0 – 110.0	P	26-JAN-10 13:02	012610-1
	Vanadium	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	26-JAN-10 13:02	012610-1
	Zinc	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	26-JAN-10 13:02	012610-1
	Manganese	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	27-JAN-10 13:36	012710-2
	Potassium	5030	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	27-JAN-10 13:36	012710-2
CCV05	Nickel	50	ug/L	50	ug/L	100	90.0 – 110.0	MS	16-JAN-10 02:09	100115-3
	Selenium	47.9	ug/L	50	ug/L	95.8	90.0 – 110.0	MS	16-JAN-10 02:09	100115-3
	Thallium	51.3	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	16-JAN-10 02:09	100115-3
	Uranium	51.4	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	16-JAN-10 02:09	100115-3
	Arsenic	47	ug/L	50	ug/L	94	90.0 – 110.0	MS	19-JAN-10 19:54	100119-5
	Beryllium	53.6	ug/L	50	ug/L	107.3	90.0 – 110.0	MS	19-JAN-10 19:54	100119-5
	Mercury	5.01	ug/L	5	ug/L	100.2	80.0 – 120.0	AV	22-JAN-10 09:26	102210S1-13
	Aluminum	4930	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	26-JAN-10 13:39	012610-1
	Antimony	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	26-JAN-10 13:39	012610-1
	Barium	487	ug/L	500	ug/L	97.5	90.0 – 110.0	P	26-JAN-10 13:39	012610-1
	Cadmium	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	26-JAN-10 13:39	012610-1
	Calcium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	26-JAN-10 13:39	012610-1
	Chromium	488	ug/L	500	ug/L	97.5	90.0 – 110.0	P	26-JAN-10 13:39	012610-1
	Cobalt	500	ug/L	500	ug/L	100	90.0 – 110.0	P	26-JAN-10 13:39	012610-1
	Copper	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	26-JAN-10 13:39	012610-1
	Iron	5370	ug/L	5000	ug/L	107.4	90.0 – 110.0	P	26-JAN-10 13:39	012610-1
	Lead	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	26-JAN-10 13:39	012610-1
	Magnesium	5380	ug/L	5000	ug/L	107.5	90.0 – 110.0	P	26-JAN-10 13:39	012610-1
	Manganese	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	26-JAN-10 13:39	012610-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Potassium	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	26-JAN-10 13:39	012610-1
	Silver	490	ug/L	500	ug/L	98	90.0 – 110.0	P	26-JAN-10 13:39	012610-1
	Sodium	10800	ug/L	10000	ug/L	107.9	90.0 – 110.0	P	26-JAN-10 13:39	012610-1
	Vanadium	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	26-JAN-10 13:39	012610-1
	Zinc	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	26-JAN-10 13:39	012610-1
	Manganese	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	27-JAN-10 14:32	012710-2
	Potassium	5050	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	27-JAN-10 14:32	012710-2
CCV06	Nickel	49.3	ug/L	50	ug/L	98.6	90.0 – 110.0	MS	16-JAN-10 02:31	100115-3
	Selenium	48.6	ug/L	50	ug/L	97.3	90.0 – 110.0	MS	16-JAN-10 02:31	100115-3
	Thallium	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	16-JAN-10 02:31	100115-3
	Uranium	51.1	ug/L	50	ug/L	102.3	90.0 – 110.0	MS	16-JAN-10 02:31	100115-3
	Arsenic	46.8	ug/L	50	ug/L	93.6	90.0 – 110.0	MS	19-JAN-10 20:17	100119-5
	Beryllium	54.1	ug/L	50	ug/L	108.2	90.0 – 110.0	MS	19-JAN-10 20:17	100119-5
	Aluminum	4830	ug/L	5000	ug/L	96.6	90.0 – 110.0	P	26-JAN-10 14:50	012610-1
	Antimony	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	26-JAN-10 14:50	012610-1
	Barium	476	ug/L	500	ug/L	95.2	90.0 – 110.0	P	26-JAN-10 14:50	012610-1
	Cadmium	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	26-JAN-10 14:50	012610-1
	Calcium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	26-JAN-10 14:50	012610-1
	Chromium	476	ug/L	500	ug/L	95.3	90.0 – 110.0	P	26-JAN-10 14:50	012610-1
	Cobalt	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	26-JAN-10 14:50	012610-1
	Copper	470	ug/L	500	ug/L	94	90.0 – 110.0	P	26-JAN-10 14:50	012610-1
	Iron	5120	ug/L	5000	ug/L	102.5	90.0 – 110.0	P	26-JAN-10 14:50	012610-1
	Lead	476	ug/L	500	ug/L	95.2	90.0 – 110.0	P	26-JAN-10 14:50	012610-1
	Magnesium	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	26-JAN-10 14:50	012610-1
	Manganese	474	ug/L	500	ug/L	94.9	90.0 – 110.0	P	26-JAN-10 14:50	012610-1
	Potassium	4950	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	26-JAN-10 14:50	012610-1
	Silver	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	26-JAN-10 14:50	012610-1
	Sodium	9870	ug/L	10000	ug/L	98.7	90.0 – 110.0	P	26-JAN-10 14:50	012610-1
	Vanadium	481	ug/L	500	ug/L	96.1	90.0 – 110.0	P	26-JAN-10 14:50	012610-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Zinc	471	ug/L	500	ug/L	94.1	90.0 – 110.0	P	26-JAN-10 14:50	012610-1
	Manganese	517	ug/L	500	ug/L	103.3	90.0 – 110.0	P	27-JAN-10 15:19	012710-2
	Potassium	5110	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	27-JAN-10 15:19	012710-2
CCV07										
	Nickel	49.4	ug/L	50	ug/L	98.8	90.0 – 110.0	MS	16-JAN-10 03:01	100115-3
	Selenium	49.5	ug/L	50	ug/L	99	90.0 – 110.0	MS	16-JAN-10 03:01	100115-3
	Thallium	50.2	ug/L	50	ug/L	100.3	90.0 – 110.0	MS	16-JAN-10 03:01	100115-3
	Uranium	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	16-JAN-10 03:01	100115-3
	Arsenic	46.8	ug/L	50	ug/L	93.6	90.0 – 110.0	MS	19-JAN-10 20:40	100119-5
	Beryllium	54.3	ug/L	50	ug/L	108.7	90.0 – 110.0	MS	19-JAN-10 20:40	100119-5
	Aluminum	4780	ug/L	5000	ug/L	95.6	90.0 – 110.0	P	26-JAN-10 15:38	012610-1
	Antimony	486	ug/L	500	ug/L	97.1	90.0 – 110.0	P	26-JAN-10 15:38	012610-1
	Barium	475	ug/L	500	ug/L	94.9	90.0 – 110.0	P	26-JAN-10 15:38	012610-1
	Cadmium	477	ug/L	500	ug/L	95.4	90.0 – 110.0	P	26-JAN-10 15:38	012610-1
	Calcium	4900	ug/L	5000	ug/L	98	90.0 – 110.0	P	26-JAN-10 15:38	012610-1
	Chromium	475	ug/L	500	ug/L	94.9	90.0 – 110.0	P	26-JAN-10 15:38	012610-1
	Cobalt	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	26-JAN-10 15:38	012610-1
	Copper	467	ug/L	500	ug/L	93.4	90.0 – 110.0	P	26-JAN-10 15:38	012610-1
	Iron	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	26-JAN-10 15:38	012610-1
	Lead	477	ug/L	500	ug/L	95.4	90.0 – 110.0	P	26-JAN-10 15:38	012610-1
	Magnesium	5160	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	26-JAN-10 15:38	012610-1
	Manganese	475	ug/L	500	ug/L	95.1	90.0 – 110.0	P	26-JAN-10 15:38	012610-1
	Potassium	4900	ug/L	5000	ug/L	98	90.0 – 110.0	P	26-JAN-10 15:38	012610-1
	Silver	478	ug/L	500	ug/L	95.5	90.0 – 110.0	P	26-JAN-10 15:38	012610-1
	Sodium	9980	ug/L	10000	ug/L	99.8	90.0 – 110.0	P	26-JAN-10 15:38	012610-1
	Vanadium	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	26-JAN-10 15:38	012610-1
	Zinc	469	ug/L	500	ug/L	93.8	90.0 – 110.0	P	26-JAN-10 15:38	012610-1
CCV08										
	Nickel	50.1	ug/L	50	ug/L	100.2	90.0 – 110.0	MS	16-JAN-10 03:34	100115-3
	Selenium	48.7	ug/L	50	ug/L	97.4	90.0 – 110.0	MS	16-JAN-10 03:34	100115-3

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Thallium	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	16-JAN-10 03:34	100115-3
	Uranium	51	ug/L	50	ug/L	102.1	90.0 – 110.0	MS	16-JAN-10 03:34	100115-3
	Arsenic	46.9	ug/L	50	ug/L	93.8	90.0 – 110.0	MS	19-JAN-10 21:04	100119-5
	Beryllium	54	ug/L	50	ug/L	108.1	90.0 – 110.0	MS	19-JAN-10 21:04	100119-5
	Aluminum	4890	ug/L	5000	ug/L	97.8	90.0 – 110.0	P	26-JAN-10 16:55	012610-1
	Antimony	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	26-JAN-10 16:55	012610-1
	Barium	481	ug/L	500	ug/L	96.1	90.0 – 110.0	P	26-JAN-10 16:55	012610-1
	Cadmium	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	26-JAN-10 16:55	012610-1
	Calcium	4970	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	26-JAN-10 16:55	012610-1
	Chromium	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	26-JAN-10 16:55	012610-1
	Cobalt	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	26-JAN-10 16:55	012610-1
	Copper	476	ug/L	500	ug/L	95.3	90.0 – 110.0	P	26-JAN-10 16:55	012610-1
	Iron	5100	ug/L	5000	ug/L	102	90.0 – 110.0	P	26-JAN-10 16:55	012610-1
	Lead	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	26-JAN-10 16:55	012610-1
	Magnesium	5220	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	26-JAN-10 16:55	012610-1
	Manganese	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	26-JAN-10 16:55	012610-1
	Potassium	4960	ug/L	5000	ug/L	99.1	90.0 – 110.0	P	26-JAN-10 16:55	012610-1
	Silver	484	ug/L	500	ug/L	96.9	90.0 – 110.0	P	26-JAN-10 16:55	012610-1
	Sodium	9720	ug/L	10000	ug/L	97.2	90.0 – 110.0	P	26-JAN-10 16:55	012610-1
	Vanadium	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	26-JAN-10 16:55	012610-1
	Zinc	475	ug/L	500	ug/L	95.1	90.0 – 110.0	P	26-JAN-10 16:55	012610-1
CCV09										
	Aluminum	4830	ug/L	5000	ug/L	96.5	90.0 – 110.0	P	26-JAN-10 18:12	012610-1
	Antimony	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	26-JAN-10 18:12	012610-1
	Barium	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	26-JAN-10 18:12	012610-1
	Cadmium	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	26-JAN-10 18:12	012610-1
	Calcium	4970	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	26-JAN-10 18:12	012610-1
	Chromium	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	26-JAN-10 18:12	012610-1
	Cobalt	495	ug/L	500	ug/L	99	90.0 – 110.0	P	26-JAN-10 18:12	012610-1
	Copper	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	26-JAN-10 18:12	012610-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Iron	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	26-JAN-10 18:12	012610-1
	Lead	485	ug/L	500	ug/L	97	90.0 – 110.0	P	26-JAN-10 18:12	012610-1
	Magnesium	5220	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	26-JAN-10 18:12	012610-1
	Manganese	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	26-JAN-10 18:12	012610-1
	Potassium	4910	ug/L	5000	ug/L	98.2	90.0 – 110.0	P	26-JAN-10 18:12	012610-1
	Silver	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	26-JAN-10 18:12	012610-1
	Sodium	10200	ug/L	10000	ug/L	101.8	90.0 – 110.0	P	26-JAN-10 18:12	012610-1
	Vanadium	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	26-JAN-10 18:12	012610-1
	Zinc	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	26-JAN-10 18:12	012610-1
CCV10	Aluminum	4780	ug/L	5000	ug/L	95.6	90.0 – 110.0	P	26-JAN-10 19:22	012610-1
	Antimony	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	26-JAN-10 19:22	012610-1
	Barium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	26-JAN-10 19:22	012610-1
	Cadmium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	26-JAN-10 19:22	012610-1
	Calcium	4900	ug/L	5000	ug/L	97.9	90.0 – 110.0	P	26-JAN-10 19:22	012610-1
	Chromium	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	26-JAN-10 19:22	012610-1
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	26-JAN-10 19:22	012610-1
	Copper	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	26-JAN-10 19:22	012610-1
	Iron	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	26-JAN-10 19:22	012610-1
	Lead	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	26-JAN-10 19:22	012610-1
	Magnesium	5100	ug/L	5000	ug/L	102	90.0 – 110.0	P	26-JAN-10 19:22	012610-1
	Manganese	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	26-JAN-10 19:22	012610-1
	Potassium	4820	ug/L	5000	ug/L	96.5	90.0 – 110.0	P	26-JAN-10 19:22	012610-1
	Silver	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	26-JAN-10 19:22	012610-1
	Sodium	9290	ug/L	10000	ug/L	92.9	90.0 – 110.0	P	26-JAN-10 19:22	012610-1
	Vanadium	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	26-JAN-10 19:22	012610-1
	Zinc	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	26-JAN-10 19:22	012610-1
CCV11	Aluminum	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	26-JAN-10 20:41	012610-1
	Antimony	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	26-JAN-10 20:41	012610-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Barium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	26-JAN-10 20:41	012610-1
	Cadmium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	26-JAN-10 20:41	012610-1
	Calcium	5050	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	26-JAN-10 20:41	012610-1
	Chromium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	26-JAN-10 20:41	012610-1
	Cobalt	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	26-JAN-10 20:41	012610-1
	Copper	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	26-JAN-10 20:41	012610-1
	Iron	5260	ug/L	5000	ug/L	105.1	90.0 – 110.0	P	26-JAN-10 20:41	012610-1
	Lead	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	26-JAN-10 20:41	012610-1
	Magnesium	5280	ug/L	5000	ug/L	105.7	90.0 – 110.0	P	26-JAN-10 20:41	012610-1
	Manganese	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	26-JAN-10 20:41	012610-1
	Potassium	5060	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	26-JAN-10 20:41	012610-1
	Silver	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	26-JAN-10 20:41	012610-1
	Sodium	10000	ug/L	10000	ug/L	100.1	90.0 – 110.0	P	26-JAN-10 20:41	012610-1
	Vanadium	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	26-JAN-10 20:41	012610-1
	Zinc	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	26-JAN-10 20:41	012610-1
CCV12	Aluminum	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	26-JAN-10 22:00	012610-1
	Antimony	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	26-JAN-10 22:00	012610-1
	Barium	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	26-JAN-10 22:00	012610-1
	Cadmium	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	26-JAN-10 22:00	012610-1
	Calcium	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	26-JAN-10 22:00	012610-1
	Chromium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	26-JAN-10 22:00	012610-1
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	26-JAN-10 22:00	012610-1
	Copper	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	26-JAN-10 22:00	012610-1
	Iron	5240	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	26-JAN-10 22:00	012610-1
	Lead	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	26-JAN-10 22:00	012610-1
	Magnesium	5260	ug/L	5000	ug/L	105.3	90.0 – 110.0	P	26-JAN-10 22:00	012610-1
	Manganese	485	ug/L	500	ug/L	97	90.0 – 110.0	P	26-JAN-10 22:00	012610-1
	Potassium	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	26-JAN-10 22:00	012610-1
	Silver	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	26-JAN-10 22:00	012610-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV13	Sodium	9920	ug/L	10000	ug/L	99.2	90.0 – 110.0	P	26-JAN-10 22:00	012610-1
	Vanadium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	26-JAN-10 22:00	012610-1
	Zinc	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	26-JAN-10 22:00	012610-1
CCV13	Aluminum	5040	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	26-JAN-10 23:12	012610-1
	Antimony	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	26-JAN-10 23:12	012610-1
	Barium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	26-JAN-10 23:12	012610-1
	Cadmium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	26-JAN-10 23:12	012610-1
	Calcium	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	26-JAN-10 23:12	012610-1
	Chromium	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	26-JAN-10 23:12	012610-1
	Cobalt	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	26-JAN-10 23:12	012610-1
	Copper	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	26-JAN-10 23:12	012610-1
	Iron	5420	ug/L	5000	ug/L	108.4	90.0 – 110.0	P	26-JAN-10 23:12	012610-1
	Lead	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	26-JAN-10 23:12	012610-1
	Magnesium	5510	ug/L	5000	ug/L	110.2	90.0 – 110.0	P	26-JAN-10 23:12	012610-1
	Manganese	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	26-JAN-10 23:12	012610-1
	Potassium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	26-JAN-10 23:12	012610-1
	Silver	495	ug/L	500	ug/L	99	90.0 – 110.0	P	26-JAN-10 23:12	012610-1
	Sodium	10100	ug/L	10000	ug/L	101.2	90.0 – 110.0	P	26-JAN-10 23:12	012610-1
	Vanadium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	26-JAN-10 23:12	012610-1
	Zinc	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	26-JAN-10 23:12	012610-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CRDL01										
	Nickel	2.14	ug/L	2	ug/L	107.1	70.0 – 130.0	MS	16-JAN-10 00:34	100115-3
	Thallium	1.14	ug/L	1	ug/L	114.1	70.0 – 130.0	MS	16-JAN-10 00:34	100115-3
	Selenium	5.57	ug/L	5	ug/L	111.4	70.0 – 130.0	MS	16-JAN-10 00:34	100115-3
	Uranium	.213	ug/L	.2	ug/L	106.5	70.0 – 130.0	MS	16-JAN-10 00:34	100115-3
	Arsenic	5.8	ug/L	5	ug/L	116	70.0 – 130.0	MS	19-JAN-10 18:17	100119-5
	Beryllium	.601	ug/L	.5	ug/L	120.2	70.0 – 130.0	MS	19-JAN-10 18:17	100119-5
	Mercury	.174	ug/L	.2	ug/L	87	70.0 – 130.0	AV	22-JAN-10 08:04	102210S1-13
	Nickel	2.09	ug/L	2	ug/L	104.5	70.0 – 130.0	MS	23-JAN-10 10:39	100123-6
	Selenium	5.1	ug/L	5	ug/L	102.1	70.0 – 130.0	MS	23-JAN-10 10:39	100123-6
	Arsenic	5.38	ug/L	5	ug/L	107.6	70.0 – 130.0	MS	23-JAN-10 10:39	100123-6
	Thallium	1.18	ug/L	1	ug/L	118.4	70.0 – 130.0	MS	23-JAN-10 19:11	100123-10
	Beryllium	.553	ug/L	.5	ug/L	110.6	70.0 – 130.0	MS	24-JAN-10 12:46	100124-11
	Beryllium	.555	ug/L	.5	ug/L	111	70.0 – 130.0	MS	25-JAN-10 10:24	100125-12
	Uranium	.228	ug/L	.2	ug/L	114	70.0 – 130.0	MS	25-JAN-10 10:59	100125-4
PQL01										
	Aluminum	202	ug/L	200	ug/L	101.1	70.0 – 130.0	P	26-JAN-10 09:53	012610-1
	Iron	104	ug/L	100	ug/L	103.8	70.0 – 130.0	P	26-JAN-10 09:53	012610-1
	Lead	11.5	ug/L	10	ug/L	114.7	70.0 – 130.0	P	26-JAN-10 09:53	012610-1
	Magnesium	382	ug/L	300	ug/L	127.5	70.0 – 130.0	P	26-JAN-10 09:53	012610-1
	Manganese	10.3	ug/L	10	ug/L	103.3	70.0 – 130.0	P	26-JAN-10 09:53	012610-1
	Potassium	99.4	ug/L	150	ug/L	66.3	70.0 – 130.0	P	26-JAN-10 09:53	012610-1
	Silver	5.01	ug/L	5	ug/L	100.2	70.0 – 130.0	P	26-JAN-10 09:53	012610-1
	Sodium	233	ug/L	300	ug/L	77.8	70.0 – 130.0	P	26-JAN-10 09:53	012610-1
	Antimony	10.6	ug/L	10	ug/L	105.6	70.0 – 130.0	P	26-JAN-10 09:53	012610-1
	Barium	5.18	ug/L	5	ug/L	103.6	70.0 – 130.0	P	26-JAN-10 09:53	012610-1
	Cadmium	5.1	ug/L	5	ug/L	102	70.0 – 130.0	P	26-JAN-10 09:53	012610-1
	Chromium	5.04	ug/L	5	ug/L	100.7	70.0 – 130.0	P	26-JAN-10 09:53	012610-1
	Cobalt	5.2	ug/L	5	ug/L	103.9	70.0 – 130.0	P	26-JAN-10 09:53	012610-1
	Copper	9.35	ug/L	10	ug/L	93.5	70.0 – 130.0	P	26-JAN-10 09:53	012610-1
	Vanadium	5.51	ug/L	5	ug/L	110.1	70.0 – 130.0	P	26-JAN-10 09:53	012610-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Zinc	9.48	ug/L	10	ug/L	94.8	70.0 – 130.0	P	26-JAN-10 09:53	012610-1
	Calcium	205	ug/L	200	ug/L	102.4	70.0 – 130.0	P	26-JAN-10 09:53	012610-1
	Manganese	10.5	ug/L	10	ug/L	104.8	70.0 – 130.0	P	27-JAN-10 11:06	012710-2
	Potassium	156	ug/L	150	ug/L	103.9	70.0 – 130.0	P	27-JAN-10 11:06	012710-2
PQL02										
	Aluminum	199	ug/L	200	ug/L	99.4	70.0 – 130.0	P	26-JAN-10 12:20	012610-1
	Iron	114	ug/L	100	ug/L	114.3	70.0 – 130.0	P	26-JAN-10 12:20	012610-1
	Lead	10.3	ug/L	10	ug/L	103.4	70.0 – 130.0	P	26-JAN-10 12:20	012610-1
	Potassium	125	ug/L	150	ug/L	83.6	70.0 – 130.0	P	26-JAN-10 12:20	012610-1
	Sodium	254	ug/L	300	ug/L	84.6	70.0 – 130.0	P	26-JAN-10 12:20	012610-1
	Barium	5.23	ug/L	5	ug/L	104.5	70.0 – 130.0	P	26-JAN-10 12:20	012610-1
	Chromium	5.14	ug/L	5	ug/L	102.8	70.0 – 130.0	P	26-JAN-10 12:20	012610-1
	Calcium	203	ug/L	200	ug/L	101.3	70.0 – 130.0	P	26-JAN-10 12:20	012610-1
	Zinc	9.95	ug/L	10	ug/L	99.5	70.0 – 130.0	P	26-JAN-10 12:20	012610-1
	Vanadium	5.28	ug/L	5	ug/L	105.7	70.0 – 130.0	P	26-JAN-10 12:20	012610-1
	Copper	9.78	ug/L	10	ug/L	97.8	70.0 – 130.0	P	26-JAN-10 12:20	012610-1
	Cobalt	5.09	ug/L	5	ug/L	101.8	70.0 – 130.0	P	26-JAN-10 12:20	012610-1
	Cadmium	5.33	ug/L	5	ug/L	106.5	70.0 – 130.0	P	26-JAN-10 12:20	012610-1
	Antimony	12.9	ug/L	10	ug/L	129.3	70.0 – 130.0	P	26-JAN-10 12:20	012610-1
	Silver	5.42	ug/L	5	ug/L	108.3	70.0 – 130.0	P	26-JAN-10 12:20	012610-1
	Magnesium	321	ug/L	300	ug/L	107.2	70.0 – 130.0	P	26-JAN-10 12:20	012610-1
	Manganese	10.6	ug/L	10	ug/L	106	70.0 – 130.0	P	26-JAN-10 12:20	012610-1
	Manganese	10.5	ug/L	10	ug/L	104.9	70.0 – 130.0	P	27-JAN-10 13:43	012710-2
	Potassium	150	ug/L	150	ug/L	100.3	70.0 – 130.0	P	27-JAN-10 13:43	012710-2
PQL03										
	Aluminum	213	ug/L	200	ug/L	106.4	70.0 – 130.0	P	26-JAN-10 14:57	012610-1
	Iron	116	ug/L	100	ug/L	115.8	70.0 – 130.0	P	26-JAN-10 14:57	012610-1
	Lead	12.5	ug/L	10	ug/L	124.5	70.0 – 130.0	P	26-JAN-10 14:57	012610-1
	Magnesium	359	ug/L	300	ug/L	119.7	70.0 – 130.0	P	26-JAN-10 14:57	012610-1
	Manganese	10.3	ug/L	10	ug/L	103	70.0 – 130.0	P	26-JAN-10 14:57	012610-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: HG3,ICPMS3,ICPMS4,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Potassium	109	ug/L	150	ug/L	72.9	70.0 – 130.0	P	26-JAN-10 14:57	012610-1
	Silver	5.13	ug/L	5	ug/L	102.7	70.0 – 130.0	P	26-JAN-10 14:57	012610-1
	Sodium	258	ug/L	300	ug/L	86.1	70.0 – 130.0	P	26-JAN-10 14:57	012610-1
	Antimony	14.3	ug/L	10	ug/L	142.8	70.0 – 130.0	P	26-JAN-10 14:57	012610-1
	Barium	4.91	ug/L	5	ug/L	98.1	70.0 – 130.0	P	26-JAN-10 14:57	012610-1
	Cadmium	5.07	ug/L	5	ug/L	101.5	70.0 – 130.0	P	26-JAN-10 14:57	012610-1
	Chromium	4.88	ug/L	5	ug/L	97.5	70.0 – 130.0	P	26-JAN-10 14:57	012610-1
	Cobalt	5.02	ug/L	5	ug/L	100.4	70.0 – 130.0	P	26-JAN-10 14:57	012610-1
	Copper	8.8	ug/L	10	ug/L	88	70.0 – 130.0	P	26-JAN-10 14:57	012610-1
	Vanadium	5.44	ug/L	5	ug/L	108.9	70.0 – 130.0	P	26-JAN-10 14:57	012610-1
	Zinc	9.4	ug/L	10	ug/L	94	70.0 – 130.0	P	26-JAN-10 14:57	012610-1
	Calcium	200	ug/L	200	ug/L	99.9	70.0 – 130.0	P	26-JAN-10 14:57	012610-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1132

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
ICB01										
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	16-JAN-10 00:32	100115-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	16-JAN-10 00:32	100115-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	16-JAN-10 00:32	100115-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	16-JAN-10 00:32	100115-3
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	19-JAN-10 18:13	100119-5
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	19-JAN-10 18:13	100119-5
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	22-JAN-10 08:03	102210S1-13
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	23-JAN-10 10:35	100123-6
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	23-JAN-10 10:35	100123-6
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	23-JAN-10 10:35	100123-6
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	23-JAN-10 19:06	100123-10
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	24-JAN-10 12:45	100124-11
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	25-JAN-10 10:22	100125-12
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	25-JAN-10 10:56	100125-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-JAN-10 09:45	012610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 09:45	012610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 09:45	012610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 09:45	012610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 09:45	012610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 09:45	012610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 09:45	012610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-JAN-10 09:45	012610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 09:45	012610-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-JAN-10 09:45	012610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-JAN-10 09:45	012610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-JAN-10 09:45	012610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-JAN-10 09:45	012610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 09:45	012610-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-JAN-10 09:45	012610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 09:45	012610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 09:45	012610-1

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1132

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	27-JAN-10 10:59	012710-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	27-JAN-10 10:59	012710-2
CCB01	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	16-JAN-10 00:45	100115-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	16-JAN-10 00:45	100115-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	16-JAN-10 00:45	100115-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	16-JAN-10 00:45	100115-3
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	19-JAN-10 18:32	100119-5
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	19-JAN-10 18:32	100119-5
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	22-JAN-10 08:08	102210S1-13
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	23-JAN-10 10:54	100123-6
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	23-JAN-10 10:54	100123-6
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	23-JAN-10 10:54	100123-6
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	23-JAN-10 19:29	100123-10
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	24-JAN-10 12:53	100124-11
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	25-JAN-10 10:31	100125-12
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	25-JAN-10 11:07	100125-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-JAN-10 10:46	012610-1
	Antimony	4.82	+/-10	J	3.3	10.0	SOL	P	26-JAN-10 10:46	012610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 10:46	012610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 10:46	012610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 10:46	012610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 10:46	012610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 10:46	012610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-JAN-10 10:46	012610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 10:46	012610-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-JAN-10 10:46	012610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-JAN-10 10:46	012610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-JAN-10 10:46	012610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-JAN-10 10:46	012610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 10:46	012610-1

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1132

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-JAN-10 10:46	012610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 10:46	012610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 10:46	012610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	27-JAN-10 11:45	012710-2
	Potassium	64.3	+/-250	J	64.0	250	SOL	P	27-JAN-10 11:45	012710-2
CCB02	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	16-JAN-10 01:10	100115-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	16-JAN-10 01:10	100115-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	16-JAN-10 01:10	100115-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	16-JAN-10 01:10	100115-3
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	19-JAN-10 18:44	100119-5
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	19-JAN-10 18:44	100119-5
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	22-JAN-10 08:28	102210S1-13
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	23-JAN-10 11:27	100123-6
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	23-JAN-10 11:27	100123-6
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	23-JAN-10 11:27	100123-6
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	23-JAN-10 20:09	100123-10
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	24-JAN-10 13:08	100124-11
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	25-JAN-10 10:46	100125-12
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	25-JAN-10 11:27	100125-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-JAN-10 11:07	012610-1
	Antimony	3.41	+/-10	J	3.3	10.0	SOL	P	26-JAN-10 11:07	012610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 11:07	012610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 11:07	012610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 11:07	012610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 11:07	012610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 11:07	012610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-JAN-10 11:07	012610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 11:07	012610-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-JAN-10 11:07	012610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-JAN-10 11:07	012610-1

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1132

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ng/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-JAN-10 11:07	012610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-JAN-10 11:07	012610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 11:07	012610-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-JAN-10 11:07	012610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 11:07	012610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 11:07	012610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	27-JAN-10 12:05	012710-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	27-JAN-10 12:05	012710-2
CCB03	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	16-JAN-10 01:27	100115-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	16-JAN-10 01:27	100115-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	16-JAN-10 01:27	100115-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	16-JAN-10 01:27	100115-3
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	19-JAN-10 19:07	100119-5
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	19-JAN-10 19:07	100119-5
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	22-JAN-10 08:48	102210S1-13
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	23-JAN-10 12:04	100123-6
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	23-JAN-10 12:04	100123-6
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	23-JAN-10 12:04	100123-6
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	23-JAN-10 20:55	100123-10
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	25-JAN-10 11:43	100125-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-JAN-10 12:27	012610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 12:27	012610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 12:27	012610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 12:27	012610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 12:27	012610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 12:27	012610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 12:27	012610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-JAN-10 12:27	012610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 12:27	012610-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-JAN-10 12:27	012610-1

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1132

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ng/L</u>	<u>Acceptance</u>	<u>Conc Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run</u>
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-JAN-10 12:27	012610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-JAN-10 12:27	012610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-JAN-10 12:27	012610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 12:27	012610-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-JAN-10 12:27	012610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 12:27	012610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 12:27	012610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	27-JAN-10 12:34	012710-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	27-JAN-10 12:34	012710-2
CCB04	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	16-JAN-10 01:52	100115-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	16-JAN-10 01:52	100115-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	16-JAN-10 01:52	100115-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	16-JAN-10 01:52	100115-3
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	19-JAN-10 19:34	100119-5
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	19-JAN-10 19:34	100119-5
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	22-JAN-10 09:08	102210S1-13
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-JAN-10 13:09	012610-1
	Antimony	4.29	+/-10	J	3.3	10.0	SOL	P	26-JAN-10 13:09	012610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 13:09	012610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 13:09	012610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 13:09	012610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 13:09	012610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 13:09	012610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-JAN-10 13:09	012610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 13:09	012610-1
	Lead	13.2	+/-10		2.5	10.0	SOL	P	26-JAN-10 13:09	012610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-JAN-10 13:09	012610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-JAN-10 13:09	012610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-JAN-10 13:09	012610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 13:09	012610-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1132

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ng/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB05	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-JAN-10 13:09	012610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 13:09	012610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 13:09	012610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	27-JAN-10 13:51	012710-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	27-JAN-10 13:51	012710-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	16-JAN-10 02:12	100115-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	16-JAN-10 02:12	100115-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	16-JAN-10 02:12	100115-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	16-JAN-10 02:12	100115-3
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	19-JAN-10 19:58	100119-5
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	19-JAN-10 19:58	100119-5
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	22-JAN-10 09:28	102210S1-13
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-JAN-10 13:46	012610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 13:46	012610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 13:46	012610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 13:46	012610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 13:46	012610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 13:46	012610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 13:46	012610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-JAN-10 13:46	012610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 13:46	012610-1
	Lead	4.5	+/-10	J	2.5	10.0	SOL	P	26-JAN-10 13:46	012610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-JAN-10 13:46	012610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-JAN-10 13:46	012610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-JAN-10 13:46	012610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 13:46	012610-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-JAN-10 13:46	012610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 13:46	012610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 13:46	012610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	27-JAN-10 14:39	012710-2

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1132

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB06	Potassium	64.0	+/-250	U	64.0	250	SOL	P	27-JAN-10 14:39	012710-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	16-JAN-10 02:34	100115-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	16-JAN-10 02:34	100115-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	16-JAN-10 02:34	100115-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	16-JAN-10 02:34	100115-3
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	19-JAN-10 20:21	100119-5
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	19-JAN-10 20:21	100119-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-JAN-10 15:04	012610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 15:04	012610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 15:04	012610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 15:04	012610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 15:04	012610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 15:04	012610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 15:04	012610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-JAN-10 15:04	012610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 15:04	012610-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-JAN-10 15:04	012610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-JAN-10 15:04	012610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-JAN-10 15:04	012610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-JAN-10 15:04	012610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 15:04	012610-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-JAN-10 15:04	012610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 15:04	012610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 15:04	012610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	27-JAN-10 15:26	012710-2
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	27-JAN-10 15:26	012710-2
CCB07	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	16-JAN-10 03:04	100115-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	16-JAN-10 03:04	100115-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	16-JAN-10 03:04	100115-3

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1132

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ug/L</u>	<u>Acceptance</u>	<u>Conc Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run</u>
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	16-JAN-10 03:04	100115-3
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	19-JAN-10 20:44	100119-5
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	19-JAN-10 20:44	100119-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-JAN-10 15:45	012610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 15:45	012610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 15:45	012610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 15:45	012610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 15:45	012610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 15:45	012610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 15:45	012610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-JAN-10 15:45	012610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 15:45	012610-1
	Lead	2.64	+/-10	J	2.5	10.0	SOL	P	26-JAN-10 15:45	012610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-JAN-10 15:45	012610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-JAN-10 15:45	012610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-JAN-10 15:45	012610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 15:45	012610-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-JAN-10 15:45	012610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 15:45	012610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 15:45	012610-1
CCB08	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	16-JAN-10 03:37	100115-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	16-JAN-10 03:37	100115-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	16-JAN-10 03:37	100115-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	16-JAN-10 03:37	100115-3
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	19-JAN-10 21:08	100119-5
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	19-JAN-10 21:08	100119-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-JAN-10 17:02	012610-1
	Antimony	4.51	+/-10	J	3.3	10.0	SOL	P	26-JAN-10 17:02	012610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 17:02	012610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 17:02	012610-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1132

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ug/L</u>	<u>Acceptance</u>	<u>Conc Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run</u>
CCB09	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 17:02	012610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 17:02	012610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 17:02	012610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-JAN-10 17:02	012610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 17:02	012610-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-JAN-10 17:02	012610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-JAN-10 17:02	012610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-JAN-10 17:02	012610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-JAN-10 17:02	012610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 17:02	012610-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-JAN-10 17:02	012610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 17:02	012610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 17:02	012610-1
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-JAN-10 18:19	012610-1
CCB09	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 18:19	012610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 18:19	012610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 18:19	012610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 18:19	012610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 18:19	012610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 18:19	012610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-JAN-10 18:19	012610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 18:19	012610-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-JAN-10 18:19	012610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-JAN-10 18:19	012610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-JAN-10 18:19	012610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-JAN-10 18:19	012610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 18:19	012610-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-JAN-10 18:19	012610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 18:19	012610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 18:19	012610-1

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1132

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB10	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-JAN-10 19:29	012610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 19:29	012610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 19:29	012610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 19:29	012610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 19:29	012610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 19:29	012610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 19:29	012610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-JAN-10 19:29	012610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 19:29	012610-1
	Lead	2.93	+/-10	J	2.5	10.0	SOL	P	26-JAN-10 19:29	012610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-JAN-10 19:29	012610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-JAN-10 19:29	012610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-JAN-10 19:29	012610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 19:29	012610-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-JAN-10 19:29	012610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 19:29	012610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 19:29	012610-1
CCB11	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-JAN-10 20:48	012610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 20:48	012610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 20:48	012610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 20:48	012610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 20:48	012610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 20:48	012610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 20:48	012610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-JAN-10 20:48	012610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 20:48	012610-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-JAN-10 20:48	012610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-JAN-10 20:48	012610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-JAN-10 20:48	012610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-JAN-10 20:48	012610-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1132

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 20:48	012610-1
	Sodium	-92.47	+/-250	J	70.0	250	SOL	P	26-JAN-10 20:48	012610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 20:48	012610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 20:48	012610-1
CCB12	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-JAN-10 22:07	012610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 22:07	012610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 22:07	012610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 22:07	012610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 22:07	012610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 22:07	012610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 22:07	012610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-JAN-10 22:07	012610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 22:07	012610-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-JAN-10 22:07	012610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-JAN-10 22:07	012610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-JAN-10 22:07	012610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-JAN-10 22:07	012610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 22:07	012610-1
	Sodium	-108.92	+/-250	J	70.0	250	SOL	P	26-JAN-10 22:07	012610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 22:07	012610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 22:07	012610-1
CCB13	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-JAN-10 23:19	012610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 23:19	012610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 23:19	012610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 23:19	012610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 23:19	012610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 23:19	012610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-JAN-10 23:19	012610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-JAN-10 23:19	012610-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1132

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ng/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-JAN-10 23:19	012610-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-JAN-10 23:19	012610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-JAN-10 23:19	012610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-JAN-10 23:19	012610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-JAN-10 23:19	012610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 23:19	012610-1
	Sodium	-120.81	+/-250	J	70.0	250	SOL	P	26-JAN-10 23:19	012610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-JAN-10 23:19	012610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-JAN-10 23:19	012610-1

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-1132
Contract: LANL01004
Matrix: SOIL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Acceptance Window</u>	<u>Conc Qual</u>	<u>M</u>	<u>MDL</u>	<u>RDL</u>
1202011693	Arsenic	0.187	mg/kg	+/-0.933	U	MS	0.187	0.933
	Beryllium	0.0187	mg/kg	+/-0.0933	U	MS	0.0187	0.0933
	Nickel	0.0933	mg/kg	+/-0.373	U	MS	0.0933	0.373
	Uranium	0.0129	mg/kg	+/-0.0373	J	MS	0.0123	0.0373
	Thallium	0.056	mg/kg	+/-0.187	U	MS	0.056	0.187
	Selenium	0.466	mg/kg	+/-0.933	U	MS	0.466	0.933
1202011760	Arsenic	0.191	mg/kg	+/-0.954	U	MS	0.191	0.954
	Nickel	0.0954	mg/kg	+/-0.382	U	MS	0.0954	0.382
	Thallium	0.0573	mg/kg	+/-0.191	U	MS	0.0573	0.191
	Uranium	0.0126	mg/kg	+/-0.0382	U	MS	0.0126	0.0382
	Selenium	0.477	mg/kg	+/-0.954	U	MS	0.477	0.954
	Beryllium	0.0191	mg/kg	+/-0.0954	U	MS	0.0191	0.0954
1202011791	Chromium	146	ug/Kg	+/-485	U	P	146	485
	Cobalt	146	ug/Kg	+/-485	U	P	146	485
	Copper	291	ug/Kg	+/-971	U	P	291	971
	Iron	7770	ug/Kg	+/-24300	U	P	7770	24300
	Lead	243	ug/Kg	+/-971	U	P	243	971
	Magnesium	8250	ug/Kg	+/-29100	U	P	8250	29100
	Calcium	7770	ug/Kg	+/-24300	U	P	7770	24300
	Cadmium	97.1	ug/Kg	+/-485	U	P	97.1	485
	Barium	97.1	ug/Kg	+/-485	U	P	97.1	485
	Antimony	320	ug/Kg	+/-971	U	P	320	971
	Aluminum	6600	ug/Kg	+/-19400	U	P	6600	19400
	Manganese	194	ug/Kg	+/-971	U	P	194	971
	Potassium	6210	ug/Kg	+/-24300	U	P	6210	24300
	Silver	97.1	ug/Kg	+/-485	U	P	97.1	485
	Sodium	6800	ug/Kg	+/-24300	U	P	6800	24300
	Vanadium	97.1	ug/Kg	+/-485	U	P	97.1	485
	Zinc	320	ug/Kg	+/-971	U	P	320	971
1202019637								
	Mercury	3.88	ug/kg	+/-11.4	U	AV	3.88	11.4

METALS
-4-
Interference Check Sample

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Aluminum	523000	ug/L	500000	ug/L	105	80.0 – 120.0	26-JAN-10 09:59	012610-1
	Antimony	0.664	ug/L					26-JAN-10 09:59	012610-1
	Barium	1.3	ug/L					26-JAN-10 09:59	012610-1
	Cadmium	0.779	ug/L					26-JAN-10 09:59	012610-1
	Calcium	483000	ug/L	500000	ug/L	96.6	80.0 – 120.0	26-JAN-10 09:59	012610-1
	Chromium	1.81	ug/L					26-JAN-10 09:59	012610-1
	Cobalt	-1.55	ug/L					26-JAN-10 09:59	012610-1
	Copper	3.75	ug/L					26-JAN-10 09:59	012610-1
	Iron	189000	ug/L	200000	ug/L	94.7	80.0 – 120.0	26-JAN-10 09:59	012610-1
	Lead	10.0	ug/L					26-JAN-10 09:59	012610-1
	Magnesium	499000	ug/L	500000	ug/L	99.9	80.0 – 120.0	26-JAN-10 09:59	012610-1
	Manganese	-3.56	ug/L					26-JAN-10 09:59	012610-1
	Potassium	-162.0	ug/L					26-JAN-10 09:59	012610-1
	Silver	4.99	ug/L					26-JAN-10 09:59	012610-1
	Sodium	-12.2	ug/L					26-JAN-10 09:59	012610-1
	Vanadium	-1.22	ug/L					26-JAN-10 09:59	012610-1
	Zinc	8.12	ug/L					26-JAN-10 09:59	012610-1
ICSAB01									
	Aluminum	534000	ug/L	500000	ug/L	107	80.0 – 120.0	26-JAN-10 10:05	012610-1
	Antimony	542	ug/L	500	ug/L	108	80.0 – 120.0	26-JAN-10 10:05	012610-1
	Barium	481	ug/L	500	ug/L	96.2	80.0 – 120.0	26-JAN-10 10:05	012610-1
	Cadmium	436	ug/L	500	ug/L	87.3	80.0 – 120.0	26-JAN-10 10:05	012610-1
	Calcium	488000	ug/L	500000	ug/L	97.7	80.0 – 120.0	26-JAN-10 10:05	012610-1
	Chromium	464	ug/L	500	ug/L	92.7	80.0 – 120.0	26-JAN-10 10:05	012610-1
	Cobalt	440	ug/L	500	ug/L	88	80.0 – 120.0	26-JAN-10 10:05	012610-1
	Copper	550	ug/L	500	ug/L	110	80.0 – 120.0	26-JAN-10 10:05	012610-1
	Iron	189000	ug/L	200000	ug/L	94.8	80.0 – 120.0	26-JAN-10 10:05	012610-1
	Lead	460	ug/L	500	ug/L	92	80.0 – 120.0	26-JAN-10 10:05	012610-1
	Magnesium	503000	ug/L	500000	ug/L	101	80.0 – 120.0	26-JAN-10 10:05	012610-1

METALS
-4-
Interference Check Sample

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

ICS:

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Manganese	465	ug/L	500	ug/L	92.9	80.0 – 120.0	26-JAN-10 10:05	012610-1
	Potassium	5420	ug/L	5000	ug/L	108	80.0 – 120.0	26-JAN-10 10:05	012610-1
	Silver	267	ug/L	250	ug/L	107	80.0 – 120.0	26-JAN-10 10:05	012610-1
	Sodium	5560	ug/L	5000	ug/L	111	80.0 – 120.0	26-JAN-10 10:05	012610-1
	Vanadium	483	ug/L	500	ug/L	96.6	80.0 – 120.0	26-JAN-10 10:05	012610-1
	Zinc	485	ug/L	500	ug/L	97	80.0 – 120.0	26-JAN-10 10:05	012610-1

METALS
-4-
Interference Check Sample

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Thallium	0.021	ug/L					23-JAN-10 19:15	100123-10
ICSAB01	Thallium	19.8	ug/L	20	ug/L	98.8	80.0 - 120.0	23-JAN-10 19:20	100123-10

METALS
-4-
Interference Check Sample

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Beryllium	0.057	ug/L					24-JAN-10 12:48	100124-11
ICSAB01	Beryllium	19.6	ug/L	20	ug/L	98	80.0 - 120.0	24-JAN-10 12:50	100124-11

METALS

-4-

Interference Check Sample

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Beryllium	0.064	ug/L					25-JAN-10 10:26	100125-12
ICSAB01	Beryllium	18.7	ug/L	20	ug/L	93.6	80.0 - 120.0	25-JAN-10 10:27	100125-12

METALS
-4-
Interference Check Sample

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Manganese	-3.83	ug/L					27-JAN-10 11:13	012710-2
	Potassium	-141.0	ug/L					27-JAN-10 11:13	012710-2
ICSAB01									
	Manganese	501	ug/L	500	ug/L	100	80.0 - 120.0	27-JAN-10 11:19	012710-2
	Potassium	5510	ug/L	5000	ug/L	110	80.0 - 120.0	27-JAN-10 11:19	012710-2

METALS
-4-
Interference Check Sample

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Nickel	2.74	ug/L					16-JAN-10 00:37	100115-3
	Selenium	-0.62	ug/L					16-JAN-10 00:37	100115-3
	Thallium	0.036	ug/L					16-JAN-10 00:37	100115-3
	Uranium	-0.028	ug/L					16-JAN-10 00:37	100115-3
ICSAB01									
	Nickel	21.9	ug/L	22.7	ug/L	96.2	80.0 - 120.0	16-JAN-10 00:40	100115-3
	Selenium	19.6	ug/L	20	ug/L	98.1	80.0 - 120.0	16-JAN-10 00:40	100115-3
	Thallium	19.0	ug/L	20	ug/L	94.7	80.0 - 120.0	16-JAN-10 00:40	100115-3
	Uranium	22.0	ug/L	20	ug/L	110	80.0 - 120.0	16-JAN-10 00:40	100115-3

METALS
-4-
Interference Check Sample

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS4

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Uranium	0.003	ug/L					25-JAN-10 11:01	100125-4
ICSAB01	Uranium	20.5	ug/L	20	ug/L	103	80.0 – 120.0	25-JAN-10 11:03	100125-4

METALS
-4-
Interference Check Sample

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Arsenic	-0.03	ug/L					19-JAN-10 18:20	100119-5
	Beryllium	0.086	ug/L					19-JAN-10 18:20	100119-5
ICSAB01									
	Arsenic	19.8	ug/L	20	ug/L	98.9	80.0 - 120.0	19-JAN-10 18:24	100119-5
	Beryllium	20.5	ug/L	20	ug/L	102	80.0 - 120.0	19-JAN-10 18:24	100119-5

METALS
-4-
Interference Check Sample

SDG No: 10-1132

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Arsenic	0.021	ug/L					23-JAN-10 10:43	100123-6
	Nickel	3.15	ug/L					23-JAN-10 10:43	100123-6
	Selenium	-1.05	ug/L					23-JAN-10 10:43	100123-6
ICSAB01									
	Arsenic	20.0	ug/L	20	ug/L	99.8	80.0 - 120.0	23-JAN-10 10:46	100123-6
	Nickel	22.4	ug/L	22.7	ug/L	98.6	80.0 - 120.0	23-JAN-10 10:46	100123-6
	Selenium	19.6	ug/L	20	ug/L	98	80.0 - 120.0	23-JAN-10 10:46	100123-6

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1132

Client ID: RE16-10-415S

Contract: LANL01004

Level: Low

Matrix: SOIL

% Solids: 80

Sample ID: 244207001

Spike ID: 1202011696

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	11.8		1.99		9.69	102		MS
Beryllium	mg/kg	75-125	6.83		0.503		6.06	104		MS
Nickel	mg/kg	75-125	10.3		3.21		6.06	118		MS
Selenium	mg/kg	75-125	2.39		0.587	U	2.42	94.8		MS
Thallium	mg/kg	75-125	11.9		0.0914	J	12.1	97.7		MS
Uranium	mg/kg	75-125	13.8		4.34		6.06	157	N	MS

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1132 Client ID: RE16-10-415SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 80

Sample ID: 244207001 Spike ID: 1202011698

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	9.95		1.99		8.84	90.1		MS
Beryllium	mg/kg	75-125	5.86		0.503		5.53	96.9		MS
Nickel	mg/kg	75-125	8.4		3.21		5.53	94		MS
Selenium	mg/kg	75-125	2.02		0.587	U	2.21	87		MS
Thallium	mg/kg	75-125	10.4		0.0914	J	11.1	93.6		MS
Uranium	mg/kg	75-125	9.93		4.34		5.53	101		MS

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1132

Client ID RE12-10-7647S

Contract: LANL01004

Level: Low

Matrix: SOIL

% Solids: 83

Sample ID: 244128006

Spike ID: 1202011763

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Beryllium	mg/kg	75-125	7.77		1.22		5.97	110		MS
Nickel	mg/kg	75-125	14.1		9.34		5.97	79.9		MS
Selenium	mg/kg	75-125	1.52		0.594	U	2.39	63.7	N	MS
Thallium	mg/kg	75-125	11.9		0.264		11.9	97.1		MS
Uranium	mg/kg	75-125	10.9		3.58		5.97	123		MS
Arsenic	mg/kg	75-125	11.6		2.17		9.55	98.8		MS

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1132 Client ID RE12-10-7647SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 83

Sample ID: 244128006 Spike ID: 1202011771

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	11.3		2.17		9.25	98.6		MS
Beryllium	mg/kg	75-125	7.89		1.22		5.78	115		MS
Nickel	mg/kg	75-125	14.7		9.34		5.78	92.4		MS
Selenium	mg/kg	75-125	1.38		0.594	U	2.31	59.5	N	MS
Thallium	mg/kg	75-125	11.7		0.264		11.6	98.8		MS
Uranium	mg/kg	75-125	10.5		3.58		5.78	119		MS

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1132 Client ID RE12-10-7634S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 90

Sample ID: 244128001 Spike ID: 1202011794

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		26600000		18000000		552000	1550	N/A	P
Antimony	ug/Kg	75-125	29300		364	U	55200	53	N	P
Barium	ug/Kg		267000		334000		55200	-121	N/A	P
Cadmium	ug/Kg	75-125	48300		233	J	55200	87.1		P
Calcium	ug/Kg		2900000		2550000		552000	63.1	N/A	P
Chromium	ug/Kg	75-125	62900		12800		55200	90.7		P
Cobalt	ug/Kg	75-125	55100		15200		55200	72.4	N	P
Copper	ug/Kg	75-125	63300		8230		55200	99.7		P
Iron	ug/Kg		17400000		16800000		552000	112	N/A	P
Lead	ug/Kg	75-125	63800		18100		55200	82.9		P
Magnesium	ug/Kg		3350000		2710000		552000	116	N/A	P
Manganese	ug/Kg		418000		1380000		55200	-1730	N/A	P
Potassium	ug/Kg	75-125	2920000		2010000		552000	164	N	P
Silver	ug/Kg	75-125	53500		1110		55200	94.9		P
Sodium	ug/Kg	75-125	673000		143000		552000	96.1		P
Vanadium	ug/Kg	75-125	80200		32300		55200	86.8		P
Zinc	ug/Kg	75-125	81300		27100		55200	98.2		P

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1132 Client ID RE12-10-7634SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 90

Sample ID: 244128001 Spike ID: 1202011796

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/Kg	75-125	31100		364	U	54800	56.7	N	P
Barium	ug/Kg		299000		334000		54800	-64.5	N/A	P
Cadmium	ug/Kg	75-125	51800		233	J	54800	94		P
Calcium	ug/Kg		2910000		2550000		548000	66.3	N/A	P
Chromium	ug/Kg	75-125	64800		12800		54800	95		P
Cobalt	ug/Kg	75-125	57100		15200		54800	76.5		P
Copper	ug/Kg	75-125	65500		8230		54800	105		P
Iron	ug/Kg		16700000		16800000		548000	-11.7	N/A	P
Lead	ug/Kg	75-125	66500		18100		54800	88.3		P
Magnesium	ug/Kg		3260000		2710000		548000	101	N/A	P
Manganese	ug/Kg		457000		1380000		54800	-1680	N/A	P
Potassium	ug/Kg	75-125	2920000		2010000		548000	166	N	P
Silver	ug/Kg	75-125	55500		1110		54800	99.2		P
Sodium	ug/Kg	75-125	680000		143000		548000	98.1		P
Vanadium	ug/Kg	75-125	82100		32300		54800	90.9		P
Zinc	ug/Kg	75-125	83700		27100		54800	103		P
Aluminum	ug/Kg		25600000		18000000		548000	1380	N/A	P

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1132

Client ID RE12-10-7634S

Contract: LANL01004

Level: Low

Matrix: SOIL

% Solids: 90

Sample ID: 244128001

Spike ID: 1202019640

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Mercury	ug/kg	75-125	155		17.6		133	103		AV

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1132 Client ID: RE12-10-7634SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 90

Sample ID: 244128001 Spike ID: 1202019647

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	156		17.6		133	104		AV

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1132

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE16-10-415D

Sample ID: 244207001

Duplicate ID: 1202011695

Percent Solids for Dup: 80

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-1.2	1.99		1.83		8.18		MS
Beryllium	mg/kg	+/-1.2	0.503		0.564		11.3		MS
Nickel	mg/kg	+/-20%	3.21		3.37		5.09		MS
Selenium	mg/kg		0.587 U		0.601 U				MS
Thallium	mg/kg	+/-24	0.0914 J		0.0904 J		1.1		MS
Uranium	mg/kg	+/-20%	4.34		5.41		21.9	*	MS

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1132

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE16-10-415SD

Sample ID: 1202011696

Duplicate ID: 1202011698

Percent Solids for Dup: 80

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-20	11.8		9.95		17.2		MS
Beryllium	mg/kg	+/-20	6.83		5.86		15.3		MS
Nickel	mg/kg	+/-20	10.3		8.4		20.8	*	MS
Selenium	mg/kg	+/-20	2.39		2.02		16.8		MS
Thallium	mg/kg	+/-20	11.9		10.4		13.3		MS
Uranium	mg/kg	+/-20	13.8		9.93		32.7	*	MS

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1132

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE12-10-7647D

Sample ID: 244128006

Duplicate ID: 1202011762

Percent Solids for Dup: 83

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-1.17	2.17		2.24		3.31		MS
Beryllium	mg/kg	+/-20%	1.22		1.26		3.01		MS
Nickel	mg/kg	+/-20%	9.34		8.17		13.3		MS
Selenium	mg/kg		0.594 U		0.587 U				MS
Thallium	mg/kg	+/- .235	0.264		0.245		7.58		MS
Uranium	mg/kg	+/-20%	3.58		3.75		4.66		MS

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1132

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE12-10-7647SD

Sample ID: 1202011763

Duplicate ID: 1202011771

Percent Solids for Dup: 83

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-20	11.6		11.3		2.69		MS
Beryllium	mg/kg	+/-20	7.77		7.89		1.58		MS
Nickel	mg/kg	+/-20	14.1		14.7		4.01		MS
Selenium	mg/kg	+/-20	1.52		1.38		10		MS
Thallium	mg/kg	+/-20	11.9		11.7		1.33		MS
Uranium	mg/kg	+/-20	10.9		10.5		4.44		MS

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1132

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE12-10-7634D

Sample ID: 244128001

Duplicate ID: 1202011793

Percent Solids for Dup: 90

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20%	18000000		16600000		8.33		P
Antimony	ug/Kg		364 U		366 U				P
Barium	ug/Kg	+/-20%	334000		216000		43	*	P
Cadmium	ug/Kg	+/-554	233 J		166 J		33.3		P
Calcium	ug/Kg	+/-20%	2550000		2400000		5.96		P
Chromium	ug/Kg	+/-20%	12800		12100		5.5		P
Cobalt	ug/Kg	+/-20%	15200		5400		94.9	*	P
Copper	ug/Kg	+/-20%	8230		7520		8.93		P
Iron	ug/Kg	+/-20%	16800000		14900000		12		P
Lead	ug/Kg	+/-20%	18100		14400		22.8	*	P
Magnesium	ug/Kg	+/-20%	2710000		2380000		12.9		P
Manganese	ug/Kg	+/-20%	1380000		373000		115	*	P
Potassium	ug/Kg	+/-20%	2010000		2080000		3.52		P
Silver	ug/Kg	+/-554	1110		649		52.7		P
Sodium	ug/Kg	+/-27700	143000		115000		21.3	*	P
Vanadium	ug/Kg	+/-20%	32300		28300		13.4		P
Zinc	ug/Kg	+/-20%	27100		26300		3.09		P

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-1132

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE12-10-7634SD

Sample ID: 1202011794

Duplicate ID: 1202011796

Percent Solids for Dup: 90

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20	26600000		25600000		3.85		P
Antimony	ug/Kg	+/-20	29300		31100		5.9		P
Barium	ug/Kg	+/-20	267000		299000		11.1		P
Cadmium	ug/Kg	+/-20	48300		51800		6.89		P
Calcium	ug/Kg	+/-20	2900000		2910000		.503		P
Chromium	ug/Kg	+/-20	62900		64800		3.1		P
Cobalt	ug/Kg	+/-20	55100		57100		3.48		P
Copper	ug/Kg	+/-20	63300		65500		3.53		P
Iron	ug/Kg	+/-20	17400000		16700000		3.99		P
Lead	ug/Kg	+/-20	63800		66500		4.03		P
Magnesium	ug/Kg	+/-20	3350000		3260000		2.56		P
Manganese	ug/Kg	+/-20	418000		457000		8.83		P
Potassium	ug/Kg	+/-20	2920000		2920000		.0819		P
Silver	ug/Kg	+/-20	53500		55500		3.64		P
Sodium	ug/Kg	+/-20	673000		680000		1		P
Vanadium	ug/Kg	+/-20	80200		82100		2.3		P
Zinc	ug/Kg	+/-20	81300		83700		2.89		P

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1132

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE12-10-7634D

Sample ID: 244128001

Duplicate ID: 1202019639

Percent Solids for Dup: 90

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-13.1	17.6		17.2		2.23		AV

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1132

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE12-10-7634SD

Sample ID: 1202019640

Duplicate ID: 1202019647

Percent Solids for Dup: 90

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-20	155		156		.542		AV

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1132

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202011694								
	Arsenic	mg/kg	104	106		102	83-120	MS
	Beryllium	mg/kg	77.6	85.6		110	81.2-126.8	MS
	Nickel	mg/kg	134	137		103	83.3-121.4	MS
	Selenium	mg/kg	286	289		101	80.2-125.9	MS
	Thallium	mg/kg	121	123		101	78-123.2	MS
	Uranium	mg/kg	2.13	2.13		99.9	61.9-130.7	MS

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1132

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202011761								
	Beryllium	mg/kg	77.6	94.6		122	81.2-126.8	MS
	Nickel	mg/kg	134	148		110	83.3-121.4	MS
	Selenium	mg/kg	286	311		109	80.2-125.9	MS
	Thallium	mg/kg	121	136		112	78-123.2	MS
	Uranium	mg/kg	2.13	1.98		93.2	61.9-130.7	MS
	Arsenic	mg/kg	104	120		116	83-120	MS

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1132

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202011792								
	Aluminum	ug/Kg	10500000	9150000		87.2	56-144	P
	Antimony	ug/Kg	173000	121000		70	71-130	P
	Barium	ug/Kg	198000	200000		101	80-120	P
	Cadmium	ug/Kg	60700	59400		97.8	81-120	P
	Calcium	ug/Kg	9870000	10100000		102	83-117	P
	Chromium	ug/Kg	236000	236000		99.8	80-120	P
	Cobalt	ug/Kg	91200	93300		102	81-120	P
	Copper	ug/Kg	174000	195000		112	81-118	P
	Iron	ug/Kg	18000000	17900000		99.4	51-149	P
	Lead	ug/Kg	86000	80700		93.8	79-121	P
	Magnesium	ug/Kg	4000000	3870000		96.8	79-122	P
	Manganese	ug/Kg	558000	522000		93.6	81-119	P
	Potassium	ug/Kg	4300000	4160000		96.8	74-127	P
	Silver	ug/Kg	30100	31300		104	66-134	P
	Sodium	ug/Kg	1020000	1030000		101	74-127	P
	Vanadium	ug/Kg	115000	119000		104	79-121	P
	Zinc	ug/Kg	594000	574000		96.7	80-121	P

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1132

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202019638	Mercury	ug/kg	5150	5450		106	71.6-128.3	AV

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1132

Client ID: RE16-10-415L

Contract: LANL01004

Matrix: SOLID

Level: Low

Sample ID: 244207001

Serial Dilution ID: 1202011697

Analyte	Initial Value ng/L	C	Serial Value ng/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	8.46		7.45	J	11.9			MS
Beryllium	2.14		2.71		26.6			MS
Nickel	13.6		15		9.93			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.389	J	1.5	U	100			MS
Uranium	18.5		18.9		1.89		10	MS

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1132 Client ID RE12-10-7647L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 244128006 Serial Dilution ID: 1202011764

<u>Analyte</u>	<u>Initial Value ng/L</u>	<u>C</u>	<u>Serial Value ng/L</u>	<u>C</u>	<u>% Difference</u>	<u>Qual</u>	<u>Acceptance Limit</u>	<u>M</u>
Arsenic	9.12		9.15	J	.329			MS
Beryllium	5.13		5.5		7.21			MS
Nickel	39.3		43.1		9.67			MS
Selenium	2.5	U	12.5	U				MS
Thallium	1.11		1.77	J	59.5			MS
Uranium	15.1		14.8		1.99		10	MS

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1132 Client ID RE12-10-7634L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 244128001 Serial Dilution ID: 1202011795

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	163000		163000		0		10	P
Antimony	3.3	U	16.5	U				P
Barium	3030		3160		4.13		10	P
Cadmium	2.11	J	5	U	100			P
Calcium	23100		23600		1.95		10	P
Chromium	116		124		6.47		10	P
Cobalt	137		143		4.38		10	P
Copper	74.6		68		8.85			P
Iron	152000		163000		7.24		10	P
Lead	164		177		7.62		10	P
Magnesium	24600		25700		4.47		10	P
Manganese	2500		2800		11.8	E	10	P
Potassium	3650		3910		6.99		10	P
Silver	10.1		11.3	J	11.4			P
Sodium	1290		975	J	24.4			P
Vanadium	293		308		4.95		10	P
Zinc	246		259		5.28		10	P

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1132 **Client ID:** RE12-10-7634L**Contract:** LANL01004**Matrix:** SOLID **Level:** Low**Sample ID:** 244128001 **Serial Dilution ID:** 1202019646

<u>Analyte</u>	<u>Initial Value ug/L</u>	<u>C</u>	<u>Serial Value ug/L</u>	<u>C</u>	<u>% Difference</u>	<u>Qual</u>	<u>Acceptance Limit</u>	<u>M</u>
Mercury	.281		.34	U	100			AV

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1132

Method Type: P

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 940120							
1202011791	MB for batch 940120	MB	S	12-JAN-10	.515g	50mL	
1202011792	LCS for batch 940120	LCS	S	12-JAN-10	.508g	50mL	
1202011794	RE12-10-7634S	MS	S	12-JAN-10	.505g	50mL	
1202011796	RE12-10-7634SD	MSD	S	12-JAN-10	.509g	50mL	
1202011793	RE12-10-7634D	DUP	S	12-JAN-10	.503g	50mL	
244128001	RE12-10-7634	SAMPLE	S	12-JAN-10	.506g	50mL	
244128002	RE12-10-7648	SAMPLE	S	12-JAN-10	.512g	50mL	
244128003	RE12-10-7638	SAMPLE	S	12-JAN-10	.5g	50mL	
244128004	RE12-10-7639	SAMPLE	S	12-JAN-10	.505g	50mL	
244128005	RE12-10-7633	SAMPLE	S	12-JAN-10	.504g	50mL	
244128006	RE12-10-7647	SAMPLE	S	12-JAN-10	.505g	50mL	
244128007	RE12-10-7644	SAMPLE	S	12-JAN-10	.502g	50mL	
244128008	RE12-10-7637	SAMPLE	S	12-JAN-10	.501g	50mL	
244128009	RE12-10-7635	SAMPLE	S	12-JAN-10	.506g	50mL	
244128010	RE12-10-7642	SAMPLE	S	12-JAN-10	.506g	50mL	
244128011	RE12-10-7649	SAMPLE	S	12-JAN-10	.507g	50mL	
244128012	RE12-10-7650	SAMPLE	S	12-JAN-10	.506g	50mL	
244128013	RE12-10-7641	SAMPLE	S	12-JAN-10	.51g	50mL	
244128014	RE12-10-7643	SAMPLE	S	12-JAN-10	.518g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1132

Method Type: P

Contract:

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
244128015	RE12-10-7640	SAMPLE	S	12-JAN-10	.504g	50mL	
244128016	RE12-10-7645	SAMPLE	S	12-JAN-10	.515g	50mL	
244128017	RE12-10-7646	SAMPLE	S	12-JAN-10	.5g	50mL	
244128018	RE12-10-7636	SAMPLE	S	12-JAN-10	.523g	50mL	
244128019	RE12-10-7657	SAMPLE	S	12-JAN-10	.511g	50mL	
244128020	RE12-10-7658	SAMPLE	S	12-JAN-10	.5g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1132

Method Type: MS

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 940076							
1202011693	MB for batch 940076	MB	S	11-JAN-10	.536g	50mL	
1202011694	LCS for batch 940076	LCS	S	11-JAN-10	.502g	50mL	
1202011696	RE16-10-415S	MS	S	11-JAN-10	.513g	50mL	
1202011698	RE16-10-415SD	MSD	S	11-JAN-10	.562g	50mL	
1202011695	RE16-10-415D	DUP	S	11-JAN-10	.517g	50mL	
244128001	RE12-10-7634	SAMPLE	S	11-JAN-10	.524g	50mL	
244128002	RE12-10-7648	SAMPLE	S	11-JAN-10	.52g	50mL	
244128003	RE12-10-7638	SAMPLE	S	11-JAN-10	.539g	50mL	
244128004	RE12-10-7639	SAMPLE	S	11-JAN-10	.524g	50mL	
244128005	RE12-10-7633	SAMPLE	S	11-JAN-10	.52g	50mL	
Batch Number 940101							
1202011760	MB for batch 940101	MB	S	11-JAN-10	.524g	50mL	
1202011761	LCS for batch 940101	LCS	S	11-JAN-10	.522g	50mL	
1202011763	RE12-10-7647S	MS	S	11-JAN-10	.506g	50mL	
1202011771	RE12-10-7647SD	MSD	S	11-JAN-10	.522g	50mL	
1202011762	RE12-10-7647D	DUP	S	11-JAN-10	.514g	50mL	
244128006	RE12-10-7647	SAMPLE	S	11-JAN-10	.508g	50mL	
244128007	RE12-10-7644	SAMPLE	S	11-JAN-10	.508g	50mL	
244128008	RE12-10-7637	SAMPLE	S	11-JAN-10	.502g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1132

Method Type: MS

Contract:

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
244128009	RE12-10-7635	SAMPLE	S	11-JAN-10	.514g	50mL	
244128010	RE12-10-7642	SAMPLE	S	11-JAN-10	.502g	50mL	
244128011	RE12-10-7649	SAMPLE	S	11-JAN-10	.522g	50mL	
244128012	RE12-10-7650	SAMPLE	S	11-JAN-10	.525g	50mL	
244128013	RE12-10-7641	SAMPLE	S	11-JAN-10	.519g	50mL	
244128014	RE12-10-7643	SAMPLE	S	11-JAN-10	.52g	50mL	
244128015	RE12-10-7640	SAMPLE	S	11-JAN-10	.51g	50mL	
244128016	RE12-10-7645	SAMPLE	S	11-JAN-10	.515g	50mL	
244128017	RE12-10-7646	SAMPLE	S	11-JAN-10	.519g	50mL	
244128018	RE12-10-7636	SAMPLE	S	11-JAN-10	.505g	50mL	
244128019	RE12-10-7657	SAMPLE	S	11-JAN-10	.516g	50mL	
244128020	RE12-10-7658	SAMPLE	S	11-JAN-10	.517g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1132

Method Type: AV

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 943258							
1202019637	MB for batch 943258	MB	S	21-JAN-10	.526g	30mL	
1202019638	LCS for batch 943258	LCS	S	21-JAN-10	.2g	30mL	
1202019640	RE12-10-7634S	MS	S	21-JAN-10	.503g	30mL	
1202019647	RE12-10-7634SD	MSD	S	21-JAN-10	.502g	30mL	
1202019639	RE12-10-7634D	DUP	S	21-JAN-10	.512g	30mL	
244128001	RE12-10-7634	SAMPLE	S	21-JAN-10	.535g	30mL	
244128002	RE12-10-7648	SAMPLE	S	21-JAN-10	.524g	30mL	
244128003	RE12-10-7638	SAMPLE	S	21-JAN-10	.524g	30mL	
244128004	RE12-10-7639	SAMPLE	S	21-JAN-10	.511g	30mL	
244128005	RE12-10-7633	SAMPLE	S	21-JAN-10	.596g	30mL	
244128006	RE12-10-7647	SAMPLE	S	21-JAN-10	.537g	30mL	
244128007	RE12-10-7644	SAMPLE	S	21-JAN-10	.523g	30mL	
244128008	RE12-10-7637	SAMPLE	S	21-JAN-10	.556g	30mL	
244128009	RE12-10-7635	SAMPLE	S	21-JAN-10	.564g	30mL	
244128010	RE12-10-7642	SAMPLE	S	21-JAN-10	.519g	30mL	
244128011	RE12-10-7649	SAMPLE	S	21-JAN-10	.579g	30mL	
244128012	RE12-10-7650	SAMPLE	S	21-JAN-10	.584g	30mL	
244128013	RE12-10-7641	SAMPLE	S	21-JAN-10	.542g	30mL	
244128014	RE12-10-7643	SAMPLE	S	21-JAN-10	.571g	30mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1132

Method Type: AV

Contract:

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
244128015	RE12-10-7640	SAMPLE	S	21-JAN-10	.529g	30mL	
244128016	RE12-10-7645	SAMPLE	S	21-JAN-10	.566g	30mL	
244128017	RE12-10-7646	SAMPLE	S	21-JAN-10	.553g	30mL	
244128018	RE12-10-7636	SAMPLE	S	21-JAN-10	.534g	30mL	
244128019	RE12-10-7657	SAMPLE	S	21-JAN-10	.546g	30mL	
244128020	RE12-10-7658	SAMPLE	S	21-JAN-10	.526g	30mL	

SW846

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 19-JAN-10

End Date: 19-JAN-10

Client Sdg: 10-1132

Method MS

Data File: 100119-5

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	17:57			X		X																			
S10	1	18:01			X		X																			
S100	1	18:05			X		X																			
ICV01	1	18:09			X		X																			
ICB01	1	18:13			X		X																			
CRDL01	1	18:17			X		X																			
ICSA01	1	18:20			X		X																			
ICSAB01	1	18:24			X		X																			
CCV01	1	18:28			X		X																			
CCB01	1	18:32			X		X																			
LR01	1	18:36			X		X																			
CCV02	1	18:40			X		X																			
CCB02	1	18:44			X		X																			
1202011760	2	18:48			X		X																			
1202011761	40	18:51			X		X																			
ZZZZZZ	2	18:55																								
ZZZZZZ	2	18:59																								
CCV03	1	19:03			X		X																			
CCB03	1	19:07			X		X																			
ZZZZZZ	2	19:11																								
ZZZZZZ	2	19:15																								
244128006	2	19:19			X		X																			
1202011762	2	19:23			X		X																			
1202011763	2	19:26			X		X																			
CCV04	1	19:30			X		X																			
CCB04	1	19:34			X		X																			
1202011771	2	19:38			X		X																			
1202011764	10	19:42			X		X																			
244128007	2	19:46			X		X																			
244128008	2	19:50			X		X																			
CCV05	1	19:54			X		X																			
CCB05	1	19:58			X		X																			
244128009	2	20:01			X		X																			
244128010	2	20:05			X		X																			
244128011	2	20:09			X		X																			
244128012	2	20:13			X		X																			
CCV06	1	20:17			X		X																			
CCB06	1	20:21			X		X																			
244128013	2	20:25			X		X																			
244128014	2	20:29			X		X																			

Samp No.	D/F	Run Time
244128015	2	20:33
244128016	2	20:37
CCV07	1	20:40
CCB07	1	20:44
244128017	2	20:48
244128018	2	20:52
244128019	2	20:56
244128020	2	21:00
CCV08	1	21:04
CCB08	1	21:08

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 23-JAN-10

End Date: 23-JAN-10

Client Sdg: 10-1132

Method MS

Data File: 100123-10

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	18:48																					X			
S10	1	18:53																					X			
S100	1	18:57																					X			
ICV01	1	19:02																					X			
ICB01	1	19:06																					X			
CRDL01	1	19:11																					X			
ICSA01	1	19:15																					X			
ICSAB01	1	19:20																					X			
CCV01	1	19:24																					X			
CCB01	1	19:29																					X			
1202011693	2	19:33																					X			
1202011694	40	19:38																					X			
244128001	2	19:42																					X			
244128002	2	19:47																					X			
244128003	2	19:51																					X			
244128004	2	19:56																					X			
244128005	2	20:00																					X			
CCV02	1	20:05																					X			
CCB02	1	20:09																					X			
ZZZZZZ	2	20:14																								
1202011695	2	20:18																					X			
1202011696	2	20:23																					X			
1202011698	2	20:27																					X			
1202011697	10	20:32																					X			
ZZZZZZ	2	20:37																								
ZZZZZZ	2	20:41																								
ZZZZZZ	2	20:46																								
CCV03	1	20:50																					X			
CCB03	1	20:55																					X			

Metals
-14-
Analysis Run Log

Contract: LANL01004**Lab Code:** GEL**Inst Name:** ICPMS5**Start Date:** 23-JAN-10**End Date:** 23-JAN-10**Client Sdg:** 10-1132**Method:** MS**Data File:** 100123-6

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	Zr
S0.0	1	10:21			X													X	X							
S10	1	10:24			X													X	X							
S100	1	10:28			X													X	X							
ICV01	1	10:32			X													X	X							
ICB01	1	10:35			X													X	X							
CRDL01	1	10:39			X													X	X							
ICSA01	1	10:43			X													X	X							
ICSAB01	1	10:46			X													X	X							
CCV01	1	10:50			X													X	X							
CCB01	1	10:54			X													X	X							
1202011693	2	10:57			X													X	X							
1202011694	40	11:01			X													X	X							
244128001	2	11:05			X													X	X							
244128002	2	11:09			X													X	X							
244128003	2	11:12			X													X	X							
244128004	2	11:16			X													X	X							
244128005	2	11:20			X													X	X							
CCV02	1	11:23			X													X	X							
CCB02	1	11:27			X													X	X							
ZZZZZZ	2	11:31																								
1202011695	2	11:35			X													X	X							
1202011696	2	11:38			X													X	X							
1202011698	2	11:42			X													X	X							
1202011697	10	11:46			X													X	X							
ZZZZZZ	2	11:49																								
ZZZZZZ	2	11:53																								
ZZZZZZ	2	11:57																								
CCV03	1	12:01			X													X	X							
CCB03	1	12:04			X													X	X							

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 24-JAN-10

End Date: 24-JAN-10

Client Sdg: 10-1132

Method MS

Data File: 100124-11

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	12:38					X																			
S10	1	12:40					X																			
S100	1	12:41					X																			
ICV01	1	12:43					X																			
ICB01	1	12:45					X																			
CRDL01	1	12:46					X																			
ICSA01	1	12:48					X																			
ICSAB01	1	12:50					X																			
CCV01	1	12:51					X																			
CCB01	1	12:53					X																			
ZZZZZ	2	12:55																								
ZZZZZ	40	12:56																								
244128001	2	12:58					X																			
244128002	2	13:00					X																			
244128003	2	13:01					X																			
244128004	2	13:03					X																			
244128005	2	13:05					X																			
CCV02	1	13:06					X																			
CCB02	1	13:08					X																			

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 25-JAN-10

End Date: 25-JAN-10

Client Sdg: 10-1132

Method: MS

Data File: 100125-12

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	10:16					X																			
S10	1	10:18					X																			
S100	1	10:19					X																			
ICV01	1	10:21					X																			
ICB01	1	10:22					X																			
CRDL01	1	10:24					X																			
ICSA01	1	10:26					X																			
ICSAB01	1	10:27					X																			
CCV01	1	10:29					X																			
CCB01	1	10:31					X																			
1202011693	2	10:32					X																			
1202011694	40	10:34					X																			
ZZZZZZ	2	10:36																								
1202011695	2	10:37					X																			
1202011696	2	10:39					X																			
1202011698	2	10:41					X																			
1202011697	10	10:42					X																			
CCV02	1	10:44					X																			
CCB02	1	10:46					X																			

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 26-JAN-10

End Date: 26-JAN-10

Client Sdg: 10-1132

Method P

Data File: 012610-1

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	09:04	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S0.1	1	09:12		X		X		X		X	X	X		X		X			X		X				X	X
S0.5	1	09:18	X	X		X		X	X	X	X	X		X	X	X			X		X				X	X
SCAL	1	09:25	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S10	1	09:32	X					X					X		X							X				
ICV01	1	09:38	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICB01	1	09:45	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
PQL01	1	09:53	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSA01	1	09:59	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSAB01	1	10:05	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR01	1	10:12	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR02	1	10:18	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	10:24																								
ZZZZZZ	1	10:32																								
CCV01	1	10:38	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB01	1	10:46	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR03	1	10:53	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV02	1	11:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB02	1	11:07	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	11:18																								
ZZZZZZ	1	11:25																								
ZZZZZZ	1	11:32																								
ZZZZZZ	1	11:39																								
ZZZZZZ	1	11:46																								
ZZZZZZ	1	11:53																								
ZZZZZZ	1	11:59																								
ZZZZZZ	5	12:06																								
CCV03	1	12:13	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
PQL02	1	12:20	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB03	1	12:27	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	12:35																								
ZZZZZZ	1	12:42																								
ZZZZZZ	1	12:48																								
ZZZZZZ	1	12:55																								
CCV04	1	13:02	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB04	1	13:09	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	13:24																								
ZZZZZZ	1	13:32																								
CCV05	1	13:39	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB05	1	13:46	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X

Samp No.	D/F	Run Time																								
ZZZZZZ	1	13:54																								
ZZZZZZ	1	14:01																								
ZZZZZZ	1	14:08																								
ZZZZZZ	1	14:15																								
ZZZZZZ	1	14:23																								
ZZZZZZ	1	14:29																								
ZZZZZZ	1	14:36																								
ZZZZZZ	5	14:43																								
CCV06	1	14:50	X	X		X			X	X	X	X	X	X	X	X		X		X	X			X	X	
PQL03	1	14:57	X	X		X			X	X	X	X	X	X	X	X		X		X	X			X	X	
CCB06	1	15:04	X	X		X			X	X	X	X	X	X	X	X		X		X	X			X	X	
CCV07	1	15:38	X	X		X			X	X	X	X	X	X	X	X		X		X	X			X	X	
CCB07	1	15:45	X	X		X			X	X	X	X	X	X	X	X		X		X	X			X	X	
ZZZZZZ	1	15:53																								
ZZZZZZ	1	16:00																								
ZZZZZZ	1	16:07																								
ZZZZZZ	1	16:13																								
ZZZZZZ	1	16:20																								
ZZZZZZ	1	16:27																								
ZZZZZZ	1	16:34																								
ZZZZZZ	1	16:41																								
ZZZZZZ	1	16:48																								
CCV08	1	16:55	X	X		X			X	X	X	X	X	X	X	X		X		X	X			X	X	
CCB08	1	17:02	X	X		X			X	X	X	X	X	X	X	X		X		X	X			X	X	
ZZZZZZ	1	17:10																								
ZZZZZZ	1	17:17																								
ZZZZZZ	1	17:24																								
ZZZZZZ	1	17:31																								
ZZZZZZ	10	17:37																								
ZZZZZZ	100	17:45																								
ZZZZZZ	1	17:52																								
ZZZZZZ	1	17:59																								
ZZZZZZ	1	18:05																								
CCV09	1	18:12	X	X		X			X	X	X	X	X	X	X	X		X		X	X			X	X	
CCB09	1	18:19	X	X		X			X	X	X	X	X	X	X	X		X		X	X			X	X	
ZZZZZZ	1	18:27																								
ZZZZZZ	1	18:34																								
ZZZZZZ	1	18:41																								
ZZZZZZ	1	18:47																								
ZZZZZZ	1	18:55																								

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
ZZZZZ	1	19:02																								
ZZZZZ	5	19:08																								
ZZZZZ	1	19:15																								
CCV10	1	19:22	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB10	1	19:29	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202011791	1	19:37	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202011792	1	19:44	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244128001	1	19:50	X	X		X		X	X	X	X	X	X	X	X	X					X	X			X	X
1202011793	1	19:57	X	X		X		X	X	X	X	X	X	X	X	X					X	X			X	X
1202011794	1	20:05	X	X		X		X	X	X	X	X	X	X	X	X					X	X			X	X
1202011796	1	20:12	X	X		X		X	X	X	X	X	X	X	X	X					X	X			X	X
1202011795	5	20:19	X	X		X		X	X	X	X	X	X	X	X	X					X	X			X	X
244128002	1	20:26	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244128003	1	20:33	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV11	1	20:41	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB11	1	20:48	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244128004	1	20:55	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244128005	1	21:02	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244128006	1	21:09	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244128007	1	21:17	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244128008	1	21:24	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244128009	1	21:31	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244128010	1	21:38	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244128011	1	21:45	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244128012	1	21:52	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV12	1	22:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB12	1	22:07	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244128013	1	22:14	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244128014	1	22:22	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244128015	1	22:29	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244128016	1	22:36	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244128017	1	22:43	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244128018	1	22:50	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244128019	1	22:57	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244128020	1	23:05	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV13	1	23:12	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB13	1	23:19	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: 27-JAN-10

End Date: 27-JAN-10

Client Sdg: 10-1132

Method P

Data File: 012710-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	10:19														X			X							
S0.1	1	10:26														X			X							
S0.5	1	10:33														X			X							
SCAL	1	10:40														X			X							
S10	1	10:47																								
ICV01	1	10:52														X			X							
ICB01	1	10:59														X			X							
PQL01	1	11:06														X			X							
ICSA01	1	11:13														X			X							
ICSAB01	1	11:19														X			X							
LR01	1	11:25														X			X							
LR02	1	11:31														X			X							
CCV01	1	11:38														X			X							
CCB01	1	11:45														X			X							
LR03	1	11:51														X			X							
CCV02	1	11:58														X			X							
CCB02	1	12:05														X			X							
ZZZZZ	1	12:12																								
ZZZZZ	1	12:19																								
CCV03	1	12:27														X			X							
CCB03	1	12:34														X			X							
ZZZZZ	1	12:41																								
ZZZZZ	1	12:48																								
ZZZZZ	1	12:55																								
ZZZZZ	1	13:02																								
ZZZZZ	1	13:09																								
ZZZZZ	1	13:16																								
ZZZZZ	1	13:22																								
ZZZZZ	5	13:29																								
CCV04	1	13:36														X			X							
PQL02	1	13:43														X			X							
CCB04	1	13:51														X			X							
ZZZZZ	5	13:57																								
ZZZZZ	5	14:04																								
ZZZZZ	10	14:11																								
ZZZZZ	10	14:18																								
ZZZZZ	10	14:25																								
CCV05	1	14:32														X			X							
CCB05	1	14:39														X			X							
244128001	5	14:44														X			X							

Samp No.	D/F	Run Time
1202011793	5	14:51
1202011794	5	14:58
1202011796	5	15:05
1202011795	25	15:12
CCV06	1	15:19
CCB06	1	15:26

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: HG3

Start Date: 22-JAN-10

End Date: 22-JAN-10

Client Sdg: 10-1132

Method: AV

Data File: 102210S1-13

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	07:51															X									
S0.2	1	07:53															X									
S0.5	1	07:54															X									
S2.0	1	07:56															X									
S5.0	1	07:58															X									
S10.0	1	07:59															X									
ICV01	1	08:01															X									
ICB01	1	08:03															X									
CRDL01	1	08:04															X									
CCV01	1	08:06															X									
CCB01	1	08:08															X									
ZZZZZ	1	08:09																								
ZZZZZ	1	08:11																								
ZZZZZ	1	08:13																								
ZZZZZ	1	08:15																								
ZZZZZ	1	08:16																								
ZZZZZ	1	08:18																								
ZZZZZ	5	08:19																								
ZZZZZ	1	08:21																								
ZZZZZ	1	08:23																								
ZZZZZ	1	08:24																								
CCV02	1	08:26															X									
CCB02	1	08:28															X									
ZZZZZ	1	08:29																								
ZZZZZ	1	08:31																								
1202019637	1	08:33															X									
1202019638	10	08:35															X									
244128001	1	08:36															X									
1202019639	1	08:38															X									
1202019640	1	08:40															X									
1202019647	1	08:41															X									
1202019646	5	08:43															X									
244128002	1	08:45															X									
CCV03	1	08:46															X									
CCB03	1	08:48															X									
244128003	1	08:50															X									
244128004	1	08:51															X									
244128005	1	08:53															X									
244128006	1	08:55															X									
244128007	1	08:56															X									

[illegible]

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS3

Start Date: 16-JAN-10

End Date: 16-JAN-10

Client Sdg: 10-1132

Method MS

Data File: 100115-3

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	00:21																X	X			X	X			
S10	1	00:24																X	X			X	X			
S100	1	00:26																X	X			X	X			
ICV01	1	00:29																X	X			X	X			
ICB01	1	00:32																X	X			X	X			
CRDL01	1	00:34																X	X			X	X			
ICSA01	1	00:37																X	X			X	X			
ICSAB01	1	00:40																X	X			X	X			
CCV01	1	00:43																X	X			X	X			
CCB01	1	00:45																X	X			X	X			
ZZZZZZ	2	00:48																								
ZZZZZZ	40	00:51																								
ZZZZZZ	2	00:54																								
ZZZZZZ	2	00:56																								
ZZZZZZ	2	00:59																								
ZZZZZZ	2	01:02																								
ZZZZZZ	10	01:05																								
CCV02	1	01:08																X	X			X	X			
CCB02	1	01:10																X	X			X	X			
ZZZZZZ	2	01:13																								
ZZZZZZ	2	01:16																								
ZZZZZZ	2	01:19																								
ZZZZZZ	2	01:21																								
CCV03	1	01:24																X	X			X	X			
CCB03	1	01:27																X	X			X	X			
ZZZZZZ	2	01:30																								
ZZZZZZ	40	01:33																								
ZZZZZZ	2	01:35																								
ZZZZZZ	2	01:38																								
ZZZZZZ	2	01:41																								
ZZZZZZ	2	01:44																								
ZZZZZZ	10	01:46																								
CCV04	1	01:49																X	X			X	X			
CCB04	1	01:52																X	X			X	X			
ZZZZZZ	2	01:55																								
ZZZZZZ	2	01:58																								
ZZZZZZ	2	02:00																								
ZZZZZZ	2	02:03																								
ZZZZZZ	2	02:06																								
CCV05	1	02:09																X	X			X	X			

Metals
-14-
Analysis Run Log

[illegible]

Metals
-14-
Analysis Run Log

Contract: LANL01004**Lab Code:** GEL**Inst Name:** ICPMS4**Start Date:** 25-JAN-10**End Date:** 25-JAN-10**Client Sdg:** 10-1132**Method:** MS**Data File:** 100125-4

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	10:48																						X		
S10	1	10:50																						X		
S100	1	10:52																						X		
ICV01	1	10:54																						X		
ICB01	1	10:56																						X		
CRDL01	1	10:59																						X		
ICSA01	1	11:01																						X		
ICSAB01	1	11:03																						X		
CCV01	1	11:05																						X		
CCB01	1	11:07																						X		
1202011693	2	11:10																						X		
1202011694	40	11:12																						X		
244128001	2	11:14																						X		
244128002	2	11:16																						X		
244128003	2	11:18																						X		
244128004	2	11:21																						X		
244128005	2	11:23																						X		
CCV02	1	11:25																						X		
CCB02	1	11:27																						X		
ZZZZZZ	2	11:29																								
1202011695	2	11:32																						X		
1202011696	2	11:34																						X		
1202011698	2	11:36																						X		
1202011697	10	11:38																						X		
CCV03	1	11:40																						X		
CCB03	1	11:43																						X		

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1132

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP/MS	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
SOLID	Aluminum		15.0	50
	Antimony		0.5	3
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Uranium		0.066	.2
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1132

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 15-JUN-09

	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u> <u>ug/L</u>	<u>RDL</u> <u>ug/L</u>
MERCURY				
SOLID	Mercury		0.068	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1132

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

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

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1132

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-NOV-09

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Aluminum	Antimony	Arsenic	Barium	Beryllium
Parmname	Wavelength					
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02697	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.48147	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.21356	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05186	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.18741	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1132**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-NOV-09**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1132

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-NOV-09

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	48.4946
Antimony	206.836	-0.02515	0.00000	0.00000	0.00000	-20.5057
Arsenic	188.979	-0.23424	0.00000	0.00000	0.00000	2.41902
Barium	233.527	-0.03042	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.16240	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.10329	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01944	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01444	0.00000	0.00000	0.00000	-2.33100
Copper	324.752	-0.05293	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09554	0.00000	0.00000	0.00000	-2.48774
Magnesium	279.077	1.04597	0.00000	0.00000	0.00000	-10.4683
Manganese	257.61	-0.09877	0.00000	0.04089	0.00000	0.00000
Molybdenum	202.031	-0.07763	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80543	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.39429	1.18725
Selenium	196.026	-3.27508	0.00000	0.00000	0.00000	-3.07287
Silica	251.611	0.00000	0.00000	0.00000	0.00000	27.2377
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	12.3082
Silver	328.068	-0.32385	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-4.77918	0.00000
Tin	189.927	-0.01682	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.08168	0.00000	0.00000
Uranium	409.014	0.11400	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.14564	0.00000	-0.01931	0.00000	-14.1293
Zinc	213.857	0.09701	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1132**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-NOV-09**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1132**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-NOV-09**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Silver	Strontium	Sulfur	Thallium	Tin
Parmname	Wavelength					
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-15.4932
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	-9.37529
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1132**Contract: **LANL01004**Instrument: **OPTIMA3**Effective Dates: **01-NOV-09**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	3.30431	0.00000	-2.81282	0.00000
Arsenic	188.979	-8.66313	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.20293	0.00000
Beryllium	313.107	-2.27027	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	-0.19473	0.00000	0.00000
Chromium	267.716	0.00000	0.39645	-1.41250	0.00000
Cobalt	228.616	2.09497	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.55360	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
Silica	251.611	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.81635	-4.04400	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	-8.29801	0.00000	1.88584	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.43915	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.05947	-1.91382	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
-12-
Linear Ranges

SDG NO. 10-1132

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS5

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
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
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
Nickel	1000	1000	ug/L	01-NOV-09

METALS
-12-
Linear Ranges

SDG NO. 10-1132

Contract: LANL01004

Lab Code: GEL

Instrument ID OPTIMA3

<u>Analyte</u>	<u>Integration Time (sec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
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. 10-1132

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS3

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
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. 10-1132

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS4

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
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
Aluminum	1	50000	ug/L	01-NOV-09

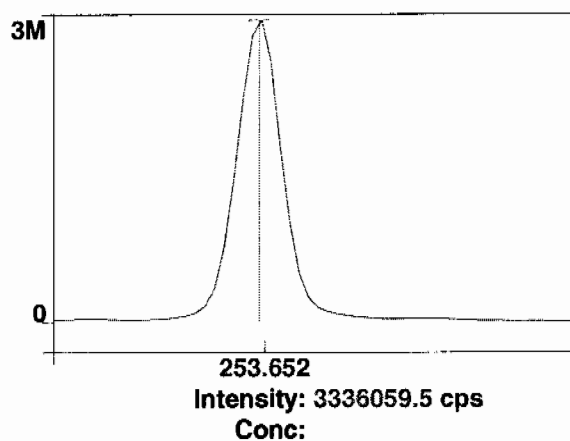
Raw Data

Method: Hg_ReAlign
Result: 020210

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1



1

=====
Analysis Begun

Start Time: 1/26/2010 09:04:50

Plasma On Time: 00:00:00

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\012610.sif

Batch ID:

Results Data Set: 012610

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

=====
Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 1/25/2010 09:50:48

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: 1/26/2010 09:04:59

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	5270.9	5270.9	98.7 %	09:06:51
1	Y RADIAL	5705.9	5705.9	99.11 %	09:06:51
1	Al 396.153Radial†	10.0	10.2	{0.00} ug/L	09:07:11

1	Ca 317.933Radial†	17.0	17.2	[0.00]	ug/L	09:07:11
1	Fe 238.204 Radial†	6.7	6.8	[0.00]	ug/L	09:07:11
1	K 766.490 Radial†	2388.4	2419.8	[0.00]	ug/L	09:06:51
1	Mg 279.077 IEC†	2.8	2.8	[0.00]	ug/L	09:07:11
1	Na 589.592 Radial†	-551.5	-558.7	[0.00]	ug/L	09:06:51
1	Sr 421.552†	1.2	1.3	[0.00]	ug/L	09:06:51
1	Sc 361.383	897998.2	897998.2	100.01	%	09:08:08
1	Y 371.029	821867.5	821867.5	99.848	%	09:08:08
1	Ag 328.068†	250.1	250.0	[0.00]	ug/L	09:08:08
1	As 188.979†	-30.3	-30.3	[0.00]	ug/L	09:08:28
1	B 249.677†	-230.6	-230.6	[0.00]	ug/L	09:08:28
1	Ba 233.527†	0.5	0.5	[0.00]	ug/L	09:08:28
1	Be 313.107†	-5154.8	-5154.0	[0.00]	ug/L	09:08:08
1	Cd 226.502†	-211.8	-211.8	[0.00]	ug/L	09:08:28
1	Co 228.616†	-60.5	-60.5	[0.00]	ug/L	09:08:28
1	Cr 267.716†	96.1	96.1	[0.00]	ug/L	09:08:28
1	Cu 324.752†	9140.4	9139.1	[0.00]	ug/L	09:08:08
1	Mn 257.610†	497.9	497.9	[0.00]	ug/L	09:08:28
1	Mo 202.031†	24.4	24.4	[0.00]	ug/L	09:08:28
1	Ni 231.604†	100.2	100.2	[0.00]	ug/L	09:08:28
1	P 214.914†	249.5	249.5	[0.00]	ug/L	09:08:28
1	Pb 220.353†	-59.3	-59.3	[0.00]	ug/L	09:08:28
1	S 181.975 Axial†	79.8	79.8	[0.00]	ug/L	09:08:28
1	Sb 206.836†	33.5	33.5	[0.00]	ug/L	09:08:28
1	Se 196.026†	-21.1	-21.1	[0.00]	ug/L	09:08:28
1	Si 251.611†	505.0	504.9	[0.00]	ug/L	09:08:28
1	Sn 189.927†	-0.8	-0.8	[0.00]	ug/L	09:08:28
1	Ti 334.940†	-870.8	-870.7	[0.00]	ug/L	09:08:08
1	Tl 190.801†	-42.5	-42.5	[0.00]	ug/L	09:08:28
1	U 409.014†	-1117.0	-1116.9	[0.00]	ug/L	09:08:08
1	V 292.402†	-1380.5	-1380.3	[0.00]	ug/L	09:08:08
1	Zn 213.857†	721.7	721.6	[0.00]	ug/L	09:08:28
1	SiO2†	507.3	507.2	[0.00]	ug/L	09:09:39
2	Sc Radial	5430.3	5430.3	102	%	09:07:17
2	Y RADIAL	5851.7	5851.7	101.6	%	09:07:17
2	Al 396.153Radial†	7.5	7.4	[0.00]	ug/L	09:07:37
2	Ca 317.933Radial†	21.2	20.8	[0.00]	ug/L	09:07:37
2	Fe 238.204 Radial†	7.9	7.8	[0.00]	ug/L	09:07:37
2	K 766.490 Radial†	2627.0	2583.3	[0.00]	ug/L	09:07:17
2	Mg 279.077 IEC†	-1.8	-1.7	[0.00]	ug/L	09:07:37
2	Na 589.592 Radial†	-568.8	-559.3	[0.00]	ug/L	09:07:17
2	Sr 421.552†	-1.4	-1.3	[0.00]	ug/L	09:07:17
2	Sc 361.383	895675.0	895675.0	99.755	%	09:08:34
2	Y 371.029	819609.1	819609.1	99.573	%	09:08:34
2	Ag 328.068†	327.6	328.4	[0.00]	ug/L	09:08:34
2	As 188.979†	-31.5	-31.6	[0.00]	ug/L	09:08:54
2	B 249.677†	-244.4	-245.0	[0.00]	ug/L	09:08:54
2	Ba 233.527†	-1.4	-1.4	[0.00]	ug/L	09:08:54
2	Be 313.107†	-5103.8	-5116.3	[0.00]	ug/L	09:08:34
2	Cd 226.502†	-193.7	-194.2	[0.00]	ug/L	09:08:54
2	Co 228.616†	-82.8	-83.0	[0.00]	ug/L	09:08:54
2	Cr 267.716†	84.9	85.1	[0.00]	ug/L	09:08:54
2	Cu 324.752†	9095.4	9117.7	[0.00]	ug/L	09:08:34
2	Mn 257.610†	494.4	495.6	[0.00]	ug/L	09:08:54
2	Mo 202.031†	24.8	24.8	[0.00]	ug/L	09:08:54
2	Ni 231.604†	86.1	86.3	[0.00]	ug/L	09:08:54
2	P 214.914†	231.3	231.9	[0.00]	ug/L	09:08:54
2	Pb 220.353†	-55.9	-56.1	[0.00]	ug/L	09:08:54
2	S 181.975 Axial†	73.8	74.0	[0.00]	ug/L	09:08:54
2	Sb 206.836†	25.7	25.7	[0.00]	ug/L	09:08:54
2	Se 196.026†	-15.9	-16.0	[0.00]	ug/L	09:08:54
2	Si 251.611†	498.6	499.8	[0.00]	ug/L	09:08:54
2	Sn 189.927†	-0.8	-0.8	[0.00]	ug/L	09:08:54
2	Ti 334.940†	-903.1	-905.3	[0.00]	ug/L	09:08:34
2	Tl 190.801†	-29.5	-29.6	[0.00]	ug/L	09:08:54
2	U 409.014†	-1068.1	-1070.7	[0.00]	ug/L	09:08:34
2	V 292.402†	-1404.0	-1407.5	[0.00]	ug/L	09:08:34
2	Zn 213.857†	724.5	726.2	[0.00]	ug/L	09:08:54
2	SiO2†	511.0	512.3	[0.00]	ug/L	09:09:59
3	Sc Radial	5319.1	5319.1	99.6	%	09:07:42
3	Y RADIAL	5714.0	5714.0	99.25	%	09:07:42

3	Al 396.153Radial†	9.9	9.9	[0.00]	ug/L	09:08:02
3	Ca 317.933Radial†	22.6	22.7	[0.00]	ug/L	09:08:02
3	Fe 238.204 Radial†	6.9	6.9	[0.00]	ug/L	09:08:02
3	K 766.490 Radial†	2497.5	2507.4	[0.00]	ug/L	09:07:42
3	Mg 279.077 IEC†	1.8	1.8	[0.00]	ug/L	09:08:02
3	Na 589.592 Radial†	-522.8	-524.9	[0.00]	ug/L	09:07:42
3	Sr 421.552†	21.3	21.3	[0.00]	ug/L	09:07:42
3	Sc 361.383	899945.9	899945.9	100.23	%	09:08:59
3	Y 371.029	827890.4	827890.4	100.58	%	09:08:59
3	Ag 328.068†	310.3	309.6	[0.00]	ug/L	09:08:59
3	As 188.979†	-28.8	-28.7	[0.00]	ug/L	09:09:19
3	B 249.677†	-246.2	-245.6	[0.00]	ug/L	09:09:19
3	Ba 233.527†	-8.4	-8.4	[0.00]	ug/L	09:09:19
3	Be 313.107†	-5042.6	-5031.0	[0.00]	ug/L	09:08:59
3	Cd 226.502†	-213.0	-212.5	[0.00]	ug/L	09:09:19
3	Co 228.616†	-66.4	-66.3	[0.00]	ug/L	09:09:19
3	Cr 267.716†	100.8	100.5	[0.00]	ug/L	09:09:19
3	Cu 324.752†	9148.3	9127.2	[0.00]	ug/L	09:08:59
3	Mn 257.610†	477.2	476.1	[0.00]	ug/L	09:09:19
3	Mo 202.031†	21.6	21.6	[0.00]	ug/L	09:09:19
3	Ni 231.604†	94.8	94.5	[0.00]	ug/L	09:09:19
3	P 214.914†	235.4	234.9	[0.00]	ug/L	09:09:19
3	Pb 220.353†	-66.0	-65.8	[0.00]	ug/L	09:09:19
3	S 181.975 Axial†	77.3	77.2	[0.00]	ug/L	09:09:19
3	Sb 206.836†	31.6	31.5	[0.00]	ug/L	09:09:19
3	Se 196.026†	-16.8	-16.8	[0.00]	ug/L	09:09:19
3	Si 251.611†	484.3	483.1	[0.00]	ug/L	09:09:19
3	Sn 189.927†	0.5	0.5	[0.00]	ug/L	09:09:19
3	Ti 334.940†	-945.8	-943.6	[0.00]	ug/L	09:08:59
3	Tl 190.801†	-38.7	-38.6	[0.00]	ug/L	09:09:19
3	U 409.014†	-1003.2	-1000.9	[0.00]	ug/L	09:08:59
3	V 292.402†	-1396.2	-1393.0	[0.00]	ug/L	09:08:59
3	Zn 213.857†	754.1	752.4	[0.00]	ug/L	09:09:19
3	SiO2†	522.0	520.8	[0.00]	ug/L	09:10:19

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	897873.0	2138.24	0.24%	100.00	%
Sc Radial	5340.1	81.74	1.53%	100	%
Y 371.029	823122.4	4280.88	0.52%	100.00	%
Y RADIAL	5757.2	81.93	1.42%	100.0	%
Ag 328.068†	296.0	40.93	13.83%	[0.00]	ug/L
Al 396.153Radial†	9.1	1.55	16.93%	[0.00]	ug/L
As 188.979†	-30.2	1.45	4.79%	[0.00]	ug/L
B 249.677†	-240.4	8.50	3.54%	[0.00]	ug/L
Ba 233.527†	-3.1	4.71	152.10%	[0.00]	ug/L
Be 313.107†	-5100.4	63.05	1.24%	[0.00]	ug/L
Ca 317.933Radial†	20.2	2.80	13.85%	[0.00]	ug/L
Cd 226.502†	-206.2	10.37	5.03%	[0.00]	ug/L
Co 228.616†	-69.9	11.70	16.72%	[0.00]	ug/L
Cr 267.716†	93.9	7.92	8.44%	[0.00]	ug/L
Cu 324.752†	9128.0	10.74	0.12%	[0.00]	ug/L
Fe 238.204 Radial†	7.2	0.54	7.51%	[0.00]	ug/L
K 766.490 Radial†	2503.5	81.85	3.27%	[0.00]	ug/L
Mg 279.077 IEC†	1.0	2.39	245.73%	[0.00]	ug/L
Mn 257.610†	489.9	11.99	2.45%	[0.00]	ug/L
Mo 202.031†	23.6	1.76	7.45%	[0.00]	ug/L
Na 589.592 Radial†	-547.6	19.71	3.60%	[0.00]	ug/L
Ni 231.604†	93.7	7.00	7.47%	[0.00]	ug/L
P 214.914†	238.7	9.42	3.95%	[0.00]	ug/L
Pb 220.353†	-60.4	4.98	8.24%	[0.00]	ug/L
S 181.975 Axial†	77.0	2.90	3.77%	[0.00]	ug/L
Sb 206.836†	30.3	4.04	13.36%	[0.00]	ug/L
Se 196.026†	-18.0	2.78	15.50%	[0.00]	ug/L
Si 251.611†	496.0	11.39	2.30%	[0.00]	ug/L
Sn 189.927†	-0.3	0.72	209.81%	[0.00]	ug/L
Sr 421.552†	7.1	12.41	175.14%	[0.00]	ug/L
Ti 334.940†	-906.5	36.45	4.02%	[0.00]	ug/L
Tl 190.801†	-36.9	6.60	17.88%	[0.00]	ug/L

U 409.014†	-1062.8	58.40	5.49%	[0.00]	ug/L
V 292.402†	-1393.6	13.60	0.98%	[0.00]	ug/L
Zn 213.857†	733.4	16.62	2.27%	[0.00]	ug/L
SiO2†	513.4	6.86	1.34%	[0.00]	ug/L

Sequence No.: 2
 Sample ID: S0.1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 1/26/2010 09:12:30
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	5478.5	5478.5	103 %	09:14:28
1	Y RADIAL	5929.0	5929.0	103.0 %	09:14:28
1	K 766.490 Radial†	8180.8	5470.6	[1000] ug/L	09:14:22
1	Sr 421.552†	15624.1	15222.2	[100] ug/L	09:14:28
1	Sc 361.383	945841.4	945841.4	105.34 %	09:14:54
1	Y 371.029	834392.6	834392.6	101.37 %	09:14:54
1	Ag 328.068†	24461.7	22925.1	[100] ug/L	09:14:59
1	As 188.979†	218.1	237.2	[100] ug/L	09:15:19
1	B 249.677†	4102.6	4135.0	[100] ug/L	09:14:59
1	Ba 233.527†	12755.3	12111.5	[100] ug/L	09:14:59
1	Be 313.107†	276501.8	267579.4	[100] ug/L	09:14:54
1	Cd 226.502†	8905.8	8660.3	[100] ug/L	09:14:59
1	Co 228.616†	4544.0	4383.5	[100] ug/L	09:15:19
1	Cr 267.716†	9400.6	8829.9	[100] ug/L	09:14:59
1	Cu 324.752†	44282.4	32908.6	[100] ug/L	09:14:59
1	Mn 257.610†	89928.8	84878.2	[100] ug/L	09:14:59
1	Mo 202.031†	1497.9	1398.3	[100] ug/L	09:15:19
1	Ni 231.604†	4055.6	3756.2	[100] ug/L	09:15:19
1	P 214.914†	1122.9	827.2	[500] ug/L	09:15:19
1	Pb 220.353†	744.8	767.4	[100] ug/L	09:15:19
1	S 181.975 Axial†	208.9	121.3	[200] ug/L	09:15:19
1	Sb 206.836†	322.1	275.5	[100] ug/L	09:15:19
1	Se 196.026†	148.1	158.5	[100] ug/L	09:15:19
1	Si 251.611†	17157.6	15791.5	[500] ug/L	09:14:59
1	Sn 189.927†	532.4	505.8	[100] ug/L	09:15:19
1	Ti 334.940†	64818.1	62437.4	[100] ug/L	09:14:59
1	Tl 190.801†	277.3	300.1	[100] ug/L	09:15:19
1	U 409.014†	2516.8	3452.0	[100] ug/L	09:14:59
1	V 292.402†	14563.8	15218.7	[100] ug/L	09:14:59
1	Zn 213.857†	11534.9	10216.5	[100] ug/L	09:14:59
1	SiO2†	17321.5	15929.7	[1069.5] ug/L	09:16:25
2	Sc Radial	5485.7	5485.7	103 %	09:14:38
2	Y RADIAL	5888.9	5888.9	102.3 %	09:14:38
2	K 766.490 Radial†	8131.4	5412.0	[1000] ug/L	09:14:33
2	Sr 421.552†	15502.5	15083.8	[100] ug/L	09:14:38
2	Sc 361.383	933561.7	933561.7	103.97 %	09:15:25
2	Y 371.029	824195.9	824195.9	100.13 %	09:15:25
2	Ag 328.068†	24140.4	22921.5	[100] ug/L	09:15:30
2	As 188.979†	218.9	240.8	[100] ug/L	09:15:50
2	B 249.677†	4075.6	4160.2	[100] ug/L	09:15:30
2	Ba 233.527†	12627.0	12147.4	[100] ug/L	09:15:30
2	Be 313.107†	273568.0	268210.4	[100] ug/L	09:15:25
2	Cd 226.502†	8810.8	8680.1	[100] ug/L	09:15:30
2	Co 228.616†	4533.4	4430.1	[100] ug/L	09:15:50
2	Cr 267.716†	9333.6	8882.9	[100] ug/L	09:15:30
2	Cu 324.752†	43795.1	32992.8	[100] ug/L	09:15:30
2	Mn 257.610†	89016.7	85123.8	[100] ug/L	09:15:30
2	Mo 202.031†	1490.2	1409.6	[100] ug/L	09:15:50
2	Ni 231.604†	4047.7	3799.3	[100] ug/L	09:15:50
2	P 214.914†	1108.9	827.7	[500] ug/L	09:15:50
2	Pb 220.353†	737.7	769.9	[100] ug/L	09:15:50
2	S 181.975 Axial†	212.2	127.1	[200] ug/L	09:15:50
2	Sb 206.836†	318.9	276.5	[100] ug/L	09:15:50
2	Se 196.026†	149.5	161.8	[100] ug/L	09:15:50
2	Si 251.611†	16977.9	15832.9	[500] ug/L	09:15:30
2	Sn 189.927†	530.1	510.1	[100] ug/L	09:15:50
2	Ti 334.940†	64288.7	62737.6	[100] ug/L	09:15:30
2	Tl 190.801†	272.5	299.0	[100] ug/L	09:15:50
2	U 409.014†	2576.4	3540.8	[100] ug/L	09:15:30

2	V 292.402†	14557.2	15394.3	[100]	ug/L	09:15:30
2	Zn 213.857†	11410.7	10241.1	[100]	ug/L	09:15:30
2	SiO2†	17135.5	15967.1	[1069.5]	ug/L	09:16:31
3	Sc Radial	5500.8	5500.8	103	%	09:14:48
3	Y RADIAL	5878.0	5878.0	102.1	%	09:14:48
3	K 766.490 Radial†	8274.4	5529.2	[1000]	ug/L	09:14:43
3	Sr 421.552†	15524.9	15064.1	[100]	ug/L	09:14:48
3	Sc 361.383	940133.8	940133.8	104.71	%	09:15:55
3	Y 371.029	830474.4	830474.4	100.89	%	09:15:55
3	Ag 328.068†	24348.1	22957.6	[100]	ug/L	09:16:00
3	As 188.979†	213.4	234.0	[100]	ug/L	09:16:20
3	B 249.677†	4131.3	4186.0	[100]	ug/L	09:16:00
3	Ba 233.527†	12754.6	12184.3	[100]	ug/L	09:16:00
3	Be 313.107†	276165.1	268851.4	[100]	ug/L	09:15:55
3	Cd 226.502†	8836.7	8645.7	[100]	ug/L	09:16:00
3	Co 228.616†	4541.1	4406.9	[100]	ug/L	09:16:20
3	Cr 267.716†	9334.6	8821.1	[100]	ug/L	09:16:00
3	Cu 324.752†	44165.7	33052.4	[100]	ug/L	09:16:00
3	Mn 257.610†	89482.1	84969.9	[100]	ug/L	09:16:00
3	Mo 202.031†	1498.1	1407.2	[100]	ug/L	09:16:20
3	Ni 231.604†	4050.9	3775.1	[100]	ug/L	09:16:20
3	P 214.914†	1118.0	829.0	[500]	ug/L	09:16:20
3	Pb 220.353†	764.8	790.8	[100]	ug/L	09:16:20
3	S 181.975 Axial†	203.2	117.1	[200]	ug/L	09:16:20
3	Sb 206.836†	326.8	281.9	[100]	ug/L	09:16:20
3	Se 196.026†	149.1	160.3	[100]	ug/L	09:16:20
3	Si 251.611†	17113.9	15848.6	[500]	ug/L	09:16:00
3	Sn 189.927†	530.1	506.6	[100]	ug/L	09:16:20
3	Ti 334.940†	64692.0	62690.5	[100]	ug/L	09:16:00
3	Tl 190.801†	274.6	299.2	[100]	ug/L	09:16:20
3	U 409.014†	2598.0	3544.1	[100]	ug/L	09:16:00
3	V 292.402†	14424.7	15169.9	[100]	ug/L	09:16:00
3	Zn 213.857†	11446.7	10198.8	[100]	ug/L	09:16:00
3	SiO2†	17261.3	15971.9	[1069.5]	ug/L	09:16:36

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	939845.6	6144.95	0.65%	104.67 %
Sc Radial	5488.3	11.39	0.21%	103 %
Y 371.029	829687.6	5143.69	0.62%	100.80 %
Y RADIAL	5898.6	26.84	0.45%	102.5 %
Ag 328.068†	22934.7	19.84	0.09%	[100] ug/L
As 188.979†	237.3	3.37	1.42%	[100] ug/L
B 249.677†	4160.4	25.53	0.61%	[100] ug/L
Ba 233.527†	12147.8	36.43	0.30%	[100] ug/L
Be 313.107†	268213.8	636.02	0.24%	[100] ug/L
Cd 226.502†	8662.0	17.28	0.20%	[100] ug/L
Co 228.616†	4406.8	23.31	0.53%	[100] ug/L
Cr 267.716†	8844.6	33.42	0.38%	[100] ug/L
Cu 324.752†	32984.6	72.25	0.22%	[100] ug/L
K 766.490 Radial†	5470.6	58.57	1.07%	[1000] ug/L
Mn 257.610†	84990.6	124.11	0.15%	[100] ug/L
Mo 202.031†	1405.0	5.95	0.42%	[100] ug/L
Ni 231.604†	3776.9	21.60	0.57%	[100] ug/L
P 214.914†	828.0	0.92	0.11%	[500] ug/L
Pb 220.353†	776.0	12.84	1.66%	[100] ug/L
S 181.975 Axial†	121.9	5.02	4.12%	[200] ug/L
Sb 206.836†	278.0	3.43	1.23%	[100] ug/L
Se 196.026†	160.2	1.62	1.01%	[100] ug/L
Si 251.611†	15824.3	29.53	0.19%	[500] ug/L
Sn 189.927†	507.5	2.31	0.46%	[100] ug/L
Sr 421.552†	15123.4	86.16	0.57%	[100] ug/L
Ti 334.940†	62621.8	161.47	0.26%	[100] ug/L
Tl 190.801†	299.4	0.61	0.20%	[100] ug/L
U 409.014†	3512.3	52.21	1.49%	[100] ug/L
V 292.402†	15261.0	118.01	0.77%	[100] ug/L
Zn 213.857†	10218.8	21.26	0.21%	[100] ug/L
SiO2†	15956.2	23.14	0.15%	[1069.5] ug/L

Sequence No.: 3
 Sample ID: S0.5
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 1/26/2010 09:18:46
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	5276.5	5276.5	98.8 %	09:20:39
1	Y RADIAL	5642.9	5642.9	98.02 %	09:20:39
1	Al 396.153Radial†	6434.8	6503.2	[5000] ug/L	09:20:39
1	Ca 317.933Radial†	3188.7	3206.9	[5000] ug/L	09:20:59
1	K 766.490 Radial†	30120.9	27980.2	[5000] ug/L	09:20:39
1	Mg 279.077 IEC†	149.5	150.4	[5000] ug/L	09:20:59
1	Sr 421.552†	78289.2	79225.0	[500] ug/L	09:20:39
1	Sc 361.383	937398.2	937398.2	104.40 %	09:21:56
1	Y 371.029	818980.5	818980.5	99.497 %	09:21:56
1	Ag 328.068†	121403.4	115988.5	[500] ug/L	09:22:02
1	As 188.979†	1198.4	1178.0	[500] ug/L	09:22:22
1	B 249.677†	22582.0	21870.2	[500] ug/L	09:22:02
1	Ba 233.527†	64045.6	61348.3	[500] ug/L	09:22:02
1	Be 313.107†	1425315.9	1370318.3	[500] ug/L	09:21:56
1	Cd 226.502†	45085.4	43390.5	[500] ug/L	09:22:02
1	Co 228.616†	23485.7	22565.3	[500] ug/L	09:22:02
1	Cr 267.716†	46577.6	44519.7	[500] ug/L	09:22:02
1	Cu 324.752†	188814.8	171725.5	[500] ug/L	09:22:02
1	Mn 257.610†	452812.6	433230.0	[500] ug/L	09:21:56
1	Mo 202.031†	7371.0	7036.6	[500] ug/L	09:22:22
1	Ni 231.604†	20252.8	19305.2	[500] ug/L	09:22:02
1	P 214.914†	4680.6	4244.5	[2500] ug/L	09:22:22
1	Pb 220.353†	3954.5	3848.1	[500] ug/L	09:22:22
1	S 181.975 Axial†	803.3	692.5	[1000] ug/L	09:22:22
1	Sb 206.836†	1520.2	1425.8	[500] ug/L	09:22:22
1	Se 196.026†	852.0	834.0	[500] ug/L	09:22:22
1	Si 251.611†	85957.7	81837.3	[2500] ug/L	09:22:02
1	Sn 189.927†	2702.3	2588.7	[500] ug/L	09:22:22
1	Ti 334.940†	329288.5	316310.7	[500] ug/L	09:22:02
1	Tl 190.801†	1543.5	1515.3	[500] ug/L	09:22:22
1	U 409.014†	19191.0	19444.7	[500] ug/L	09:22:02
1	V 292.402†	79506.6	77547.8	[500] ug/L	09:22:02
1	Zn 213.857†	55045.2	51990.8	[500] ug/L	09:22:02
1	SiO2†	85563.9	81442.7	[5347.5] ug/L	09:23:29
2	Sc Radial	5492.4	5492.4	103 %	09:21:04
2	Y RADIAL	5888.7	5888.7	102.3 %	09:21:04
2	Al 396.153Radial†	6663.2	6469.2	[5000] ug/L	09:21:04
2	Ca 317.933Radial†	3207.1	3097.9	[5000] ug/L	09:21:24
2	K 766.490 Radial†	30912.1	27551.1	[5000] ug/L	09:21:04
2	Mg 279.077 IEC†	148.2	143.1	[5000] ug/L	09:21:24
2	Sr 421.552†	80704.1	78458.2	[500] ug/L	09:21:04
2	Sc 361.383	935356.6	935356.6	104.17 %	09:22:27
2	Y 371.029	818485.6	818485.6	99.437 %	09:22:27
2	Ag 328.068†	120356.2	115237.0	[500] ug/L	09:22:33
2	As 188.979†	1195.6	1177.9	[500] ug/L	09:22:53
2	B 249.677†	22466.2	21806.3	[500] ug/L	09:22:33
2	Ba 233.527†	63727.0	61176.3	[500] ug/L	09:22:33
2	Be 313.107†	1411823.8	1360346.6	[500] ug/L	09:22:27
2	Cd 226.502†	45018.1	43420.2	[500] ug/L	09:22:33
2	Co 228.616†	23420.5	22551.9	[500] ug/L	09:22:33
2	Cr 267.716†	46416.9	44462.9	[500] ug/L	09:22:33
2	Cu 324.752†	186490.7	169889.2	[500] ug/L	09:22:33
2	Mn 257.610†	446497.8	428115.0	[500] ug/L	09:22:27
2	Mo 202.031†	7366.4	7047.6	[500] ug/L	09:22:53
2	Ni 231.604†	20222.2	19318.1	[500] ug/L	09:22:33
2	P 214.914†	4688.8	4262.2	[2500] ug/L	09:22:53
2	Pb 220.353†	3937.2	3839.8	[500] ug/L	09:22:53
2	S 181.975 Axial†	797.2	688.3	[1000] ug/L	09:22:53
2	Sb 206.836†	1521.4	1430.2	[500] ug/L	09:22:53

2	Se 196.026†	850.8	834.6	[500]	ug/L	09:22:53
2	Si 251.611†	85449.0	81528.7	[2500]	ug/L	09:22:33
2	Sn 189.927†	2715.2	2606.8	[500]	ug/L	09:22:53
2	Ti 334.940†	326947.0	314751.5	[500]	ug/L	09:22:33
2	Tl 190.801†	1530.6	1506.1	[500]	ug/L	09:22:53
2	U 409.014†	18817.8	19126.5	[500]	ug/L	09:22:33
2	V 292.402†	79133.9	77356.3	[500]	ug/L	09:22:33
2	Zn 213.857†	54711.1	51785.1	[500]	ug/L	09:22:33
2	SiO2†	85555.8	81613.8	[5347.5]	ug/L	09:23:34
3	Sc Radial	5619.8	5619.8	105	%	09:21:29
3	Y RADIAL	6029.1	6029.1	104.7	%	09:21:29
3	Al 396.153Radial†	6714.0	6370.7	[5000]	ug/L	09:21:29
3	Ca 317.933Radial†	3206.4	3026.6	[5000]	ug/L	09:21:49
3	K 766.490 Radial†	31280.5	27220.0	[5000]	ug/L	09:21:29
3	Mg 279.077 IEC†	150.8	142.3	[5000]	ug/L	09:21:49
3	Sr 421.552†	81800.0	77721.3	[500]	ug/L	09:21:29
3	Sc 361.383	935046.1	935046.1	104.14	%	09:22:58
3	Y 371.029	818427.1	818427.1	99.430	%	09:22:58
3	Ag 328.068†	119722.0	114666.3	[500]	ug/L	09:23:04
3	As 188.979†	1189.4	1172.3	[500]	ug/L	09:23:24
3	B 249.677†	22298.7	21652.6	[500]	ug/L	09:23:04
3	Ba 233.527†	63397.1	60879.8	[500]	ug/L	09:23:04
3	Be 313.107†	1419339.9	1368014.0	[500]	ug/L	09:22:58
3	Cd 226.502†	44767.0	43193.4	[500]	ug/L	09:23:04
3	Co 228.616†	23283.4	22427.7	[500]	ug/L	09:23:04
3	Cr 267.716†	46273.4	44339.9	[500]	ug/L	09:23:04
3	Cu 324.752†	186029.8	169506.1	[500]	ug/L	09:23:04
3	Mn 257.610†	449335.3	430981.9	[500]	ug/L	09:22:58
3	Mo 202.031†	7341.1	7025.7	[500]	ug/L	09:23:24
3	Ni 231.604†	20081.9	19189.8	[500]	ug/L	09:23:04
3	P 214.914†	4686.1	4261.1	[2500]	ug/L	09:23:24
3	Pb 220.353†	3942.7	3846.3	[500]	ug/L	09:23:24
3	S 181.975 Axial†	805.3	696.3	[1000]	ug/L	09:23:24
3	Sb 206.836†	1528.1	1437.1	[500]	ug/L	09:23:24
3	Se 196.026†	855.2	839.2	[500]	ug/L	09:23:24
3	Si 251.611†	84941.2	81068.4	[2500]	ug/L	09:23:04
3	Sn 189.927†	2725.6	2617.6	[500]	ug/L	09:23:24
3	Ti 334.940†	324928.9	312917.8	[500]	ug/L	09:23:04
3	Tl 190.801†	1534.4	1510.3	[500]	ug/L	09:23:24
3	U 409.014†	18829.3	19143.6	[500]	ug/L	09:23:04
3	V 292.402†	78624.8	76892.7	[500]	ug/L	09:23:04
3	Zn 213.857†	54448.2	51550.2	[500]	ug/L	09:23:04
3	SiO2†	85756.2	81833.5	[5347.5]	ug/L	09:23:39

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	935933.6	1277.77	0.14%	104.24 %
Sc Radial	5462.9	173.53	3.18%	102 %
Y 371.029	818631.1	304.00	0.04%	99.454 %
Y RADIAL	5853.6	195.45	3.34%	101.7 %
Ag 328.068†	115297.3	663.12	0.58%	[500] ug/L
Al 396.153Radial†	6447.7	68.80	1.07%	[5000] ug/L
As 188.979†	1176.1	3.27	0.28%	[500] ug/L
B 249.677†	21776.4	111.83	0.51%	[500] ug/L
Ba 233.527†	61134.8	236.97	0.39%	[500] ug/L
Be 313.107†	1366226.3	5220.68	0.38%	[500] ug/L
Ca 317.933Radial†	3110.5	90.81	2.92%	[5000] ug/L
Cd 226.502†	43334.7	123.26	0.28%	[500] ug/L
Co 228.616†	22515.0	75.86	0.34%	[500] ug/L
Cr 267.716†	44440.8	91.92	0.21%	[500] ug/L
Cu 324.752†	170373.6	1186.34	0.70%	[500] ug/L
K 766.490 Radial†	27583.8	381.15	1.38%	[5000] ug/L
Mg 279.077 IEC†	145.2	4.46	3.07%	[5000] ug/L
Mn 257.610†	430775.6	2563.76	0.60%	[500] ug/L
Mo 202.031†	7036.6	10.95	0.16%	[500] ug/L
Ni 231.604†	19271.1	70.63	0.37%	[500] ug/L
P 214.914†	4255.9	9.91	0.23%	[2500] ug/L
Pb 220.353†	3844.8	4.36	0.11%	[500] ug/L
S 181.975 Axial†	692.4	4.03	0.58%	[1000] ug/L

Sb 206.836†	1431.0	5.68	0.40%	[500]	ug/L
Se 196.026†	835.9	2.82	0.34%	[500]	ug/L
Si 251.611†	81478.1	386.97	0.47%	[2500]	ug/L
Sn 189.927†	2604.3	14.60	0.56%	[500]	ug/L
Sr 421.552†	78468.2	751.89	0.96%	[500]	ug/L
Ti 334.940†	314660.0	1698.32	0.54%	[500]	ug/L
Tl 190.801†	1510.6	4.61	0.31%	[500]	ug/L
U 409.014†	19238.3	178.95	0.93%	[500]	ug/L
V 292.402†	77265.6	336.87	0.44%	[500]	ug/L
Zn 213.857†	51775.4	220.48	0.43%	[500]	ug/L
SiO2†	81630.0	195.91	0.24%	[5347.5]	ug/L

Sequence No.: 4
 Sample ID: SCAL
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 1/26/2010 09:25:50
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	5490.0	5490.0	103 %	09:27:43
1	Y RADIAL	5899.6	5899.6	102.5 %	09:27:43
1	Al 396.153Radial†	13109.2	12742.0	[10000] ug/L	09:27:43
1	Ca 317.933Radial†	6424.5	6228.8	[10000] ug/L	09:27:43
1	Fe 238.204 Radial†	1109.0	1071.6	[10000] ug/L	09:28:03
1	K 766.490 Radial†	58355.3	54257.7	[10000] ug/L	09:27:43
1	Mg 279.077 IEC†	295.5	286.5	[10000] ug/L	09:28:03
1	Na 589.592 Radial†	33069.1	32713.4	[10000] ug/L	09:27:43
1	Sr 421.552†	159135.1	154780.8	[1000] ug/L	09:27:43
1	Sc 361.383	873351.5	873351.5	97.269 %	09:29:06
1	Y 371.029	776986.9	776986.9	94.395 %	09:29:06
1	Ag 328.068†	234042.0	240317.3	[1000] ug/L	09:29:06
1	As 188.979†	2386.7	2483.9	[1000] ug/L	09:29:27
1	B 249.677†	44137.1	45616.8	[1000] ug/L	09:29:06
1	Ba 233.527†	123470.6	126940.4	[1000] ug/L	09:29:06
1	Be 313.107†	2812668.3	2896741.5	[1000] ug/L	09:29:01
1	Cd 226.502†	86786.4	89429.3	[1000] ug/L	09:29:06
1	Co 228.616†	44636.4	45959.6	[1000] ug/L	09:29:27
1	Cr 267.716†	89926.1	92357.1	[1000] ug/L	09:29:06
1	Cu 324.752†	357126.6	358025.8	[1000] ug/L	09:29:06
1	Mn 257.610†	887295.3	911718.5	[1000] ug/L	09:29:01
1	Mo 202.031†	14486.9	14870.0	[1000] ug/L	09:29:27
1	Ni 231.604†	38732.2	39726.0	[1000] ug/L	09:29:06
1	P 214.914†	8973.9	8987.1	[5000] ug/L	09:29:27
1	Pb 220.353†	7795.6	8074.8	[1000] ug/L	09:29:27
1	S 181.975 Axial†	1508.1	1473.4	[2000] ug/L	09:29:27
1	Sb 206.836†	2977.1	3030.4	[1000] ug/L	09:29:27
1	Se 196.026†	1689.3	1754.7	[1000] ug/L	09:29:27
1	Si 251.611†	164645.9	168772.8	[5000] ug/L	09:29:06
1	Sn 189.927†	5369.6	5520.7	[1000] ug/L	09:29:27
1	Ti 334.940†	638137.0	656960.8	[1000] ug/L	09:29:06
1	Tl 190.801†	3057.7	3180.5	[1000] ug/L	09:29:27
1	U 409.014†	37941.9	40070.1	[1000] ug/L	09:29:06
1	V 292.402†	155491.1	161250.5	[1000] ug/L	09:29:06
1	Zn 213.857†	105137.4	107356.0	[1000] ug/L	09:29:06
1	SiO2†	167060.8	171238.1	[10695] ug/L	09:30:35
2	Sc Radial	5509.4	5509.4	103 %	09:28:08
2	Y RADIAL	5946.5	5946.5	103.3 %	09:28:08
2	Al 396.153Radial†	13348.4	12929.1	[10000] ug/L	09:28:08
2	Ca 317.933Radial†	6546.0	6324.6	[10000] ug/L	09:28:08
2	Fe 238.204 Radial†	1104.0	1062.9	[10000] ug/L	09:28:28
2	K 766.490 Radial†	59013.7	54696.9	[10000] ug/L	09:28:08
2	Mg 279.077 IEC†	294.3	284.3	[10000] ug/L	09:28:28
2	Na 589.592 Radial†	33358.1	32880.8	[10000] ug/L	09:28:08
2	Sr 421.552†	160976.9	156023.4	[1000] ug/L	09:28:08
2	Sc 361.383	884457.4	884457.4	98.506 %	09:29:38
2	Y 371.029	789932.9	789932.9	95.968 %	09:29:38
2	Ag 328.068†	240298.0	243646.9	[1000] ug/L	09:29:38
2	As 188.979†	2372.4	2438.6	[1000] ug/L	09:29:58
2	B 249.677†	45576.6	46508.3	[1000] ug/L	09:29:38
2	Ba 233.527†	126823.1	128749.8	[1000] ug/L	09:29:38
2	Be 313.107†	2760137.8	2807104.6	[1000] ug/L	09:29:32
2	Cd 226.502†	88950.2	90505.6	[1000] ug/L	09:29:38
2	Co 228.616†	44630.8	45377.7	[1000] ug/L	09:29:58
2	Cr 267.716†	92114.8	93418.1	[1000] ug/L	09:29:38
2	Cu 324.752†	367506.8	363953.3	[1000] ug/L	09:29:38
2	Mn 257.610†	867933.9	880609.1	[1000] ug/L	09:29:32
2	Mo 202.031†	14468.4	14664.2	[1000] ug/L	09:29:58
2	Ni 231.604†	39782.8	40292.6	[1000] ug/L	09:29:38

2	P 214.914†	8977.8	8875.2	[5000]	ug/L	09:29:58
2	Pb 220.353†	7799.7	7978.4	[1000]	ug/L	09:29:58
2	S 181.975 Axial†	1508.8	1454.7	[2000]	ug/L	09:29:58
2	Sb 206.836†	2977.4	2992.3	[1000]	ug/L	09:29:58
2	Se 196.026†	1701.5	1745.2	[1000]	ug/L	09:29:58
2	Si 251.611†	169491.2	171566.1	[5000]	ug/L	09:29:38
2	Sn 189.927†	5372.8	5454.6	[1000]	ug/L	09:29:58
2	Ti 334.940†	656564.4	667429.8	[1000]	ug/L	09:29:38
2	Tl 190.801†	3035.2	3118.1	[1000]	ug/L	09:29:58
2	U 409.014†	39157.8	40814.6	[1000]	ug/L	09:29:38
2	V 292.402†	159397.9	163209.2	[1000]	ug/L	09:29:38
2	Zn 213.857†	108054.6	108960.2	[1000]	ug/L	09:29:38
2	SiO2†	166820.6	168837.5	[10695]	ug/L	09:30:40
3	Sc Radial	5341.0	5341.0	100	%	09:28:34
3	Y RADIAL	5734.2	5734.2	99.60	%	09:28:34
3	Al 396.153Radial†	12914.3	12902.8	[10000]	ug/L	09:28:34
3	Ca 317.933Radial†	6329.4	6308.0	[10000]	ug/L	09:28:34
3	Fe 238.204 Radial†	1106.9	1099.6	[10000]	ug/L	09:28:54
3	K 766.490 Radial†	57457.1	54943.5	[10000]	ug/L	09:28:34
3	Mg 279.077 IEC†	295.8	294.8	[10000]	ug/L	09:28:54
3	Na 589.592 Radial†	32526.7	33068.6	[10000]	ug/L	09:28:34
3	Sr 421.552†	155987.1	155952.7	[1000]	ug/L	09:28:34
3	Sc 361.383	878114.9	878114.9	97.799	%	09:30:09
3	Y 371.029	782745.7	782745.7	95.095	%	09:30:09
3	Ag 328.068†	236972.7	242008.7	[1000]	ug/L	09:30:09
3	As 188.979†	2397.5	2481.6	[1000]	ug/L	09:30:30
3	B 249.677†	45069.1	46323.6	[1000]	ug/L	09:30:09
3	Ba 233.527†	125693.3	128524.6	[1000]	ug/L	09:30:09
3	Be 313.107†	2813407.2	2881811.0	[1000]	ug/L	09:30:04
3	Cd 226.502†	88658.7	90859.8	[1000]	ug/L	09:30:09
3	Co 228.616†	44912.7	45993.2	[1000]	ug/L	09:30:30
3	Cr 267.716†	91627.1	93594.8	[1000]	ug/L	09:30:09
3	Cu 324.752†	361045.0	360040.7	[1000]	ug/L	09:30:09
3	Mn 257.610†	887989.8	907480.2	[1000]	ug/L	09:30:04
3	Mo 202.031†	14571.4	14875.6	[1000]	ug/L	09:30:30
3	Ni 231.604†	39553.9	40350.2	[1000]	ug/L	09:30:09
3	P 214.914†	9055.4	9020.4	[5000]	ug/L	09:30:30
3	Pb 220.353†	7825.3	8061.8	[1000]	ug/L	09:30:30
3	S 181.975 Axial†	1530.2	1487.7	[2000]	ug/L	09:30:30
3	Sb 206.836†	3004.1	3041.4	[1000]	ug/L	09:30:30
3	Se 196.026†	1695.3	1751.4	[1000]	ug/L	09:30:30
3	Si 251.611†	167298.3	170566.7	[5000]	ug/L	09:30:09
3	Sn 189.927†	5400.2	5522.1	[1000]	ug/L	09:30:30
3	Ti 334.940†	648493.8	663991.8	[1000]	ug/L	09:30:09
3	Tl 190.801†	3057.3	3163.0	[1000]	ug/L	09:30:30
3	U 409.014†	38445.4	40373.3	[1000]	ug/L	09:30:09
3	V 292.402†	157949.2	162896.8	[1000]	ug/L	09:30:09
3	Zn 213.857†	107095.9	108772.3	[1000]	ug/L	09:30:09
3	SiO2†	168631.0	171911.9	[10695]	ug/L	09:30:46

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	878641.3	5571.64	0.63%	97.858 %
Sc Radial	5446.8	92.13	1.69%	102 %
Y 371.029	783221.8	6486.13	0.83%	95.153 %
Y RADIAL	5860.1	111.51	1.90%	101.8 %
Ag 328.068†	241991.0	1664.87	0.69%	[1000] ug/L
Al 396.153Radial†	12858.0	101.30	0.79%	[10000] ug/L
As 188.979†	2468.0	25.53	1.03%	[1000] ug/L
B 249.677†	46149.6	470.55	1.02%	[1000] ug/L
Ba 233.527†	128071.6	986.10	0.77%	[1000] ug/L
Be 313.107†	2861885.7	48025.56	1.68%	[1000] ug/L
Ca 317.933Radial†	6287.1	51.21	0.81%	[10000] ug/L
Cd 226.502†	90264.9	745.01	0.83%	[1000] ug/L
Co 228.616†	45776.9	346.04	0.76%	[1000] ug/L
Cr 267.716†	93123.3	669.46	0.72%	[1000] ug/L
Cu 324.752†	360673.3	3013.92	0.84%	[1000] ug/L
Fe 238.204 Radial†	1078.0	19.17	1.78%	[10000] ug/L
K 766.490 Radial†	54632.7	347.39	0.64%	[10000] ug/L

Mg 279.077 IEC†	288.5	5.53	1.92%	[10000]	ug/L
Mn 257.610†	899935.9	16871.16	1.87%	[1000]	ug/L
Mo 202.031†	14803.3	120.46	0.81%	[1000]	ug/L
Na 589.592 Radial†	32887.6	177.72	0.54%	[10000]	ug/L
Ni 231.604†	40122.9	344.93	0.86%	[1000]	ug/L
P 214.914†	8960.9	76.06	0.85%	[5000]	ug/L
Pb 220.353†	8038.4	52.31	0.65%	[1000]	ug/L
S 181.975 Axial†	1471.9	16.53	1.12%	[2000]	ug/L
Sb 206.836†	3021.4	25.77	0.85%	[1000]	ug/L
Se 196.026†	1750.5	4.83	0.28%	[1000]	ug/L
Si 251.611†	170301.9	1415.37	0.83%	[5000]	ug/L
Sn 189.927†	5499.1	38.55	0.70%	[1000]	ug/L
Sr 421.552†	155585.6	697.91	0.45%	[1000]	ug/L
Ti 334.940†	662794.2	5336.26	0.81%	[1000]	ug/L
Tl 190.801†	3153.9	32.15	1.02%	[1000]	ug/L
U 409.014†	40419.3	374.38	0.93%	[1000]	ug/L
V 292.402†	162452.1	1052.35	0.65%	[1000]	ug/L
Zn 213.857†	108362.8	877.02	0.81%	[1000]	ug/L
SiO2†	170662.5	1615.97	0.95%	[10695]	ug/L

Sequence No.: 5

Sample ID: S10

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 1/26/2010 09:32:56

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	5254.7	5254.7	98.4 %	09:35:10
1	Y RADIAL	5600.1	5600.1	97.27 %	09:35:10
1	Al 396.153Radial†	65162.8	66212.0	[50000] ug/L	09:34:50
1	Ca 317.933Radial†	30729.5	31208.3	[50000] ug/L	09:34:50
1	Fe 238.204 Radial†	2112.0	2139.2	[20000] ug/L	09:35:10
1	Mg 279.077 IEC†	1384.0	1405.5	[50000] ug/L	09:35:10
1	Na 589.592 Radial†	66167.5	67789.8	[20000] ug/L	09:34:50
1	Sc 361.383	909079.1	909079.1	101.25 %	09:36:07
1	Y 371.029	791008.5	791008.5	96.099 %	09:36:07
2	Sc Radial	5290.9	5290.9	99.1 %	09:35:35
2	Y RADIAL	5632.8	5632.8	97.84 %	09:35:35
2	Al 396.153Radial†	65366.4	65964.2	[50000] ug/L	09:35:15
2	Ca 317.933Radial†	30818.9	31084.8	[50000] ug/L	09:35:15
2	Fe 238.204 Radial†	2127.1	2139.7	[20000] ug/L	09:35:35
2	Mg 279.077 IEC†	1391.3	1403.2	[50000] ug/L	09:35:35
2	Na 589.592 Radial†	66538.2	67703.8	[20000] ug/L	09:35:15
2	Sc 361.383	910680.4	910680.4	101.43 %	09:36:13
2	Y 371.029	792508.2	792508.2	96.281 %	09:36:13
3	Sc Radial	5325.4	5325.4	99.7 %	09:36:00
3	Y RADIAL	5675.3	5675.3	98.58 %	09:36:00
3	Al 396.153Radial†	65914.7	66087.3	[50000] ug/L	09:35:40
3	Ca 317.933Radial†	30927.0	30992.0	[50000] ug/L	09:35:40
3	Fe 238.204 Radial†	2130.6	2129.3	[20000] ug/L	09:36:00
3	Mg 279.077 IEC†	1387.2	1390.1	[50000] ug/L	09:36:00
3	Na 589.592 Radial†	66737.8	67469.4	[20000] ug/L	09:35:40
3	Sc 361.383	914147.0	914147.0	101.81 %	09:36:18
3	Y 371.029	795556.8	795556.8	96.651 %	09:36:18

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	911302.2	2590.53	0.28%	101.50 %
Sc Radial	5290.4	35.33	0.67%	99.1 %
Y 371.029	793024.5	2317.69	0.29%	96.343 %
Y RADIAL	5636.1	37.74	0.67%	97.90 %
Al 396.153Radial†	66087.8	123.89	0.19%	[50000] ug/L
Ca 317.933Radial†	31095.1	108.49	0.35%	[50000] ug/L
Fe 238.204 Radial†	2136.1	5.88	0.28%	[20000] ug/L
Mg 279.077 IEC†	1399.6	8.34	0.60%	[50000] ug/L
Na 589.592 Radial†	67654.3	165.80	0.25%	[20000] ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	239.6	0.00000	0.999813	
Al 396.153Radial	3	Lin Thru 0	0.0	1.320	0.00000	0.999984	
As 188.979	3	Lin Thru 0	0.0	2.444	0.00000	0.999818	
B 249.677	3	Lin Thru 0	0.0	45.60	0.00000	0.999712	
Ba 233.527	3	Lin Thru 0	0.0	126.9	0.00000	0.999827	
Be 313.107	3	Lin Thru 0	0.0	2835	0.00000	0.999823	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6222	0.00000	0.999998	
Cd 226.502	3	Lin Thru 0	0.0	89.52	0.00000	0.999868	
Co 228.616	3	Lin Thru 0	0.0	45.62	0.00000	0.999974	
Cr 267.716	3	Lin Thru 0	0.0	92.24	0.00000	0.999825	
Cu 324.752	3	Lin Thru 0	0.0	356.5	0.00000	0.999730	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1070	0.00000	0.999993	
K 766.490 Radial	3	Lin Thru 0	0.0	5.474	0.00000	0.999992	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0280	0.00000	0.999977
Mn 257.610	3	Lin Thru 0	0.0	891.9	0.00000	0.999844
Mo 202.031	3	Lin Thru 0	0.0	14.65	0.00000	0.999796
Na 589.592 Radia	2	Lin Thru 0	0.0	3.364	0.00000	0.999938
Ni 231.604	3	Lin Thru 0	0.0	39.79	0.00000	0.999864
P 214.914	3	Lin Thru 0	0.0	1.773	0.00000	0.999779
Pb 220.353	3	Lin Thru 0	0.0	7.967	0.00000	0.999845
S 181.975 Axial	3	Lin Thru 0	0.0	0.7263	0.00000	0.999610
Sb 206.836	3	Lin Thru 0	0.0	2.988	0.00000	0.999755
Se 196.026	3	Lin Thru 0	0.0	1.734	0.00000	0.999814
Si 251.611	3	Lin Thru 0	0.0	33.75	0.00000	0.999834
Sn 189.927	3	Lin Thru 0	0.0	5.438	0.00000	0.999756
Sr 421.552	3	Lin Thru 0	0.0	155.8	0.00000	0.999991
Ti 334.940	3	Lin Thru 0	0.0	655.9	0.00000	0.999785
Tl 190.801	3	Lin Thru 0	0.0	3.126	0.00000	0.999850
U 409.014	3	Lin Thru 0	0.0	39.99	0.00000	0.999753
V 292.402	3	Lin Thru 0	0.0	160.8	0.00000	0.999797
Zn 213.857	3	Lin Thru 0	0.0	107.4	0.00000	0.999831
SiO2	3	Lin Thru 0	0.0	15.81	0.00000	0.999835

Sequence No.: 6
 Sample ID: ICV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 9
 Date Collected: 1/26/2010 09:38:30
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5529.0	5529.0	104 %			09:40:22
1	Y RADIAL	5902.0	5902.0	102.5 %			09:40:22
1	Al 396.153Radial†	6743.5	6503.8	4901.7 ug/L		4901.7 ppb	09:40:22
1	Ca 317.933Radial†	3157.4	3029.2	4868.9 ug/L		4868.9 ppb	09:40:43
1	Fe 238.204 Radial†	560.7	534.4	5008.8 ug/L		5008.8 ppb	09:40:43
1	K 766.490 Radial†	16368.8	13305.9	2427.4 ug/L		2427.4 ppb	09:40:22
1	Mg 279.077 IEC†	154.1	147.9	5274.4 ug/L		5274.4 ppb	09:40:43
1	Na 589.592 Radial†	7735.7	8019.0	2383.8 ug/L		2383.8 ppb	09:40:22
1	Sr 421.552†	84235.4	81349.3	522.04 ug/L		522.04 ppb	09:40:22
1	Sc 361.383	934550.6	934550.6	104.08 %			09:41:40
1	Y 371.029	821438.6	821438.6	99.795 %			09:41:40
1	Ag 328.068†	62913.3	60148.2	254.16 ug/L		254.16 ppb	09:41:40
1	As 188.979†	1141.2	1126.6	465.10 ug/L		465.10 ppb	09:42:00
1	B 249.677†	23610.6	22924.3	500.52 ug/L		500.52 ppb	09:41:40
1	Ba 233.527†	65239.1	62681.8	495.31 ug/L		495.31 ppb	09:41:40
1	Be 313.107†	736308.9	712512.1	252.46 ug/L		252.46 ppb	09:41:40
1	Cd 226.502†	43866.6	42351.2	472.96 ug/L		472.96 ppb	09:42:00
1	Co 228.616†	23483.0	22631.3	496.27 ug/L		496.27 ppb	09:42:00
1	Cr 267.716†	45639.9	43754.8	474.94 ug/L		474.94 ppb	09:41:40
1	Cu 324.752†	192751.0	176058.3	493.89 ug/L		493.89 ppb	09:41:40
1	Mn 257.610†	460430.0	441870.0	495.69 ug/L		495.69 ppb	09:41:40
1	Mo 202.031†	7945.2	7609.8	519.80 ug/L		519.80 ppb	09:42:00
1	Ni 231.604†	20126.0	19242.5	483.29 ug/L		483.29 ppb	09:42:00
1	P 214.914†	4720.0	4296.0	2326.6 ug/L		2326.6 ppb	09:42:00
1	Pb 220.353†	3955.6	3860.7	486.27 ug/L		486.27 ppb	09:42:00
1	S 181.975 Axial†	1900.4	1748.9	2407.0 ug/L		2407.0 ppb	09:42:00
1	Sb 206.836†	1532.9	1442.5	501.66 ug/L		501.66 ppb	09:42:00
1	Se 196.026†	4419.4	4263.9	2477.8 ug/L		2477.8 ppb	09:42:00
1	Si 251.611†	164820.1	157855.6	4670.8 ug/L		4670.8 ppb	09:41:40
1	Sn 189.927†	2941.6	2826.5	520.58 ug/L		520.58 ppb	09:42:00
1	Ti 334.940†	334537.4	322314.6	491.28 ug/L		491.28 ppb	09:41:40
1	Tl 190.801†	1606.5	1580.4	508.86 ug/L		508.86 ppb	09:42:00
1	U 409.014†	18431.7	18771.1	467.74 ug/L		467.74 ppb	09:41:40
1	V 292.402†	80960.2	79176.4	499.30 ug/L		499.30 ppb	09:41:40
1	Zn 213.857†	56166.4	53228.7	491.57 ug/L		491.57 ppb	09:41:40
1	SiO2†	162523.5	155631.7	9828.7 ug/L		9828.7 ppb	09:42:58
2	Sc Radial	5518.3	5518.3	103 %			09:40:48
2	Y RADIAL	5888.3	5888.3	102.3 %			09:40:48
2	Al 396.153Radial†	6721.4	6495.2	4894.9 ug/L		4894.9 ppb	09:40:48
2	Ca 317.933Radial†	3187.0	3063.8	4924.5 ug/L		4924.5 ppb	09:41:08
2	Fe 238.204 Radial†	568.3	542.8	5087.8 ug/L		5087.8 ppb	09:41:08
2	K 766.490 Radial†	16372.7	13340.2	2433.7 ug/L		2433.7 ppb	09:40:48
2	Mg 279.077 IEC†	154.6	148.7	5303.2 ug/L		5303.2 ppb	09:41:08
2	Na 589.592 Radial†	7637.2	7938.1	2359.8 ug/L		2359.8 ppb	09:40:48
2	Sr 421.552†	83965.2	81245.5	521.37 ug/L		521.37 ppb	09:40:48
2	Sc 361.383	926496.6	926496.6	103.19 %			09:42:06
2	Y 371.029	813316.0	813316.0	98.809 %			09:42:06
2	Ag 328.068†	62560.8	60332.0	254.96 ug/L		254.96 ppb	09:42:06
2	As 188.979†	1131.2	1126.4	465.02 ug/L		465.02 ppb	09:42:26
2	B 249.677†	23461.0	22976.6	501.65 ug/L		501.65 ppb	09:42:06
2	Ba 233.527†	64625.9	62632.4	494.92 ug/L		494.92 ppb	09:42:06
2	Be 313.107†	730281.0	712819.8	252.57 ug/L		252.57 ppb	09:42:06
2	Cd 226.502†	43703.8	42559.7	475.28 ug/L		475.28 ppb	09:42:26
2	Co 228.616†	23369.3	22717.2	498.16 ug/L		498.16 ppb	09:42:26
2	Cr 267.716†	45276.8	43784.0	475.26 ug/L		475.26 ppb	09:42:06
2	Cu 324.752†	191554.9	176508.9	495.16 ug/L		495.16 ppb	09:42:06
2	Mn 257.610†	457122.5	442510.1	496.41 ug/L		496.41 ppb	09:42:06
2	Mo 202.031†	7939.2	7670.3	523.94 ug/L		523.94 ppb	09:42:26
2	Ni 231.604†	20069.7	19356.0	486.15 ug/L		486.15 ppb	09:42:26

2	P 214.914†	4683.8	4300.3	2328.7 ug/L	2328.7 ppb	09:42:26
2	Pb 220.353†	3964.0	3901.9	491.44 ug/L	491.44 ppb	09:42:26
2	S 181.975 Axial†	1883.2	1748.0	2405.8 ug/L	2405.8 ppb	09:42:26
2	Sb 206.836†	1522.8	1445.5	502.74 ug/L	502.74 ppb	09:42:26
2	Se 196.026†	4397.9	4279.9	2487.4 ug/L	2487.4 ppb	09:42:26
2	Si 251.611†	163797.9	158241.5	4682.2 ug/L	4682.2 ppb	09:42:06
2	Sn 189.927†	2913.0	2823.4	520.01 ug/L	520.01 ppb	09:42:26
2	Ti 334.940†	332133.9	322779.4	491.99 ug/L	491.99 ppb	09:42:06
2	Tl 190.801†	1609.9	1597.1	514.21 ug/L	514.21 ppb	09:42:26
2	U 409.014†	18330.2	18826.7	469.12 ug/L	469.12 ppb	09:42:06
2	V 292.402†	80367.4	79278.1	499.98 ug/L	499.98 ppb	09:42:06
2	Zn 213.857†	55760.3	53304.2	492.24 ug/L	492.24 ppb	09:42:06
2	SiO2†	165322.5	159701.6	10086 ug/L	10086 ppb	09:43:03
3	Sc Radial	5416.5	5416.5	101 %		09:41:13
3	Y RADIAL	5831.9	5831.9	101.3 %		09:41:13
3	Al 396.153Radial†	6631.6	6528.8	4920.6 ug/L	4920.6 ppb	09:41:13
3	Ca 317.933Radial†	3198.2	3132.8	5035.3 ug/L	5035.3 ppb	09:41:33
3	Fe 238.204 Radial†	566.6	551.4	5168.4 ug/L	5168.4 ppb	09:41:33
3	K 766.490 Radial†	16048.1	13318.1	2429.6 ug/L	2429.6 ppb	09:41:13
3	Mg 279.077 IEC†	157.1	153.9	5489.4 ug/L	5489.4 ppb	09:41:33
3	Na 589.592 Radial†	7465.8	7908.1	2350.9 ug/L	2350.9 ppb	09:41:13
3	Sr 421.552†	82380.8	81211.0	521.15 ug/L	521.15 ppb	09:41:13
3	Sc 361.383	930823.2	930823.2	103.67 %		09:42:32
3	Y 371.029	818504.2	818504.2	99.439 %		09:42:32
3	Ag 328.068†	62784.2	60265.7	254.71 ug/L	254.71 ppb	09:42:32
3	As 188.979†	1114.5	1105.2	456.38 ug/L	456.38 ppb	09:42:52
3	B 249.677†	23566.3	22972.5	501.55 ug/L	501.55 ppb	09:42:32
3	Ba 233.527†	64951.2	62655.1	495.10 ug/L	495.10 ppb	09:42:32
3	Be 313.107†	734417.2	713520.1	252.82 ug/L	252.82 ppb	09:42:32
3	Cd 226.502†	43659.8	42320.4	472.60 ug/L	472.60 ppb	09:42:52
3	Co 228.616†	23368.7	22611.4	495.83 ug/L	495.83 ppb	09:42:52
3	Cr 267.716†	45446.6	43743.9	474.83 ug/L	474.83 ppb	09:42:32
3	Cu 324.752†	192364.4	176426.9	494.93 ug/L	494.93 ppb	09:42:32
3	Mn 257.610†	459010.9	442272.5	496.15 ug/L	496.15 ppb	09:42:32
3	Mo 202.031†	7923.6	7619.5	520.47 ug/L	520.47 ppb	09:42:52
3	Ni 231.604†	20042.9	19239.7	483.22 ug/L	483.22 ppb	09:42:52
3	P 214.914†	4675.6	4271.3	2312.4 ug/L	2312.4 ppb	09:42:52
3	Pb 220.353†	3942.5	3863.3	486.58 ug/L	486.58 ppb	09:42:52
3	S 181.975 Axial†	1892.0	1748.0	2405.8 ug/L	2405.8 ppb	09:42:52
3	Sb 206.836†	1532.7	1448.2	503.56 ug/L	503.56 ppb	09:42:52
3	Se 196.026†	4406.4	4268.3	2480.9 ug/L	2480.9 ppb	09:42:52
3	Si 251.611†	164260.4	157949.8	4673.6 ug/L	4673.6 ppb	09:42:32
3	Sn 189.927†	2921.3	2818.2	519.08 ug/L	519.08 ppb	09:42:52
3	Ti 334.940†	333508.8	322609.5	491.73 ug/L	491.73 ppb	09:42:32
3	Tl 190.801†	1604.4	1584.5	510.18 ug/L	510.18 ppb	09:42:52
3	U 409.014†	18413.6	18824.7	469.06 ug/L	469.06 ppb	09:42:32
3	V 292.402†	80872.9	79403.7	500.70 ug/L	500.70 ppb	09:42:32
3	Zn 213.857†	55935.1	53221.7	491.49 ug/L	491.49 ppb	09:42:32
3	SiO2†	162740.7	156466.5	9881.5 ug/L	9881.5 ppb	09:43:08

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	930623.5	103.65 %	0.449			0.43%
Sc Radial	5488.0	103 %	1.2			1.13%
Y 371.029	817752.9	99.348 %	0.4997			0.50%
Y RADIAL	5874.1	102.0 %	0.64			0.63%
Ag 328.068†	60248.6	254.61 ug/L	0.406	254.61 ppb	0.406	0.16%
QC value within limits for Ag 328.068 Recovery = 101.84%						
Al 396.153Radial†	6509.3	4905.7 ug/L	13.31	4905.7 ppb	13.31	0.27%
QC value within limits for Al 396.153Radial Recovery = 98.11%						
As 188.979†	1119.4	462.17 ug/L	5.010	462.17 ppb	5.010	1.08%
QC value within limits for As 188.979 Recovery = 92.43%						
B 249.677†	22957.8	501.24 ug/L	0.625	501.24 ppb	0.625	0.12%
QC value within limits for B 249.677 Recovery = 100.25%						
Ba 233.527†	62656.4	495.11 ug/L	0.193	495.11 ppb	0.193	0.04%
QC value within limits for Ba 233.527 Recovery = 99.02%						
Be 313.107†	712950.6	252.62 ug/L	0.183	252.62 ppb	0.183	0.07%
QC value within limits for Be 313.107 Recovery = 101.05%						
Ca 317.933Radial†	3075.3	4942.9 ug/L	84.74	4942.9 ppb	84.74	1.71%

QC value within limits for Ca 317.933 Radial Recovery = 98.86%							
Cd 226.502†	42410.5	473.62 ug/L	1.456	473.62 ppb	1.456	0.31%	
QC value within limits for Cd 226.502 Recovery = 94.72%							
Co 228.616†	22653.3	496.76 ug/L	1.237	496.76 ppb	1.237	0.25%	
QC value within limits for Co 228.616 Recovery = 99.35%							
Cr 267.716†	43760.9	475.01 ug/L	0.224	475.01 ppb	0.224	0.05%	
QC value within limits for Cr 267.716 Recovery = 95.00%							
Cu 324.752†	176331.4	494.66 ug/L	0.676	494.66 ppb	0.676	0.14%	
QC value within limits for Cu 324.752 Recovery = 98.93%							
Fe 238.204 Radial†	542.9	5088.3 ug/L	79.81	5088.3 ppb	79.81	1.57%	
QC value within limits for Fe 238.204 Radial Recovery = 101.77%							
K 766.490 Radial†	13321.4	2430.2 ug/L	3.17	2430.2 ppb	3.17	0.13%	
QC value within limits for K 766.490 Radial Recovery = 97.21%							
Mg 279.077 IEC†	150.1	5355.7 ug/L	116.67	5355.7 ppb	116.67	2.18%	
QC value within limits for Mg 279.077 IEC Recovery = 107.11%							
Mn 257.610†	442217.5	496.08 ug/L	0.366	496.08 ppb	0.366	0.07%	
QC value within limits for Mn 257.610 Recovery = 99.22%							
Mo 202.031†	7633.2	521.40 ug/L	2.221	521.40 ppb	2.221	0.43%	
QC value within limits for Mo 202.031 Recovery = 104.28%							
Na 589.592 Radial†	7955.1	2364.8 ug/L	17.05	2364.8 ppb	17.05	0.72%	
QC value within limits for Na 589.592 Radial Recovery = 94.59%							
Ni 231.604†	19279.4	484.22 ug/L	1.667	484.22 ppb	1.667	0.34%	
QC value within limits for Ni 231.604 Recovery = 96.84%							
P 214.914†	4289.2	2322.6 ug/L	8.91	2322.6 ppb	8.91	0.38%	
QC value within limits for P 214.914 Recovery = 92.90%							
Pb 220.353†	3875.3	488.10 ug/L	2.899	488.10 ppb	2.899	0.59%	
QC value within limits for Pb 220.353 Recovery = 97.62%							
S 181.975 Axial†	1748.3	2406.2 ug/L	0.67	2406.2 ppb	0.67	0.03%	
QC value within limits for S 181.975 Axial Recovery = 96.25%							
Sb 206.836†	1445.4	502.65 ug/L	0.956	502.65 ppb	0.956	0.19%	
QC value within limits for Sb 206.836 Recovery = 100.53%							
Se 196.026†	4270.7	2482.0 ug/L	4.87	2482.0 ppb	4.87	0.20%	
QC value within limits for Se 196.026 Recovery = 99.28%							
Si 251.611†	158015.6	4675.6 ug/L	5.93	4675.6 ppb	5.93	0.13%	
QC value within limits for Si 251.611 Recovery = 93.51%							
Sn 189.927†	2822.7	519.89 ug/L	0.754	519.89 ppb	0.754	0.15%	
QC value within limits for Sn 189.927 Recovery = 103.98%							
Sr 421.552†	81268.6	521.52 ug/L	0.462	521.52 ppb	0.462	0.09%	
QC value within limits for Sr 421.552 Recovery = 104.30%							
Ti 334.940†	322567.8	491.67 ug/L	0.361	491.67 ppb	0.361	0.07%	
QC value within limits for Ti 334.940 Recovery = 98.33%							
Tl 190.801†	1587.3	511.08 ug/L	2.786	511.08 ppb	2.786	0.55%	
QC value within limits for Tl 190.801 Recovery = 102.22%							
U 409.014†	18807.5	468.64 ug/L	0.780	468.64 ppb	0.780	0.17%	
QC value within limits for U 409.014 Recovery = 93.73%							
V 292.402†	79286.1	499.99 ug/L	0.703	499.99 ppb	0.703	0.14%	
QC value within limits for V 292.402 Recovery = 100.00%							
Zn 213.857†	53251.5	491.77 ug/L	0.416	491.77 ppb	0.416	0.08%	
QC value within limits for Zn 213.857 Recovery = 98.35%							
SiO2†	157266.6	9932.1 ug/L	135.90	9932.1 ppb	135.90	1.37%	
QC value within limits for SiO2 Recovery = 92.87%							
All analyte(s) passed QC.							

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 1/26/2010 09:45:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5489.0	5489.0	103 %		09:47:12
1	Y RADIAL	5901.6	5901.6	102.5 %		09:47:12
1	Al 396.153Radial†	6.3	-3.0	-2.3087 ug/L	-2.3087 ppb	09:47:32
1	Ca 317.933Radial†	15.2	-5.4	-8.7450 ug/L	-8.7450 ppb	09:47:32
1	Fe 238.204 Radial†	8.4	1.1	9.8996 ug/L	9.8996 ppb	09:47:32
1	K 766.490 Radial†	2308.3	-257.9	-47.084 ug/L	-47.084 ppb	09:47:12
1	Mg 279.077 IEC†	0.9	-0.1	-3.5151 ug/L	-3.5151 ppb	09:47:32
1	Na 589.592 Radial†	-741.9	-174.2	-51.776 ug/L	-51.776 ppb	09:47:12
1	Sr 421.552†	14.4	6.9	0.0445 ug/L	0.0445 ppb	09:47:12
1	Sc 361.383	946678.1	946678.1	105.44 %		09:48:29
1	Y 371.029	838473.7	838473.7	101.87 %		09:48:29
1	Ag 328.068†	341.1	27.5	0.1305 ug/L	0.1305 ppb	09:48:34
1	As 188.979†	-27.8	3.9	1.5843 ug/L	1.5843 ppb	09:48:54
1	B 249.677†	-44.3	198.4	4.3481 ug/L	4.3481 ppb	09:48:54
1	Ba 233.527†	16.4	18.6	0.1498 ug/L	0.1498 ppb	09:48:54
1	Be 313.107†	-5045.4	315.1	0.1113 ug/L	0.1113 ppb	09:48:34
1	Cd 226.502†	-205.0	11.7	0.1285 ug/L	0.1285 ppb	09:48:54
1	Co 228.616†	-56.6	16.3	0.3569 ug/L	0.3569 ppb	09:48:54
1	Cr 267.716†	71.1	-26.5	-0.2816 ug/L	-0.2816 ppb	09:48:54
1	Cu 324.752†	9103.6	-493.8	-1.3796 ug/L	-1.3796 ppb	09:48:34
1	Mn 257.610†	475.0	-39.3	-0.0430 ug/L	-0.0430 ppb	09:48:54
1	Mo 202.031†	28.1	3.0	0.2087 ug/L	0.2087 ppb	09:48:54
1	Ni 231.604†	104.6	5.6	0.1393 ug/L	0.1393 ppb	09:48:54
1	P 214.914†	245.0	-6.4	-3.3430 ug/L	-3.3430 ppb	09:48:54
1	Pb 220.353†	-45.4	17.4	2.1776 ug/L	2.1776 ppb	09:48:54
1	S 181.975 Axial†	56.0	-23.9	-32.868 ug/L	-32.868 ppb	09:48:54
1	Sb 206.836†	39.4	7.2	2.4048 ug/L	2.4048 ppb	09:48:54
1	Se 196.026†	-16.6	2.2	1.2931 ug/L	1.2931 ppb	09:48:54
1	Si 251.611†	508.0	-14.1	-0.4205 ug/L	-0.4205 ppb	09:48:54
1	Sn 189.927†	1.0	1.3	0.2385 ug/L	0.2385 ppb	09:48:54
1	Ti 334.940†	-915.7	38.1	0.0612 ug/L	0.0612 ppb	09:48:34
1	Tl 190.801†	-43.0	-3.8	-1.2350 ug/L	-1.2350 ppb	09:48:54
1	U 409.014†	-1500.9	-360.7	-9.0203 ug/L	-9.0203 ppb	09:48:34
1	V 292.402†	-1260.9	197.7	1.2136 ug/L	1.2136 ppb	09:48:34
1	Zn 213.857†	687.2	-81.6	-0.7600 ug/L	-0.7600 ppb	09:48:54
1	SiO2†	517.1	-22.9	-1.4569 ug/L	-1.4569 ppb	09:50:15
2	Sc Radial	5519.6	5519.6	103 %		09:47:37
2	Y RADIAL	5909.8	5909.8	102.7 %		09:47:37
2	Al 396.153Radial†	6.2	-3.1	-2.3683 ug/L	-2.3683 ppb	09:47:57
2	Ca 317.933Radial†	18.6	-2.3	-3.6376 ug/L	-3.6376 ppb	09:47:57
2	Fe 238.204 Radial†	7.6	0.2	1.4787 ug/L	1.4787 ppb	09:47:57
2	K 766.490 Radial†	2259.3	-317.7	-58.017 ug/L	-58.017 ppb	09:47:37
2	Mg 279.077 IEC†	2.1	1.1	37.955 ug/L	37.955 ppb	09:47:57
2	Na 589.592 Radial†	-766.4	-193.9	-57.629 ug/L	-57.629 ppb	09:47:37
2	Sr 421.552†	24.0	16.2	0.1037 ug/L	0.1037 ppb	09:47:37
2	Sc 361.383	935009.3	935009.3	104.14 %		09:48:59
2	Y 371.029	827735.8	827735.8	100.56 %		09:48:59
2	Ag 328.068†	404.2	92.1	0.3957 ug/L	0.3957 ppb	09:49:04
2	As 188.979†	-25.9	5.3	2.1562 ug/L	2.1562 ppb	09:49:24
2	B 249.677†	-80.7	162.9	3.5714 ug/L	3.5714 ppb	09:49:24
2	Ba 233.527†	-1.3	1.9	0.0159 ug/L	0.0159 ppb	09:49:24
2	Be 313.107†	-5043.7	257.0	0.0908 ug/L	0.0908 ppb	09:49:04
2	Cd 226.502†	-197.2	16.8	0.1855 ug/L	0.1855 ppb	09:49:24
2	Co 228.616†	-62.3	10.1	0.2230 ug/L	0.2230 ppb	09:49:24
2	Cr 267.716†	64.9	-31.6	-0.3379 ug/L	-0.3379 ppb	09:49:24
2	Cu 324.752†	9122.4	-367.9	-1.0261 ug/L	-1.0261 ppb	09:49:04
2	Mn 257.610†	489.6	-19.7	-0.0234 ug/L	-0.0234 ppb	09:49:24
2	Mo 202.031†	29.1	4.3	0.2934 ug/L	0.2934 ppb	09:49:24
2	Ni 231.604†	96.4	-1.1	-0.0270 ug/L	-0.0270 ppb	09:49:24

2	P 214.914†	228.8	-19.0	-10.523 ug/L	-10.523 ppb	09:49:24
2	Pb 220.353†	-60.1	2.7	0.3407 ug/L	0.3407 ppb	09:49:24
2	S 181.975 Axial†	54.0	-25.2	-34.634 ug/L	-34.634 ppb	09:49:24
2	Sb 206.836†	41.2	9.3	3.1237 ug/L	3.1237 ppb	09:49:24
2	Se 196.026†	-17.3	1.4	0.8071 ug/L	0.8071 ppb	09:49:24
2	Si 251.611†	501.1	-14.8	-0.4415 ug/L	-0.4415 ppb	09:49:24
2	Sn 189.927†	0.3	0.6	0.1080 ug/L	0.1080 ppb	09:49:24
2	Ti 334.940†	-895.9	46.2	0.0718 ug/L	0.0718 ppb	09:49:04
2	Tl 190.801†	-32.6	5.5	1.7733 ug/L	1.7733 ppb	09:49:24
2	U 409.014†	-1560.6	-435.7	-10.895 ug/L	-10.895 ppb	09:49:04
2	V 292.402†	-1376.7	71.5	0.4288 ug/L	0.4288 ppb	09:49:04
2	Zn 213.857†	688.6	-72.1	-0.6706 ug/L	-0.6706 ppb	09:49:24
2	SiO2†	525.5	-8.8	-0.5632 ug/L	-0.5632 ppb	09:50:35
3	Sc Radial	5485.5	5485.5	103 %		09:48:02
3	Y RADIAL	5902.8	5902.8	102.5 %		09:48:02
3	Al 396.153Radial†	-0.4	-9.6	-7.2610 ug/L	-7.2610 ppb	09:48:22
3	Ca 317.933Radial†	17.3	-3.4	-5.4770 ug/L	-5.4770 ppb	09:48:22
3	Fe 238.204 Radial†	8.1	0.7	6.6633 ug/L	6.6633 ppb	09:48:22
3	K 766.490 Radial†	2330.9	-234.4	-42.810 ug/L	-42.810 ppb	09:48:02
3	Mg 279.077 IEC†	4.2	3.1	109.43 ug/L	109.43 ppb	09:48:22
3	Na 589.592 Radial†	-712.5	-145.9	-43.385 ug/L	-43.385 ppb	09:48:02
3	Sr 421.552†	-2.2	-9.2	-0.0590 ug/L	-0.0590 ppb	09:48:02
3	Sc 361.383	930868.9	930868.9	103.67 %		09:49:30
3	Y 371.029	824178.7	824178.7	100.13 %		09:49:30
3	Ag 328.068†	419.5	108.6	0.4648 ug/L	0.4648 ppb	09:49:35
3	As 188.979†	-36.0	-4.5	-1.8576 ug/L	-1.8576 ppb	09:49:55
3	B 249.677†	-48.2	193.9	4.2512 ug/L	4.2512 ppb	09:49:55
3	Ba 233.527†	3.1	6.1	0.0493 ug/L	0.0493 ppb	09:49:55
3	Be 313.107†	-4988.4	288.8	0.1020 ug/L	0.1020 ppb	09:49:35
3	Cd 226.502†	-183.0	29.7	0.3293 ug/L	0.3293 ppb	09:49:55
3	Co 228.616†	-75.0	-2.4	-0.0518 ug/L	-0.0518 ppb	09:49:55
3	Cr 267.716†	96.6	-0.8	-0.0039 ug/L	-0.0039 ppb	09:49:55
3	Cu 324.752†	9043.4	-405.2	-1.1317 ug/L	-1.1317 ppb	09:49:35
3	Mn 257.610†	462.4	-43.8	-0.0529 ug/L	-0.0529 ppb	09:49:55
3	Mo 202.031†	26.2	1.7	0.1133 ug/L	0.1133 ppb	09:49:55
3	Ni 231.604†	108.1	10.6	0.2659 ug/L	0.2659 ppb	09:49:55
3	P 214.914†	229.2	-17.7	-9.7421 ug/L	-9.7421 ppb	09:49:55
3	Pb 220.353†	-60.6	1.9	0.2372 ug/L	0.2372 ppb	09:49:55
3	S 181.975 Axial†	54.6	-24.3	-33.504 ug/L	-33.504 ppb	09:49:55
3	Sb 206.836†	33.4	2.0	0.6687 ug/L	0.6687 ppb	09:49:55
3	Se 196.026†	-11.6	6.7	3.9014 ug/L	3.9014 ppb	09:49:55
3	Si 251.611†	506.9	-7.0	-0.2100 ug/L	-0.2100 ppb	09:49:55
3	Sn 189.927†	-0.6	-0.3	-0.0522 ug/L	-0.0522 ppb	09:49:55
3	Ti 334.940†	-913.3	25.6	0.0329 ug/L	0.0329 ppb	09:49:35
3	Tl 190.801†	-33.1	5.0	1.5860 ug/L	1.5860 ppb	09:49:55
3	U 409.014†	-1444.2	-330.2	-8.2563 ug/L	-8.2563 ppb	09:49:35
3	V 292.402†	-1345.2	96.1	0.5845 ug/L	0.5845 ppb	09:49:35
3	Zn 213.857†	690.3	-67.6	-0.6302 ug/L	-0.6302 ppb	09:49:55
3	SiO2†	517.2	-14.5	-0.9220 ug/L	-0.9220 ppb	09:50:55

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	937518.8	104.42 %		0.913			0.87%
Sc Radial	5498.1	103 %		0.4			0.34%
Y 371.029	830129.4	100.85 %		0.904			0.90%
Y RADIAL	5904.7	102.6 %		0.08			0.08%
Ag 328.068†	76.1	0.3303 ug/L		0.17648	0.3303 ppb	0.17648	53.43%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-5.2	-3.9793 ug/L		2.84213	-3.9793 ppb	2.84213	71.42%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	1.5	0.6276 ug/L		2.17119	0.6276 ppb	2.17119	345.95%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	185.1	4.0569 ug/L		0.42321	4.0569 ppb	0.42321	10.43%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	8.9	0.0717 ug/L		0.06971	0.0717 ppb	0.06971	97.25%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	287.0	0.1014 ug/L		0.01025	0.1014 ppb	0.01025	10.11%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-3.7	-5.9532 ug/L		2.58676	-5.9532 ppb	2.58676	43.45%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	19.4	0.2144 ug/L	0.10349	0.2144 ppb	0.10349	48.26%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	8.0	0.1760 ug/L	0.20839	0.1760 ppb	0.20839	118.38%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-19.6	-0.2078 ug/L	0.17878	-0.2078 ppb	0.17878	86.04%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-422.3	-1.1791 ug/L	0.18151	-1.1791 ppb	0.18151	15.39%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.6	6.0139 ug/L	4.24789	6.0139 ppb	4.24789	70.63%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-270.0	-49.304 ug/L	7.8429	-49.304 ppb	7.8429	15.91%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	1.3	47.957 ug/L	57.1337	47.957 ppb	57.1337	119.14%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	-34.3	-0.0398 ug/L	0.01500	-0.0398 ppb	0.01500	37.70%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	3.0	0.2051 ug/L	0.09008	0.2051 ppb	0.09008	43.92%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-171.3	-50.930 ug/L	7.1595	-50.930 ppb	7.1595	14.06%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	5.0	0.1261 ug/L	0.14693	0.1261 ppb	0.14693	116.56%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-14.4	-7.8693 ug/L	3.93933	-7.8693 ppb	3.93933	50.06%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	7.3	0.9185 ug/L	1.09162	0.9185 ppb	1.09162	118.85%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-24.5	-33.669 ug/L	0.8943	-33.669 ppb	0.8943	2.66%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	6.1	2.0657 ug/L	1.26213	2.0657 ppb	1.26213	61.10%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	3.4	2.0005 ug/L	1.66404	2.0005 ppb	1.66404	83.18%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-12.0	-0.3573 ug/L	0.12803	-0.3573 ppb	0.12803	35.83%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	0.5	0.0981 ug/L	0.14558	0.0981 ppb	0.14558	148.39%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	4.6	0.0297 ug/L	0.08236	0.0297 ppb	0.08236	276.86%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	36.6	0.0553 ug/L	0.02010	0.0553 ppb	0.02010	36.33%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	2.2	0.7081 ug/L	1.68539	0.7081 ppb	1.68539	238.02%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-375.5	-9.3907 ug/L	1.35796	-9.3907 ppb	1.35796	14.46%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	121.8	0.7423 ug/L	0.41552	0.7423 ppb	0.41552	55.98%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-73.8	-0.6869 ug/L	0.06642	-0.6869 ppb	0.06642	9.67%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-15.4	-0.9807 ug/L	0.44976	-0.9807 ppb	0.44976	45.86%	
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: 1/26/2010 09:53:06
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5473.2	5473.2	102 %		09:54:59
1	Y RADIAL	5918.4	5918.4	102.8 %		09:54:59
1	Al 396.153Radial†	289.1	272.9	206.21 ug/L	206.21 ppb	09:55:19
1	Ca 317.933Radial†	150.6	126.7	203.68 ug/L	203.68 ppb	09:55:19
1	Fe 238.204 Radial†	18.5	10.9	101.99 ug/L	101.99 ppb	09:55:19
1	K 766.490 Radial†	3154.0	573.8	104.65 ug/L	104.65 ppb	09:54:59
1	Mg 279.077 IEC†	12.4	11.1	395.23 ug/L	395.23 ppb	09:55:19
1	Na 589.592 Radial†	219.9	762.2	226.57 ug/L	226.57 ppb	09:54:59
1	Sr 421.552†	823.0	795.9	5.1061 ug/L	5.1061 ppb	09:54:59
1	Sc 361.383	920367.1	920367.1	102.51 %		09:56:16
1	Y 371.029	809322.7	809322.7	98.323 %		09:56:16
1	Ag 328.068†	1516.4	1183.4	4.9461 ug/L	4.9461 ppb	09:56:16
1	As 188.979†	37.7	67.0	27.456 ug/L	27.456 ppb	09:56:36
1	B 249.677†	2097.4	2286.6	50.116 ug/L	50.116 ppb	09:56:16
1	Ba 233.527†	662.9	649.8	5.1362 ug/L	5.1362 ppb	09:56:36
1	Be 313.107†	9361.0	14232.7	5.0326 ug/L	5.0326 ppb	09:56:16
1	Cd 226.502†	257.9	457.8	5.1174 ug/L	5.1174 ppb	09:56:36
1	Co 228.616†	167.9	233.8	5.1374 ug/L	5.1374 ppb	09:56:36
1	Cr 267.716†	588.3	479.9	5.1911 ug/L	5.1911 ppb	09:56:36
1	Cu 324.752†	12745.4	3305.9	9.2497 ug/L	9.2497 ppb	09:56:16
1	Mn 257.610†	9947.8	9214.8	10.325 ug/L	10.325 ppb	09:56:16
1	Mo 202.031†	185.8	157.7	10.773 ug/L	10.773 ppb	09:56:36
1	Ni 231.604†	337.5	235.6	5.9182 ug/L	5.9182 ppb	09:56:36
1	P 214.914†	507.8	256.6	142.92 ug/L	142.92 ppb	09:56:36
1	Pb 220.353†	35.8	95.3	12.019 ug/L	12.019 ppb	09:56:36
1	S 181.975 Axial†	138.9	58.5	80.539 ug/L	80.539 ppb	09:56:36
1	Sb 206.836†	51.7	20.2	7.1200 ug/L	7.1200 ppb	09:56:36
1	Se 196.026†	40.8	57.8	33.699 ug/L	33.699 ppb	09:56:36
1	Si 251.611†	3814.5	3225.3	95.433 ug/L	95.433 ppb	09:56:36
1	Sn 189.927†	51.0	50.1	9.2415 ug/L	9.2415 ppb	09:56:36
1	Ti 334.940†	2592.1	3435.3	5.2076 ug/L	5.2076 ppb	09:56:16
1	Tl 190.801†	28.8	65.0	20.859 ug/L	20.859 ppb	09:56:36
1	U 409.014†	1094.3	2130.4	53.249 ug/L	53.249 ppb	09:56:16
1	V 292.402†	-570.9	836.6	5.4422 ug/L	5.4422 ppb	09:56:16
1	Zn 213.857†	1791.7	1014.5	9.3899 ug/L	9.3899 ppb	09:56:36
1	SiO2†	3944.5	3334.7	210.61 ug/L	210.61 ppb	09:57:32
2	Sc Radial	5481.8	5481.8	103 %		09:55:24
2	Y RADIAL	5873.6	5873.6	102.0 %		09:55:24
2	Al 396.153Radial†	283.5	267.0	201.81 ug/L	201.81 ppb	09:55:44
2	Ca 317.933Radial†	152.7	128.5	206.58 ug/L	206.58 ppb	09:55:44
2	Fe 238.204 Radial†	19.1	11.4	106.77 ug/L	106.77 ppb	09:55:44
2	K 766.490 Radial†	3086.1	502.8	91.668 ug/L	91.668 ppb	09:55:24
2	Mg 279.077 IEC†	11.9	10.7	379.90 ug/L	379.90 ppb	09:55:44
2	Na 589.592 Radial†	257.6	798.6	237.40 ug/L	237.40 ppb	09:55:24
2	Sr 421.552†	835.0	806.3	5.1730 ug/L	5.1730 ppb	09:55:24
2	Sc 361.383	911945.6	911945.6	101.57 %		09:56:42
2	Y 371.029	802802.3	802802.3	97.531 %		09:56:42
2	Ag 328.068†	1577.4	1257.0	5.2526 ug/L	5.2526 ppb	09:56:42
2	As 188.979†	29.8	59.6	24.417 ug/L	24.417 ppb	09:57:02
2	B 249.677†	2098.2	2306.3	50.546 ug/L	50.546 ppb	09:56:42
2	Ba 233.527†	653.6	646.6	5.1113 ug/L	5.1113 ppb	09:57:02
2	Be 313.107†	9377.7	14333.4	5.0678 ug/L	5.0678 ppb	09:56:42
2	Cd 226.502†	243.2	445.6	4.9807 ug/L	4.9807 ppb	09:57:02
2	Co 228.616†	170.7	238.0	5.2280 ug/L	5.2280 ppb	09:57:02
2	Cr 267.716†	544.2	441.9	4.7777 ug/L	4.7777 ppb	09:57:02
2	Cu 324.752†	12645.8	3322.7	9.2960 ug/L	9.2960 ppb	09:56:42
2	Mn 257.610†	9880.5	9238.2	10.353 ug/L	10.353 ppb	09:56:42
2	Mo 202.031†	163.9	137.7	9.4112 ug/L	9.4112 ppb	09:57:02
2	Ni 231.604†	316.5	217.9	5.4734 ug/L	5.4734 ppb	09:57:02

2	P 214.914†	508.2	261.6	145.73 ug/L	145.73 ppb	09:57:02
2	Pb 220.353†	30.5	90.5	11.411 ug/L	11.411 ppb	09:57:02
2	S 181.975 Axial†	125.2	46.2	63.628 ug/L	63.628 ppb	09:57:02
2	Sb 206.836†	69.9	38.6	13.246 ug/L	13.246 ppb	09:57:02
2	Se 196.026†	39.3	56.6	33.061 ug/L	33.061 ppb	09:57:02
2	Si 251.611†	3801.0	3246.4	96.075 ug/L	96.075 ppb	09:57:02
2	Sn 189.927†	49.4	49.0	9.0492 ug/L	9.0492 ppb	09:57:02
2	Ti 334.940†	2475.0	3343.4	5.0684 ug/L	5.0684 ppb	09:56:42
2	Tl 190.801†	28.1	64.6	20.708 ug/L	20.708 ppb	09:57:02
2	U 409.014†	1159.9	2204.9	55.110 ug/L	55.110 ppb	09:56:42
2	V 292.402†	-595.1	807.7	5.2458 ug/L	5.2458 ppb	09:56:42
2	Zn 213.857†	1792.0	1030.9	9.5445 ug/L	9.5445 ppb	09:57:02
2	SiO2†	3920.4	3346.5	211.39 ug/L	211.39 ppb	09:57:38
3	Sc Radial	5498.1	5498.1	103 %		09:55:49
3	Y RADIAL	5877.6	5877.6	102.1 %		09:55:49
3	Al 396.153Radial†	280.2	263.0	198.71 ug/L	198.71 ppb	09:56:09
3	Ca 317.933Radial†	151.6	127.0	204.09 ug/L	204.09 ppb	09:56:09
3	Fe 238.204 Radial†	18.7	11.0	102.62 ug/L	102.62 ppb	09:56:09
3	K 766.490 Radial†	3152.5	558.4	101.84 ug/L	101.84 ppb	09:55:49
3	Mg 279.077 IEC†	11.7	10.4	372.00 ug/L	372.00 ppb	09:56:09
3	Na 589.592 Radial†	254.9	795.2	236.40 ug/L	236.40 ppb	09:55:49
3	Sr 421.552†	826.9	796.0	5.1070 ug/L	5.1070 ppb	09:55:49
3	Sc 361.383	909827.5	909827.5	101.33 %		09:57:07
3	Y 371.029	800430.8	800430.8	97.243 %		09:57:07
3	Ag 328.068†	1472.5	1157.1	4.8366 ug/L	4.8366 ppb	09:57:07
3	As 188.979†	40.3	69.9	28.659 ug/L	28.659 ppb	09:57:27
3	B 249.677†	2041.1	2254.7	49.415 ug/L	49.415 ppb	09:57:07
3	Ba 233.527†	675.3	669.5	5.2927 ug/L	5.2927 ppb	09:57:27
3	Be 313.107†	9250.8	14229.7	5.0313 ug/L	5.0313 ppb	09:57:07
3	Cd 226.502†	263.0	465.7	5.2062 ug/L	5.2062 ppb	09:57:27
3	Co 228.616†	170.0	237.7	5.2234 ug/L	5.2234 ppb	09:57:27
3	Cr 267.716†	576.6	475.1	5.1379 ug/L	5.1379 ppb	09:57:27
3	Cu 324.752†	12690.9	3396.1	9.5018 ug/L	9.5018 ppb	09:57:07
3	Mn 257.610†	9818.0	9199.2	10.309 ug/L	10.309 ppb	09:57:07
3	Mo 202.031†	182.1	156.1	10.666 ug/L	10.666 ppb	09:57:27
3	Ni 231.604†	317.5	219.7	5.5180 ug/L	5.5180 ppb	09:57:27
3	P 214.914†	492.3	247.1	137.52 ug/L	137.52 ppb	09:57:27
3	Pb 220.353†	26.9	86.9	10.971 ug/L	10.971 ppb	09:57:27
3	S 181.975 Axial†	122.8	44.2	60.772 ug/L	60.772 ppb	09:57:27
3	Sb 206.836†	63.7	32.6	11.302 ug/L	11.302 ppb	09:57:27
3	Se 196.026†	27.4	45.0	26.345 ug/L	26.345 ppb	09:57:27
3	Si 251.611†	3813.7	3267.6	96.688 ug/L	96.688 ppb	09:57:27
3	Sn 189.927†	56.4	56.0	10.337 ug/L	10.337 ppb	09:57:27
3	Ti 334.940†	2475.5	3349.5	5.0779 ug/L	5.0779 ppb	09:57:07
3	Tl 190.801†	13.2	49.9	16.024 ug/L	16.024 ppb	09:57:27
3	U 409.014†	1160.5	2208.1	55.190 ug/L	55.190 ppb	09:57:07
3	V 292.402†	-501.3	898.9	5.8312 ug/L	5.8312 ppb	09:57:07
3	Zn 213.857†	1782.7	1025.9	9.4975 ug/L	9.4975 ppb	09:57:27
3	SiO2†	3961.0	3395.6	214.46 ug/L	214.46 ppb	09:57:43

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	914046.8	101.80 %	0.621			0.61%
Sc Radial	5484.4	103 %	0.2			0.23%
Y 371.029	804185.2	97.699 %	0.5594			0.57%
Y RADIAL	5889.9	102.3 %	0.43			0.42%
Ag 328.068†	1199.1	5.0117 ug/L	0.21563	5.0117 ppb	0.21563	4.30%
QC value within limits for Ag 328.068 Recovery = 100.23%						
Al 396.153Radial†	267.6	202.24 ug/L	3.772	202.24 ppb	3.772	1.87%
QC value within limits for Al 396.153Radial Recovery = 101.12%						
As 188.979†	65.5	26.844 ug/L	2.1860	26.844 ppb	2.1860	8.14%
QC value within limits for As 188.979 Recovery = 89.48%						
B 249.677†	2282.5	50.026 ug/L	0.5708	50.026 ppb	0.5708	1.14%
QC value within limits for B 249.677 Recovery = 100.05%						
Ba 233.527†	655.3	5.1801 ug/L	0.09832	5.1801 ppb	0.09832	1.90%
QC value within limits for Ba 233.527 Recovery = 103.60%						
Be 313.107†	14265.3	5.0439 ug/L	0.02072	5.0439 ppb	0.02072	0.41%
QC value within limits for Be 313.107 Recovery = 100.88%						
Ca 317.933Radial†	127.4	204.78 ug/L	1.568	204.78 ppb	1.568	0.77%

QC value within limits for Ca 317.933 Radial Recovery = 102.39%							
Cd 226.502†	456.4	5.1014 ug/L	0.11355	5.1014 ppb	0.11355	2.23%	
QC value within limits for Cd 226.502 Recovery = 102.03%							
Co 228.616†	236.5	5.1963 ug/L	0.05108	5.1963 ppb	0.05108	0.98%	
QC value within limits for Co 228.616 Recovery = 103.93%							
Cr 267.716†	465.6	5.0356 ug/L	0.22489	5.0356 ppb	0.22489	4.47%	
QC value within limits for Cr 267.716 Recovery = 100.71%							
Cu 324.752†	3341.5	9.3491 ug/L	0.13419	9.3491 ppb	0.13419	1.44%	
QC value within limits for Cu 324.752 Recovery = 93.49%							
Fe 238.204 Radial†	11.1	103.79 ug/L	2.602	103.79 ppb	2.602	2.51%	
QC value within limits for Fe 238.204 Radial Recovery = 103.79%							
K 766.490 Radial†	545.0	99.385 ug/L	6.8289	99.385 ppb	6.8289	6.87%	
QC value less than the lower limit for K 766.490 Radial Recovery = 66.26%							
Mg 279.077 IEC†	10.7	382.38 ug/L	11.814	382.38 ppb	11.814	3.09%	
QC value within limits for Mg 279.077 IEC Recovery = 127.46%							
Mn 257.610†	9217.4	10.329 ug/L	0.0221	10.329 ppb	0.0221	0.21%	
QC value within limits for Mn 257.610 Recovery = 103.29%							
Mo 202.031†	150.5	10.283 ug/L	0.7570	10.283 ppb	0.7570	7.36%	
QC value within limits for Mo 202.031 Recovery = 102.83%							
Na 589.592 Radial†	785.3	233.46 ug/L	5.988	233.46 ppb	5.988	2.56%	
QC value within limits for Na 589.592 Radial Recovery = 77.82%							
Ni 231.604†	224.4	5.6365 ug/L	0.24496	5.6365 ppb	0.24496	4.35%	
QC value within limits for Ni 231.604 Recovery = 112.73%							
P 214.914†	255.1	142.06 ug/L	4.172	142.06 ppb	4.172	2.94%	
QC value within limits for P 214.914 Recovery = 94.71%							
Pb 220.353†	90.9	11.467 ug/L	0.5264	11.467 ppb	0.5264	4.59%	
QC value within limits for Pb 220.353 Recovery = 114.67%							
S 181.975 Axial†	49.6	68.313 ug/L	10.6838	68.313 ppb	10.6838	15.64%	
QC value less than the lower limit for S 181.975 Axial Recovery = 68.31%							
Sb 206.836†	30.5	10.556 ug/L	3.1304	10.556 ppb	3.1304	29.66%	
QC value within limits for Sb 206.836 Recovery = 105.56%							
Se 196.026†	53.1	31.035 ug/L	4.0738	31.035 ppb	4.0738	13.13%	
QC value within limits for Se 196.026 Recovery = 103.45%							
Si 251.611†	3246.5	96.065 ug/L	0.6276	96.065 ppb	0.6276	0.65%	
QC value within limits for Si 251.611 Recovery = 96.07%							
Sn 189.927†	51.7	9.5424 ug/L	0.69442	9.5424 ppb	0.69442	7.28%	
QC value within limits for Sn 189.927 Recovery = 95.42%							
Sr 421.552†	799.4	5.1287 ug/L	0.03840	5.1287 ppb	0.03840	0.75%	
QC value within limits for Sr 421.552 Recovery = 102.57%							
Ti 334.940†	3376.1	5.1180 ug/L	0.07775	5.1180 ppb	0.07775	1.52%	
QC value within limits for Ti 334.940 Recovery = 102.36%							
Tl 190.801†	59.8	19.197 ug/L	2.7491	19.197 ppb	2.7491	14.32%	
QC value within limits for Tl 190.801 Recovery = 95.99%							
U 409.014†	2181.1	54.516 ug/L	1.0986	54.516 ppb	1.0986	2.02%	
QC value within limits for U 409.014 Recovery = 109.03%							
V 292.402†	847.7	5.5064 ug/L	0.29793	5.5064 ppb	0.29793	5.41%	
QC value within limits for V 292.402 Recovery = 110.13%							
Zn 213.857†	1023.8	9.4773 ug/L	0.07926	9.4773 ppb	0.07926	0.84%	
QC value within limits for Zn 213.857 Recovery = 94.77%							
SiO2†	3358.9	212.15 ug/L	2.036	212.15 ppb	2.036	0.96%	
QC value within limits for SiO2 Recovery = 99.60%							
QC Failed. Continue with analysis.							

Sequence No.: 9

Sample ID: ICSA

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 13

Date Collected: 1/26/2010 09:59:54

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4967.3	4967.3	93.0 %		10:01:53
1	Y RADIAL	5327.2	5327.2	92.53 %		10:01:53
1	Al 396.153Radial†	627223.9	674282.7	510790 ug/L	510790 ppb	10:01:48
1	Ca 317.933Radial†	274135.2	294686.6	473650 ug/L	473650 ppb	10:01:48
1	Fe 238.204 Radial†	18771.2	20172.7	188520 ug/L	188520 ppb	10:01:53
1	K 766.490 Radial†	2344.2	16.6	-155.38 ug/L	-155.38 ppb	10:01:53
1	Mg 279.077 IEC†	12983.9	13957.2	497650 ug/L	497650 ppb	10:01:53
1	Na 589.592 Radial†	-558.7	-53.0	-15.743 ug/L	-15.743 ppb	10:01:53
1	Sr 421.552†	557.3	592.1	0.2629 ug/L	0.2629 ppb	10:01:53
1	Sc 361.383	803575.0	803575.0	89.498 %		10:02:20
1	Y 371.029	694490.8	694490.8	84.373 %		10:02:20
1	Ag 328.068†	-10512.1	-12041.7	4.4102 ug/L	4.4102 ppb	10:02:20
1	As 188.979†	-96.3	-77.4	12.285 ug/L	12.285 ppb	10:02:41
1	B 249.677†	714.2	1038.5	-7.8439 ug/L	-7.8439 ppb	10:02:20
1	Ba 233.527†	-521.1	-579.2	1.2082 ug/L	1.2082 ppb	10:02:41
1	Be 313.107†	-5374.5	-904.8	-0.3813 ug/L	-0.3813 ppb	10:02:20
1	Cd 226.502†	1427.5	1801.1	0.6534 ug/L	0.6534 ppb	10:02:41
1	Co 228.616†	-17.5	50.4	-1.6008 ug/L	-1.6008 ppb	10:02:41
1	Cr 267.716†	-71.2	-173.5	1.7967 ug/L	1.7967 ppb	10:02:41
1	Cu 324.752†	6271.0	-2121.2	4.0136 ug/L	4.0136 ppb	10:02:20
1	Mn 257.610†	-907.5	-1503.9	-3.4218 ug/L	-3.4218 ppb	10:02:20
1	Mo 202.031†	-192.0	-238.1	4.0180 ug/L	4.0180 ppb	10:02:41
1	Ni 231.604†	191.1	119.9	3.0119 ug/L	3.0119 ppb	10:02:41
1	P 214.914†	161.5	-58.3	-56.873 ug/L	-56.873 ppb	10:02:41
1	Pb 220.353†	-732.4	-758.0	4.8704 ug/L	4.8704 ppb	10:02:41
1	S 181.975 Axial†	94.0	28.1	-57.078 ug/L	-57.078 ppb	10:02:41
1	Sb 206.836†	45.4	20.5	-3.5060 ug/L	-3.5060 ppb	10:02:41
1	Se 196.026†	-990.2	-1088.4	28.011 ug/L	28.011 ppb	10:02:41
1	Si 251.611†	453.7	11.0	0.5251 ug/L	0.5251 ppb	10:02:41
1	Sn 189.927†	-354.3	-395.5	2.4151 ug/L	2.4151 ppb	10:02:41
1	Ti 334.940†	-16876.4	-17950.3	-4.5144 ug/L	-4.5144 ppb	10:02:20
1	Tl 190.801†	-80.6	-53.2	-17.274 ug/L	-17.274 ppb	10:02:41
1	U 409.014†	-6.0	1056.1	4.9202 ug/L	4.9202 ppb	10:02:20
1	V 292.402†	1204.3	2739.2	-0.9575 ug/L	-0.9575 ppb	10:02:41
1	Zn 213.857†	3199.5	2841.6	8.1691 ug/L	8.1691 ppb	10:02:41
1	SiO2†	470.8	12.7	1.2450 ug/L	1.2450 ppb	10:03:37
2	Sc Radial	4805.3	4805.3	90.0 %		10:02:04
2	Y RADIAL	5154.3	5154.3	89.53 %		10:02:04
2	Al 396.153Radial†	638034.9	709025.6	537110 ug/L	537110 ppb	10:01:59
2	Ca 317.933Radial†	277837.7	308735.0	496230 ug/L	496230 ppb	10:01:59
2	Fe 238.204 Radial†	18349.0	20383.7	190500 ug/L	190500 ppb	10:02:04
2	K 766.490 Radial†	2296.2	48.2	-157.16 ug/L	-157.16 ppb	10:02:04
2	Mg 279.077 IEC†	12666.3	14074.9	501840 ug/L	501840 ppb	10:02:04
2	Na 589.592 Radial†	-529.9	-41.2	-12.242 ug/L	-12.242 ppb	10:02:04
2	Sr 421.552†	538.8	591.7	0.0918 ug/L	0.0918 ppb	10:02:04
2	Sc 361.383	796203.6	796203.6	88.677 %		10:02:46
2	Y 371.029	688426.5	688426.5	83.636 %		10:02:46
2	Ag 328.068†	-10223.7	-11825.2	5.6422 ug/L	5.6422 ppb	10:02:46
2	As 188.979†	-101.8	-84.6	9.8181 ug/L	9.8181 ppb	10:03:06
2	B 249.677†	660.6	985.4	-9.3310 ug/L	-9.3310 ppb	10:02:46
2	Ba 233.527†	-511.6	-573.8	1.3095 ug/L	1.3095 ppb	10:03:06
2	Be 313.107†	-5211.7	-776.8	-0.3356 ug/L	-0.3356 ppb	10:02:46
2	Cd 226.502†	1442.8	1833.2	0.8085 ug/L	0.8085 ppb	10:03:06
2	Co 228.616†	7.5	78.4	-1.0172 ug/L	-1.0172 ppb	10:03:06
2	Cr 267.716†	-56.2	-157.3	2.0091 ug/L	2.0091 ppb	10:03:06
2	Cu 324.752†	6058.2	-2296.2	3.6260 ug/L	3.6260 ppb	10:02:46
2	Mn 257.610†	-1005.6	-1623.8	-3.5331 ug/L	-3.5331 ppb	10:02:46
2	Mo 202.031†	-205.9	-255.8	3.2318 ug/L	3.2318 ppb	10:03:06
2	Ni 231.604†	191.9	122.7	3.0836 ug/L	3.0836 ppb	10:03:06

2	P 214.914†	203.4	-9.4	-24.205 ug/L	-24.205 ppb	10:03:06
2	Pb 220.353†	-727.2	-759.7	10.511 ug/L	10.511 ppb	10:03:06
2	S 181.975 Axial†	80.5	13.8	-81.631 ug/L	-81.631 ppb	10:03:06
2	Sb 206.836†	56.4	33.3	0.0791 ug/L	0.0791 ppb	10:03:06
2	Se 196.026†	-989.5	-1097.9	30.741 ug/L	30.741 ppb	10:03:06
2	Si 251.611†	435.0	-5.4	0.0536 ug/L	0.0536 ppb	10:03:06
2	Sn 189.927†	-357.9	-403.2	4.4640 ug/L	4.4640 ppb	10:03:06
2	Ti 334.940†	-16585.3	-17796.6	-1.5952 ug/L	-1.5952 ppb	10:02:46
2	Tl 190.801†	-83.9	-57.7	-18.729 ug/L	-18.729 ppb	10:03:06
2	U 409.014†	60.2	1130.7	6.5597 ug/L	6.5597 ppb	10:02:46
2	V 292.402†	1142.5	2681.9	-1.5332 ug/L	-1.5332 ppb	10:03:06
2	Zn 213.857†	3183.8	2857.0	8.1215 ug/L	8.1215 ppb	10:03:06
2	SiO2†	464.0	9.8	1.0970 ug/L	1.0970 ppb	10:03:42
3	Sc Radial	4958.7	4958.7	92.9 %		10:02:14
3	Y RADIAL	5327.7	5327.7	92.54 %		10:02:14
3	Al 396.153Radial†	637938.3	686986.6	520410 ug/L	520410 ppb	10:02:09
3	Ca 317.933Radial†	277017.0	298299.4	479460 ug/L	479460 ppb	10:02:09
3	Fe 238.204 Radial†	18772.9	20209.4	188870 ug/L	188870 ppb	10:02:14
3	K 766.490 Radial†	2258.1	-71.7	-173.46 ug/L	-173.46 ppb	10:02:14
3	Mg 279.077 IEC†	12977.2	13974.1	498250 ug/L	498250 ppb	10:02:14
3	Na 589.592 Radial†	-535.3	-28.8	-8.5601 ug/L	-8.5601 ppb	10:02:14
3	Sr 421.552†	586.5	624.5	0.4280 ug/L	0.4280 ppb	10:02:14
3	Sc 361.383	803234.6	803234.6	89.460 %		10:03:11
3	Y 371.029	695709.6	695709.6	84.521 %		10:03:11
3	Ag 328.068†	-10403.9	-11925.7	4.9265 ug/L	4.9265 ppb	10:03:11
3	As 188.979†	-71.4	-49.7	23.727 ug/L	23.727 ppb	10:03:31
3	B 249.677†	677.8	998.1	-8.7842 ug/L	-8.7842 ppb	10:03:11
3	Ba 233.527†	-502.1	-558.2	1.3839 ug/L	1.3839 ppb	10:03:31
3	Be 313.107†	-5187.9	-698.7	-0.3089 ug/L	-0.3089 ppb	10:03:11
3	Cd 226.502†	1447.4	1824.1	0.8739 ug/L	0.8739 ppb	10:03:31
3	Co 228.616†	-35.3	30.5	-2.0439 ug/L	-2.0439 ppb	10:03:31
3	Cr 267.716†	-86.7	-190.8	1.6159 ug/L	1.6159 ppb	10:03:31
3	Cu 324.752†	6133.7	-2271.6	3.6103 ug/L	3.6103 ppb	10:03:11
3	Mn 257.610†	-1168.2	-1795.7	-3.7398 ug/L	-3.7398 ppb	10:03:11
3	Mo 202.031†	-212.4	-261.0	2.5516 ug/L	2.5516 ppb	10:03:31
3	Ni 231.604†	196.5	125.9	3.1641 ug/L	3.1641 ppb	10:03:31
3	P 214.914†	193.9	-22.0	-34.176 ug/L	-34.176 ppb	10:03:31
3	Pb 220.353†	-677.2	-696.6	14.705 ug/L	14.705 ppb	10:03:31
3	S 181.975 Axial†	71.8	3.2	-93.093 ug/L	-93.093 ppb	10:03:31
3	Sb 206.836†	70.0	48.0	5.4189 ug/L	5.4189 ppb	10:03:31
3	Se 196.026†	-975.4	-1072.4	39.009 ug/L	39.009 ppb	10:03:31
3	Si 251.611†	460.1	18.3	0.7628 ug/L	0.7628 ppb	10:03:31
3	Sn 189.927†	-361.2	-403.4	1.8639 ug/L	1.8639 ppb	10:03:31
3	Ti 334.940†	-16938.8	-18028.0	-3.9028 ug/L	-3.9028 ppb	10:03:11
3	Tl 190.801†	-91.5	-65.4	-21.184 ug/L	-21.184 ppb	10:03:31
3	U 409.014†	-43.6	1014.1	3.8316 ug/L	3.8316 ppb	10:03:11
3	V 292.402†	1180.8	2713.5	-1.1790 ug/L	-1.1790 ppb	10:03:31
3	Zn 213.857†	3190.5	2833.0	8.0557 ug/L	8.0557 ppb	10:03:31
3	SiO2†	454.6	-5.2	0.1536 ug/L	0.1536 ppb	10:03:47

Mean Data: ICSEA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	801004.4	89.211 %	0.4634			0.52%
Sc Radial	4910.5	92.0 %	1.71			1.86%
Y 371.029	692875.6	84.177 %	0.4739			0.56%
Y RADIAL	5269.7	91.53 %	1.736			1.90%
Ag 328.068†	-11930.9	4.9930 ug/L	0.61869	4.9930 ppb	0.61869	12.39%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	690098.3	522770 ug/L	13316.8	522770 ppb	13316.8	2.55%
QC value within limits for Al 396.153Radial Recovery = 104.55%						
As 188.979†	-70.6	15.277 ug/L	7.4211	15.277 ppb	7.4211	48.58%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	1007.3	-8.6530 ug/L	0.75218	-8.6530 ppb	0.75218	8.69%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-570.4	1.3005 ug/L	0.08822	1.3005 ppb	0.08822	6.78%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-793.4	-0.3419 ug/L	0.03662	-0.3419 ppb	0.03662	10.71%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	300573.7	483110 ug/L	11725.4	483110 ppb	11725.4	2.43%

QC value within limits for Ca 317.933 Radial Recovery = 96.62%

Cd 226.502†	1819.5	0.7786 ug/L	0.11328	0.7786 ppb	0.11328	14.55%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	53.1	-1.5540 ug/L	0.51493	-1.5540 ppb	0.51493	33.14%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-173.9	1.8072 ug/L	0.19685	1.8072 ppb	0.19685	10.89%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-2229.6	3.7500 ug/L	0.22845	3.7500 ppb	0.22845	6.09%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	20255.3	189300 ug/L	1053.7	189300 ppb	1053.7	0.56%
QC value within limits for Fe 238.204 Radial Recovery = 94.65%						
K 766.490 Radial†	-2.3	-162.00 ug/L	9.967	-162.00 ppb	9.967	6.15%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	14002.1	499250 ug/L	2267.9	499250 ppb	2267.9	0.45%
QC value within limits for Mg 279.077 IEC Recovery = 99.85%						
Mn 257.610†	-1641.2	-3.5649 ug/L	0.16136	-3.5649 ppb	0.16136	4.53%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-251.7	3.2671 ug/L	0.73385	3.2671 ppb	0.73385	22.46%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-41.0	-12.182 ug/L	3.5916	-12.182 ppb	3.5916	29.48%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	122.8	3.0865 ug/L	0.07614	3.0865 ppb	0.07614	2.47%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-29.9	-38.418 ug/L	16.7419	-38.418 ppb	16.7419	43.58%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-738.1	10.029 ug/L	4.9350	10.029 ppb	4.9350	49.21%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	15.0	-77.267 ug/L	18.3996	-77.267 ppb	18.3996	23.81%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	33.9	0.6640 ug/L	4.49112	0.6640 ppb	4.49112	676.41%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-1086.2	32.587 ug/L	5.7268	32.587 ppb	5.7268	17.57%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	8.0	0.4472 ug/L	0.36099	0.4472 ppb	0.36099	80.73%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-400.7	2.9143 ug/L	1.37005	2.9143 ppb	1.37005	47.01%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	602.8	0.2609 ug/L	0.16808	0.2609 ppb	0.16808	64.43%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-17924.9	-3.3375 ug/L	1.53955	-3.3375 ppb	1.53955	46.13%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-58.7	-19.062 ug/L	1.9761	-19.062 ppb	1.9761	10.37%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	1067.0	5.1038 ug/L	1.37328	5.1038 ppb	1.37328	26.91%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	2711.5	-1.2232 ug/L	0.29041	-1.2232 ppb	0.29041	23.74%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	2843.9	8.1154 ug/L	0.05696	8.1154 ppb	0.05696	0.70%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	5.8	0.8319 ug/L	0.59204	0.8319 ppb	0.59204	71.17%
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: 1/26/2010 10:05:59
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4682.8	4682.8	87.7 %		10:07:56
1	Y RADIAL	5066.7	5066.7	88.01 %		10:07:56
1	Al 396.153Radial†	643486.0	733803.2	555860 ug/L	555860 ppb	10:07:51
1	Ca 317.933Radial†	276930.6	315783.1	507560 ug/L	507560 ppb	10:07:51
1	Fe 238.204 Radial†	18141.6	20681.0	193290 ug/L	193290 ppb	10:07:56
1	K 766.490 Radial†	30165.9	31896.8	5654.3 ug/L	5654.3 ppb	10:07:51
1	Mg 279.077 IEC†	12619.0	14389.4	513060 ug/L	513060 ppb	10:07:56
1	Na 589.592 Radial†	16222.4	19047.2	5662.2 ug/L	5662.2 ppb	10:07:56
1	Sr 421.552†	75006.7	85528.3	545.11 ug/L	545.11 ppb	10:07:51
1	Sc 361.383	810517.8	810517.8	90.271 %		10:08:24
1	Y 371.029	699266.8	699266.8	84.953 %		10:08:24
1	Ag 328.068†	45937.7	50592.7	268.41 ug/L	268.41 ppb	10:08:24
1	As 188.979†	978.8	1114.5	504.25 ug/L	504.25 ppb	10:08:44
1	B 249.677†	21280.1	23814.0	489.62 ug/L	489.62 ppb	10:08:24
1	Ba 233.527†	54181.3	60024.0	480.09 ug/L	480.09 ppb	10:08:24
1	Be 313.107†	592235.6	661165.4	234.31 ug/L	234.31 ppb	10:08:24
1	Cd 226.502†	36417.2	40548.3	433.34 ug/L	433.34 ppb	10:08:44
1	Co 228.616†	18038.6	20052.7	436.89 ug/L	436.89 ppb	10:08:44
1	Cr 267.716†	38282.5	42314.5	462.98 ug/L	462.98 ppb	10:08:24
1	Cu 324.752†	182336.3	192859.9	550.98 ug/L	550.98 ppb	10:08:24
1	Mn 257.610†	375636.6	415631.7	464.10 ug/L	464.10 ppb	10:08:24
1	Mo 202.031†	5964.1	6583.3	470.34 ug/L	470.34 ppb	10:08:44
1	Ni 231.604†	15304.6	16860.4	423.46 ug/L	423.46 ppb	10:08:44
1	P 214.914†	4113.6	4318.2	2314.3 ug/L	2314.3 ppb	10:08:44
1	Pb 220.353†	2482.9	2810.9	463.49 ug/L	463.49 ppb	10:08:44
1	S 181.975 Axial†	1773.8	1887.9	2495.2 ug/L	2495.2 ppb	10:08:44
1	Sb 206.836†	1459.1	1586.1	536.22 ug/L	536.22 ppb	10:08:44
1	Se 196.026†	2870.6	3198.0	2520.4 ug/L	2520.4 ppb	10:08:44
1	Si 251.611†	156650.3	173037.6	5121.5 ug/L	5121.5 ppb	10:08:24
1	Sn 189.927†	1936.3	2145.4	474.88 ug/L	474.88 ppb	10:08:44
1	Ti 334.940†	279825.4	310890.7	499.79 ug/L	499.79 ppb	10:08:24
1	Tl 190.801†	1229.1	1398.5	450.64 ug/L	450.64 ppb	10:08:44
1	U 409.014†	16791.8	19664.4	468.65 ug/L	468.65 ppb	10:08:24
1	V 292.402†	70344.0	79319.1	481.65 ug/L	481.65 ppb	10:08:24
1	Zn 213.857†	49752.3	54381.1	484.35 ug/L	484.35 ppb	10:08:24
1	SiO2†	153831.7	169897.8	10733 ug/L	10733 ppb	10:09:42
2	Sc Radial	4877.2	4877.2	91.3 %		10:08:07
2	Y RADIAL	5274.4	5274.4	91.61 %		10:08:07
2	Al 396.153Radial†	642479.4	703438.4	532850 ug/L	532850 ppb	10:08:01
2	Ca 317.933Radial†	276272.3	302469.0	486160 ug/L	486160 ppb	10:08:01
2	Fe 238.204 Radial†	18461.9	20206.6	188850 ug/L	188850 ppb	10:08:07
2	K 766.490 Radial†	30146.8	30504.1	5407.1 ug/L	5407.1 ppb	10:08:01
2	Mg 279.077 IEC†	12827.9	14044.2	500760 ug/L	500760 ppb	10:08:07
2	Na 589.592 Radial†	16453.0	18561.9	5517.9 ug/L	5517.9 ppb	10:08:07
2	Sr 421.552†	74798.4	81889.3	521.91 ug/L	521.91 ppb	10:08:01
2	Sc 361.383	803590.5	803590.5	89.499 %		10:08:50
2	Y 371.029	693102.3	693102.3	84.204 %		10:08:50
2	Ag 328.068†	45476.7	50516.3	266.96 ug/L	266.96 ppb	10:08:50
2	As 188.979†	979.5	1124.6	507.32 ug/L	507.32 ppb	10:09:10
2	B 249.677†	21099.5	23815.5	490.35 ug/L	490.35 ppb	10:08:50
2	Ba 233.527†	53880.1	60204.8	481.38 ug/L	481.38 ppb	10:08:50
2	Be 313.107†	588080.2	662178.1	234.67 ug/L	234.67 ppb	10:08:50
2	Cd 226.502†	36645.0	41150.6	440.53 ug/L	440.53 ppb	10:09:10
2	Co 228.616†	18184.9	20388.4	444.33 ug/L	444.33 ppb	10:09:10
2	Cr 267.716†	38093.5	42469.0	464.57 ug/L	464.57 ppb	10:08:50
2	Cu 324.752†	180019.1	192012.2	548.37 ug/L	548.37 ppb	10:08:50
2	Mn 257.610†	373055.8	416335.3	464.95 ug/L	464.95 ppb	10:08:50
2	Mo 202.031†	5960.9	6636.7	473.39 ug/L	473.39 ppb	10:09:10
2	Ni 231.604†	15394.4	17106.8	429.65 ug/L	429.65 ppb	10:09:10

2	P 214.914†	4120.7	4365.5	2339.4 ug/L	2339.4 ppb	10:09:10
2	Pb 220.353†	2492.7	2845.6	462.97 ug/L	462.97 ppb	10:09:10
2	S 181.975 Axial†	1783.3	1915.5	2537.4 ug/L	2537.4 ppb	10:09:10
2	Sb 206.836†	1483.3	1627.1	550.68 ug/L	550.68 ppb	10:09:10
2	Se 196.026†	2881.7	3237.8	2527.2 ug/L	2527.2 ppb	10:09:10
2	Si 251.611†	155320.8	173048.1	5121.8 ug/L	5121.8 ppb	10:08:50
2	Sn 189.927†	1965.3	2196.2	480.91 ug/L	480.91 ppb	10:09:10
2	Ti 334.940†	277575.0	311048.5	498.17 ug/L	498.17 ppb	10:08:50
2	Tl 190.801†	1228.2	1409.2	454.05 ug/L	454.05 ppb	10:09:10
2	U 409.014†	16374.9	19359.0	461.52 ug/L	461.52 ppb	10:08:50
2	V 292.402†	70038.4	79649.4	484.15 ug/L	484.15 ppb	10:08:50
2	Zn 213.857†	49406.5	54469.8	485.58 ug/L	485.58 ppb	10:08:50
2	SiO2†	155870.0	173644.3	10970 ug/L	10970 ppb	10:09:47
3	Sc Radial	4934.5	4934.5	92.4 %		10:08:17
3	Y RADIAL	5304.8	5304.8	92.14 %		10:08:17
3	Al 396.153Radial†	626718.7	678215.7	513750 ug/L	513750 ppb	10:08:12
3	Ca 317.933Radial†	271233.6	293504.4	471750 ug/L	471750 ppb	10:08:12
3	Fe 238.204 Radial†	18429.0	19936.5	186330 ug/L	186330 ppb	10:08:17
3	K 766.490 Radial†	29462.0	29379.9	5206.6 ug/L	5206.6 ppb	10:08:12
3	Mg 279.077 IEC†	12818.6	13871.1	494590 ug/L	494590 ppb	10:08:17
3	Na 589.592 Radial†	16552.0	18460.0	5487.6 ug/L	5487.6 ppb	10:08:17
3	Sr 421.552†	72805.7	78782.0	502.08 ug/L	502.08 ppb	10:08:12
3	Sc 361.383	812825.4	812825.4	90.528 %		10:09:16
3	Y 371.029	701381.0	701381.0	85.210 %		10:09:16
3	Ag 328.068†	45984.7	50500.2	266.27 ug/L	266.27 ppb	10:09:16
3	As 188.979†	977.1	1109.5	500.60 ug/L	500.60 ppb	10:09:36
3	B 249.677†	21323.8	23795.3	490.33 ug/L	490.33 ppb	10:09:16
3	Ba 233.527†	54466.0	60167.9	481.01 ug/L	481.01 ppb	10:09:16
3	Be 313.107†	594499.7	661803.9	234.54 ug/L	234.54 ppb	10:09:16
3	Cd 226.502†	36616.5	40654.0	435.24 ug/L	435.24 ppb	10:09:36
3	Co 228.616†	18168.8	20139.8	438.90 ug/L	438.90 ppb	10:09:36
3	Cr 267.716†	38418.7	42344.6	463.17 ug/L	463.17 ppb	10:09:16
3	Cu 324.752†	182676.4	192662.2	550.06 ug/L	550.06 ppb	10:09:16
3	Mn 257.610†	377256.0	416239.2	464.85 ug/L	464.85 ppb	10:09:16
3	Mo 202.031†	5991.3	6594.6	470.14 ug/L	470.14 ppb	10:09:36
3	Ni 231.604†	15451.9	16975.0	426.34 ug/L	426.34 ppb	10:09:36
3	P 214.914†	4132.9	4326.6	2314.3 ug/L	2314.3 ppb	10:09:36
3	Pb 220.353†	2486.2	2806.7	453.96 ug/L	453.96 ppb	10:09:36
3	S 181.975 Axial†	1793.0	1903.6	2524.6 ug/L	2524.6 ppb	10:09:36
3	Sb 206.836†	1466.3	1589.5	538.41 ug/L	538.41 ppb	10:09:36
3	Se 196.026†	2888.7	3208.9	2501.0 ug/L	2501.0 ppb	10:09:36
3	Si 251.611†	157227.3	173182.3	5125.8 ug/L	5125.8 ppb	10:09:16
3	Sn 189.927†	1962.6	2168.2	473.54 ug/L	473.54 ppb	10:09:36
3	Ti 334.940†	281058.1	311372.3	497.23 ug/L	497.23 ppb	10:09:16
3	Tl 190.801†	1227.1	1392.4	448.68 ug/L	448.68 ppb	10:09:36
3	U 409.014†	16728.4	19541.6	466.37 ug/L	466.37 ppb	10:09:16
3	V 292.402†	70744.1	79539.7	483.68 ug/L	483.68 ppb	10:09:16
3	Zn 213.857†	49881.9	54367.8	484.89 ug/L	484.89 ppb	10:09:16
3	SiO2†	155898.0	171696.5	10847 ug/L	10847 ppb	10:09:52

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	808977.9	90.099 %	0.5353			0.59%
Sc Radial	4831.5	90.5 %	2.47			2.73%
Y 371.029	697916.7	84.789 %	0.5226			0.62%
Y RADIAL	5215.3	90.59 %	2.252			2.49%
Ag 328.068†	50536.4	267.22 ug/L	1.094	267.22 ppb	1.094	0.41%
QC value within limits for Ag 328.068 Recovery = 106.89%						
Al 396.153Radial†	705152.4	534150 ug/L	21084.6	534150 ppb	21084.6	3.95%
QC value within limits for Al 396.153Radial Recovery = 106.83%						
As 188.979†	1116.2	504.06 ug/L	3.367	504.06 ppb	3.367	0.67%
QC value within limits for As 188.979 Recovery = 100.81%						
B 249.677†	23808.3	490.10 ug/L	0.417	490.10 ppb	0.417	0.09%
QC value within limits for B 249.677 Recovery = 98.02%						
Ba 233.527†	60132.2	480.83 ug/L	0.667	480.83 ppb	0.667	0.14%
QC value within limits for Ba 233.527 Recovery = 96.17%						
Be 313.107†	661715.8	234.50 ug/L	0.181	234.50 ppb	0.181	0.08%
QC value within limits for Be 313.107 Recovery = 93.80%						
Ca 317.933Radial†	303918.8	488490 ug/L	18017.7	488490 ppb	18017.7	3.69%

QC value within limits for Ca 317.933 Radial Recovery = 97.70%

Cd 226.502†	40784.3	436.37 ug/L	3.725	436.37 ppb	3.725	0.85%
QC value within limits for Cd 226.502 Recovery = 87.27%						
Co 228.616†	20193.6	440.04 ug/L	3.845	440.04 ppb	3.845	0.87%
QC value within limits for Co 228.616 Recovery = 88.01%						
Cr 267.716†	42376.0	463.57 ug/L	0.870	463.57 ppb	0.870	0.19%
QC value within limits for Cr 267.716 Recovery = 92.71%						
Cu 324.752†	192511.4	549.80 ug/L	1.323	549.80 ppb	1.323	0.24%
QC value within limits for Cu 324.752 Recovery = 109.96%						
Fe 238.204 Radial†	20274.7	189490 ug/L	3522.1	189490 ppb	3522.1	1.86%
QC value within limits for Fe 238.204 Radial Recovery = 94.75%						
K 766.490 Radial†	30593.6	5422.7 ug/L	224.28	5422.7 ppb	224.28	4.14%
QC value within limits for K 766.490 Radial Recovery = 108.45%						
Mg 279.077 IEC†	14101.6	502800 ug/L	9407.2	502800 ppb	9407.2	1.87%
QC value within limits for Mg 279.077 IEC Recovery = 100.56%						
Mn 257.610†	416068.8	464.63 ug/L	0.466	464.63 ppb	0.466	0.10%
QC value within limits for Mn 257.610 Recovery = 92.93%						
Mo 202.031†	6604.9	471.29 ug/L	1.818	471.29 ppb	1.818	0.39%
QC value within limits for Mo 202.031 Recovery = 94.26%						
Na 589.592 Radial†	18689.7	5555.9 ug/L	93.27	5555.9 ppb	93.27	1.68%
QC value within limits for Na 589.592 Radial Recovery = 111.12%						
Ni 231.604†	16980.7	426.49 ug/L	3.097	426.49 ppb	3.097	0.73%
QC value within limits for Ni 231.604 Recovery = 85.30%						
P 214.914†	4336.8	2322.7 ug/L	14.46	2322.7 ppb	14.46	0.62%
QC value within limits for P 214.914 Recovery = 92.91%						
Pb 220.353†	2821.1	460.14 ug/L	5.357	460.14 ppb	5.357	1.16%
QC value within limits for Pb 220.353 Recovery = 92.03%						
S 181.975 Axial†	1902.3	2519.1 ug/L	21.66	2519.1 ppb	21.66	0.86%
QC value within limits for S 181.975 Axial Recovery = 100.76%						
Sb 206.836†	1600.9	541.77 ug/L	7.795	541.77 ppb	7.795	1.44%
QC value within limits for Sb 206.836 Recovery = 108.35%						
Se 196.026†	3214.9	2516.2 ug/L	13.60	2516.2 ppb	13.60	0.54%
QC value within limits for Se 196.026 Recovery = 100.65%						
Si 251.611†	173089.3	5123.1 ug/L	2.40	5123.1 ppb	2.40	0.05%
QC value within limits for Si 251.611 Recovery = 102.46%						
Sn 189.927†	2169.9	476.44 ug/L	3.927	476.44 ppb	3.927	0.82%
QC value within limits for Sn 189.927 Recovery = 95.29%						
Sr 421.552†	82066.5	523.03 ug/L	21.536	523.03 ppb	21.536	4.12%
QC value within limits for Sr 421.552 Recovery = 104.61%						
Ti 334.940†	311103.8	498.40 ug/L	1.294	498.40 ppb	1.294	0.26%
QC value within limits for Ti 334.940 Recovery = 99.68%						
Tl 190.801†	1400.0	451.12 ug/L	2.719	451.12 ppb	2.719	0.60%
QC value within limits for Tl 190.801 Recovery = 90.22%						
U 409.014†	19521.7	465.51 ug/L	3.645	465.51 ppb	3.645	0.78%
QC value within limits for U 409.014 Recovery = 93.10%						
V 292.402†	79502.7	483.16 ug/L	1.328	483.16 ppb	1.328	0.27%
QC value within limits for V 292.402 Recovery = 96.63%						
Zn 213.857†	54406.2	484.94 ug/L	0.612	484.94 ppb	0.612	0.13%
QC value within limits for Zn 213.857 Recovery = 96.99%						
SiO2†	171746.2	10850 ug/L	118.5	10850 ppb	118.5	1.09%
QC value within limits for SiO2 Recovery = 101.45%						

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: LR1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 15

Date Collected: 1/26/2010 10:12:02

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4645.9	4645.9	87.0 %		10:14:00
1	Y RADIAL	5024.7	5024.7	87.28 %		10:14:00
1	Al 396.153Radial†	612943.2	704519.2	533700 ug/L	533700 ppb	10:13:55
1	Ca 317.933Radial†	263608.8	302976.6	486970 ug/L	486970 ppb	10:13:55
1	Fe 238.204 Radial†	40997.7	47116.4	440330 ug/L	440330 ppb	10:14:00
1	K 766.490 Radial†	3429.1	1438.0	-101.18 ug/L	-101.18 ppb	10:14:00
1	Mg 279.077 IEC†	12176.3	13994.7	498720 ug/L	498720 ppb	10:14:00
1	Na 589.592 Radial†	1507847.4	1733695.5	515380 ug/L	515380 ppb	10:13:55
1	Sr 421.552†	747.8	852.4	1.8345 ug/L	1.8345 ppb	10:14:00
1	Sc 361.383	772915.2	772915.2	86.083 %		10:14:28
1	Y 371.029	667874.5	667874.5	81.139 %		10:14:28
1	Ag 328.068†	-24214.7	-28425.5	5.9459 ug/L	5.9459 ppb	10:14:28
1	As 188.979†	-174.8	-172.9	32.271 ug/L	32.271 ppb	10:14:48
1	B 249.677†	1895.6	2442.5	-17.957 ug/L	-17.957 ppb	10:14:28
1	Ba 233.527†	-1435.9	-1665.0	0.3312 ug/L	0.3312 ppb	10:14:48
1	Be 313.107†	-12543.2	-9470.6	-3.4025 ug/L	-3.4025 ppb	10:14:28
1	Cd 226.502†	3612.6	4402.8	6.4501 ug/L	6.4501 ppb	10:14:48
1	Co 228.616†	165.5	262.3	-0.6478 ug/L	-0.6478 ppb	10:14:48
1	Cr 267.716†	92.7	13.7	3.1507 ug/L	3.1507 ppb	10:14:48
1	Cu 324.752†	3140.0	-5480.4	0.1227 ug/L	0.1227 ppb	10:14:28
1	Mn 257.610†	-25492.5	-30103.8	-10.672 ug/L	-10.672 ppb	10:14:28
1	Mo 202.031†	-455.7	-552.9	2.2395 ug/L	2.2395 ppb	10:14:48
1	Ni 231.604†	304.5	260.1	6.5328 ug/L	6.5328 ppb	10:14:48
1	P 214.914†	575.8	430.2	23.277 ug/L	23.277 ppb	10:14:48
1	Pb 220.353†	-490.6	-509.5	17.099 ug/L	17.099 ppb	10:14:48
1	S 181.975 Axial†	113.6	54.9	-24.396 ug/L	-24.396 ppb	10:14:48
1	Sb 206.836†	52.8	31.0	5.1806 ug/L	5.1806 ppb	10:14:48
1	Se 196.026†	-2319.5	-2676.6	-53.978 ug/L	-53.978 ppb	10:14:48
1	Si 251.611†	-336.8	-887.2	-25.823 ug/L	-25.823 ppb	10:14:48
1	Sn 189.927†	-386.1	-448.2	-1.0007 ug/L	-1.0007 ppb	10:14:48
1	Ti 334.940†	-16109.5	-17807.4	-8.8031 ug/L	-8.8031 ppb	10:14:28
1	Tl 190.801†	-115.1	-96.8	-31.432 ug/L	-31.432 ppb	10:14:48
1	U 409.014†	484755.7	564189.4	14057 ug/L	14057 ppb	10:14:28
1	V 292.402†	2453.6	4243.8	-1.6032 ug/L	-1.6032 ppb	10:14:28
1	Zn 213.857†	6099.6	6352.3	16.434 ug/L	16.434 ppb	10:14:48
1	SiO2†	-208.5	-755.6	-46.762 ug/L	-46.762 ppb	10:15:45
2	Sc Radial	4757.3	4757.3	89.1 %		10:14:10
2	Y RADIAL	5166.2	5166.2	89.74 %		10:14:10
2	Al 396.153Radial†	608754.8	683325.3	517640 ug/L	517640 ppb	10:14:05
2	Ca 317.933Radial†	262404.0	294531.4	473400 ug/L	473400 ppb	10:14:05
2	Fe 238.204 Radial†	41753.4	46861.5	437940 ug/L	437940 ppb	10:14:10
2	K 766.490 Radial†	3251.6	1146.4	-143.92 ug/L	-143.92 ppb	10:14:10
2	Mg 279.077 IEC†	12381.3	13897.2	495250 ug/L	495250 ppb	10:14:10
2	Na 589.592 Radial†	1498032.8	1682107.0	500040 ug/L	500040 ppb	10:14:05
2	Sr 421.552†	765.0	851.6	1.9307 ug/L	1.9307 ppb	10:14:10
2	Sc 361.383	772649.8	772649.8	86.053 %		10:14:54
2	Y 371.029	668937.3	668937.3	81.268 %		10:14:54
2	Ag 328.068†	-23940.6	-28116.7	6.6625 ug/L	6.6625 ppb	10:14:54
2	As 188.979†	-181.4	-180.6	28.539 ug/L	28.539 ppb	10:15:14
2	B 249.677†	1756.8	2281.9	-21.093 ug/L	-21.093 ppb	10:14:54
2	Ba 233.527†	-1423.6	-1651.3	0.3679 ug/L	0.3679 ppb	10:15:14
2	Be 313.107†	-12402.2	-9311.8	-3.3458 ug/L	-3.3458 ppb	10:14:54
2	Cd 226.502†	3621.5	4414.6	6.8246 ug/L	6.8246 ppb	10:15:14
2	Co 228.616†	171.7	269.4	-0.4550 ug/L	-0.4550 ppb	10:15:14
2	Cr 267.716†	104.2	27.1	3.2564 ug/L	3.2564 ppb	10:15:14
2	Cu 324.752†	2954.9	-5694.3	-0.5947 ug/L	-0.5947 ppb	10:14:54
2	Mn 257.610†	-25727.5	-30387.0	-11.083 ug/L	-11.083 ppb	10:14:54
2	Mo 202.031†	-446.0	-541.9	2.6479 ug/L	2.6479 ppb	10:15:14
2	Ni 231.604†	321.0	279.4	7.0176 ug/L	7.0176 ppb	10:15:14

2	P 214.914†	595.7	453.5	34.464 ug/L	34.464 ppb	10:15:14
2	Pb 220.353†	-497.5	-517.8	12.602 ug/L	12.602 ppb	10:15:14
2	S 181.975 Axial†	94.2	32.5	-52.286 ug/L	-52.286 ppb	10:15:14
2	Sb 206.836†	46.6	23.9	3.1939 ug/L	3.1939 ppb	10:15:14
2	Se 196.026†	-2317.2	-2674.8	-61.842 ug/L	-61.842 ppb	10:15:14
2	Si 251.611†	-346.3	-898.4	-26.165 ug/L	-26.165 ppb	10:15:14
2	Sn 189.927†	-382.4	-444.0	-2.3452 ug/L	-2.3452 ppb	10:15:14
2	Ti 334.940†	-15941.1	-17618.1	-10.044 ug/L	-10.044 ppb	10:14:54
2	Tl 190.801†	-105.9	-86.2	-28.039 ug/L	-28.039 ppb	10:15:14
2	U 409.014†	484051.8	563564.9	14042 ug/L	14042 ppb	10:14:54
2	V 292.402†	2511.9	4312.6	-0.9154 ug/L	-0.9154 ppb	10:14:54
2	Zn 213.857†	6095.9	6350.4	16.645 ug/L	16.645 ppb	10:15:14
2	SiO2†	-313.0	-877.2	-54.468 ug/L	-54.468 ppb	10:15:50
3	Sc Radial	4765.7	4765.7	89.2 %		10:14:21
3	Y RADIAL	5129.6	5129.6	89.10 %		10:14:21
3	Al 396.153Radial†	612444.6	686252.5	519860 ug/L	519860 ppb	10:14:16
3	Ca 317.933Radial†	263051.2	294736.1	473730 ug/L	473730 ppb	10:14:16
3	Fe 238.204 Radial†	41494.8	46489.0	434460 ug/L	434460 ppb	10:14:21
3	K 766.490 Radial†	3310.7	1206.2	-133.73 ug/L	-133.73 ppb	10:14:21
3	Mg 279.077 IEC†	12335.2	13820.9	492530 ug/L	492530 ppb	10:14:21
3	Na 589.592 Radial†	1505450.7	1687448.1	501630 ug/L	501630 ppb	10:14:16
3	Sr 421.552†	730.3	811.3	1.6691 ug/L	1.6691 ppb	10:14:21
3	Sc 361.383	773612.1	773612.1	86.161 %		10:15:19
3	Y 371.029	669300.1	669300.1	81.312 %		10:15:19
3	Ag 328.068†	-24009.9	-28162.5	5.3114 ug/L	5.3114 ppb	10:15:19
3	As 188.979†	-190.3	-190.7	23.617 ug/L	23.617 ppb	10:15:40
3	B 249.677†	1765.8	2289.9	-20.354 ug/L	-20.354 ppb	10:15:19
3	Ba 233.527†	-1493.6	-1730.4	-0.3626 ug/L	-0.3626 ppb	10:15:40
3	Be 313.107†	-12392.9	-9283.0	-3.3371 ug/L	-3.3371 ppb	10:15:19
3	Cd 226.502†	3643.5	4434.9	7.4175 ug/L	7.4175 ppb	10:15:40
3	Co 228.616†	184.0	283.5	-0.0993 ug/L	-0.0993 ppb	10:15:40
3	Cr 267.716†	92.9	13.9	3.0318 ug/L	3.0318 ppb	10:15:40
3	Cu 324.752†	3245.7	-5361.0	0.1381 ug/L	0.1381 ppb	10:15:19
3	Mn 257.610†	-25660.9	-30272.6	-11.187 ug/L	-11.187 ppb	10:15:19
3	Mo 202.031†	-464.9	-563.2	0.9239 ug/L	0.9239 ppb	10:15:40
3	Ni 231.604†	300.7	255.3	6.4121 ug/L	6.4121 ppb	10:15:40
3	P 214.914†	581.4	436.0	27.787 ug/L	27.787 ppb	10:15:40
3	Pb 220.353†	-459.5	-472.9	19.046 ug/L	19.046 ppb	10:15:40
3	S 181.975 Axial†	93.4	31.4	-54.211 ug/L	-54.211 ppb	10:15:40
3	Sb 206.836†	64.5	44.5	9.9375 ug/L	9.9375 ppb	10:15:40
3	Se 196.026†	-2314.0	-2667.7	-69.116 ug/L	-69.116 ppb	10:15:40
3	Si 251.611†	-397.8	-957.7	-27.902 ug/L	-27.902 ppb	10:15:40
3	Sn 189.927†	-381.1	-442.0	-1.9728 ug/L	-1.9728 ppb	10:15:40
3	Ti 334.940†	-16327.4	-18043.5	-10.440 ug/L	-10.440 ppb	10:15:19
3	Tl 190.801†	-112.0	-93.0	-30.230 ug/L	-30.230 ppb	10:15:40
3	U 409.014†	485762.5	564850.6	14075 ug/L	14075 ppb	10:15:19
3	V 292.402†	2455.5	4243.5	-0.8485 ug/L	-0.8485 ppb	10:15:19
3	Zn 213.857†	6174.3	6432.6	17.751 ug/L	17.751 ppb	10:15:40
3	SiO2†	-468.6	-1057.2	-65.818 ug/L	-65.818 ppb	10:15:55

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	773059.0	86.099 %		0.0554			0.06%
Sc Radial	4722.9	88.4 %		1.25			1.42%
Y 371.029	668703.9	81.240 %		0.0900			0.11%
Y RADIAL	5106.8	88.70 %		1.275			1.44%
Ag 328.068†	-28234.9	5.9733 ug/L		0.67597	5.9733 ppb	0.67597	11.32%
Al 396.153Radial†	691365.7	523730 ug/L		8700.2	523730 ppb	8700.2	1.66%
QC value within limits for Al 396.153Radial Recovery = 104.75%							
As 188.979†	-181.4	28.143 ug/L		4.3405	28.143 ppb	4.3405	15.42%
B 249.677†	2338.1	-19.801 ug/L		1.6392	-19.801 ppb	1.6392	8.28%
Ba 233.527†	-1682.2	0.1122 ug/L		0.41156	0.1122 ppb	0.41156	366.91%
Be 313.107†	-9355.1	-3.3618 ug/L		0.03549	-3.3618 ppb	0.03549	1.06%
Ca 317.933Radial†	297414.7	478030 ug/L		7743.7	478030 ppb	7743.7	1.62%
QC value within limits for Ca 317.933Radial Recovery = 95.61%							
Cd 226.502†	4417.5	6.8974 ug/L		0.48776	6.8974 ppb	0.48776	7.07%
Co 228.616†	271.7	-0.4007 ug/L		0.27821	-0.4007 ppb	0.27821	69.43%
Cr 267.716†	18.2	3.1463 ug/L		0.11239	3.1463 ppb	0.11239	3.57%
Cu 324.752†	-5511.9	-0.1113 ug/L		0.41869	-0.1113 ppb	0.41869	376.20%

Fe 238.204 Radial†	46822.3	437580 ug/L	2948.9	437580 ppb	2948.9	0.67%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 87.52%						
K 766.490 Radial†	1263.5	-126.28 ug/L	22.324	-126.28 ppb	22.324	17.68%
Mg 279.077 IEC†	13904.3	495500 ug/L	3103.9	495500 ppb	3103.9	0.63%
QC value within limits for Mg 279.077 IEC Recovery = 99.10%						
Mn 257.610†	-30254.5	-10.981 ug/L	0.2722	-10.981 ppb	0.2722	2.48%
Mo 202.031†	-552.7	1.9371 ug/L	0.90088	1.9371 ppb	0.90088	46.51%
Na 589.592 Radial†	1701083.5	505680 ug/L	8433.2	505680 ppb	8433.2	1.67%
QC value within limits for Na 589.592 Radial Recovery = 101.14%						
Ni 231.604†	264.9	6.6542 ug/L	0.32049	6.6542 ppb	0.32049	4.82%
P 214.914†	439.9	28.509 ug/L	5.6284	28.509 ppb	5.6284	19.74%
Pb 220.353†	-500.1	16.249 ug/L	3.3049	16.249 ppb	3.3049	20.34%
S 181.975 Axial†	39.6	-43.631 ug/L	16.6859	-43.631 ppb	16.6859	38.24%
Sb 206.836†	33.2	6.1040 ug/L	3.46534	6.1040 ppb	3.46534	56.77%
Se 196.026†	-2673.0	-61.645 ug/L	7.5706	-61.645 ppb	7.5706	12.28%
Si 251.611†	-914.4	-26.630 ug/L	1.1151	-26.630 ppb	1.1151	4.19%
Sn 189.927†	-444.7	-1.7729 ug/L	0.69417	-1.7729 ppb	0.69417	39.15%
Sr 421.552†	838.4	1.8114 ug/L	0.13233	1.8114 ppb	0.13233	7.31%
Ti 334.940†	-17823.0	-9.7626 ug/L	0.85426	-9.7626 ppb	0.85426	8.75%
Tl 190.801†	-92.0	-29.900 ug/L	1.7201	-29.900 ppb	1.7201	5.75%
U 409.014†	564201.6	14058 ug/L	16.3	14058 ppb	16.3	0.12%
QC value within limits for U 409.014 Recovery = 93.72%						
V 292.402†	4266.6	-1.1224 ug/L	0.41775	-1.1224 ppb	0.41775	37.22%
Zn 213.857†	6378.5	16.944 ug/L	0.7074	16.944 ppb	0.7074	4.17%
SiO2†	-896.7	-55.683 ug/L	9.5855	-55.683 ppb	9.5855	17.21%

QC Failed. Continue with analysis.

Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 16

Date Collected: 1/26/2010 10:18:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5207.0	5207.0	97.5 %		10:20:03
1	Y RADIAL	5586.5	5586.5	97.03 %		10:20:03
1	Al 396.153Radial†	592.5	598.5	29.601 ug/L	29.601 ppb	10:20:03
1	Ca 317.933Radial†	32.1	12.7	20.420 ug/L	20.420 ppb	10:20:23
1	Fe 238.204 Radial†	-19.6	-27.3	7.5818 ug/L	7.5818 ppb	10:20:23
1	K 766.490 Radial†	1648379.4	1687992.8	308350 ug/L	308350 ppb	10:19:58
1	Mg 279.077 IEC†	-7.3	-8.5	-211.18 ug/L	-211.18 ppb	10:20:23
1	Na 589.592 Radial†	-277.7	262.9	78.147 ug/L	78.147 ppb	10:20:03
1	Sr 421.552†	1549691.8	1589280.1	10200 ug/L	10200 ppb	10:19:58
1	Sc 361.383	874848.0	874848.0	97.436 %		10:21:40
1	Y 371.029	758195.9	758195.9	92.112 %		10:21:40
1	Ag 328.068†	-7176.3	-7661.2	6.4330 ug/L	6.4330 ppb	10:21:46
1	As 188.979†	20253.0	20816.2	8579.6 ug/L	8579.6 ppb	10:21:46
1	B 249.677†	211582.3	217391.3	4742.5 ug/L	4742.5 ppb	10:21:40
1	Ba 233.527†	1688325.3	1732763.2	13679 ug/L	13679 ppb	10:21:40
1	Be 313.107†	7745227.2	7954173.5	2828.1 ug/L	2828.1 ppb	10:21:34
1	Cd 226.502†	807433.6	828890.6	9264.6 ug/L	9264.6 ppb	10:21:40
1	Co 228.616†	389631.2	399955.8	8764.4 ug/L	8764.4 ppb	10:21:46
1	Cr 267.716†	2063525.6	2117741.4	22971 ug/L	22971 ppb	10:21:40
1	Cu 324.752†	6900835.9	7073330.3	19842 ug/L	19842 ppb	10:21:34
1	Mn 257.610†	8084783.9	8297076.6	9302.4 ug/L	9302.4 ppb	10:21:34
1	Mo 202.031†	124785.3	128045.9	8738.9 ug/L	8738.9 ppb	10:21:46
1	Ni 231.604†	337445.5	346233.0	8696.1 ug/L	8696.1 ppb	10:21:46
1	P 214.914†	27588.6	28075.9	11982 ug/L	11982 ppb	10:21:46
1	Pb 220.353†	170940.1	175499.4	22039 ug/L	22039 ppb	10:21:46
1	S 181.975 Axial†	32738.4	33523.0	46155 ug/L	46155 ppb	10:21:46
1	Sb 206.836†	27325.3	28014.2	9705.7 ug/L	9705.7 ppb	10:21:46
1	Se 196.026†	14817.7	15225.7	8808.2 ug/L	8808.2 ppb	10:21:46
1	Si 251.611†	1473739.1	1512030.3	44694 ug/L	44694 ppb	10:21:40
1	Sn 189.927†	50819.6	52157.4	9591.0 ug/L	9591.0 ppb	10:21:46
1	Ti 334.940†	6230699.3	6395590.9	9743.1 ug/L	9743.1 ppb	10:21:34
1	Tl 190.801†	26856.3	27600.0	8897.4 ug/L	8897.4 ppb	10:21:46
1	U 409.014†	77.9	1142.8	-22.771 ug/L	-22.771 ppb	10:21:46
1	V 292.402†	1490666.3	1531292.6	9627.6 ug/L	9627.6 ppb	10:21:40
1	Zn 213.857†	1401987.5	1438152.9	13313 ug/L	13313 ppb	10:21:40
1	SiO2†	1531352.3	1571142.4	99128 ug/L	99128 ppb	10:22:33
2	Sc Radial	5189.5	5189.5	97.2 %		10:20:33
2	Y RADIAL	5560.9	5560.9	96.59 %		10:20:33
2	Al 396.153Radial†	604.8	613.2	1.4686 ug/L	1.4686 ppb	10:20:33
2	Ca 317.933Radial†	27.9	8.5	13.669 ug/L	13.669 ppb	10:20:53
2	Fe 238.204 Radial†	-20.9	-28.7	19.431 ug/L	19.431 ppb	10:20:53
2	K 766.490 Radial†	1622973.2	1667544.4	304620 ug/L	304620 ppb	10:20:28
2	Mg 279.077 IEC†	-5.4	-6.5	-132.53 ug/L	-132.53 ppb	10:20:53
2	Na 589.592 Radial†	-304.9	233.9	69.534 ug/L	69.534 ppb	10:20:33
2	Sr 421.552†	1520045.7	1564127.9	10038 ug/L	10038 ppb	10:20:28
2	Sc 361.383	854709.8	854709.8	95.193 %		10:22:00
2	Y 371.029	740540.6	740540.6	89.967 %		10:22:00
2	Ag 328.068†	-7740.3	-8427.2	4.6708 ug/L	4.6708 ppb	10:22:05
2	As 188.979†	21891.8	23027.5	9483.2 ug/L	9483.2 ppb	10:22:05
2	B 249.677†	214363.9	225429.8	4916.5 ug/L	4916.5 ppb	10:22:00
2	Ba 233.527†	1710841.0	1797242.5	14188 ug/L	14188 ppb	10:22:00
2	Be 313.107†	7647408.3	8038706.8	2858.1 ug/L	2858.1 ppb	10:21:54
2	Cd 226.502†	818865.2	860424.4	9617.3 ug/L	9617.3 ppb	10:22:00
2	Co 228.616†	416796.7	437915.1	9598.0 ug/L	9598.0 ppb	10:22:05
2	Cr 267.716†	2091850.6	2197396.2	23835 ug/L	23835 ppb	10:22:00
2	Cu 324.752†	6819344.2	7154596.6	20070 ug/L	20070 ppb	10:21:54
2	Mn 257.610†	7988964.5	8391921.5	9408.8 ug/L	9408.8 ppb	10:21:54
2	Mo 202.031†	133205.7	139909.0	9548.5 ug/L	9548.5 ppb	10:22:05
2	Ni 231.604†	360437.4	378546.0	9507.7 ug/L	9507.7 ppb	10:22:05

2	P 214.914†	29899.2	31170.4	13690 ug/L	13690 ppb	10:22:05
2	Pb 220.353†	182634.9	191918.4	24102 ug/L	24102 ppb	10:22:05
2	S 181.975 Axial†	35539.6	37257.4	51297 ug/L	51297 ppb	10:22:05
2	Sb 206.836†	29527.6	30988.5	10733 ug/L	10733 ppb	10:22:05
2	Se 196.026†	16270.3	17109.9	9897.5 ug/L	9897.5 ppb	10:22:05
2	Si 251.611†	1493583.0	1568513.8	46357 ug/L	46357 ppb	10:22:00
2	Sn 189.927†	54371.0	57117.1	10503 ug/L	10503 ppb	10:22:05
2	Ti 334.940†	6156000.6	6467788.3	9852.9 ug/L	9852.9 ppb	10:21:54
2	Tl 190.801†	28735.4	30223.5	9733.7 ug/L	9733.7 ppb	10:22:05
2	U 409.014†	155.9	1226.7	-22.606 ug/L	-22.606 ppb	10:22:05
2	V 292.402†	1510862.6	1588555.5	9994.7 ug/L	9994.7 ppb	10:22:00
2	Zn 213.857†	1419289.7	1490231.1	13793 ug/L	13793 ppb	10:22:00
2	Sio2†	1541505.3	1618838.7	102120 ug/L	102120 ppb	10:22:40
3	Sc Radial	5368.9	5368.9	101 %		10:21:04
3	Y RADIAL	5740.0	5740.0	99.70 %		10:21:04
3	Al 396.153Radial†	601.9	589.5	-33.075 ug/L	-33.075 ppb	10:21:04
3	Ca 317.933Radial†	27.9	7.5	12.128 ug/L	12.128 ppb	10:21:24
3	Fe 238.204 Radial†	-23.8	-30.8	9.1186 ug/L	9.1186 ppb	10:21:24
3	K 766.490 Radial†	1640207.1	1628890.9	297560 ug/L	297560 ppb	10:20:59
3	Mg 279.077 IEC†	-5.2	-6.2	-116.63 ug/L	-116.63 ppb	10:21:24
3	Na 589.592 Radial†	-270.1	279.0	82.934 ug/L	82.934 ppb	10:21:04
3	Sr 421.552†	1540648.5	1532363.6	9834.2 ug/L	9834.2 ppb	10:20:59
3	Sc 361.383	846991.1	846991.1	94.333 %		10:22:20
3	Y 371.029	732830.7	732830.7	89.031 %		10:22:20
3	Ag 328.068†	-7897.1	-8667.6	4.1798 ug/L	4.1798 ppb	10:22:25
3	As 188.979†	22637.3	24027.3	9892.5 ug/L	9892.5 ppb	10:22:25
3	B 249.677†	215594.9	228786.9	4989.1 ug/L	4989.1 ppb	10:22:20
3	Ba 233.527†	1718251.9	1821476.9	14379 ug/L	14379 ppb	10:22:20
3	Be 313.107†	7668912.1	8134713.2	2892.3 ug/L	2892.3 ppb	10:22:13
3	Cd 226.502†	823505.8	873183.1	9760.1 ug/L	9760.1 ppb	10:22:20
3	Co 228.616†	427725.6	453490.7	9940.0 ug/L	9940.0 ppb	10:22:25
3	Cr 267.716†	2101234.2	2227369.4	24160 ug/L	24160 ppb	10:22:20
3	Cu 324.752†	6852725.1	7255266.3	20353 ug/L	20353 ppb	10:22:13
3	Mn 257.610†	8015481.1	8496511.6	9526.0 ug/L	9526.0 ppb	10:22:13
3	Mo 202.031†	136735.2	144925.8	9890.9 ug/L	9890.9 ppb	10:22:25
3	Ni 231.604†	369684.2	391798.9	9840.5 ug/L	9840.5 ppb	10:22:25
3	P 214.914†	30656.1	32259.0	14251 ug/L	14251 ppb	10:22:25
3	Pb 220.353†	187366.9	198683.1	24951 ug/L	24951 ppb	10:22:25
3	S 181.975 Axial†	36509.4	38625.7	53181 ug/L	53181 ppb	10:22:25
3	Sb 206.836†	30318.6	32109.7	11121 ug/L	11121 ppb	10:22:25
3	Se 196.026†	16784.5	17810.8	10303 ug/L	10303 ppb	10:22:25
3	Si 251.611†	1501806.8	1591530.1	47035 ug/L	47035 ppb	10:22:20
3	Sn 189.927†	55742.7	59091.7	10866 ug/L	10866 ppb	10:22:25
3	Ti 334.940†	6175380.2	6547265.3	9974.0 ug/L	9974.0 ppb	10:22:13
3	Tl 190.801†	29521.0	31331.3	10088 ug/L	10088 ppb	10:22:25
3	U 409.014†	146.7	1218.4	-23.537 ug/L	-23.537 ppb	10:22:25
3	V 292.402†	1516669.0	1609174.6	10128 ug/L	10128 ppb	10:22:20
3	Zn 213.857†	1427141.7	1512142.1	13995 ug/L	13995 ppb	10:22:20
3	Sio2†	1527675.5	1618935.4	102120 ug/L	102120 ppb	10:22:47

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	858849.6	95.654 %	1.6018			1.67%
Sc Radial	5255.2	98.4 %	1.85			1.88%
Y 371.029	743855.7	90.370 %	1.5798			1.75%
Y RADIAL	5629.2	97.78 %	1.683			1.72%
Ag 328.068†	-8252.0	5.0945 ug/L	1.18484	5.0945 ppb	1.18484	23.26%
Al 396.153Radial†	600.4	-0.6687 ug/L	31.39251	-0.6687 ppb	31.39251	>999.9%
As 188.979†	22623.7	9318.4 ug/L	671.81	9318.4 ppb	671.81	7.21%
QC value within limits for As 188.979 Recovery = 93.18%						
B 249.677†	223869.3	4882.7 ug/L	126.70	4882.7 ppb	126.70	2.59%
QC value within limits for B 249.677 Recovery = 97.65%						
Ba 233.527†	1783827.5	14082 ug/L	362.0	14082 ppb	362.0	2.57%
QC value within limits for Ba 233.527 Recovery = 93.88%						
Be 313.107†	8042531.1	2859.5 ug/L	32.13	2859.5 ppb	32.13	1.12%
QC value within limits for Be 313.107 Recovery = 95.32%						
Ca 317.933Radial†	9.6	15.406 ug/L	4.4101	15.406 ppb	4.4101	28.63%
Cd 226.502†	854166.0	9547.3 ug/L	255.06	9547.3 ppb	255.06	2.67%
QC value within limits for Cd 226.502 Recovery = 95.47%						

Co 228.616†	430453.9	9434.1 ug/L	604.71	9434.1 ppb	604.71	6.41%
QC value within limits for Co 228.616 Recovery = 94.34%						
Cr 267.716†	2180835.7	23656 ug/L	614.6	23656 ppb	614.6	2.60%
QC value within limits for Cr 267.716 Recovery = 94.62%						
Cu 324.752†	7161064.4	20089 ug/L	255.7	20089 ppb	255.7	1.27%
QC value within limits for Cu 324.752 Recovery = 100.44%						
Fe 238.204 Radial†	-28.9	12.044 ug/L	6.4436	12.044 ppb	6.4436	53.50%
K 766.490 Radial†	1661476.0	303510 ug/L	5483.9	303510 ppb	5483.9	1.81%
QC value within limits for K 766.490 Radial Recovery = 101.17%						
Mg 279.077 IEC†	-7.1	-153.44 ug/L	50.626	-153.44 ppb	50.626	32.99%
Mn 257.610†	8395169.9	9412.4 ug/L	111.84	9412.4 ppb	111.84	1.19%
QC value within limits for Mn 257.610 Recovery = 94.12%						
Mo 202.031†	137626.9	9392.7 ug/L	591.59	9392.7 ppb	591.59	6.30%
QC value within limits for Mo 202.031 Recovery = 93.93%						
Na 589.592 Radial†	258.6	76.872 ug/L	6.7903	76.872 ppb	6.7903	8.83%
Ni 231.604†	372192.6	9348.1 ug/L	588.67	9348.1 ppb	588.67	6.30%
QC value within limits for Ni 231.604 Recovery = 93.48%						
P 214.914†	30501.8	13308 ug/L	1182.1	13308 ppb	1182.1	8.88%
QC value less than the lower limit for P 214.914 Recovery = 88.72%						
Pb 220.353†	188700.3	23697 ug/L	1497.8	23697 ppb	1497.8	6.32%
QC value within limits for Pb 220.353 Recovery = 94.79%						
S 181.975 Axial†	36468.7	50211 ug/L	3636.5	50211 ppb	3636.5	7.24%
QC value within limits for S 181.975 Axial Recovery = 100.42%						
Sb 206.836†	30370.8	10520 ug/L	731.5	10520 ppb	731.5	6.95%
QC value within limits for Sb 206.836 Recovery = 105.20%						
Se 196.026†	16715.4	9669.5 ug/L	772.90	9669.5 ppb	772.90	7.99%
QC value within limits for Se 196.026 Recovery = 96.69%						
Si 251.611†	1557358.1	46029 ug/L	1204.8	46029 ppb	1204.8	2.62%
QC value within limits for Si 251.611 Recovery = 92.06%						
Sn 189.927†	56122.1	10320 ug/L	657.0	10320 ppb	657.0	6.37%
QC value within limits for Sn 189.927 Recovery = 103.20%						
Sr 421.552†	1561923.9	10024 ug/L	183.0	10024 ppb	183.0	1.83%
QC value within limits for Sr 421.552 Recovery = 100.24%						
Ti 334.940†	6470214.8	9856.7 ug/L	115.46	9856.7 ppb	115.46	1.17%
QC value within limits for Ti 334.940 Recovery = 98.57%						
Tl 190.801†	29718.3	9573.0 ug/L	611.29	9573.0 ppb	611.29	6.39%
QC value within limits for Tl 190.801 Recovery = 95.73%						
U 409.014†	1196.0	-22.971 ug/L	0.4970	-22.971 ppb	0.4970	2.16%
V 292.402†	1576340.9	9916.6 ug/L	258.96	9916.6 ppb	258.96	2.61%
QC value within limits for V 292.402 Recovery = 99.17%						
Zn 213.857†	1480175.4	13700 ug/L	349.9	13700 ppb	349.9	2.55%
QC value within limits for Zn 213.857 Recovery = 91.34%						
SiO2†	1602972.2	101120 ug/L	1727.9	101120 ppb	1727.9	1.71%
QC value within limits for SiO2 Recovery = 94.51%						
QC Failed. Continue with analysis.						

=====

Analysis Begun

Start Time: 1/26/2010 10:38:56

Plasma On Time: 00:00:00

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\012610.sif

Batch ID:

Results Data Set: 012610

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

=====

Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 1/26/2010 09:10:21

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: 7

Sample ID: CCV

Date Collected: 1/26/2010 10:38:58

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

=====

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5709.5	5709.5	107 %		10:40:50
1	Y RADIAL	6139.2	6139.2	106.6 %		10:40:50
1	Al 396.153Radial†	6542.6	6110.2	4605.4 ug/L	4605.4 ppb	10:40:50

1	Ca 317.933Radial†	3195.2	2968.2	4770.8 ug/L	4770.8 ppb	10:41:10
1	Fe 238.204 Radial†	564.2	520.5	4879.5 ug/L	4879.5 ppb	10:41:10
1	K 766.490 Radial†	30504.7	26027.6	4748.8 ug/L	4748.8 ppb	10:40:50
1	Mg 279.077 IEC†	148.1	137.5	4905.2 ug/L	4905.2 ppb	10:41:10
1	Na 589.592 Radial†	33087.5	31494.4	9362.4 ug/L	9362.4 ppb	10:40:50
1	Sr 421.552†	79318.2	74179.5	476.03 ug/L	476.03 ppb	10:40:50
1	Sc 361.383	938569.5	938569.5	104.53 %		10:42:08
1	Y 371.029	823149.9	823149.9	100.00 %		10:42:08
1	Ag 328.068†	121397.9	115838.0	486.48 ug/L	486.48 ppb	10:42:13
1	As 188.979†	1221.4	1198.6	494.52 ug/L	494.52 ppb	10:42:33
1	B 249.677†	23250.5	22482.7	490.85 ug/L	490.85 ppb	10:42:13
1	Ba 233.527†	64251.2	61468.3	485.72 ug/L	485.72 ppb	10:42:13
1	Be 313.107†	1428011.9	1371193.7	484.80 ug/L	484.80 ppb	10:42:08
1	Cd 226.502†	45340.0	43580.3	486.71 ug/L	486.71 ppb	10:42:13
1	Co 228.616†	23578.3	22625.9	496.07 ug/L	496.07 ppb	10:42:13
1	Cr 267.716†	46813.4	44689.6	485.05 ug/L	485.05 ppb	10:42:13
1	Cu 324.752†	188322.0	171028.4	479.76 ug/L	479.76 ppb	10:42:13
1	Mn 257.610†	449448.4	429470.4	481.79 ug/L	481.79 ppb	10:42:08
1	Mo 202.031†	7360.0	7017.3	479.35 ug/L	479.35 ppb	10:42:33
1	Ni 231.604†	20329.8	19354.6	486.11 ug/L	486.11 ppb	10:42:13
1	P 214.914†	4663.6	4222.6	2287.7 ug/L	2287.7 ppb	10:42:33
1	Pb 220.353†	3960.9	3849.5	484.72 ug/L	484.72 ppb	10:42:33
1	S 181.975 Axial†	789.3	678.1	932.77 ug/L	932.77 ppb	10:42:33
1	Sb 206.836†	1539.2	1442.2	500.17 ug/L	500.17 ppb	10:42:33
1	Se 196.026†	847.4	828.6	495.79 ug/L	495.79 ppb	10:42:33
1	Si 251.611†	86090.8	81861.9	2419.7 ug/L	2419.7 ppb	10:42:13
1	Sn 189.927†	2747.7	2628.9	484.23 ug/L	484.23 ppb	10:42:33
1	Ti 334.940†	329323.4	315950.5	481.58 ug/L	481.58 ppb	10:42:13
1	Tl 190.801†	1504.0	1475.7	475.23 ug/L	475.23 ppb	10:42:33
1	U 409.014†	19231.5	19460.5	484.97 ug/L	484.97 ppb	10:42:13
1	V 292.402†	79895.1	77824.4	490.37 ug/L	490.37 ppb	10:42:13
1	Zn 213.857†	55169.2	52043.7	480.54 ug/L	480.54 ppb	10:42:13
1	SiO2†	85634.8	81408.2	5135.6 ug/L	5135.6 ppb	10:43:40
2	Sc Radial	5189.1	5189.1	97.2 %		10:41:15
2	Y RADIAL	5588.6	5588.6	97.07 %		10:41:15
2	Al 396.153Radial†	6568.7	6750.6	5090.4 ug/L	5090.4 ppb	10:41:15
2	Ca 317.933Radial†	3218.9	3292.3	5291.7 ug/L	5291.7 ppb	10:41:35
2	Fe 238.204 Radial†	568.5	577.9	5415.3 ug/L	5415.3 ppb	10:41:35
2	K 766.490 Radial†	30413.4	28794.7	5253.8 ug/L	5253.8 ppb	10:41:15
2	Mg 279.077 IEC†	152.9	156.4	5578.1 ug/L	5578.1 ppb	10:41:35
2	Na 589.592 Radial†	33068.7	34578.4	10279 ug/L	10279 ppb	10:41:15
2	Sr 421.552†	79365.7	81667.5	524.08 ug/L	524.08 ppb	10:41:15
2	Sc 361.383	933250.2	933250.2	103.94 %		10:42:39
2	Y 371.029	817518.6	817518.6	99.319 %		10:42:39
2	Ag 328.068†	119632.8	114801.8	482.31 ug/L	482.31 ppb	10:42:44
2	As 188.979†	1223.4	1207.2	498.11 ug/L	498.11 ppb	10:43:04
2	B 249.677†	22983.6	22352.7	487.93 ug/L	487.93 ppb	10:42:44
2	Ba 233.527†	63558.5	61152.2	483.24 ug/L	483.24 ppb	10:42:44
2	Be 313.107†	1419124.6	1370429.5	484.52 ug/L	484.52 ppb	10:42:39
2	Cd 226.502†	44945.0	43447.4	485.17 ug/L	485.17 ppb	10:42:44
2	Co 228.616†	23288.3	22475.5	492.78 ug/L	492.78 ppb	10:42:44
2	Cr 267.716†	46456.2	44601.2	484.10 ug/L	484.10 ppb	10:42:44
2	Cu 324.752†	184874.1	168738.0	473.37 ug/L	473.37 ppb	10:42:44
2	Mn 257.610†	447911.4	430442.3	482.91 ug/L	482.91 ppb	10:42:39
2	Mo 202.031†	7368.1	7065.2	482.67 ug/L	482.67 ppb	10:43:04
2	Ni 231.604†	20172.1	19313.8	485.09 ug/L	485.09 ppb	10:42:44
2	P 214.914†	4660.3	4244.9	2301.3 ug/L	2301.3 ppb	10:43:04
2	Pb 220.353†	3938.7	3849.8	484.82 ug/L	484.82 ppb	10:43:04
2	S 181.975 Axial†	792.2	685.2	942.39 ug/L	942.39 ppb	10:43:04
2	Sb 206.836†	1553.4	1464.2	507.62 ug/L	507.62 ppb	10:43:04
2	Se 196.026†	860.3	845.6	507.41 ug/L	507.41 ppb	10:43:04
2	Si 251.611†	85133.5	81410.4	2406.2 ug/L	2406.2 ppb	10:42:44
2	Sn 189.927†	2734.9	2631.6	484.81 ug/L	484.81 ppb	10:43:04
2	Ti 334.940†	324380.2	312990.3	477.09 ug/L	477.09 ppb	10:42:44
2	Tl 190.801†	1521.9	1501.1	483.36 ug/L	483.36 ppb	10:43:04
2	U 409.014†	18714.7	19068.1	475.10 ug/L	475.10 ppb	10:42:44
2	V 292.402†	78768.2	77175.9	486.31 ug/L	486.31 ppb	10:42:44
2	Zn 213.857†	54657.0	51851.7	478.72 ug/L	478.72 ppb	10:42:44
2	SiO2†	84965.4	81231.2	5124.3 ug/L	5124.3 ppb	10:43:45
3	Sc Radial	5417.9	5417.9	101 %		10:41:40
3	Y RADIAL	5821.4	5821.4	101.1 %		10:41:40

3	Al 396.153Radial†	6665.3	6560.4	4946.3 ug/L	4946.3 ppb	10:41:40
3	Ca 317.933Radial†	3192.6	3126.5	5025.2 ug/L	5025.2 ppb	10:42:01
3	Fe 238.204 Radial†	563.2	547.9	5135.6 ug/L	5135.6 ppb	10:42:01
3	K 766.490 Radial†	30739.0	27793.7	5071.2 ug/L	5071.2 ppb	10:41:40
3	Mg 279.077 IEC†	150.2	147.1	5245.0 ug/L	5245.0 ppb	10:42:01
3	Na 589.592 Radial†	33156.2	33227.3	9877.5 ug/L	9877.5 ppb	10:41:40
3	Sr 421.552†	79990.3	78833.7	505.89 ug/L	505.89 ppb	10:41:40
3	Sc 361.383	942206.6	942206.6	104.94 %		10:43:10
3	Y 371.029	824780.8	824780.8	100.20 %		10:43:10
3	Ag 328.068†	121460.3	115449.2	484.94 ug/L	484.94 ppb	10:43:15
3	As 188.979†	1234.2	1206.3	497.70 ug/L	497.70 ppb	10:43:35
3	B 249.677†	23336.6	22478.9	490.73 ug/L	490.73 ppb	10:43:15
3	Ba 233.527†	64474.0	61443.4	485.53 ug/L	485.53 ppb	10:43:15
3	Be 313.107†	1427946.0	1365857.4	482.91 ug/L	482.91 ppb	10:43:10
3	Cd 226.502†	45654.6	43712.6	488.16 ug/L	488.16 ppb	10:43:15
3	Co 228.616†	23646.2	22603.5	495.59 ug/L	495.59 ppb	10:43:15
3	Cr 267.716†	47071.4	44762.6	485.85 ug/L	485.85 ppb	10:43:15
3	Cu 324.752†	187900.9	169931.6	476.71 ug/L	476.71 ppb	10:43:15
3	Mn 257.610†	451278.4	429554.6	481.90 ug/L	481.90 ppb	10:43:10
3	Mo 202.031†	7425.7	7052.7	481.79 ug/L	481.79 ppb	10:43:35
3	Ni 231.604†	20541.6	19481.4	489.30 ug/L	489.30 ppb	10:43:15
3	P 214.914†	4698.8	4239.0	2297.5 ug/L	2297.5 ppb	10:43:35
3	Pb 220.353†	3975.4	3848.7	484.68 ug/L	484.68 ppb	10:43:35
3	S 181.975 Axial†	788.5	674.5	927.67 ug/L	927.67 ppb	10:43:35
3	Sb 206.836†	1559.8	1456.2	504.93 ug/L	504.93 ppb	10:43:35
3	Se 196.026†	852.2	830.1	497.51 ug/L	497.51 ppb	10:43:35
3	Si 251.611†	86396.5	81835.3	2418.8 ug/L	2418.8 ppb	10:43:15
3	Sn 189.927†	2768.0	2638.1	485.96 ug/L	485.96 ppb	10:43:35
3	Ti 334.940†	329592.1	314990.3	480.13 ug/L	480.13 ppb	10:43:15
3	Tl 190.801†	1537.5	1502.0	483.65 ug/L	483.65 ppb	10:43:35
3	U 409.014†	18985.1	19154.6	477.29 ug/L	477.29 ppb	10:43:15
3	V 292.402†	80086.5	77711.8	489.66 ug/L	489.66 ppb	10:43:15
3	Zn 213.857†	55335.0	51997.9	480.08 ug/L	480.08 ppb	10:43:15
3	SiO2†	85189.0	80667.2	5088.6 ug/L	5088.6 ppb	10:43:51

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	938008.8	104.47 %	0.502			0.48%
Sc Radial	5438.8	102 %	4.9			4.80%
Y 371.029	821816.4	99.841 %	0.4629			0.46%
Y RADIAL	5849.7	101.6 %	4.80			4.72%
Ag 328.068†	115363.0	484.57 ug/L	2.107	484.57 ppb	2.107	0.43%
QC value within limits for Ag 328.068 Recovery = 96.91%						
Al 396.153Radial†	6473.7	4880.7 ug/L	249.05	4880.7 ppb	249.05	5.10%
QC value within limits for Al 396.153Radial Recovery = 97.61%						
As 188.979†	1204.0	496.78 ug/L	1.963	496.78 ppb	1.963	0.40%
QC value within limits for As 188.979 Recovery = 99.36%						
B 249.677†	22438.1	489.84 ug/L	1.656	489.84 ppb	1.656	0.34%
QC value within limits for B 249.677 Recovery = 97.97%						
Ba 233.527†	61354.7	484.83 ug/L	1.383	484.83 ppb	1.383	0.29%
QC value within limits for Ba 233.527 Recovery = 96.97%						
Be 313.107†	1369160.2	484.08 ug/L	1.018	484.08 ppb	1.018	0.21%
QC value within limits for Be 313.107 Recovery = 96.82%						
Ca 317.933Radial†	3129.0	5029.2 ug/L	260.49	5029.2 ppb	260.49	5.18%
QC value within limits for Ca 317.933Radial Recovery = 100.58%						
Cd 226.502†	43580.1	486.68 ug/L	1.497	486.68 ppb	1.497	0.31%
QC value within limits for Cd 226.502 Recovery = 97.34%						
Co 228.616†	22568.3	494.81 ug/L	1.775	494.81 ppb	1.775	0.36%
QC value within limits for Co 228.616 Recovery = 98.96%						
Cr 267.716†	44684.5	485.00 ug/L	0.875	485.00 ppb	0.875	0.18%
QC value within limits for Cr 267.716 Recovery = 97.00%						
Cu 324.752†	169899.3	476.61 ug/L	3.197	476.61 ppb	3.197	0.67%
QC value within limits for Cu 324.752 Recovery = 95.32%						
Fe 238.204 Radial†	548.8	5143.4 ug/L	268.00	5143.4 ppb	268.00	5.21%
QC value within limits for Fe 238.204 Radial Recovery = 102.87%						
K 766.490 Radial†	27538.7	5024.6 ug/L	255.69	5024.6 ppb	255.69	5.09%
QC value within limits for K 766.490 Radial Recovery = 100.49%						
Mg 279.077 IEC†	147.0	5242.7 ug/L	336.44	5242.7 ppb	336.44	6.42%
QC value within limits for Mg 279.077 IEC Recovery = 104.85%						

Mn 257.610†	429822.4	482.20 ug/L	0.616	482.20 ppb	0.616	0.13%
QC value within limits for Mn 257.610 Recovery = 96.44%						
Mo 202.031†	7045.1	481.27 ug/L	1.720	481.27 ppb	1.720	0.36%
QC value within limits for Mo 202.031 Recovery = 96.25%						
Na 589.592 Radial†	33100.0	9839.7 ug/L	459.55	9839.7 ppb	459.55	4.67%
QC value within limits for Na 589.592 Radial Recovery = 98.40%						
Ni 231.604†	19383.3	486.83 ug/L	2.197	486.83 ppb	2.197	0.45%
QC value within limits for Ni 231.604 Recovery = 97.37%						
P 214.914†	4235.5	2295.5 ug/L	6.99	2295.5 ppb	6.99	0.30%
QC value within limits for P 214.914 Recovery = 91.82%						
Pb 220.353†	3849.3	484.74 ug/L	0.073	484.74 ppb	0.073	0.02%
QC value within limits for Pb 220.353 Recovery = 96.95%						
S 181.975 Axial†	679.2	934.28 ug/L	7.470	934.28 ppb	7.470	0.80%
QC value within limits for S 181.975 Axial Recovery = 93.43%						
Sb 206.836†	1454.2	504.24 ug/L	3.772	504.24 ppb	3.772	0.75%
QC value within limits for Sb 206.836 Recovery = 100.85%						
Se 196.026†	834.8	500.24 ug/L	6.269	500.24 ppb	6.269	1.25%
QC value within limits for Se 196.026 Recovery = 100.05%						
Si 251.611†	81702.6	2414.9 ug/L	7.52	2414.9 ppb	7.52	0.31%
QC value within limits for Si 251.611 Recovery = 96.60%						
Sn 189.927†	2632.9	485.00 ug/L	0.877	485.00 ppb	0.877	0.18%
QC value within limits for Sn 189.927 Recovery = 97.00%						
Sr 421.552†	78226.9	502.00 ug/L	24.262	502.00 ppb	24.262	4.83%
QC value within limits for Sr 421.552 Recovery = 100.40%						
Ti 334.940†	314643.7	479.60 ug/L	2.293	479.60 ppb	2.293	0.48%
QC value within limits for Ti 334.940 Recovery = 95.92%						
Tl 190.801†	1492.9	480.75 ug/L	4.781	480.75 ppb	4.781	0.99%
QC value within limits for Tl 190.801 Recovery = 96.15%						
U 409.014†	19227.7	479.12 ug/L	5.183	479.12 ppb	5.183	1.08%
QC value within limits for U 409.014 Recovery = 95.82%						
V 292.402†	77570.7	488.78 ug/L	2.171	488.78 ppb	2.171	0.44%
QC value within limits for V 292.402 Recovery = 97.76%						
Zn 213.857†	51964.4	479.78 ug/L	0.948	479.78 ppb	0.948	0.20%
QC value within limits for Zn 213.857 Recovery = 95.96%						
SiO2†	81102.2	5116.2 ug/L	24.50	5116.2 ppb	24.50	0.48%
QC value within limits for SiO2 Recovery = 95.67%						
All analyte(s) passed QC.						

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 1/26/2010 10:46:01

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5500.4	5500.4	103 %		10:47:53
1	Y RADIAL	5938.0	5938.0	103.1 %		10:47:53
1	Al 396.153Radial†	3.1	-6.1	-4.6271 ug/L	-4.6271 ppb	10:48:13
1	Ca 317.933Radial†	21.4	0.5	0.8113 ug/L	0.8113 ppb	10:48:13
1	Fe 238.204 Radial†	6.9	-0.5	-4.6519 ug/L	-4.6519 ppb	10:48:13
1	K 766.490 Radial†	2596.4	17.3	3.1658 ug/L	3.1658 ppb	10:47:53
1	Mg 279.077 IEC†	0.7	-0.3	-11.957 ug/L	-11.957 ppb	10:48:13
1	Na 589.592 Radial†	-679.9	-112.4	-33.420 ug/L	-33.420 ppb	10:47:53
1	Sr 421.552†	59.1	50.3	0.3225 ug/L	0.3225 ppb	10:47:53
1	Sc 361.383	895964.4	895964.4	99.787 %		10:49:10
1	Y 371.029	821794.6	821794.6	99.839 %		10:49:10
1	Ag 328.068†	381.0	85.8	0.3573 ug/L	0.3573 ppb	10:49:10
1	As 188.979†	-13.5	16.7	6.8113 ug/L	6.8113 ppb	10:49:30
1	B 249.677†	284.9	525.9	11.535 ug/L	11.535 ppb	10:49:30
1	Ba 233.527†	16.3	19.5	0.1538 ug/L	0.1538 ppb	10:49:30
1	Be 313.107†	-4987.3	102.5	0.0359 ug/L	0.0359 ppb	10:49:10
1	Cd 226.502†	-195.3	10.5	0.1180 ug/L	0.1180 ppb	10:49:30
1	Co 228.616†	-72.6	-2.8	-0.0617 ug/L	-0.0617 ppb	10:49:30
1	Cr 267.716†	91.8	-2.0	-0.0212 ug/L	-0.0212 ppb	10:49:30
1	Cu 324.752†	9066.2	-42.5	-0.1193 ug/L	-0.1193 ppb	10:49:10
1	Mn 257.610†	508.7	20.0	0.0224 ug/L	0.0224 ppb	10:49:30
1	Mo 202.031†	21.6	-2.0	-0.1376 ug/L	-0.1376 ppb	10:49:30
1	Ni 231.604†	113.8	20.3	0.5114 ug/L	0.5114 ppb	10:49:30
1	P 214.914†	236.5	-1.7	-0.9137 ug/L	-0.9137 ppb	10:49:30
1	Pb 220.353†	-52.5	7.8	0.9777 ug/L	0.9777 ppb	10:49:30
1	S 181.975 Axial†	46.3	-30.6	-42.105 ug/L	-42.105 ppb	10:49:30
1	Sb 206.836†	41.6	11.5	3.8882 ug/L	3.8882 ppb	10:49:30
1	Se 196.026†	-22.6	-4.7	-2.7190 ug/L	-2.7190 ppb	10:49:30
1	Si 251.611†	502.2	7.3	0.2182 ug/L	0.2182 ppb	10:49:30
1	Sn 189.927†	16.2	16.6	3.0446 ug/L	3.0446 ppb	10:49:30
1	Ti 334.940†	-965.7	-61.2	-0.0922 ug/L	-0.0922 ppb	10:49:10
1	Tl 190.801†	-37.4	-0.5	-0.1739 ug/L	-0.1739 ppb	10:49:30
1	U 409.014†	-1065.4	-4.8	-0.1193 ug/L	-0.1193 ppb	10:49:10
1	V 292.402†	-1357.2	33.5	0.2066 ug/L	0.2066 ppb	10:49:10
1	Zn 213.857†	703.2	-28.7	-0.2699 ug/L	-0.2699 ppb	10:49:30
1	SiO2†	530.2	17.9	1.1374 ug/L	1.1374 ppb	10:50:41
2	Sc Radial	5462.9	5462.9	102 %		10:48:18
2	Y RADIAL	5846.7	5846.7	101.6 %		10:48:18
2	Al 396.153Radial†	8.7	-0.7	-0.5100 ug/L	-0.5100 ppb	10:48:38
2	Ca 317.933Radial†	24.7	3.9	6.2066 ug/L	6.2066 ppb	10:48:38
2	Fe 238.204 Radial†	8.5	1.2	11.151 ug/L	11.151 ppb	10:48:38
2	K 766.490 Radial†	2505.6	-54.2	-9.8962 ug/L	-9.8962 ppb	10:48:18
2	Mg 279.077 IEC†	3.2	2.2	78.437 ug/L	78.437 ppb	10:48:38
2	Na 589.592 Radial†	-690.4	-127.2	-37.826 ug/L	-37.826 ppb	10:48:18
2	Sr 421.552†	51.1	42.9	0.2753 ug/L	0.2753 ppb	10:48:18
2	Sc 361.383	893219.2	893219.2	99.482 %		10:49:35
2	Y 371.029	815151.4	815151.4	99.032 %		10:49:35
2	Ag 328.068†	358.6	64.5	0.2711 ug/L	0.2711 ppb	10:49:35
2	As 188.979†	-18.4	11.7	4.8007 ug/L	4.8007 ppb	10:49:55
2	B 249.677†	281.3	523.1	11.471 ug/L	11.471 ppb	10:49:55
2	Ba 233.527†	-0.5	2.6	0.0210 ug/L	0.0210 ppb	10:49:55
2	Be 313.107†	-5012.5	61.8	0.0213 ug/L	0.0213 ppb	10:49:35
2	Cd 226.502†	-197.3	7.8	0.0866 ug/L	0.0866 ppb	10:49:55
2	Co 228.616†	-70.7	-1.2	-0.0243 ug/L	-0.0243 ppb	10:49:55
2	Cr 267.716†	106.9	13.5	0.1457 ug/L	0.1457 ppb	10:49:55
2	Cu 324.752†	9006.6	-74.5	-0.2093 ug/L	-0.2093 ppb	10:49:35
2	Mn 257.610†	520.5	33.4	0.0353 ug/L	0.0353 ppb	10:49:55
2	Mo 202.031†	28.3	4.9	0.3340 ug/L	0.3340 ppb	10:49:55
2	Ni 231.604†	93.0	-0.2	-0.0047 ug/L	-0.0047 ppb	10:49:55

2	P 214.914†	234.0	-3.5	-1.9175 ug/L	-1.9175 ppb	10:49:55
2	Pb 220.353†	-29.7	30.5	3.8308 ug/L	3.8308 ppb	10:49:55
2	S 181.975 Axial†	51.1	-25.6	-35.242 ug/L	-35.242 ppb	10:49:55
2	Sb 206.836†	50.8	20.8	7.0038 ug/L	7.0038 ppb	10:49:55
2	Se 196.026†	-16.3	1.6	0.9508 ug/L	0.9508 ppb	10:49:55
2	Si 251.611†	544.5	51.4	1.5188 ug/L	1.5188 ppb	10:49:55
2	Sn 189.927†	11.9	12.3	2.2605 ug/L	2.2605 ppb	10:49:55
2	Ti 334.940†	-1051.8	-150.7	-0.2361 ug/L	-0.2361 ppb	10:49:35
2	Tl 190.801†	-33.3	3.4	1.0888 ug/L	1.0888 ppb	10:49:55
2	U 409.014†	-997.0	60.6	1.5146 ug/L	1.5146 ppb	10:49:35
2	V 292.402†	-1396.8	-10.5	-0.0577 ug/L	-0.0577 ppb	10:49:35
2	Zn 213.857†	677.8	-52.1	-0.4861 ug/L	-0.4861 ppb	10:49:55
2	SiO2†	521.7	11.0	0.6885 ug/L	0.6885 ppb	10:51:01
3	Sc Radial	5553.5	5553.5	104 %		10:48:43
3	Y RADIAL	6016.2	6016.2	104.5 %		10:48:43
3	Al 396.153Radial†	9.0	-0.5	-0.3490 ug/L	-0.3490 ppb	10:49:03
3	Ca 317.933Radial†	25.5	4.3	6.9058 ug/L	6.9058 ppb	10:49:03
3	Fe 238.204 Radial†	8.8	1.3	12.233 ug/L	12.233 ppb	10:49:03
3	K 766.490 Radial†	2493.3	-106.0	-19.357 ug/L	-19.357 ppb	10:48:43
3	Mg 279.077 IEC†	3.3	2.2	77.715 ug/L	77.715 ppb	10:49:03
3	Na 589.592 Radial†	-707.0	-132.2	-39.292 ug/L	-39.292 ppb	10:48:43
3	Sr 421.552†	15.2	7.5	0.0482 ug/L	0.0482 ppb	10:48:43
3	Sc 361.383	891232.6	891232.6	99.260 %		10:50:00
3	Y 371.029	812156.4	812156.4	98.668 %		10:50:00
3	Ag 328.068†	321.1	27.4	0.1190 ug/L	0.1190 ppb	10:50:00
3	As 188.979†	-15.0	15.1	6.1770 ug/L	6.1770 ppb	10:50:20
3	B 249.677†	245.5	487.8	10.695 ug/L	10.695 ppb	10:50:20
3	Ba 233.527†	-2.7	0.3	0.0029 ug/L	0.0029 ppb	10:50:20
3	Be 313.107†	-4989.4	73.9	0.0259 ug/L	0.0259 ppb	10:50:00
3	Cd 226.502†	-205.5	-0.9	-0.0113 ug/L	-0.0113 ppb	10:50:20
3	Co 228.616†	-67.9	1.5	0.0322 ug/L	0.0322 ppb	10:50:20
3	Cr 267.716†	83.3	-10.0	-0.1083 ug/L	-0.1083 ppb	10:50:20
3	Cu 324.752†	8878.2	-183.7	-0.5139 ug/L	-0.5139 ppb	10:50:00
3	Mn 257.610†	491.9	5.7	0.0044 ug/L	0.0044 ppb	10:50:20
3	Mo 202.031†	17.0	-6.5	-0.4400 ug/L	-0.4400 ppb	10:50:20
3	Ni 231.604†	112.0	19.1	0.4810 ug/L	0.4810 ppb	10:50:20
3	P 214.914†	241.0	4.0	2.3932 ug/L	2.3932 ppb	10:50:20
3	Pb 220.353†	-39.8	20.3	2.5479 ug/L	2.5479 ppb	10:50:20
3	S 181.975 Axial†	43.6	-33.0	-45.497 ug/L	-45.497 ppb	10:50:20
3	Sb 206.836†	40.5	10.6	3.5552 ug/L	3.5552 ppb	10:50:20
3	Se 196.026†	-22.4	-4.6	-2.6295 ug/L	-2.6295 ppb	10:50:20
3	Si 251.611†	509.2	17.0	0.5098 ug/L	0.5098 ppb	10:50:20
3	Sn 189.927†	9.7	10.1	1.8540 ug/L	1.8540 ppb	10:50:20
3	Ti 334.940†	-935.1	-35.6	-0.0591 ug/L	-0.0591 ppb	10:50:00
3	Tl 190.801†	-40.0	-3.4	-1.0927 ug/L	-1.0927 ppb	10:50:20
3	U 409.014†	-1104.3	-49.7	-1.2427 ug/L	-1.2427 ppb	10:50:00
3	V 292.402†	-1399.1	-15.9	-0.1079 ug/L	-0.1079 ppb	10:50:00
3	Zn 213.857†	676.8	-51.5	-0.4835 ug/L	-0.4835 ppb	10:50:20
3	SiO2†	549.0	39.6	2.5188 ug/L	2.5188 ppb	10:51:21

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	893472.1	99.510 %	0.2646			0.27%
Sc Radial	5505.6	103 %	0.9			0.83%
Y 371.029	816367.5	99.179 %	0.5993			0.60%
Y RADIAL	5933.6	103.1 %	1.47			1.43%
Ag 328.068†	59.2	0.2491 ug/L	0.12069	0.2491 ppb	0.12069	48.44%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-2.4	-1.8287 ug/L	2.42479	-1.8287 ppb	2.42479	132.60%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	14.5	5.9297 ug/L	1.02783	5.9297 ppb	1.02783	17.33%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	512.3	11.234 ug/L	0.4675	11.234 ppb	0.4675	4.16%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.5	0.0592 ug/L	0.08240	0.0592 ppb	0.08240	139.11%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	79.4	0.0277 ug/L	0.00749	0.0277 ppb	0.00749	27.01%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	2.9	4.6412 ug/L	3.33521	4.6412 ppb	3.33521	71.86%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	5.8	0.0644 ug/L	0.06743	0.0644 ppb	0.06743	104.69%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-0.8	-0.0179 ug/L	0.04728	-0.0179 ppb	0.04728	264.22%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	0.5	0.0054 ug/L	0.12908	0.0054 ppb	0.12908	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-100.2	-0.2808 ug/L	0.20683	-0.2808 ppb	0.20683	73.65%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.7	6.2442 ug/L	9.45182	6.2442 ppb	9.45182	151.37%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-47.7	-8.6957 ug/L	11.30917	-8.6957 ppb	11.30917	130.06%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.3	48.065 ug/L	51.9821	48.065 ppb	51.9821	108.15%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	19.7	0.0207 ug/L	0.01552	0.0207 ppb	0.01552	74.90%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-1.2	-0.0812 ug/L	0.39010	-0.0812 ppb	0.39010	480.41%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-123.9	-36.846 ug/L	3.0563	-36.846 ppb	3.0563	8.29%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	13.1	0.3292 ug/L	0.28960	0.3292 ppb	0.28960	87.96%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-0.4	-0.1460 ug/L	2.25556	-0.1460 ppb	2.25556	>999.9%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	19.5	2.4521 ug/L	1.42899	2.4521 ppb	1.42899	58.28%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-29.7	-40.948 ug/L	5.2243	-40.948 ppb	5.2243	12.76%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	14.3	4.8158 ug/L	1.90220	4.8158 ppb	1.90220	39.50%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-2.6	-1.4659 ug/L	2.09340	-1.4659 ppb	2.09340	142.81%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	25.2	0.7490 ug/L	0.68248	0.7490 ppb	0.68248	91.12%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	13.0	2.3864 ug/L	0.60523	2.3864 ppb	0.60523	25.36%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	33.6	0.2154 ug/L	0.14664	0.2154 ppb	0.14664	68.09%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-82.5	-0.1291 ug/L	0.09412	-0.1291 ppb	0.09412	72.90%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-0.2	-0.0593 ug/L	1.09525	-0.0593 ppb	1.09525	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	2.1	0.0509 ug/L	1.38652	0.0509 ppb	1.38652	>999.9%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	2.3	0.0136 ug/L	0.16895	0.0136 ppb	0.16895	>999.9%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-44.1	-0.4132 ug/L	0.12412	-0.4132 ppb	0.12412	30.04%
QC value within limits for Zn 213.857 Recovery = Not calculated						
Sio2†	22.9	1.4482 ug/L	0.95397	1.4482 ppb	0.95397	65.87%
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: 1/26/2010 10:53:32

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5331.5	5331.5	99.8 %		10:55:25
1	Y RADIAL	5743.5	5743.5	99.76 %		10:55:25
1	Al 396.153Radial†	-9.1	-18.3	-12.713 ug/L	-12.713 ppb	10:55:45
1	Ca 317.933Radial†	32.2	12.0	19.322 ug/L	19.322 ppb	10:55:45
1	Fe 238.204 Radial†	40804.6	40863.0	381890 ug/L	381890 ppb	10:55:25
1	K 766.490 Radial†	1969.1	-531.2	-96.996 ug/L	-96.996 ppb	10:55:25
1	Mg 279.077 IEC†	9.8	8.8	-85.328 ug/L	-85.328 ppb	10:55:45
1	Na 589.592 Radial†	-673.5	-126.9	-37.733 ug/L	-37.733 ppb	10:55:25
1	Sr 421.552†	82.7	75.8	0.4860 ug/L	0.4860 ppb	10:55:25
1	Sc 361.383	906081.7	906081.7	100.91 %		10:56:43
1	Y 371.029	797742.4	797742.4	96.917 %		10:56:43
1	Ag 328.068†	-27617.7	-27663.5	8.4117 ug/L	8.4117 ppb	10:56:43
1	As 188.979†	-199.2	-167.2	21.092 ug/L	21.092 ppb	10:57:03
1	B 249.677†	2638.5	2855.1	0.5806 ug/L	0.5806 ppb	10:56:43
1	Ba 233.527†	-1739.3	-1720.5	-1.8216 ug/L	-1.8216 ppb	10:56:43
1	Be 313.107†	-4917.4	227.6	0.0803 ug/L	0.0803 ppb	10:56:43
1	Cd 226.502†	3491.0	3665.6	1.5105 ug/L	1.5105 ppb	10:56:43
1	Co 228.616†	191.4	259.6	0.1169 ug/L	0.1169 ppb	10:57:03
1	Cr 267.716†	-532.5	-621.6	0.7406 ug/L	0.7406 ppb	10:56:43
1	Cu 324.752†	1887.4	-7257.7	-0.1738 ug/L	-0.1738 ppb	10:56:43
1	Mn 257.610†	-36804.5	-36961.0	-3.7350 ug/L	-3.7350 ppb	10:56:43
1	Mo 202.031†	-327.2	-347.8	5.9079 ug/L	5.9079 ppb	10:56:43
1	Ni 231.604†	168.2	72.9	1.8299 ug/L	1.8299 ppb	10:57:03
1	P 214.914†	744.3	498.9	-22.245 ug/L	-22.245 ppb	10:57:03
1	Pb 220.353†	214.8	273.3	-2.2331 ug/L	-2.2331 ppb	10:57:03
1	S 181.975 Axial†	60.1	-17.5	-24.065 ug/L	-24.065 ppb	10:57:03
1	Sb 206.836†	26.9	-3.6	8.0432 ug/L	8.0432 ppb	10:57:03
1	Se 196.026†	-1933.3	-1897.8	168.11 ug/L	168.11 ppb	10:57:03
1	Si 251.611†	-597.2	-1087.7	-31.937 ug/L	-31.937 ppb	10:56:43
1	Sn 189.927†	-11.6	-11.1	4.3774 ug/L	4.3774 ppb	10:57:03
1	Ti 334.940†	-922.9	-8.0	-0.0546 ug/L	-0.0546 ppb	10:56:43
1	Tl 190.801†	-66.2	-28.8	-9.5234 ug/L	-9.5234 ppb	10:57:03
1	U 409.014†	922.4	1976.9	5.9120 ug/L	5.9120 ppb	10:56:43
1	V 292.402†	7477.9	8803.7	-1.1023 ug/L	-1.1023 ppb	10:56:43
1	Zn 213.857†	4800.3	4023.4	0.4469 ug/L	0.4469 ppb	10:57:03
1	SiO2†	-519.1	-1027.9	-64.360 ug/L	-64.360 ppb	10:58:00
2	Sc Radial	5369.1	5369.1	101 %		10:55:50
2	Y RADIAL	5831.7	5831.7	101.3 %		10:55:50
2	Al 396.153Radial†	-21.7	-30.8	-22.209 ug/L	-22.209 ppb	10:56:10
2	Ca 317.933Radial†	34.8	14.4	23.128 ug/L	23.128 ppb	10:56:10
2	Fe 238.204 Radial†	41219.6	40989.9	383070 ug/L	383070 ppb	10:55:50
2	K 766.490 Radial†	2093.1	-421.7	-76.985 ug/L	-76.985 ppb	10:55:50
2	Mg 279.077 IEC†	12.6	11.6	12.481 ug/L	12.481 ppb	10:56:10
2	Na 589.592 Radial†	-690.3	-138.9	-41.301 ug/L	-41.301 ppb	10:55:50
2	Sr 421.552†	96.4	88.8	0.5700 ug/L	0.5700 ppb	10:55:50
2	Sc 361.383	909885.9	909885.9	101.34 %		10:57:09
2	Y 371.029	802891.2	802891.2	97.542 %		10:57:09
2	Ag 328.068†	-27755.5	-27685.0	8.7029 ug/L	8.7029 ppb	10:57:09
2	As 188.979†	-205.1	-172.2	19.325 ug/L	19.325 ppb	10:57:29
2	B 249.677†	2539.3	2746.2	-2.0008 ug/L	-2.0008 ppb	10:57:09
2	Ba 233.527†	-1751.4	-1725.2	-1.8253 ug/L	-1.8253 ppb	10:57:09
2	Be 313.107†	-4938.7	227.0	0.0799 ug/L	0.0799 ppb	10:57:09
2	Cd 226.502†	3490.1	3650.2	1.2158 ug/L	1.2158 ppb	10:57:09
2	Co 228.616†	205.7	272.9	0.3935 ug/L	0.3935 ppb	10:57:29
2	Cr 267.716†	-537.4	-624.2	0.7348 ug/L	0.7348 ppb	10:57:09
2	Cu 324.752†	2027.4	-7127.4	0.2558 ug/L	0.2558 ppb	10:57:09
2	Mn 257.610†	-37179.1	-37178.1	-3.8654 ug/L	-3.8654 ppb	10:57:09
2	Mo 202.031†	-312.3	-331.8	7.0920 ug/L	7.0920 ppb	10:57:09
2	Ni 231.604†	160.3	64.5	1.6166 ug/L	1.6166 ppb	10:57:29

2	P 214.914†	734.1	485.7	-30.705 ug/L	-30.705 ppb	10:57:29
2	Pb 220.353†	216.9	274.5	-2.1980 ug/L	-2.1980 ppb	10:57:29
2	S 181.975 Axial†	61.8	-16.0	-21.981 ug/L	-21.981 ppb	10:57:29
2	Sb 206.836†	14.1	-16.4	3.7916 ug/L	3.7916 ppb	10:57:29
2	Se 196.026†	-1940.0	-1896.5	172.83 ug/L	172.83 ppb	10:57:29
2	Si 251.611†	-549.5	-1038.2	-30.483 ug/L	-30.483 ppb	10:57:09
2	Sn 189.927†	-20.1	-19.5	2.8635 ug/L	2.8635 ppb	10:57:29
2	Ti 334.940†	-977.1	-57.7	-0.1370 ug/L	-0.1370 ppb	10:57:09
2	Tl 190.801†	-59.7	-22.0	-7.3556 ug/L	-7.3556 ppb	10:57:29
2	U 409.014†	843.8	1895.5	3.7415 ug/L	3.7415 ppb	10:57:09
2	V 292.402†	7328.8	8625.6	-2.3692 ug/L	-2.3692 ppb	10:57:09
2	Zn 213.857†	4845.0	4047.7	0.5590 ug/L	0.5590 ppb	10:57:29
2	SiO2†	-491.2	-998.1	-62.509 ug/L	-62.509 ppb	10:58:05
3	Sc Radial	5378.0	5378.0	101 %		10:56:15
3	Y RADIAL	5823.7	5823.7	101.2 %		10:56:15
3	Al 396.153Radial†	-12.3	-21.3	-15.054 ug/L	-15.054 ppb	10:56:35
3	Ca 317.933Radial†	31.2	10.8	17.335 ug/L	17.335 ppb	10:56:35
3	Fe 238.204 Radial†	41130.3	40832.7	381600 ug/L	381600 ppb	10:56:15
3	K 766.490 Radial†	2070.9	-447.2	-81.642 ug/L	-81.642 ppb	10:56:15
3	Mg 279.077 IEC†	12.5	11.4	8.1771 ug/L	8.1771 ppb	10:56:35
3	Na 589.592 Radial†	-663.8	-111.5	-33.143 ug/L	-33.143 ppb	10:56:15
3	Sr 421.552†	96.5	88.7	0.5691 ug/L	0.5691 ppb	10:56:15
3	Sc 361.383	911945.8	911945.8	101.57 %		10:57:35
3	Y 371.029	804967.5	804967.5	97.794 %		10:57:35
3	Ag 328.068†	-27816.4	-27683.2	8.2368 ug/L	8.2368 ppb	10:57:35
3	As 188.979†	-199.6	-166.3	21.412 ug/L	21.412 ppb	10:57:55
3	B 249.677†	2530.0	2731.4	-2.0859 ug/L	-2.0859 ppb	10:57:35
3	Ba 233.527†	-1708.2	-1678.7	-1.5032 ug/L	-1.5032 ppb	10:57:35
3	Be 313.107†	-4842.0	333.2	0.1176 ug/L	0.1176 ppb	10:57:35
3	Cd 226.502†	3498.2	3650.4	1.3691 ug/L	1.3691 ppb	10:57:35
3	Co 228.616†	191.9	258.8	0.1064 ug/L	0.1064 ppb	10:57:55
3	Cr 267.716†	-545.2	-630.7	0.6372 ug/L	0.6372 ppb	10:57:35
3	Cu 324.752†	1747.4	-7407.6	-0.6071 ug/L	-0.6071 ppb	10:57:35
3	Mn 257.610†	-37430.5	-37342.7	-4.1949 ug/L	-4.1949 ppb	10:57:35
3	Mo 202.031†	-316.3	-335.0	6.7581 ug/L	6.7581 ppb	10:57:35
3	Ni 231.604†	164.5	68.3	1.7119 ug/L	1.7119 ppb	10:57:55
3	P 214.914†	755.8	505.4	-18.283 ug/L	-18.283 ppb	10:57:55
3	Pb 220.353†	225.2	282.1	-1.0968 ug/L	-1.0968 ppb	10:57:55
3	S 181.975 Axial†	74.2	-3.9	-5.4029 ug/L	-5.4029 ppb	10:57:55
3	Sb 206.836†	9.5	-20.9	2.2066 ug/L	2.2066 ppb	10:57:55
3	Se 196.026†	-1949.0	-1901.0	165.36 ug/L	165.36 ppb	10:57:55
3	Si 251.611†	-440.0	-929.2	-27.250 ug/L	-27.250 ppb	10:57:35
3	Sn 189.927†	-28.9	-28.1	1.2547 ug/L	1.2547 ppb	10:57:55
3	Ti 334.940†	-888.0	32.3	0.0007 ug/L	0.0007 ppb	10:57:35
3	Tl 190.801†	-53.9	-16.2	-5.5052 ug/L	-5.5052 ppb	10:57:55
3	U 409.014†	772.1	1823.0	2.0958 ug/L	2.0958 ppb	10:57:35
3	V 292.402†	7364.3	8644.2	-2.0464 ug/L	-2.0464 ppb	10:57:35
3	Zn 213.857†	4842.4	4034.3	0.5771 ug/L	0.5771 ppb	10:57:55
3	SiO2†	-508.0	-1013.6	-63.480 ug/L	-63.480 ppb	10:58:10

Mean Data: LRI

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	909304.5	101.27 %		0.331			0.33%
Sc Radial	5359.5	100 %		0.5			0.46%
Y 371.029	801867.0	97.418 %		0.4519			0.46%
Y RADIAL	5799.6	100.7 %		0.85			0.84%
Ag 328.068†	-27677.2	8.4504 ug/L		0.23546	8.4504 ppb	0.23546	2.79%
Al 396.153Radial†	-23.5	-16.658 ug/L		4.9471	-16.658 ppb	4.9471	29.70%
As 188.979†	-168.6	20.610 ug/L		1.1240	20.610 ppb	1.1240	5.45%
B 249.677†	2777.5	-1.1687 ug/L		1.51555	-1.1687 ppb	1.51555	129.68%
Ba 233.527†	-1708.1	-1.7167 ug/L		0.18492	-1.7167 ppb	0.18492	10.77%
Be 313.107†	262.6	0.0926 ug/L		0.02169	0.0926 ppb	0.02169	23.43%
Ca 317.933Radial†	12.4	19.928 ug/L		2.9441	19.928 ppb	2.9441	14.77%
Cd 226.502†	3655.4	1.3652 ug/L		0.14738	1.3652 ppb	0.14738	10.80%
Co 228.616†	263.8	0.2056 ug/L		0.16283	0.2056 ppb	0.16283	79.20%
Cr 267.716†	-625.5	0.7042 ug/L		0.05809	0.7042 ppb	0.05809	8.25%
Cu 324.752†	-7264.2	-0.1750 ug/L		0.43142	-0.1750 ppb	0.43142	246.49%
Fe 238.204 Radial†	40895.2	382190 ug/L		779.5	382190 ppb	779.5	0.20%
K 766.490 Radial†	-466.7	-85.208 ug/L		10.4716	-85.208 ppb	10.4716	12.29%

Mg 279.077 IEC†	10.6	-21.557 ug/L	55.2696	-21.557 ppb	55.2696	256.39%
Mn 257.610†	-37160.6	-3.9318 ug/L	0.23701	-3.9318 ppb	0.23701	6.03%
Mo 202.031†	-338.2	6.5860 ug/L	0.61052	6.5860 ppb	0.61052	9.27%
Na 589.592 Radial†	-125.8	-37.392 ug/L	4.0899	-37.392 ppb	4.0899	10.94%
Ni 231.604†	68.6	1.7195 ug/L	0.10686	1.7195 ppb	0.10686	6.21%
P 214.914†	496.6	-23.744 ug/L	6.3449	-23.744 ppb	6.3449	26.72%
Pb 220.353†	276.6	-1.8426 ug/L	0.64619	-1.8426 ppb	0.64619	35.07%
S 181.975 Axial†	-12.5	-17.150 ug/L	10.2263	-17.150 ppb	10.2263	59.63%
Sb 206.836†	-13.6	4.6805 ug/L	3.01816	4.6805 ppb	3.01816	64.48%
Se 196.026†	-1898.4	168.77 ug/L	3.775	168.77 ppb	3.775	2.24%
Si 251.611†	-1018.4	-29.890 ug/L	2.3990	-29.890 ppb	2.3990	8.03%
Sn 189.927†	-19.6	2.8319 ug/L	1.56160	2.8319 ppb	1.56160	55.14%
Sr 421.552†	84.4	0.5417 ug/L	0.04822	0.5417 ppb	0.04822	8.90%
Ti 334.940†	-11.1	-0.0636 ug/L	0.06928	-0.0636 ppb	0.06928	108.89%
Tl 190.801†	-22.3	-7.4614 ug/L	2.01118	-7.4614 ppb	2.01118	26.95%
U 409.014†	1898.5	3.9165 ug/L	1.91408	3.9165 ppb	1.91408	48.87%
V 292.402†	8691.2	-1.8393 ug/L	0.65834	-1.8393 ppb	0.65834	35.79%
Zn 213.857†	4035.1	0.5276 ug/L	0.07052	0.5276 ppb	0.07052	13.36%
SiO2†	-1013.2	-63.449 ug/L	0.9259	-63.449 ppb	0.9259	1.46%

Sequence No.: 4

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 1/26/2010 11:00:22

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5476.7	5476.7	103 %		11:02:14
1	Y RADIAL	5888.4	5888.4	102.3 %		11:02:14
1	Al 396.153Radial†	6760.7	6582.9	4964.1 ug/L	4964.1 ppb	11:02:14
1	Ca 317.933Radial†	3177.4	3078.0	4947.2 ug/L	4947.2 ppb	11:02:34
1	Fe 238.204 Radial†	573.6	552.1	5174.1 ug/L	5174.1 ppb	11:02:34
1	K 766.490 Radial†	31043.4	27765.6	5066.0 ug/L	5066.0 ppb	11:02:14
1	Mg 279.077 IEC†	147.9	143.2	5108.7 ug/L	5108.7 ppb	11:02:34
1	Na 589.592 Radial†	34505.2	34192.1	10164 ug/L	10164 ppb	11:02:14
1	Sr 421.552†	82340.4	80279.5	515.17 ug/L	515.17 ppb	11:02:14
1	Sc 361.383	957819.9	957819.9	106.68 %		11:03:32
1	Y 371.029	839308.1	839308.1	101.97 %		11:03:32
1	Ag 328.068†	120581.9	112739.0	473.59 ug/L	473.59 ppb	11:03:37
1	As 188.979†	1199.6	1154.7	476.54 ug/L	476.54 ppb	11:03:57
1	B 249.677†	22675.2	21496.5	469.22 ug/L	469.22 ppb	11:03:37
1	Ba 233.527†	63808.5	59818.1	472.69 ug/L	472.69 ppb	11:03:37
1	Be 313.107†	1403806.0	1321046.8	467.07 ug/L	467.07 ppb	11:03:32
1	Cd 226.502†	45177.7	42556.4	475.23 ug/L	475.23 ppb	11:03:37
1	Co 228.616†	23376.3	21983.2	481.98 ug/L	481.98 ppb	11:03:37
1	Cr 267.716†	46560.1	43552.1	472.72 ug/L	472.72 ppb	11:03:37
1	Cu 324.752†	186092.8	165317.8	463.77 ug/L	463.77 ppb	11:03:37
1	Mn 257.610†	443165.2	414939.1	465.52 ug/L	465.52 ppb	11:03:32
1	Mo 202.031†	7342.2	6859.1	468.58 ug/L	468.58 ppb	11:03:57
1	Ni 231.604†	20232.7	18872.7	474.01 ug/L	474.01 ppb	11:03:37
1	P 214.914†	4678.5	4147.0	2248.0 ug/L	2248.0 ppb	11:03:57
1	Pb 220.353†	3961.4	3773.9	475.26 ug/L	475.26 ppb	11:03:57
1	S 181.975 Axial†	790.3	663.8	913.03 ug/L	913.03 ppb	11:03:57
1	Sb 206.836†	1508.9	1384.2	480.36 ug/L	480.36 ppb	11:03:57
1	Se 196.026†	855.2	819.6	491.56 ug/L	491.56 ppb	11:03:57
1	Si 251.611†	85511.1	79663.2	2354.6 ug/L	2354.6 ppb	11:03:37
1	Sn 189.927†	2731.2	2560.6	471.70 ug/L	471.70 ppb	11:03:57
1	Ti 334.940†	325820.3	306334.8	466.94 ug/L	466.94 ppb	11:03:37
1	Tl 190.801†	1519.7	1461.5	470.59 ug/L	470.59 ppb	11:03:57
1	U 409.014†	18835.8	18719.7	466.45 ug/L	466.45 ppb	11:03:37
1	V 292.402†	79078.1	75522.4	475.85 ug/L	475.85 ppb	11:03:37
1	Zn 213.857†	54836.9	50671.4	467.83 ug/L	467.83 ppb	11:03:37
1	SiO2†	85565.8	79697.1	5027.7 ug/L	5027.7 ppb	11:05:04
2	Sc Radial	5415.3	5415.3	101 %		11:02:39
2	Y RADIAL	5842.0	5842.0	101.5 %		11:02:39
2	Al 396.153Radial†	6591.8	6491.1	4893.9 ug/L	4893.9 ppb	11:02:39
2	Ca 317.933Radial†	3197.3	3132.6	5035.1 ug/L	5035.1 ppb	11:03:00
2	Fe 238.204 Radial†	571.6	556.5	5215.2 ug/L	5215.2 ppb	11:03:00
2	K 766.490 Radial†	30525.9	27598.2	5035.4 ug/L	5035.4 ppb	11:02:39
2	Mg 279.077 IEC†	152.3	149.2	5320.5 ug/L	5320.5 ppb	11:03:00
2	Na 589.592 Radial†	33626.9	33707.3	10020 ug/L	10020 ppb	11:02:39
2	Sr 421.552†	80236.8	79114.7	507.70 ug/L	507.70 ppb	11:02:39
2	Sc 361.383	933724.6	933724.6	103.99 %		11:04:03
2	Y 371.029	818894.9	818894.9	99.486 %		11:04:03
2	Ag 328.068†	119276.4	114400.6	480.57 ug/L	480.57 ppb	11:04:08
2	As 188.979†	1202.3	1186.3	489.50 ug/L	489.50 ppb	11:04:28
2	B 249.677†	22468.7	21846.4	476.86 ug/L	476.86 ppb	11:04:08
2	Ba 233.527†	62960.8	60546.5	478.45 ug/L	478.45 ppb	11:04:08
2	Be 313.107†	1410307.8	1361257.6	481.28 ug/L	481.28 ppb	11:04:03
2	Cd 226.502†	44750.1	43238.0	482.85 ug/L	482.85 ppb	11:04:08
2	Co 228.616†	23168.0	22348.4	490.00 ug/L	490.00 ppb	11:04:08
2	Cr 267.716†	46204.1	44336.1	481.22 ug/L	481.22 ppb	11:04:08
2	Cu 324.752†	183948.1	167757.2	470.61 ug/L	470.61 ppb	11:04:08
2	Mn 257.610†	444815.3	427246.2	479.31 ug/L	479.31 ppb	11:04:03
2	Mo 202.031†	7346.0	7040.4	480.95 ug/L	480.95 ppb	11:04:28
2	Ni 231.604†	20066.7	19202.5	482.29 ug/L	482.29 ppb	11:04:08

2	P 214.914†	4665.4	4247.5	2303.4 ug/L	2303.4 ppb	11:04:28
2	Pb 220.353†	3945.1	3854.0	485.32 ug/L	485.32 ppb	11:04:28
2	S 181.975 Axial†	792.8	685.4	942.70 ug/L	942.70 ppb	11:04:28
2	Sb 206.836†	1524.2	1435.4	497.92 ug/L	497.92 ppb	11:04:28
2	Se 196.026†	844.0	829.5	497.45 ug/L	497.45 ppb	11:04:28
2	Si 251.611†	84548.5	80806.2	2388.4 ug/L	2388.4 ppb	11:04:08
2	Sn 189.927†	2723.0	2618.8	482.41 ug/L	482.41 ppb	11:04:28
2	Ti 334.940†	322456.7	310982.1	474.02 ug/L	474.02 ppb	11:04:08
2	Tl 190.801†	1528.5	1506.7	485.13 ug/L	485.13 ppb	11:04:28
2	U 409.014†	18737.9	19081.2	475.46 ug/L	475.46 ppb	11:04:08
2	V 292.402†	78496.2	76875.8	484.44 ug/L	484.44 ppb	11:04:08
2	Zn 213.857†	54362.4	51541.7	475.87 ug/L	475.87 ppb	11:04:08
2	SiO2†	86284.4	82457.9	5201.9 ug/L	5201.9 ppb	11:05:10
3	Sc Radial	5455.9	5455.9	102 %		11:03:05
3	Y RADIAL	5835.4	5835.4	101.4 %		11:03:05
3	Al 396.153Radial†	6538.8	6390.8	4817.9 ug/L	4817.9 ppb	11:03:05
3	Ca 317.933Radial†	3219.8	3131.2	5032.7 ug/L	5032.7 ppb	11:03:25
3	Fe 238.204 Radial†	574.0	554.7	5198.4 ug/L	5198.4 ppb	11:03:25
3	K 766.490 Radial†	30365.0	27216.7	4965.8 ug/L	4965.8 ppb	11:03:05
3	Mg 279.077 IEC†	151.1	146.9	5240.6 ug/L	5240.6 ppb	11:03:25
3	Na 589.592 Radial†	33220.2	33062.4	9828.5 ug/L	9828.5 ppb	11:03:05
3	Sr 421.552†	79310.9	77619.5	498.10 ug/L	498.10 ppb	11:03:05
3	Sc 361.383	940128.6	940128.6	104.71 %		11:04:34
3	Y 371.029	823950.0	823950.0	100.10 %		11:04:34
3	Ag 328.068†	119785.7	114105.7	479.33 ug/L	479.33 ppb	11:04:39
3	As 188.979†	1212.0	1187.7	490.08 ug/L	490.08 ppb	11:04:59
3	B 249.677†	22492.2	21721.6	474.13 ug/L	474.13 ppb	11:04:39
3	Ba 233.527†	63370.1	60525.0	478.28 ug/L	478.28 ppb	11:04:39
3	Be 313.107†	1421296.0	1362514.0	481.72 ug/L	481.72 ppb	11:04:34
3	Cd 226.502†	44943.5	43129.6	481.64 ug/L	481.64 ppb	11:04:39
3	Co 228.616†	23346.6	22367.2	490.42 ug/L	490.42 ppb	11:04:39
3	Cr 267.716†	46372.1	44193.9	479.68 ug/L	479.68 ppb	11:04:39
3	Cu 324.752†	185130.1	167681.1	470.40 ug/L	470.40 ppb	11:04:39
3	Mn 257.610†	448155.4	427522.5	479.62 ug/L	479.62 ppb	11:04:34
3	Mo 202.031†	7408.6	7052.0	481.75 ug/L	481.75 ppb	11:04:59
3	Ni 231.604†	20160.1	19160.3	481.23 ug/L	481.23 ppb	11:04:39
3	P 214.914†	4711.0	4260.5	2310.8 ug/L	2310.8 ppb	11:04:59
3	Pb 220.353†	3981.9	3863.4	486.48 ug/L	486.48 ppb	11:04:59
3	S 181.975 Axial†	791.9	679.3	934.35 ug/L	934.35 ppb	11:04:59
3	Sb 206.836†	1533.4	1434.3	497.59 ug/L	497.59 ppb	11:04:59
3	Se 196.026†	843.6	823.6	493.98 ug/L	493.98 ppb	11:04:59
3	Si 251.611†	84926.6	80613.5	2382.6 ug/L	2382.6 ppb	11:04:39
3	Sn 189.927†	2760.5	2636.8	485.73 ug/L	485.73 ppb	11:04:59
3	Ti 334.940†	324307.9	310637.9	473.50 ug/L	473.50 ppb	11:04:39
3	Tl 190.801†	1523.3	1491.8	480.34 ug/L	480.34 ppb	11:04:59
3	U 409.014†	18833.7	19050.0	474.69 ug/L	474.69 ppb	11:04:39
3	V 292.402†	78819.7	76670.6	483.18 ug/L	483.18 ppb	11:04:39
3	Zn 213.857†	54571.3	51385.1	474.42 ug/L	474.42 ppb	11:04:39
3	SiO2†	84966.6	80634.2	5086.6 ug/L	5086.6 ppb	11:05:15

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	943891.1	105.13 %	1.390			1.32%
Sc Radial	5449.3	102 %	0.6			0.57%
Y 371.029	827384.3	100.52 %	1.292			1.28%
Y RADIAL	5855.3	101.7 %	0.50			0.49%
Ag 328.068†	113748.4	477.83 ug/L	3.720	477.83 ppb	3.720	0.78%
QC value within limits for Ag 328.068 Recovery = 95.57%						
Al 396.153Radial†	6488.3	4891.9 ug/L	73.10	4891.9 ppb	73.10	1.49%
QC value within limits for Al 396.153Radial Recovery = 97.84%						
As 188.979†	1176.3	485.37 ug/L	7.656	485.37 ppb	7.656	1.58%
QC value within limits for As 188.979 Recovery = 97.07%						
B 249.677†	21688.2	473.40 ug/L	3.874	473.40 ppb	3.874	0.82%
QC value within limits for B 249.677 Recovery = 94.68%						
Ba 233.527†	60296.5	476.47 ug/L	3.278	476.47 ppb	3.278	0.69%
QC value within limits for Ba 233.527 Recovery = 95.29%						
Be 313.107†	1348272.8	476.69 ug/L	8.329	476.69 ppb	8.329	1.75%
QC value within limits for Be 313.107 Recovery = 95.34%						
Ca 317.933Radial†	3113.9	5005.0 ug/L	50.08	5005.0 ppb	50.08	1.00%

QC value within limits for Ca 317.933 Radial Recovery = 100.10%							
Cd 226.502†	42974.7	479.90 ug/L	4.093	479.90 ppb	4.093	0.85%	
QC value within limits for Cd 226.502 Recovery = 95.98%							
Co 228.616†	22232.9	487.47 ug/L	4.754	487.47 ppb	4.754	0.98%	
QC value within limits for Co 228.616 Recovery = 97.49%							
Cr 267.716†	44027.4	477.87 ug/L	4.532	477.87 ppb	4.532	0.95%	
QC value within limits for Cr 267.716 Recovery = 95.57%							
Cu 324.752†	166918.7	468.26 ug/L	3.889	468.26 ppb	3.889	0.83%	
QC value within limits for Cu 324.752 Recovery = 93.65%							
Fe 238.204 Radial†	554.4	5195.9 ug/L	20.62	5195.9 ppb	20.62	0.40%	
QC value within limits for Fe 238.204 Radial Recovery = 103.92%							
K 766.490 Radial†	27526.8	5022.4 ug/L	51.35	5022.4 ppb	51.35	1.02%	
QC value within limits for K 766.490 Radial Recovery = 100.45%							
Mg 279.077 IEC†	146.4	5223.3 ug/L	106.95	5223.3 ppb	106.95	2.05%	
QC value within limits for Mg 279.077 IEC Recovery = 104.47%							
Mn 257.610†	423235.9	474.82 ug/L	8.055	474.82 ppb	8.055	1.70%	
QC value within limits for Mn 257.610 Recovery = 94.96%							
Mo 202.031†	6983.8	477.09 ug/L	7.386	477.09 ppb	7.386	1.55%	
QC value within limits for Mo 202.031 Recovery = 95.42%							
Na 589.592 Radial†	33653.9	10004 ug/L	168.5	10004 ppb	168.5	1.68%	
QC value within limits for Na 589.592 Radial Recovery = 100.04%							
Ni 231.604†	19078.5	479.18 ug/L	4.508	479.18 ppb	4.508	0.94%	
QC value within limits for Ni 231.604 Recovery = 95.84%							
P 214.914†	4218.4	2287.4 ug/L	34.31	2287.4 ppb	34.31	1.50%	
QC value within limits for P 214.914 Recovery = 91.50%							
Pb 220.353†	3830.4	482.36 ug/L	6.174	482.36 ppb	6.174	1.28%	
QC value within limits for Pb 220.353 Recovery = 96.47%							
S 181.975 Axial†	676.2	930.03 ug/L	15.300	930.03 ppb	15.300	1.65%	
QC value within limits for S 181.975 Axial Recovery = 93.00%							
Sb 206.836†	1418.0	491.96 ug/L	10.047	491.96 ppb	10.047	2.04%	
QC value within limits for Sb 206.836 Recovery = 98.39%							
Se 196.026†	824.2	494.33 ug/L	2.958	494.33 ppb	2.958	0.60%	
QC value within limits for Se 196.026 Recovery = 98.87%							
Si 251.611†	80361.0	2375.2 ug/L	18.04	2375.2 ppb	18.04	0.76%	
QC value within limits for Si 251.611 Recovery = 95.01%							
Sn 189.927†	2605.4	479.94 ug/L	7.332	479.94 ppb	7.332	1.53%	
QC value within limits for Sn 189.927 Recovery = 95.99%							
Sr 421.552†	79004.6	506.99 ug/L	8.558	506.99 ppb	8.558	1.69%	
QC value within limits for Sr 421.552 Recovery = 101.40%							
Ti 334.940†	309318.3	471.48 ug/L	3.943	471.48 ppb	3.943	0.84%	
QC value within limits for Ti 334.940 Recovery = 94.30%							
Tl 190.801†	1486.7	478.69 ug/L	7.408	478.69 ppb	7.408	1.55%	
QC value within limits for Tl 190.801 Recovery = 95.74%							
U 409.014†	18950.3	472.20 ug/L	4.996	472.20 ppb	4.996	1.06%	
QC value within limits for U 409.014 Recovery = 94.44%							
V 292.402†	76356.3	481.16 ug/L	4.641	481.16 ppb	4.641	0.96%	
QC value within limits for V 292.402 Recovery = 96.23%							
Zn 213.857†	51199.4	472.71 ug/L	4.285	472.71 ppb	4.285	0.91%	
QC value within limits for Zn 213.857 Recovery = 94.54%							
SiO2†	80929.7	5105.4 ug/L	88.65	5105.4 ppb	88.65	1.74%	
QC value within limits for SiO2 Recovery = 95.47%							
All analyte(s) passed QC.							

Sequence No.: 5

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 1/26/2010 11:07:24

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5038.9	5038.9	94.4 %		11:09:17
1	Y RADIAL	5462.8	5462.8	94.89 %		11:09:17
1	Al 396.153Radial†	2.4	-6.6	-4.9616 ug/L	-4.9616 ppb	11:09:37
1	Ca 317.933Radial†	14.6	-4.8	-7.6397 ug/L	-7.6397 ppb	11:09:37
1	Fe 238.204 Radial†	7.7	1.0	8.8916 ug/L	8.8916 ppb	11:09:37
1	K 766.490 Radial†	2570.3	220.4	40.293 ug/L	40.293 ppb	11:09:17
1	Mg 279.077 IEC†	0.8	-0.2	-5.8119 ug/L	-5.8119 ppb	11:09:37
1	Na 589.592 Radial†	-739.0	-235.5	-70.014 ug/L	-70.014 ppb	11:09:17
1	Sr 421.552†	10.9	4.4	0.0286 ug/L	0.0286 ppb	11:09:17
1	Sc 361.383	887409.0	887409.0	98.835 %		11:10:34
1	Y 371.029	806255.2	806255.2	97.951 %		11:10:34
1	Ag 328.068†	309.2	16.8	0.0741 ug/L	0.0741 ppb	11:10:34
1	As 188.979†	-16.5	13.5	5.5051 ug/L	5.5051 ppb	11:10:54
1	B 249.677†	36.9	277.7	6.0889 ug/L	6.0889 ppb	11:10:54
1	Ba 233.527†	-6.4	-3.3	-0.0260 ug/L	-0.0260 ppb	11:10:54
1	Be 313.107†	-4929.7	112.6	0.0398 ug/L	0.0398 ppb	11:10:34
1	Cd 226.502†	-194.5	9.4	0.1036 ug/L	0.1036 ppb	11:10:54
1	Co 228.616†	-63.7	5.5	0.1196 ug/L	0.1196 ppb	11:10:54
1	Cr 267.716†	77.0	-16.0	-0.1729 ug/L	-0.1729 ppb	11:10:54
1	Cu 324.752†	8797.6	-226.6	-0.6346 ug/L	-0.6346 ppb	11:10:34
1	Mn 257.610†	491.2	7.1	0.0091 ug/L	0.0091 ppb	11:10:54
1	Mo 202.031†	22.5	-0.9	-0.0583 ug/L	-0.0583 ppb	11:10:54
1	Ni 231.604†	88.5	-4.2	-0.1052 ug/L	-0.1052 ppb	11:10:54
1	P 214.914†	240.7	4.8	2.8188 ug/L	2.8188 ppb	11:10:54
1	Pb 220.353†	-52.1	7.7	0.9623 ug/L	0.9623 ppb	11:10:54
1	S 181.975 Axial†	48.0	-28.4	-39.140 ug/L	-39.140 ppb	11:10:54
1	Sb 206.836†	39.8	10.0	3.3555 ug/L	3.3555 ppb	11:10:54
1	Se 196.026†	-20.2	-2.5	-1.3991 ug/L	-1.3991 ppb	11:10:54
1	Si 251.611†	484.5	-5.7	-0.1695 ug/L	-0.1695 ppb	11:10:54
1	Sn 189.927†	6.7	7.2	1.3144 ug/L	1.3144 ppb	11:10:54
1	Ti 334.940†	-889.4	6.6	0.0101 ug/L	0.0101 ppb	11:10:34
1	Tl 190.801†	-35.3	1.1	0.3618 ug/L	0.3618 ppb	11:10:54
1	U 409.014†	-1095.6	-45.6	-1.1418 ug/L	-1.1418 ppb	11:10:34
1	V 292.402†	-1371.2	6.2	0.0339 ug/L	0.0339 ppb	11:10:34
1	Zn 213.857†	682.8	-42.6	-0.3958 ug/L	-0.3958 ppb	11:10:54
1	SiO2†	513.9	6.5	0.4127 ug/L	0.4127 ppb	11:12:05
2	Sc Radial	5389.5	5389.5	101 %		11:09:42
2	Y RADIAL	5844.1	5844.1	101.5 %		11:09:42
2	Al 396.153Radial†	13.2	3.9	2.9300 ug/L	2.9300 ppb	11:10:02
2	Ca 317.933Radial†	16.8	-3.6	-5.7303 ug/L	-5.7303 ppb	11:10:02
2	Fe 238.204 Radial†	8.7	1.5	13.786 ug/L	13.786 ppb	11:10:02
2	K 766.490 Radial†	2309.9	-214.8	-39.213 ug/L	-39.213 ppb	11:09:42
2	Mg 279.077 IEC†	0.7	-0.3	-10.525 ug/L	-10.525 ppb	11:10:02
2	Na 589.592 Radial†	-736.7	-182.2	-54.177 ug/L	-54.177 ppb	11:09:42
2	Sr 421.552†	50.5	42.9	0.2756 ug/L	0.2756 ppb	11:09:42
2	Sc 361.383	887653.4	887653.4	98.862 %		11:10:59
2	Y 371.029	808770.7	808770.7	98.256 %		11:10:59
2	Ag 328.068†	321.6	29.3	0.1268 ug/L	0.1268 ppb	11:10:59
2	As 188.979†	-33.3	-3.5	-1.4396 ug/L	-1.4396 ppb	11:11:19
2	B 249.677†	31.0	271.8	5.9570 ug/L	5.9570 ppb	11:11:19
2	Ba 233.527†	9.1	12.4	0.0975 ug/L	0.0975 ppb	11:11:19
2	Be 313.107†	-4884.9	159.3	0.0561 ug/L	0.0561 ppb	11:10:59
2	Cd 226.502†	-202.6	1.3	0.0127 ug/L	0.0127 ppb	11:11:19
2	Co 228.616†	-59.4	9.8	0.2163 ug/L	0.2163 ppb	11:11:19
2	Cr 267.716†	88.8	-4.1	-0.0439 ug/L	-0.0439 ppb	11:11:19
2	Cu 324.752†	8903.6	-121.9	-0.3409 ug/L	-0.3409 ppb	11:10:59
2	Mn 257.610†	486.2	1.9	0.0040 ug/L	0.0040 ppb	11:11:19
2	Mo 202.031†	27.9	4.6	0.3171 ug/L	0.3171 ppb	11:11:19
2	Ni 231.604†	103.9	11.4	0.2872 ug/L	0.2872 ppb	11:11:19

2	P 214.914†	217.8	-18.4	-10.316 ug/L	-10.316 ppb	11:11:19
2	Pb 220.353†	-41.3	18.6	2.3398 ug/L	2.3398 ppb	11:11:19
2	S 181.975 Axial†	50.8	-25.6	-35.196 ug/L	-35.196 ppb	11:11:19
2	Sb 206.836†	38.2	8.3	2.8281 ug/L	2.8281 ppb	11:11:19
2	Se 196.026†	-27.0	-9.3	-5.3261 ug/L	-5.3261 ppb	11:11:19
2	Si 251.611†	485.1	-5.3	-0.1595 ug/L	-0.1595 ppb	11:11:19
2	Sn 189.927†	9.4	9.9	1.8146 ug/L	1.8146 ppb	11:11:19
2	Ti 334.940†	-923.0	-27.1	-0.0410 ug/L	-0.0410 ppb	11:10:59
2	Tl 190.801†	-40.8	-4.3	-1.3921 ug/L	-1.3921 ppb	11:11:19
2	U 409.014†	-1067.3	-16.7	-0.4192 ug/L	-0.4192 ppb	11:10:59
2	V 292.402†	-1397.0	-19.6	-0.1201 ug/L	-0.1201 ppb	11:10:59
2	Zn 213.857†	681.0	-44.5	-0.4175 ug/L	-0.4175 ppb	11:11:19
2	SiO2†	541.7	34.5	2.1718 ug/L	2.1718 ppb	11:12:25
3	Sc Radial	5456.3	5456.3	102 %		11:10:07
3	Y RADIAL	5908.8	5908.8	102.6 %		11:10:07
3	Al 396.153Radial†	2.8	-6.4	-4.8295 ug/L	-4.8295 ppb	11:10:27
3	Ca 317.933Radial†	19.1	-1.5	-2.4499 ug/L	-2.4499 ppb	11:10:27
3	Fe 238.204 Radial†	7.4	0.1	0.4792 ug/L	0.4792 ppb	11:10:27
3	K 766.490 Radial†	2457.2	-98.6	-17.999 ug/L	-17.999 ppb	11:10:07
3	Mg 279.077 IEC†	2.9	1.9	66.619 ug/L	66.619 ppb	11:10:27
3	Na 589.592 Radial†	-708.1	-145.4	-43.226 ug/L	-43.226 ppb	11:10:07
3	Sr 421.552†	35.3	27.5	0.1763 ug/L	0.1763 ppb	11:10:07
3	Sc 361.383	889459.6	889459.6	99.063 %		11:11:25
3	Y 371.029	810407.8	810407.8	98.455 %		11:11:25
3	Ag 328.068†	349.7	57.0	0.2372 ug/L	0.2372 ppb	11:11:25
3	As 188.979†	-25.6	4.3	1.7717 ug/L	1.7717 ppb	11:11:45
3	B 249.677†	23.5	264.2	5.7933 ug/L	5.7933 ppb	11:11:45
3	Ba 233.527†	16.9	20.1	0.1585 ug/L	0.1585 ppb	11:11:45
3	Be 313.107†	-4959.8	93.7	0.0331 ug/L	0.0331 ppb	11:11:25
3	Cd 226.502†	-209.5	-5.3	-0.0593 ug/L	-0.0593 ppb	11:11:45
3	Co 228.616†	-62.5	6.8	0.1493 ug/L	0.1493 ppb	11:11:45
3	Cr 267.716†	75.7	-17.5	-0.1896 ug/L	-0.1896 ppb	11:11:45
3	Cu 324.752†	8902.8	-141.0	-0.3956 ug/L	-0.3956 ppb	11:11:25
3	Mn 257.610†	481.0	-4.3	-0.0075 ug/L	-0.0075 ppb	11:11:45
3	Mo 202.031†	20.3	-3.2	-0.2153 ug/L	-0.2153 ppb	11:11:45
3	Ni 231.604†	91.3	-1.5	-0.0375 ug/L	-0.0375 ppb	11:11:45
3	P 214.914†	235.3	-1.2	-0.5519 ug/L	-0.5519 ppb	11:11:45
3	Pb 220.353†	-59.4	0.4	0.0514 ug/L	0.0514 ppb	11:11:45
3	S 181.975 Axial†	44.4	-32.1	-44.241 ug/L	-44.241 ppb	11:11:45
3	Sb 206.836†	41.8	12.0	4.0492 ug/L	4.0492 ppb	11:11:45
3	Se 196.026†	-14.3	3.6	2.0506 ug/L	2.0506 ppb	11:11:45
3	Si 251.611†	492.2	0.9	0.0307 ug/L	0.0307 ppb	11:11:45
3	Sn 189.927†	17.8	18.3	3.3739 ug/L	3.3739 ppb	11:11:45
3	Ti 334.940†	-884.0	14.2	0.0160 ug/L	0.0160 ppb	11:11:25
3	Tl 190.801†	-38.0	-1.5	-0.4719 ug/L	-0.4719 ppb	11:11:45
3	U 409.014†	-1051.2	1.7	0.0419 ug/L	0.0419 ppb	11:11:25
3	V 292.402†	-1406.5	-26.2	-0.1649 ug/L	-0.1649 ppb	11:11:25
3	Zn 213.857†	694.5	-32.3	-0.3004 ug/L	-0.3004 ppb	11:11:45
3	SiO2†	492.3	-16.5	-1.0349 ug/L	-1.0349 ppb	11:12:45

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	888174.0	98.920 %	0.1247			0.13%
Sc Radial	5294.9	99.2 %	4.20			4.23%
Y 371.029	808477.9	98.221 %	0.2541			0.26%
Y RADIAL	5738.6	99.68 %	4.186			4.20%
Ag 328.068†	34.4	0.1460 ug/L	0.08325	0.1460 ppb	0.08325	57.00%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-3.0	-2.2870 ug/L	4.51858	-2.2870 ppb	4.51858	197.57%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	4.8	1.9457 ug/L	3.47563	1.9457 ppb	3.47563	178.63%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	271.2	5.9464 ug/L	0.14807	5.9464 ppb	0.14807	2.49%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	9.7	0.0767 ug/L	0.09401	0.0767 ppb	0.09401	122.63%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	121.9	0.0430 ug/L	0.01183	0.0430 ppb	0.01183	27.53%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-3.3	-5.2733 ug/L	2.62490	-5.2733 ppb	2.62490	49.78%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	1.8	0.0190 ug/L	0.08166	0.0190 ppb	0.08166	429.73%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	7.4	0.1618 ug/L	0.04955	0.1618 ppb	0.04955	30.63%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-12.5	-0.1355 ug/L	0.07975	-0.1355 ppb	0.07975	58.87%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-163.2	-0.4570 ug/L	0.15621	-0.4570 ppb	0.15621	34.18%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.8	7.7189 ug/L	6.73040	7.7189 ppb	6.73040	87.19%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-31.0	-5.6398 ug/L	41.16864	-5.6398 ppb	41.16864	729.96%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.5	16.761 ug/L	43.2432	16.761 ppb	43.2432	258.00%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	1.6	0.0019 ug/L	0.00849	0.0019 ppb	0.00849	456.11%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	0.2	0.0145 ug/L	0.27358	0.0145 ppb	0.27358	>999.9%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-187.7	-55.806 ug/L	13.4680	-55.806 ppb	13.4680	24.13%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	1.9	0.0482 ug/L	0.20978	0.0482 ppb	0.20978	435.37%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-4.9	-2.6831 ug/L	6.82189	-2.6831 ppb	6.82189	254.26%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	8.9	1.1179 ug/L	1.15213	1.1179 ppb	1.15213	103.07%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-28.7	-39.526 ug/L	4.5352	-39.526 ppb	4.5352	11.47%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	10.1	3.4109 ug/L	0.61240	3.4109 ppb	0.61240	17.95%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-2.7	-1.5582 ug/L	3.69089	-1.5582 ppb	3.69089	236.87%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-3.4	-0.0994 ug/L	0.11281	-0.0994 ppb	0.11281	113.44%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	11.8	2.1676 ug/L	1.07419	2.1676 ppb	1.07419	49.56%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	25.0	0.1602 ug/L	0.12431	0.1602 ppb	0.12431	77.60%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-2.1	-0.0050 ug/L	0.03133	-0.0050 ppb	0.03133	628.81%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-1.6	-0.5008 ug/L	0.87732	-0.5008 ppb	0.87732	175.20%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-20.2	-0.5064 ug/L	0.59667	-0.5064 ppb	0.59667	117.83%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-13.2	-0.0837 ug/L	0.10431	-0.0837 ppb	0.10431	124.62%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-39.8	-0.3712 ug/L	0.06231	-0.3712 ppb	0.06231	16.78%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	8.2	0.5165 ug/L	1.60587	0.5165 ppb	1.60587	310.90%
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: 7

Date Collected: 1/26/2010 12:13:34

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	5433.0	5433.0	102 %		12:15:26
1	Y RADIAL	5836.7	5836.7	101.4 %		12:15:26
1	Al 396.153Radial†	6608.6	6486.4	4890.1 ug/L	4890.1 ppb	12:15:26
1	Ca 317.933Radial†	3217.2	3141.9	5049.9 ug/L	5049.9 ppb	12:15:46
1	Fe 238.204 Radial†	578.3	561.3	5260.3 ug/L	5260.3 ppb	12:15:46
1	K 766.490 Radial†	30416.9	27392.9	4997.8 ug/L	4997.8 ppb	12:15:26
1	Mg 279.077 IEC†	151.4	147.9	5274.6 ug/L	5274.6 ppb	12:15:46
1	Na 589.592 Radial†	34421.6	34380.3	10220 ug/L	10220 ppb	12:15:26
1	Sr 421.552†	80987.0	79594.2	510.77 ug/L	510.77 ppb	12:15:26
1	Sc 361.383	923891.8	923891.8	102.90 %		12:16:44
1	Y 371.029	809345.7	809345.7	98.326 %		12:16:44
1	Ag 328.068†	121335.5	117622.4	494.07 ug/L	494.07 ppb	12:16:49
1	As 188.979†	1199.0	1195.4	493.36 ug/L	493.36 ppb	12:17:09
1	B 249.677†	22641.0	22243.8	485.53 ug/L	485.53 ppb	12:16:49
1	Ba 233.527†	64172.8	62368.7	492.84 ug/L	492.84 ppb	12:16:49
1	Be 313.107†	1415559.2	1380794.6	488.20 ug/L	488.20 ppb	12:16:44
1	Cd 226.502†	45558.5	44481.6	496.74 ug/L	496.74 ppb	12:16:49
1	Co 228.616†	23532.9	22940.1	502.96 ug/L	502.96 ppb	12:16:49
1	Cr 267.716†	47042.5	45623.8	495.20 ug/L	495.20 ppb	12:16:49
1	Cu 324.752†	187213.1	172812.8	484.79 ug/L	484.79 ppb	12:16:49
1	Mn 257.610†	447871.5	434768.6	487.75 ug/L	487.75 ppb	12:16:44
1	Mo 202.031†	7347.9	7117.4	486.22 ug/L	486.22 ppb	12:17:09
1	Ni 231.604†	20427.0	19758.1	496.25 ug/L	496.25 ppb	12:16:49
1	P 214.914†	4667.6	4297.5	2328.8 ug/L	2328.8 ppb	12:17:09
1	Pb 220.353†	3954.1	3903.2	491.49 ug/L	491.49 ppb	12:17:09
1	S 181.975 Axial†	794.7	695.4	956.46 ug/L	956.46 ppb	12:17:09
1	Sb 206.836†	1534.4	1460.9	506.67 ug/L	506.67 ppb	12:17:09
1	Se 196.026†	851.5	845.5	506.81 ug/L	506.81 ppb	12:17:09
1	Si 251.611†	86055.6	83136.1	2457.3 ug/L	2457.3 ppb	12:16:49
1	Sn 189.927†	2738.0	2661.2	490.21 ug/L	490.21 ppb	12:17:09
1	Ti 334.940†	328569.8	320223.1	488.10 ug/L	488.10 ppb	12:16:49
1	Tl 190.801†	1517.7	1511.9	486.85 ug/L	486.85 ppb	12:17:09
1	U 409.014†	18951.7	19480.8	485.41 ug/L	485.41 ppb	12:16:49
1	V 292.402†	79772.8	78919.8	497.22 ug/L	497.22 ppb	12:16:49
1	Zn 213.857†	55252.2	52962.7	489.00 ug/L	489.00 ppb	12:16:49
1	SiO2†	86703.2	83748.0	5283.4 ug/L	5283.4 ppb	12:18:17
2	Sc Radial	5434.3	5434.3	102 %		12:15:52
2	Y RADIAL	5854.6	5854.6	101.7 %		12:15:52
2	Al 396.153Radial†	6656.5	6532.0	4924.3 ug/L	4924.3 ppb	12:15:52
2	Ca 317.933Radial†	3208.0	3132.2	5034.3 ug/L	5034.3 ppb	12:16:12
2	Fe 238.204 Radial†	582.4	565.2	5296.7 ug/L	5296.7 ppb	12:16:12
2	K 766.490 Radial†	30709.3	27673.4	5049.0 ug/L	5049.0 ppb	12:15:52
2	Mg 279.077 IEC†	151.8	148.2	5285.6 ug/L	5285.6 ppb	12:16:12
2	Na 589.592 Radial†	34490.0	34439.7	10238 ug/L	10238 ppb	12:15:52
2	Sr 421.552†	81509.8	80089.5	513.95 ug/L	513.95 ppb	12:15:52
2	Sc 361.383	920562.4	920562.4	102.53 %		12:17:15
2	Y 371.029	807595.5	807595.5	98.114 %		12:17:15
2	Ag 328.068†	121078.0	117797.7	494.81 ug/L	494.81 ppb	12:17:20
2	As 188.979†	1211.1	1211.4	499.89 ug/L	499.89 ppb	12:17:40
2	B 249.677†	22650.3	22332.4	487.47 ug/L	487.47 ppb	12:17:20
2	Ba 233.527†	64060.2	62484.4	493.76 ug/L	493.76 ppb	12:17:20
2	Be 313.107†	1412967.1	1383241.8	489.06 ug/L	489.06 ppb	12:17:15
2	Cd 226.502†	45343.5	44432.1	496.19 ug/L	496.19 ppb	12:17:20
2	Co 228.616†	23476.9	22968.2	503.59 ug/L	503.59 ppb	12:17:20
2	Cr 267.716†	46867.3	45618.3	495.14 ug/L	495.14 ppb	12:17:20
2	Cu 324.752†	187165.8	173424.7	486.51 ug/L	486.51 ppb	12:17:20
2	Mn 257.610†	445993.0	434510.7	487.47 ug/L	487.47 ppb	12:17:15
2	Mo 202.031†	7434.2	7227.3	493.72 ug/L	493.72 ppb	12:17:40
2	Ni 231.604†	20378.3	19782.3	496.86 ug/L	496.86 ppb	12:17:20

2	P 214.914†	4714.9	4359.9	2363.7 ug/L	2363.7 ppb	12:17:40
2	Pb 220.353†	3979.0	3941.3	496.30 ug/L	496.30 ppb	12:17:40
2	S 181.975 Axial†	806.2	709.4	975.75 ug/L	975.75 ppb	12:17:40
2	Sb 206.836†	1546.4	1478.0	512.65 ug/L	512.65 ppb	12:17:40
2	Se 196.026†	863.0	859.7	515.15 ug/L	515.15 ppb	12:17:40
2	Si 251.611†	85994.5	83379.0	2464.4 ug/L	2464.4 ppb	12:17:20
2	Sn 189.927†	2764.7	2696.9	496.78 ug/L	496.78 ppb	12:17:40
2	Ti 334.940†	327821.2	320647.9	488.74 ug/L	488.74 ppb	12:17:20
2	Tl 190.801†	1537.6	1536.6	494.76 ug/L	494.76 ppb	12:17:40
2	U 409.014†	19037.6	19631.2	489.17 ug/L	489.17 ppb	12:17:20
2	V 292.402†	79683.0	79112.6	498.53 ug/L	498.53 ppb	12:17:20
2	Zn 213.857†	55143.1	53050.6	489.80 ug/L	489.80 ppb	12:17:20
2	SiO2†	85235.4	82621.2	5211.9 ug/L	5211.9 ppb	12:18:22
3	Sc Radial	5356.7	5356.7	100 %		12:16:17
3	Y RADIAL	5759.6	5759.6	100.0 %		12:16:17
3	Al 396.153Radial†	6629.4	6599.7	4975.9 ug/L	4975.9 ppb	12:16:17
3	Ca 317.933Radial†	3184.6	3154.5	5070.2 ug/L	5070.2 ppb	12:16:37
3	Fe 238.204 Radial†	575.3	566.4	5308.0 ug/L	5308.0 ppb	12:16:37
3	K 766.490 Radial†	30539.8	27941.5	5098.0 ug/L	5098.0 ppb	12:16:17
3	Mg 279.077 IEC†	153.4	151.9	5418.3 ug/L	5418.3 ppb	12:16:37
3	Na 589.592 Radial†	34248.3	34689.6	10312 ug/L	10312 ppb	12:16:17
3	Sr 421.552†	80762.1	80504.2	516.61 ug/L	516.61 ppb	12:16:17
3	Sc 361.383	930593.8	930593.8	103.64 %		12:17:46
3	Y 371.029	815416.9	815416.9	99.064 %		12:17:46
3	Ag 328.068†	121072.6	116519.5	489.46 ug/L	489.46 ppb	12:17:51
3	As 188.979†	1213.6	1201.1	495.64 ug/L	495.64 ppb	12:18:11
3	B 249.677†	22709.1	22151.1	483.50 ug/L	483.50 ppb	12:17:51
3	Ba 233.527†	63920.0	61675.6	487.37 ug/L	487.37 ppb	12:17:51
3	Be 313.107†	1426007.0	1380967.3	488.25 ug/L	488.25 ppb	12:17:46
3	Cd 226.502†	45398.5	44008.4	491.45 ug/L	491.45 ppb	12:17:51
3	Co 228.616†	23511.5	22754.8	498.90 ug/L	498.90 ppb	12:17:51
3	Cr 267.716†	46750.9	45013.2	488.57 ug/L	488.57 ppb	12:17:51
3	Cu 324.752†	187206.1	171495.7	481.10 ug/L	481.10 ppb	12:17:51
3	Mn 257.610†	450718.9	434381.2	487.32 ug/L	487.32 ppb	12:17:46
3	Mo 202.031†	7400.8	7116.9	486.19 ug/L	486.19 ppb	12:18:11
3	Ni 231.604†	20364.4	19554.6	491.14 ug/L	491.14 ppb	12:17:51
3	P 214.914†	4729.9	4324.8	2344.9 ug/L	2344.9 ppb	12:18:11
3	Pb 220.353†	3959.3	3880.4	488.66 ug/L	488.66 ppb	12:18:11
3	S 181.975 Axial†	799.0	693.9	954.42 ug/L	954.42 ppb	12:18:11
3	Sb 206.836†	1528.0	1444.0	501.03 ug/L	501.03 ppb	12:18:11
3	Se 196.026†	851.6	839.6	503.59 ug/L	503.59 ppb	12:18:11
3	Si 251.611†	85986.6	82467.3	2437.5 ug/L	2437.5 ppb	12:17:51
3	Sn 189.927†	2762.1	2665.3	490.98 ug/L	490.98 ppb	12:18:11
3	Ti 334.940†	327580.5	316968.9	483.13 ug/L	483.13 ppb	12:17:51
3	Tl 190.801†	1528.2	1511.4	486.68 ug/L	486.68 ppb	12:18:11
3	U 409.014†	19160.8	19549.9	487.15 ug/L	487.15 ppb	12:17:51
3	V 292.402†	79412.7	78014.1	491.60 ug/L	491.60 ppb	12:17:51
3	Zn 213.857†	55024.7	52356.5	483.38 ug/L	483.38 ppb	12:17:51
3	SiO2†	85738.5	82210.5	5186.1 ug/L	5186.1 ppb	12:18:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	925016.0	103.02 %	0.569			0.55%
Sc Radial	5408.0	101 %	0.8			0.82%
Y 371.029	810786.0	98.501 %	0.4987			0.51%
Y RADIAL	5817.0	101.0 %	0.88			0.87%
Ag 328.068†	117313.2	492.78 ug/L	2.902	492.78 ppb	2.902	0.59%
QC value within limits for Ag 328.068 Recovery = 98.56%						
Al 396.153Radial†	6539.4	4930.1 ug/L	43.20	4930.1 ppb	43.20	0.88%
QC value within limits for Al 396.153Radial Recovery = 98.60%						
As 188.979†	1202.6	496.30 ug/L	3.315	496.30 ppb	3.315	0.67%
QC value within limits for As 188.979 Recovery = 99.26%						
B 249.677†	22242.4	485.50 ug/L	1.983	485.50 ppb	1.983	0.41%
QC value within limits for B 249.677 Recovery = 97.10%						
Ba 233.527†	62176.2	491.32 ug/L	3.455	491.32 ppb	3.455	0.70%
QC value within limits for Ba 233.527 Recovery = 98.26%						
Be 313.107†	1381667.9	488.50 ug/L	0.486	488.50 ppb	0.486	0.10%
QC value within limits for Be 313.107 Recovery = 97.70%						
Ca 317.933Radial†	3142.8	5051.5 ug/L	17.96	5051.5 ppb	17.96	0.36%

QC value within limits for Ca 317.933Radial Recovery = 101.03%							
Cd 226.502†	44307.4	494.79 ug/L	2.909	494.79 ppb	2.909	0.59%	
QC value within limits for Cd 226.502 Recovery = 98.96%							
Co 228.616†	22887.7	501.82 ug/L	2.542	501.82 ppb	2.542	0.51%	
QC value within limits for Co 228.616 Recovery = 100.36%							
Cr 267.716†	45418.4	492.97 ug/L	3.809	492.97 ppb	3.809	0.77%	
QC value within limits for Cr 267.716 Recovery = 98.59%							
Cu 324.752†	172577.7	484.13 ug/L	2.764	484.13 ppb	2.764	0.57%	
QC value within limits for Cu 324.752 Recovery = 96.83%							
Fe 238.204 Radial†	564.3	5288.3 ug/L	24.91	5288.3 ppb	24.91	0.47%	
QC value within limits for Fe 238.204 Radial Recovery = 105.77%							
K 766.490 Radial†	27669.3	5048.3 ug/L	50.09	5048.3 ppb	50.09	0.99%	
QC value within limits for K 766.490 Radial Recovery = 100.97%							
Mg 279.077 IEC†	149.3	5326.1 ug/L	80.00	5326.1 ppb	80.00	1.50%	
QC value within limits for Mg 279.077 IEC Recovery = 106.52%							
Mn 257.610†	434553.5	487.51 ug/L	0.221	487.51 ppb	0.221	0.05%	
QC value within limits for Mn 257.610 Recovery = 97.50%							
Mo 202.031†	7153.9	488.71 ug/L	4.341	488.71 ppb	4.341	0.89%	
QC value within limits for Mo 202.031 Recovery = 97.74%							
Na 589.592 Radial†	34503.2	10257 ug/L	48.8	10257 ppb	48.8	0.48%	
QC value within limits for Na 589.592 Radial Recovery = 102.57%							
Ni 231.604†	19698.4	494.75 ug/L	3.141	494.75 ppb	3.141	0.63%	
QC value within limits for Ni 231.604 Recovery = 98.95%							
P 214.914†	4327.4	2345.8 ug/L	17.49	2345.8 ppb	17.49	0.75%	
QC value within limits for P 214.914 Recovery = 93.83%							
Pb 220.353†	3908.3	492.15 ug/L	3.864	492.15 ppb	3.864	0.79%	
QC value within limits for Pb 220.353 Recovery = 98.43%							
S 181.975 Axial†	699.5	962.21 ug/L	11.770	962.21 ppb	11.770	1.22%	
QC value within limits for S 181.975 Axial Recovery = 96.22%							
Sb 206.836†	1461.0	506.78 ug/L	5.808	506.78 ppb	5.808	1.15%	
QC value within limits for Sb 206.836 Recovery = 101.36%							
Se 196.026†	848.2	508.52 ug/L	5.968	508.52 ppb	5.968	1.17%	
QC value within limits for Se 196.026 Recovery = 101.70%							
Si 251.611†	82994.1	2453.1 ug/L	13.95	2453.1 ppb	13.95	0.57%	
QC value within limits for Si 251.611 Recovery = 98.12%							
Sn 189.927†	2674.5	492.66 ug/L	3.593	492.66 ppb	3.593	0.73%	
QC value within limits for Sn 189.927 Recovery = 98.53%							
Sr 421.552†	80062.7	513.78 ug/L	2.924	513.78 ppb	2.924	0.57%	
QC value within limits for Sr 421.552 Recovery = 102.76%							
Ti 334.940†	319280.0	486.66 ug/L	3.071	486.66 ppb	3.071	0.63%	
QC value within limits for Ti 334.940 Recovery = 97.33%							
Tl 190.801†	1519.9	489.43 ug/L	4.614	489.43 ppb	4.614	0.94%	
QC value within limits for Tl 190.801 Recovery = 97.89%							
U 409.014†	19553.9	487.25 ug/L	1.880	487.25 ppb	1.880	0.39%	
QC value within limits for U 409.014 Recovery = 97.45%							
V 292.402†	78682.2	495.78 ug/L	3.684	495.78 ppb	3.684	0.74%	
QC value within limits for V 292.402 Recovery = 99.16%							
Zn 213.857†	52790.0	487.39 ug/L	3.498	487.39 ppb	3.498	0.72%	
QC value within limits for Zn 213.857 Recovery = 97.48%							
SiO2†	82859.9	5227.1 ug/L	50.38	5227.1 ppb	50.38	0.96%	
QC value within limits for SiO2 Recovery = 97.75%							
All analyte(s) passed QC.							

Sequence No.: 10

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 1/26/2010 12:20:38

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5415.3	5415.3	101 %		12:22:31
1	Y RADIAL	5847.2	5847.2	101.6 %		12:22:31
1	Al 396.153Radial†	275.7	262.8	198.56 ug/L	198.56 ppb	12:22:51
1	Ca 317.933Radial†	152.1	129.8	208.60 ug/L	208.60 ppb	12:22:51
1	Fe 238.204 Radial†	21.1	13.6	127.55 ug/L	127.55 ppb	12:22:51
1	K 766.490 Radial†	3280.7	731.6	133.47 ug/L	133.47 ppb	12:22:31
1	Mg 279.077 IEC†	10.5	9.3	332.93 ug/L	332.93 ppb	12:22:51
1	Na 589.592 Radial†	265.9	809.9	240.75 ug/L	240.75 ppb	12:22:31
1	Sr 421.552†	809.0	790.6	5.0724 ug/L	5.0724 ppb	12:22:31
1	Sc 361.383	890266.9	890266.9	99.153 %		12:23:48
1	Y 371.029	809464.4	809464.4	98.341 %		12:23:48
1	Ag 328.068†	1559.9	1277.2	5.3485 ug/L	5.3485 ppb	12:23:48
1	As 188.979†	41.2	71.8	29.413 ug/L	29.413 ppb	12:24:08
1	B 249.677†	2148.3	2407.1	52.753 ug/L	52.753 ppb	12:23:48
1	Ba 233.527†	649.8	658.4	5.2058 ug/L	5.2058 ppb	12:24:08
1	Be 313.107†	9305.3	14485.2	5.1216 ug/L	5.1216 ppb	12:23:48
1	Cd 226.502†	256.1	464.5	5.1889 ug/L	5.1889 ppb	12:24:08
1	Co 228.616†	158.6	229.9	5.0505 ug/L	5.0505 ppb	12:24:08
1	Cr 267.716†	550.8	461.6	4.9940 ug/L	4.9940 ppb	12:24:08
1	Cu 324.752†	12535.9	3514.9	9.8385 ug/L	9.8385 ppb	12:23:48
1	Mn 257.610†	9867.7	9462.2	10.608 ug/L	10.608 ppb	12:23:48
1	Mo 202.031†	171.6	149.5	10.213 ug/L	10.213 ppb	12:24:08
1	Ni 231.604†	323.2	232.3	5.8342 ug/L	5.8342 ppb	12:24:08
1	P 214.914†	507.0	272.6	151.83 ug/L	151.83 ppb	12:24:08
1	Pb 220.353†	22.8	83.4	10.522 ug/L	10.522 ppb	12:24:08
1	S 181.975 Axial†	132.5	56.7	78.011 ug/L	78.011 ppb	12:24:08
1	Sb 206.836†	71.7	42.0	14.451 ug/L	14.451 ppb	12:24:08
1	Se 196.026†	31.5	49.7	29.135 ug/L	29.135 ppb	12:24:08
1	Si 251.611†	3773.0	3309.3	97.928 ug/L	97.928 ppb	12:24:08
1	Sn 189.927†	60.6	61.4	11.327 ug/L	11.327 ppb	12:24:08
1	Ti 334.940†	2484.5	3412.3	5.1791 ug/L	5.1791 ppb	12:23:48
1	Tl 190.801†	12.6	49.6	15.931 ug/L	15.931 ppb	12:24:08
1	U 409.014†	989.5	2060.7	51.504 ug/L	51.504 ppb	12:23:48
1	V 292.402†	-508.3	881.0	5.7019 ug/L	5.7019 ppb	12:23:48
1	Zn 213.857†	1790.4	1072.3	9.9246 ug/L	9.9246 ppb	12:24:08
1	SiO2†	3998.3	3519.0	222.28 ug/L	222.28 ppb	12:25:04
2	Sc Radial	5401.3	5401.3	101 %		12:22:56
2	Y RADIAL	5831.5	5831.5	101.3 %		12:22:56
2	Al 396.153Radial†	278.3	266.0	201.00 ug/L	201.00 ppb	12:23:16
2	Ca 317.933Radial†	148.3	126.4	203.13 ug/L	203.13 ppb	12:23:16
2	Fe 238.204 Radial†	19.1	11.7	109.83 ug/L	109.83 ppb	12:23:16
2	K 766.490 Radial†	3282.7	742.0	135.37 ug/L	135.37 ppb	12:22:56
2	Mg 279.077 IEC†	9.1	8.0	284.70 ug/L	284.70 ppb	12:23:16
2	Na 589.592 Radial†	292.9	837.2	248.87 ug/L	248.87 ppb	12:22:56
2	Sr 421.552†	826.6	810.2	5.1978 ug/L	5.1978 ppb	12:22:56
2	Sc 361.383	885666.5	885666.5	98.641 %		12:24:13
2	Y 371.029	803756.0	803756.0	97.647 %		12:24:13
2	Ag 328.068†	1580.8	1306.6	5.4645 ug/L	5.4645 ppb	12:24:13
2	As 188.979†	40.0	70.7	28.970 ug/L	28.970 ppb	12:24:33
2	B 249.677†	2033.1	2301.6	50.442 ug/L	50.442 ppb	12:24:13
2	Ba 233.527†	658.7	670.9	5.3023 ug/L	5.3023 ppb	12:24:33
2	Be 313.107†	9253.9	14481.8	5.1206 ug/L	5.1206 ppb	12:24:13
2	Cd 226.502†	283.8	493.9	5.5192 ug/L	5.5192 ppb	12:24:33
2	Co 228.616†	157.8	229.9	5.0515 ug/L	5.0515 ppb	12:24:33
2	Cr 267.716†	564.2	478.0	5.1716 ug/L	5.1716 ppb	12:24:33
2	Cu 324.752†	12388.3	3431.0	9.6030 ug/L	9.6030 ppb	12:24:13
2	Mn 257.610†	9788.9	9434.0	10.576 ug/L	10.576 ppb	12:24:13
2	Mo 202.031†	169.2	148.0	10.108 ug/L	10.108 ppb	12:24:33
2	Ni 231.604†	318.9	229.6	5.7665 ug/L	5.7665 ppb	12:24:33

2	P 214.914†	501.6	269.7	150.28 ug/L	150.28 ppb	12:24:33
2	Pb 220.353†	31.8	92.7	11.687 ug/L	11.687 ppb	12:24:33
2	S 181.975 Axial†	122.6	47.2	65.016 ug/L	65.016 ppb	12:24:33
2	Sb 206.836†	63.3	33.9	11.739 ug/L	11.739 ppb	12:24:33
2	Se 196.026†	29.4	47.7	27.941 ug/L	27.941 ppb	12:24:33
2	Si 251.611†	3808.9	3365.4	99.592 ug/L	99.592 ppb	12:24:33
2	Sn 189.927†	62.9	64.1	11.821 ug/L	11.821 ppb	12:24:33
2	Ti 334.940†	2521.2	3462.5	5.2594 ug/L	5.2594 ppb	12:24:13
2	Tl 190.801†	19.2	56.4	18.088 ug/L	18.088 ppb	12:24:33
2	U 409.014†	924.5	2000.1	49.988 ug/L	49.988 ppb	12:24:13
2	V 292.402†	-584.1	801.4	5.2042 ug/L	5.2042 ppb	12:24:13
2	Zn 213.857†	1797.5	1088.9	10.082 ug/L	10.082 ppb	12:24:33
2	SiO2†	3926.2	3466.9	218.99 ug/L	218.99 ppb	12:25:09
3	Sc Radial	5516.4	5516.4	103 %		12:23:21
3	Y RADIAL	5969.8	5969.8	103.7 %		12:23:21
3	Al 396.153Radial†	278.3	260.2	196.61 ug/L	196.61 ppb	12:23:41
3	Ca 317.933Radial†	146.8	121.8	195.83 ug/L	195.83 ppb	12:23:41
3	Fe 238.204 Radial†	19.0	11.3	105.44 ug/L	105.44 ppb	12:23:41
3	K 766.490 Radial†	3193.2	587.7	107.17 ug/L	107.17 ppb	12:23:21
3	Mg 279.077 IEC†	11.0	9.7	346.79 ug/L	346.79 ppb	12:23:41
3	Na 589.592 Radial†	379.7	915.2	272.07 ug/L	272.07 ppb	12:23:21
3	Sr 421.552†	846.0	811.9	5.2091 ug/L	5.2091 ppb	12:23:21
3	Sc 361.383	894423.6	894423.6	99.616 %		12:24:38
3	Y 371.029	817232.0	817232.0	99.284 %		12:24:38
3	Ag 328.068†	1591.3	1301.4	5.4350 ug/L	5.4350 ppb	12:24:38
3	As 188.979†	40.7	71.0	29.095 ug/L	29.095 ppb	12:24:58
3	B 249.677†	2091.8	2340.3	51.293 ug/L	51.293 ppb	12:24:38
3	Ba 233.527†	648.2	653.8	5.1670 ug/L	5.1670 ppb	12:24:58
3	Be 313.107†	9369.1	14505.6	5.1288 ug/L	5.1288 ppb	12:24:38
3	Cd 226.502†	264.1	471.3	5.2680 ug/L	5.2680 ppb	12:24:58
3	Co 228.616†	164.8	235.3	5.1718 ug/L	5.1718 ppb	12:24:58
3	Cr 267.716†	577.3	485.5	5.2499 ug/L	5.2499 ppb	12:24:58
3	Cu 324.752†	12615.0	3535.7	9.8927 ug/L	9.8927 ppb	12:24:38
3	Mn 257.610†	9931.8	9480.2	10.625 ug/L	10.625 ppb	12:24:38
3	Mo 202.031†	179.1	156.2	10.668 ug/L	10.668 ppb	12:24:58
3	Ni 231.604†	332.8	240.4	6.0376 ug/L	6.0376 ppb	12:24:58
3	P 214.914†	510.8	274.1	152.67 ug/L	152.67 ppb	12:24:58
3	Pb 220.353†	9.4	69.8	8.8204 ug/L	8.8204 ppb	12:24:58
3	S 181.975 Axial†	122.6	46.1	63.375 ug/L	63.375 ppb	12:24:58
3	Sb 206.836†	66.4	36.4	12.598 ug/L	12.598 ppb	12:24:58
3	Se 196.026†	27.2	45.3	26.526 ug/L	26.526 ppb	12:24:58
3	Si 251.611†	3808.4	3327.1	98.451 ug/L	98.451 ppb	12:24:58
3	Sn 189.927†	66.3	66.9	12.324 ug/L	12.324 ppb	12:24:58
3	Ti 334.940†	2490.0	3406.1	5.1645 ug/L	5.1645 ppb	12:24:38
3	Tl 190.801†	30.3	67.3	21.597 ug/L	21.597 ppb	12:24:58
3	U 409.014†	1199.0	2266.5	56.650 ug/L	56.650 ppb	12:24:38
3	V 292.402†	-635.5	755.6	4.9418 ug/L	4.9418 ppb	12:24:38
3	Zn 213.857†	1788.4	1061.9	9.8287 ug/L	9.8287 ppb	12:24:58
3	SiO2†	3913.1	3414.8	215.68 ug/L	215.68 ppb	12:25:14

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	890119.0	99.136 %	0.4879			0.49%
Sc Radial	5444.3	102 %	1.2			1.15%
Y 371.029	810150.8	98.424 %	0.8218			0.83%
Y RADIAL	5882.8	102.2 %	1.32			1.29%
Ag 328.068†	1295.1	5.4160 ug/L	0.06030	5.4160 ppb	0.06030	1.11%
QC value within limits for Ag 328.068 Recovery = 108.32%						
Al 396.153Radial†	263.0	198.72 ug/L	2.195	198.72 ppb	2.195	1.10%
QC value within limits for Al 396.153Radial Recovery = 99.36%						
As 188.979†	71.2	29.159 ug/L	0.2285	29.159 ppb	0.2285	0.78%
QC value within limits for As 188.979 Recovery = 97.20%						
B 249.677†	2349.6	51.496 ug/L	1.1689	51.496 ppb	1.1689	2.27%
QC value within limits for B 249.677 Recovery = 102.99%						
Ba 233.527†	661.0	5.2250 ug/L	0.06968	5.2250 ppb	0.06968	1.33%
QC value within limits for Ba 233.527 Recovery = 104.50%						
Be 313.107†	14490.9	5.1237 ug/L	0.00447	5.1237 ppb	0.00447	0.09%
QC value within limits for Be 313.107 Recovery = 102.47%						
Ca 317.933Radial†	126.0	202.52 ug/L	6.404	202.52 ppb	6.404	3.16%

QC value within limits for Ca 317.933 Radial Recovery = 101.26%							
Cd 226.502†	476.5	5.3254 ug/L	0.17250	5.3254 ppb	0.17250	3.24%	
QC value within limits for Cd 226.502 Recovery = 106.51%							
Co 228.616†	231.7	5.0913 ug/L	0.06971	5.0913 ppb	0.06971	1.37%	
QC value within limits for Co 228.616 Recovery = 101.83%							
Cr 267.716†	475.1	5.1385 ug/L	0.13115	5.1385 ppb	0.13115	2.55%	
QC value within limits for Cr 267.716 Recovery = 102.77%							
Cu 324.752†	3493.9	9.7781 ug/L	0.15398	9.7781 ppb	0.15398	1.57%	
QC value within limits for Cu 324.752 Recovery = 97.78%							
Fe 238.204 Radial†	12.2	114.27 ug/L	11.708	114.27 ppb	11.708	10.25%	
QC value within limits for Fe 238.204 Radial Recovery = 114.27%							
K 766.490 Radial†	687.1	125.34 ug/L	15.761	125.34 ppb	15.761	12.57%	
QC value within limits for K 766.490 Radial Recovery = 83.56%							
Mg 279.077 IEC†	9.0	321.48 ug/L	32.589	321.48 ppb	32.589	10.14%	
QC value within limits for Mg 279.077 IEC Recovery = 107.16%							
Mn 257.610†	9458.8	10.603 ug/L	0.0248	10.603 ppb	0.0248	0.23%	
QC value within limits for Mn 257.610 Recovery = 106.03%							
Mo 202.031†	151.2	10.330 ug/L	0.2973	10.330 ppb	0.2973	2.88%	
QC value within limits for Mo 202.031 Recovery = 103.30%							
Na 589.592 Radial†	854.1	253.90 ug/L	16.254	253.90 ppb	16.254	6.40%	
QC value within limits for Na 589.592 Radial Recovery = 84.63%							
Ni 231.604†	234.1	5.8794 ug/L	0.14108	5.8794 ppb	0.14108	2.40%	
QC value within limits for Ni 231.604 Recovery = 117.59%							
P 214.914†	272.1	151.59 ug/L	1.213	151.59 ppb	1.213	0.80%	
QC value within limits for P 214.914 Recovery = 101.06%							
Pb 220.353†	82.0	10.343 ug/L	1.4418	10.343 ppb	1.4418	13.94%	
QC value within limits for Pb 220.353 Recovery = 103.43%							
S 181.975 Axial†	50.0	68.801 ug/L	8.0186	68.801 ppb	8.0186	11.65%	
QC value less than the lower limit for S 181.975 Axial Recovery = 68.80%							
Sb 206.836†	37.5	12.929 ug/L	1.3861	12.929 ppb	1.3861	10.72%	
QC value within limits for Sb 206.836 Recovery = 129.29%							
Se 196.026†	47.6	27.867 ug/L	1.3060	27.867 ppb	1.3060	4.69%	
QC value within limits for Se 196.026 Recovery = 92.89%							
Si 251.611†	3333.9	98.657 ug/L	0.8512	98.657 ppb	0.8512	0.86%	
QC value within limits for Si 251.611 Recovery = 98.66%							
Sn 189.927†	64.1	11.824 ug/L	0.4988	11.824 ppb	0.4988	4.22%	
QC value within limits for Sn 189.927 Recovery = 118.24%							
Sr 421.552†	804.2	5.1598 ug/L	0.07583	5.1598 ppb	0.07583	1.47%	
QC value within limits for Sr 421.552 Recovery = 103.20%							
Ti 334.940†	3427.0	5.2010 ug/L	0.05110	5.2010 ppb	0.05110	0.98%	
QC value within limits for Ti 334.940 Recovery = 104.02%							
Tl 190.801†	57.8	18.539 ug/L	2.8599	18.539 ppb	2.8599	15.43%	
QC value within limits for Tl 190.801 Recovery = 92.69%							
U 409.014†	2109.1	52.714 ug/L	3.4919	52.714 ppb	3.4919	6.62%	
QC value within limits for U 409.014 Recovery = 105.43%							
V 292.402†	812.7	5.2826 ug/L	0.38605	5.2826 ppb	0.38605	7.31%	
QC value within limits for V 292.402 Recovery = 105.65%							
Zn 213.857†	1074.3	9.9452 ug/L	0.12804	9.9452 ppb	0.12804	1.29%	
QC value within limits for Zn 213.857 Recovery = 99.45%							
SiO2†	3466.9	218.98 ug/L	3.303	218.98 ppb	3.303	1.51%	
QC value within limits for SiO2 Recovery = 102.81%							
QC Failed. Continue with analysis.							

Sequence No.: 11

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 1/26/2010 12:27:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5457.3	5457.3	102 %		12:29:18
1	Y RADIAL	5882.3	5882.3	102.2 %		12:29:18
1	Al 396.153Radial†	15.3	5.8	4.4091 ug/L	4.4091 ppb	12:29:38
1	Ca 317.933Radial†	18.3	-2.3	-3.6904 ug/L	-3.6904 ppb	12:29:38
1	Fe 238.204 Radial†	9.1	1.7	16.303 ug/L	16.303 ppb	12:29:38
1	K 766.490 Radial†	2332.0	-221.6	-40.456 ug/L	-40.456 ppb	12:29:18
1	Mg 279.077 IEC†	2.4	1.4	48.448 ug/L	48.448 ppb	12:29:38
1	Na 589.592 Radial†	-726.5	-163.3	-48.538 ug/L	-48.538 ppb	12:29:18
1	Sr 421.552†	35.9	28.1	0.1803 ug/L	0.1803 ppb	12:29:18
1	Sc 361.383	931138.2	931138.2	103.70 %		12:30:35
1	Y 371.029	823490.4	823490.4	100.04 %		12:30:35
1	Ag 328.068†	271.8	-33.9	-0.1249 ug/L	-0.1249 ppb	12:30:40
1	As 188.979†	-38.0	-6.4	-2.6215 ug/L	-2.6215 ppb	12:31:00
1	B 249.677†	-245.1	4.1	0.0872 ug/L	0.0872 ppb	12:31:00
1	Ba 233.527†	-2.2	1.0	0.0098 ug/L	0.0098 ppb	12:31:00
1	Be 313.107†	-5022.0	257.9	0.0909 ug/L	0.0909 ppb	12:30:40
1	Cd 226.502†	-206.2	7.3	0.0781 ug/L	0.0781 ppb	12:31:00
1	Co 228.616†	-74.8	-2.2	-0.0476 ug/L	-0.0476 ppb	12:31:00
1	Cr 267.716†	73.4	-23.1	-0.2455 ug/L	-0.2455 ppb	12:31:00
1	Cu 324.752†	8993.0	-456.3	-1.2733 ug/L	-1.2733 ppb	12:30:40
1	Mn 257.610†	492.9	-14.6	-0.0167 ug/L	-0.0167 ppb	12:31:00
1	Mo 202.031†	23.2	-1.2	-0.0805 ug/L	-0.0805 ppb	12:31:00
1	Ni 231.604†	110.0	12.4	0.3118 ug/L	0.3118 ppb	12:31:00
1	P 214.914†	248.2	0.5	0.5603 ug/L	0.5603 ppb	12:31:00
1	Pb 220.353†	-52.9	9.4	1.1792 ug/L	1.1792 ppb	12:31:00
1	S 181.975 Axial†	46.2	-32.5	-44.726 ug/L	-44.726 ppb	12:31:00
1	Sb 206.836†	29.4	-1.9	-0.6305 ug/L	-0.6305 ppb	12:31:00
1	Se 196.026†	-20.3	-1.6	-0.8854 ug/L	-0.8854 ppb	12:31:00
1	Si 251.611†	515.4	1.1	0.0322 ug/L	0.0322 ppb	12:31:00
1	Sn 189.927†	5.8	6.0	1.0998 ug/L	1.0998 ppb	12:31:00
1	Ti 334.940†	-976.2	-34.7	-0.0527 ug/L	-0.0527 ppb	12:30:40
1	Tl 190.801†	-33.7	4.4	1.3911 ug/L	1.3911 ppb	12:31:00
1	U 409.014†	-1543.5	-425.5	-10.642 ug/L	-10.642 ppb	12:30:40
1	V 292.402†	-1334.8	106.5	0.6395 ug/L	0.6395 ppb	12:30:40
1	Zn 213.857†	688.4	-69.6	-0.6499 ug/L	-0.6499 ppb	12:31:00
1	SiO2†	513.6	-18.1	-1.1455 ug/L	-1.1455 ppb	12:32:21
2	Sc Radial	5451.6	5451.6	102 %		12:29:43
2	Y RADIAL	5824.3	5824.3	101.2 %		12:29:43
2	Al 396.153Radial†	17.8	8.3	6.2802 ug/L	6.2802 ppb	12:30:03
2	Ca 317.933Radial†	22.3	1.6	2.6482 ug/L	2.6482 ppb	12:30:03
2	Fe 238.204 Radial†	11.0	3.6	33.550 ug/L	33.550 ppb	12:30:03
2	K 766.490 Radial†	2338.7	-212.7	-38.834 ug/L	-38.834 ppb	12:29:43
2	Mg 279.077 IEC†	3.3	2.3	81.282 ug/L	81.282 ppb	12:30:03
2	Na 589.592 Radial†	-698.5	-136.6	-40.614 ug/L	-40.614 ppb	12:29:43
2	Sr 421.552†	45.6	37.6	0.2412 ug/L	0.2412 ppb	12:29:43
2	Sc 361.383	943443.6	943443.6	105.08 %		12:31:05
2	Y 371.029	835412.7	835412.7	101.49 %		12:31:05
2	Ag 328.068†	279.4	-30.1	-0.1076 ug/L	-0.1076 ppb	12:31:10
2	As 188.979†	-25.7	5.8	2.3664 ug/L	2.3664 ppb	12:31:30
2	B 249.677†	-255.8	-3.0	-0.0720 ug/L	-0.0720 ppb	12:31:30
2	Ba 233.527†	-6.2	-2.8	-0.0202 ug/L	-0.0202 ppb	12:31:30
2	Be 313.107†	-5031.2	312.3	0.1101 ug/L	0.1101 ppb	12:31:10
2	Cd 226.502†	-195.4	20.2	0.2203 ug/L	0.2203 ppb	12:31:30
2	Co 228.616†	-62.3	10.6	0.2321 ug/L	0.2321 ppb	12:31:30
2	Cr 267.716†	80.7	-17.1	-0.1817 ug/L	-0.1817 ppb	12:31:30
2	Cu 324.752†	9012.5	-550.8	-1.5392 ug/L	-1.5392 ppb	12:31:10
2	Mn 257.610†	480.1	-32.9	-0.0369 ug/L	-0.0369 ppb	12:31:30
2	Mo 202.031†	18.7	-5.8	-0.3952 ug/L	-0.3952 ppb	12:31:30
2	Ni 231.604†	86.4	-11.4	-0.2872 ug/L	-0.2872 ppb	12:31:30

2	P 214.914†	239.8	-10.5	-5.6378 ug/L	-5.6378 ppb	12:31:30
2	Pb 220.353†	-49.6	13.2	1.6534 ug/L	1.6534 ppb	12:31:30
2	S 181.975 Axial†	47.2	-32.0	-44.114 ug/L	-44.114 ppb	12:31:30
2	Sb 206.836†	46.5	14.0	4.7134 ug/L	4.7134 ppb	12:31:30
2	Se 196.026†	-22.7	-3.6	-1.9927 ug/L	-1.9927 ppb	12:31:30
2	Si 251.611†	484.4	-35.0	-1.0308 ug/L	-1.0308 ppb	12:31:30
2	Sn 189.927†	10.4	10.3	1.8880 ug/L	1.8880 ppb	12:31:30
2	Ti 334.940†	-980.0	-26.2	-0.0428 ug/L	-0.0428 ppb	12:31:10
2	Tl 190.801†	-28.1	10.1	3.2419 ug/L	3.2419 ppb	12:31:30
2	U 409.014†	-1436.6	-304.4	-7.6138 ug/L	-7.6138 ppb	12:31:10
2	V 292.402†	-1425.7	36.8	0.2052 ug/L	0.2052 ppb	12:31:10
2	Zn 213.857†	704.8	-62.6	-0.5826 ug/L	-0.5826 ppb	12:31:30
2	SiO2†	494.6	-42.7	-2.6888 ug/L	-2.6888 ppb	12:32:41
3	Sc Radial	5389.5	5389.5	101 %		12:30:08
3	Y RADIAL	5799.9	5799.9	100.7 %		12:30:08
3	Al 396.153Radial†	5.8	-3.4	-2.6016 ug/L	-2.6016 ppb	12:30:28
3	Ca 317.933Radial†	23.9	3.4	5.4992 ug/L	5.4992 ppb	12:30:28
3	Fe 238.204 Radial†	8.2	1.0	9.3222 ug/L	9.3222 ppb	12:30:28
3	K 766.490 Radial†	2388.5	-136.9	-24.994 ug/L	-24.994 ppb	12:30:08
3	Mg 279.077 IEC†	2.7	1.7	59.817 ug/L	59.817 ppb	12:30:28
3	Na 589.592 Radial†	-671.1	-117.3	-34.861 ug/L	-34.861 ppb	12:30:08
3	Sr 421.552†	13.8	6.6	0.0423 ug/L	0.0423 ppb	12:30:08
3	Sc 361.383	924987.0	924987.0	103.02 %		12:31:35
3	Y 371.029	817391.7	817391.7	99.304 %		12:31:35
3	Ag 328.068†	271.8	-32.2	-0.1211 ug/L	-0.1211 ppb	12:31:40
3	As 188.979†	-35.5	-4.3	-1.7376 ug/L	-1.7376 ppb	12:32:00
3	B 249.677†	-248.5	-0.7	-0.0182 ug/L	-0.0182 ppb	12:32:00
3	Ba 233.527†	2.9	5.9	0.0476 ug/L	0.0476 ppb	12:32:00
3	Be 313.107†	-5118.1	132.4	0.0467 ug/L	0.0467 ppb	12:31:40
3	Cd 226.502†	-207.5	4.8	0.0501 ug/L	0.0501 ppb	12:32:00
3	Co 228.616†	-67.2	4.7	0.1021 ug/L	0.1021 ppb	12:32:00
3	Cr 267.716†	98.5	1.7	0.0238 ug/L	0.0238 ppb	12:32:00
3	Cu 324.752†	9022.3	-370.2	-1.0317 ug/L	-1.0317 ppb	12:31:40
3	Mn 257.610†	494.8	-9.6	-0.0122 ug/L	-0.0122 ppb	12:32:00
3	Mo 202.031†	24.1	-0.2	-0.0131 ug/L	-0.0131 ppb	12:32:00
3	Ni 231.604†	106.9	10.1	0.2540 ug/L	0.2540 ppb	12:32:00
3	P 214.914†	248.8	2.8	1.7694 ug/L	1.7694 ppb	12:32:00
3	Pb 220.353†	-46.8	15.0	1.8788 ug/L	1.8788 ppb	12:32:00
3	S 181.975 Axial†	50.3	-28.2	-38.792 ug/L	-38.792 ppb	12:32:00
3	Sb 206.836†	42.9	11.4	3.7902 ug/L	3.7902 ppb	12:32:00
3	Se 196.026†	-16.5	2.0	1.1690 ug/L	1.1690 ppb	12:32:00
3	Si 251.611†	466.6	-43.0	-1.2740 ug/L	-1.2740 ppb	12:32:00
3	Sn 189.927†	-4.5	-4.0	-0.7425 ug/L	-0.7425 ppb	12:32:00
3	Ti 334.940†	-923.7	9.9	0.0160 ug/L	0.0160 ppb	12:31:40
3	Tl 190.801†	-32.1	5.7	1.8355 ug/L	1.8355 ppb	12:32:00
3	U 409.014†	-1567.1	-458.3	-11.462 ug/L	-11.462 ppb	12:31:40
3	V 292.402†	-1390.6	43.8	0.2498 ug/L	0.2498 ppb	12:31:40
3	Zn 213.857†	694.7	-59.0	-0.5511 ug/L	-0.5511 ppb	12:32:00
3	SiO2†	507.6	-20.7	-1.3074 ug/L	-1.3074 ppb	12:33:01

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	933189.6	103.93 %	1.047			1.01%
Sc Radial	5432.8	102 %	0.7			0.69%
Y 371.029	825431.6	100.28 %	1.114			1.11%
Y RADIAL	5835.5	101.4 %	0.74			0.73%
Ag 328.068†	-32.1	-0.1178 ug/L	0.00909	-0.1178 ppb	0.00909	7.72%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	3.5	2.6959 ug/L	4.68221	2.6959 ppb	4.68221	173.68%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.6	-0.6642 ug/L	2.66156	-0.6642 ppb	2.66156	400.69%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	0.1	-0.0010 ug/L	0.08101	-0.0010 ppb	0.08101	>999.9%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	1.4	0.0124 ug/L	0.03399	0.0124 ppb	0.03399	273.99%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	234.2	0.0826 ug/L	0.03247	0.0826 ppb	0.03247	39.33%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	0.9	1.4857 ug/L	4.70382	1.4857 ppb	4.70382	316.61%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	10.7	0.1162 ug/L	0.09126	0.1162 ppb	0.09126	78.56%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	4.4	0.0956 ug/L	0.13997	0.0956 ppb	0.13997	146.48%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	-12.9	-0.1345 ug/L	0.14069	-0.1345 ppb	0.14069	104.62%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-459.1	-1.2814 ug/L	0.25387	-1.2814 ppb	0.25387	19.81%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	2.1	19.725 ug/L	12.4713	19.725 ppb	12.4713	63.22%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	-190.4	-34.761 ug/L	8.4973	-34.761 ppb	8.4973	24.44%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	1.8	63.182 ug/L	16.6737	63.182 ppb	16.6737	26.39%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	-19.0	-0.0220 ug/L	0.01316	-0.0220 ppb	0.01316	59.90%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	-2.4	-0.1629 ug/L	0.20395	-0.1629 ppb	0.20395	125.19%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	-139.1	-41.338 ug/L	6.8668	-41.338 ppb	6.8668	16.61%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	3.7	0.0929 ug/L	0.33040	0.0929 ppb	0.33040	355.75%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-2.4	-1.1027 ug/L	3.97373	-1.1027 ppb	3.97373	360.36%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	12.5	1.5705 ug/L	0.35710	1.5705 ppb	0.35710	22.74%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-30.9	-42.544 ug/L	3.2636	-42.544 ppb	3.2636	7.67%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	7.8	2.6244 ug/L	2.85633	2.6244 ppb	2.85633	108.84%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-1.1	-0.5697 ug/L	1.60435	-0.5697 ppb	1.60435	281.61%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	-25.6	-0.7575 ug/L	0.69467	-0.7575 ppb	0.69467	91.70%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	4.1	0.7484 ug/L	1.35003	0.7484 ppb	1.35003	180.38%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	24.1	0.1546 ug/L	0.10190	0.1546 ppb	0.10190	65.92%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	-17.0	-0.0265 ug/L	0.03711	-0.0265 ppb	0.03711	140.09%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	6.7	2.1562 ug/L	0.96613	2.1562 ppb	0.96613	44.81%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	-396.1	-9.9059 ug/L	2.02696	-9.9059 ppb	2.02696	20.46%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	62.3	0.3648 ug/L	0.23890	0.3648 ppb	0.23890	65.48%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-63.7	-0.5945 ug/L	0.05049	-0.5945 ppb	0.05049	8.49%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-27.2	-1.7139 ug/L	0.84815	-1.7139 ppb	0.84815	49.49%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 16

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 1/26/2010 13:02:25

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5409.7	5409.7	101 %		13:04:17
1	Y RADIAL	5794.4	5794.4	100.6 %		13:04:17
1	Al 396.153Radial†	6559.7	6466.2	4875.0 ug/L	4875.0 ppb	13:04:17
1	Ca 317.933Radial†	3166.2	3105.2	4991.0 ug/L	4991.0 ppb	13:04:37
1	Fe 238.204 Radial†	566.6	552.2	5175.3 ug/L	5175.3 ppb	13:04:37
1	K 766.490 Radial†	30135.1	27243.7	4970.6 ug/L	4970.6 ppb	13:04:17
1	Mg 279.077 IEC†	149.5	146.6	5229.4 ug/L	5229.4 ppb	13:04:37
1	Na 589.592 Radial†	33774.4	33887.3	10074 ug/L	10074 ppb	13:04:17
1	Sr 421.552†	79900.3	78864.9	506.09 ug/L	506.09 ppb	13:04:17
1	Sc 361.383	929796.1	929796.1	103.56 %		13:05:35
1	Y 371.029	812299.4	812299.4	98.685 %		13:05:35
1	Ag 328.068†	121543.2	117074.2	491.73 ug/L	491.73 ppb	13:05:40
1	As 188.979†	1192.0	1181.3	487.58 ug/L	487.58 ppb	13:06:00
1	B 249.677†	22409.4	21880.4	477.58 ug/L	477.58 ppb	13:05:40
1	Ba 233.527†	64140.6	61941.6	489.47 ug/L	489.47 ppb	13:05:40
1	Be 313.107†	1399484.3	1356535.7	479.65 ug/L	479.65 ppb	13:05:35
1	Cd 226.502†	45506.7	44150.5	493.05 ug/L	493.05 ppb	13:05:40
1	Co 228.616†	23606.6	22866.1	501.32 ug/L	501.32 ppb	13:05:40
1	Cr 267.716†	46713.6	45015.8	488.60 ug/L	488.60 ppb	13:05:40
1	Cu 324.752†	188075.8	172490.5	483.88 ug/L	483.88 ppb	13:05:40
1	Mn 257.610†	446277.4	430465.3	482.92 ug/L	482.92 ppb	13:05:35
1	Mo 202.031†	7319.5	7044.6	481.24 ug/L	481.24 ppb	13:06:00
1	Ni 231.604†	20306.7	19515.8	490.16 ug/L	490.16 ppb	13:05:40
1	P 214.914†	4659.9	4261.2	2308.5 ug/L	2308.5 ppb	13:06:00
1	Pb 220.353†	4070.8	3991.4	502.56 ug/L	502.56 ppb	13:06:00
1	S 181.975 Axial†	786.9	682.9	939.35 ug/L	939.35 ppb	13:06:00
1	Sb 206.836†	1532.7	1449.8	502.73 ug/L	502.73 ppb	13:06:00
1	Se 196.026†	850.7	839.5	503.07 ug/L	503.07 ppb	13:06:00
1	Si 251.611†	86320.3	82860.7	2449.2 ug/L	2449.2 ppb	13:05:40
1	Sn 189.927†	2723.7	2630.5	484.56 ug/L	484.56 ppb	13:06:00
1	Ti 334.940†	332571.1	322059.4	490.90 ug/L	490.90 ppb	13:05:35
1	Tl 190.801†	1515.9	1500.7	483.31 ug/L	483.31 ppb	13:06:00
1	U 409.014†	19318.1	19717.6	491.36 ug/L	491.36 ppb	13:05:40
1	V 292.402†	79628.3	78287.9	493.24 ug/L	493.24 ppb	13:05:40
1	Zn 213.857†	55169.5	52541.9	485.12 ug/L	485.12 ppb	13:05:40
1	SiO2†	85215.1	81775.9	5158.8 ug/L	5158.8 ppb	13:07:08
2	Sc Radial	5338.6	5338.6	100.0 %		13:04:42
2	Y RADIAL	5707.1	5707.1	99.13 %		13:04:42
2	Al 396.153Radial†	6649.9	6642.6	5008.7 ug/L	5008.7 ppb	13:04:42
2	Ca 317.933Radial†	3176.3	3156.9	5074.1 ug/L	5074.1 ppb	13:05:02
2	Fe 238.204 Radial†	572.0	564.9	5294.7 ug/L	5294.7 ppb	13:05:02
2	K 766.490 Radial†	30673.2	28178.0	5141.2 ug/L	5141.2 ppb	13:04:42
2	Mg 279.077 IEC†	153.2	152.2	5429.4 ug/L	5429.4 ppb	13:05:02
2	Na 589.592 Radial†	34094.6	34651.5	10301 ug/L	10301 ppb	13:04:42
2	Sr 421.552†	81018.9	81033.7	520.01 ug/L	520.01 ppb	13:04:42
2	Sc 361.383	928173.3	928173.3	103.37 %		13:06:06
2	Y 371.029	810603.7	810603.7	98.479 %		13:06:06
2	Ag 328.068†	121045.4	116797.9	490.61 ug/L	490.61 ppb	13:06:11
2	As 188.979†	1175.9	1167.7	482.12 ug/L	482.12 ppb	13:06:31
2	B 249.677†	22436.5	21944.5	478.97 ug/L	478.97 ppb	13:06:11
2	Ba 233.527†	64049.7	61961.9	489.63 ug/L	489.63 ppb	13:06:11
2	Be 313.107†	1409254.8	1368350.1	483.83 ug/L	483.83 ppb	13:06:06
2	Cd 226.502†	45176.9	43908.3	490.33 ug/L	490.33 ppb	13:06:11
2	Co 228.616†	23490.7	22793.8	499.72 ug/L	499.72 ppb	13:06:11
2	Cr 267.716†	46649.5	45032.7	488.78 ug/L	488.78 ppb	13:06:11
2	Cu 324.752†	187321.5	172078.4	482.73 ug/L	482.73 ppb	13:06:11
2	Mn 257.610†	449781.3	434608.3	487.57 ug/L	487.57 ppb	13:06:06
2	Mo 202.031†	7302.6	7040.6	480.98 ug/L	480.98 ppb	13:06:31
2	Ni 231.604†	20274.7	19519.2	490.25 ug/L	490.25 ppb	13:06:11

2	P 214.914†	4659.2	4268.3	2312.6 ug/L	2312.6 ppb	13:06:31
2	Pb 220.353†	4023.2	3952.2	497.66 ug/L	497.66 ppb	13:06:31
2	S 181.975 Axial†	785.1	682.5	938.69 ug/L	938.69 ppb	13:06:31
2	Sb 206.836†	1516.4	1436.6	498.24 ug/L	498.24 ppb	13:06:31
2	Se 196.026†	839.4	830.0	497.99 ug/L	497.99 ppb	13:06:31
2	Si 251.611†	85943.2	82641.6	2442.7 ug/L	2442.7 ppb	13:06:11
2	Sn 189.927†	2700.6	2612.8	481.31 ug/L	481.31 ppb	13:06:31
2	Ti 334.940†	335526.9	325480.1	496.11 ug/L	496.11 ppb	13:06:06
2	Tl 190.801†	1512.3	1499.9	483.10 ug/L	483.10 ppb	13:06:31
2	U 409.014†	19412.0	19841.1	494.43 ug/L	494.43 ppb	13:06:11
2	V 292.402†	79182.2	77990.9	491.38 ug/L	491.38 ppb	13:06:11
2	Zn 213.857†	54851.4	52327.4	483.12 ug/L	483.12 ppb	13:06:11
2	SiO2†	86471.8	83135.5	5244.8 ug/L	5244.8 ppb	13:07:13
3	Sc Radial	5457.3	5457.3	102 %		13:05:07
3	Y RADIAL	5842.5	5842.5	101.5 %		13:05:07
3	Al 396.153Radial†	6605.0	6453.9	4865.6 ug/L	4865.6 ppb	13:05:07
3	Ca 317.933Radial†	3177.9	3089.4	4965.6 ug/L	4965.6 ppb	13:05:27
3	Fe 238.204 Radial†	571.9	552.4	5177.9 ug/L	5177.9 ppb	13:05:27
3	K 766.490 Radial†	30413.8	27257.0	4973.1 ug/L	4973.1 ppb	13:05:07
3	Mg 279.077 IEC†	152.0	147.8	5271.6 ug/L	5271.6 ppb	13:05:27
3	Na 589.592 Radial†	33913.5	33732.6	10028 ug/L	10028 ppb	13:05:07
3	Sr 421.552†	80702.5	78961.8	506.72 ug/L	506.72 ppb	13:05:07
3	Sc 361.383	927620.9	927620.9	103.31 %		13:06:37
3	Y 371.029	812561.6	812561.6	98.717 %		13:06:37
3	Ag 328.068†	121460.2	117269.1	492.55 ug/L	492.55 ppb	13:06:42
3	As 188.979†	1193.6	1185.5	489.31 ug/L	489.31 ppb	13:07:02
3	B 249.677†	22512.9	22031.4	480.90 ug/L	480.90 ppb	13:06:42
3	Ba 233.527†	63968.3	61920.0	489.30 ug/L	489.30 ppb	13:06:42
3	Be 313.107†	1400314.6	1360508.4	481.05 ug/L	481.05 ppb	13:06:37
3	Cd 226.502†	45183.7	43940.8	490.71 ug/L	490.71 ppb	13:06:42
3	Co 228.616†	23510.9	22826.9	500.47 ug/L	500.47 ppb	13:06:42
3	Cr 267.716†	46717.5	45125.4	489.79 ug/L	489.79 ppb	13:06:42
3	Cu 324.752†	187714.3	172566.5	484.09 ug/L	484.09 ppb	13:06:42
3	Mn 257.610†	443797.9	429075.9	481.36 ug/L	481.36 ppb	13:06:37
3	Mo 202.031†	7354.9	7095.4	484.71 ug/L	484.71 ppb	13:07:02
3	Ni 231.604†	20310.5	19565.4	491.41 ug/L	491.41 ppb	13:06:42
3	P 214.914†	4693.5	4304.3	2332.8 ug/L	2332.8 ppb	13:07:02
3	Pb 220.353†	4071.3	4001.1	503.78 ug/L	503.78 ppb	13:07:02
3	S 181.975 Axial†	794.1	691.6	951.34 ug/L	951.34 ppb	13:07:02
3	Sb 206.836†	1505.6	1427.1	495.24 ug/L	495.24 ppb	13:07:02
3	Se 196.026†	843.2	834.1	499.97 ug/L	499.97 ppb	13:07:02
3	Si 251.611†	85970.5	82717.6	2444.9 ug/L	2444.9 ppb	13:06:42
3	Sn 189.927†	2727.6	2640.5	486.39 ug/L	486.39 ppb	13:07:02
3	Ti 334.940†	331298.6	321580.8	490.16 ug/L	490.16 ppb	13:06:37
3	Tl 190.801†	1514.7	1503.0	484.02 ug/L	484.02 ppb	13:07:02
3	U 409.014†	19260.9	19706.1	491.07 ug/L	491.07 ppb	13:06:42
3	V 292.402†	79463.5	78308.7	493.42 ug/L	493.42 ppb	13:06:42
3	Zn 213.857†	55061.3	52562.2	485.30 ug/L	485.30 ppb	13:06:42
3	SiO2†	85667.4	82406.8	5198.6 ug/L	5198.6 ppb	13:07:18

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	928530.1	103.41 %		0.126			0.12%
Sc Radial	5401.9	101 %		1.1			1.11%
Y 371.029	811821.6	98.627 %		0.1291			0.13%
Y RADIAL	5781.3	100.4 %		1.19			1.19%
Ag 328.068†	117047.1	491.63 ug/L		0.975	491.63 ppb	0.975	0.20%
QC value within limits for Ag 328.068 Recovery = 98.33%							
Al 396.153Radial†	6520.9	4916.4 ug/L		80.03	4916.4 ppb	80.03	1.63%
QC value within limits for Al 396.153Radial Recovery = 98.33%							
As 188.979†	1178.2	486.34 ug/L		3.754	486.34 ppb	3.754	0.77%
QC value within limits for As 188.979 Recovery = 97.27%							
B 249.677†	21952.1	479.15 ug/L		1.664	479.15 ppb	1.664	0.35%
QC value within limits for B 249.677 Recovery = 95.83%							
Ba 233.527†	61941.2	489.46 ug/L		0.165	489.46 ppb	0.165	0.03%
QC value within limits for Ba 233.527 Recovery = 97.89%							
Be 313.107†	1361798.1	481.51 ug/L		2.127	481.51 ppb	2.127	0.44%
QC value within limits for Be 313.107 Recovery = 96.30%							
Ca 317.933Radial†	3117.2	5010.2 ug/L		56.78	5010.2 ppb	56.78	1.13%

QC value within limits for Ca 317.933 Radial Recovery = 100.20%							
Cd	226.502†	43999.9	491.37 ug/L	1.473	491.37 ppb	1.473	0.30%
QC value within limits for Cd 226.502 Recovery = 98.27%							
Co	228.616†	22828.9	500.50 ug/L	0.800	500.50 ppb	0.800	0.16%
QC value within limits for Co 228.616 Recovery = 100.10%							
Cr	267.716†	45058.0	489.05 ug/L	0.640	489.05 ppb	0.640	0.13%
QC value within limits for Cr 267.716 Recovery = 97.81%							
Cu	324.752†	172378.5	483.57 ug/L	0.734	483.57 ppb	0.734	0.15%
QC value within limits for Cu 324.752 Recovery = 96.71%							
Fe	238.204 Radial†	556.5	5215.9 ug/L	68.19	5215.9 ppb	68.19	1.31%
QC value within limits for Fe 238.204 Radial Recovery = 104.32%							
K	766.490 Radial†	27559.6	5028.3 ug/L	97.77	5028.3 ppb	97.77	1.94%
QC value within limits for K 766.490 Radial Recovery = 100.57%							
Mg	279.077 IEC†	148.9	5310.1 ug/L	105.44	5310.1 ppb	105.44	1.99%
QC value within limits for Mg 279.077 IEC Recovery = 106.20%							
Mn	257.610†	431383.2	483.95 ug/L	3.230	483.95 ppb	3.230	0.67%
QC value within limits for Mn 257.610 Recovery = 96.79%							
Mo	202.031†	7060.2	482.31 ug/L	2.082	482.31 ppb	2.082	0.43%
QC value within limits for Mo 202.031 Recovery = 96.46%							
Na	589.592 Radial†	34090.5	10134 ug/L	146.2	10134 ppb	146.2	1.44%
QC value within limits for Na 589.592 Radial Recovery = 101.34%							
Ni	231.604†	19533.5	490.60 ug/L	0.697	490.60 ppb	0.697	0.14%
QC value within limits for Ni 231.604 Recovery = 98.12%							
P	214.914†	4277.9	2318.0 ug/L	12.98	2318.0 ppb	12.98	0.56%
QC value within limits for P 214.914 Recovery = 92.72%							
Pb	220.353†	3981.6	501.34 ug/L	3.240	501.34 ppb	3.240	0.65%
QC value within limits for Pb 220.353 Recovery = 100.27%							
S	181.975 Axial†	685.7	943.13 ug/L	7.121	943.13 ppb	7.121	0.76%
QC value within limits for S 181.975 Axial Recovery = 94.31%							
Sb	206.836†	1437.8	498.74 ug/L	3.772	498.74 ppb	3.772	0.76%
QC value within limits for Sb 206.836 Recovery = 99.75%							
Se	196.026†	834.5	500.34 ug/L	2.562	500.34 ppb	2.562	0.51%
QC value within limits for Se 196.026 Recovery = 100.07%							
Si	251.611†	82739.9	2445.6 ug/L	3.30	2445.6 ppb	3.30	0.13%
QC value within limits for Si 251.611 Recovery = 97.83%							
Sn	189.927†	2627.9	484.09 ug/L	2.572	484.09 ppb	2.572	0.53%
QC value within limits for Sn 189.927 Recovery = 96.82%							
Sr	421.552†	79620.1	510.94 ug/L	7.862	510.94 ppb	7.862	1.54%
QC value within limits for Sr 421.552 Recovery = 102.19%							
Ti	334.940†	323040.1	492.39 ug/L	3.241	492.39 ppb	3.241	0.66%
QC value within limits for Ti 334.940 Recovery = 98.48%							
Tl	190.801†	1501.2	483.48 ug/L	0.481	483.48 ppb	0.481	0.10%
QC value within limits for Tl 190.801 Recovery = 96.70%							
U	409.014†	19754.9	492.29 ug/L	1.864	492.29 ppb	1.864	0.38%
QC value within limits for U 409.014 Recovery = 98.46%							
V	292.402†	78195.9	492.68 ug/L	1.131	492.68 ppb	1.131	0.23%
QC value within limits for V 292.402 Recovery = 98.54%							
Zn	213.857†	52477.2	484.51 ug/L	1.215	484.51 ppb	1.215	0.25%
QC value within limits for Zn 213.857 Recovery = 96.90%							
SiO2†		82439.4	5200.7 ug/L	43.04	5200.7 ppb	43.04	0.83%
QC value within limits for SiO2 Recovery = 97.26%							
All analyte(s) passed QC.							

Sequence No.: 17

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 1/26/2010 13:09:29

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5358.7	5358.7	100 %		13:11:22
1	Y RADIAL	5787.1	5787.1	100.5 %		13:11:22
1	Al 396.153Radial†	10.1	0.9	0.6540 ug/L	0.6540 ppb	13:11:42
1	Ca 317.933Radial†	20.7	0.4	0.6949 ug/L	0.6949 ppb	13:11:42
1	Fe 238.204 Radial†	8.6	1.4	13.425 ug/L	13.425 ppb	13:11:42
1	K 766.490 Radial†	2284.5	-226.9	-41.440 ug/L	-41.440 ppb	13:11:22
1	Mg 279.077 IEC†	3.5	2.6	91.174 ug/L	91.174 ppb	13:11:42
1	Na 589.592 Radial†	-697.0	-146.9	-43.679 ug/L	-43.679 ppb	13:11:22
1	Sr 421.552†	14.4	7.3	0.0469 ug/L	0.0469 ppb	13:11:22
1	Sc 361.383	906281.3	906281.3	100.94 %		13:12:38
1	Y 371.029	798201.9	798201.9	96.972 %		13:12:38
1	Ag 328.068†	273.1	-25.4	-0.1009 ug/L	-0.1009 ppb	13:12:38
1	As 188.979†	-30.4	0.0	0.0134 ug/L	0.0134 ppb	13:12:58
1	B 249.677†	-210.1	32.3	0.7064 ug/L	0.7064 ppb	13:12:58
1	Ba 233.527†	-13.2	-10.0	-0.0779 ug/L	-0.0779 ppb	13:12:58
1	Be 313.107†	-4998.3	148.5	0.0522 ug/L	0.0522 ppb	13:12:38
1	Cd 226.502†	-190.5	17.4	0.1928 ug/L	0.1928 ppb	13:12:58
1	Co 228.616†	-69.3	1.3	0.0293 ug/L	0.0293 ppb	13:12:58
1	Cr 267.716†	93.7	-1.1	-0.0109 ug/L	-0.0109 ppb	13:12:58
1	Cu 324.752†	8874.3	-336.1	-0.9420 ug/L	-0.9420 ppb	13:12:38
1	Mn 257.610†	486.9	-7.5	-0.0108 ug/L	-0.0108 ppb	13:12:58
1	Mo 202.031†	26.3	2.5	0.1688 ug/L	0.1688 ppb	13:12:58
1	Ni 231.604†	71.2	-23.1	-0.5806 ug/L	-0.5806 ppb	13:12:58
1	P 214.914†	245.9	4.9	2.9309 ug/L	2.9309 ppb	13:12:58
1	Pb 220.353†	40.3	100.3	12.593 ug/L	12.593 ppb	13:12:58
1	S 181.975 Axial†	40.7	-36.7	-50.525 ug/L	-50.525 ppb	13:12:58
1	Sb 206.836†	41.2	10.5	3.5460 ug/L	3.5460 ppb	13:12:58
1	Se 196.026†	-9.4	8.6	5.0282 ug/L	5.0282 ppb	13:12:58
1	Si 251.611†	469.9	-30.4	-0.9021 ug/L	-0.9021 ppb	13:12:58
1	Sn 189.927†	7.8	8.1	1.4834 ug/L	1.4834 ppb	13:12:58
1	Ti 334.940†	-960.1	-44.6	-0.0753 ug/L	-0.0753 ppb	13:12:38
1	Tl 190.801†	-35.8	1.5	0.4636 ug/L	0.4636 ppb	13:12:58
1	U 409.014†	-1080.6	-7.7	-0.1946 ug/L	-0.1946 ppb	13:12:38
1	V 292.402†	-1380.9	25.5	0.1604 ug/L	0.1604 ppb	13:12:38
1	Zn 213.857†	682.8	-56.9	-0.5264 ug/L	-0.5264 ppb	13:12:58
1	SiO2†	481.3	-36.6	-2.3197 ug/L	-2.3197 ppb	13:14:09
2	Sc Radial	5391.4	5391.4	101 %		13:11:47
2	Y RADIAL	5829.7	5829.7	101.3 %		13:11:47
2	Al 396.153Radial†	0.5	-8.7	-6.5539 ug/L	-6.5539 ppb	13:12:07
2	Ca 317.933Radial†	16.8	-3.6	-5.8156 ug/L	-5.8156 ppb	13:12:07
2	Fe 238.204 Radial†	7.0	-0.2	-2.2305 ug/L	-2.2305 ppb	13:12:07
2	K 766.490 Radial†	2343.4	-182.4	-33.308 ug/L	-33.308 ppb	13:11:47
2	Mg 279.077 IEC†	4.2	3.2	112.56 ug/L	112.56 ppb	13:12:07
2	Na 589.592 Radial†	-682.4	-128.3	-38.131 ug/L	-38.131 ppb	13:11:47
2	Sr 421.552†	19.8	12.6	0.0807 ug/L	0.0807 ppb	13:11:47
2	Sc 361.383	908925.0	908925.0	101.23 %		13:13:04
2	Y 371.029	801255.6	801255.6	97.343 %		13:13:04
2	Ag 328.068†	156.8	-141.1	-0.5896 ug/L	-0.5896 ppb	13:13:04
2	As 188.979†	-30.5	0.1	0.0293 ug/L	0.0293 ppb	13:13:24
2	B 249.677†	-207.2	35.8	0.7852 ug/L	0.7852 ppb	13:13:24
2	Ba 233.527†	-0.5	2.6	0.0209 ug/L	0.0209 ppb	13:13:24
2	Be 313.107†	-4946.8	213.8	0.0752 ug/L	0.0752 ppb	13:13:04
2	Cd 226.502†	-198.9	9.7	0.1090 ug/L	0.1090 ppb	13:13:24
2	Co 228.616†	-74.4	-3.5	-0.0772 ug/L	-0.0772 ppb	13:13:24
2	Cr 267.716†	84.5	-10.5	-0.1141 ug/L	-0.1141 ppb	13:13:24
2	Cu 324.752†	8876.5	-359.5	-1.0095 ug/L	-1.0095 ppb	13:13:04
2	Mn 257.610†	481.7	-14.0	-0.0205 ug/L	-0.0205 ppb	13:13:24
2	Mo 202.031†	22.9	-1.0	-0.0657 ug/L	-0.0657 ppb	13:13:24
2	Ni 231.604†	77.7	-16.9	-0.4246 ug/L	-0.4246 ppb	13:13:24

2	P 214.914†	244.6	2.9	1.8714 ug/L	1.8714 ppb	13:13:24
2	Pb 220.353†	42.2	102.1	12.817 ug/L	12.817 ppb	13:13:24
2	S 181.975 Axial†	43.5	-34.0	-46.836 ug/L	-46.836 ppb	13:13:24
2	Sb 206.836†	50.6	19.7	6.6260 ug/L	6.6260 ppb	13:13:24
2	Se 196.026†	-9.9	8.2	4.7131 ug/L	4.7131 ppb	13:13:24
2	Si 251.611†	486.9	-14.9	-0.4419 ug/L	-0.4419 ppb	13:13:24
2	Sn 189.927†	12.0	12.2	2.2497 ug/L	2.2497 ppb	13:13:24
2	Ti 334.940†	-974.5	-56.1	-0.0962 ug/L	-0.0962 ppb	13:13:04
2	Tl 190.801†	-34.9	2.4	0.7708 ug/L	0.7708 ppb	13:13:24
2	U 409.014†	-1007.1	68.0	1.7014 ug/L	1.7014 ppb	13:13:04
2	V 292.402†	-1362.6	47.6	0.3007 ug/L	0.3007 ppb	13:13:04
2	Zn 213.857†	691.3	-50.5	-0.4658 ug/L	-0.4658 ppb	13:13:24
2	SiO2†	480.0	-39.2	-2.4782 ug/L	-2.4782 ppb	13:14:29
3	Sc Radial	5363.8	5363.8	100 %		13:12:12
3	Y RADIAL	5794.6	5794.6	100.7 %		13:12:12
3	Al 396.153Radial†	17.3	8.1	6.1125 ug/L	6.1125 ppb	13:12:32
3	Ca 317.933Radial†	21.8	1.5	2.4110 ug/L	2.4110 ppb	13:12:32
3	Fe 238.204 Radial†	8.2	1.0	9.4466 ug/L	9.4466 ppb	13:12:32
3	K 766.490 Radial†	2265.0	-248.5	-45.374 ug/L	-45.374 ppb	13:12:12
3	Mg 279.077 IEC†	1.3	0.3	10.353 ug/L	10.353 ppb	13:12:32
3	Na 589.592 Radial†	-708.7	-157.9	-46.949 ug/L	-46.949 ppb	13:12:12
3	Sr 421.552†	21.9	14.8	0.0947 ug/L	0.0947 ppb	13:12:12
3	Sc 361.383	905694.6	905694.6	100.87 %		13:13:29
3	Y 371.029	798812.2	798812.2	97.047 %		13:13:29
3	Ag 328.068†	271.1	-27.2	-0.1113 ug/L	-0.1113 ppb	13:13:29
3	As 188.979†	-23.0	7.3	3.0049 ug/L	3.0049 ppb	13:13:49
3	B 249.677†	-212.8	29.4	0.6437 ug/L	0.6437 ppb	13:13:49
3	Ba 233.527†	-12.7	-9.5	-0.0743 ug/L	-0.0743 ppb	13:13:49
3	Be 313.107†	-4964.0	179.3	0.0633 ug/L	0.0633 ppb	13:13:29
3	Cd 226.502†	-192.2	15.7	0.1744 ug/L	0.1744 ppb	13:13:49
3	Co 228.616†	-68.2	2.3	0.0509 ug/L	0.0509 ppb	13:13:49
3	Cr 267.716†	102.2	7.3	0.0795 ug/L	0.0795 ppb	13:13:49
3	Cu 324.752†	8831.8	-372.5	-1.0448 ug/L	-1.0448 ppb	13:13:29
3	Mn 257.610†	497.9	3.8	0.0047 ug/L	0.0047 ppb	13:13:49
3	Mo 202.031†	25.3	1.5	0.1033 ug/L	0.1033 ppb	13:13:49
3	Ni 231.604†	97.9	3.3	0.0839 ug/L	0.0839 ppb	13:13:49
3	P 214.914†	246.6	5.8	3.4554 ug/L	3.4554 ppb	13:13:49
3	Pb 220.353†	53.0	112.9	14.175 ug/L	14.175 ppb	13:13:49
3	S 181.975 Axial†	46.2	-31.2	-42.970 ug/L	-42.970 ppb	13:13:49
3	Sb 206.836†	38.6	8.1	2.7015 ug/L	2.7015 ppb	13:13:49
3	Se 196.026†	-19.3	-1.2	-0.6689 ug/L	-0.6689 ppb	13:13:49
3	Si 251.611†	468.6	-31.4	-0.9303 ug/L	-0.9303 ppb	13:13:49
3	Sn 189.927†	0.7	1.0	0.1906 ug/L	0.1906 ppb	13:13:49
3	Ti 334.940†	-900.7	13.6	0.0198 ug/L	0.0198 ppb	13:13:29
3	Tl 190.801†	-36.9	0.3	0.1040 ug/L	0.1040 ppb	13:13:49
3	U 409.014†	-1036.3	35.5	0.8865 ug/L	0.8865 ppb	13:13:29
3	V 292.402†	-1403.9	1.8	0.0129 ug/L	0.0129 ppb	13:13:29
3	Zn 213.857†	664.8	-74.3	-0.6922 ug/L	-0.6922 ppb	13:13:49
3	SiO2†	467.8	-49.6	-3.1427 ug/L	-3.1427 ppb	13:14:49

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	906967.0	101.01 %		0.192			0.19%
Sc Radial	5371.3	101 %		0.3			0.33%
Y 371.029	799423.2	97.121 %		0.1963			0.20%
Y RADIAL	5803.8	100.8 %		0.39			0.39%
Ag 328.068†	-64.6	-0.2673 ug/L		0.27915	-0.2673 ppb	0.27915	104.44%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	0.1	0.0709 ug/L		6.35328	0.0709 ppb	6.35328	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	2.5	1.0159 ug/L		1.72258	1.0159 ppb	1.72258	169.56%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	32.5	0.7118 ug/L		0.07088	0.7118 ppb	0.07088	9.96%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-5.6	-0.0438 ug/L		0.05602	-0.0438 ppb	0.05602	127.96%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	180.6	0.0636 ug/L		0.01150	0.0636 ppb	0.01150	18.09%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-0.6	-0.9032 ug/L		4.33987	-0.9032 ppb	4.33987	480.48%

QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	14.3	0.1587 ug/L	0.04402	0.1587 ppb	0.04402	27.73%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	0.0	0.0010 ug/L	0.06855	0.0010 ppb	0.06855	>999.9%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-1.4	-0.0152 ug/L	0.09687	-0.0152 ppb	0.09687	638.17%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-356.0	-0.9988 ug/L	0.05225	-0.9988 ppb	0.05225	5.23%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.7	6.8803 ug/L	8.13701	6.8803 ppb	8.13701	118.27%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-219.3	-40.040 ug/L	6.1533	-40.040 ppb	6.1533	15.37%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	2.0	71.361 ug/L	53.9060	71.361 ppb	53.9060	75.54%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	-5.9	-0.0089 ug/L	0.01274	-0.0089 ppb	0.01274	143.55%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	1.0	0.0688 ug/L	0.12099	0.0688 ppb	0.12099	175.79%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-144.4	-42.920 ug/L	4.4578	-42.920 ppb	4.4578	10.39%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-12.2	-0.3071 ug/L	0.34747	-0.3071 ppb	0.34747	113.14%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	4.5	2.7525 ug/L	0.80692	2.7525 ppb	0.80692	29.32%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	105.1	13.195 ug/L	0.8563	13.195 ppb	0.8563	6.49%	
QC value greater than the upper limit for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-34.0	-46.777 ug/L	3.7775	-46.777 ppb	3.7775	8.08%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	12.8	4.2912 ug/L	2.06567	4.2912 ppb	2.06567	48.14%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	5.2	3.0241 ug/L	3.20212	3.0241 ppb	3.20212	105.89%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-25.6	-0.7581 ug/L	0.27423	-0.7581 ppb	0.27423	36.17%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	7.1	1.3079 ug/L	1.04073	1.3079 ppb	1.04073	79.57%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	11.5	0.0741 ug/L	0.02457	0.0741 ppb	0.02457	33.17%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-29.0	-0.0506 ug/L	0.06185	-0.0506 ppb	0.06185	122.27%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	1.4	0.4461 ug/L	0.33376	0.4461 ppb	0.33376	74.81%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	31.9	0.7978 ug/L	0.95111	0.7978 ppb	0.95111	119.22%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	24.9	0.1580 ug/L	0.14389	0.1580 ppb	0.14389	91.06%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-60.6	-0.5615 ug/L	0.11718	-0.5615 ppb	0.11718	20.87%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-41.8	-2.6469 ug/L	0.43669	-2.6469 ppb	0.43669	16.50%	
QC value within limits for SiO2 Recovery = Not calculated							
QC Failed. Continue with analysis.							

Sequence No.: 3

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 1/26/2010 13:39:53

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5327.2	5327.2	99.8 %		13:41:46
1	Y RADIAL	5721.6	5721.6	99.38 %		13:41:46
1	Al 396.153Radial†	6703.3	6710.3	5059.8 ug/L	5059.8 ppb	13:41:46
1	Ca 317.933Radial†	3218.7	3206.2	5153.3 ug/L	5153.3 ppb	13:42:06
1	Fe 238.204 Radial†	584.4	578.6	5422.8 ug/L	5422.8 ppb	13:42:06
1	K 766.490 Radial†	30737.0	28307.7	5164.5 ug/L	5164.5 ppb	13:41:46
1	Mg 279.077 IEC†	158.0	157.4	5613.4 ug/L	5613.4 ppb	13:42:06
1	Na 589.592 Radial†	36530.0	37165.7	11048 ug/L	11048 ppb	13:41:46
1	Sr 421.552†	83885.7	84080.9	539.57 ug/L	539.57 ppb	13:41:46
1	Sc 361.383	929779.9	929779.9	103.55 %		13:43:03
1	Y 371.029	812452.1	812452.1	98.704 %		13:43:03
1	Ag 328.068†	121501.0	117035.4	491.65 ug/L	491.65 ppb	13:43:08
1	As 188.979†	1195.9	1185.0	489.12 ug/L	489.12 ppb	13:43:28
1	B 249.677†	22494.0	21962.5	479.34 ug/L	479.34 ppb	13:43:08
1	Ba 233.527†	64225.9	62025.0	490.13 ug/L	490.13 ppb	13:43:08
1	Be 313.107†	1419405.0	1375796.3	486.43 ug/L	486.43 ppb	13:43:03
1	Cd 226.502†	45567.0	44209.4	493.69 ug/L	493.69 ppb	13:43:08
1	Co 228.616†	23673.7	22931.2	502.76 ug/L	502.76 ppb	13:43:08
1	Cr 267.716†	46862.1	45160.0	490.17 ug/L	490.17 ppb	13:43:08
1	Cu 324.752†	188101.7	172518.7	483.97 ug/L	483.97 ppb	13:43:08
1	Mn 257.610†	451524.7	435540.0	488.62 ug/L	488.62 ppb	13:43:03
1	Mo 202.031†	7373.2	7096.6	484.81 ug/L	484.81 ppb	13:43:28
1	Ni 231.604†	20400.5	19606.8	492.45 ug/L	492.45 ppb	13:43:08
1	P 214.914†	4709.4	4309.1	2335.4 ug/L	2335.4 ppb	13:43:28
1	Pb 220.353†	3986.6	3910.2	492.39 ug/L	492.39 ppb	13:43:28
1	S 181.975 Axial†	801.1	696.6	958.11 ug/L	958.11 ppb	13:43:28
1	Sb 206.836†	1536.2	1453.2	504.03 ug/L	504.03 ppb	13:43:28
1	Se 196.026†	862.0	850.4	510.19 ug/L	510.19 ppb	13:43:28
1	Si 251.611†	86295.8	82838.4	2448.5 ug/L	2448.5 ppb	13:43:08
1	Sn 189.927†	2743.2	2649.4	488.06 ug/L	488.06 ppb	13:43:28
1	Ti 334.940†	329670.6	319264.0	486.62 ug/L	486.62 ppb	13:43:08
1	Tl 190.801†	1528.8	1513.3	487.30 ug/L	487.30 ppb	13:43:28
1	U 409.014†	19377.3	19775.2	492.77 ug/L	492.77 ppb	13:43:08
1	V 292.402†	79796.0	78451.3	494.29 ug/L	494.29 ppb	13:43:08
1	Zn 213.857†	55352.7	52719.8	486.74 ug/L	486.74 ppb	13:43:08
1	SiO2†	85873.2	82412.9	5199.0 ug/L	5199.0 ppb	13:44:36
2	Sc Radial	5393.0	5393.0	101 %		13:42:11
2	Y RADIAL	5768.1	5768.1	100.2 %		13:42:11
2	Al 396.153Radial†	6540.8	6467.5	4876.0 ug/L	4876.0 ppb	13:42:11
2	Ca 317.933Radial†	3144.7	3093.6	4972.4 ug/L	4972.4 ppb	13:42:31
2	Fe 238.204 Radial†	574.7	561.9	5266.0 ug/L	5266.0 ppb	13:42:31
2	K 766.490 Radial†	30206.3	27406.6	5000.1 ug/L	5000.1 ppb	13:42:11
2	Mg 279.077 IEC†	148.5	146.1	5209.3 ug/L	5209.3 ppb	13:42:31
2	Na 589.592 Radial†	35798.8	35995.4	10700 ug/L	10700 ppb	13:42:11
2	Sr 421.552†	82097.4	81285.2	521.63 ug/L	521.63 ppb	13:42:11
2	Sc 361.383	934913.7	934913.7	104.13 %		13:43:34
2	Y 371.029	817652.1	817652.1	99.335 %		13:43:34
2	Ag 328.068†	120064.5	115011.7	483.13 ug/L	483.13 ppb	13:43:39
2	As 188.979†	1187.0	1170.1	482.93 ug/L	482.93 ppb	13:43:59
2	B 249.677†	22201.9	21562.7	470.62 ug/L	470.62 ppb	13:43:39
2	Ba 233.527†	63420.1	60910.5	481.32 ug/L	481.32 ppb	13:43:39
2	Be 313.107†	1426424.3	1375010.8	486.14 ug/L	486.14 ppb	13:43:34
2	Cd 226.502†	44943.8	43369.4	484.31 ug/L	484.31 ppb	13:43:39
2	Co 228.616†	23328.6	22474.2	492.76 ug/L	492.76 ppb	13:43:39
2	Cr 267.716†	46254.3	44327.8	481.13 ug/L	481.13 ppb	13:43:39
2	Cu 324.752†	185518.3	169040.2	474.21 ug/L	474.21 ppb	13:43:39
2	Mn 257.610†	453481.7	435025.2	488.04 ug/L	488.04 ppb	13:43:34
2	Mo 202.031†	7364.4	7049.1	481.55 ug/L	481.55 ppb	13:43:59
2	Ni 231.604†	20115.3	19224.6	482.85 ug/L	482.85 ppb	13:43:39

2	P 214.914†	4695.2	4270.4	2315.5 ug/L	2315.5 ppb	13:43:59
2	Pb 220.353†	3977.5	3880.3	488.61 ug/L	488.61 ppb	13:43:59
2	S 181.975 Axial†	788.4	680.1	935.51 ug/L	935.51 ppb	13:43:59
2	Sb 206.836†	1534.8	1443.7	500.69 ug/L	500.69 ppb	13:43:59
2	Se 196.026†	847.6	832.0	499.07 ug/L	499.07 ppb	13:43:59
2	Si 251.611†	85114.9	81246.7	2401.4 ug/L	2401.4 ppb	13:43:39
2	Sn 189.927†	2726.5	2618.9	482.42 ug/L	482.42 ppb	13:43:59
2	Ti 334.940†	325305.6	313323.8	477.58 ug/L	477.58 ppb	13:43:39
2	Tl 190.801†	1514.5	1491.4	480.28 ug/L	480.28 ppb	13:43:59
2	U 409.014†	19113.3	19418.8	483.90 ug/L	483.90 ppb	13:43:39
2	V 292.402†	78652.5	76929.9	484.79 ug/L	484.79 ppb	13:43:39
2	Zn 213.857†	54607.0	51710.1	477.43 ug/L	477.43 ppb	13:43:39
2	SiO2†	85386.5	81490.2	5140.7 ug/L	5140.7 ppb	13:44:41
3	Sc Radial	5448.6	5448.6	102 %		13:42:36
3	Y RADIAL	5817.8	5817.8	101.1 %		13:42:36
3	Al 396.153Radial†	6598.4	6457.9	4868.3 ug/L	4868.3 ppb	13:42:36
3	Ca 317.933Radial†	3244.9	3160.0	5079.1 ug/L	5079.1 ppb	13:42:56
3	Fe 238.204 Radial†	597.7	578.7	5423.0 ug/L	5423.0 ppb	13:42:56
3	K 766.490 Radial†	30404.8	27295.9	4979.9 ug/L	4979.9 ppb	13:42:36
3	Mg 279.077 IEC†	152.9	148.8	5308.8 ug/L	5308.8 ppb	13:42:56
3	Na 589.592 Radial†	35940.2	35772.2	10634 ug/L	10634 ppb	13:42:36
3	Sr 421.552†	82466.8	80817.8	518.63 ug/L	518.63 ppb	13:42:36
3	Sc 361.383	921952.0	921952.0	102.68 %		13:44:05
3	Y 371.029	807764.9	807764.9	98.134 %		13:44:05
3	Ag 328.068†	121154.1	117693.9	494.41 ug/L	494.41 ppb	13:44:10
3	As 188.979†	1202.7	1201.5	495.88 ug/L	495.88 ppb	13:44:30
3	B 249.677†	22587.9	22238.4	485.38 ug/L	485.38 ppb	13:44:10
3	Ba 233.527†	63793.3	62130.3	490.97 ug/L	490.97 ppb	13:44:10
3	Be 313.107†	1409215.0	1377510.5	487.04 ug/L	487.04 ppb	13:44:05
3	Cd 226.502†	45205.3	44230.9	493.93 ug/L	493.93 ppb	13:44:10
3	Co 228.616†	23547.8	23002.7	504.33 ug/L	504.33 ppb	13:44:10
3	Cr 267.716†	46620.2	45308.7	491.78 ug/L	491.78 ppb	13:44:10
3	Cu 324.752†	187862.7	173828.2	487.64 ug/L	487.64 ppb	13:44:10
3	Mn 257.610†	446717.2	434560.3	487.53 ug/L	487.53 ppb	13:44:05
3	Mo 202.031†	7385.1	7168.6	489.73 ug/L	489.73 ppb	13:44:30
3	Ni 231.604†	20291.4	19667.7	493.98 ug/L	493.98 ppb	13:44:10
3	P 214.914†	4711.6	4349.8	2357.6 ug/L	2357.6 ppb	13:44:30
3	Pb 220.353†	3985.1	3941.5	496.29 ug/L	496.29 ppb	13:44:30
3	S 181.975 Axial†	790.6	692.9	953.12 ug/L	953.12 ppb	13:44:30
3	Sb 206.836†	1536.4	1466.1	508.54 ug/L	508.54 ppb	13:44:30
3	Se 196.026†	859.3	854.8	512.76 ug/L	512.76 ppb	13:44:30
3	Si 251.611†	85918.4	83178.5	2458.5 ug/L	2458.5 ppb	13:44:10
3	Sn 189.927†	2756.9	2685.3	494.65 ug/L	494.65 ppb	13:44:30
3	Ti 334.940†	328431.2	320760.0	488.92 ug/L	488.92 ppb	13:44:10
3	Tl 190.801†	1536.5	1533.3	493.71 ug/L	493.71 ppb	13:44:30
3	U 409.014†	19295.0	19853.9	494.73 ug/L	494.73 ppb	13:44:10
3	V 292.402†	79483.5	78801.2	496.53 ug/L	496.53 ppb	13:44:10
3	Zn 213.857†	54995.2	52825.5	487.71 ug/L	487.71 ppb	13:44:10
3	SiO2†	86703.8	83925.9	5294.5 ug/L	5294.5 ppb	13:44:46

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	928881.8	103.45 %	0.727			0.70%
Sc Radial	5389.6	101 %	1.1			1.13%
Y 371.029	812623.0	98.724 %	0.6009			0.61%
Y RADIAL	5769.2	100.2 %	0.84			0.83%
Ag 328.068†	116580.3	489.73 ug/L	5.881	489.73 ppb	5.881	1.20%
QC value within limits for Ag 328.068 Recovery = 97.95%						
Al 396.153Radial†	6545.2	4934.7 ug/L	108.38	4934.7 ppb	108.38	2.20%
QC value within limits for Al 396.153Radial Recovery = 98.69%						
As 188.979†	1185.5	489.31 ug/L	6.475	489.31 ppb	6.475	1.32%
QC value within limits for As 188.979 Recovery = 97.86%						
B 249.677†	21921.2	478.45 ug/L	7.420	478.45 ppb	7.420	1.55%
QC value within limits for B 249.677 Recovery = 95.69%						
Ba 233.527†	61688.6	487.47 ug/L	5.344	487.47 ppb	5.344	1.10%
QC value within limits for Ba 233.527 Recovery = 97.49%						
Be 313.107†	1376105.9	486.54 ug/L	0.463	486.54 ppb	0.463	0.10%
QC value within limits for Be 313.107 Recovery = 97.31%						
Ca 317.933Radial†	3153.3	5068.3 ug/L	90.95	5068.3 ppb	90.95	1.79%

QC value within limits for Ca 317.933 Radial Recovery = 101.37%							
Cd 226.502†	43936.6	490.64 ug/L	5.484	490.64 ppb	5.484	1.12%	
QC value within limits for Cd 226.502 Recovery = 98.13%							
Co 228.616†	22802.7	499.95 ug/L	6.280	499.95 ppb	6.280	1.26%	
QC value within limits for Co 228.616 Recovery = 99.99%							
Cr 267.716†	44932.2	487.69 ug/L	5.739	487.69 ppb	5.739	1.18%	
QC value within limits for Cr 267.716 Recovery = 97.54%							
Cu 324.752†	171795.7	481.94 ug/L	6.943	481.94 ppb	6.943	1.44%	
QC value within limits for Cu 324.752 Recovery = 96.39%							
Fe 238.204 Radial†	573.1	5370.6 ug/L	90.59	5370.6 ppb	90.59	1.69%	
QC value within limits for Fe 238.204 Radial Recovery = 107.41%							
K 766.490 Radial†	27670.1	5048.2 ug/L	101.27	5048.2 ppb	101.27	2.01%	
QC value within limits for K 766.490 Radial Recovery = 100.96%							
Mg 279.077 IEC†	150.8	5377.1 ug/L	210.55	5377.1 ppb	210.55	3.92%	
QC value within limits for Mg 279.077 IEC Recovery = 107.54%							
Mn 257.610†	435041.8	488.07 ug/L	0.543	488.07 ppb	0.543	0.11%	
QC value within limits for Mn 257.610 Recovery = 97.61%							
Mo 202.031†	7104.8	485.36 ug/L	4.116	485.36 ppb	4.116	0.85%	
QC value within limits for Mo 202.031 Recovery = 97.07%							
Na 589.592 Radial†	36311.1	10794 ug/L	222.5	10794 ppb	222.5	2.06%	
QC value within limits for Na 589.592 Radial Recovery = 107.94%							
Ni 231.604†	19499.7	489.76 ug/L	6.032	489.76 ppb	6.032	1.23%	
QC value within limits for Ni 231.604 Recovery = 97.95%							
P 214.914†	4309.8	2336.2 ug/L	21.06	2336.2 ppb	21.06	0.90%	
QC value within limits for P 214.914 Recovery = 93.45%							
Pb 220.353†	3910.6	492.43 ug/L	3.837	492.43 ppb	3.837	0.78%	
QC value within limits for Pb 220.353 Recovery = 98.49%							
S 181.975 Axial†	689.9	948.91 ug/L	11.874	948.91 ppb	11.874	1.25%	
QC value within limits for S 181.975 Axial Recovery = 94.89%							
Sb 206.836†	1454.3	504.42 ug/L	3.940	504.42 ppb	3.940	0.78%	
QC value within limits for Sb 206.836 Recovery = 100.88%							
Se 196.026†	845.7	507.34 ug/L	7.278	507.34 ppb	7.278	1.43%	
QC value within limits for Se 196.026 Recovery = 101.47%							
Si 251.611†	82421.2	2436.2 ug/L	30.51	2436.2 ppb	30.51	1.25%	
QC value within limits for Si 251.611 Recovery = 97.45%							
Sn 189.927†	2651.2	488.38 ug/L	6.121	488.38 ppb	6.121	1.25%	
QC value within limits for Sn 189.927 Recovery = 97.68%							
Sr 421.552†	82061.3	526.61 ug/L	11.324	526.61 ppb	11.324	2.15%	
QC value within limits for Sr 421.552 Recovery = 105.32%							
Ti 334.940†	317782.6	484.37 ug/L	5.993	484.37 ppb	5.993	1.24%	
QC value within limits for Ti 334.940 Recovery = 96.87%							
Tl 190.801†	1512.7	487.10 ug/L	6.718	487.10 ppb	6.718	1.38%	
QC value within limits for Tl 190.801 Recovery = 97.42%							
U 409.014†	19682.6	490.47 ug/L	5.774	490.47 ppb	5.774	1.18%	
QC value within limits for U 409.014 Recovery = 98.09%							
V 292.402†	78060.8	491.87 ug/L	6.231	491.87 ppb	6.231	1.27%	
QC value within limits for V 292.402 Recovery = 98.37%							
Zn 213.857†	52418.5	483.96 ug/L	5.679	483.96 ppb	5.679	1.17%	
QC value within limits for Zn 213.857 Recovery = 96.79%							
SiO2†	82609.7	5211.4 ug/L	77.66	5211.4 ppb	77.66	1.49%	
QC value within limits for SiO2 Recovery = 97.45%							
All analyte(s) passed QC.							

Sequence No.: 4

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 1/26/2010 13:46:57

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5502.8	5502.8	103 %		13:48:50
1	Y RADIAL	5974.5	5974.5	103.8 %		13:48:50
1	Al 396.153Radial†	13.3	3.7	2.8216 ug/L	2.8216 ppb	13:49:10
1	Ca 317.933Radial†	21.9	1.1	1.7031 ug/L	1.7031 ppb	13:49:10
1	Fe 238.204 Radial†	8.1	0.7	6.7191 ug/L	6.7191 ppb	13:49:10
1	K 766.490 Radial†	2275.4	-295.4	-53.955 ug/L	-53.955 ppb	13:48:50
1	Mg 279.077 IEC†	1.4	0.4	14.680 ug/L	14.680 ppb	13:49:10
1	Na 589.592 Radial†	-696.9	-128.6	-38.239 ug/L	-38.239 ppb	13:48:50
1	Sr 421.552†	40.5	32.2	0.2067 ug/L	0.2067 ppb	13:48:50
1	Sc 361.383	914086.5	914086.5	101.81 %		13:50:06
1	Y 371.029	804471.0	804471.0	97.734 %		13:50:06
1	Ag 328.068†	300.7	-0.7	-0.0001 ug/L	-0.0001 ppb	13:50:06
1	As 188.979†	-28.2	2.4	1.0017 ug/L	1.0017 ppb	13:50:26
1	B 249.677†	-230.5	14.0	0.3050 ug/L	0.3050 ppb	13:50:26
1	Ba 233.527†	-17.4	-14.0	-0.1090 ug/L	-0.1090 ppb	13:50:26
1	Be 313.107†	-5100.1	90.8	0.0320 ug/L	0.0320 ppb	13:50:06
1	Cd 226.502†	-204.9	4.9	0.0543 ug/L	0.0543 ppb	13:50:26
1	Co 228.616†	-65.1	6.0	0.1305 ug/L	0.1305 ppb	13:50:26
1	Cr 267.716†	88.2	-7.3	-0.0787 ug/L	-0.0787 ppb	13:50:26
1	Cu 324.752†	8875.1	-410.3	-1.1516 ug/L	-1.1516 ppb	13:50:06
1	Mn 257.610†	506.5	7.7	0.0086 ug/L	0.0086 ppb	13:50:26
1	Mo 202.031†	25.0	1.0	0.0668 ug/L	0.0668 ppb	13:50:26
1	Ni 231.604†	98.7	3.2	0.0812 ug/L	0.0812 ppb	13:50:26
1	P 214.914†	238.6	-4.3	-2.2005 ug/L	-2.2005 ppb	13:50:26
1	Pb 220.353†	-35.5	25.5	3.2068 ug/L	3.2068 ppb	13:50:26
1	S 181.975 Axial†	53.5	-24.4	-33.595 ug/L	-33.595 ppb	13:50:26
1	Sb 206.836†	35.8	4.9	1.6619 ug/L	1.6619 ppb	13:50:26
1	Se 196.026†	-20.0	-1.7	-0.9428 ug/L	-0.9428 ppb	13:50:26
1	Si 251.611†	481.8	-22.7	-0.6737 ug/L	-0.6737 ppb	13:50:26
1	Sn 189.927†	11.2	11.4	2.0944 ug/L	2.0944 ppb	13:50:26
1	Ti 334.940†	-930.9	-7.8	-0.0136 ug/L	-0.0136 ppb	13:50:06
1	Tl 190.801†	-40.6	-2.9	-0.9418 ug/L	-0.9418 ppb	13:50:26
1	U 409.014†	-1016.1	64.8	1.6197 ug/L	1.6197 ppb	13:50:06
1	V 292.402†	-1340.6	76.8	0.4807 ug/L	0.4807 ppb	13:50:06
1	Zn 213.857†	713.3	-32.8	-0.3052 ug/L	-0.3052 ppb	13:50:26
1	SiO2†	487.5	-34.6	-2.1894 ug/L	-2.1894 ppb	13:51:37
2	Sc Radial	5401.7	5401.7	101 %		13:49:15
2	Y RADIAL	5835.8	5835.8	101.4 %		13:49:15
2	Al 396.153Radial†	2.3	-6.9	-5.2210 ug/L	-5.2210 ppb	13:49:35
2	Ca 317.933Radial†	21.8	1.3	2.1032 ug/L	2.1032 ppb	13:49:35
2	Fe 238.204 Radial†	10.1	2.8	26.145 ug/L	26.145 ppb	13:49:35
2	K 766.490 Radial†	2271.0	-258.4	-47.189 ug/L	-47.189 ppb	13:49:15
2	Mg 279.077 IEC†	1.0	-0.0	-0.6395 ug/L	-0.6395 ppb	13:49:35
2	Na 589.592 Radial†	-723.5	-167.7	-49.840 ug/L	-49.840 ppb	13:49:15
2	Sr 421.552†	24.3	16.9	0.1086 ug/L	0.1086 ppb	13:49:15
2	Sc 361.383	909949.5	909949.5	101.35 %		13:50:32
2	Y 371.029	801794.3	801794.3	97.409 %		13:50:32
2	Ag 328.068†	341.5	40.9	0.1803 ug/L	0.1803 ppb	13:50:32
2	As 188.979†	-32.3	-1.6	-0.6638 ug/L	-0.6638 ppb	13:50:52
2	B 249.677†	-244.2	-0.5	-0.0156 ug/L	-0.0156 ppb	13:50:52
2	Ba 233.527†	4.0	7.1	0.0572 ug/L	0.0572 ppb	13:50:52
2	Be 313.107†	-5034.9	132.4	0.0468 ug/L	0.0468 ppb	13:50:32
2	Cd 226.502†	-212.3	-3.3	-0.0398 ug/L	-0.0398 ppb	13:50:52
2	Co 228.616†	-65.3	5.5	0.1200 ug/L	0.1200 ppb	13:50:52
2	Cr 267.716†	100.5	5.2	0.0571 ug/L	0.0571 ppb	13:50:52
2	Cu 324.752†	8920.7	-325.7	-0.9127 ug/L	-0.9127 ppb	13:50:32
2	Mn 257.610†	495.5	-1.0	0.0015 ug/L	0.0015 ppb	13:50:52
2	Mo 202.031†	24.6	0.7	0.0475 ug/L	0.0475 ppb	13:50:52
2	Ni 231.604†	103.7	8.6	0.2159 ug/L	0.2159 ppb	13:50:52

2	P 214.914†	245.5	3.5	2.1684 ug/L	2.1684 ppb	13:50:52
2	Pb 220.353†	-34.9	26.0	3.2600 ug/L	3.2600 ppb	13:50:52
2	S 181.975 Axial†	49.3	-28.3	-38.999 ug/L	-38.999 ppb	13:50:52
2	Sb 206.836†	37.0	6.2	2.1206 ug/L	2.1206 ppb	13:50:52
2	Se 196.026†	-8.3	9.8	5.7168 ug/L	5.7168 ppb	13:50:52
2	Si 251.611†	471.9	-30.3	-0.8997 ug/L	-0.8997 ppb	13:50:52
2	Sn 189.927†	9.1	9.3	1.7078 ug/L	1.7078 ppb	13:50:52
2	Ti 334.940†	-882.4	35.8	0.0547 ug/L	0.0547 ppb	13:50:32
2	Tl 190.801†	-42.5	-5.0	-1.6097 ug/L	-1.6097 ppb	13:50:52
2	U 409.014†	-1053.6	23.2	0.5782 ug/L	0.5782 ppb	13:50:32
2	V 292.402†	-1350.8	60.7	0.3753 ug/L	0.3753 ppb	13:50:32
2	Zn 213.857†	714.8	-28.1	-0.2647 ug/L	-0.2647 ppb	13:50:52
2	SiO2†	494.8	-25.2	-1.5953 ug/L	-1.5953 ppb	13:51:57
3	Sc Radial	5421.1	5421.1	102 %		13:49:40
3	Y RADIAL	5839.3	5839.3	101.4 %		13:49:40
3	Al 396.153Radial†	9.4	0.1	0.0666 ug/L	0.0666 ppb	13:50:00
3	Ca 317.933Radial†	19.9	-0.6	-1.0380 ug/L	-1.0380 ppb	13:50:00
3	Fe 238.204 Radial†	7.3	0.1	0.6454 ug/L	0.6454 ppb	13:50:00
3	K 766.490 Radial†	2330.8	-207.5	-37.899 ug/L	-37.899 ppb	13:49:40
3	Mg 279.077 IEC†	1.2	0.2	6.8873 ug/L	6.8873 ppb	13:50:00
3	Na 589.592 Radial†	-673.4	-115.7	-34.381 ug/L	-34.381 ppb	13:49:40
3	Sr 421.552†	31.5	24.0	0.1539 ug/L	0.1539 ppb	13:49:40
3	Sc 361.383	917057.8	917057.8	102.14 %		13:50:57
3	Y 371.029	807599.7	807599.7	98.114 %		13:50:57
3	Ag 328.068†	340.4	37.3	0.1574 ug/L	0.1574 ppb	13:50:57
3	As 188.979†	-26.5	4.2	1.7148 ug/L	1.7148 ppb	13:51:17
3	B 249.677†	-235.3	10.0	0.2189 ug/L	0.2189 ppb	13:51:17
3	Ba 233.527†	2.9	6.0	0.0484 ug/L	0.0484 ppb	13:51:17
3	Be 313.107†	-4960.4	243.8	0.0860 ug/L	0.0860 ppb	13:50:57
3	Cd 226.502†	-201.8	8.6	0.0959 ug/L	0.0959 ppb	13:51:17
3	Co 228.616†	-64.4	6.9	0.1532 ug/L	0.1532 ppb	13:51:17
3	Cr 267.716†	84.4	-11.3	-0.1226 ug/L	-0.1226 ppb	13:51:17
3	Cu 324.752†	8880.0	-433.7	-1.2172 ug/L	-1.2172 ppb	13:50:57
3	Mn 257.610†	485.8	-14.2	-0.0161 ug/L	-0.0161 ppb	13:51:17
3	Mo 202.031†	32.5	8.2	0.5593 ug/L	0.5593 ppb	13:51:17
3	Ni 231.604†	85.5	-10.0	-0.2514 ug/L	-0.2514 ppb	13:51:17
3	P 214.914†	242.9	-1.0	-0.2837 ug/L	-0.2837 ppb	13:51:17
3	Pb 220.353†	-4.5	56.0	7.0347 ug/L	7.0347 ppb	13:51:17
3	S 181.975 Axial†	48.9	-29.1	-40.108 ug/L	-40.108 ppb	13:51:17
3	Sb 206.836†	27.9	-2.9	-0.9294 ug/L	-0.9294 ppb	13:51:17
3	Se 196.026†	-22.8	-4.4	-2.5404 ug/L	-2.5404 ppb	13:51:17
3	Si 251.611†	458.6	-46.9	-1.3968 ug/L	-1.3968 ppb	13:51:17
3	Sn 189.927†	9.4	9.5	1.7489 ug/L	1.7489 ppb	13:51:17
3	Ti 334.940†	-921.7	4.2	0.0053 ug/L	0.0053 ppb	13:50:57
3	Tl 190.801†	-36.2	1.5	0.4733 ug/L	0.4733 ppb	13:51:17
3	U 409.014†	-1046.5	38.2	0.9557 ug/L	0.9557 ppb	13:50:57
3	V 292.402†	-1328.9	92.5	0.5848 ug/L	0.5848 ppb	13:50:57
3	Zn 213.857†	712.3	-36.0	-0.3324 ug/L	-0.3324 ppb	13:51:17
3	SiO2†	472.1	-51.1	-3.2499 ug/L	-3.2499 ppb	13:52:17

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	913697.9	101.76 %	0.398			0.39%
Sc Radial	5441.9	102 %	1.0			0.99%
Y 371.029	804621.7	97.752 %	0.3530			0.36%
Y RADIAL	5883.2	102.2 %	1.37			1.34%
Ag 328.068†	25.8	0.1125 ug/L	0.09820	0.1125 ppb	0.09820	87.29%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-1.0	-0.7776 ug/L	4.08724	-0.7776 ppb	4.08724	525.63%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.7	0.6842 ug/L	1.22064	0.6842 ppb	1.22064	178.39%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	7.8	0.1694 ug/L	0.16592	0.1694 ppb	0.16592	97.93%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-0.3	-0.0011 ug/L	0.09353	-0.0011 ppb	0.09353	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	155.7	0.0550 ug/L	0.02790	0.0550 ppb	0.02790	50.78%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	0.6	0.9228 ug/L	1.70981	0.9228 ppb	1.70981	185.29%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	3.4	0.0368 ug/L	0.06951	0.0368 ppb	0.06951	188.94%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	6.1	0.1346 ug/L	0.01697	0.1346 ppb	0.01697	12.61%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-4.5	-0.0481 ug/L	0.09367	-0.0481 ppb	0.09367	194.89%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-389.9	-1.0938 ug/L	0.16027	-1.0938 ppb	0.16027	14.65%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.2	11.170 ug/L	13.3194	11.170 ppb	13.3194	119.25%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-253.8	-46.348 ug/L	8.0607	-46.348 ppb	8.0607	17.39%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.2	6.9760 ug/L	7.66032	6.9760 ppb	7.66032	109.81%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-2.5	-0.0020 ug/L	0.01276	-0.0020 ppb	0.01276	639.66%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	3.3	0.2245 ug/L	0.29006	0.2245 ppb	0.29006	129.19%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-137.3	-40.820 ug/L	8.0463	-40.820 ppb	8.0463	19.71%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	0.6	0.0152 ug/L	0.24054	0.0152 ppb	0.24054	>999.9%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-0.6	-0.1053 ug/L	2.18991	-0.1053 ppb	2.18991	>999.9%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	35.9	4.5005 ug/L	2.19481	4.5005 ppb	2.19481	48.77%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-27.3	-37.567 ug/L	3.4845	-37.567 ppb	3.4845	9.28%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	2.7	0.9510 ug/L	1.64458	0.9510 ppb	1.64458	172.93%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	1.2	0.7445 ug/L	4.37955	0.7445 ppb	4.37955	588.24%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-33.3	-0.9900 ug/L	0.36996	-0.9900 ppb	0.36996	37.37%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	10.1	1.8504 ug/L	0.21237	1.8504 ppb	0.21237	11.48%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	24.4	0.1564 ug/L	0.04909	0.1564 ppb	0.04909	31.39%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	10.7	0.0155 ug/L	0.03526	0.0155 ppb	0.03526	227.88%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-2.2	-0.6927 ug/L	1.06361	-0.6927 ppb	1.06361	153.54%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	42.1	1.0512 ug/L	0.52729	1.0512 ppb	0.52729	50.16%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	76.6	0.4803 ug/L	0.10473	0.4803 ppb	0.10473	21.81%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-32.3	-0.3007 ug/L	0.03406	-0.3007 ppb	0.03406	11.33%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	-37.0	-2.3449 ug/L	0.83818	-2.3449 ppb	0.83818	35.75%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 1/26/2010 14:50:29

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5288.7	5288.7	99.0 %		14:52:21
1	Y RADIAL	5671.7	5671.7	98.52 %		14:52:21
1	Al 396.153Radial†	6479.9	6533.7	4926.7 ug/L	4926.7 ppb	14:52:21
1	Ca 317.933Radial†	3112.5	3122.5	5018.7 ug/L	5018.7 ppb	14:52:41
1	Fe 238.204 Radial†	560.0	558.3	5231.9 ug/L	5231.9 ppb	14:52:41
1	K 766.490 Radial†	29735.5	27521.0	5021.3 ug/L	5021.3 ppb	14:52:21
1	Mg 279.077 IEC†	148.6	149.1	5316.9 ug/L	5316.9 ppb	14:52:41
1	Na 589.592 Radial†	32957.6	33825.6	10055 ug/L	10055 ppb	14:52:21
1	Sr 421.552†	78604.6	79361.4	509.28 ug/L	509.28 ppb	14:52:21
1	Sc 361.383	938731.1	938731.1	104.55 %		14:53:39
1	Y 371.029	822827.6	822827.6	99.964 %		14:53:39
1	Ag 328.068†	118903.4	113432.1	476.51 ug/L	476.51 ppb	14:53:44
1	As 188.979†	1159.0	1138.8	470.07 ug/L	470.07 ppb	14:54:04
1	B 249.677†	22100.0	21378.5	466.62 ug/L	466.62 ppb	14:53:44
1	Ba 233.527†	62665.6	59941.2	473.67 ug/L	473.67 ppb	14:53:44
1	Be 313.107†	1394002.7	1338429.5	473.22 ug/L	473.22 ppb	14:53:39
1	Cd 226.502†	44461.1	42732.1	477.19 ug/L	477.19 ppb	14:53:44
1	Co 228.616†	23009.4	22077.9	484.05 ug/L	484.05 ppb	14:53:44
1	Cr 267.716†	45795.3	43708.1	474.41 ug/L	474.41 ppb	14:53:44
1	Cu 324.752†	183775.2	166648.4	467.50 ug/L	467.50 ppb	14:53:44
1	Mn 257.610†	442114.3	422381.5	473.86 ug/L	473.86 ppb	14:53:39
1	Mo 202.031†	7231.3	6892.9	470.89 ug/L	470.89 ppb	14:54:04
1	Ni 231.604†	19875.1	18916.3	475.10 ug/L	475.10 ppb	14:53:44
1	P 214.914†	4567.9	4130.4	2237.8 ug/L	2237.8 ppb	14:54:04
1	Pb 220.353†	3883.1	3774.4	475.32 ug/L	475.32 ppb	14:54:04
1	S 181.975 Axial†	778.4	667.5	918.15 ug/L	918.15 ppb	14:54:04
1	Sb 206.836†	1505.6	1409.8	488.96 ug/L	488.96 ppb	14:54:04
1	Se 196.026†	826.6	808.6	485.40 ug/L	485.40 ppb	14:54:04
1	Si 251.611†	84433.6	80262.7	2372.4 ug/L	2372.4 ppb	14:53:44
1	Sn 189.927†	2674.0	2557.9	471.22 ug/L	471.22 ppb	14:54:04
1	Ti 334.940†	322609.8	309474.8	471.72 ug/L	471.72 ppb	14:53:44
1	Tl 190.801†	1490.2	1462.2	470.88 ug/L	470.88 ppb	14:54:04
1	U 409.014†	18632.1	18883.9	470.54 ug/L	470.54 ppb	14:53:44
1	V 292.402†	77910.2	75912.7	478.31 ug/L	478.31 ppb	14:53:44
1	Zn 213.857†	53777.1	50703.0	468.11 ug/L	468.11 ppb	14:53:44
1	SiO2†	84053.3	79881.5	5039.3 ug/L	5039.3 ppb	14:55:11
2	Sc Radial	5373.3	5373.3	101 %		14:52:46
2	Y RADIAL	5778.0	5778.0	100.4 %		14:52:46
2	Al 396.153Radial†	6395.3	6346.6	4784.5 ug/L	4784.5 ppb	14:52:46
2	Ca 317.933Radial†	3094.2	3054.8	4910.0 ug/L	4910.0 ppb	14:53:06
2	Fe 238.204 Radial†	547.2	536.7	5030.1 ug/L	5030.1 ppb	14:53:06
2	K 766.490 Radial†	29588.3	26901.8	4908.3 ug/L	4908.3 ppb	14:52:46
2	Mg 279.077 IEC†	144.7	142.8	5094.6 ug/L	5094.6 ppb	14:53:06
2	Na 589.592 Radial†	32768.3	33113.3	9843.6 ug/L	9843.6 ppb	14:52:46
2	Sr 421.552†	77962.5	77473.3	497.16 ug/L	497.16 ppb	14:52:46
2	Sc 361.383	919503.5	919503.5	102.41 %		14:54:10
2	Y 371.029	804779.4	804779.4	97.772 %		14:54:10
2	Ag 328.068†	117506.6	114446.4	480.69 ug/L	480.69 ppb	14:54:15
2	As 188.979†	1159.0	1162.0	479.52 ug/L	479.52 ppb	14:54:35
2	B 249.677†	21749.3	21478.1	468.82 ug/L	468.82 ppb	14:54:15
2	Ba 233.527†	61978.0	60523.2	478.26 ug/L	478.26 ppb	14:54:15
2	Be 313.107†	1365150.6	1338137.2	473.12 ug/L	473.12 ppb	14:54:10
2	Cd 226.502†	43888.6	43062.4	480.90 ug/L	480.90 ppb	14:54:15
2	Co 228.616†	22787.8	22321.7	489.41 ug/L	489.41 ppb	14:54:15
2	Cr 267.716†	45221.4	44063.7	478.26 ug/L	478.26 ppb	14:54:15
2	Cu 324.752†	181173.8	167783.9	470.68 ug/L	470.68 ppb	14:54:15
2	Mn 257.610†	433737.5	423044.4	474.59 ug/L	474.59 ppb	14:54:10
2	Mo 202.031†	7210.0	7016.8	479.33 ug/L	479.33 ppb	14:54:35
2	Ni 231.604†	19664.6	19108.3	479.93 ug/L	479.93 ppb	14:54:15

2	P 214.914†	4554.7	4208.8	2281.6 ug/L	2281.6 ppb	14:54:35
2	Pb 220.353†	3839.6	3809.7	479.75 ug/L	479.75 ppb	14:54:35
2	S 181.975 Axial†	771.9	676.8	930.88 ug/L	930.88 ppb	14:54:35
2	Sb 206.836†	1481.7	1416.6	491.54 ug/L	491.54 ppb	14:54:35
2	Se 196.026†	818.9	817.6	489.96 ug/L	489.96 ppb	14:54:35
2	Si 251.611†	83568.6	81106.8	2397.3 ug/L	2397.3 ppb	14:54:15
2	Sn 189.927†	2670.1	2607.7	480.34 ug/L	480.34 ppb	14:54:35
2	Ti 334.940†	318960.9	312364.2	476.12 ug/L	476.12 ppb	14:54:15
2	Tl 190.801†	1489.8	1491.6	480.31 ug/L	480.31 ppb	14:54:35
2	U 409.014†	18517.6	19144.8	477.08 ug/L	477.08 ppb	14:54:15
2	V 292.402†	76876.0	76461.1	481.87 ug/L	481.87 ppb	14:54:15
2	Zn 213.857†	53183.7	51199.2	472.71 ug/L	472.71 ppb	14:54:15
2	SiO2†	84095.9	81604.2	5148.0 ug/L	5148.0 ppb	14:55:16
3	Sc Radial	5352.8	5352.8	100 %		14:53:11
3	Y RADIAL	5721.4	5721.4	99.38 %		14:53:11
3	Al 396.153Radial†	6361.7	6337.4	4778.0 ug/L	4778.0 ppb	14:53:11
3	Ca 317.933Radial†	3089.2	3061.6	4920.9 ug/L	4920.9 ppb	14:53:31
3	Fe 238.204 Radial†	553.9	545.5	5112.1 ug/L	5112.1 ppb	14:53:31
3	K 766.490 Radial†	29479.9	26906.4	4909.2 ug/L	4909.2 ppb	14:53:11
3	Mg 279.077 IEC†	145.2	143.9	5132.6 ug/L	5132.6 ppb	14:53:31
3	Na 589.592 Radial†	32225.5	32696.5	9719.8 ug/L	9719.8 ppb	14:53:11
3	Sr 421.552†	77129.1	76938.8	493.73 ug/L	493.73 ppb	14:53:11
3	Sc 361.383	931169.9	931169.9	103.71 %		14:54:41
3	Y 371.029	815789.7	815789.7	99.109 %		14:54:41
3	Ag 328.068†	118925.2	114376.6	480.42 ug/L	480.42 ppb	14:54:46
3	As 188.979†	1154.5	1143.4	471.96 ug/L	471.96 ppb	14:55:06
3	B 249.677†	22063.4	21514.8	469.62 ug/L	469.62 ppb	14:54:46
3	Ba 233.527†	62378.3	60150.9	475.32 ug/L	475.32 ppb	14:54:46
3	Be 313.107†	1384417.8	1340014.1	473.78 ug/L	473.78 ppb	14:54:41
3	Cd 226.502†	44263.5	42886.9	478.93 ug/L	478.93 ppb	14:54:46
3	Co 228.616†	22957.0	22206.0	486.86 ug/L	486.86 ppb	14:54:46
3	Cr 267.716†	45642.1	43916.1	476.66 ug/L	476.66 ppb	14:54:46
3	Cu 324.752†	183677.5	167981.5	471.23 ug/L	471.23 ppb	14:54:46
3	Mn 257.610†	439156.5	422963.3	474.51 ug/L	474.51 ppb	14:54:41
3	Mo 202.031†	7181.4	6901.0	471.43 ug/L	471.43 ppb	14:55:06
3	Ni 231.604†	19847.0	19043.6	478.30 ug/L	478.30 ppb	14:54:46
3	P 214.914†	4544.2	4143.0	2244.3 ug/L	2244.3 ppb	14:55:06
3	Pb 220.353†	3832.5	3755.9	472.96 ug/L	472.96 ppb	14:55:06
3	S 181.975 Axial†	770.2	665.6	915.57 ug/L	915.57 ppb	14:55:06
3	Sb 206.836†	1460.1	1377.7	478.24 ug/L	478.24 ppb	14:55:06
3	Se 196.026†	810.9	799.8	479.96 ug/L	479.96 ppb	14:55:06
3	Si 251.611†	84294.5	80784.3	2387.8 ug/L	2387.8 ppb	14:54:46
3	Sn 189.927†	2663.3	2568.4	473.13 ug/L	473.13 ppb	14:55:06
3	Ti 334.940†	322161.8	311548.4	474.88 ug/L	474.88 ppb	14:54:46
3	Tl 190.801†	1487.8	1471.4	473.85 ug/L	473.85 ppb	14:55:06
3	U 409.014†	18887.6	19275.1	480.33 ug/L	480.33 ppb	14:54:46
3	V 292.402†	77843.4	76453.4	481.70 ug/L	481.70 ppb	14:54:46
3	Zn 213.857†	53666.2	51013.8	470.99 ug/L	470.99 ppb	14:54:46
3	SiO2†	83783.5	80274.1	5064.1 ug/L	5064.1 ppb	14:55:21

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	929801.5	103.56 %	1.079			1.04%
Sc Radial	5338.3	100.0 %	0.83			0.83%
Y 371.029	814465.6	98.948 %	1.1051			1.12%
Y RADIAL	5723.7	99.42 %	0.924			0.93%
Ag 328.068†	114085.0	479.21 ug/L	2.338	479.21 ppb	2.338	0.49%
QC value within limits for Ag 328.068 Recovery = 95.84%						
Al 396.153Radial†	6405.9	4829.7 ug/L	84.04	4829.7 ppb	84.04	1.74%
QC value within limits for Al 396.153Radial Recovery = 96.59%						
As 188.979†	1148.1	473.85 ug/L	5.004	473.85 ppb	5.004	1.06%
QC value within limits for As 188.979 Recovery = 94.77%						
B 249.677†	21457.2	468.35 ug/L	1.554	468.35 ppb	1.554	0.33%
QC value within limits for B 249.677 Recovery = 93.67%						
Ba 233.527†	60205.1	475.75 ug/L	2.324	475.75 ppb	2.324	0.49%
QC value within limits for Ba 233.527 Recovery = 95.15%						
Be 313.107†	1338860.3	473.38 ug/L	0.357	473.38 ppb	0.357	0.08%
QC value within limits for Be 313.107 Recovery = 94.68%						
Ca 317.933Radial†	3079.6	4949.9 ug/L	59.88	4949.9 ppb	59.88	1.21%

QC value within limits for Ca 317.933 Radial Recovery = 99.00%							
Cd 226.502†	42893.8	479.01 ug/L	1.858	479.01 ppb	1.858	0.39%	
QC value within limits for Cd 226.502 Recovery = 95.80%							
Co 228.616†	22201.9	486.77 ug/L	2.680	486.77 ppb	2.680	0.55%	
QC value within limits for Co 228.616 Recovery = 97.35%							
Cr 267.716†	43896.0	476.44 ug/L	1.936	476.44 ppb	1.936	0.41%	
QC value within limits for Cr 267.716 Recovery = 95.29%							
Cu 324.752†	167471.3	469.80 ug/L	2.011	469.80 ppb	2.011	0.43%	
QC value within limits for Cu 324.752 Recovery = 93.96%							
Fe 238.204 Radial†	546.8	5124.7 ug/L	101.52	5124.7 ppb	101.52	1.98%	
QC value within limits for Fe 238.204 Radial Recovery = 102.49%							
K 766.490 Radial†	27109.7	4946.3 ug/L	64.99	4946.3 ppb	64.99	1.31%	
QC value within limits for K 766.490 Radial Recovery = 98.93%							
Mg 279.077 IEC†	145.3	5181.4 ug/L	118.93	5181.4 ppb	118.93	2.30%	
QC value within limits for Mg 279.077 IEC Recovery = 103.63%							
Mn 257.610†	422796.4	474.32 ug/L	0.401	474.32 ppb	0.401	0.08%	
QC value within limits for Mn 257.610 Recovery = 94.86%							
Mo 202.031†	6936.9	473.89 ug/L	4.723	473.89 ppb	4.723	1.00%	
QC value within limits for Mo 202.031 Recovery = 94.78%							
Na 589.592 Radial†	33211.8	9872.9 ug/L	169.72	9872.9 ppb	169.72	1.72%	
QC value within limits for Na 589.592 Radial Recovery = 98.73%							
Ni 231.604†	19022.8	477.78 ug/L	2.453	477.78 ppb	2.453	0.51%	
QC value within limits for Ni 231.604 Recovery = 95.56%							
P 214.914†	4160.7	2254.6 ug/L	23.65	2254.6 ppb	23.65	1.05%	
QC value within limits for P 214.914 Recovery = 90.18%							
Pb 220.353†	3780.0	476.01 ug/L	3.443	476.01 ppb	3.443	0.72%	
QC value within limits for Pb 220.353 Recovery = 95.20%							
S 181.975 Axial†	670.0	921.53 ug/L	8.195	921.53 ppb	8.195	0.89%	
QC value within limits for S 181.975 Axial Recovery = 92.15%							
Sb 206.836†	1401.4	486.24 ug/L	7.053	486.24 ppb	7.053	1.45%	
QC value within limits for Sb 206.836 Recovery = 97.25%							
Se 196.026†	808.7	485.11 ug/L	5.007	485.11 ppb	5.007	1.03%	
QC value within limits for Se 196.026 Recovery = 97.02%							
Si 251.611†	80717.9	2385.8 ug/L	12.57	2385.8 ppb	12.57	0.53%	
QC value within limits for Si 251.611 Recovery = 95.43%							
Sn 189.927†	2578.0	474.90 ug/L	4.813	474.90 ppb	4.813	1.01%	
QC value within limits for Sn 189.927 Recovery = 94.98%							
Sr 421.552†	77924.5	500.06 ug/L	8.168	500.06 ppb	8.168	1.63%	
QC value within limits for Sr 421.552 Recovery = 100.01%							
Ti 334.940†	311129.2	474.24 ug/L	2.271	474.24 ppb	2.271	0.48%	
QC value within limits for Ti 334.940 Recovery = 94.85%							
Tl 190.801†	1475.1	475.01 ug/L	4.822	475.01 ppb	4.822	1.02%	
QC value within limits for Tl 190.801 Recovery = 95.00%							
U 409.014†	19101.3	475.98 ug/L	4.985	475.98 ppb	4.985	1.05%	
QC value within limits for U 409.014 Recovery = 95.20%							
V 292.402†	76275.8	480.63 ug/L	2.011	480.63 ppb	2.011	0.42%	
QC value within limits for V 292.402 Recovery = 96.13%							
Zn 213.857†	50972.0	470.60 ug/L	2.327	470.60 ppb	2.327	0.49%	
QC value within limits for Zn 213.857 Recovery = 94.12%							
SiO2†	80586.6	5083.8 ug/L	56.97	5083.8 ppb	56.97	1.12%	
QC value within limits for SiO2 Recovery = 95.07%							
All analyte(s) passed QC.							

Sequence No.: 14

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 1/26/2010 14:57:31

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5466.8	5466.8	102 %		14:59:24
1	Y RADIAL	5869.4	5869.4	101.9 %		14:59:24
1	Al 396.153Radial†	279.6	264.0	199.52 ug/L	199.52 ppb	14:59:45
1	Ca 317.933Radial†	145.9	122.3	196.50 ug/L	196.50 ppb	14:59:45
1	Fe 238.204 Radial†	19.4	11.8	110.07 ug/L	110.07 ppb	14:59:45
1	K 766.490 Radial†	3024.8	451.2	82.242 ug/L	82.242 ppb	14:59:24
1	Mg 279.077 IEC†	9.8	8.6	305.27 ug/L	305.27 ppb	14:59:45
1	Na 589.592 Radial†	358.2	897.6	266.82 ug/L	266.82 ppb	14:59:24
1	Sr 421.552†	851.2	824.4	5.2892 ug/L	5.2892 ppb	14:59:24
1	Sc 361.383	915476.5	915476.5	101.96 %		15:00:41
1	Y 371.029	805899.9	805899.9	97.908 %		15:00:41
1	Ag 328.068†	1485.0	1160.4	4.8535 ug/L	4.8535 ppb	15:00:41
1	As 188.979†	41.2	70.6	28.912 ug/L	28.912 ppb	15:01:01
1	B 249.677†	2044.5	2245.6	49.216 ug/L	49.216 ppb	15:00:41
1	Ba 233.527†	622.7	613.8	4.8529 ug/L	4.8529 ppb	15:01:01
1	Be 313.107†	9187.6	14111.3	4.9896 ug/L	4.9896 ppb	15:00:41
1	Cd 226.502†	260.7	461.9	5.1615 ug/L	5.1615 ppb	15:01:01
1	Co 228.616†	160.3	227.1	4.9904 ug/L	4.9904 ppb	15:01:01
1	Cr 267.716†	553.0	448.5	4.8504 ug/L	4.8504 ppb	15:01:01
1	Cu 324.752†	12452.8	3085.4	8.6322 ug/L	8.6322 ppb	15:00:41
1	Mn 257.610†	9908.5	9228.1	10.345 ug/L	10.345 ppb	15:00:41
1	Mo 202.031†	171.7	144.8	9.8940 ug/L	9.8940 ppb	15:01:01
1	Ni 231.604†	310.0	210.4	5.2842 ug/L	5.2842 ppb	15:01:01
1	P 214.914†	511.1	262.5	146.38 ug/L	146.38 ppb	15:01:01
1	Pb 220.353†	27.3	87.1	10.993 ug/L	10.993 ppb	15:01:01
1	S 181.975 Axial†	123.6	44.2	60.815 ug/L	60.815 ppb	15:01:01
1	Sb 206.836†	65.7	34.2	11.819 ug/L	11.819 ppb	15:01:01
1	Se 196.026†	41.5	58.7	34.250 ug/L	34.250 ppb	15:01:01
1	Si 251.611†	3748.5	3180.5	94.116 ug/L	94.116 ppb	15:01:01
1	Sn 189.927†	64.3	63.4	11.684 ug/L	11.684 ppb	15:01:01
1	Ti 334.940†	2521.9	3379.9	5.1302 ug/L	5.1302 ppb	15:00:41
1	Tl 190.801†	26.4	62.8	20.140 ug/L	20.140 ppb	15:01:01
1	U 409.014†	1041.5	2084.3	52.094 ug/L	52.094 ppb	15:00:41
1	V 292.402†	-585.9	819.0	5.3151 ug/L	5.3151 ppb	15:00:41
1	Zn 213.857†	1787.6	1019.8	9.4427 ug/L	9.4427 ppb	15:01:01
1	SiO2†	3926.3	3337.3	210.80 ug/L	210.80 ppb	15:01:58
2	Sc Radial	5383.3	5383.3	101 %		14:59:50
2	Y RADIAL	5822.6	5822.6	101.1 %		14:59:50
2	Al 396.153Radial†	288.7	277.3	209.58 ug/L	209.58 ppb	15:00:10
2	Ca 317.933Radial†	148.7	127.2	204.53 ug/L	204.53 ppb	15:00:10
2	Fe 238.204 Radial†	19.8	12.5	117.05 ug/L	117.05 ppb	15:00:10
2	K 766.490 Radial†	3208.6	679.3	123.92 ug/L	123.92 ppb	14:59:50
2	Mg 279.077 IEC†	13.0	11.9	425.10 ug/L	425.10 ppb	15:00:10
2	Na 589.592 Radial†	306.6	851.8	253.22 ug/L	253.22 ppb	14:59:50
2	Sr 421.552†	825.0	811.3	5.2051 ug/L	5.2051 ppb	14:59:50
2	Sc 361.383	911011.3	911011.3	101.46 %		15:01:07
2	Y 371.029	802353.5	802353.5	97.477 %		15:01:07
2	Ag 328.068†	1591.5	1272.6	5.3246 ug/L	5.3246 ppb	15:01:07
2	As 188.979†	39.6	69.3	28.387 ug/L	28.387 ppb	15:01:27
2	B 249.677†	2050.3	2261.1	49.554 ug/L	49.554 ppb	15:01:07
2	Ba 233.527†	633.9	627.9	4.9641 ug/L	4.9641 ppb	15:01:27
2	Be 313.107†	9054.3	14024.2	4.9589 ug/L	4.9589 ppb	15:01:07
2	Cd 226.502†	247.1	449.7	5.0251 ug/L	5.0251 ppb	15:01:27
2	Co 228.616†	165.8	233.3	5.1244 ug/L	5.1244 ppb	15:01:27
2	Cr 267.716†	547.5	445.7	4.8207 ug/L	4.8207 ppb	15:01:27
2	Cu 324.752†	12456.7	3149.0	8.8115 ug/L	8.8115 ppb	15:01:07
2	Mn 257.610†	9825.3	9193.7	10.302 ug/L	10.302 ppb	15:01:07
2	Mo 202.031†	161.7	135.7	9.2749 ug/L	9.2749 ppb	15:01:27
2	Ni 231.604†	310.7	212.5	5.3371 ug/L	5.3371 ppb	15:01:27

2	P 214.914†	513.8	267.7	149.27 ug/L	149.27 ppb	15:01:27
2	Pb 220.353†	46.2	105.9	13.347 ug/L	13.347 ppb	15:01:27
2	S 181.975 Axial†	124.7	45.9	63.125 ug/L	63.125 ppb	15:01:27
2	Sb 206.836†	79.8	48.4	16.590 ug/L	16.590 ppb	15:01:27
2	Se 196.026†	33.4	50.8	29.751 ug/L	29.751 ppb	15:01:27
2	Si 251.611†	3729.1	3179.4	94.090 ug/L	94.090 ppb	15:01:27
2	Sn 189.927†	69.8	69.1	12.741 ug/L	12.741 ppb	15:01:27
2	Ti 334.940†	2514.0	3384.3	5.1285 ug/L	5.1285 ppb	15:01:07
2	Tl 190.801†	18.4	55.1	17.671 ug/L	17.671 ppb	15:01:27
2	U 409.014†	1005.9	2054.2	51.341 ug/L	51.341 ppb	15:01:07
2	V 292.402†	-571.8	830.1	5.3751 ug/L	5.3751 ppb	15:01:07
2	Zn 213.857†	1774.3	1015.3	9.3996 ug/L	9.3996 ppb	15:01:27
2	SiO2†	3943.3	3373.0	213.07 ug/L	213.07 ppb	15:02:03
3	Sc Radial	5232.6	5232.6	98.0 %		15:00:15
3	Y RADIAL	5665.9	5665.9	98.41 %		15:00:15
3	Al 396.153Radial†	306.3	303.4	229.34 ug/L	229.34 ppb	15:00:35
3	Ca 317.933Radial†	140.6	123.3	198.15 ug/L	198.15 ppb	15:00:35
3	Fe 238.204 Radial†	19.6	12.8	120.17 ug/L	120.17 ppb	15:00:35
3	K 766.490 Radial†	3108.0	668.4	121.92 ug/L	121.92 ppb	15:00:15
3	Mg 279.077 IEC†	10.5	9.7	346.78 ug/L	346.78 ppb	15:00:35
3	Na 589.592 Radial†	302.5	856.3	254.57 ug/L	254.57 ppb	15:00:15
3	Sr 421.552†	782.3	791.2	5.0765 ug/L	5.0765 ppb	15:00:15
3	Sc 361.383	914033.0	914033.0	101.80 %		15:01:32
3	Y 371.029	804583.4	804583.4	97.748 %		15:01:32
3	Ag 328.068†	1571.8	1248.0	5.2224 ug/L	5.2224 ppb	15:01:32
3	As 188.979†	30.3	59.9	24.571 ug/L	24.571 ppb	15:01:52
3	B 249.677†	2057.7	2261.8	49.568 ug/L	49.568 ppb	15:01:32
3	Ba 233.527†	627.9	619.9	4.9020 ug/L	4.9020 ppb	15:01:52
3	Be 313.107†	9158.6	14097.2	4.9847 ug/L	4.9847 ppb	15:01:32
3	Cd 226.502†	248.9	450.7	5.0356 ug/L	5.0356 ppb	15:01:52
3	Co 228.616†	157.5	224.7	4.9373 ug/L	4.9373 ppb	15:01:52
3	Cr 267.716†	561.9	458.1	4.9547 ug/L	4.9547 ppb	15:01:52
3	Cu 324.752†	12555.7	3205.7	8.9695 ug/L	8.9695 ppb	15:01:32
3	Mn 257.610†	9820.8	9157.3	10.265 ug/L	10.265 ppb	15:01:32
3	Mo 202.031†	177.8	151.0	10.320 ug/L	10.320 ppb	15:01:52
3	Ni 231.604†	324.2	224.7	5.6451 ug/L	5.6451 ppb	15:01:52
3	P 214.914†	499.3	251.7	140.22 ug/L	140.22 ppb	15:01:52
3	Pb 220.353†	43.5	103.1	13.005 ug/L	13.005 ppb	15:01:52
3	S 181.975 Axial†	121.1	42.0	57.727 ug/L	57.727 ppb	15:01:52
3	Sb 206.836†	73.5	42.0	14.422 ug/L	14.422 ppb	15:01:52
3	Se 196.026†	27.5	44.9	26.366 ug/L	26.366 ppb	15:01:52
3	Si 251.611†	3740.3	3178.2	94.042 ug/L	94.042 ppb	15:01:52
3	Sn 189.927†	58.2	57.5	10.604 ug/L	10.604 ppb	15:01:52
3	Ti 334.940†	2524.8	3386.7	5.1367 ug/L	5.1367 ppb	15:01:32
3	Tl 190.801†	24.3	60.7	19.490 ug/L	19.490 ppb	15:01:52
3	U 409.014†	1089.9	2133.4	53.322 ug/L	53.322 ppb	15:01:32
3	V 292.402†	-532.8	870.2	5.6411 ug/L	5.6411 ppb	15:01:32
3	Zn 213.857†	1774.4	1009.6	9.3445 ug/L	9.3445 ppb	15:01:52
3	SiO2†	3891.2	3309.0	209.00 ug/L	209.00 ppb	15:02:08

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	913506.9	101.74 %		0.254			0.25%
Sc Radial	5360.9	100 %		2.2			2.21%
Y 371.029	804278.9	97.711 %		0.2178			0.22%
Y RADIAL	5786.0	100.5 %		1.85			1.84%
Ag 328.068†	1227.0	5.1335 ug/L		0.24779	5.1335 ppb	0.24779	4.83%
QC value within limits for Ag 328.068 Recovery = 102.67%							
Al 396.153Radial†	281.6	212.81 ug/L		15.172	212.81 ppb	15.172	7.13%
QC value within limits for Al 396.153Radial Recovery = 106.41%							
As 188.979†	66.6	27.290 ug/L		2.3691	27.290 ppb	2.3691	8.68%
QC value within limits for As 188.979 Recovery = 90.97%							
B 249.677†	2256.2	49.446 ug/L		0.1993	49.446 ppb	0.1993	0.40%
QC value within limits for B 249.677 Recovery = 98.89%							
Ba 233.527†	620.6	4.9063 ug/L		0.05575	4.9063 ppb	0.05575	1.14%
QC value within limits for Ba 233.527 Recovery = 98.13%							
Be 313.107†	14077.6	4.9777 ug/L		0.01650	4.9777 ppb	0.01650	0.33%
QC value within limits for Be 313.107 Recovery = 99.55%							
Ca 317.933Radial†	124.3	199.73 ug/L		4.239	199.73 ppb	4.239	2.12%

QC value within limits for Ca 317.933 Radial Recovery = 99.86%

Cd 226.502†	454.1	5.0741 ug/L	0.07589	5.0741 ppb	0.07589	1.50%
QC value within limits for Cd 226.502 Recovery = 101.48%						
Co 228.616†	228.4	5.0174 ug/L	0.09646	5.0174 ppb	0.09646	1.92%
QC value within limits for Co 228.616 Recovery = 100.35%						
Cr 267.716†	450.7	4.8753 ug/L	0.07035	4.8753 ppb	0.07035	1.44%
QC value within limits for Cr 267.716 Recovery = 97.51%						
Cu 324.752†	3146.7	8.8044 ug/L	0.16874	8.8044 ppb	0.16874	1.92%
QC value within limits for Cu 324.752 Recovery = 88.04%						
Fe 238.204 Radial†	12.4	115.76 ug/L	5.171	115.76 ppb	5.171	4.47%
QC value within limits for Fe 238.204 Radial Recovery = 115.76%						
K 766.490 Radial†	599.6	109.36 ug/L	23.507	109.36 ppb	23.507	21.50%
QC value within limits for K 766.490 Radial Recovery = 72.91%						
Mg 279.077 IEC†	10.1	359.05 ug/L	60.849	359.05 ppb	60.849	16.95%
QC value within limits for Mg 279.077 IEC Recovery = 119.68%						
Mn 257.610†	9193.0	10.304 ug/L	0.0401	10.304 ppb	0.0401	0.39%
QC value within limits for Mn 257.610 Recovery = 103.04%						
Mo 202.031†	143.9	9.8295 ug/L	0.52531	9.8295 ppb	0.52531	5.34%
QC value within limits for Mo 202.031 Recovery = 98.30%						
Na 589.592 Radial†	868.6	258.20 ug/L	7.492	258.20 ppb	7.492	2.90%
QC value within limits for Na 589.592 Radial Recovery = 86.07%						
Ni 231.604†	215.9	5.4222 ug/L	0.19487	5.4222 ppb	0.19487	3.59%
QC value within limits for Ni 231.604 Recovery = 108.44%						
P 214.914†	260.6	145.29 ug/L	4.624	145.29 ppb	4.624	3.18%
QC value within limits for P 214.914 Recovery = 96.86%						
Pb 220.353†	98.7	12.448 ug/L	1.2720	12.448 ppb	1.2720	10.22%
QC value within limits for Pb 220.353 Recovery = 124.48%						
S 181.975 Axial†	44.0	60.555 ug/L	2.7085	60.555 ppb	2.7085	4.47%
QC value less than the lower limit for S 181.975 Axial Recovery = 60.56%						
Sb 206.836†	41.5	14.277 ug/L	2.3890	14.277 ppb	2.3890	16.73%
QC value greater than the upper limit for Sb 206.836 Recovery = 142.77%						
Se 196.026†	51.5	30.122 ug/L	3.9551	30.122 ppb	3.9551	13.13%
QC value within limits for Se 196.026 Recovery = 100.41%						
Si 251.611†	3179.3	94.083 ug/L	0.0374	94.083 ppb	0.0374	0.04%
QC value within limits for Si 251.611 Recovery = 94.08%						
Sn 189.927†	63.3	11.676 ug/L	1.0682	11.676 ppb	1.0682	9.15%
QC value within limits for Sn 189.927 Recovery = 116.76%						
Sr 421.552†	809.0	5.1903 ug/L	0.10715	5.1903 ppb	0.10715	2.06%
QC value within limits for Sr 421.552 Recovery = 103.81%						
Ti 334.940†	3383.6	5.1318 ug/L	0.00434	5.1318 ppb	0.00434	0.08%
QC value within limits for Ti 334.940 Recovery = 102.64%						
Tl 190.801†	59.5	19.100 ug/L	1.2796	19.100 ppb	1.2796	6.70%
QC value within limits for Tl 190.801 Recovery = 95.50%						
U 409.014†	2090.6	52.253 ug/L	0.9997	52.253 ppb	0.9997	1.91%
QC value within limits for U 409.014 Recovery = 104.51%						
V 292.402†	839.7	5.4438 ug/L	0.17354	5.4438 ppb	0.17354	3.19%
QC value within limits for V 292.402 Recovery = 108.88%						
Zn 213.857†	1014.9	9.3956 ug/L	0.04926	9.3956 ppb	0.04926	0.52%
QC value within limits for Zn 213.857 Recovery = 93.96%						
SiO2†	3339.8	210.96 ug/L	2.043	210.96 ppb	2.043	0.97%
QC value within limits for SiO2 Recovery = 99.04%						

QC Failed. Continue with analysis.

Sequence No.: 15

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 1/26/2010 15:04:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5472.0	5472.0	102 %		15:06:11
1	Y RADIAL	5876.1	5876.1	102.1 %		15:06:11
1	Al 396.153Radial†	10.5	1.1	0.7686 ug/L	0.7686 ppb	15:06:31
1	Ca 317.933Radial†	23.2	2.4	3.8210 ug/L	3.8210 ppb	15:06:31
1	Fe 238.204 Radial†	6.6	-0.8	-7.0459 ug/L	-7.0459 ppb	15:06:31
1	K 766.490 Radial†	2348.4	-211.7	-38.664 ug/L	-38.664 ppb	15:06:11
1	Mg 279.077 IEC†	1.1	0.1	3.9059 ug/L	3.9059 ppb	15:06:31
1	Na 589.592 Radial†	-671.6	-107.8	-32.050 ug/L	-32.050 ppb	15:06:11
1	Sr 421.552†	4.7	-2.5	-0.0159 ug/L	-0.0159 ppb	15:06:11
1	Sc 361.383	924855.8	924855.8	103.01 %		15:07:28
1	Y 371.029	818551.5	818551.5	99.445 %		15:07:28
1	Ag 328.068†	199.0	-102.8	-0.4219 ug/L	-0.4219 ppb	15:07:33
1	As 188.979†	-37.2	-5.9	-2.4310 ug/L	-2.4310 ppb	15:07:53
1	B 249.677†	-255.5	-7.6	-0.1666 ug/L	-0.1666 ppb	15:07:53
1	Ba 233.527†	-1.7	1.4	0.0119 ug/L	0.0119 ppb	15:07:53
1	Be 313.107†	-5071.6	176.9	0.0623 ug/L	0.0623 ppb	15:07:33
1	Cd 226.502†	-196.0	15.9	0.1766 ug/L	0.1766 ppb	15:07:53
1	Co 228.616†	-62.6	9.1	0.2027 ug/L	0.2027 ppb	15:07:53
1	Cr 267.716†	86.9	-9.6	-0.1000 ug/L	-0.1000 ppb	15:07:53
1	Cu 324.752†	8959.2	-430.2	-1.2021 ug/L	-1.2021 ppb	15:07:33
1	Mn 257.610†	497.0	-7.4	-0.0091 ug/L	-0.0091 ppb	15:07:53
1	Mo 202.031†	37.3	12.6	0.8590 ug/L	0.8590 ppb	15:07:53
1	Ni 231.604†	89.7	-6.6	-0.1664 ug/L	-0.1664 ppb	15:07:53
1	P 214.914†	241.5	-4.3	-2.1660 ug/L	-2.1660 ppb	15:07:53
1	Pb 220.353†	-49.9	12.0	1.5064 ug/L	1.5064 ppb	15:07:53
1	S 181.975 Axial†	42.2	-36.0	-49.588 ug/L	-49.588 ppb	15:07:53
1	Sb 206.836†	47.8	16.2	5.4534 ug/L	5.4534 ppb	15:07:53
1	Se 196.026†	-23.4	-4.7	-2.7572 ug/L	-2.7572 ppb	15:07:53
1	Si 251.611†	486.3	-23.9	-0.7173 ug/L	-0.7173 ppb	15:07:53
1	Sn 189.927†	6.8	6.9	1.2694 ug/L	1.2694 ppb	15:07:53
1	Ti 334.940†	-962.5	-27.9	-0.0381 ug/L	-0.0381 ppb	15:07:33
1	Tl 190.801†	-36.6	1.3	0.4201 ug/L	0.4201 ppb	15:07:53
1	U 409.014†	-1483.1	-377.0	-9.4257 ug/L	-9.4257 ppb	15:07:33
1	V 292.402†	-1360.9	72.4	0.4454 ug/L	0.4454 ppb	15:07:33
1	Zn 213.857†	702.1	-51.8	-0.4787 ug/L	-0.4787 ppb	15:07:53
1	SiO2†	510.2	-18.1	-1.1669 ug/L	-1.1669 ppb	15:09:14
2	Sc Radial	5243.7	5243.7	98.2 %		15:06:36
2	Y RADIAL	5652.8	5652.8	98.19 %		15:06:36
2	Al 396.153Radial†	4.7	-4.3	-3.2647 ug/L	-3.2647 ppb	15:06:56
2	Ca 317.933Radial†	23.8	4.0	6.3563 ug/L	6.3563 ppb	15:06:56
2	Fe 238.204 Radial†	7.0	-0.1	-0.5032 ug/L	-0.5032 ppb	15:06:56
2	K 766.490 Radial†	2220.4	-242.3	-44.247 ug/L	-44.247 ppb	15:06:36
2	Mg 279.077 IEC†	0.6	-0.3	-12.125 ug/L	-12.125 ppb	15:06:56
2	Na 589.592 Radial†	-641.4	-105.6	-31.389 ug/L	-31.389 ppb	15:06:36
2	Sr 421.552†	-0.2	-7.3	-0.0472 ug/L	-0.0472 ppb	15:06:36
2	Sc 361.383	930124.5	930124.5	103.59 %		15:07:58
2	Y 371.029	821671.2	821671.2	99.824 %		15:07:58
2	Ag 328.068†	351.3	43.1	0.1892 ug/L	0.1892 ppb	15:08:03
2	As 188.979†	-25.2	5.9	2.3945 ug/L	2.3945 ppb	15:08:23
2	B 249.677†	-251.0	-1.9	-0.0411 ug/L	-0.0411 ppb	15:08:23
2	Ba 233.527†	-13.5	-9.9	-0.0768 ug/L	-0.0768 ppb	15:08:23
2	Be 313.107†	-5059.3	216.6	0.0764 ug/L	0.0764 ppb	15:08:03
2	Cd 226.502†	-197.6	15.4	0.1705 ug/L	0.1705 ppb	15:08:23
2	Co 228.616†	-73.0	-0.5	-0.0121 ug/L	-0.0121 ppb	15:08:23
2	Cr 267.716†	98.8	1.5	0.0202 ug/L	0.0202 ppb	15:08:23
2	Cu 324.752†	8852.9	-582.1	-1.6285 ug/L	-1.6285 ppb	15:08:03
2	Mn 257.610†	488.9	-17.9	-0.0196 ug/L	-0.0196 ppb	15:08:23
2	Mo 202.031†	20.2	-4.1	-0.2800 ug/L	-0.2800 ppb	15:08:23
2	Ni 231.604†	98.7	1.6	0.0399 ug/L	0.0399 ppb	15:08:23

2	P 214.914†	237.3	-9.6	-5.1042 ug/L	-5.1042 ppb	15:08:23
2	Pb 220.353†	-53.0	9.2	1.1559 ug/L	1.1559 ppb	15:08:23
2	S 181.975 Axial†	47.5	-31.1	-42.866 ug/L	-42.866 ppb	15:08:23
2	Sb 206.836†	35.6	4.1	1.3743 ug/L	1.3743 ppb	15:08:23
2	Se 196.026†	-18.4	0.2	0.1159 ug/L	0.1159 ppb	15:08:23
2	Si 251.611†	479.7	-32.9	-0.9699 ug/L	-0.9699 ppb	15:08:23
2	Sn 189.927†	2.7	2.9	0.5420 ug/L	0.5420 ppb	15:08:23
2	Ti 334.940†	-948.9	-9.5	-0.0091 ug/L	-0.0091 ppb	15:08:03
2	Tl 190.801†	-32.0	6.0	1.9202 ug/L	1.9202 ppb	15:08:23
2	U 409.014†	-1435.0	-322.4	-8.0617 ug/L	-8.0617 ppb	15:08:03
2	V 292.402†	-1325.5	114.0	0.6897 ug/L	0.6897 ppb	15:08:03
2	Zn 213.857†	699.5	-58.2	-0.5401 ug/L	-0.5401 ppb	15:08:23
2	SiO2†	522.0	-9.5	-0.5957 ug/L	-0.5957 ppb	15:09:34
3	Sc Radial	5356.1	5356.1	100 %		15:07:01
3	Y RADIAL	5779.0	5779.0	100.4 %		15:07:01
3	Al 396.153Radial†	-3.2	-12.3	-9.3374 ug/L	-9.3374 ppb	15:07:21
3	Ca 317.933Radial†	19.0	-1.3	-2.0191 ug/L	-2.0191 ppb	15:07:21
3	Fe 238.204 Radial†	6.9	-0.3	-2.5493 ug/L	-2.5493 ppb	15:07:21
3	K 766.490 Radial†	2304.6	-205.8	-37.572 ug/L	-37.572 ppb	15:07:01
3	Mg 279.077 IEC†	-0.2	-1.2	-41.291 ug/L	-41.291 ppb	15:07:21
3	Na 589.592 Radial†	-688.2	-138.5	-41.183 ug/L	-41.183 ppb	15:07:01
3	Sr 421.552†	18.1	11.0	0.0706 ug/L	0.0706 ppb	15:07:01
3	Sc 361.383	923472.4	923472.4	102.85 %		15:08:28
3	Y 371.029	818650.7	818650.7	99.457 %		15:08:28
3	Ag 328.068†	374.2	67.8	0.2917 ug/L	0.2917 ppb	15:08:33
3	As 188.979†	-32.4	-1.3	-0.5276 ug/L	-0.5276 ppb	15:08:53
3	B 249.677†	-257.9	-10.3	-0.2267 ug/L	-0.2267 ppb	15:08:53
3	Ba 233.527†	2.8	5.8	0.0465 ug/L	0.0465 ppb	15:08:53
3	Be 313.107†	-5044.2	196.1	0.0690 ug/L	0.0690 ppb	15:08:33
3	Cd 226.502†	-194.4	17.2	0.1902 ug/L	0.1902 ppb	15:08:53
3	Co 228.616†	-59.4	12.2	0.2680 ug/L	0.2680 ppb	15:08:53
3	Cr 267.716†	102.6	5.8	0.0673 ug/L	0.0673 ppb	15:08:53
3	Cu 324.752†	8998.4	-379.1	-1.0578 ug/L	-1.0578 ppb	15:08:33
3	Mn 257.610†	482.2	-21.0	-0.0221 ug/L	-0.0221 ppb	15:08:53
3	Mo 202.031†	25.1	0.8	0.0514 ug/L	0.0514 ppb	15:08:53
3	Ni 231.604†	103.1	6.5	0.1642 ug/L	0.1642 ppb	15:08:53
3	P 214.914†	247.3	1.7	1.1533 ug/L	1.1533 ppb	15:08:53
3	Pb 220.353†	-40.3	21.2	2.6653 ug/L	2.6653 ppb	15:08:53
3	S 181.975 Axial†	47.1	-31.1	-42.885 ug/L	-42.885 ppb	15:08:53
3	Sb 206.836†	33.8	2.6	0.8967 ug/L	0.8967 ppb	15:08:53
3	Se 196.026†	-17.4	1.0	0.5763 ug/L	0.5763 ppb	15:08:53
3	Si 251.611†	479.8	-29.5	-0.8732 ug/L	-0.8732 ppb	15:08:53
3	Sn 189.927†	2.3	2.6	0.4705 ug/L	0.4705 ppb	15:08:53
3	Ti 334.940†	-991.7	-57.7	-0.0804 ug/L	-0.0804 ppb	15:08:33
3	Tl 190.801†	-38.3	-0.4	-0.1232 ug/L	-0.1232 ppb	15:08:53
3	U 409.014†	-1515.4	-410.6	-10.267 ug/L	-10.267 ppb	15:08:33
3	V 292.402†	-1385.4	46.6	0.2706 ug/L	0.2706 ppb	15:08:33
3	Zn 213.857†	703.5	-49.4	-0.4599 ug/L	-0.4599 ppb	15:08:53
3	SiO2†	489.7	-37.3	-2.3610 ug/L	-2.3610 ppb	15:09:54

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	926150.9	103.15 %		0.391			0.38%
Sc Radial	5357.2	100 %		2.1			2.13%
Y 371.029	819624.5	99.575 %		0.2154			0.22%
Y RADIAL	5769.3	100.2 %		1.95			1.94%
Ag 328.068†	2.7	0.0197 ug/L		0.38582	0.0197 ppb	0.38582	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-5.2	-3.9445 ug/L		5.08721	-3.9445 ppb	5.08721	128.97%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-0.5	-0.1881 ug/L		2.43060	-0.1881 ppb	2.43060	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-6.6	-0.1448 ug/L		0.09473	-0.1448 ppb	0.09473	65.42%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-0.9	-0.0061 ug/L		0.06358	-0.0061 ppb	0.06358	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	196.5	0.0692 ug/L		0.00704	0.0692 ppb	0.00704	10.17%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	1.7	2.7194 ug/L		4.29499	2.7194 ppb	4.29499	157.94%

QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	16.2	0.1791 ug/L	0.01011	0.1791 ppb	0.01011	5.64%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	6.9	0.1529 ug/L	0.14651	0.1529 ppb	0.14651	95.85%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-0.8	-0.0041 ug/L	0.08628	-0.0041 ppb	0.08628	>999.9%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-463.8	-1.2961 ug/L	0.29674	-1.2961 ppb	0.29674	22.89%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-0.4	-3.3661 ug/L	3.34697	-3.3661 ppb	3.34697	99.43%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-219.9	-40.161 ug/L	3.5803	-40.161 ppb	3.5803	8.91%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-0.5	-16.503 ug/L	22.9145	-16.503 ppb	22.9145	138.85%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	-15.4	-0.0169 ug/L	0.00690	-0.0169 ppb	0.00690	40.68%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	3.1	0.2101 ug/L	0.58583	0.2101 ppb	0.58583	278.78%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-117.3	-34.874 ug/L	5.4738	-34.874 ppb	5.4738	15.70%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	0.5	0.0126 ug/L	0.16701	0.0126 ppb	0.16701	>999.9%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-4.1	-2.0390 ug/L	3.13071	-2.0390 ppb	3.13071	153.54%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	14.1	1.7759 ug/L	0.78995	1.7759 ppb	0.78995	44.48%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-32.8	-45.113 ug/L	3.8758	-45.113 ppb	3.8758	8.59%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	7.6	2.5748 ug/L	2.50433	2.5748 ppb	2.50433	97.26%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-1.2	-0.6883 ug/L	1.80640	-0.6883 ppb	1.80640	262.44%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-28.7	-0.8535 ug/L	0.12748	-0.8535 ppb	0.12748	14.94%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	4.1	0.7606 ug/L	0.44205	0.7606 ppb	0.44205	58.12%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	0.4	0.0025 ug/L	0.06100	0.0025 ppb	0.06100	>999.9%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-31.7	-0.0425 ug/L	0.03586	-0.0425 ppb	0.03586	84.38%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	2.3	0.7391 ug/L	1.05839	0.7391 ppb	1.05839	143.21%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-370.0	-9.2515 ug/L	1.11296	-9.2515 ppb	1.11296	12.03%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	77.7	0.4686 ug/L	0.21050	0.4686 ppb	0.21050	44.93%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-53.1	-0.4929 ug/L	0.04197	-0.4929 ppb	0.04197	8.51%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-21.6	-1.3745 ug/L	0.90078	-1.3745 ppb	0.90078	65.53%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

=====

Analysis Begun

Start Time: 1/26/2010 15:38:39

Plasma On Time: 00:00:00

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\012610A.sif

Batch ID:

Results Data Set: 012610

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

Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 1/26/2010 15:38:40

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5349.6	5349.6	100 %		15:40:32
1	Y RADIAL	5716.3	5716.3	99.29 %		15:40:32
1	Al 396.153Radial†	6385.3	6364.8	4798.5 ug/L	4798.5 ppb	15:40:32
1	Ca 317.933Radial†	3093.2	3067.5	4930.3 ug/L	4930.3 ppb	15:40:52
1	Fe 238.204 Radial†	560.5	552.4	5176.7 ug/L	5176.7 ppb	15:40:52
1	K 766.490 Radial†	29390.2	26834.5	4895.9 ug/L	4895.9 ppb	15:40:32
1	Mg 279.077 IEC†	148.1	146.9	5239.6 ug/L	5239.6 ppb	15:40:52
1	Na 589.592 Radial†	33214.0	33702.7	10019 ug/L	10019 ppb	15:40:32
1	Sr 421.552†	78263.1	78117.0	501.29 ug/L	501.29 ppb	15:40:32
1	Sc 361.383	927647.7	927647.7	103.32 %		15:41:50
1	Y 371.029	811568.1	811568.1	98.596 %		15:41:50
1	Ag 328.068†	118279.7	114187.3	479.65 ug/L	479.65 ppb	15:41:55
1	As 188.979†	1157.1	1150.2	474.83 ug/L	474.83 ppb	15:42:15
1	B 249.677†	21715.1	21258.6	463.98 ug/L	463.98 ppb	15:41:55
1	Ba 233.527†	62364.5	60365.9	477.02 ug/L	477.02 ppb	15:41:55
1	Be 313.107†	1382970.1	1343681.4	475.10 ug/L	475.10 ppb	15:41:50
1	Cd 226.502†	44113.7	42904.0	479.12 ug/L	479.12 ppb	15:41:55
1	Co 228.616†	22948.4	22281.7	488.50 ug/L	488.50 ppb	15:41:55
1	Cr 267.716†	45484.6	43930.8	476.82 ug/L	476.82 ppb	15:41:55
1	Cu 324.752†	182306.2	167326.7	469.40 ug/L	469.40 ppb	15:41:55
1	Mn 257.610†	439125.2	424540.8	476.28 ug/L	476.28 ppb	15:41:50
1	Mo 202.031†	7214.7	6959.5	475.43 ug/L	475.43 ppb	15:42:15
1	Ni 231.604†	19779.1	19050.6	478.48 ug/L	478.48 ppb	15:41:55
1	P 214.914†	4604.6	4218.0	2286.9 ug/L	2286.9 ppb	15:42:15
1	Pb 220.353†	3865.5	3801.8	478.74 ug/L	478.74 ppb	15:42:15
1	S 181.975 Axial†	770.0	668.3	919.26 ug/L	919.26 ppb	15:42:15
1	Sb 206.836†	1490.1	1412.0	489.83 ug/L	489.83 ppb	15:42:15
1	Se 196.026†	822.5	814.1	488.41 ug/L	488.41 ppb	15:42:15
1	Si 251.611†	83951.9	80761.3	2387.1 ug/L	2387.1 ppb	15:41:55
1	Sn 189.927†	2676.9	2591.4	477.35 ug/L	477.35 ppb	15:42:15
1	Ti 334.940†	328377.9	318744.5	485.84 ug/L	485.84 ppb	15:41:50
1	Tl 190.801†	1492.7	1481.7	477.22 ug/L	477.22 ppb	15:42:15
1	U 409.014†	18724.2	19186.1	478.10 ug/L	478.10 ppb	15:41:55
1	V 292.402†	77396.8	76306.2	480.82 ug/L	480.82 ppb	15:41:55
1	Zn 213.857†	53494.7	51044.3	471.27 ug/L	471.27 ppb	15:41:55
1	SiO2†	84835.3	81599.0	5147.7 ug/L	5147.7 ppb	15:43:23
2	Sc Radial	5402.9	5402.9	101 %		15:40:57
2	Y RADIAL	5778.6	5778.6	100.4 %		15:40:57
2	Al 396.153Radial†	6422.6	6338.8	4778.9 ug/L	4778.9 ppb	15:40:57
2	Ca 317.933Radial†	3094.0	3037.8	4882.7 ug/L	4882.7 ppb	15:41:17
2	Fe 238.204 Radial†	554.8	541.2	5071.8 ug/L	5071.8 ppb	15:41:17
2	K 766.490 Radial†	29782.0	26932.3	4913.8 ug/L	4913.8 ppb	15:40:57
2	Mg 279.077 IEC†	147.0	144.3	5145.7 ug/L	5145.7 ppb	15:41:17
2	Na 589.592 Radial†	33364.3	33524.0	9965.8 ug/L	9965.8 ppb	15:40:57
2	Sr 421.552†	78809.9	77886.5	499.82 ug/L	499.82 ppb	15:40:57
2	Sc 361.383	930884.6	930884.6	103.68 %		15:42:21
2	Y 371.029	814937.8	814937.8	99.006 %		15:42:21

2	Ag 328.068†	117990.2	113509.9	476.78 ug/L	476.78 ppb	15:42:26
2	As 188.979†	1154.2	1143.4	472.05 ug/L	472.05 ppb	15:42:46
2	B 249.677†	21641.4	21114.4	460.85 ug/L	460.85 ppb	15:42:26
2	Ba 233.527†	62083.9	59885.4	473.22 ug/L	473.22 ppb	15:42:26
2	Be 313.107†	1385302.6	1341276.7	474.25 ug/L	474.25 ppb	15:42:21
2	Cd 226.502†	44031.1	42675.8	476.58 ug/L	476.58 ppb	15:42:26
2	Co 228.616†	22803.0	22064.2	483.73 ug/L	483.73 ppb	15:42:26
2	Cr 267.716†	45324.3	43623.0	473.48 ug/L	473.48 ppb	15:42:26
2	Cu 324.752†	181385.9	165825.5	465.19 ug/L	465.19 ppb	15:42:26
2	Mn 257.610†	439898.2	423808.4	475.45 ug/L	475.45 ppb	15:42:21
2	Mo 202.031†	7198.7	6919.8	472.71 ug/L	472.71 ppb	15:42:46
2	Ni 231.604†	19767.9	18973.2	476.53 ug/L	476.53 ppb	15:42:26
2	P 214.914†	4572.6	4171.7	2261.7 ug/L	2261.7 ppb	15:42:46
2	Pb 220.353†	3839.6	3763.8	473.97 ug/L	473.97 ppb	15:42:46
2	S 181.975 Axial†	777.7	673.1	925.83 ug/L	925.83 ppb	15:42:46
2	Sb 206.836†	1475.5	1392.9	483.33 ug/L	483.33 ppb	15:42:46
2	Se 196.026†	822.8	811.6	486.63 ug/L	486.63 ppb	15:42:46
2	Si 251.611†	83476.2	80019.9	2365.2 ug/L	2365.2 ppb	15:42:26
2	Sn 189.927†	2675.1	2580.5	475.35 ug/L	475.35 ppb	15:42:46
2	Ti 334.940†	329456.8	318679.9	485.75 ug/L	485.75 ppb	15:42:21
2	Tl 190.801†	1476.6	1461.1	470.67 ug/L	470.67 ppb	15:42:46
2	U 409.014†	18584.8	18988.6	473.18 ug/L	473.18 ppb	15:42:26
2	V 292.402†	77165.2	75822.3	477.78 ug/L	477.78 ppb	15:42:26
2	Zn 213.857†	53399.1	50772.0	468.76 ug/L	468.76 ppb	15:42:26
2	SiO2†	84786.0	81265.8	5126.8 ug/L	5126.8 ppb	15:43:28
3	Sc Radial	5417.9	5417.9	101 %		15:41:22
3	Y RADIAL	5815.8	5815.8	101.0 %		15:41:22
3	Al 396.153Radial†	6423.6	6322.2	4766.3 ug/L	4766.3 ppb	15:41:22
3	Ca 317.933Radial†	3102.0	3037.2	4881.7 ug/L	4881.7 ppb	15:41:42
3	Fe 238.204 Radial†	557.2	542.0	5080.0 ug/L	5080.0 ppb	15:41:42
3	K 766.490 Radial†	29721.5	26791.2	4888.1 ug/L	4888.1 ppb	15:41:22
3	Mg 279.077 IEC†	145.6	142.5	5083.1 ug/L	5083.1 ppb	15:41:42
3	Na 589.592 Radial†	33391.4	33459.6	9946.6 ug/L	9946.6 ppb	15:41:22
3	Sr 421.552†	78985.5	77844.4	499.55 ug/L	499.55 ppb	15:41:22
3	Sc 361.383	931013.9	931013.9	103.69 %		15:42:52
3	Y 371.029	814850.4	814850.4	98.995 %		15:42:52
3	Ag 328.068†	117952.5	113457.8	476.56 ug/L	476.56 ppb	15:42:57
3	As 188.979†	1178.2	1166.4	481.45 ug/L	481.45 ppb	15:43:18
3	B 249.677†	21627.3	21097.9	460.48 ug/L	460.48 ppb	15:42:57
3	Ba 233.527†	62112.9	59905.0	473.38 ug/L	473.38 ppb	15:42:57
3	Be 313.107†	1383031.9	1338901.2	473.41 ug/L	473.41 ppb	15:42:52
3	Cd 226.502†	43959.1	42600.5	475.74 ug/L	475.74 ppb	15:42:57
3	Co 228.616†	22903.6	22158.2	485.80 ug/L	485.80 ppb	15:42:57
3	Cr 267.716†	45349.5	43641.3	473.68 ug/L	473.68 ppb	15:42:57
3	Cu 324.752†	181782.0	166183.1	466.19 ug/L	466.19 ppb	15:42:57
3	Mn 257.610†	439073.0	422953.7	474.50 ug/L	474.50 ppb	15:42:52
3	Mo 202.031†	7226.1	6945.2	474.45 ug/L	474.45 ppb	15:43:18
3	Ni 231.604†	19710.3	18915.0	475.07 ug/L	475.07 ppb	15:42:57
3	P 214.914†	4573.8	4172.3	2261.8 ug/L	2261.8 ppb	15:43:18
3	Pb 220.353†	3870.6	3793.2	477.67 ug/L	477.67 ppb	15:43:18
3	S 181.975 Axial†	780.8	676.1	929.91 ug/L	929.91 ppb	15:43:18
3	Sb 206.836†	1476.8	1394.0	483.75 ug/L	483.75 ppb	15:43:18
3	Se 196.026†	833.8	822.1	492.68 ug/L	492.68 ppb	15:43:18
3	Si 251.611†	83722.9	80246.7	2371.9 ug/L	2371.9 ppb	15:42:57
3	Sn 189.927†	2676.2	2581.2	475.48 ug/L	475.48 ppb	15:43:18
3	Ti 334.940†	328877.3	318076.9	484.83 ug/L	484.83 ppb	15:42:52
3	Tl 190.801†	1491.3	1475.1	475.12 ug/L	475.12 ppb	15:43:18
3	U 409.014†	18724.4	19120.8	476.48 ug/L	476.48 ppb	15:42:57
3	V 292.402†	77216.9	75861.8	478.06 ug/L	478.06 ppb	15:42:57
3	Zn 213.857†	53234.5	50606.1	467.22 ug/L	467.22 ppb	15:42:57
3	SiO2†	83293.1	79814.7	5034.9 ug/L	5034.9 ppb	15:43:33

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	929848.7	103.56 %	0.212			0.21%
Sc Radial	5390.1	101 %	0.7			0.67%
Y 371.029	813785.4	98.866 %	0.2334			0.24%
Y RADIAL	5770.2	100.2 %	0.87			0.87%
Ag 328.068†	113718.3	477.66 ug/L	1.722	477.66 ppb	1.722	0.36%

QC value within limits for Ag 328.068 Recovery = 95.53%							
Al	396.153Radial†	6341.9	4781.2 ug/L	16.25	4781.2 ppb	16.25	0.34%
QC value within limits for Al 396.153Radial Recovery = 95.62%							
As	188.979†	1153.3	476.11 ug/L	4.828	476.11 ppb	4.828	1.01%
QC value within limits for As 188.979 Recovery = 95.22%							
B	249.677†	21156.9	461.77 ug/L	1.923	461.77 ppb	1.923	0.42%
QC value within limits for B 249.677 Recovery = 92.35%							
Ba	233.527†	60052.1	474.54 ug/L	2.149	474.54 ppb	2.149	0.45%
QC value within limits for Ba 233.527 Recovery = 94.91%							
Be	313.107†	1341286.4	474.26 ug/L	0.844	474.26 ppb	0.844	0.18%
QC value within limits for Be 313.107 Recovery = 94.85%							
Ca	317.933Radial†	3047.5	4898.2 ug/L	27.82	4898.2 ppb	27.82	0.57%
QC value within limits for Ca 317.933Radial Recovery = 97.96%							
Cd	226.502†	42726.8	477.14 ug/L	1.761	477.14 ppb	1.761	0.37%
QC value within limits for Cd 226.502 Recovery = 95.43%							
Co	228.616†	22168.1	486.01 ug/L	2.394	486.01 ppb	2.394	0.49%
QC value within limits for Co 228.616 Recovery = 97.20%							
Cr	267.716†	43731.7	474.66 ug/L	1.874	474.66 ppb	1.874	0.39%
QC value within limits for Cr 267.716 Recovery = 94.93%							
Cu	324.752†	166445.1	466.92 ug/L	2.201	466.92 ppb	2.201	0.47%
QC value within limits for Cu 324.752 Recovery = 93.38%							
Fe	238.204 Radial†	545.2	5109.5 ug/L	58.32	5109.5 ppb	58.32	1.14%
QC value within limits for Fe 238.204 Radial Recovery = 102.19%							
K	766.490 Radial†	26852.7	4899.3 ug/L	13.20	4899.3 ppb	13.20	0.27%
QC value within limits for K 766.490 Radial Recovery = 97.99%							
Mg	279.077 IEC†	144.6	5156.1 ug/L	78.78	5156.1 ppb	78.78	1.53%
QC value within limits for Mg 279.077 IEC Recovery = 103.12%							
Mn	257.610†	423767.6	475.41 ug/L	0.892	475.41 ppb	0.892	0.19%
QC value within limits for Mn 257.610 Recovery = 95.08%							
Mo	202.031†	6941.5	474.20 ug/L	1.379	474.20 ppb	1.379	0.29%
QC value within limits for Mo 202.031 Recovery = 94.84%							
Na	589.592 Radial†	33562.1	9977.1 ug/L	37.44	9977.1 ppb	37.44	0.38%
QC value within limits for Na 589.592 Radial Recovery = 99.77%							
Ni	231.604†	18979.6	476.69 ug/L	1.709	476.69 ppb	1.709	0.36%
QC value within limits for Ni 231.604 Recovery = 95.34%							
P	214.914†	4187.3	2270.2 ug/L	14.54	2270.2 ppb	14.54	0.64%
QC value within limits for P 214.914 Recovery = 90.81%							
Pb	220.353†	3786.3	476.79 ug/L	2.501	476.79 ppb	2.501	0.52%
QC value within limits for Pb 220.353 Recovery = 95.36%							
S	181.975 Axial†	672.5	925.00 ug/L	5.372	925.00 ppb	5.372	0.58%
QC value within limits for S 181.975 Axial Recovery = 92.50%							
Sb	206.836†	1399.6	485.64 ug/L	3.636	485.64 ppb	3.636	0.75%
QC value within limits for Sb 206.836 Recovery = 97.13%							
Se	196.026†	815.9	489.24 ug/L	3.112	489.24 ppb	3.112	0.64%
QC value within limits for Se 196.026 Recovery = 97.85%							
Si	251.611†	80342.7	2374.7 ug/L	11.24	2374.7 ppb	11.24	0.47%
QC value within limits for Si 251.611 Recovery = 94.99%							
Sn	189.927†	2584.4	476.06 ug/L	1.120	476.06 ppb	1.120	0.24%
QC value within limits for Sn 189.927 Recovery = 95.21%							
Sr	421.552†	77949.3	500.22 ug/L	0.942	500.22 ppb	0.942	0.19%
QC value within limits for Sr 421.552 Recovery = 100.04%							
Ti	334.940†	318500.5	485.48 ug/L	0.558	485.48 ppb	0.558	0.11%
QC value within limits for Ti 334.940 Recovery = 97.10%							
Tl	190.801†	1472.6	474.34 ug/L	3.345	474.34 ppb	3.345	0.71%
QC value within limits for Tl 190.801 Recovery = 94.87%							
U	409.014†	19098.5	475.92 ug/L	2.507	475.92 ppb	2.507	0.53%
QC value within limits for U 409.014 Recovery = 95.18%							
V	292.402†	75996.8	478.89 ug/L	1.683	478.89 ppb	1.683	0.35%
QC value within limits for V 292.402 Recovery = 95.78%							
Zn	213.857†	50807.5	469.08 ug/L	2.042	469.08 ppb	2.042	0.44%
QC value within limits for Zn 213.857 Recovery = 93.82%							
SiO2†		80893.2	5103.1 ug/L	60.00	5103.1 ppb	60.00	1.18%
QC value within limits for SiO2 Recovery = 95.43%							
All analyte(s) passed QC.							

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 1/26/2010 15:45:44

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5055.4	5055.4	94.7 %		15:47:37
1	Y RADIAL	5423.2	5423.2	94.20 %		15:47:37
1	Al 396.153Radial†	4.6	-4.3	-3.2555 ug/L	-3.2555 ppb	15:47:57
1	Ca 317.933Radial†	24.4	5.6	8.9546 ug/L	8.9546 ppb	15:47:57
1	Fe 238.204 Radial†	6.1	-0.7	-6.2166 ug/L	-6.2166 ppb	15:47:57
1	K 766.490 Radial†	2358.3	-12.4	-2.2489 ug/L	-2.2489 ppb	15:47:37
1	Mg 279.077 IEC†	3.6	2.9	102.27 ug/L	102.27 ppb	15:47:57
1	Na 589.592 Radial†	-681.0	-171.7	-51.051 ug/L	-51.051 ppb	15:47:37
1	Sr 421.552†	18.3	12.2	0.0783 ug/L	0.0783 ppb	15:47:37
1	Sc 361.383	935233.3	935233.3	104.16 %		15:48:53
1	Y 371.029	827186.0	827186.0	100.49 %		15:48:53
1	Ag 328.068†	257.7	-48.6	-0.1929 ug/L	-0.1929 ppb	15:48:58
1	As 188.979†	-27.4	3.9	1.5941 ug/L	1.5941 ppb	15:49:18
1	B 249.677†	-247.9	2.4	0.0542 ug/L	0.0542 ppb	15:49:18
1	Ba 233.527†	-13.1	-9.5	-0.0736 ug/L	-0.0736 ppb	15:49:18
1	Be 313.107†	-4977.5	321.8	0.1135 ug/L	0.1135 ppb	15:48:58
1	Cd 226.502†	-188.7	25.0	0.2783 ug/L	0.2783 ppb	15:49:18
1	Co 228.616†	-76.1	-3.1	-0.0677 ug/L	-0.0677 ppb	15:49:18
1	Cr 267.716†	69.8	-26.9	-0.2863 ug/L	-0.2863 ppb	15:49:18
1	Cu 324.752†	8962.5	-523.5	-1.4627 ug/L	-1.4627 ppb	15:48:58
1	Mn 257.610†	491.6	-17.9	-0.0249 ug/L	-0.0249 ppb	15:49:18
1	Mo 202.031†	25.2	0.6	0.0394 ug/L	0.0394 ppb	15:49:18
1	Ni 231.604†	99.9	2.3	0.0566 ug/L	0.0566 ppb	15:49:18
1	P 214.914†	239.6	-8.7	-4.6112 ug/L	-4.6112 ppb	15:49:18
1	Pb 220.353†	-50.9	11.5	1.4437 ug/L	1.4437 ppb	15:49:18
1	S 181.975 Axial†	44.3	-34.4	-47.405 ug/L	-47.405 ppb	15:49:18
1	Sb 206.836†	36.3	4.6	1.5463 ug/L	1.5463 ppb	15:49:18
1	Se 196.026†	-19.3	-0.6	-0.3685 ug/L	-0.3685 ppb	15:49:18
1	Si 251.611†	487.6	-27.8	-0.8251 ug/L	-0.8251 ppb	15:49:18
1	Sn 189.927†	0.5	0.9	0.1613 ug/L	0.1613 ppb	15:49:18
1	Ti 334.940†	-949.6	-5.1	-0.0099 ug/L	-0.0099 ppb	15:48:58
1	Tl 190.801†	-39.2	-0.8	-0.2431 ug/L	-0.2431 ppb	15:49:18
1	U 409.014†	-1570.1	-444.5	-11.114 ug/L	-11.114 ppb	15:48:58
1	V 292.402†	-1323.0	123.4	0.7499 ug/L	0.7499 ppb	15:48:58
1	Zn 213.857†	702.8	-58.7	-0.5441 ug/L	-0.5441 ppb	15:49:18
1	SiO2†	468.5	-63.7	-4.0273 ug/L	-4.0273 ppb	15:50:39
2	Sc Radial	5389.8	5389.8	101 %		15:48:02
2	Y RADIAL	5787.5	5787.5	100.5 %		15:48:02
2	Al 396.153Radial†	6.0	-3.2	-2.4025 ug/L	-2.4025 ppb	15:48:22
2	Ca 317.933Radial†	19.6	-0.8	-1.3266 ug/L	-1.3266 ppb	15:48:22
2	Fe 238.204 Radial†	6.9	-0.3	-2.6454 ug/L	-2.6454 ppb	15:48:22
2	K 766.490 Radial†	2319.8	-205.1	-37.440 ug/L	-37.440 ppb	15:48:02
2	Mg 279.077 IEC†	2.8	1.8	63.531 ug/L	63.531 ppb	15:48:22
2	Na 589.592 Radial†	-713.5	-159.3	-47.353 ug/L	-47.353 ppb	15:48:02
2	Sr 421.552†	39.8	32.3	0.2076 ug/L	0.2076 ppb	15:48:02
2	Sc 361.383	936244.1	936244.1	104.27 %		15:49:23
2	Y 371.029	827401.7	827401.7	100.52 %		15:49:23
2	Ag 328.068†	344.2	34.1	0.1505 ug/L	0.1505 ppb	15:49:29
2	As 188.979†	-25.4	5.8	2.3856 ug/L	2.3856 ppb	15:49:49
2	B 249.677†	-194.1	54.2	1.1896 ug/L	1.1896 ppb	15:49:49
2	Ba 233.527†	20.5	22.7	0.1800 ug/L	0.1800 ppb	15:49:49
2	Be 313.107†	-4919.0	383.0	0.1354 ug/L	0.1354 ppb	15:49:29
2	Cd 226.502†	-192.1	21.9	0.2431 ug/L	0.2431 ppb	15:49:49
2	Co 228.616†	-66.4	6.2	0.1354 ug/L	0.1354 ppb	15:49:49
2	Cr 267.716†	94.4	-3.4	-0.0331 ug/L	-0.0331 ppb	15:49:49
2	Cu 324.752†	8866.5	-624.9	-1.7480 ug/L	-1.7480 ppb	15:49:29
2	Mn 257.610†	578.6	65.0	0.0700 ug/L	0.0700 ppb	15:49:49
2	Mo 202.031†	16.3	-7.9	-0.5424 ug/L	-0.5424 ppb	15:49:49
2	Ni 231.604†	102.2	4.4	0.1095 ug/L	0.1095 ppb	15:49:49

2	P 214.914†	232.6	-15.7	-8.4993 ug/L	-8.4993 ppb	15:49:49
2	Pb 220.353†	-29.7	31.9	4.0019 ug/L	4.0019 ppb	15:49:49
2	S 181.975 Axial†	52.0	-27.1	-37.305 ug/L	-37.305 ppb	15:49:49
2	Sb 206.836†	47.1	14.9	4.9902 ug/L	4.9902 ppb	15:49:49
2	Se 196.026†	-19.8	-1.0	-0.6087 ug/L	-0.6087 ppb	15:49:49
2	Si 251.611†	540.1	22.1	0.6601 ug/L	0.6601 ppb	15:49:49
2	Sn 189.927†	-0.5	-0.1	-0.0266 ug/L	-0.0266 ppb	15:49:49
2	Ti 334.940†	-863.8	78.1	0.1179 ug/L	0.1179 ppb	15:49:29
2	Tl 190.801†	-48.3	-9.4	-3.0051 ug/L	-3.0051 ppb	15:49:49
2	U 409.014†	-1499.1	-374.9	-9.3729 ug/L	-9.3729 ppb	15:49:29
2	V 292.402†	-1395.8	54.9	0.3176 ug/L	0.3176 ppb	15:49:29
2	Zn 213.857†	744.1	-19.8	-0.1829 ug/L	-0.1829 ppb	15:49:49
2	SiO2†	479.4	-53.7	-3.3808 ug/L	-3.3808 ppb	15:50:59
3	Sc Radial	5423.9	5423.9	102 %		15:48:27
3	Y RADIAL	5862.1	5862.1	101.8 %		15:48:27
3	Al 396.153Radial†	11.7	2.4	1.8213 ug/L	1.8213 ppb	15:48:47
3	Ca 317.933Radial†	19.6	-0.9	-1.4384 ug/L	-1.4384 ppb	15:48:47
3	Fe 238.204 Radial†	5.0	-2.2	-21.020 ug/L	-21.020 ppb	15:48:47
3	K 766.490 Radial†	2257.0	-281.3	-51.379 ug/L	-51.379 ppb	15:48:27
3	Mg 279.077 IEC†	0.2	-0.8	-26.766 ug/L	-26.766 ppb	15:48:47
3	Na 589.592 Radial†	-681.1	-122.9	-36.544 ug/L	-36.544 ppb	15:48:27
3	Sr 421.552†	51.6	43.7	0.2803 ug/L	0.2803 ppb	15:48:27
3	Sc 361.383	942414.5	942414.5	104.96 %		15:49:54
3	Y 371.029	834912.8	834912.8	101.43 %		15:49:54
3	Ag 328.068†	375.4	61.6	0.2599 ug/L	0.2599 ppb	15:49:59
3	As 188.979†	-25.2	6.1	2.5071 ug/L	2.5071 ppb	15:50:19
3	B 249.677†	-269.4	-16.3	-0.3524 ug/L	-0.3524 ppb	15:50:19
3	Ba 233.527†	-1.6	1.6	0.0129 ug/L	0.0129 ppb	15:50:19
3	Be 313.107†	-4953.6	381.0	0.1344 ug/L	0.1344 ppb	15:49:59
3	Cd 226.502†	-196.1	19.4	0.2168 ug/L	0.2168 ppb	15:50:19
3	Co 228.616†	-86.0	-12.0	-0.2636 ug/L	-0.2636 ppb	15:50:19
3	Cr 267.716†	70.8	-26.5	-0.2829 ug/L	-0.2829 ppb	15:50:19
3	Cu 324.752†	8995.8	-557.4	-1.5593 ug/L	-1.5593 ppb	15:49:59
3	Mn 257.610†	504.2	-9.5	-0.0116 ug/L	-0.0116 ppb	15:50:19
3	Mo 202.031†	23.3	-1.4	-0.0987 ug/L	-0.0987 ppb	15:50:19
3	Ni 231.604†	106.0	7.3	0.1835 ug/L	0.1835 ppb	15:50:19
3	P 214.914†	238.2	-11.8	-6.3348 ug/L	-6.3348 ppb	15:50:19
3	Pb 220.353†	-42.8	19.6	2.4614 ug/L	2.4614 ppb	15:50:19
3	S 181.975 Axial†	44.9	-34.2	-47.150 ug/L	-47.150 ppb	15:50:19
3	Sb 206.836†	28.7	-2.9	-0.9716 ug/L	-0.9716 ppb	15:50:19
3	Se 196.026†	-19.7	-0.8	-0.5186 ug/L	-0.5186 ppb	15:50:19
3	Si 251.611†	462.7	-55.1	-1.6309 ug/L	-1.6309 ppb	15:50:19
3	Sn 189.927†	2.1	2.3	0.4302 ug/L	0.4302 ppb	15:50:19
3	Ti 334.940†	-933.8	16.8	0.0321 ug/L	0.0321 ppb	15:49:59
3	Tl 190.801†	-34.8	3.7	1.1815 ug/L	1.1815 ppb	15:50:19
3	U 409.014†	-1528.3	-393.2	-9.8291 ug/L	-9.8291 ppb	15:49:59
3	V 292.402†	-1393.9	65.5	0.3898 ug/L	0.3898 ppb	15:49:59
3	Zn 213.857†	708.3	-58.6	-0.5429 ug/L	-0.5429 ppb	15:50:19
3	SiO2†	486.4	-50.0	-3.1623 ug/L	-3.1623 ppb	15:51:19

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	937964.0	104.47 %		0.433			0.41%
Sc Radial	5289.7	99.1 %		3.81			3.85%
Y 371.029	829833.5	100.82 %		0.535			0.53%
Y RADIAL	5690.9	98.85 %		4.080			4.13%
Ag 328.068†	15.7	0.0725 ug/L		0.23628	0.0725 ppb	0.23628	325.84%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-1.7	-1.2789 ug/L		2.71851	-1.2789 ppb	2.71851	212.56%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	5.3	2.1623 ug/L		0.49578	2.1623 ppb	0.49578	22.93%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	13.5	0.2971 ug/L		0.79917	0.2971 ppb	0.79917	268.95%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	4.9	0.0398 ug/L		0.12889	0.0398 ppb	0.12889	324.14%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	361.9	0.1278 ug/L		0.01238	0.1278 ppb	0.01238	9.69%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	1.3	2.0632 ug/L		5.96837	2.0632 ppb	5.96837	289.28%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd 226.502†	22.1	0.2460 ug/L	0.03086	0.2460 ppb	0.03086	12.54%			
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co 228.616†	-3.0	-0.0653 ug/L	0.19950	-0.0653 ppb	0.19950	305.49%			
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr 267.716†	-18.9	-0.2008 ug/L	0.14521	-0.2008 ppb	0.14521	72.32%			
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu 324.752†	-568.6	-1.5900 ug/L	0.14506	-1.5900 ppb	0.14506	9.12%			
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe 238.204 Radial†	-1.1	-9.9606 ug/L	9.74262	-9.9606 ppb	9.74262	97.81%			
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K 766.490 Radial†	-166.3	-30.356 ug/L	25.3196	-30.356 ppb	25.3196	83.41%			
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg 279.077 IEC†	1.3	46.346 ug/L	66.2135	46.346 ppb	66.2135	142.87%			
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn 257.610†	12.5	0.0112 ug/L	0.05141	0.0112 ppb	0.05141	459.55%			
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo 202.031†	-2.9	-0.2006 ug/L	0.30399	-0.2006 ppb	0.30399	151.57%			
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na 589.592 Radial†	-151.3	-44.982 ug/L	7.5386	-44.982 ppb	7.5386	16.76%			
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni 231.604†	4.6	0.1165 ug/L	0.06374	0.1165 ppb	0.06374	54.69%			
QC value within limits for Ni 231.604 Recovery = Not calculated									
P 214.914†	-12.1	-6.4817 ug/L	1.94824	-6.4817 ppb	1.94824	30.06%			
QC value within limits for P 214.914 Recovery = Not calculated									
Pb 220.353†	21.0	2.6356 ug/L	1.28797	2.6356 ppb	1.28797	48.87%			
QC value within limits for Pb 220.353 Recovery = Not calculated									
S 181.975 Axial†	-31.9	-43.953 ug/L	5.7590	-43.953 ppb	5.7590	13.10%			
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb 206.836†	5.5	1.8550 ug/L	2.99289	1.8550 ppb	2.99289	161.34%			
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se 196.026†	-0.8	-0.4986 ug/L	0.12133	-0.4986 ppb	0.12133	24.33%			
QC value within limits for Se 196.026 Recovery = Not calculated									
Si 251.611†	-20.3	-0.5986 ug/L	1.16219	-0.5986 ppb	1.16219	194.14%			
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn 189.927†	1.0	0.1883 ug/L	0.22960	0.1883 ppb	0.22960	121.93%			
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr 421.552†	29.4	0.1887 ug/L	0.10233	0.1887 ppb	0.10233	54.22%			
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti 334.940†	30.0	0.0467 ug/L	0.06516	0.0467 ppb	0.06516	139.58%			
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl 190.801†	-2.2	-0.6889 ug/L	2.12861	-0.6889 ppb	2.12861	309.00%			
QC value within limits for Tl 190.801 Recovery = Not calculated									
U 409.014†	-404.2	-10.105 ug/L	0.9026	-10.105 ppb	0.9026	8.93%			
QC value within limits for U 409.014 Recovery = Not calculated									
V 292.402†	81.3	0.4858 ug/L	0.23158	0.4858 ppb	0.23158	47.67%			
QC value within limits for V 292.402 Recovery = Not calculated									
Zn 213.857†	-45.7	-0.4233 ug/L	0.20819	-0.4233 ppb	0.20819	49.19%			
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†	-55.8	-3.5235 ug/L	0.44978	-3.5235 ppb	0.44978	12.77%			
QC value within limits for SiO2 Recovery = Not calculated									
All analyte(s) passed QC.									

Sequence No.: 12

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 1/26/2010 16:55:39

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	5404.1	5404.1	101 %		16:57:31
1	Y RADIAL	5813.1	5813.1	101.0 %		16:57:31
1	Al 396.153Radial†	6596.0	6508.7	4907.1 ug/L	4907.1 ppb	16:57:31
1	Ca 317.933Radial†	3156.1	3098.5	4980.2 ug/L	4980.2 ppb	16:57:51
1	Fe 238.204 Radial†	558.8	545.1	5108.5 ug/L	5108.5 ppb	16:57:51
1	K 766.490 Radial†	30060.1	27200.3	4962.8 ug/L	4962.8 ppb	16:57:31
1	Mg 279.077 IEC†	146.5	143.8	5127.5 ug/L	5127.5 ppb	16:57:51
1	Na 589.592 Radial†	32863.9	33022.0	9816.5 ug/L	9816.5 ppb	16:57:31
1	Sr 421.552†	79011.1	78067.5	500.98 ug/L	500.98 ppb	16:57:31
1	Sc 361.383	933459.5	933459.5	103.96 %		16:58:49
1	Y 371.029	816613.7	816613.7	99.209 %		16:58:49
1	Ag 328.068†	119809.4	114945.9	482.80 ug/L	482.80 ppb	16:58:54
1	As 188.979†	1192.2	1176.9	485.77 ug/L	485.77 ppb	16:59:14
1	B 249.677†	22006.1	21407.6	467.26 ug/L	467.26 ppb	16:58:54
1	Ba 233.527†	63064.8	60663.7	479.37 ug/L	479.37 ppb	16:58:54
1	Be 313.107†	1405050.3	1356585.8	479.67 ug/L	479.67 ppb	16:58:49
1	Cd 226.502†	44607.2	43112.8	481.46 ug/L	481.46 ppb	16:58:54
1	Co 228.616†	23169.0	22355.7	490.13 ug/L	490.13 ppb	16:58:54
1	Cr 267.716†	46082.0	44231.2	480.08 ug/L	480.08 ppb	16:58:54
1	Cu 324.752†	185253.1	169062.7	474.26 ug/L	474.26 ppb	16:58:54
1	Mn 257.610†	446312.1	428807.4	481.06 ug/L	481.06 ppb	16:58:49
1	Mo 202.031†	7383.8	7078.7	483.56 ug/L	483.56 ppb	16:59:14
1	Ni 231.604†	20043.5	19185.7	481.87 ug/L	481.87 ppb	16:58:54
1	P 214.914†	4669.2	4252.5	2305.6 ug/L	2305.6 ppb	16:59:14
1	Pb 220.353†	3941.6	3851.7	485.05 ug/L	485.05 ppb	16:59:14
1	S 181.975 Axial†	789.3	682.2	938.41 ug/L	938.41 ppb	16:59:14
1	Sb 206.836†	1536.7	1447.8	502.14 ug/L	502.14 ppb	16:59:14
1	Se 196.026†	834.8	821.0	492.18 ug/L	492.18 ppb	16:59:14
1	Si 251.611†	85090.0	81350.2	2404.4 ug/L	2404.4 ppb	16:58:54
1	Sn 189.927†	2752.0	2647.4	487.67 ug/L	487.67 ppb	16:59:14
1	Ti 334.940†	333773.7	321955.7	490.75 ug/L	490.75 ppb	16:58:49
1	Tl 190.801†	1513.2	1492.4	480.69 ug/L	480.69 ppb	16:59:14
1	U 409.014†	19016.4	19354.3	482.30 ug/L	482.30 ppb	16:58:54
1	V 292.402†	78414.0	76818.2	484.13 ug/L	484.13 ppb	16:58:54
1	Zn 213.857†	54192.3	51392.9	474.49 ug/L	474.49 ppb	16:58:54
1	SiO2†	85733.7	81951.9	5169.8 ug/L	5169.8 ppb	17:00:22
2	Sc Radial	5464.4	5464.4	102 %		16:57:57
2	Y RADIAL	5854.8	5854.8	101.7 %		16:57:57
2	Al 396.153Radial†	6607.0	6447.5	4861.0 ug/L	4861.0 ppb	16:57:57
2	Ca 317.933Radial†	3114.7	3023.6	4859.7 ug/L	4859.7 ppb	16:58:17
2	Fe 238.204 Radial†	551.7	532.0	4986.7 ug/L	4986.7 ppb	16:58:17
2	K 766.490 Radial†	30113.7	26924.8	4912.6 ug/L	4912.6 ppb	16:57:57
2	Mg 279.077 IEC†	149.8	145.4	5186.7 ug/L	5186.7 ppb	16:58:17
2	Na 589.592 Radial†	32632.4	32437.4	9642.7 ug/L	9642.7 ppb	16:57:57
2	Sr 421.552†	78996.9	77191.8	495.36 ug/L	495.36 ppb	16:57:57
2	Sc 361.383	937520.1	937520.1	104.42 %		16:59:20
2	Y 371.029	819542.3	819542.3	99.565 %		16:59:20
2	Ag 328.068†	119741.6	114381.8	480.40 ug/L	480.40 ppb	16:59:26
2	As 188.979†	1188.9	1168.8	482.47 ug/L	482.47 ppb	16:59:46
2	B 249.677†	22032.5	21341.2	465.83 ug/L	465.83 ppb	16:59:26
2	Ba 233.527†	62932.0	60273.7	476.29 ug/L	476.29 ppb	16:59:26
2	Be 313.107†	1415446.5	1360688.7	481.12 ug/L	481.12 ppb	16:59:20
2	Cd 226.502†	44490.8	42815.5	478.15 ug/L	478.15 ppb	16:59:26
2	Co 228.616†	23118.9	22211.2	486.95 ug/L	486.95 ppb	16:59:26
2	Cr 267.716†	45947.6	43910.6	476.60 ug/L	476.60 ppb	16:59:26
2	Cu 324.752†	185148.5	168190.6	471.81 ug/L	471.81 ppb	16:59:26
2	Mn 257.610†	449866.5	430352.1	482.78 ug/L	482.78 ppb	16:59:20
2	Mo 202.031†	7330.8	6997.2	477.99 ug/L	477.99 ppb	16:59:46
2	Ni 231.604†	19941.2	19004.2	477.31 ug/L	477.31 ppb	16:59:26

2	P 214.914†	4638.9	4203.9	2278.7 ug/L	2278.7 ppb	16:59:46
2	Pb 220.353†	3914.4	3809.2	479.71 ug/L	479.71 ppb	16:59:46
2	S 181.975 Axial†	777.8	667.9	918.64 ug/L	918.64 ppb	16:59:46
2	Sb 206.836†	1527.0	1432.1	496.67 ug/L	496.67 ppb	16:59:46
2	Se 196.026†	841.1	823.4	493.18 ug/L	493.18 ppb	16:59:46
2	Si 251.611†	84970.0	80880.7	2390.6 ug/L	2390.6 ppb	16:59:26
2	Sn 189.927†	2735.5	2620.2	482.64 ug/L	482.64 ppb	16:59:46
2	Ti 334.940†	336981.7	323637.5	493.30 ug/L	493.30 ppb	16:59:20
2	Tl 190.801†	1515.1	1487.9	479.32 ug/L	479.32 ppb	16:59:46
2	U 409.014†	18862.1	19127.3	476.65 ug/L	476.65 ppb	16:59:26
2	V 292.402†	78246.7	76331.3	481.03 ug/L	481.03 ppb	16:59:26
2	Zn 213.857†	54088.3	51067.5	471.51 ug/L	471.51 ppb	16:59:26
2	SiO2†	85093.4	80981.4	5108.6 ug/L	5108.6 ppb	17:00:27
3	Sc Radial	5318.4	5318.4	99.6 %		16:58:22
3	Y RADIAL	5730.9	5730.9	99.54 %		16:58:22
3	Al 396.153Radial†	6474.1	6491.4	4894.0 ug/L	4894.0 ppb	16:58:22
3	Ca 317.933Radial†	3156.9	3149.5	5062.2 ug/L	5062.2 ppb	16:58:42
3	Fe 238.204 Radial†	560.5	555.6	5207.1 ug/L	5207.1 ppb	16:58:42
3	K 766.490 Radial†	29759.8	27377.7	4995.2 ug/L	4995.2 ppb	16:58:22
3	Mg 279.077 IEC†	149.8	149.5	5331.4 ug/L	5331.4 ppb	16:58:42
3	Na 589.592 Radial†	31935.3	32613.1	9695.0 ug/L	9695.0 ppb	16:58:22
3	Sr 421.552†	77533.5	77842.6	499.53 ug/L	499.53 ppb	16:58:22
3	Sc 361.383	927787.5	927787.5	103.33 %		16:59:52
3	Y 371.029	812798.3	812798.3	98.746 %		16:59:52
3	Ag 328.068†	120774.2	116584.1	489.69 ug/L	489.69 ppb	16:59:57
3	As 188.979†	1188.1	1180.0	487.07 ug/L	487.07 ppb	17:00:17
3	B 249.677†	22301.4	21822.8	476.33 ug/L	476.33 ppb	16:59:57
3	Ba 233.527†	63594.5	61547.1	486.35 ug/L	486.35 ppb	16:59:57
3	Be 313.107†	1402066.6	1361960.4	481.57 ug/L	481.57 ppb	16:59:52
3	Cd 226.502†	44852.4	43612.4	487.04 ug/L	487.04 ppb	16:59:57
3	Co 228.616†	23282.3	22601.6	495.52 ug/L	495.52 ppb	16:59:57
3	Cr 267.716†	46420.8	44830.1	486.58 ug/L	486.58 ppb	16:59:57
3	Cu 324.752†	187305.0	172137.7	482.89 ug/L	482.89 ppb	16:59:57
3	Mn 257.610†	444250.0	429436.2	481.77 ug/L	481.77 ppb	16:59:52
3	Mo 202.031†	7320.5	7060.8	482.35 ug/L	482.35 ppb	17:00:17
3	Ni 231.604†	20169.0	19425.0	487.88 ug/L	487.88 ppb	16:59:57
3	P 214.914†	4632.8	4244.7	2299.4 ug/L	2299.4 ppb	17:00:17
3	Pb 220.353†	3913.1	3847.4	484.49 ug/L	484.49 ppb	17:00:17
3	S 181.975 Axial†	779.6	677.5	931.83 ug/L	931.83 ppb	17:00:17
3	Sb 206.836†	1534.3	1454.6	504.36 ug/L	504.36 ppb	17:00:17
3	Se 196.026†	837.8	828.7	496.98 ug/L	496.98 ppb	17:00:17
3	Si 251.611†	85819.4	82556.3	2440.2 ug/L	2440.2 ppb	16:59:57
3	Sn 189.927†	2722.3	2634.8	485.37 ug/L	485.37 ppb	17:00:17
3	Ti 334.940†	333068.8	323236.3	492.69 ug/L	492.69 ppb	16:59:52
3	Tl 190.801†	1503.4	1491.8	480.50 ug/L	480.50 ppb	17:00:17
3	U 409.014†	19251.8	19693.9	490.77 ug/L	490.77 ppb	16:59:57
3	V 292.402†	79080.8	77924.6	491.00 ug/L	491.00 ppb	16:59:57
3	Zn 213.857†	54509.8	52018.9	480.26 ug/L	480.26 ppb	16:59:57
3	SiO2†	85048.9	81793.2	5159.8 ug/L	5159.8 ppb	17:00:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	932922.4	103.90 %	0.544			0.52%
Sc Radial	5395.7	101 %	1.4			1.36%
Y 371.029	816318.1	99.173 %	0.4108			0.41%
Y RADIAL	5799.6	100.7 %	1.10			1.09%
Ag 328.068†	115303.9	484.30 ug/L	4.821	484.30 ppb	4.821	1.00%
QC value within limits for Ag 328.068 Recovery = 96.86%						
Al 396.153Radial†	6482.5	4887.4 ug/L	23.75	4887.4 ppb	23.75	0.49%
QC value within limits for Al 396.153Radial Recovery = 97.75%						
As 188.979†	1175.2	485.11 ug/L	2.372	485.11 ppb	2.372	0.49%
QC value within limits for As 188.979 Recovery = 97.02%						
B 249.677†	21523.8	469.80 ug/L	5.696	469.80 ppb	5.696	1.21%
QC value within limits for B 249.677 Recovery = 93.96%						
Ba 233.527†	60828.2	480.67 ug/L	5.157	480.67 ppb	5.157	1.07%
QC value within limits for Ba 233.527 Recovery = 96.13%						
Be 313.107†	1359745.0	480.78 ug/L	0.994	480.78 ppb	0.994	0.21%
QC value within limits for Be 313.107 Recovery = 96.16%						
Ca 317.933Radial†	3090.5	4967.4 ug/L	101.86	4967.4 ppb	101.86	2.05%

QC value within limits for Ca 317.933Radial Recovery = 99.35%							
Cd 226.502†	43180.2	482.21 ug/L	4.492	482.21 ppb	4.492	0.93%	
QC value within limits for Cd 226.502 Recovery = 96.44%							
Co 228.616†	22389.5	490.87 ug/L	4.330	490.87 ppb	4.330	0.88%	
QC value within limits for Co 228.616 Recovery = 98.17%							
Cr 267.716†	44324.0	481.09 ug/L	5.066	481.09 ppb	5.066	1.05%	
QC value within limits for Cr 267.716 Recovery = 96.22%							
Cu 324.752†	169797.0	476.32 ug/L	5.818	476.32 ppb	5.818	1.22%	
QC value within limits for Cu 324.752 Recovery = 95.26%							
Fe 238.204 Radial†	544.2	5100.8 ug/L	110.41	5100.8 ppb	110.41	2.16%	
QC value within limits for Fe 238.204 Radial Recovery = 102.02%							
K 766.490 Radial†	27167.6	4956.9 ug/L	41.64	4956.9 ppb	41.64	0.84%	
QC value within limits for K 766.490 Radial Recovery = 99.14%							
Mg 279.077 IEC†	146.2	5215.2 ug/L	104.90	5215.2 ppb	104.90	2.01%	
QC value within limits for Mg 279.077 IEC Recovery = 104.30%							
Mn 257.610†	429531.9	481.87 ug/L	0.863	481.87 ppb	0.863	0.18%	
QC value within limits for Mn 257.610 Recovery = 96.37%							
Mo 202.031†	7045.6	481.30 ug/L	2.933	481.30 ppb	2.933	0.61%	
QC value within limits for Mo 202.031 Recovery = 96.26%							
Na 589.592 Radial†	32690.8	9718.1 ug/L	89.17	9718.1 ppb	89.17	0.92%	
QC value within limits for Na 589.592 Radial Recovery = 97.18%							
Ni 231.604†	19205.0	482.36 ug/L	5.302	482.36 ppb	5.302	1.10%	
QC value within limits for Ni 231.604 Recovery = 96.47%							
P 214.914†	4233.7	2294.6 ug/L	14.05	2294.6 ppb	14.05	0.61%	
QC value within limits for P 214.914 Recovery = 91.78%							
Pb 220.353†	3836.1	483.08 ug/L	2.937	483.08 ppb	2.937	0.61%	
QC value within limits for Pb 220.353 Recovery = 96.62%							
S 181.975 Axial†	675.9	929.62 ug/L	10.068	929.62 ppb	10.068	1.08%	
QC value within limits for S 181.975 Axial Recovery = 92.96%							
Sb 206.836†	1444.8	501.06 ug/L	3.955	501.06 ppb	3.955	0.79%	
QC value within limits for Sb 206.836 Recovery = 100.21%							
Se 196.026†	824.4	494.11 ug/L	2.530	494.11 ppb	2.530	0.51%	
QC value within limits for Se 196.026 Recovery = 98.82%							
Si 251.611†	81595.7	2411.8 ug/L	25.59	2411.8 ppb	25.59	1.06%	
QC value within limits for Si 251.611 Recovery = 96.47%							
Sn 189.927†	2634.1	485.22 ug/L	2.517	485.22 ppb	2.517	0.52%	
QC value within limits for Sn 189.927 Recovery = 97.04%							
Sr 421.552†	77700.7	498.62 ug/L	2.918	498.62 ppb	2.918	0.59%	
QC value within limits for Sr 421.552 Recovery = 99.72%							
Ti 334.940†	322943.2	492.25 ug/L	1.330	492.25 ppb	1.330	0.27%	
QC value within limits for Ti 334.940 Recovery = 98.45%							
Tl 190.801†	1490.7	480.17 ug/L	0.741	480.17 ppb	0.741	0.15%	
QC value within limits for Tl 190.801 Recovery = 96.03%							
U 409.014†	19391.8	483.24 ug/L	7.108	483.24 ppb	7.108	1.47%	
QC value within limits for U 409.014 Recovery = 96.65%							
V 292.402†	77024.7	485.39 ug/L	5.100	485.39 ppb	5.100	1.05%	
QC value within limits for V 292.402 Recovery = 97.08%							
Zn 213.857†	51493.1	475.42 ug/L	4.452	475.42 ppb	4.452	0.94%	
QC value within limits for Zn 213.857 Recovery = 95.08%							
SiO2†	81575.5	5146.1 ug/L	32.84	5146.1 ppb	32.84	0.64%	
QC value within limits for SiO2 Recovery = 96.23%							
All analyte(s) passed QC.							

Sequence No.: 13

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 1/26/2010 17:02:43

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5295.7	5295.7	99.2 %		17:04:36
1	Y RADIAL	5703.6	5703.6	99.07 %		17:04:36
1	Al 396.153Radial†	8.7	-0.4	-0.3165 ug/L	-0.3165 ppb	17:04:56
1	Ca 317.933Radial†	26.1	6.1	9.7644 ug/L	9.7644 ppb	17:04:56
1	Fe 238.204 Radial†	8.0	1.0	8.9563 ug/L	8.9563 ppb	17:04:56
1	K 766.490 Radial†	2160.1	-325.3	-59.418 ug/L	-59.418 ppb	17:04:36
1	Mg 279.077 IEC†	1.9	1.0	34.293 ug/L	34.293 ppb	17:04:56
1	Na 589.592 Radial†	-707.3	-165.6	-49.235 ug/L	-49.235 ppb	17:04:36
1	Sr 421.552†	35.8	29.0	0.1861 ug/L	0.1861 ppb	17:04:36
1	Sc 361.383	903875.2	903875.2	100.67 %		17:05:52
1	Y 371.029	795336.9	795336.9	96.624 %		17:05:52
1	Ag 328.068†	342.0	43.7	0.1899 ug/L	0.1899 ppb	17:05:52
1	As 188.979†	-26.0	4.3	1.7762 ug/L	1.7762 ppb	17:06:12
1	B 249.677†	-263.2	-21.1	-0.4638 ug/L	-0.4638 ppb	17:06:12
1	Ba 233.527†	-7.5	-4.3	-0.0326 ug/L	-0.0326 ppb	17:06:12
1	Be 313.107†	-5006.7	127.0	0.0449 ug/L	0.0449 ppb	17:05:52
1	Cd 226.502†	-205.3	2.2	0.0232 ug/L	0.0232 ppb	17:06:12
1	Co 228.616†	-67.8	2.6	0.0562 ug/L	0.0562 ppb	17:06:12
1	Cr 267.716†	96.6	2.0	0.0242 ug/L	0.0242 ppb	17:06:12
1	Cu 324.752†	8877.4	-309.6	-0.8661 ug/L	-0.8661 ppb	17:05:52
1	Mn 257.610†	516.4	23.1	0.0254 ug/L	0.0254 ppb	17:06:12
1	Mo 202.031†	24.6	0.8	0.0577 ug/L	0.0577 ppb	17:06:12
1	Ni 231.604†	98.4	4.1	0.1023 ug/L	0.1023 ppb	17:06:12
1	P 214.914†	247.7	7.3	4.3184 ug/L	4.3184 ppb	17:06:12
1	Pb 220.353†	-56.1	4.7	0.5870 ug/L	0.5870 ppb	17:06:12
1	S 181.975 Axial†	49.0	-28.3	-38.996 ug/L	-38.996 ppb	17:06:12
1	Sb 206.836†	53.0	22.4	7.5215 ug/L	7.5215 ppb	17:06:12
1	Se 196.026†	-21.6	-3.5	-2.0027 ug/L	-2.0027 ppb	17:06:12
1	Si 251.611†	527.7	28.3	0.8364 ug/L	0.8364 ppb	17:06:12
1	Sn 189.927†	6.3	6.6	1.2065 ug/L	1.2065 ppb	17:06:12
1	Ti 334.940†	-891.8	20.7	0.0315 ug/L	0.0315 ppb	17:05:52
1	Tl 190.801†	-44.2	-7.0	-2.2451 ug/L	-2.2451 ppb	17:06:12
1	U 409.014†	-1201.2	-130.4	-3.2608 ug/L	-3.2608 ppb	17:05:52
1	V 292.402†	-1323.0	79.4	0.4875 ug/L	0.4875 ppb	17:05:52
1	Zn 213.857†	727.9	-10.3	-0.0966 ug/L	-0.0966 ppb	17:06:12
1	SiO2†	541.1	24.0	1.5192 ug/L	1.5192 ppb	17:07:23
2	Sc Radial	5415.0	5415.0	101 %		17:05:01
2	Y RADIAL	5882.2	5882.2	102.2 %		17:05:01
2	Al 396.153Radial†	4.3	-4.9	-3.6707 ug/L	-3.6707 ppb	17:05:21
2	Ca 317.933Radial†	24.9	4.3	6.8654 ug/L	6.8654 ppb	17:05:21
2	Fe 238.204 Radial†	7.9	0.6	5.4460 ug/L	5.4460 ppb	17:05:21
2	K 766.490 Radial†	2320.8	-214.8	-39.226 ug/L	-39.226 ppb	17:05:01
2	Mg 279.077 IEC†	0.6	-0.3	-12.259 ug/L	-12.259 ppb	17:05:21
2	Na 589.592 Radial†	-762.3	-204.1	-60.676 ug/L	-60.676 ppb	17:05:01
2	Sr 421.552†	10.1	2.9	0.0183 ug/L	0.0183 ppb	17:05:01
2	Sc 361.383	921318.5	921318.5	102.61 %		17:06:18
2	Y 371.029	809656.2	809656.2	98.364 %		17:06:18
2	Ag 328.068†	291.2	-12.2	-0.0431 ug/L	-0.0431 ppb	17:06:18
2	As 188.979†	-21.7	9.1	3.7078 ug/L	3.7078 ppb	17:06:38
2	B 249.677†	-236.3	10.2	0.2215 ug/L	0.2215 ppb	17:06:38
2	Ba 233.527†	-0.6	2.5	0.0216 ug/L	0.0216 ppb	17:06:38
2	Be 313.107†	-5015.9	212.1	0.0750 ug/L	0.0750 ppb	17:06:18
2	Cd 226.502†	-199.4	11.8	0.1309 ug/L	0.1309 ppb	17:06:38
2	Co 228.616†	-65.3	6.3	0.1372 ug/L	0.1372 ppb	17:06:38
2	Cr 267.716†	91.4	-4.8	-0.0495 ug/L	-0.0495 ppb	17:06:38
2	Cu 324.752†	9048.2	-310.1	-0.8671 ug/L	-0.8671 ppb	17:06:18
2	Mn 257.610†	517.6	14.6	0.0174 ug/L	0.0174 ppb	17:06:38
2	Mo 202.031†	18.6	-5.5	-0.3757 ug/L	-0.3757 ppb	17:06:38
2	Ni 231.604†	103.6	7.3	0.1831 ug/L	0.1831 ppb	17:06:38

2	P 214.914†	240.8	-4.1	-2.1204 ug/L	-2.1204 ppb	17:06:38
2	Pb 220.353†	-62.1	-0.1	-0.0146 ug/L	-0.0146 ppb	17:06:38
2	S 181.975 Axial†	45.0	-33.1	-45.630 ug/L	-45.630 ppb	17:06:38
2	Sb 206.836†	38.0	6.8	2.2872 ug/L	2.2872 ppb	17:06:38
2	Se 196.026†	-24.1	-5.6	-3.1979 ug/L	-3.1979 ppb	17:06:38
2	Si 251.611†	529.2	19.8	0.5906 ug/L	0.5906 ppb	17:06:38
2	Sn 189.927†	4.2	4.4	0.8191 ug/L	0.8191 ppb	17:06:38
2	Ti 334.940†	-882.6	46.4	0.0746 ug/L	0.0746 ppb	17:06:18
2	Tl 190.801†	-37.8	0.1	0.0208 ug/L	0.0208 ppb	17:06:38
2	U 409.014†	-1272.6	-177.3	-4.4350 ug/L	-4.4350 ppb	17:06:18
2	V 292.402†	-1324.4	102.9	0.6249 ug/L	0.6249 ppb	17:06:18
2	Zn 213.857†	723.6	-28.2	-0.2634 ug/L	-0.2634 ppb	17:06:38
2	SiO2†	549.0	21.6	1.3762 ug/L	1.3762 ppb	17:07:44
3	Sc Radial	5411.0	5411.0	101 %		17:05:26
3	Y RADIAL	5850.4	5850.4	101.6 %		17:05:26
3	Al 396.153Radial†	15.2	5.9	4.4738 ug/L	4.4738 ppb	17:05:46
3	Ca 317.933Radial†	20.3	-0.2	-0.2757 ug/L	-0.2757 ppb	17:05:46
3	Fe 238.204 Radial†	7.3	0.1	0.4720 ug/L	0.4720 ppb	17:05:46
3	K 766.490 Radial†	2343.5	-190.7	-34.833 ug/L	-34.833 ppb	17:05:26
3	Mg 279.077 IEC†	1.3	0.3	10.439 ug/L	10.439 ppb	17:05:46
3	Na 589.592 Radial†	-667.7	-111.3	-33.083 ug/L	-33.083 ppb	17:05:26
3	Sr 421.552†	1.4	-5.7	-0.0365 ug/L	-0.0365 ppb	17:05:26
3	Sc 361.383	915253.9	915253.9	101.94 %		17:06:43
3	Y 371.029	804714.4	804714.4	97.764 %		17:06:43
3	Ag 328.068†	313.2	11.3	0.0479 ug/L	0.0479 ppb	17:06:43
3	As 188.979†	-24.4	6.2	2.5504 ug/L	2.5504 ppb	17:07:03
3	B 249.677†	-265.6	-20.2	-0.4425 ug/L	-0.4425 ppb	17:07:03
3	Ba 233.527†	-16.0	-12.6	-0.0990 ug/L	-0.0990 ppb	17:07:03
3	Be 313.107†	-5010.8	184.8	0.0652 ug/L	0.0652 ppb	17:06:43
3	Cd 226.502†	-208.5	1.7	0.0186 ug/L	0.0186 ppb	17:07:03
3	Co 228.616†	-70.0	1.3	0.0287 ug/L	0.0287 ppb	17:07:03
3	Cr 267.716†	85.6	-9.9	-0.1075 ug/L	-0.1075 ppb	17:07:03
3	Cu 324.752†	8977.2	-321.3	-0.9012 ug/L	-0.9012 ppb	17:06:43
3	Mn 257.610†	513.8	14.1	0.0155 ug/L	0.0155 ppb	17:07:03
3	Mo 202.031†	22.7	-1.3	-0.0882 ug/L	-0.0882 ppb	17:07:03
3	Ni 231.604†	96.2	0.7	0.0179 ug/L	0.0179 ppb	17:07:03
3	P 214.914†	240.0	-3.3	-1.6913 ug/L	-1.6913 ppb	17:07:03
3	Pb 220.353†	-45.4	15.8	1.9863 ug/L	1.9863 ppb	17:07:03
3	S 181.975 Axial†	45.3	-32.5	-44.797 ug/L	-44.797 ppb	17:07:03
3	Sb 206.836†	42.2	11.1	3.7340 ug/L	3.7340 ppb	17:07:03
3	Se 196.026†	-24.5	-6.1	-3.5188 ug/L	-3.5188 ppb	17:07:03
3	Si 251.611†	518.0	12.2	0.3629 ug/L	0.3629 ppb	17:07:03
3	Sn 189.927†	7.1	7.3	1.3401 ug/L	1.3401 ppb	17:07:03
3	Ti 334.940†	-910.1	13.7	0.0201 ug/L	0.0201 ppb	17:06:43
3	Tl 190.801†	-43.6	-5.9	-1.8844 ug/L	-1.8844 ppb	17:07:03
3	U 409.014†	-1090.9	-7.4	-0.1841 ug/L	-0.1841 ppb	17:06:43
3	V 292.402†	-1395.0	25.0	0.1542 ug/L	0.1542 ppb	17:06:43
3	Zn 213.857†	725.8	-21.4	-0.1980 ug/L	-0.1980 ppb	17:07:03
3	SiO2†	552.2	28.3	1.7920 ug/L	1.7920 ppb	17:08:04

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	913482.5	101.74 %		0.986			0.97%
Sc Radial	5373.9	101 %		1.3			1.26%
Y 371.029	803235.8	97.584 %		0.8836			0.91%
Y RADIAL	5812.1	101.0 %		1.66			1.64%
Ag 328.068†	14.3	0.0649 ug/L		0.11742	0.0649 ppb	0.11742	180.97%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	0.2	0.1622 ug/L		4.09327	0.1622 ppb	4.09327	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	6.5	2.6782 ug/L		0.97210	2.6782 ppb	0.97210	36.30%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-10.4	-0.2283 ug/L		0.38965	-0.2283 ppb	0.38965	170.70%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-4.8	-0.0367 ug/L		0.06043	-0.0367 ppb	0.06043	164.85%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	174.6	0.0617 ug/L		0.01538	0.0617 ppb	0.01538	24.92%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	3.4	5.4514 ug/L		5.16727	5.4514 ppb	5.16727	94.79%

QC value within limits for Ca 317.933 Radial	Recovery = Not calculated		
Cd 226.502†	5.2 0.0576 ug/L	0.06354 0.0576 ppb	0.06354 110.35%
QC value within limits for Cd 226.502	Recovery = Not calculated		
Co 228.616†	3.4 0.0740 ug/L	0.05642 0.0740 ppb	0.05642 76.22%
QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	-4.2 -0.0442 ug/L	0.06599 -0.0442 ppb	0.06599 149.20%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-313.6 -0.8781 ug/L	0.02000 -0.8781 ppb	0.02000 2.28%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	0.5 4.9581 ug/L	4.26317 4.9581 ppb	4.26317 85.98%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	-243.6 -44.492 ug/L	13.1117 -44.492 ppb	13.1117 29.47%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	0.3 10.825 ug/L	23.2784 10.825 ppb	23.2784 215.05%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	17.3 0.0194 ug/L	0.00525 0.0194 ppb	0.00525 27.06%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	-2.0 -0.1354 ug/L	0.22054 -0.1354 ppb	0.22054 162.86%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	-160.3 -47.664 ug/L	13.8633 -47.664 ppb	13.8633 29.09%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	4.0 0.1011 ug/L	0.08260 0.1011 ppb	0.08260 81.71%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-0.0 0.1689 ug/L	3.59995 0.1689 ppb	3.59995 >999.9%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	6.8 0.8529 ug/L	1.02660 0.8529 ppb	1.02660 120.37%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-31.3 -43.141 ug/L	3.6142 -43.141 ppb	3.6142 8.38%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	13.4 4.5142 ug/L	2.70297 4.5142 ppb	2.70297 59.88%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-5.1 -2.9064 ug/L	0.79897 -2.9064 ppb	0.79897 27.49%
QC value within limits for Se 196.026	Recovery = Not calculated		
Si 251.611†	20.1 0.5966 ug/L	0.23684 0.5966 ppb	0.23684 39.70%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	6.1 1.1219 ug/L	0.27063 1.1219 ppb	0.27063 24.12%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	8.7 0.0560 ug/L	0.11601 0.0560 ppb	0.11601 207.25%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	26.9 0.0421 ug/L	0.02876 0.0421 ppb	0.02876 68.38%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-4.3 -1.3695 ug/L	1.21751 -1.3695 ppb	1.21751 88.90%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	-105.0 -2.6266 ug/L	2.19531 -2.6266 ppb	2.19531 83.58%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	69.1 0.4222 ug/L	0.24203 0.4222 ppb	0.24203 57.33%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	-20.0 -0.1860 ug/L	0.08405 -0.1860 ppb	0.08405 45.19%
QC value within limits for Zn 213.857	Recovery = Not calculated		
SiO2†	24.6 1.5625 ug/L	0.21124 1.5625 ppb	0.21124 13.52%
QC value within limits for SiO2	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 23
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 1/26/2010 18:12:35
 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	5569.9	5569.9	104 %		18:14:27
1	Y RADIAL	5977.3	5977.3	103.8 %		18:14:27
1	Al 396.153Radial†	6615.6	6333.5	4774.3 ug/L	4774.3 ppb	18:14:27
1	Ca 317.933Radial†	3229.3	3075.8	4943.7 ug/L	4943.7 ppb	18:14:47
1	Fe 238.204 Radial†	581.1	549.9	5154.2 ug/L	5154.2 ppb	18:14:47
1	K 766.490 Radial†	30244.3	26492.8	4833.4 ug/L	4833.4 ppb	18:14:27
1	Mg 279.077 IEC†	153.1	145.8	5201.0 ug/L	5201.0 ppb	18:14:47
1	Na 589.592 Radial†	34927.7	34034.1	10117 ug/L	10117 ppb	18:14:27
1	Sr 421.552†	81821.1	78437.9	503.35 ug/L	503.35 ppb	18:14:27
1	Sc 361.383	936626.4	936626.4	104.32 %		18:15:44
1	Y 371.029	818866.9	818866.9	99.483 %		18:15:44
1	Ag 328.068†	120728.0	115436.8	484.87 ug/L	484.87 ppb	18:15:50
1	As 188.979†	1205.1	1185.4	489.17 ug/L	489.17 ppb	18:16:10
1	B 249.677†	22866.7	22161.0	483.76 ug/L	483.76 ppb	18:15:50
1	Ba 233.527†	63707.9	61075.1	482.62 ug/L	482.62 ppb	18:15:50
1	Be 313.107†	1419153.9	1365536.1	482.80 ug/L	482.80 ppb	18:15:44
1	Cd 226.502†	44928.9	43276.1	483.28 ug/L	483.28 ppb	18:15:50
1	Co 228.616†	23402.0	22503.6	493.40 ug/L	493.40 ppb	18:15:50
1	Cr 267.716†	46426.3	44411.4	482.04 ug/L	482.04 ppb	18:15:50
1	Cu 324.752†	188180.1	171266.1	480.45 ug/L	480.45 ppb	18:15:50
1	Mn 257.610†	449551.0	430460.8	482.92 ug/L	482.92 ppb	18:15:44
1	Mo 202.031†	7422.6	7091.9	484.47 ug/L	484.47 ppb	18:16:10
1	Ni 231.604†	20312.5	19378.4	486.71 ug/L	486.71 ppb	18:15:50
1	P 214.914†	4676.2	4244.0	2299.5 ug/L	2299.5 ppb	18:16:10
1	Pb 220.353†	3949.8	3846.8	484.40 ug/L	484.40 ppb	18:16:10
1	S 181.975 Axial†	798.4	688.4	946.84 ug/L	946.84 ppb	18:16:10
1	Sb 206.836†	1541.6	1447.6	502.14 ug/L	502.14 ppb	18:16:10
1	Se 196.026†	841.9	825.0	494.64 ug/L	494.64 ppb	18:16:10
1	Si 251.611†	85599.3	81561.7	2410.7 ug/L	2410.7 ppb	18:15:50
1	Sn 189.927†	2767.6	2653.4	488.76 ug/L	488.76 ppb	18:16:10
1	Ti 334.940†	327922.6	315261.2	480.53 ug/L	480.53 ppb	18:15:50
1	Tl 190.801†	1520.2	1494.2	481.16 ug/L	481.16 ppb	18:16:10
1	U 409.014†	19088.3	19361.4	482.47 ug/L	482.47 ppb	18:15:50
1	V 292.402†	79087.9	77209.2	486.58 ug/L	486.58 ppb	18:15:50
1	Zn 213.857†	54759.1	51760.1	477.87 ug/L	477.87 ppb	18:15:50
1	SiO2†	85110.1	81075.2	5114.4 ug/L	5114.4 ppb	18:17:17
2	Sc Radial	5552.4	5552.4	104 %		18:14:52
2	Y RADIAL	5966.5	5966.5	103.6 %		18:14:52
2	Al 396.153Radial†	6678.3	6413.7	4835.2 ug/L	4835.2 ppb	18:14:52
2	Ca 317.933Radial†	3214.5	3071.3	4936.5 ug/L	4936.5 ppb	18:15:12
2	Fe 238.204 Radial†	584.7	555.2	5203.2 ug/L	5203.2 ppb	18:15:12
2	K 766.490 Radial†	30676.1	26999.3	4926.0 ug/L	4926.0 ppb	18:14:52
2	Mg 279.077 IEC†	152.0	145.2	5179.3 ug/L	5179.3 ppb	18:15:12
2	Na 589.592 Radial†	35017.5	34225.8	10174 ug/L	10174 ppb	18:14:52
2	Sr 421.552†	82187.9	79037.4	507.20 ug/L	507.20 ppb	18:14:52
2	Sc 361.383	940530.3	940530.3	104.75 %		18:16:15
2	Y 371.029	824263.5	824263.5	100.14 %		18:16:15
2	Ag 328.068†	121450.6	115646.3	485.77 ug/L	485.77 ppb	18:16:21
2	As 188.979†	1192.7	1168.8	482.38 ug/L	482.38 ppb	18:16:41
2	B 249.677†	23132.6	22323.9	487.33 ug/L	487.33 ppb	18:16:21
2	Ba 233.527†	63953.3	61055.8	482.47 ug/L	482.47 ppb	18:16:21
2	Be 313.107†	1433413.1	1373501.9	485.61 ug/L	485.61 ppb	18:16:15
2	Cd 226.502†	45112.0	43272.1	483.23 ug/L	483.23 ppb	18:16:21
2	Co 228.616†	23504.1	22508.0	493.49 ug/L	493.49 ppb	18:16:21
2	Cr 267.716†	46703.3	44491.2	482.91 ug/L	482.91 ppb	18:16:21
2	Cu 324.752†	188868.6	171174.6	480.19 ug/L	480.19 ppb	18:16:21
2	Mn 257.610†	452511.0	431497.8	484.08 ug/L	484.08 ppb	18:16:15
2	Mo 202.031†	7411.1	7051.4	481.71 ug/L	481.71 ppb	18:16:41
2	Ni 231.604†	20348.8	19332.2	485.55 ug/L	485.55 ppb	18:16:21

2	P 214.914†	4681.7	4230.6	2291.9 ug/L	2291.9 ppb	18:16:41
2	Pb 220.353†	3958.2	3839.0	483.43 ug/L	483.43 ppb	18:16:41
2	S 181.975 Axial†	795.1	682.0	938.14 ug/L	938.14 ppb	18:16:41
2	Sb 206.836†	1531.7	1431.9	496.76 ug/L	496.76 ppb	18:16:41
2	Se 196.026†	838.5	818.4	491.01 ug/L	491.01 ppb	18:16:41
2	Si 251.611†	86009.9	81613.0	2412.3 ug/L	2412.3 ppb	18:16:21
2	Sn 189.927†	2744.2	2620.1	482.64 ug/L	482.64 ppb	18:16:41
2	Ti 334.940†	329683.4	315637.3	481.11 ug/L	481.11 ppb	18:16:21
2	Tl 190.801†	1532.9	1500.3	483.13 ug/L	483.13 ppb	18:16:41
2	U 409.014†	19217.0	19408.2	483.63 ug/L	483.63 ppb	18:16:21
2	V 292.402†	79766.1	77541.9	488.60 ug/L	488.60 ppb	18:16:21
2	Zn 213.857†	55055.7	51825.3	478.48 ug/L	478.48 ppb	18:16:21
2	SiO2†	86087.3	81669.4	5152.0 ug/L	5152.0 ppb	18:17:22
3	Sc Radial	5484.8	5484.8	103 %		18:15:17
3	Y RADIAL	5916.9	5916.9	102.8 %		18:15:17
3	Al 396.153Radial†	6642.3	6457.9	4868.5 ug/L	4868.5 ppb	18:15:17
3	Ca 317.933Radial†	3230.5	3125.1	5022.9 ug/L	5022.9 ppb	18:15:37
3	Fe 238.204 Radial†	587.6	565.0	5294.8 ug/L	5294.8 ppb	18:15:37
3	K 766.490 Radial†	30532.3	27223.3	4966.8 ug/L	4966.8 ppb	18:15:17
3	Mg 279.077 IEC†	152.7	147.7	5269.4 ug/L	5269.4 ppb	18:15:37
3	Na 589.592 Radial†	34866.3	34494.0	10254 ug/L	10254 ppb	18:15:17
3	Sr 421.552†	81761.9	79597.6	510.80 ug/L	510.80 ppb	18:15:17
3	Sc 361.383	930460.1	930460.1	103.63 %		18:16:46
3	Y 371.029	814593.4	814593.4	98.964 %		18:16:46
3	Ag 328.068†	120875.5	116346.1	488.73 ug/L	488.73 ppb	18:16:52
3	As 188.979†	1187.4	1176.0	485.36 ug/L	485.36 ppb	18:17:12
3	B 249.677†	23060.7	22493.4	491.02 ug/L	491.02 ppb	18:16:52
3	Ba 233.527†	63827.8	61595.5	486.74 ug/L	486.74 ppb	18:16:52
3	Be 313.107†	1417049.1	1372521.0	485.27 ug/L	485.27 ppb	18:16:46
3	Cd 226.502†	45037.3	43666.2	487.63 ug/L	487.63 ppb	18:16:52
3	Co 228.616†	23492.6	22739.8	498.57 ug/L	498.57 ppb	18:16:52
3	Cr 267.716†	46609.4	44883.0	487.16 ug/L	487.16 ppb	18:16:52
3	Cu 324.752†	187500.7	171805.9	481.97 ug/L	481.97 ppb	18:16:52
3	Mn 257.610†	447975.3	431796.3	484.42 ug/L	484.42 ppb	18:16:46
3	Mo 202.031†	7397.2	7114.6	486.02 ug/L	486.02 ppb	18:17:12
3	Ni 231.604†	20291.4	19487.1	489.44 ug/L	489.44 ppb	18:16:52
3	P 214.914†	4679.3	4276.7	2317.5 ug/L	2317.5 ppb	18:17:12
3	Pb 220.353†	3950.8	3872.9	487.68 ug/L	487.68 ppb	18:17:12
3	S 181.975 Axial†	790.6	685.9	943.46 ug/L	943.46 ppb	18:17:12
3	Sb 206.836†	1552.6	1468.0	509.03 ug/L	509.03 ppb	18:17:12
3	Se 196.026†	837.3	826.0	495.69 ug/L	495.69 ppb	18:17:12
3	Si 251.611†	85764.2	82264.6	2431.5 ug/L	2431.5 ppb	18:16:52
3	Sn 189.927†	2757.6	2661.4	490.25 ug/L	490.25 ppb	18:17:12
3	Ti 334.940†	328021.8	317440.2	483.86 ug/L	483.86 ppb	18:16:52
3	Tl 190.801†	1542.6	1525.4	491.17 ug/L	491.17 ppb	18:17:12
3	U 409.014†	19033.2	19429.5	484.15 ug/L	484.15 ppb	18:16:52
3	V 292.402†	79407.3	78019.8	491.62 ug/L	491.62 ppb	18:16:52
3	Zn 213.857†	54717.4	52067.7	480.70 ug/L	480.70 ppb	18:16:52
3	SiO2†	85324.6	81822.9	5161.6 ug/L	5161.6 ppb	18:17:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	935872.3	104.23 %	0.565			0.54%
Sc Radial	5535.7	104 %	0.8			0.81%
Y 371.029	819241.3	99.528 %	0.5887			0.59%
Y RADIAL	5953.6	103.4 %	0.56			0.54%
Ag 328.068†	115809.7	486.46 ug/L	2.019	486.46 ppb	2.019	0.42%
QC value within limits for Ag 328.068 Recovery = 97.29%						
Al 396.153Radial†	6401.7	4826.0 ug/L	47.75	4826.0 ppb	47.75	0.99%
QC value within limits for Al 396.153Radial Recovery = 96.52%						
As 188.979†	1176.7	485.64 ug/L	3.403	485.64 ppb	3.403	0.70%
QC value within limits for As 188.979 Recovery = 97.13%						
B 249.677†	22326.1	487.37 ug/L	3.627	487.37 ppb	3.627	0.74%
QC value within limits for B 249.677 Recovery = 97.47%						
Ba 233.527†	61242.1	483.94 ug/L	2.420	483.94 ppb	2.420	0.50%
QC value within limits for Ba 233.527 Recovery = 96.79%						
Be 313.107†	1370519.7	484.56 ug/L	1.534	484.56 ppb	1.534	0.32%
QC value within limits for Be 313.107 Recovery = 96.91%						
Ca 317.933Radial†	3090.7	4967.7 ug/L	47.95	4967.7 ppb	47.95	0.97%

QC value within limits for Ca 317.933Radial Recovery = 99.35%							
Cd 226.502†	43404.8	484.71 ug/L	2.523	484.71 ppb	2.523	0.52%	
QC value within limits for Cd 226.502 Recovery = 96.94%							
Co 228.616†	22583.8	495.16 ug/L	2.961	495.16 ppb	2.961	0.60%	
QC value within limits for Co 228.616 Recovery = 99.03%							
Cr 267.716†	44595.2	484.04 ug/L	2.741	484.04 ppb	2.741	0.57%	
QC value within limits for Cr 267.716 Recovery = 96.81%							
Cu 324.752†	171415.5	480.87 ug/L	0.960	480.87 ppb	0.960	0.20%	
QC value within limits for Cu 324.752 Recovery = 96.17%							
Fe 238.204 Radial†	556.7	5217.4 ug/L	71.38	5217.4 ppb	71.38	1.37%	
QC value within limits for Fe 238.204 Radial Recovery = 104.35%							
K 766.490 Radial†	26905.1	4908.7 ug/L	68.33	4908.7 ppb	68.33	1.39%	
QC value within limits for K 766.490 Radial Recovery = 98.17%							
Mg 279.077 IEC†	146.3	5216.6 ug/L	47.03	5216.6 ppb	47.03	0.90%	
QC value within limits for Mg 279.077 IEC Recovery = 104.33%							
Mn 257.610†	431251.6	483.81 ug/L	0.791	483.81 ppb	0.791	0.16%	
QC value within limits for Mn 257.610 Recovery = 96.76%							
Mo 202.031†	7086.0	484.07 ug/L	2.187	484.07 ppb	2.187	0.45%	
QC value within limits for Mo 202.031 Recovery = 96.81%							
Na 589.592 Radial†	34251.3	10182 ug/L	68.7	10182 ppb	68.7	0.67%	
QC value within limits for Na 589.592 Radial Recovery = 101.82%							
Ni 231.604†	19399.2	487.23 ug/L	1.997	487.23 ppb	1.997	0.41%	
QC value within limits for Ni 231.604 Recovery = 97.45%							
P 214.914†	4250.4	2303.0 ug/L	13.16	2303.0 ppb	13.16	0.57%	
QC value within limits for P 214.914 Recovery = 92.12%							
Pb 220.353†	3852.9	485.17 ug/L	2.230	485.17 ppb	2.230	0.46%	
QC value within limits for Pb 220.353 Recovery = 97.03%							
S 181.975 Axial†	685.4	942.81 ug/L	4.387	942.81 ppb	4.387	0.47%	
QC value within limits for S 181.975 Axial Recovery = 94.28%							
Sb 206.836†	1449.2	502.64 ug/L	6.154	502.64 ppb	6.154	1.22%	
QC value within limits for Sb 206.836 Recovery = 100.53%							
Se 196.026†	823.1	493.78 ug/L	2.457	493.78 ppb	2.457	0.50%	
QC value within limits for Se 196.026 Recovery = 98.76%							
Si 251.611†	81813.1	2418.2 ug/L	11.59	2418.2 ppb	11.59	0.48%	
QC value within limits for Si 251.611 Recovery = 96.73%							
Sn 189.927†	2645.0	487.22 ug/L	4.033	487.22 ppb	4.033	0.83%	
QC value within limits for Sn 189.927 Recovery = 97.44%							
Sr 421.552†	79024.3	507.12 ug/L	3.722	507.12 ppb	3.722	0.73%	
QC value within limits for Sr 421.552 Recovery = 101.42%							
Ti 334.940†	316112.9	481.83 ug/L	1.777	481.83 ppb	1.777	0.37%	
QC value within limits for Ti 334.940 Recovery = 96.37%							
Tl 190.801†	1506.6	485.16 ug/L	5.303	485.16 ppb	5.303	1.09%	
QC value within limits for Tl 190.801 Recovery = 97.03%							
U 409.014†	19399.7	483.42 ug/L	0.859	483.42 ppb	0.859	0.18%	
QC value within limits for U 409.014 Recovery = 96.68%							
V 292.402†	77590.3	488.94 ug/L	2.537	488.94 ppb	2.537	0.52%	
QC value within limits for V 292.402 Recovery = 97.79%							
Zn 213.857†	51884.3	479.02 ug/L	1.491	479.02 ppb	1.491	0.31%	
QC value within limits for Zn 213.857 Recovery = 95.80%							
SiO2†	81522.5	5142.7 ug/L	24.97	5142.7 ppb	24.97	0.49%	
QC value within limits for SiO2 Recovery = 96.17%							
All analyte(s) passed QC.							

Sequence No.: 24

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 1/26/2010 18:19:37

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5441.5	5441.5	102 %		18:21:29
1	Y RADIAL	5854.4	5854.4	101.7 %		18:21:29
1	Al 396.153Radial†	-2.8	-11.9	-8.9932 ug/L	-8.9932 ppb	18:21:49
1	Ca 317.933Radial†	19.1	-1.5	-2.4436 ug/L	-2.4436 ppb	18:21:49
1	Fe 238.204 Radial†	5.6	-1.7	-15.847 ug/L	-15.847 ppb	18:21:49
1	K 766.490 Radial†	2272.4	-273.4	-49.926 ug/L	-49.926 ppb	18:21:29
1	Mg 279.077 IEC†	3.2	2.2	77.442 ug/L	77.442 ppb	18:21:49
1	Na 589.592 Radial†	-747.7	-186.1	-55.317 ug/L	-55.317 ppb	18:21:29
1	Sr 421.552†	22.7	15.2	0.0973 ug/L	0.0973 ppb	18:21:29
1	Sc 361.383	951804.2	951804.2	106.01 %		18:22:46
1	Y 371.029	841748.5	841748.5	102.26 %		18:22:46
1	Ag 328.068†	230.7	-78.4	-0.3222 ug/L	-0.3222 ppb	18:22:51
1	As 188.979†	-27.7	4.1	1.6523 ug/L	1.6523 ppb	18:23:11
1	B 249.677†	346.0	566.8	12.434 ug/L	12.434 ppb	18:23:11
1	Ba 233.527†	-4.0	-0.6	-0.0045 ug/L	-0.0045 ppb	18:23:11
1	Be 313.107†	-4974.6	407.7	0.1437 ug/L	0.1437 ppb	18:22:51
1	Cd 226.502†	-199.0	18.5	0.2063 ug/L	0.2063 ppb	18:23:11
1	Co 228.616†	-70.4	3.5	0.0779 ug/L	0.0779 ppb	18:23:11
1	Cr 267.716†	64.2	-33.4	-0.3578 ug/L	-0.3578 ppb	18:23:11
1	Cu 324.752†	8814.5	-813.0	-2.2759 ug/L	-2.2759 ppb	18:22:51
1	Mn 257.610†	497.5	-20.5	-0.0277 ug/L	-0.0277 ppb	18:23:11
1	Mo 202.031†	28.6	3.4	0.2303 ug/L	0.2303 ppb	18:23:11
1	Ni 231.604†	105.0	5.4	0.1347 ug/L	0.1347 ppb	18:23:11
1	P 214.914†	227.2	-24.4	-13.285 ug/L	-13.285 ppb	18:23:11
1	Pb 220.353†	-45.8	17.2	2.1599 ug/L	2.1599 ppb	18:23:11
1	S 181.975 Axial†	38.1	-41.1	-56.541 ug/L	-56.541 ppb	18:23:11
1	Sb 206.836†	39.2	6.8	2.2867 ug/L	2.2867 ppb	18:23:11
1	Se 196.026†	-16.1	2.7	1.5329 ug/L	1.5329 ppb	18:23:11
1	Si 251.611†	473.1	-49.7	-1.4750 ug/L	-1.4750 ppb	18:23:11
1	Sn 189.927†	6.3	6.2	1.1486 ug/L	1.1486 ppb	18:23:11
1	Ti 334.940†	-1010.6	-46.8	-0.0735 ug/L	-0.0735 ppb	18:22:51
1	Tl 190.801†	-39.3	-0.2	-0.0557 ug/L	-0.0557 ppb	18:23:11
1	U 409.014†	-1552.6	-401.8	-10.043 ug/L	-10.043 ppb	18:22:51
1	V 292.402†	-1398.8	74.0	0.4485 ug/L	0.4485 ppb	18:22:51
1	Zn 213.857†	678.3	-93.5	-0.8675 ug/L	-0.8675 ppb	18:23:11
1	SiO2†	481.0	-59.6	-3.7784 ug/L	-3.7784 ppb	18:24:32
2	Sc Radial	5535.8	5535.8	104 %		18:21:54
2	Y RADIAL	5952.0	5952.0	103.4 %		18:21:54
2	Al 396.153Radial†	5.0	-4.3	-3.2815 ug/L	-3.2815 ppb	18:22:14
2	Ca 317.933Radial†	21.2	0.2	0.3784 ug/L	0.3784 ppb	18:22:14
2	Fe 238.204 Radial†	6.4	-1.0	-9.1324 ug/L	-9.1324 ppb	18:22:14
2	K 766.490 Radial†	2249.9	-333.2	-60.846 ug/L	-60.846 ppb	18:21:54
2	Mg 279.077 IEC†	1.9	0.9	31.198 ug/L	31.198 ppb	18:22:14
2	Na 589.592 Radial†	-800.8	-224.8	-66.840 ug/L	-66.840 ppb	18:21:54
2	Sr 421.552†	36.3	27.9	0.1790 ug/L	0.1790 ppb	18:21:54
2	Sc 361.383	943560.9	943560.9	105.09 %		18:23:16
2	Y 371.029	834278.1	834278.1	101.36 %		18:23:16
2	Ag 328.068†	265.6	-43.3	-0.1742 ug/L	-0.1742 ppb	18:23:21
2	As 188.979†	-24.7	6.7	2.7286 ug/L	2.7286 ppb	18:23:41
2	B 249.677†	359.1	582.1	12.768 ug/L	12.768 ppb	18:23:41
2	Ba 233.527†	-10.0	-6.4	-0.0499 ug/L	-0.0499 ppb	18:23:41
2	Be 313.107†	-5059.7	285.7	0.1011 ug/L	0.1011 ppb	18:23:21
2	Cd 226.502†	-178.3	36.5	0.4066 ug/L	0.4066 ppb	18:23:41
2	Co 228.616†	-70.4	3.0	0.0662 ug/L	0.0662 ppb	18:23:41
2	Cr 267.716†	81.4	-16.5	-0.1745 ug/L	-0.1745 ppb	18:23:41
2	Cu 324.752†	8860.9	-696.2	-1.9486 ug/L	-1.9486 ppb	18:23:21
2	Mn 257.610†	493.4	-20.4	-0.0250 ug/L	-0.0250 ppb	18:23:41
2	Mo 202.031†	29.6	4.6	0.3101 ug/L	0.3101 ppb	18:23:41
2	Ni 231.604†	99.5	1.0	0.0261 ug/L	0.0261 ppb	18:23:41

2	P 214.914†	226.3	-23.4	-12.814 ug/L	-12.814 ppb	18:23:41
2	Pb 220.353†	-53.2	9.7	1.2229 ug/L	1.2229 ppb	18:23:41
2	S 181.975 Axial†	47.8	-31.5	-43.424 ug/L	-43.424 ppb	18:23:41
2	Sb 206.836†	36.6	4.6	1.5412 ug/L	1.5412 ppb	18:23:41
2	Se 196.026†	-20.9	-1.9	-1.1471 ug/L	-1.1471 ppb	18:23:41
2	Si 251.611†	491.7	-28.1	-0.8359 ug/L	-0.8359 ppb	18:23:41
2	Sn 189.927†	1.8	2.0	0.3698 ug/L	0.3698 ppb	18:23:41
2	Ti 334.940†	-846.7	100.8	0.1552 ug/L	0.1552 ppb	18:23:21
2	Tl 190.801†	-34.8	3.7	1.1972 ug/L	1.1972 ppb	18:23:41
2	U 409.014†	-1491.2	-356.1	-8.9034 ug/L	-8.9034 ppb	18:23:21
2	V 292.402†	-1372.0	88.0	0.5364 ug/L	0.5364 ppb	18:23:21
2	Zn 213.857†	678.3	-87.9	-0.8158 ug/L	-0.8158 ppb	18:23:41
2	SiO2†	460.8	-74.9	-4.7464 ug/L	-4.7464 ppb	18:24:52
3	Sc Radial	5334.3	5334.3	99.9 %		18:22:19
3	Y RADIAL	5763.8	5763.8	100.1 %		18:22:19
3	Al 396.153Radial†	11.8	2.7	1.9930 ug/L	1.9930 ppb	18:22:39
3	Ca 317.933Radial†	19.7	-0.6	-0.9033 ug/L	-0.9033 ppb	18:22:39
3	Fe 238.204 Radial†	5.2	-2.0	-18.237 ug/L	-18.237 ppb	18:22:39
3	K 766.490 Radial†	2341.9	-159.1	-29.029 ug/L	-29.029 ppb	18:22:19
3	Mg 279.077 IEC†	1.9	0.9	32.584 ug/L	32.584 ppb	18:22:39
3	Na 589.592 Radial†	-798.5	-251.7	-74.826 ug/L	-74.826 ppb	18:22:19
3	Sr 421.552†	17.3	10.3	0.0658 ug/L	0.0658 ppb	18:22:19
3	Sc 361.383	942574.3	942574.3	104.98 %		18:23:46
3	Y 371.029	833350.1	833350.1	101.24 %		18:23:46
3	Ag 328.068†	320.1	8.9	0.0424 ug/L	0.0424 ppb	18:23:51
3	As 188.979†	-35.7	-3.8	-1.5690 ug/L	-1.5690 ppb	18:24:11
3	B 249.677†	300.2	526.4	11.547 ug/L	11.547 ppb	18:24:11
3	Ba 233.527†	4.9	7.8	0.0628 ug/L	0.0628 ppb	18:24:11
3	Be 313.107†	-4884.3	447.8	0.1581 ug/L	0.1581 ppb	18:23:51
3	Cd 226.502†	-193.5	21.9	0.2441 ug/L	0.2441 ppb	18:24:11
3	Co 228.616†	-69.8	3.4	0.0759 ug/L	0.0759 ppb	18:24:11
3	Cr 267.716†	72.8	-24.6	-0.2622 ug/L	-0.2622 ppb	18:24:11
3	Cu 324.752†	8813.0	-732.9	-2.0521 ug/L	-2.0521 ppb	18:23:51
3	Mn 257.610†	490.7	-22.4	-0.0283 ug/L	-0.0283 ppb	18:24:11
3	Mo 202.031†	29.8	4.7	0.3217 ug/L	0.3217 ppb	18:24:11
3	Ni 231.604†	85.3	-12.4	-0.3118 ug/L	-0.3118 ppb	18:24:11
3	P 214.914†	242.8	-7.4	-3.7755 ug/L	-3.7755 ppb	18:24:11
3	Pb 220.353†	-57.3	5.8	0.7364 ug/L	0.7364 ppb	18:24:11
3	S 181.975 Axial†	45.7	-33.4	-46.022 ug/L	-46.022 ppb	18:24:11
3	Sb 206.836†	36.6	4.6	1.5476 ug/L	1.5476 ppb	18:24:11
3	Se 196.026†	-8.7	9.7	5.5321 ug/L	5.5321 ppb	18:24:11
3	Si 251.611†	493.8	-25.6	-0.7613 ug/L	-0.7613 ppb	18:24:11
3	Sn 189.927†	-3.1	-2.6	-0.4821 ug/L	-0.4821 ppb	18:24:11
3	Ti 334.940†	-901.3	48.0	0.0744 ug/L	0.0744 ppb	18:23:51
3	Tl 190.801†	-38.8	-0.0	-0.0146 ug/L	-0.0146 ppb	18:24:11
3	U 409.014†	-1483.6	-350.4	-8.7596 ug/L	-8.7596 ppb	18:23:51
3	V 292.402†	-1288.7	166.0	1.0234 ug/L	1.0234 ppb	18:23:51
3	Zn 213.857†	676.5	-89.0	-0.8223 ug/L	-0.8223 ppb	18:24:11
3	SiO2†	491.0	-45.7	-2.8960 ug/L	-2.8960 ppb	18:25:12

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	945979.8	105.36 %		0.564			0.54%
Sc Radial	5437.2	102 %		1.9			1.85%
Y 371.029	836458.9	101.62 %		0.559			0.55%
Y RADIAL	5856.8	101.7 %		1.64			1.61%
Ag 328.068†	-37.6	-0.1513 ug/L		0.18335	-0.1513 ppb	0.18335	121.18%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-4.5	-3.4273 ug/L		5.49454	-3.4273 ppb	5.49454	160.32%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	2.3	0.9373 ug/L		2.23623	0.9373 ppb	2.23623	238.58%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	558.5	12.250 ug/L		0.6306	12.250 ppb	0.6306	5.15%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	0.2	0.0028 ug/L		0.05670	0.0028 ppb	0.05670	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	380.4	0.1343 ug/L		0.02963	0.1343 ppb	0.02963	22.06%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-0.6	-0.9895 ug/L		1.41301	-0.9895 ppb	1.41301	142.80%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	25.6	0.2857 ug/L	0.10642	0.2857 ppb	0.10642	37.26%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	3.3	0.0733 ug/L	0.00625	0.0733 ppb	0.00625	8.52%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	-24.8	-0.2649 ug/L	0.09165	-0.2649 ppb	0.09165	34.60%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-747.4	-2.0922 ug/L	0.16728	-2.0922 ppb	0.16728	8.00%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	-1.5	-14.406 ug/L	4.7204	-14.406 ppb	4.7204	32.77%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	-255.2	-46.600 ug/L	16.1672	-46.600 ppb	16.1672	34.69%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	1.3	47.075 ug/L	26.3079	47.075 ppb	26.3079	55.89%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	-21.1	-0.0270 ug/L	0.00173	-0.0270 ppb	0.00173	6.41%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	4.2	0.2874 ug/L	0.04977	0.2874 ppb	0.04977	17.32%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	-220.9	-65.661 ug/L	9.8077	-65.661 ppb	9.8077	14.94%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-2.0	-0.0503 ug/L	0.23286	-0.0503 ppb	0.23286	462.57%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-18.4	-9.9581 ug/L	5.35947	-9.9581 ppb	5.35947	53.82%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	10.9	1.3731 ug/L	0.72353	1.3731 ppb	0.72353	52.69%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-35.3	-48.662 ug/L	6.9456	-48.662 ppb	6.9456	14.27%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	5.3	1.7918 ug/L	0.42857	1.7918 ppb	0.42857	23.92%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	3.5	1.9726 ug/L	3.36125	1.9726 ppb	3.36125	170.39%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	-34.4	-1.0241 ug/L	0.39226	-1.0241 ppb	0.39226	38.30%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	1.9	0.3455 ug/L	0.81560	0.3455 ppb	0.81560	236.10%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	17.8	0.1140 ug/L	0.05843	0.1140 ppb	0.05843	51.24%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	34.0	0.0520 ug/L	0.11596	0.0520 ppb	0.11596	222.80%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	1.2	0.3756 ug/L	0.71179	0.3756 ppb	0.71179	189.50%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	-369.4	-9.2355 ug/L	0.70333	-9.2355 ppb	0.70333	7.62%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	109.3	0.6694 ug/L	0.30967	0.6694 ppb	0.30967	46.26%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-90.2	-0.8352 ug/L	0.02814	-0.8352 ppb	0.02814	3.37%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-60.1	-3.8070 ug/L	0.92554	-3.8070 ppb	0.92554	24.31%	
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: 1/26/2010 19:22:53

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5428.8	5428.8	102 %		19:24:45
1	Y RADIAL	5838.3	5838.3	101.4 %		19:24:45
1	Al 396.153Radial†	6771.3	6651.5	5015.1 ug/L	5015.1 ppb	19:24:45
1	Ca 317.933Radial†	3213.1	3140.3	5047.5 ug/L	5047.5 ppb	19:25:05
1	Fe 238.204 Radial†	571.2	554.7	5198.8 ug/L	5198.8 ppb	19:25:05
1	K 766.490 Radial†	30694.7	27689.5	5052.2 ug/L	5052.2 ppb	19:24:45
1	Mg 279.077 IEC†	151.0	147.6	5263.8 ug/L	5263.8 ppb	19:25:05
1	Na 589.592 Radial†	32853.5	32864.2	9769.6 ug/L	9769.6 ppb	19:24:45
1	Sr 421.552†	80682.6	79356.8	509.25 ug/L	509.25 ppb	19:24:45
1	Sc 361.383	932362.2	932362.2	103.84 %		19:26:02
1	Y 371.029	817818.1	817818.1	99.356 %		19:26:02
1	Ag 328.068†	122271.0	117452.0	493.33 ug/L	493.33 ppb	19:26:08
1	As 188.979†	1200.0	1185.8	489.42 ug/L	489.42 ppb	19:26:28
1	B 249.677†	22865.8	22260.4	485.91 ug/L	485.91 ppb	19:26:08
1	Ba 233.527†	64346.9	61969.8	489.70 ug/L	489.70 ppb	19:26:08
1	Be 313.107†	1423895.6	1376324.5	486.62 ug/L	486.62 ppb	19:26:02
1	Cd 226.502†	45499.2	44022.3	491.62 ug/L	491.62 ppb	19:26:08
1	Co 228.616†	23628.7	22824.6	500.43 ug/L	500.43 ppb	19:26:08
1	Cr 267.716†	47235.9	45394.6	492.71 ug/L	492.71 ppb	19:26:08
1	Cu 324.752†	189180.4	173054.4	485.46 ug/L	485.46 ppb	19:26:08
1	Mn 257.610†	448525.6	431444.3	484.02 ug/L	484.02 ppb	19:26:02
1	Mo 202.031†	7418.6	7120.6	486.43 ug/L	486.43 ppb	19:26:28
1	Ni 231.604†	20425.0	19575.8	491.67 ug/L	491.67 ppb	19:26:08
1	P 214.914†	4651.8	4241.0	2296.9 ug/L	2296.9 ppb	19:26:28
1	Pb 220.353†	3966.2	3879.9	488.60 ug/L	488.60 ppb	19:26:28
1	S 181.975 Axial†	792.1	685.8	943.27 ug/L	943.27 ppb	19:26:28
1	Sb 206.836†	1545.0	1457.6	505.55 ug/L	505.55 ppb	19:26:28
1	Se 196.026†	845.3	832.0	498.83 ug/L	498.83 ppb	19:26:28
1	Si 251.611†	86832.3	83124.3	2457.0 ug/L	2457.0 ppb	19:26:08
1	Sn 189.927†	2762.5	2660.7	490.11 ug/L	490.11 ppb	19:26:28
1	Ti 334.940†	331572.5	320213.8	488.09 ug/L	488.09 ppb	19:26:08
1	Tl 190.801†	1498.2	1479.7	476.56 ug/L	476.56 ppb	19:26:28
1	U 409.014†	19186.9	19540.0	486.91 ug/L	486.91 ppb	19:26:08
1	V 292.402†	80369.2	78789.8	496.43 ug/L	496.43 ppb	19:26:08
1	Zn 213.857†	55370.8	52589.1	485.55 ug/L	485.55 ppb	19:26:08
1	SiO2†	86637.3	82919.1	5230.9 ug/L	5230.9 ppb	19:27:35
2	Sc Radial	5266.7	5266.7	98.6 %		19:25:10
2	Y RADIAL	5668.8	5668.8	98.46 %		19:25:10
2	Al 396.153Radial†	6543.0	6625.0	4995.0 ug/L	4995.0 ppb	19:25:10
2	Ca 317.933Radial†	3193.2	3217.4	5171.3 ug/L	5171.3 ppb	19:25:30
2	Fe 238.204 Radial†	565.6	566.3	5307.8 ug/L	5307.8 ppb	19:25:30
2	K 766.490 Radial†	29779.6	27691.0	5052.4 ug/L	5052.4 ppb	19:25:10
2	Mg 279.077 IEC†	148.8	149.9	5346.5 ug/L	5346.5 ppb	19:25:30
2	Na 589.592 Radial†	31534.9	32521.8	9667.8 ug/L	9667.8 ppb	19:25:10
2	Sr 421.552†	77425.8	78497.3	503.73 ug/L	503.73 ppb	19:25:10
2	Sc 361.383	930628.1	930628.1	103.65 %		19:26:33
2	Y 371.029	815853.6	815853.6	99.117 %		19:26:33
2	Ag 328.068†	122700.9	118086.3	496.02 ug/L	496.02 ppb	19:26:39
2	As 188.979†	1187.5	1175.9	485.41 ug/L	485.41 ppb	19:26:59
2	B 249.677†	22981.9	22413.5	489.24 ug/L	489.24 ppb	19:26:39
2	Ba 233.527†	64753.6	62477.5	493.71 ug/L	493.71 ppb	19:26:39
2	Be 313.107†	1423009.1	1378024.4	487.23 ug/L	487.23 ppb	19:26:33
2	Cd 226.502†	45720.0	44317.0	494.90 ug/L	494.90 ppb	19:26:39
2	Co 228.616†	23730.3	22965.0	503.50 ug/L	503.50 ppb	19:26:39
2	Cr 267.716†	47294.6	45536.1	494.25 ug/L	494.25 ppb	19:26:39
2	Cu 324.752†	190054.8	174237.5	488.78 ug/L	488.78 ppb	19:26:39
2	Mn 257.610†	448212.9	431947.4	484.59 ug/L	484.59 ppb	19:26:33
2	Mo 202.031†	7426.9	7141.9	487.89 ug/L	487.89 ppb	19:26:59
2	Ni 231.604†	20560.4	19743.1	495.87 ug/L	495.87 ppb	19:26:39

2	P 214.914†	4686.1	4282.5	2319.5 ug/L	2319.5 ppb	19:26:59
2	Pb 220.353†	3968.9	3889.6	489.81 ug/L	489.81 ppb	19:26:59
2	S 181.975 Axial†	790.7	685.9	943.39 ug/L	943.39 ppb	19:26:59
2	Sb 206.836†	1563.3	1478.0	512.44 ug/L	512.44 ppb	19:26:59
2	Se 196.026†	833.3	821.9	493.39 ug/L	493.39 ppb	19:26:59
2	Si 251.611†	87174.0	83609.8	2471.3 ug/L	2471.3 ppb	19:26:39
2	Sn 189.927†	2768.2	2671.1	492.06 ug/L	492.06 ppb	19:26:59
2	Ti 334.940†	333473.9	322643.2	491.80 ug/L	491.80 ppb	19:26:39
2	Tl 190.801†	1512.2	1495.9	481.76 ug/L	481.76 ppb	19:26:59
2	U 409.014†	19443.9	19822.4	493.95 ug/L	493.95 ppb	19:26:39
2	V 292.402†	80616.6	79172.8	498.83 ug/L	498.83 ppb	19:26:39
2	Zn 213.857†	55655.0	52962.7	488.99 ug/L	488.99 ppb	19:26:39
2	SiO2†	85843.9	82309.0	5192.3 ug/L	5192.3 ppb	19:27:40
3	Sc Radial	6022.1	6022.1	113 %		19:25:35
3	Y RADIAL	6490.1	6490.1	112.7 %		19:25:35
3	Al 396.153Radial†	6495.3	5750.5	4332.6 ug/L	4332.6 ppb	19:25:35
3	Ca 317.933Radial†	3160.4	2782.3	4471.9 ug/L	4471.9 ppb	19:25:55
3	Fe 238.204 Radial†	561.7	491.0	4603.2 ug/L	4603.2 ppb	19:25:55
3	K 766.490 Radial†	29809.0	23929.5	4366.0 ug/L	4366.0 ppb	19:25:35
3	Mg 279.077 IEC†	149.2	131.3	4683.9 ug/L	4683.9 ppb	19:25:55
3	Na 589.592 Radial†	31334.7	28333.6	8422.8 ug/L	8422.8 ppb	19:25:35
3	Sr 421.552†	76882.8	68168.5	437.45 ug/L	437.45 ppb	19:25:35
3	Sc 361.383	931108.5	931108.5	103.70 %		19:27:04
3	Y 371.029	815501.5	815501.5	99.074 %		19:27:04
3	Ag 328.068†	122018.0	117366.6	492.78 ug/L	492.78 ppb	19:27:10
3	As 188.979†	1212.5	1199.4	494.82 ug/L	494.82 ppb	19:27:30
3	B 249.677†	22891.2	22314.5	487.20 ug/L	487.20 ppb	19:27:10
3	Ba 233.527†	64161.2	61874.1	488.92 ug/L	488.92 ppb	19:27:10
3	Be 313.107†	1420909.4	1375291.2	486.25 ug/L	486.25 ppb	19:27:04
3	Cd 226.502†	45352.7	43940.0	490.76 ug/L	490.76 ppb	19:27:10
3	Co 228.616†	23528.1	22758.2	498.99 ug/L	498.99 ppb	19:27:10
3	Cr 267.716†	46854.6	45088.2	489.37 ug/L	489.37 ppb	19:27:10
3	Cu 324.752†	188570.8	172711.9	484.47 ug/L	484.47 ppb	19:27:10
3	Mn 257.610†	448969.0	432453.4	485.12 ug/L	485.12 ppb	19:27:04
3	Mo 202.031†	7423.0	7134.4	487.32 ug/L	487.32 ppb	19:27:30
3	Ni 231.604†	20397.2	19575.4	491.66 ug/L	491.66 ppb	19:27:10
3	P 214.914†	4694.3	4288.0	2323.9 ug/L	2323.9 ppb	19:27:30
3	Pb 220.353†	3970.3	3889.0	489.65 ug/L	489.65 ppb	19:27:30
3	S 181.975 Axial†	793.2	687.9	946.30 ug/L	946.30 ppb	19:27:30
3	Sb 206.836†	1543.8	1458.5	505.91 ug/L	505.91 ppb	19:27:30
3	Se 196.026†	835.5	823.7	492.04 ug/L	492.04 ppb	19:27:30
3	Si 251.611†	86462.4	82880.2	2449.7 ug/L	2449.7 ppb	19:27:10
3	Sn 189.927†	2773.1	2674.5	492.56 ug/L	492.56 ppb	19:27:30
3	Ti 334.940†	330185.4	319306.1	486.68 ug/L	486.68 ppb	19:27:10
3	Tl 190.801†	1505.8	1489.0	479.53 ug/L	479.53 ppb	19:27:30
3	U 409.014†	19161.8	19540.7	487.00 ug/L	487.00 ppb	19:27:10
3	V 292.402†	79846.5	78390.0	494.03 ug/L	494.03 ppb	19:27:10
3	Zn 213.857†	55042.7	52344.6	483.33 ug/L	483.33 ppb	19:27:10
3	SiO2†	86429.8	82831.3	5225.4 ug/L	5225.4 ppb	19:27:45

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	931366.3	103.73 %	0.100			0.10%
Sc Radial	5572.5	104 %	7.4			7.14%
Y 371.029	816391.1	99.182 %	0.1517			0.15%
Y RADIAL	5999.0	104.2 %	7.53			7.23%
Ag 328.068†	117634.9	494.04 ug/L	1.731	494.04 ppb	1.731	0.35%
QC value within limits for Ag 328.068 Recovery = 98.81%						
Al 396.153Radial†	6342.4	4780.9 ug/L	388.39	4780.9 ppb	388.39	8.12%
QC value within limits for Al 396.153Radial Recovery = 95.62%						
As 188.979†	1187.1	489.88 ug/L	4.722	489.88 ppb	4.722	0.96%
QC value within limits for As 188.979 Recovery = 97.98%						
B 249.677†	22329.5	487.45 ug/L	1.679	487.45 ppb	1.679	0.34%
QC value within limits for B 249.677 Recovery = 97.49%						
Ba 233.527†	62107.1	490.77 ug/L	2.570	490.77 ppb	2.570	0.52%
QC value within limits for Ba 233.527 Recovery = 98.15%						
Be 313.107†	1376546.7	486.70 ug/L	0.493	486.70 ppb	0.493	0.10%
QC value within limits for Be 313.107 Recovery = 97.34%						
Ca 317.933Radial†	3046.7	4896.9 ug/L	373.23	4896.9 ppb	373.23	7.62%

QC value within limits for Ca 317.933 Radial Recovery = 97.94%							
Cd	226.502†	44093.1	492.43 ug/L	2.186	492.43 ppb	2.186	0.44%
QC value within limits for Cd 226.502 Recovery = 98.49%							
Co	228.616†	22849.3	500.97 ug/L	2.305	500.97 ppb	2.305	0.46%
QC value within limits for Co 228.616 Recovery = 100.19%							
Cr	267.716†	45339.6	492.11 ug/L	2.491	492.11 ppb	2.491	0.51%
QC value within limits for Cr 267.716 Recovery = 98.42%							
Cu	324.752†	173334.6	486.24 ug/L	2.259	486.24 ppb	2.259	0.46%
QC value within limits for Cu 324.752 Recovery = 97.25%							
Fe	238.204 Radial†	537.3	5036.6 ug/L	379.25	5036.6 ppb	379.25	7.53%
QC value within limits for Fe 238.204 Radial Recovery = 100.73%							
K	766.490 Radial†	26436.7	4823.5 ug/L	396.24	4823.5 ppb	396.24	8.21%
QC value within limits for K 766.490 Radial Recovery = 96.47%							
Mg	279.077 IEC†	142.9	5098.1 ug/L	361.03	5098.1 ppb	361.03	7.08%
QC value within limits for Mg 279.077 IEC Recovery = 101.96%							
Mn	257.610†	431948.4	484.58 ug/L	0.548	484.58 ppb	0.548	0.11%
QC value within limits for Mn 257.610 Recovery = 96.92%							
Mo	202.031†	7132.3	487.21 ug/L	0.739	487.21 ppb	0.739	0.15%
QC value within limits for Mo 202.031 Recovery = 97.44%							
Na	589.592 Radial†	31239.9	9286.7 ug/L	749.93	9286.7 ppb	749.93	8.08%
QC value within limits for Na 589.592 Radial Recovery = 92.87%							
Ni	231.604†	19631.4	493.07 ug/L	2.428	493.07 ppb	2.428	0.49%
QC value within limits for Ni 231.604 Recovery = 98.61%							
P	214.914†	4270.5	2313.4 ug/L	14.50	2313.4 ppb	14.50	0.63%
QC value within limits for P 214.914 Recovery = 92.54%							
Pb	220.353†	3886.1	489.35 ug/L	0.657	489.35 ppb	0.657	0.13%
QC value within limits for Pb 220.353 Recovery = 97.87%							
S	181.975 Axial†	686.5	944.32 ug/L	1.714	944.32 ppb	1.714	0.18%
QC value within limits for S 181.975 Axial Recovery = 94.43%							
Sb	206.836†	1464.7	507.97 ug/L	3.877	507.97 ppb	3.877	0.76%
QC value within limits for Sb 206.836 Recovery = 101.59%							
Se	196.026†	825.8	494.75 ug/L	3.594	494.75 ppb	3.594	0.73%
QC value within limits for Se 196.026 Recovery = 98.95%							
Si	251.611†	83204.8	2459.4 ug/L	11.00	2459.4 ppb	11.00	0.45%
QC value within limits for Si 251.611 Recovery = 98.37%							
Sn	189.927†	2668.8	491.58 ug/L	1.291	491.58 ppb	1.291	0.26%
QC value within limits for Sn 189.927 Recovery = 98.32%							
Sr	421.552†	75340.9	483.48 ug/L	39.956	483.48 ppb	39.956	8.26%
QC value within limits for Sr 421.552 Recovery = 96.70%							
Ti	334.940†	320721.0	488.85 ug/L	2.646	488.85 ppb	2.646	0.54%
QC value within limits for Ti 334.940 Recovery = 97.77%							
Tl	190.801†	1488.2	479.28 ug/L	2.607	479.28 ppb	2.607	0.54%
QC value within limits for Tl 190.801 Recovery = 95.86%							
U	409.014†	19634.3	489.29 ug/L	4.041	489.29 ppb	4.041	0.83%
QC value within limits for U 409.014 Recovery = 97.86%							
V	292.402†	78784.2	496.43 ug/L	2.396	496.43 ppb	2.396	0.48%
QC value within limits for V 292.402 Recovery = 99.29%							
Zn	213.857†	52632.2	485.96 ug/L	2.850	485.96 ppb	2.850	0.59%
QC value within limits for Zn 213.857 Recovery = 97.19%							
SiO2†		82686.5	5216.2 ug/L	20.88	5216.2 ppb	20.88	0.40%
QC value within limits for SiO2 Recovery = 97.54%							
All analyte(s) passed QC.							

Sequence No.: 34

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 1/26/2010 19:29:56

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5428.5	5428.5	102 %		19:31:47
1	Y RADIAL	5877.7	5877.7	102.1 %		19:31:47
1	Al 396.153Radial†	10.8	1.5	1.1418 ug/L	1.1418 ppb	19:32:07
1	Ca 317.933Radial†	15.1	-5.4	-8.7282 ug/L	-8.7282 ppb	19:32:07
1	Fe 238.204 Radial†	5.9	-1.3	-12.322 ug/L	-12.322 ppb	19:32:07
1	K 766.490 Radial†	2384.3	-158.1	-28.843 ug/L	-28.843 ppb	19:31:47
1	Mg 279.077 IEC†	-1.5	-2.4	-86.408 ug/L	-86.408 ppb	19:32:07
1	Na 589.592 Radial†	-829.4	-268.2	-79.742 ug/L	-79.742 ppb	19:31:47
1	Sr 421.552†	38.6	30.8	0.1980 ug/L	0.1980 ppb	19:31:47
1	Sc 361.383	917685.8	917685.8	102.21 %		19:33:04
1	Y 371.029	806622.3	806622.3	97.995 %		19:33:04
1	Ag 328.068†	411.7	106.7	0.4441 ug/L	0.4441 ppb	19:33:04
1	As 188.979†	-21.3	9.4	3.8243 ug/L	3.8243 ppb	19:33:24
1	B 249.677†	-49.2	192.3	4.2201 ug/L	4.2201 ppb	19:33:24
1	Ba 233.527†	-3.3	-0.1	-0.0007 ug/L	-0.0007 ppb	19:33:24
1	Be 313.107†	-4993.5	214.7	0.0757 ug/L	0.0757 ppb	19:33:04
1	Cd 226.502†	-193.7	16.7	0.1875 ug/L	0.1875 ppb	19:33:24
1	Co 228.616†	-77.4	-5.7	-0.1249 ug/L	-0.1249 ppb	19:33:24
1	Cr 267.716†	95.0	-1.0	-0.0101 ug/L	-0.0101 ppb	19:33:24
1	Cu 324.752†	9042.5	-280.8	-0.7875 ug/L	-0.7875 ppb	19:33:04
1	Mn 257.610†	488.9	-11.5	-0.0106 ug/L	-0.0106 ppb	19:33:24
1	Mo 202.031†	29.4	5.2	0.3518 ug/L	0.3518 ppb	19:33:24
1	Ni 231.604†	101.8	5.9	0.1476 ug/L	0.1476 ppb	19:33:24
1	P 214.914†	241.2	-2.7	-1.3616 ug/L	-1.3616 ppb	19:33:24
1	Pb 220.353†	-36.5	24.7	3.1020 ug/L	3.1020 ppb	19:33:24
1	S 181.975 Axial†	44.3	-33.7	-46.385 ug/L	-46.385 ppb	19:33:24
1	Sb 206.836†	40.3	9.2	3.0770 ug/L	3.0770 ppb	19:33:24
1	Se 196.026†	-24.7	-6.2	-3.6440 ug/L	-3.6440 ppb	19:33:24
1	Si 251.611†	533.9	26.4	0.7774 ug/L	0.7774 ppb	19:33:24
1	Sn 189.927†	1.8	2.1	0.3788 ug/L	0.3788 ppb	19:33:24
1	Ti 334.940†	-928.8	-2.2	0.0032 ug/L	0.0032 ppb	19:33:04
1	Tl 190.801†	-46.1	-8.2	-2.6150 ug/L	-2.6150 ppb	19:33:24
1	U 409.014†	-1141.2	-53.7	-1.3426 ug/L	-1.3426 ppb	19:33:04
1	V 292.402†	-1367.7	55.4	0.3473 ug/L	0.3473 ppb	19:33:04
1	Zn 213.857†	687.7	-60.6	-0.5629 ug/L	-0.5629 ppb	19:33:24
1	SiO2†	541.0	16.0	0.9995 ug/L	0.9995 ppb	19:34:35
2	Sc Radial	5727.5	5727.5	107 %		19:32:12
2	Y RADIAL	6158.4	6158.4	107.0 %		19:32:12
2	Al 396.153Radial†	1.4	-7.8	-5.8944 ug/L	-5.8944 ppb	19:32:32
2	Ca 317.933Radial†	17.8	-3.6	-5.8334 ug/L	-5.8334 ppb	19:32:32
2	Fe 238.204 Radial†	8.5	0.8	7.3524 ug/L	7.3524 ppb	19:32:32
2	K 766.490 Radial†	2335.5	-326.0	-59.526 ug/L	-59.526 ppb	19:32:12
2	Mg 279.077 IEC†	1.5	0.4	13.732 ug/L	13.732 ppb	19:32:32
2	Na 589.592 Radial†	-753.0	-154.4	-45.905 ug/L	-45.905 ppb	19:32:12
2	Sr 421.552†	2.8	-4.5	-0.0289 ug/L	-0.0289 ppb	19:32:12
2	Sc 361.383	909084.1	909084.1	101.25 %		19:33:29
2	Y 371.029	798999.4	798999.4	97.069 %		19:33:29
2	Ag 328.068†	350.9	50.5	0.2162 ug/L	0.2162 ppb	19:33:29
2	As 188.979†	-25.7	4.8	1.9789 ug/L	1.9789 ppb	19:33:50
2	B 249.677†	-57.6	183.6	4.0244 ug/L	4.0244 ppb	19:33:50
2	Ba 233.527†	8.7	11.7	0.0928 ug/L	0.0928 ppb	19:33:50
2	Be 313.107†	-4921.2	239.9	0.0847 ug/L	0.0847 ppb	19:33:29
2	Cd 226.502†	-205.7	3.0	0.0324 ug/L	0.0324 ppb	19:33:50
2	Co 228.616†	-67.3	3.4	0.0743 ug/L	0.0743 ppb	19:33:50
2	Cr 267.716†	95.0	-0.1	0.0002 ug/L	0.0002 ppb	19:33:50
2	Cu 324.752†	8934.2	-303.9	-0.8506 ug/L	-0.8506 ppb	19:33:29
2	Mn 257.610†	463.6	-31.9	-0.0356 ug/L	-0.0356 ppb	19:33:50
2	Mo 202.031†	19.4	-4.4	-0.3025 ug/L	-0.3025 ppb	19:33:50
2	Ni 231.604†	102.1	7.2	0.1798 ug/L	0.1798 ppb	19:33:50

2	P 214.914†	231.7	-9.9	-5.4325 ug/L	-5.4325 ppb	19:33:50
2	Pb 220.353†	-40.2	20.7	2.5986 ug/L	2.5986 ppb	19:33:50
2	S 181.975 Axial†	41.0	-36.5	-50.288 ug/L	-50.288 ppb	19:33:50
2	Sb 206.836†	35.5	4.8	1.5909 ug/L	1.5909 ppb	19:33:50
2	Se 196.026†	-12.2	5.9	3.4478 ug/L	3.4478 ppb	19:33:50
2	Si 251.611†	536.1	33.6	0.9984 ug/L	0.9984 ppb	19:33:50
2	Sn 189.927†	-0.1	0.3	0.0456 ug/L	0.0456 ppb	19:33:50
2	Ti 334.940†	-887.2	30.2	0.0455 ug/L	0.0455 ppb	19:33:29
2	Tl 190.801†	-29.5	7.7	2.4773 ug/L	2.4773 ppb	19:33:50
2	U 409.014†	-1199.4	-121.7	-3.0447 ug/L	-3.0447 ppb	19:33:29
2	V 292.402†	-1393.3	17.4	0.0975 ug/L	0.0975 ppb	19:33:29
2	Zn 213.857†	702.1	-39.9	-0.3727 ug/L	-0.3727 ppb	19:33:50
2	SiO2†	550.2	30.0	1.9084 ug/L	1.9084 ppb	19:34:55
3	Sc Radial	5518.7	5518.7	103 %		19:32:37
3	Y RADIAL	5956.4	5956.4	103.5 %		19:32:37
3	Al 396.153Radial†	-16.0	-24.7	-18.663 ug/L	-18.663 ppb	19:32:58
3	Ca 317.933Radial†	16.1	-4.6	-7.4572 ug/L	-7.4572 ppb	19:32:58
3	Fe 238.204 Radial†	9.6	2.2	20.284 ug/L	20.284 ppb	19:32:58
3	K 766.490 Radial†	2476.0	-107.6	-19.630 ug/L	-19.630 ppb	19:32:37
3	Mg 279.077 IEC†	2.2	1.2	42.605 ug/L	42.605 ppb	19:32:58
3	Na 589.592 Radial†	-830.5	-256.0	-76.094 ug/L	-76.094 ppb	19:32:37
3	Sr 421.552†	13.2	5.7	0.0367 ug/L	0.0367 ppb	19:32:37
3	Sc 361.383	911535.1	911535.1	101.52 %		19:33:55
3	Y 371.029	801306.1	801306.1	97.350 %		19:33:55
3	Ag 328.068†	366.2	64.7	0.2759 ug/L	0.2759 ppb	19:33:55
3	As 188.979†	-29.4	1.2	0.5114 ug/L	0.5114 ppb	19:34:15
3	B 249.677†	-70.7	170.8	3.7429 ug/L	3.7429 ppb	19:34:15
3	Ba 233.527†	-10.2	-7.0	-0.0542 ug/L	-0.0542 ppb	19:34:15
3	Be 313.107†	-4939.8	234.7	0.0828 ug/L	0.0828 ppb	19:33:55
3	Cd 226.502†	-203.8	5.4	0.0588 ug/L	0.0588 ppb	19:34:15
3	Co 228.616†	-70.6	0.4	0.0083 ug/L	0.0083 ppb	19:34:15
3	Cr 267.716†	80.7	-14.4	-0.1563 ug/L	-0.1563 ppb	19:34:15
3	Cu 324.752†	8845.9	-414.7	-1.1629 ug/L	-1.1629 ppb	19:33:55
3	Mn 257.610†	497.0	-0.3	-0.0001 ug/L	-0.0001 ppb	19:34:15
3	Mo 202.031†	18.9	-5.0	-0.3416 ug/L	-0.3416 ppb	19:34:15
3	Ni 231.604†	106.6	11.4	0.2855 ug/L	0.2855 ppb	19:34:15
3	P 214.914†	255.9	13.3	7.7282 ug/L	7.7282 ppb	19:34:15
3	Pb 220.353†	-36.3	24.6	3.0867 ug/L	3.0867 ppb	19:34:15
3	S 181.975 Axial†	40.3	-37.3	-51.350 ug/L	-51.350 ppb	19:34:15
3	Sb 206.836†	46.3	15.4	5.1528 ug/L	5.1528 ppb	19:34:15
3	Se 196.026†	-14.3	3.9	2.3078 ug/L	2.3078 ppb	19:34:15
3	Si 251.611†	517.3	13.6	0.4070 ug/L	0.4070 ppb	19:34:15
3	Sn 189.927†	1.5	1.8	0.3306 ug/L	0.3306 ppb	19:34:15
3	Ti 334.940†	-920.0	0.3	-0.0044 ug/L	-0.0044 ppb	19:33:55
3	Tl 190.801†	-32.4	5.0	1.5910 ug/L	1.5910 ppb	19:34:15
3	U 409.014†	-1034.4	43.9	1.0959 ug/L	1.0959 ppb	19:33:55
3	V 292.402†	-1417.5	-2.7	-0.0216 ug/L	-0.0216 ppb	19:33:55
3	Zn 213.857†	675.4	-68.1	-0.6364 ug/L	-0.6364 ppb	19:34:15
3	SiO2†	523.1	1.9	0.1271 ug/L	0.1271 ppb	19:35:15

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	912768.3	101.66 %		0.494			0.49%
Sc Radial	5558.2	104 %		2.9			2.76%
Y 371.029	802309.2	97.471 %		0.4749			0.49%
Y RADIAL	5997.5	104.2 %		2.52			2.41%
Ag 328.068†	74.0	0.3121 ug/L		0.11816	0.3121 ppb	0.11816	37.86%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-10.3	-7.8052 ug/L		10.03973	-7.8052 ppb	10.03973	128.63%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	5.1	2.1049 ug/L		1.66004	2.1049 ppb	1.66004	78.87%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	182.2	3.9958 ug/L		0.23991	3.9958 ppb	0.23991	6.00%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	1.5	0.0126 ug/L		0.07442	0.0126 ppb	0.07442	588.46%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	229.8	0.0811 ug/L		0.00473	0.0811 ppb	0.00473	5.83%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-4.6	-7.3396 ug/L		1.45103	-7.3396 ppb	1.45103	19.77%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	8.4	0.0929 ug/L	0.08299	0.0929 ppb	0.08299	89.34%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-0.6	-0.0141 ug/L	0.10149	-0.0141 ppb	0.10149	719.21%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-5.2	-0.0554 ug/L	0.08752	-0.0554 ppb	0.08752	158.02%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-333.1	-0.9337 ug/L	0.20104	-0.9337 ppb	0.20104	21.53%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.5	5.1047 ug/L	16.41880	5.1047 ppb	16.41880	321.64%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-197.2	-36.000 ug/L	20.8884	-36.000 ppb	20.8884	58.02%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.3	-10.024 ug/L	67.7075	-10.024 ppb	67.7075	675.49%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-14.6	-0.0154 ug/L	0.01826	-0.0154 ppb	0.01826	118.24%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-1.4	-0.0974 ug/L	0.38952	-0.0974 ppb	0.38952	399.81%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-226.2	-67.247 ug/L	18.5721	-67.247 ppb	18.5721	27.62%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	8.1	0.2043 ug/L	0.07213	0.2043 ppb	0.07213	35.30%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	0.2	0.3114 ug/L	6.73795	0.3114 ppb	6.73795	>999.9%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	23.4	2.9291 ug/L	0.28632	2.9291 ppb	0.28632	9.77%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-35.8	-49.341 ug/L	2.6148	-49.341 ppb	2.6148	5.30%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	9.8	3.2736 ug/L	1.78907	3.2736 ppb	1.78907	54.65%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	1.2	0.7039 ug/L	3.80824	0.7039 ppb	3.80824	541.05%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	24.5	0.7276 ug/L	0.29884	0.7276 ppb	0.29884	41.07%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	1.4	0.2517 ug/L	0.18006	0.2517 ppb	0.18006	71.55%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	10.7	0.0686 ug/L	0.11676	0.0686 ppb	0.11676	170.26%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	9.5	0.0148 ug/L	0.02692	0.0148 ppb	0.02692	182.30%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	1.5	0.4845 ug/L	2.72054	0.4845 ppb	2.72054	561.56%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-43.9	-1.0971 ug/L	2.08114	-1.0971 ppb	2.08114	189.69%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	23.4	0.1411 ug/L	0.18830	0.1411 ppb	0.18830	133.49%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-56.2	-0.5240 ug/L	0.13608	-0.5240 ppb	0.13608	25.97%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	16.0	1.0117 ug/L	0.89071	1.0117 ppb	0.89071	88.04%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

Sequence No.: 35

Sample ID: 1202011791|940124|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 64

Date Collected: 1/26/2010 19:37:25

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202011791|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5420.3	5420.3	102 %			19:39:18
1	Y RADIAL	5849.9	5849.9	101.6 %			19:39:18
1	Al 396.153Radial†	15.1	5.7	4.3248 ug/L		4.3248 ppb	19:39:38
1	Ca 317.933Radial†	32.2	11.5	18.442 ug/L		18.442 ppb	19:39:38
1	Fe 238.204 Radial†	15.0	7.7	71.653 ug/L		71.653 ppb	19:39:38
1	K 766.490 Radial†	2342.1	-196.1	-35.799 ug/L		-35.799 ppb	19:39:18
1	Mg 279.077 IEC†	4.0	2.9	104.49 ug/L		104.49 ppb	19:39:38
1	Na 589.592 Radial†	-764.1	-205.1	-60.981 ug/L		-60.981 ppb	19:39:18
1	Sr 421.552†	29.6	22.1	0.1417 ug/L		0.1417 ppb	19:39:18
1	Sc 361.383	942389.1	942389.1	104.96 %			19:40:35
1	Y 371.029	832953.9	832953.9	101.19 %			19:40:35
1	Ag 328.068†	552.3	230.2	0.9917 ug/L		0.9917 ppb	19:40:40
1	As 188.979†	-26.3	5.2	2.1360 ug/L		2.1360 ppb	19:41:00
1	B 249.677†	-147.7	99.7	2.1736 ug/L		2.1736 ppb	19:41:00
1	Ba 233.527†	29.7	31.4	0.2509 ug/L		0.2509 ppb	19:41:00
1	Be 313.107†	-5006.4	330.5	0.1174 ug/L		0.1174 ppb	19:40:40
1	Cd 226.502†	-202.2	13.5	0.1421 ug/L		0.1421 ppb	19:41:00
1	Co 228.616†	-65.4	7.6	0.1646 ug/L		0.1646 ppb	19:41:00
1	Cr 267.716†	110.6	11.4	0.1288 ug/L		0.1288 ppb	19:41:00
1	Cu 324.752†	9086.5	-470.8	-1.3130 ug/L		-1.3130 ppb	19:40:40
1	Mn 257.610†	1115.0	572.4	0.6446 ug/L		0.6446 ppb	19:41:00
1	Mo 202.031†	22.6	-2.0	-0.1327 ug/L		-0.1327 ppb	19:41:00
1	Ni 231.604†	113.5	14.4	0.3620 ug/L		0.3620 ppb	19:41:00
1	P 214.914†	235.0	-14.9	-8.1674 ug/L		-8.1674 ppb	19:41:00
1	Pb 220.353†	-50.8	12.0	1.5023 ug/L		1.5023 ppb	19:41:00
1	S 181.975 Axial†	40.1	-38.8	-53.412 ug/L		-53.412 ppb	19:41:00
1	Sb 206.836†	33.0	1.2	0.4139 ug/L		0.4139 ppb	19:41:00
1	Se 196.026†	-13.2	5.4	3.3466 ug/L		3.3466 ppb	19:41:00
1	Si 251.611†	920.9	381.4	11.303 ug/L		11.303 ppb	19:41:00
1	Sn 189.927†	9.4	9.3	1.7199 ug/L		1.7199 ppb	19:41:00
1	Ti 334.940†	-700.1	239.5	0.3622 ug/L		0.3622 ppb	19:40:40
1	Tl 190.801†	-34.0	4.5	1.4295 ug/L		1.4295 ppb	19:41:00
1	U 409.014†	-1404.7	-275.5	-6.8975 ug/L		-6.8975 ppb	19:40:40
1	V 292.402†	-1353.9	103.6	0.6206 ug/L		0.6206 ppb	19:40:40
1	Zn 213.857†	807.5	36.0	0.3274 ug/L		0.3274 ppb	19:41:00
1	SiO2†	908.8	352.5	22.296 ug/L		22.296 ppb	19:42:06
2	Sc Radial	5415.0	5415.0	101 %			19:39:43
2	Y RADIAL	5870.9	5870.9	102.0 %			19:39:43
2	Al 396.153Radial†	9.2	-0.1	-0.0358 ug/L		-0.0358 ppb	19:40:03
2	Ca 317.933Radial†	29.7	9.0	14.471 ug/L		14.471 ppb	19:40:03
2	Fe 238.204 Radial†	9.0	1.7	15.926 ug/L		15.926 ppb	19:40:03
2	K 766.490 Radial†	2406.2	-130.6	-23.846 ug/L		-23.846 ppb	19:39:43
2	Mg 279.077 IEC†	0.2	-0.8	-28.471 ug/L		-28.471 ppb	19:40:03
2	Na 589.592 Radial†	-723.0	-165.4	-49.160 ug/L		-49.160 ppb	19:39:43
2	Sr 421.552†	57.9	50.0	0.3210 ug/L		0.3210 ppb	19:39:43
2	Sc 361.383	933332.9	933332.9	103.95 %			19:41:05
2	Y 371.029	824803.3	824803.3	100.20 %			19:41:05
2	Ag 328.068†	548.3	231.4	0.9822 ug/L		0.9822 ppb	19:41:10
2	As 188.979†	-30.6	0.7	0.3076 ug/L		0.3076 ppb	19:41:30
2	B 249.677†	-129.6	115.8	2.5367 ug/L		2.5367 ppb	19:41:30
2	Ba 233.527†	9.2	11.9	0.0965 ug/L		0.0965 ppb	19:41:30
2	Be 313.107†	-4944.2	344.1	0.1221 ug/L		0.1221 ppb	19:41:10
2	Cd 226.502†	-193.3	20.2	0.2222 ug/L		0.2222 ppb	19:41:30
2	Co 228.616†	-74.6	-1.9	-0.0439 ug/L		-0.0439 ppb	19:41:30
2	Cr 267.716†	109.8	11.7	0.1324 ug/L		0.1324 ppb	19:41:30
2	Cu 324.752†	8798.0	-664.3	-1.8573 ug/L		-1.8573 ppb	19:41:10
2	Mn 257.610†	1121.4	588.9	0.6630 ug/L		0.6630 ppb	19:41:30
2	Mo 202.031†	11.0	-13.0	-0.8884 ug/L		-0.8884 ppb	19:41:30
2	Ni 231.604†	95.0	-2.3	-0.0583 ug/L		-0.0583 ppb	19:41:30

2	P 214.914†	220.0	-27.1	-14.884 ug/L	-14.884 ppb	19:41:30
2	Pb 220.353†	-48.4	13.8	1.7346 ug/L	1.7346 ppb	19:41:30
2	S 181.975 Axial†	39.0	-39.5	-54.392 ug/L	-54.392 ppb	19:41:30
2	Sb 206.836†	37.3	5.6	1.8841 ug/L	1.8841 ppb	19:41:30
2	Se 196.026†	-20.9	-2.1	-1.1854 ug/L	-1.1854 ppb	19:41:30
2	Si 251.611†	911.2	380.6	11.288 ug/L	11.288 ppb	19:41:30
2	Sn 189.927†	11.0	10.9	2.0120 ug/L	2.0120 ppb	19:41:30
2	Ti 334.940†	-713.3	220.4	0.3445 ug/L	0.3445 ppb	19:41:10
2	Tl 190.801†	-33.8	4.3	1.3894 ug/L	1.3894 ppb	19:41:30
2	U 409.014†	-1506.0	-385.9	-9.6524 ug/L	-9.6524 ppb	19:41:10
2	V 292.402†	-1303.8	139.3	0.8319 ug/L	0.8319 ppb	19:41:10
2	Zn 213.857†	806.6	42.6	0.3979 ug/L	0.3979 ppb	19:41:30
2	SiO2†	939.4	390.3	24.708 ug/L	24.708 ppb	19:42:11
3	Sc Radial	5156.2	5156.2	96.6 %		19:40:08
3	Y RADIAL	5604.0	5604.0	97.34 %		19:40:08
3	Al 396.153Radial†	16.2	7.7	5.8093 ug/L	5.8093 ppb	19:40:28
3	Ca 317.933Radial†	26.4	7.1	11.357 ug/L	11.357 ppb	19:40:28
3	Fe 238.204 Radial†	12.9	6.2	58.146 ug/L	58.146 ppb	19:40:28
3	K 766.490 Radial†	2272.2	-150.3	-27.433 ug/L	-27.433 ppb	19:40:08
3	Mg 279.077 IEC†	0.8	-0.1	-3.7914 ug/L	-3.7914 ppb	19:40:28
3	Na 589.592 Radial†	-804.1	-285.2	-84.773 ug/L	-84.773 ppb	19:40:08
3	Sr 421.552†	44.6	39.1	0.2511 ug/L	0.2511 ppb	19:40:08
3	Sc 361.383	950919.8	950919.8	105.91 %		19:41:35
3	Y 371.029	841669.1	841669.1	102.25 %		19:41:35
3	Ag 328.068†	543.2	216.9	0.9323 ug/L	0.9323 ppb	19:41:40
3	As 188.979†	-21.3	10.1	4.1342 ug/L	4.1342 ppb	19:42:00
3	B 249.677†	-139.9	108.3	2.3659 ug/L	2.3659 ppb	19:42:00
3	Ba 233.527†	14.8	17.0	0.1367 ug/L	0.1367 ppb	19:42:00
3	Be 313.107†	-4899.2	474.6	0.1680 ug/L	0.1680 ppb	19:41:40
3	Cd 226.502†	-191.2	25.7	0.2789 ug/L	0.2789 ppb	19:42:00
3	Co 228.616†	-61.7	11.7	0.2558 ug/L	0.2558 ppb	19:42:00
3	Cr 267.716†	106.6	6.7	0.0783 ug/L	0.0783 ppb	19:42:00
3	Cu 324.752†	8953.8	-673.7	-1.8818 ug/L	-1.8818 ppb	19:41:40
3	Mn 257.610†	1169.2	614.1	0.6945 ug/L	0.6945 ppb	19:42:00
3	Mo 202.031†	28.5	3.3	0.2311 ug/L	0.2311 ppb	19:42:00
3	Ni 231.604†	96.5	-2.6	-0.0653 ug/L	-0.0653 ppb	19:42:00
3	P 214.914†	228.6	-22.9	-12.576 ug/L	-12.576 ppb	19:42:00
3	Pb 220.353†	-60.0	3.8	0.4689 ug/L	0.4689 ppb	19:42:00
3	S 181.975 Axial†	40.7	-38.6	-53.078 ug/L	-53.078 ppb	19:42:00
3	Sb 206.836†	40.8	8.3	2.7914 ug/L	2.7914 ppb	19:42:00
3	Se 196.026†	-14.5	4.3	2.6747 ug/L	2.6747 ppb	19:42:00
3	Si 251.611†	912.9	366.0	10.842 ug/L	10.842 ppb	19:42:00
3	Sn 189.927†	6.2	6.2	1.1366 ug/L	1.1366 ppb	19:42:00
3	Ti 334.940†	-786.1	164.3	0.2563 ug/L	0.2563 ppb	19:41:40
3	Tl 190.801†	-39.1	-0.1	-0.0198 ug/L	-0.0198 ppb	19:42:00
3	U 409.014†	-1510.5	-363.4	-9.0941 ug/L	-9.0941 ppb	19:41:40
3	V 292.402†	-1424.4	48.6	0.2791 ug/L	0.2791 ppb	19:41:40
3	Zn 213.857†	795.6	17.8	0.1634 ug/L	0.1634 ppb	19:42:00
3	SiO2†	940.3	374.5	23.676 ug/L	23.676 ppb	19:42:16

Mean Data: 1202011791|940124|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	942213.9	104.94 %		0.980				0.93%
Sc Radial	5330.5	99.8 %		2.83				2.83%
Y 371.029	833142.1	101.22 %		1.025				1.01%
Y RADIAL	5775.0	100.3 %		2.58				2.57%
Ag 328.068†	226.2	0.9687 ug/L		0.03193	0.9687 ppb		0.03193	3.30%
Al 396.153Radial†	4.4	3.3661 ug/L		3.03815	3.3661 ppb		3.03815	90.26%
As 188.979†	5.3	2.1926 ug/L		1.91396	2.1926 ppb		1.91396	87.29%
B 249.677†	107.9	2.3587 ug/L		0.18164	2.3587 ppb		0.18164	7.70%
Ba 233.527†	20.1	0.1614 ug/L		0.08010	0.1614 ppb		0.08010	49.64%
Be 313.107†	383.1	0.1359 ug/L		0.02792	0.1359 ppb		0.02792	20.55%
Ca 317.933Radial†	9.2	14.756 ug/L		3.5509	14.756 ppb		3.5509	24.06%
Cd 226.502†	19.8	0.2144 ug/L		0.06873	0.2144 ppb		0.06873	32.06%
Co 228.616†	5.8	0.1255 ug/L		0.15362	0.1255 ppb		0.15362	122.39%
Cr 267.716†	10.0	0.1132 ug/L		0.03022	0.1132 ppb		0.03022	26.71%
Cu 324.752†	-602.9	-1.6841 ug/L		0.32156	-1.6841 ppb		0.32156	19.09%
Fe 238.204 Radial†	5.2	48.575 ug/L		29.0704	48.575 ppb		29.0704	59.85%
K 766.490 Radial†	-159.0	-29.026 ug/L		6.1338	-29.026 ppb		6.1338	21.13%

Mg 279.077 IEC†	0.7	24.076 ug/L	70.7253	24.076 ppb	70.7253	293.76%
Mn 257.610†	591.8	0.6673 ug/L	0.02521	0.6673 ppb	0.02521	3.78%
Mo 202.031†	-3.9	-0.2633 ug/L	0.57107	-0.2633 ppb	0.57107	216.87%
Na 589.592 Radial†	-218.6	-64.972 ug/L	18.1389	-64.972 ppb	18.1389	27.92%
Ni 231.604†	3.2	0.0795 ug/L	0.24468	0.0795 ppb	0.24468	307.93%
P 214.914†	-21.6	-11.876 ug/L	3.4126	-11.876 ppb	3.4126	28.74%
Pb 220.353†	9.9	1.2353 ug/L	0.67381	1.2353 ppb	0.67381	54.55%
S 181.975 Axial†	-38.9	-53.627 ug/L	0.6829	-53.627 ppb	0.6829	1.27%
Sb 206.836†	5.0	1.6965 ug/L	1.19982	1.6965 ppb	1.19982	70.72%
Se 196.026†	2.5	1.6120 ug/L	2.44575	1.6120 ppb	2.44575	151.72%
Si 251.611†	376.0	11.144 ug/L	0.2622	11.144 ppb	0.2622	2.35%
Sn 189.927†	8.8	1.6228 ug/L	0.44570	1.6228 ppb	0.44570	27.46%
Sr 421.552†	37.1	0.2379 ug/L	0.09038	0.2379 ppb	0.09038	37.99%
Ti 334.940†	208.1	0.3210 ug/L	0.05672	0.3210 ppb	0.05672	17.67%
Tl 190.801†	2.9	0.9330 ug/L	0.82538	0.9330 ppb	0.82538	88.46%
U 409.014†	-341.6	-8.5480 ug/L	1.45636	-8.5480 ppb	1.45636	17.04%
V 292.402†	97.2	0.5772 ug/L	0.27892	0.5772 ppb	0.27892	48.32%
Zn 213.857†	32.1	0.2962 ug/L	0.12030	0.2962 ppb	0.12030	40.61%
SiO2†	372.4	23.560 ug/L	1.2103	23.560 ppb	1.2103	5.14%

Sequence No.: 36

Sample ID: 1202011792|940124|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 65

Date Collected: 1/26/2010 19:44:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202011792|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5655.2	5655.2	106 %		19:46:39
1	Y RADIAL	6720.3	6720.3	116.7 %		19:46:39
1	Al 396.153Radial†	130396.0	123120.8	93243 ug/L	93243 ppb	19:46:19
1	Ca 317.933Radial†	67443.2	63664.8	102330 ug/L	102330 ppb	19:46:19
1	Fe 238.204 Radial†	20684.0	19524.2	182490 ug/L	182490 ppb	19:46:19
1	K 766.490 Radial†	249205.1	232815.1	42491 ug/L	42491 ppb	19:46:19
1	Mg 279.077 IEC†	1182.0	1115.1	39590 ug/L	39590 ppb	19:46:39
1	Na 589.592 Radial†	36985.8	35472.5	10545 ug/L	10545 ppb	19:46:19
1	Sr 421.552†	402800.9	380348.5	2440.2 ug/L	2440.2 ppb	19:46:19
1	Sc 361.383	958904.5	958904.5	106.80 %		19:47:41
1	Y 371.029	921299.3	921299.3	111.93 %		19:47:41
1	Ag 328.068†	65653.1	61178.4	318.16 ug/L	318.16 ppb	19:47:41
1	As 188.979†	2650.7	2512.2	1119.1 ug/L	1119.1 ppb	19:47:46
1	B 249.677†	74390.1	69895.8	1500.5 ug/L	1500.5 ppb	19:47:41
1	Ba 233.527†	274215.9	256765.9	2032.2 ug/L	2032.2 ppb	19:47:41
1	Be 313.107†	2403469.1	2255595.7	808.73 ug/L	808.73 ppb	19:47:41
1	Cd 226.502†	59465.4	55886.8	606.26 ug/L	606.26 ppb	19:47:46
1	Co 228.616†	47037.7	44113.9	953.51 ug/L	953.51 ppb	19:47:46
1	Cr 267.716†	235234.7	220168.7	2392.2 ug/L	2392.2 ppb	19:47:41
1	Cu 324.752†	759121.2	701677.4	1978.1 ug/L	1978.1 ppb	19:47:41
1	Mn 257.610†	5038128.8	4716976.6	5304.9 ug/L	5304.9 ppb	19:47:41
1	Mo 202.031†	7912.5	7385.2	519.41 ug/L	519.41 ppb	19:47:46
1	Ni 231.604†	57964.3	54181.3	1361.1 ug/L	1361.1 ppb	19:47:46
1	P 214.914†	15290.0	14078.1	7433.8 ug/L	7433.8 ppb	19:47:46
1	Pb 220.353†	6932.3	6551.5	826.88 ug/L	826.88 ppb	19:47:46
1	S 181.975 Axial†	3720.4	3406.6	4672.9 ug/L	4672.9 ppb	19:47:46
1	Sb 206.836†	3909.6	3630.5	1228.8 ug/L	1228.8 ppb	19:47:46
1	Se 196.026†	4826.1	4536.9	3227.7 ug/L	3227.7 ppb	19:47:46
1	Si 251.611†	1422123.2	1331113.2	39434 ug/L	39434 ppb	19:47:41
1	Sn 189.927†	5858.0	5485.5	1027.3 ug/L	1027.3 ppb	19:47:46
1	Ti 334.940†	4022877.5	3767739.6	5754.4 ug/L	5754.4 ppb	19:47:41
1	Tl 190.801†	3785.4	3581.4	1211.9 ug/L	1211.9 ppb	19:47:46
1	U 409.014†	-8603.9	-6993.5	-201.02 ug/L	-201.02 ppb	19:47:41
1	V 292.402†	211386.4	199325.8	1213.6 ug/L	1213.6 ppb	19:47:41
1	Zn 213.857†	673821.3	630201.1	5841.0 ug/L	5841.0 ppb	19:47:41
1	SiO2†	1410729.4	1320427.2	83496 ug/L	83496 ppb	19:48:20
2	Sc Radial	5818.9	5818.9	109 %		19:47:05
2	Y RADIAL	6897.8	6897.8	119.8 %		19:47:05
2	Al 396.153Radial†	131112.9	120314.6	91118 ug/L	91118 ppb	19:46:45
2	Ca 317.933Radial†	67860.4	62256.0	100060 ug/L	100060 ppb	19:46:45
2	Fe 238.204 Radial†	20716.1	19004.2	177630 ug/L	177630 ppb	19:46:45
2	K 766.490 Radial†	248316.1	225379.0	41133 ug/L	41133 ppb	19:46:45
2	Mg 279.077 IEC†	1177.4	1079.6	38327 ug/L	38327 ppb	19:47:05
2	Na 589.592 Radial†	36605.6	34141.0	10149 ug/L	10149 ppb	19:46:45
2	Sr 421.552†	402080.7	368986.9	2367.3 ug/L	2367.3 ppb	19:46:45
2	Sc 361.383	965737.3	965737.3	107.56 %		19:47:55
2	Y 371.029	928111.1	928111.1	112.75 %		19:47:55
2	Ag 328.068†	66053.3	61115.6	316.34 ug/L	316.34 ppb	19:47:55
2	As 188.979†	2591.2	2439.3	1088.1 ug/L	1088.1 ppb	19:48:00
2	B 249.677†	74793.5	69778.0	1498.7 ug/L	1498.7 ppb	19:47:55
2	Ba 233.527†	275985.0	256594.1	2030.7 ug/L	2030.7 ppb	19:47:55
2	Be 313.107†	2416068.4	2251387.0	807.24 ug/L	807.24 ppb	19:47:55
2	Cd 226.502†	59054.5	55110.8	598.08 ug/L	598.08 ppb	19:48:00
2	Co 228.616†	46714.1	43501.4	940.14 ug/L	940.14 ppb	19:48:00
2	Cr 267.716†	236511.7	219797.6	2388.0 ug/L	2388.0 ppb	19:47:55
2	Cu 324.752†	764819.4	701946.1	1978.6 ug/L	1978.6 ppb	19:47:55
2	Mn 257.610†	5067711.6	4711103.7	5297.9 ug/L	5297.9 ppb	19:47:55
2	Mo 202.031†	7907.5	7328.2	515.11 ug/L	515.11 ppb	19:48:00
2	Ni 231.604†	57482.2	53349.1	1340.2 ug/L	1340.2 ppb	19:48:00

2	P 214.914†	15277.0	13964.7	7372.9 ug/L	7372.9 ppb	19:48:00
2	Pb 220.353†	6856.9	6435.5	812.27 ug/L	812.27 ppb	19:48:00
2	S 181.975 Axial†	3713.7	3375.7	4630.7 ug/L	4630.7 ppb	19:48:00
2	Sb 206.836†	3897.6	3593.5	1215.9 ug/L	1215.9 ppb	19:48:00
2	Se 196.026†	4808.6	4488.6	3183.7 ug/L	3183.7 ppb	19:48:00
2	Si 251.611†	1430769.9	1329731.0	39394 ug/L	39394 ppb	19:47:55
2	Sn 189.927†	5790.5	5384.0	1008.2 ug/L	1008.2 ppb	19:48:00
2	Ti 334.940†	4050650.8	3766910.2	5752.9 ug/L	5752.9 ppb	19:47:55
2	Tl 190.801†	3734.9	3509.4	1188.9 ug/L	1188.9 ppb	19:48:00
2	U 409.014†	-8595.0	-6928.2	-198.82 ug/L	-198.82 ppb	19:47:55
2	V 292.402†	212490.4	198951.9	1211.9 ug/L	1211.9 ppb	19:47:55
2	Zn 213.857†	676658.3	628374.8	5824.6 ug/L	5824.6 ppb	19:47:55
2	SiO2†	1405298.7	1306032.2	82586 ug/L	82586 ppb	19:48:26
3	Sc Radial	5571.7	5571.7	104 %		19:47:30
3	Y RADIAL	6633.1	6633.1	115.2 %		19:47:30
3	Al 396.153Radial†	130381.4	124951.4	94630 ug/L	94630 ppb	19:47:10
3	Ca 317.933Radial†	67574.9	64745.1	104060 ug/L	104060 ppb	19:47:10
3	Fe 238.204 Radial†	20698.3	19830.6	185360 ug/L	185360 ppb	19:47:10
3	K 766.490 Radial†	249790.3	236901.3	43236 ug/L	43236 ppb	19:47:10
3	Mg 279.077 IEC†	1179.2	1129.2	40088 ug/L	40088 ppb	19:47:30
3	Na 589.592 Radial†	36798.0	35815.7	10647 ug/L	10647 ppb	19:47:10
3	Sr 421.552†	401832.0	385118.1	2470.8 ug/L	2470.8 ppb	19:47:10
3	Sc 361.383	953431.0	953431.0	106.19 %		19:48:09
3	Y 371.029	917337.4	917337.4	111.45 %		19:48:09
3	Ag 328.068†	65320.1	61217.7	319.23 ug/L	319.23 ppb	19:48:09
3	As 188.979†	2574.0	2454.2	1096.1 ug/L	1096.1 ppb	19:48:14
3	B 249.677†	74064.9	69989.4	1502.1 ug/L	1502.1 ppb	19:48:09
3	Ba 233.527†	273307.7	257384.7	2037.1 ug/L	2037.1 ppb	19:48:09
3	Be 313.107†	2394628.1	2260189.7	810.38 ug/L	810.38 ppb	19:48:09
3	Cd 226.502†	59095.5	55858.0	605.64 ug/L	605.64 ppb	19:48:14
3	Co 228.616†	46538.9	43897.0	948.68 ug/L	948.68 ppb	19:48:14
3	Cr 267.716†	234612.4	220847.2	2399.6 ug/L	2399.6 ppb	19:48:09
3	Cu 324.752†	755129.3	701998.7	1979.2 ug/L	1979.2 ppb	19:48:09
3	Mn 257.610†	5016561.1	4723748.1	5312.8 ug/L	5312.8 ppb	19:48:09
3	Mo 202.031†	7828.9	7349.1	517.18 ug/L	517.18 ppb	19:48:14
3	Ni 231.604†	57517.5	54072.2	1358.3 ug/L	1358.3 ppb	19:48:14
3	P 214.914†	15156.2	14034.3	7406.9 ug/L	7406.9 ppb	19:48:14
3	Pb 220.353†	6835.9	6497.9	820.21 ug/L	820.21 ppb	19:48:14
3	S 181.975 Axial†	3697.4	3405.0	4670.4 ug/L	4670.4 ppb	19:48:14
3	Sb 206.836†	3942.6	3682.6	1246.1 ug/L	1246.1 ppb	19:48:14
3	Se 196.026†	4799.5	4537.8	3237.8 ug/L	3237.8 ppb	19:48:14
3	Si 251.611†	1416498.1	1333460.5	39504 ug/L	39504 ppb	19:48:09
3	Sn 189.927†	5803.2	5465.4	1023.9 ug/L	1023.9 ppb	19:48:14
3	Ti 334.940†	4007840.8	3775204.0	5766.0 ug/L	5766.0 ppb	19:48:09
3	Tl 190.801†	3759.3	3577.1	1210.7 ug/L	1210.7 ppb	19:48:14
3	U 409.014†	-8416.6	-6863.3	-198.10 ug/L	-198.10 ppb	19:48:09
3	V 292.402†	210507.6	199634.5	1215.1 ug/L	1215.1 ppb	19:48:09
3	Zn 213.857†	670466.2	630663.7	5845.0 ug/L	5845.0 ppb	19:48:09
3	SiO2†	1422629.8	1339217.4	84684 ug/L	84684 ppb	19:48:32

Mean Data: 1202011792|940124|1

	Mean Corrected	Calib.		Sample		
Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Sc 361.383	959357.6	106.85 %	0.687			0.64%
Sc Radial	5681.9	106 %	2.4			2.21%
Y 371.029	922249.3	112.04 %	0.662			0.59%
Y RADIAL	6750.4	117.3 %	2.34			2.00%
Ag 328.068†	61170.6	317.91 ug/L	1.460	317.91 ppb	1.460	0.46%
Al 396.153Radial†	122795.6	92997 ug/L	1769.1	92997 ppb	1769.1	1.90%
As 188.979†	2468.5	1101.1 ug/L	16.07	1101.1 ppb	16.07	1.46%
B 249.677†	69887.7	1500.4 ug/L	1.68	1500.4 ppb	1.68	0.11%
Ba 233.527†	256914.9	2033.3 ug/L	3.39	2033.3 ppb	3.39	0.17%
Be 313.107†	2255724.1	808.78 ug/L	1.568	808.78 ppb	1.568	0.19%
Ca 317.933Radial†	63555.3	102150 ug/L	2006.1	102150 ppb	2006.1	1.96%
Cd 226.502†	55618.6	603.33 ug/L	4.554	603.33 ppb	4.554	0.75%
Co 228.616†	43837.4	947.44 ug/L	6.766	947.44 ppb	6.766	0.71%
Cr 267.716†	220271.2	2393.3 ug/L	5.84	2393.3 ppb	5.84	0.24%
Cu 324.752†	701874.0	1978.6 ug/L	0.53	1978.6 ppb	0.53	0.03%
Fe 238.204 Radial†	19453.0	181830 ug/L	3904.4	181830 ppb	3904.4	2.15%
K 766.490 Radial†	231698.5	42287 ug/L	1066.4	42287 ppb	1066.4	2.52%

Mg 279.077 IEC†	1108.0	39335 ug/L	907.8	39335 ppb	907.8	2.31%
Mn 257.610†	4717276.1	5305.2 ug/L	7.44	5305.2 ppb	7.44	0.14%
Mo 202.031†	7354.2	517.24 ug/L	2.148	517.24 ppb	2.148	0.42%
Na 589.592 Radial†	35143.1	10447 ug/L	263.0	10447 ppb	263.0	2.52%
Ni 231.604†	53867.5	1353.2 ug/L	11.36	1353.2 ppb	11.36	0.84%
P 214.914†	14025.7	7404.6 ug/L	30.50	7404.6 ppb	30.50	0.41%
Pb 220.353†	6494.9	819.78 ug/L	7.310	819.78 ppb	7.310	0.89%
S 181.975 Axial†	3395.8	4658.0 ug/L	23.67	4658.0 ppb	23.67	0.51%
Sb 206.836†	3635.5	1230.3 ug/L	15.14	1230.3 ppb	15.14	1.23%
Se 196.026†	4521.1	3216.4 ug/L	28.79	3216.4 ppb	28.79	0.90%
Si 251.611†	1331434.9	39444 ug/L	55.9	39444 ppb	55.9	0.14%
Sn 189.927†	5445.0	1019.8 ug/L	10.19	1019.8 ppb	10.19	1.00%
Sr 421.552†	378151.2	2426.1 ug/L	53.17	2426.1 ppb	53.17	2.19%
Ti 334.940†	3769951.3	5757.8 ug/L	7.14	5757.8 ppb	7.14	0.12%
Tl 190.801†	3556.0	1203.9 ug/L	12.95	1203.9 ppb	12.95	1.08%
U 409.014†	-6928.3	-199.31 ug/L	1.517	-199.31 ppb	1.517	0.76%
V 292.402†	199304.1	1213.5 ug/L	1.58	1213.5 ppb	1.58	0.13%
Zn 213.857†	629746.5	5836.9 ug/L	10.83	5836.9 ppb	10.83	0.19%
Sio2†	1321892.3	83589 ug/L	1052.4	83589 ppb	1052.4	1.26%

Sequence No.: 37
 Sample ID: 244128001|940124|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 66
 Date Collected: 1/26/2010 19:50:44
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 244128001|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5441.1	5441.1	102 %		19:52:57
1	Y RADIAL	6680.9	6680.9	116.0 %		19:52:57
1	Al 396.153Radial†	222094.1	217960.7	165110 ug/L	165110 ppb	19:52:37
1	Ca 317.933Radial†	14821.5	14526.0	23348 ug/L	23348 ppb	19:52:37
1	Fe 238.204 Radial†	16845.1	16525.2	154440 ug/L	154440 ppb	19:52:37
1	K 766.490 Radial†	104847.0	100396.6	18328 ug/L	18328 ppb	19:52:37
1	Mg 279.077 IEC†	717.0	702.7	24905 ug/L	24905 ppb	19:52:57
1	Na 589.592 Radial†	3917.0	4391.9	1305.6 ug/L	1305.6 ppb	19:52:37
1	Sr 421.552†	50867.2	49915.5	320.17 ug/L	320.17 ppb	19:52:37
1	Sc 361.383	958329.5	958329.5	106.73 %		19:54:02
1	Y 371.029	954093.2	954093.2	115.91 %		19:54:02
1	Ag 328.068†	-10022.8	-9686.5	10.769 ug/L	10.769 ppb	19:54:02
1	As 188.979†	-94.8	-58.6	65.041 ug/L	65.041 ppb	19:54:22
1	B 249.677†	2361.3	2452.7	28.276 ug/L	28.276 ppb	19:54:02
1	Ba 233.527†	410605.8	384705.8	3037.7 ug/L	3037.7 ppb	19:54:02
1	Be 313.107†	-13471.5	-7521.2	11.190 ug/L	11.190 ppb	19:54:02
1	Cd 226.502†	1487.2	1599.5	1.9437 ug/L	1.9437 ppb	19:54:22
1	Co 228.616†	7324.6	6932.5	138.37 ug/L	138.37 ppb	19:54:22
1	Cr 267.716†	11226.8	10424.6	116.56 ug/L	116.56 ppb	19:54:22
1	Cu 324.752†	35126.2	23782.3	75.020 ug/L	75.020 ppb	19:54:02
1	Mn 257.610†	10880640.0	10193742.7	11443 ug/L	11443 ppb	19:53:56
1	Mo 202.031†	-68.5	-87.7	6.2782 ug/L	6.2782 ppb	19:54:22
1	Ni 231.604†	5070.6	4657.1	116.95 ug/L	116.95 ppb	19:54:22
1	P 214.914†	2092.4	1721.7	874.21 ug/L	874.21 ppb	19:54:22
1	Pb 220.353†	1156.5	1144.0	164.49 ug/L	164.49 ppb	19:54:22
1	S 181.975 Axial†	463.7	357.4	461.18 ug/L	461.18 ppb	19:54:22
1	Sb 206.836†	96.8	60.4	0.0328 ug/L	0.0328 ppb	19:54:22
1	Se 196.026†	-797.1	-728.9	100.74 ug/L	100.74 ppb	19:54:22
1	Si 251.611†	1431671.3	1340858.1	39730 ug/L	39730 ppb	19:54:02
1	Sn 189.927†	-134.9	-126.1	-17.034 ug/L	-17.034 ppb	19:54:22
1	Ti 334.940†	4267400.7	3999097.4	6098.6 ug/L	6098.6 ppb	19:53:56
1	Tl 190.801†	-392.0	-330.4	-1.7458 ug/L	-1.7458 ppb	19:54:22
1	U 409.014†	-11219.5	-9448.9	-254.13 ug/L	-254.13 ppb	19:54:02
1	V 292.402†	53806.9	51806.1	293.13 ug/L	293.13 ppb	19:54:02
1	Zn 213.857†	30856.1	28176.2	246.63 ug/L	246.63 ppb	19:54:22
1	SiO2†	1441071.5	1349647.8	85358 ug/L	85358 ppb	19:55:34
2	Sc Radial	5554.8	5554.8	104 %		19:53:22
2	Y RADIAL	6809.1	6809.1	118.3 %		19:53:22
2	Al 396.153Radial†	224489.2	215801.4	163480 ug/L	163480 ppb	19:53:02
2	Ca 317.933Radial†	14997.3	14397.3	23141 ug/L	23141 ppb	19:53:02
2	Fe 238.204 Radial†	16949.6	16287.2	152220 ug/L	152220 ppb	19:53:02
2	K 766.490 Radial†	105941.6	99342.4	18136 ug/L	18136 ppb	19:53:02
2	Mg 279.077 IEC†	723.3	694.4	24609 ug/L	24609 ppb	19:53:22
2	Na 589.592 Radial†	3954.6	4349.4	1293.0 ug/L	1293.0 ppb	19:53:02
2	Sr 421.552†	51400.4	49406.2	316.90 ug/L	316.90 ppb	19:53:02
2	Sc 361.383	964555.8	964555.8	107.43 %		19:54:34
2	Y 371.029	957975.3	957975.3	116.38 %		19:54:34
2	Ag 328.068†	-10034.8	-9637.1	10.250 ug/L	10.250 ppb	19:54:34
2	As 188.979†	-90.3	-53.9	66.111 ug/L	66.111 ppb	19:54:55
2	B 249.677†	2248.1	2333.1	26.019 ug/L	26.019 ppb	19:54:34
2	Ba 233.527†	409653.7	381336.2	3011.1 ug/L	3011.1 ppb	19:54:34
2	Be 313.107†	-13222.9	-7208.3	11.215 ug/L	11.215 ppb	19:54:34
2	Cd 226.502†	1479.2	1583.1	1.9887 ug/L	1.9887 ppb	19:54:55
2	Co 228.616†	7304.0	6869.0	137.08 ug/L	137.08 ppb	19:54:55
2	Cr 267.716†	11222.9	10353.1	115.74 ug/L	115.74 ppb	19:54:55
2	Cu 324.752†	34989.9	23442.9	73.951 ug/L	73.951 ppb	19:54:34
2	Mn 257.610†	10881808.7	10129025.5	11370 ug/L	11370 ppb	19:54:29
2	Mo 202.031†	-61.9	-81.2	6.5489 ug/L	6.5489 ppb	19:54:55
2	Ni 231.604†	5058.2	4614.8	115.89 ug/L	115.89 ppb	19:54:55

2	P 214.914†	2099.0	1715.2	872.12 ug/L	872.12 ppb	19:54:55
2	Pb 220.353†	1163.1	1143.1	164.24 ug/L	164.24 ppb	19:54:55
2	S 181.975 Axial†	462.3	353.3	455.83 ug/L	455.83 ppb	19:54:55
2	Sb 206.836†	87.6	51.3	-2.9145 ug/L	-2.9145 ppb	19:54:55
2	Se 196.026†	-819.6	-745.0	84.004 ug/L	84.004 ppb	19:54:55
2	Si 251.611†	1428914.3	1329633.1	39397 ug/L	39397 ppb	19:54:34
2	Sn 189.927†	-135.3	-125.6	-17.014 ug/L	-17.014 ppb	19:54:55
2	Ti 334.940†	4268821.8	3974611.4	6061.3 ug/L	6061.3 ppb	19:54:29
2	Tl 190.801†	-380.8	-317.6	1.7227 ug/L	1.7227 ppb	19:54:55
2	U 409.014†	-11314.3	-9469.3	-254.38 ug/L	-254.38 ppb	19:54:34
2	V 292.402†	53781.3	51456.8	291.32 ug/L	291.32 ppb	19:54:34
2	Zn 213.857†	30843.7	27978.0	245.01 ug/L	245.01 ppb	19:54:55
2	SiO2†	1474684.5	1372221.5	86786 ug/L	86786 ppb	19:55:39
3	Sc Radial	5600.6	5600.6	105 %		19:53:47
3	Y RADIAL	6860.2	6860.2	119.2 %		19:53:47
3	Al 396.153Radial†	224086.0	213652.5	161850 ug/L	161850 ppb	19:53:27
3	Ca 317.933Radial†	14935.9	14220.8	22857 ug/L	22857 ppb	19:53:27
3	Fe 238.204 Radial†	16929.0	16134.3	150790 ug/L	150790 ppb	19:53:27
3	K 766.490 Radial†	105424.8	98017.0	17893 ug/L	17893 ppb	19:53:27
3	Mg 279.077 IEC†	717.5	683.2	24211 ug/L	24211 ppb	19:53:47
3	Na 589.592 Radial†	3949.8	4313.7	1282.3 ug/L	1282.3 ppb	19:53:27
3	Sr 421.552†	51094.1	48710.2	312.44 ug/L	312.44 ppb	19:53:27
3	Sc 361.383	964109.9	964109.9	107.38 %		19:55:07
3	Y 371.029	960386.4	960386.4	116.68 %		19:55:07
3	Ag 328.068†	-10168.3	-9765.7	9.2701 ug/L	9.2701 ppb	19:55:07
3	As 188.979†	-97.2	-60.4	63.456 ug/L	63.456 ppb	19:55:27
3	B 249.677†	2320.8	2401.8	27.757 ug/L	27.757 ppb	19:55:07
3	Ba 233.527†	413877.6	385446.2	3043.5 ug/L	3043.5 ppb	19:55:07
3	Be 313.107†	-13804.4	-7755.6	11.107 ug/L	11.107 ppb	19:55:07
3	Cd 226.502†	1504.4	1607.2	2.4059 ug/L	2.4059 ppb	19:55:27
3	Co 228.616†	7300.2	6868.6	137.02 ug/L	137.02 ppb	19:55:27
3	Cr 267.716†	11191.2	10328.4	115.45 ug/L	115.45 ppb	19:55:27
3	Cu 324.752†	35372.8	23814.6	74.918 ug/L	74.918 ppb	19:55:07
3	Mn 257.610†	10923170.5	10172231.0	11419 ug/L	11419 ppb	19:55:02
3	Mo 202.031†	-64.9	-84.0	6.2428 ug/L	6.2428 ppb	19:55:27
3	Ni 231.604†	5052.9	4612.1	115.82 ug/L	115.82 ppb	19:55:27
3	P 214.914†	2089.0	1706.8	867.93 ug/L	867.93 ppb	19:55:27
3	Pb 220.353†	1158.7	1139.5	163.56 ug/L	163.56 ppb	19:55:27
3	S 181.975 Axial†	466.1	357.0	461.25 ug/L	461.25 ppb	19:55:27
3	Sb 206.836†	90.1	53.7	-2.1978 ug/L	-2.1978 ppb	19:55:27
3	Se 196.026†	-816.9	-742.8	80.434 ug/L	80.434 ppb	19:55:27
3	Si 251.611†	1442392.5	1342800.5	39787 ug/L	39787 ppb	19:55:07
3	Sn 189.927†	-124.6	-115.7	-15.262 ug/L	-15.262 ppb	19:55:27
3	Ti 334.940†	4293031.1	3998995.5	6098.4 ug/L	6098.4 ppb	19:55:02
3	Tl 190.801†	-390.8	-327.1	-0.7923 ug/L	-0.7923 ppb	19:55:27
3	U 409.014†	-11342.8	-9500.6	-255.00 ug/L	-255.00 ppb	19:55:07
3	V 292.402†	54403.3	52059.2	295.22 ug/L	295.22 ppb	19:55:07
3	Zn 213.857†	30899.1	28042.8	245.75 ug/L	245.75 ppb	19:55:27
3	SiO2†	1454741.9	1354284.1	85651 ug/L	85651 ppb	19:55:45

Mean Data: 244128001|940124|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Units			Conc. Units		
Sc 361.383	962331.7	107.18 %		0.387			0.36%
Sc Radial	5532.2	104 %		1.5			1.48%
Y 371.029	957485.0	116.32 %		0.386			0.33%
Y RADIAL	6783.4	117.8 %		1.60			1.36%
Ag 328.068†	-9696.5	10.096 ug/L		0.7613	10.096 ppb	0.7613	7.54%
Al 396.153Radial†	215804.9	163480 ug/L		1631.8	163480 ppb	1631.8	1.00%
As 188.979†	-57.6	64.869 ug/L		1.3355	64.869 ppb	1.3355	2.06%
B 249.677†	2395.9	27.350 ug/L		1.1823	27.350 ppb	1.1823	4.32%
Ba 233.527†	383829.4	3030.8 ug/L		17.27	3030.8 ppb	17.27	0.57%
Be 313.107†	-7495.0	11.171 ug/L		0.0568	11.171 ppb	0.0568	0.51%
Ca 317.933Radial†	14381.4	23115 ug/L		246.3	23115 ppb	246.3	1.07%
Cd 226.502†	1596.6	2.1128 ug/L		0.25488	2.1128 ppb	0.25488	12.06%
Co 228.616†	6890.0	137.49 ug/L		0.762	137.49 ppb	0.762	0.55%
Cr 267.716†	10368.7	115.92 ug/L		0.577	115.92 ppb	0.577	0.50%
Cu 324.752†	23679.9	74.630 ug/L		0.5903	74.630 ppb	0.5903	0.79%
Fe 238.204 Radial†	16315.5	152480 ug/L		1840.8	152480 ppb	1840.8	1.21%
K 766.490 Radial†	99252.0	18119 ug/L		217.7	18119 ppb	217.7	1.20%

Mg 279.077 IEC†	693.4	24575 ug/L	347.9	24575 ppb	347.9	1.42%
Mn 257.610†	10164999.7	11411 ug/L	37.0	11411 ppb	37.0	0.32%
Mo 202.031†	-84.3	6.3566 ug/L	0.16742	6.3566 ppb	0.16742	2.63%
Na 589.592 Radial†	4351.7	1293.6 ug/L	11.64	1293.6 ppb	11.64	0.90%
Ni 231.604†	4628.0	116.22 ug/L	0.633	116.22 ppb	0.633	0.54%
P 214.914†	1714.5	871.42 ug/L	3.200	871.42 ppb	3.200	0.37%
Pb 220.353†	1142.2	164.10 ug/L	0.477	164.10 ppb	0.477	0.29%
S 181.975 Axial†	355.9	459.42 ug/L	3.113	459.42 ppb	3.113	0.68%
Sb 206.836†	55.1	-1.6931 ug/L	1.53706	-1.6931 ppb	1.53706	90.78%
Se 196.026†	-738.9	88.392 ug/L	10.8404	88.392 ppb	10.8404	12.26%
Si 251.611†	1337763.9	39638 ug/L	210.6	39638 ppb	210.6	0.53%
Sn 189.927†	-122.4	-16.437 ug/L	1.0178	-16.437 ppb	1.0178	6.19%
Sr 421.552†	49344.0	316.50 ug/L	3.881	316.50 ppb	3.881	1.23%
Ti 334.940†	3990901.4	6086.1 ug/L	21.51	6086.1 ppb	21.51	0.35%
Tl 190.801†	-325.0	-0.2718 ug/L	1.79188	-0.2718 ppb	1.79188	659.23%
U 409.014†	-9472.9	-254.51 ug/L	0.450	-254.51 ppb	0.450	0.18%
V 292.402†	51774.0	293.22 ug/L	1.953	293.22 ppb	1.953	0.67%
Zn 213.857†	28065.7	245.80 ug/L	0.812	245.80 ppb	0.812	0.33%
SiO2†	1358717.8	85932 ug/L	754.0	85932 ppb	754.0	0.88%

Sequence No.: 38

Sample ID: 1202011793|940124|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 67

Date Collected: 1/26/2010 19:57:56

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202011793|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5581.1	5581.1	105 %		20:00:09
1	Y RADIAL	6814.2	6814.2	118.4 %		20:00:09
1	Al 396.153Radial†	206512.8	197585.0	149680 ug/L	149680 ppb	19:59:49
1	Ca 317.933Radial†	14123.1	13492.9	21687 ug/L	21687 ppb	19:59:49
1	Fe 238.204 Radial†	15065.7	14407.9	134650 ug/L	134650 ppb	19:59:49
1	K 766.490 Radial†	104603.1	97582.1	17818 ug/L	17818 ppb	19:59:49
1	Mg 279.077 IEC†	639.4	610.8	21647 ug/L	21647 ppb	20:00:09
1	Na 589.592 Radial†	3082.1	3496.7	1039.5 ug/L	1039.5 ppb	19:59:49
1	Sr 421.552†	47270.3	45221.7	290.06 ug/L	290.06 ppb	19:59:49
1	Sc 361.383	914153.9	914153.9	101.81 %		20:01:13
1	Y 371.029	954100.8	954100.8	115.91 %		20:01:08
1	Ag 328.068†	-9117.1	-9250.7	5.9956 ug/L	5.9956 ppb	20:01:13
1	As 188.979†	-66.9	-35.6	68.362 ug/L	68.362 ppb	20:01:33
1	B 249.677†	1770.1	1979.0	21.355 ug/L	21.355 ppb	20:01:13
1	Ba 233.527†	250478.7	246020.9	1943.9 ug/L	1943.9 ppb	20:01:13
1	Be 313.107†	-13301.2	-7963.9	10.649 ug/L	10.649 ppb	20:01:13
1	Cd 226.502†	1199.2	1384.0	1.5642 ug/L	1.5642 ppb	20:01:33
1	Co 228.616†	2837.4	2856.8	49.136 ug/L	49.136 ppb	20:01:33
1	Cr 267.716†	10090.3	9816.6	109.51 ug/L	109.51 ppb	20:01:33
1	Cu 324.752†	31240.4	21556.0	67.701 ug/L	67.701 ppb	20:01:13
1	Mn 257.610†	2878764.5	2827004.6	3182.0 ug/L	3182.0 ppb	20:01:08
1	Mo 202.031†	-65.6	-88.1	4.7004 ug/L	4.7004 ppb	20:01:33
1	Ni 231.604†	3230.7	3079.5	77.354 ug/L	77.354 ppb	20:01:33
1	P 214.914†	1997.5	1723.2	888.41 ug/L	888.41 ppb	20:01:33
1	Pb 220.353†	829.0	874.7	129.25 ug/L	129.25 ppb	20:01:33
1	S 181.975 Axial†	438.6	353.8	459.12 ug/L	459.12 ppb	20:01:33
1	Sb 206.836†	92.2	60.3	0.3586 ug/L	0.3586 ppb	20:01:33
1	Se 196.026†	-707.7	-677.1	64.193 ug/L	64.193 ppb	20:01:33
1	Si 251.611†	1503060.8	1475795.7	43728 ug/L	43728 ppb	20:01:08
1	Sn 189.927†	-118.0	-115.6	-15.695 ug/L	-15.695 ppb	20:01:33
1	Ti 334.940†	3957654.6	3888076.4	5929.4 ug/L	5929.4 ppb	20:01:08
1	Tl 190.801†	-240.5	-199.3	-0.2240 ug/L	-0.2240 ppb	20:01:33
1	U 409.014†	-8745.8	-7527.2	-203.81 ug/L	-203.81 ppb	20:01:13
1	V 292.402†	44530.4	45130.9	254.71 ug/L	254.71 ppb	20:01:13
1	Zn 213.857†	28246.2	27009.7	237.95 ug/L	237.95 ppb	20:01:33
1	SiO2†	1515699.7	1488192.1	94120 ug/L	94120 ppb	20:02:44
2	Sc Radial	5611.6	5611.6	105 %		20:00:34
2	Y RADIAL	6857.9	6857.9	119.1 %		20:00:34
2	Al 396.153Radial†	205870.6	195900.5	148400 ug/L	148400 ppb	20:00:14
2	Ca 317.933Radial†	14076.0	13374.7	21497 ug/L	21497 ppb	20:00:14
2	Fe 238.204 Radial†	15016.9	14283.1	133490 ug/L	133490 ppb	20:00:14
2	K 766.490 Radial†	104555.3	96992.9	17710 ug/L	17710 ppb	20:00:14
2	Mg 279.077 IEC†	635.0	603.3	21379 ug/L	21379 ppb	20:00:34
2	Na 589.592 Radial†	3076.8	3475.6	1033.2 ug/L	1033.2 ppb	20:00:14
2	Sr 421.552†	47019.5	44737.4	286.95 ug/L	286.95 ppb	20:00:14
2	Sc 361.383	925921.4	925921.4	103.12 %		20:01:45
2	Y 371.029	946154.2	946154.2	114.95 %		20:01:40
2	Ag 328.068†	-9230.3	-9246.7	5.6398 ug/L	5.6398 ppb	20:01:45
2	As 188.979†	-87.8	-54.9	59.137 ug/L	59.137 ppb	20:02:05
2	B 249.677†	1866.8	2050.7	23.121 ug/L	23.121 ppb	20:01:45
2	Ba 233.527†	254394.8	246691.7	1949.2 ug/L	1949.2 ppb	20:01:45
2	Be 313.107†	-13588.2	-8076.2	10.340 ug/L	10.340 ppb	20:01:45
2	Cd 226.502†	1190.3	1360.4	1.4206 ug/L	1.4206 ppb	20:02:05
2	Co 228.616†	2803.5	2788.5	47.910 ug/L	47.910 ppb	20:02:05
2	Cr 267.716†	10060.0	9661.4	107.80 ug/L	107.80 ppb	20:02:05
2	Cu 324.752†	31923.6	21828.5	68.403 ug/L	68.403 ppb	20:01:45
2	Mn 257.610†	2852897.4	2765986.6	3113.5 ug/L	3113.5 ppb	20:01:40
2	Mo 202.031†	-62.7	-84.4	4.8567 ug/L	4.8567 ppb	20:02:05
2	Ni 231.604†	3227.4	3035.9	76.261 ug/L	76.261 ppb	20:02:05

2	P 214.914†	1985.1	1686.2	867.99 ug/L	867.99 ppb	20:02:05
2	Pb 220.353†	849.8	884.5	130.32 ug/L	130.32 ppb	20:02:05
2	S 181.975 Axial†	443.9	353.5	458.88 ug/L	458.88 ppb	20:02:05
2	Sb 206.836†	80.3	47.6	-3.5246 ug/L	-3.5246 ppb	20:02:05
2	Se 196.026†	-725.8	-685.8	55.236 ug/L	55.236 ppb	20:02:05
2	Si 251.611†	1491730.4	1446046.4	42846 ug/L	42846 ppb	20:01:40
2	Sn 189.927†	-132.5	-128.2	-18.060 ug/L	-18.060 ppb	20:02:05
2	Ti 334.940†	3928326.6	3810234.9	5810.7 ug/L	5810.7 ppb	20:01:40
2	Tl 190.801†	-241.0	-196.9	-0.7377 ug/L	-0.7377 ppb	20:02:05
2	U 409.014†	-8814.8	-7484.9	-202.61 ug/L	-202.61 ppb	20:01:45
2	V 292.402†	45240.7	45263.8	255.83 ug/L	255.83 ppb	20:01:45
2	Zn 213.857†	28169.5	26582.8	234.09 ug/L	234.09 ppb	20:02:05
2	SiO2†	1507772.8	1461585.4	92437 ug/L	92437 ppb	20:02:52
3	Sc Radial	5592.1	5592.1	105 %		20:01:00
3	Y RADIAL	6800.1	6800.1	118.1 %		20:01:00
3	Al 396.153Radial†	208055.2	198667.8	150500 ug/L	150500 ppb	20:00:40
3	Ca 317.933Radial†	14197.7	13537.5	21759 ug/L	21759 ppb	20:00:40
3	Fe 238.204 Radial†	15131.4	14442.2	134970 ug/L	134970 ppb	20:00:40
3	K 766.490 Radial†	105251.0	98003.2	17895 ug/L	17895 ppb	20:00:40
3	Mg 279.077 IEC†	633.3	603.8	21396 ug/L	21396 ppb	20:01:00
3	Na 589.592 Radial†	3103.3	3511.0	1043.7 ug/L	1043.7 ppb	20:00:40
3	Sr 421.552†	47365.0	45222.9	290.06 ug/L	290.06 ppb	20:00:40
3	Sc 361.383	916920.0	916920.0	102.12 %		20:02:17
3	Y 371.029	954946.2	954946.2	116.02 %		20:02:11
3	Ag 328.068†	-9188.7	-9293.9	5.9150 ug/L	5.9150 ppb	20:02:17
3	As 188.979†	-73.1	-41.4	65.792 ug/L	65.792 ppb	20:02:37
3	B 249.677†	1800.6	2003.6	21.844 ug/L	21.844 ppb	20:02:17
3	Ba 233.527†	251273.7	246057.2	1944.2 ug/L	1944.2 ppb	20:02:17
3	Be 313.107†	-13682.6	-8297.9	10.460 ug/L	10.460 ppb	20:02:17
3	Cd 226.502†	1201.5	1382.7	1.5172 ug/L	1.5172 ppb	20:02:37
3	Co 228.616†	2840.9	2851.9	49.089 ug/L	49.089 ppb	20:02:37
3	Cr 267.716†	10156.8	9851.9	109.89 ug/L	109.89 ppb	20:02:37
3	Cu 324.752†	31228.0	21451.3	67.424 ug/L	67.424 ppb	20:02:17
3	Mn 257.610†	2864029.0	2804045.5	3156.3 ug/L	3156.3 ppb	20:02:11
3	Mo 202.031†	-68.7	-90.9	4.5316 ug/L	4.5316 ppb	20:02:37
3	Ni 231.604†	3243.3	3082.2	77.423 ug/L	77.423 ppb	20:02:37
3	P 214.914†	2002.6	1722.2	887.90 ug/L	887.90 ppb	20:02:37
3	Pb 220.353†	834.4	877.4	129.74 ug/L	129.74 ppb	20:02:37
3	S 181.975 Axial†	439.8	353.6	458.71 ug/L	458.71 ppb	20:02:37
3	Sb 206.836†	87.7	55.6	-1.0985 ug/L	-1.0985 ppb	20:02:37
3	Se 196.026†	-732.2	-699.1	52.640 ug/L	52.640 ppb	20:02:37
3	Si 251.611†	1498565.6	1466940.4	43465 ug/L	43465 ppb	20:02:11
3	Sn 189.927†	-101.7	-99.3	-12.680 ug/L	-12.680 ppb	20:02:37
3	Ti 334.940†	3948558.3	3867442.6	5897.9 ug/L	5897.9 ppb	20:02:11
3	Tl 190.801†	-238.0	-196.2	0.4018 ug/L	0.4018 ppb	20:02:37
3	U 409.014†	-8733.1	-7488.8	-202.88 ug/L	-202.88 ppb	20:02:17
3	V 292.402†	44565.5	45033.4	254.08 ug/L	254.08 ppb	20:02:17
3	Zn 213.857†	28414.8	27091.1	238.67 ug/L	238.67 ppb	20:02:37
3	SiO2†	1505885.0	1474090.2	93228 ug/L	93228 ppb	20:02:59

Mean Data: 1202011793|940124|1

Analyte	Mean Corrected	Conc. Units	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity				Conc. Units		
Sc 361.383	918998.4	102.35 %		0.685			0.67%
Sc Radial	5594.9	105 %		0.3			0.28%
Y 371.029	951733.8	115.62 %		0.589			0.51%
Y RADIAL	6824.1	118.5 %		0.52			0.44%
Ag 328.068†	-9263.8	5.8501 ug/L		0.18655	5.8501 ppb	0.18655	3.19%
Al 396.153Radial†	197384.4	149520 ug/L		1056.4	149520 ppb	1056.4	0.71%
As 188.979†	-44.0	64.430 ug/L		4.7607	64.430 ppb	4.7607	7.39%
B 249.677†	2011.1	22.107 ug/L		0.9116	22.107 ppb	0.9116	4.12%
Ba 233.527†	246256.6	1945.8 ug/L		2.95	1945.8 ppb	2.95	0.15%
Be 313.107†	-8112.7	10.483 ug/L		0.1558	10.483 ppb	0.1558	1.49%
Ca 317.933Radial†	13468.4	21648 ug/L		135.2	21648 ppb	135.2	0.62%
Cd 226.502†	1375.7	1.5006 ug/L		0.07322	1.5006 ppb	0.07322	4.88%
Co 228.616†	2832.4	48.712 ug/L		0.6950	48.712 ppb	0.6950	1.43%
Cr 267.716†	9776.6	109.07 ug/L		1.113	109.07 ppb	1.113	1.02%
Cu 324.752†	21612.0	67.843 ug/L		0.5048	67.843 ppb	0.5048	0.74%
Fe 238.204 Radial†	14377.7	134370 ug/L		782.3	134370 ppb	782.3	0.58%
K 766.490 Radial†	97526.1	17808 ug/L		92.6	17808 ppb	92.6	0.52%

Mg 279.077 IEC†	606.0	21474 ug/L	150.1	21474 ppb	150.1	0.70%
Mn 257.610†	2799012.2	3150.6 ug/L	34.61	3150.6 ppb	34.61	1.10%
Mo 202.031†	-87.8	4.6963 ug/L	0.16259	4.6963 ppb	0.16259	3.46%
Na 589.592 Radial†	3494.4	1038.8 ug/L	5.30	1038.8 ppb	5.30	0.51%
Ni 231.604†	3065.9	77.013 ug/L	0.6520	77.013 ppb	0.6520	0.85%
P 214.914†	1710.5	881.44 ug/L	11.647	881.44 ppb	11.647	1.32%
Pb 220.353†	878.9	129.77 ug/L	0.534	129.77 ppb	0.534	0.41%
S 181.975 Axial†	353.7	458.90 ug/L	0.209	458.90 ppb	0.209	0.05%
Sb 206.836†	54.5	-1.4215 ug/L	1.96166	-1.4215 ppb	1.96166	138.00%
Se 196.026†	-687.3	57.356 ug/L	6.0616	57.356 ppb	6.0616	10.57%
Si 251.611†	1462927.5	43346 ug/L	452.6	43346 ppb	452.6	1.04%
Sn 189.927†	-114.4	-15.478 ug/L	2.6963	-15.478 ppb	2.6963	17.42%
Sr 421.552†	45060.7	289.02 ug/L	1.796	289.02 ppb	1.796	0.62%
Ti 334.940†	3855251.3	5879.3 ug/L	61.49	5879.3 ppb	61.49	1.05%
Tl 190.801†	-197.5	-0.1867 ug/L	0.57066	-0.1867 ppb	0.57066	305.73%
U 409.014†	-7500.3	-203.10 ug/L	0.626	-203.10 ppb	0.626	0.31%
V 292.402†	45142.7	254.87 ug/L	0.886	254.87 ppb	0.886	0.35%
Zn 213.857†	26894.6	236.90 ug/L	2.464	236.90 ppb	2.464	1.04%
SiO2†	1474622.6	93262 ug/L	841.9	93262 ppb	841.9	0.90%

Sequence No.: 39
 Sample ID: 1202011794|940124|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 68
 Date Collected: 1/26/2010 20:05:11
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202011794|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5616.1	5616.1	105 %		20:07:24
1	Y RADIAL	6862.6	6862.6	119.2 %		20:07:24
1	Al 396.153Radial†	335092.2	318614.8	241340 ug/L	241340 ppb	20:07:04
1	Ca 317.933Radial†	17209.6	16343.6	26269 ug/L	26269 ppb	20:07:04
1	Fe 238.204 Radial†	17806.7	16924.4	158180 ug/L	158180 ppb	20:07:04
1	K 766.490 Radial†	154150.8	144071.5	26306 ug/L	26306 ppb	20:07:04
1	Mg 279.077 IEC†	898.2	853.1	30268 ug/L	30268 ppb	20:07:24
1	Na 589.592 Radial†	20998.4	20514.1	6098.2 ug/L	6098.2 ppb	20:07:04
1	Sr 421.552†	128180.4	121873.8	781.95 ug/L	781.95 ppb	20:07:04
1	Sc 361.383	964401.3	964401.3	107.41 %		20:08:23
1	Y 371.029	946517.6	946517.6	114.99 %		20:08:23
1	Ag 328.068†	110190.2	102292.8	480.52 ug/L	480.52 ppb	20:08:28
1	As 188.979†	1081.5	1037.1	524.31 ug/L	524.31 ppb	20:08:48
1	B 249.677†	23376.2	22004.0	455.43 ug/L	455.43 ppb	20:08:28
1	Ba 233.527†	325345.5	302905.0	2394.0 ug/L	2394.0 ppb	20:08:28
1	Be 313.107†	1435705.4	1341765.2	490.07 ug/L	490.07 ppb	20:08:23
1	Cd 226.502†	42761.9	40018.2	431.06 ug/L	431.06 ppb	20:08:48
1	Co 228.616†	24777.0	23137.8	491.33 ug/L	491.33 ppb	20:08:48
1	Cr 267.716†	55482.7	51561.3	562.97 ug/L	562.97 ppb	20:08:28
1	Cu 324.752†	224316.0	199713.8	568.46 ug/L	568.46 ppb	20:08:28
1	Mn 257.610†	3390114.8	3155761.2	3552.5 ug/L	3552.5 ppb	20:08:23
1	Mo 202.031†	6295.8	5837.9	411.02 ug/L	411.02 ppb	20:08:48
1	Ni 231.604†	22040.2	20426.1	513.03 ug/L	513.03 ppb	20:08:48
1	P 214.914†	3050.6	2601.5	1292.7 ug/L	1292.7 ppb	20:08:48
1	Pb 220.353†	4495.4	4245.7	570.51 ug/L	570.51 ppb	20:08:48
1	S 181.975 Axial†	4143.8	3781.0	5160.5 ug/L	5160.5 ppb	20:08:48
1	Sb 206.836†	898.0	805.8	260.28 ug/L	260.28 ppb	20:08:48
1	Se 196.026†	-18.3	0.9	540.13 ug/L	540.13 ppb	20:08:48
1	Si 251.611†	1607497.7	1496110.1	44325 ug/L	44325 ppb	20:08:23
1	Sn 189.927†	2568.5	2391.6	446.44 ug/L	446.44 ppb	20:08:48
1	Ti 334.940†	5196359.5	4838800.3	7378.5 ug/L	7378.5 ppb	20:08:23
1	Tl 190.801†	1216.9	1169.8	448.70 ug/L	448.70 ppb	20:08:48
1	U 409.014†	11083.2	11381.5	265.31 ug/L	265.31 ppb	20:08:28
1	V 292.402†	126913.9	119552.4	719.18 ug/L	719.18 ppb	20:08:28
1	Zn 213.857†	87077.0	80336.6	728.93 ug/L	728.93 ppb	20:08:28
1	SiO2†	1579030.6	1469589.3	92933 ug/L	92933 ppb	20:10:01
2	Sc Radial	5594.5	5594.5	105 %		20:07:49
2	Y RADIAL	6785.8	6785.8	117.9 %		20:07:49
2	Al 396.153Radial†	333896.7	318699.8	241400 ug/L	241400 ppb	20:07:29
2	Ca 317.933Radial†	17112.6	16313.9	26221 ug/L	26221 ppb	20:07:29
2	Fe 238.204 Radial†	17684.3	16872.8	157700 ug/L	157700 ppb	20:07:29
2	K 766.490 Radial†	153938.5	144432.9	26372 ug/L	26372 ppb	20:07:29
2	Mg 279.077 IEC†	898.2	856.4	30385 ug/L	30385 ppb	20:07:49
2	Na 589.592 Radial†	21019.0	20610.5	6126.9 ug/L	6126.9 ppb	20:07:29
2	Sr 421.552†	127995.7	122166.5	783.83 ug/L	783.83 ppb	20:07:29
2	Sc 361.383	951416.4	951416.4	105.96 %		20:08:55
2	Y 371.029	935761.1	935761.1	113.68 %		20:08:55
2	Ag 328.068†	110025.8	103537.8	485.60 ug/L	485.60 ppb	20:09:01
2	As 188.979†	1084.5	1053.7	530.98 ug/L	530.98 ppb	20:09:21
2	B 249.677†	23319.4	22247.4	460.81 ug/L	460.81 ppb	20:09:01
2	Ba 233.527†	325489.8	307175.1	2427.7 ug/L	2427.7 ppb	20:09:01
2	Be 313.107†	1421090.9	1346215.9	491.65 ug/L	491.65 ppb	20:08:55
2	Cd 226.502†	43067.0	40849.5	440.40 ug/L	440.40 ppb	20:09:21
2	Co 228.616†	24986.0	23649.8	502.59 ug/L	502.59 ppb	20:09:21
2	Cr 267.716†	55622.2	52398.0	572.05 ug/L	572.05 ppb	20:09:01
2	Cu 324.752†	223500.2	201794.2	574.27 ug/L	574.27 ppb	20:09:01
2	Mn 257.610†	3347564.8	3158682.3	3555.8 ug/L	3555.8 ppb	20:08:55
2	Mo 202.031†	6348.3	5967.4	419.82 ug/L	419.82 ppb	20:09:21
2	Ni 231.604†	22220.9	20876.7	524.35 ug/L	524.35 ppb	20:09:21

2	P 214.914†	3093.0	2680.2	1336.4 ug/L	1336.4 ppb	20:09:21
2	Pb 220.353†	4521.8	4327.7	580.89 ug/L	580.89 ppb	20:09:21
2	S 181.975 Axial†	4184.4	3871.9	5285.7 ug/L	5285.7 ppb	20:09:21
2	Sb 206.836†	905.3	824.1	266.73 ug/L	266.73 ppb	20:09:21
2	Se 196.026†	-9.8	8.7	543.04 ug/L	543.04 ppb	20:09:21
2	Si 251.611†	1587762.1	1497910.8	44378 ug/L	44378 ppb	20:08:55
2	Sn 189.927†	2580.8	2435.9	454.57 ug/L	454.57 ppb	20:09:21
2	Ti 334.940†	5128799.1	4841069.5	7381.9 ug/L	7381.9 ppb	20:08:55
2	Tl 190.801†	1238.1	1205.3	460.02 ug/L	460.02 ppb	20:09:21
2	U 409.014†	10861.7	11313.2	263.64 ug/L	263.64 ppb	20:09:01
2	V 292.402†	127073.0	121315.2	730.33 ug/L	730.33 ppb	20:09:01
2	Zn 213.857†	87078.2	81444.2	739.21 ug/L	739.21 ppb	20:09:01
2	SiO2†	1590420.6	1500402.3	94881 ug/L	94881 ppb	20:10:08
3	Sc Radial	5606.3	5606.3	105 %		20:08:14
3	Y RADIAL	6809.4	6809.4	118.3 %		20:08:14
3	Al 396.153Radial†	332108.9	316329.2	239610 ug/L	239610 ppb	20:07:54
3	Ca 317.933Radial†	17122.8	16289.5	26182 ug/L	26182 ppb	20:07:54
3	Fe 238.204 Radial†	17691.0	16843.8	157430 ug/L	157430 ppb	20:07:54
3	K 766.490 Radial†	153185.5	143407.9	26185 ug/L	26185 ppb	20:07:54
3	Mg 279.077 IEC†	896.7	853.1	30270 ug/L	30270 ppb	20:08:14
3	Na 589.592 Radial†	20817.3	20376.4	6057.3 ug/L	6057.3 ppb	20:07:54
3	Sr 421.552†	127054.3	121013.9	776.44 ug/L	776.44 ppb	20:07:54
3	Sc 361.383	950304.6	950304.6	105.84 %		20:09:28
3	Y 371.029	932887.1	932887.1	113.34 %		20:09:28
3	Ag 328.068†	110258.3	103878.9	486.94 ug/L	486.94 ppb	20:09:33
3	As 188.979†	1090.6	1060.6	533.86 ug/L	533.86 ppb	20:09:53
3	B 249.677†	23448.1	22394.8	464.09 ug/L	464.09 ppb	20:09:33
3	Ba 233.527†	326426.4	308419.4	2437.5 ug/L	2437.5 ppb	20:09:33
3	Be 313.107†	1419473.6	1346256.9	491.69 ug/L	491.69 ppb	20:09:28
3	Cd 226.502†	43050.9	40881.8	440.79 ug/L	440.79 ppb	20:09:53
3	Co 228.616†	24978.8	23670.5	503.02 ug/L	503.02 ppb	20:09:53
3	Cr 267.716†	55616.0	52453.6	572.65 ug/L	572.65 ppb	20:09:33
3	Cu 324.752†	223896.4	202415.3	576.00 ug/L	576.00 ppb	20:09:33
3	Mn 257.610†	3353781.1	3168251.8	3566.5 ug/L	3566.5 ppb	20:09:28
3	Mo 202.031†	6329.9	5957.0	419.09 ug/L	419.09 ppb	20:09:53
3	Ni 231.604†	22215.0	20895.6	524.83 ug/L	524.83 ppb	20:09:53
3	P 214.914†	3099.5	2689.7	1341.2 ug/L	1341.2 ppb	20:09:53
3	Pb 220.353†	4538.2	4348.2	583.10 ug/L	583.10 ppb	20:09:53
3	S 181.975 Axial†	4170.7	3863.6	5274.5 ug/L	5274.5 ppb	20:09:53
3	Sb 206.836†	909.7	829.2	268.48 ug/L	268.48 ppb	20:09:53
3	Se 196.026†	11.3	28.6	553.53 ug/L	553.53 ppb	20:09:53
3	Si 251.611†	1589547.1	1501350.4	44480 ug/L	44480 ppb	20:09:28
3	Sn 189.927†	2594.5	2451.7	457.47 ug/L	457.47 ppb	20:09:53
3	Ti 334.940†	5130635.4	4848467.4	7393.2 ug/L	7393.2 ppb	20:09:28
3	Tl 190.801†	1218.3	1188.0	454.63 ug/L	454.63 ppb	20:09:53
3	U 409.014†	10870.1	11333.2	264.17 ug/L	264.17 ppb	20:09:33
3	V 292.402†	126884.9	121277.8	730.11 ug/L	730.11 ppb	20:09:33
3	Zn 213.857†	87190.6	81646.6	741.12 ug/L	741.12 ppb	20:09:33
3	SiO2†	1598812.3	1510087.0	95494 ug/L	95494 ppb	20:10:15

Mean Data: 1202011794|940124|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Units			Conc. Units		
Sc 361.383	955374.1	106.40 %		0.873			0.82%
Sc Radial	5605.6	105 %		0.2			0.19%
Y 371.029	938388.6	114.00 %		0.873			0.77%
Y RADIAL	6819.3	118.4 %		0.68			0.58%
Ag 328.068†	103236.5	484.35 ug/L		3.388	484.35 ppb	3.388	0.70%
Al 396.153Radial†	317881.2	240780 ug/L		1018.8	240780 ppb	1018.8	0.42%
As 188.979†	1050.5	529.72 ug/L		4.902	529.72 ppb	4.902	0.93%
B 249.677†	22215.4	460.11 ug/L		4.373	460.11 ppb	4.373	0.95%
Ba 233.527†	306166.5	2419.7 ug/L		22.80	2419.7 ppb	22.80	0.94%
Be 313.107†	1344746.0	491.14 ug/L		0.923	491.14 ppb	0.923	0.19%
Ca 317.933Radial†	16315.7	26224 ug/L		43.6	26224 ppb	43.6	0.17%
Cd 226.502†	40583.2	437.42 ug/L		5.510	437.42 ppb	5.510	1.26%
Co 228.616†	23486.0	498.98 ug/L		6.630	498.98 ppb	6.630	1.33%
Cr 267.716†	52137.6	569.22 ug/L		5.421	569.22 ppb	5.421	0.95%
Cu 324.752†	201307.7	572.91 ug/L		3.950	572.91 ppb	3.950	0.69%
Fe 238.204 Radial†	16880.3	157770 ug/L		381.6	157770 ppb	381.6	0.24%
K 766.490 Radial†	143970.7	26288 ug/L		95.0	26288 ppb	95.0	0.36%

Mg 279.077 IEC†	854.2	30308 ug/L	67.1	30308 ppb	67.1	0.22%
Mn 257.610†	3160898.4	3558.2 ug/L	7.29	3558.2 ppb	7.29	0.20%
Mo 202.031†	5920.8	416.64 ug/L	4.883	416.64 ppb	4.883	1.17%
Na 589.592 Radial†	20500.3	6094.2 ug/L	34.97	6094.2 ppb	34.97	0.57%
Ni 231.604†	20732.8	520.74 ug/L	6.676	520.74 ppb	6.676	1.28%
P 214.914†	2657.1	1323.4 ug/L	26.75	1323.4 ppb	26.75	2.02%
Pb 220.353†	4307.2	578.16 ug/L	6.717	578.16 ppb	6.717	1.16%
S 181.975 Axial†	3838.8	5240.3 ug/L	69.28	5240.3 ppb	69.28	1.32%
Sb 206.836†	819.7	265.17 ug/L	4.318	265.17 ppb	4.318	1.63%
Se 196.026†	12.8	545.57 ug/L	7.047	545.57 ppb	7.047	1.29%
Si 251.611†	1498457.1	44394 ug/L	78.8	44394 ppb	78.8	0.18%
Sn 189.927†	2426.4	452.83 ug/L	5.717	452.83 ppb	5.717	1.26%
Sr 421.552†	121684.7	780.74 ug/L	3.845	780.74 ppb	3.845	0.49%
Ti 334.940†	4842779.1	7384.5 ug/L	7.70	7384.5 ppb	7.70	0.10%
Tl 190.801†	1187.7	454.45 ug/L	5.661	454.45 ppb	5.661	1.25%
U 409.014†	11342.6	264.38 ug/L	0.854	264.38 ppb	0.854	0.32%
V 292.402†	120715.2	726.54 ug/L	6.376	726.54 ppb	6.376	0.88%
Zn 213.857†	81142.5	736.42 ug/L	6.557	736.42 ppb	6.557	0.89%
SiO2†	1493359.5	94436 ug/L	1337.3	94436 ppb	1337.3	1.42%

Sequence No.: 40

Sample ID: 1202011796|940124|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 69

Date Collected: 1/26/2010 20:12:27

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202011796|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5572.6	5572.6	104 %		20:14:40
1	Y RADIAL	6754.2	6754.2	117.3 %		20:14:40
1	Al 396.153Radial†	323142.5	309648.7	234550 ug/L	234550 ppb	20:14:20
1	Ca 317.933Radial†	17400.8	16654.5	26769 ug/L	26769 ppb	20:14:20
1	Fe 238.204 Radial†	17111.8	16390.5	153190 ug/L	153190 ppb	20:14:20
1	K 766.490 Radial†	151244.0	142429.1	26006 ug/L	26006 ppb	20:14:20
1	Mg 279.077 IEC†	882.7	844.9	29980 ug/L	29980 ppb	20:14:40
1	Na 589.592 Radial†	21226.4	20888.2	6209.5 ug/L	6209.5 ppb	20:14:20
1	Sr 421.552†	129685.3	124266.5	797.30 ug/L	797.30 ppb	20:14:20
1	Sc 361.383	920266.7	920266.7	102.49 %		20:15:44
1	Y 371.029	932936.8	932936.8	113.34 %		20:15:39
1	Ag 328.068†	111734.5	108719.5	505.81 ug/L	505.81 ppb	20:15:44
1	As 188.979†	1113.6	1116.7	553.47 ug/L	553.47 ppb	20:16:04
1	B 249.677†	23651.7	23316.6	484.94 ug/L	484.94 ppb	20:15:44
1	Ba 233.527†	353109.7	344520.3	2721.9 ug/L	2721.9 ppb	20:15:44
1	Be 313.107†	1427629.2	1397989.9	509.34 ug/L	509.34 ppb	20:15:39
1	Cd 226.502†	44475.2	43599.2	471.60 ug/L	471.60 ppb	20:15:44
1	Co 228.616†	24958.3	24420.9	520.25 ug/L	520.25 ppb	20:16:04
1	Cr 267.716†	55574.0	54127.8	590.73 ug/L	590.73 ppb	20:15:44
1	Cu 324.752†	224858.0	210258.3	597.77 ug/L	597.77 ppb	20:15:44
1	Mn 257.610†	3565392.5	3478142.8	3913.5 ug/L	3913.5 ppb	20:15:39
1	Mo 202.031†	6388.6	6209.5	436.00 ug/L	436.00 ppb	20:16:04
1	Ni 231.604†	22302.6	21666.2	544.18 ug/L	544.18 ppb	20:16:04
1	P 214.914†	3159.8	2844.1	1426.2 ug/L	1426.2 ppb	20:16:04
1	Pb 220.353†	4583.9	4532.7	605.62 ug/L	605.62 ppb	20:16:04
1	S 181.975 Axial†	4248.6	4068.2	5557.3 ug/L	5557.3 ppb	20:16:04
1	Sb 206.836†	923.5	870.8	283.92 ug/L	283.92 ppb	20:16:04
1	Se 196.026†	17.6	35.1	543.01 ug/L	543.01 ppb	20:16:04
1	Si 251.611†	1572468.8	1533708.6	45438 ug/L	45438 ppb	20:15:39
1	Sn 189.927†	2592.1	2529.4	471.76 ug/L	471.76 ppb	20:16:04
1	Ti 334.940†	4792156.4	4676451.3	7131.0 ug/L	7131.0 ppb	20:15:39
1	Tl 190.801†	1258.6	1264.9	478.61 ug/L	478.61 ppb	20:16:04
1	U 409.014†	11362.6	12148.9	285.01 ug/L	285.01 ppb	20:15:44
1	V 292.402†	125634.2	123970.6	748.02 ug/L	748.02 ppb	20:15:44
1	Zn 213.857†	86613.3	83772.3	761.17 ug/L	761.17 ppb	20:15:44
1	SiO2†	1576460.4	1537585.6	97232 ug/L	97232 ppb	20:17:15
2	Sc Radial	5670.4	5670.4	106 %		20:15:05
2	Y RADIAL	6862.6	6862.6	119.2 %		20:15:05
2	Al 396.153Radial†	322328.0	303544.3	229920 ug/L	229920 ppb	20:14:45
2	Ca 317.933Radial†	17330.8	16301.1	26201 ug/L	26201 ppb	20:14:45
2	Fe 238.204 Radial†	17170.2	16162.9	151070 ug/L	151070 ppb	20:14:45
2	K 766.490 Radial†	151373.3	140052.8	25572 ug/L	25572 ppb	20:14:45
2	Mg 279.077 IEC†	886.4	833.8	29587 ug/L	29587 ppb	20:15:05
2	Na 589.592 Radial†	21254.6	20564.2	6113.2 ug/L	6113.2 ppb	20:14:45
2	Sr 421.552†	129316.1	121776.8	781.33 ug/L	781.33 ppb	20:14:45
2	Sc 361.383	921656.0	921656.0	102.65 %		20:16:16
2	Y 371.029	934764.6	934764.6	113.56 %		20:16:11
2	Ag 328.068†	112062.3	108874.6	505.79 ug/L	505.79 ppb	20:16:16
2	As 188.979†	1089.4	1091.5	542.86 ug/L	542.86 ppb	20:16:36
2	B 249.677†	23828.5	23454.1	488.31 ug/L	488.31 ppb	20:16:16
2	Ba 233.527†	354878.7	345724.3	2731.4 ug/L	2731.4 ppb	20:16:16
2	Be 313.107†	1434883.0	1402957.0	511.15 ug/L	511.15 ppb	20:16:11
2	Cd 226.502†	44683.0	43736.1	473.35 ug/L	473.35 ppb	20:16:16
2	Co 228.616†	24971.7	24397.3	519.72 ug/L	519.72 ppb	20:16:36
2	Cr 267.716†	55860.4	54325.0	592.83 ug/L	592.83 ppb	20:16:16
2	Cu 324.752†	225423.2	210478.3	598.27 ug/L	598.27 ppb	20:16:16
2	Mn 257.610†	3582501.4	3489566.7	3926.1 ug/L	3926.1 ppb	20:16:11
2	Mo 202.031†	6399.9	6211.2	435.94 ug/L	435.94 ppb	20:16:36
2	Ni 231.604†	22226.6	21559.4	541.50 ug/L	541.50 ppb	20:16:36

2	P 214.914†	3165.5	2845.1	1427.2 ug/L	1427.2 ppb	20:16:36
2	Pb 220.353†	4592.3	4534.2	605.01 ug/L	605.01 ppb	20:16:36
2	S 181.975 Axial†	4242.6	4056.1	5541.5 ug/L	5541.5 ppb	20:16:36
2	Sb 206.836†	910.4	856.7	279.24 ug/L	279.24 ppb	20:16:36
2	Se 196.026†	22.3	39.7	538.28 ug/L	538.28 ppb	20:16:36
2	Si 251.611†	1581042.7	1539748.6	45617 ug/L	45617 ppb	20:16:11
2	Sn 189.927†	2605.1	2538.2	473.27 ug/L	473.27 ppb	20:16:36
2	Ti 334.940†	4813889.5	4690575.7	7152.5 ug/L	7152.5 ppb	20:16:11
2	Tl 190.801†	1237.8	1242.8	471.77 ug/L	471.77 ppb	20:16:36
2	U 409.014†	11375.9	12145.2	285.15 ug/L	285.15 ppb	20:16:16
2	V 292.402†	126188.6	124326.0	750.51 ug/L	750.51 ppb	20:16:16
2	Zn 213.857†	87261.4	84276.3	766.09 ug/L	766.09 ppb	20:16:16
2	SiO2†	1580926.6	1539618.1	97361 ug/L	97361 ppb	20:17:21
3	Sc Radial	5635.5	5635.5	106 %		20:15:30
3	Y RADIAL	6843.5	6843.5	118.9 %		20:15:30
3	Al 396.153Radial†	328885.8	311632.9	236050 ug/L	236050 ppb	20:15:10
3	Ca 317.933Radial†	17568.3	16626.9	26724 ug/L	26724 ppb	20:15:10
3	Fe 238.204 Radial†	17411.6	16491.5	154140 ug/L	154140 ppb	20:15:10
3	K 766.490 Radial†	153924.8	143350.9	26174 ug/L	26174 ppb	20:15:10
3	Mg 279.077 IEC†	886.3	838.8	29764 ug/L	29764 ppb	20:15:30
3	Na 589.592 Radial†	21754.6	21161.6	6290.8 ug/L	6290.8 ppb	20:15:10
3	Sr 421.552†	132280.8	125338.1	804.18 ug/L	804.18 ppb	20:15:10
3	Sc 361.383	920368.1	920368.1	102.51 %		20:16:49
3	Y 371.029	923983.3	923983.3	112.25 %		20:16:43
3	Ag 328.068†	112024.1	108990.1	507.25 ug/L	507.25 ppb	20:16:49
3	As 188.979†	1109.2	1112.3	551.50 ug/L	551.50 ppb	20:17:09
3	B 249.677†	23844.3	23502.0	488.85 ug/L	488.85 ppb	20:16:49
3	Ba 233.527†	353706.4	345064.4	2726.3 ug/L	2726.3 ppb	20:16:49
3	Be 313.107†	1416431.5	1386912.3	505.33 ug/L	505.33 ppb	20:16:43
3	Cd 226.502†	44535.9	43653.5	472.11 ug/L	472.11 ppb	20:16:49
3	Co 228.616†	25049.4	24507.1	522.23 ug/L	522.23 ppb	20:17:09
3	Cr 267.716†	55688.1	54233.0	591.89 ug/L	591.89 ppb	20:16:49
3	Cu 324.752†	225141.8	210511.0	598.53 ug/L	598.53 ppb	20:16:49
3	Mn 257.610†	3542865.9	3455783.4	3888.5 ug/L	3888.5 ppb	20:16:43
3	Mo 202.031†	6419.3	6238.8	438.06 ug/L	438.06 ppb	20:17:09
3	Ni 231.604†	22348.1	21708.2	545.24 ug/L	545.24 ppb	20:17:09
3	P 214.914†	3147.0	2831.4	1418.5 ug/L	1418.5 ppb	20:17:09
3	Pb 220.353†	4614.3	4562.0	609.53 ug/L	609.53 ppb	20:17:09
3	S 181.975 Axial†	4262.6	4081.5	5575.2 ug/L	5575.2 ppb	20:17:09
3	Sb 206.836†	933.5	880.4	287.39 ug/L	287.39 ppb	20:17:09
3	Se 196.026†	22.5	39.9	548.96 ug/L	548.96 ppb	20:17:09
3	Si 251.611†	1563687.6	1524972.9	45179 ug/L	45179 ppb	20:16:43
3	Sn 189.927†	2612.8	2549.3	475.43 ug/L	475.43 ppb	20:17:09
3	Ti 334.940†	4762533.2	4647036.7	7086.2 ug/L	7086.2 ppb	20:16:43
3	Tl 190.801†	1255.4	1261.6	477.04 ug/L	477.04 ppb	20:17:09
3	U 409.014†	11328.4	12114.3	284.03 ug/L	284.03 ppb	20:16:49
3	V 292.402†	125916.0	124232.0	749.58 ug/L	749.58 ppb	20:16:49
3	Zn 213.857†	87034.6	84174.0	764.82 ug/L	764.82 ppb	20:16:49
3	SiO2†	1578573.9	1539477.9	97352 ug/L	97352 ppb	20:17:27

Mean Data: 1202011796|940124|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	920763.6	102.55 %	0.086			0.08%
Sc Radial	5626.2	105 %	0.9			0.88%
Y 371.029	930561.6	113.05 %	0.701			0.62%
Y RADIAL	6820.1	118.5 %	1.00			0.85%
Ag 328.068†	108861.4	506.28 ug/L	0.840	506.28 ppb	0.840	0.17%
Al 396.153Radial†	308275.3	233510 ug/L	3193.4	233510 ppb	3193.4	1.37%
As 188.979†	1106.8	549.28 ug/L	5.641	549.28 ppb	5.641	1.03%
B 249.677†	23424.2	487.37 ug/L	2.115	487.37 ppb	2.115	0.43%
Ba 233.527†	345103.0	2726.5 ug/L	4.72	2726.5 ppb	4.72	0.17%
Be 313.107†	1395953.1	508.61 ug/L	2.974	508.61 ppb	2.974	0.58%
Ca 317.933Radial†	16527.5	26565 ug/L	316.0	26565 ppb	316.0	1.19%
Cd 226.502†	43662.9	472.35 ug/L	0.899	472.35 ppb	0.899	0.19%
Co 228.616†	24441.8	520.74 ug/L	1.320	520.74 ppb	1.320	0.25%
Cr 267.716†	54228.6	591.82 ug/L	1.052	591.82 ppb	1.052	0.18%
Cu 324.752†	210415.9	598.19 ug/L	0.386	598.19 ppb	0.386	0.06%
Fe 238.204 Radial†	16348.3	152800 ug/L	1573.3	152800 ppb	1573.3	1.03%
K 766.490 Radial†	141944.3	25918 ug/L	310.7	25918 ppb	310.7	1.20%

Mg 279.077 IEC†	839.2	29777 ug/L	196.9	29777 ppb	196.9	0.66%
Mn 257.610†	3474497.6	3909.4 ug/L	19.13	3909.4 ppb	19.13	0.49%
Mo 202.031†	6219.8	436.67 ug/L	1.211	436.67 ppb	1.211	0.28%
Na 589.592 Radial†	20871.4	6204.5 ug/L	88.90	6204.5 ppb	88.90	1.43%
Ni 231.604†	21644.6	543.64 ug/L	1.927	543.64 ppb	1.927	0.35%
P 214.914†	2840.2	1424.0 ug/L	4.75	1424.0 ppb	4.75	0.33%
Pb 220.353†	4543.0	606.72 ug/L	2.449	606.72 ppb	2.449	0.40%
S 181.975 Axial†	4068.6	5558.0 ug/L	16.90	5558.0 ppb	16.90	0.30%
Sb 206.836†	869.3	283.52 ug/L	4.086	283.52 ppb	4.086	1.44%
Se 196.026†	38.2	543.42 ug/L	5.350	543.42 ppb	5.350	0.98%
Si 251.611†	1532810.0	45412 ug/L	220.1	45412 ppb	220.1	0.48%
Sn 189.927†	2538.9	473.49 ug/L	1.844	473.49 ppb	1.844	0.39%
Sr 421.552†	123793.8	794.27 ug/L	11.724	794.27 ppb	11.724	1.48%
Ti 334.940†	4671354.6	7123.2 ug/L	33.84	7123.2 ppb	33.84	0.48%
Tl 190.801†	1256.4	475.81 ug/L	3.585	475.81 ppb	3.585	0.75%
U 409.014†	12136.1	284.73 ug/L	0.609	284.73 ppb	0.609	0.21%
V 292.402†	124176.2	749.37 ug/L	1.258	749.37 ppb	1.258	0.17%
Zn 213.857†	84074.2	764.03 ug/L	2.552	764.03 ppb	2.552	0.33%
SiO2†	1538893.9	97315 ug/L	71.8	97315 ppb	71.8	0.07%

Sequence No.: 41
 Sample ID: 1202011795|940124|5
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 70
 Date Collected: 1/26/2010 20:19:37
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202011795|940124|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5611.8	5611.8	105 %		20:21:30
1	Y RADIAL	6207.2	6207.2	107.8 %		20:21:30
1	Al 396.153Radial†	44749.7	42573.9	32251 ug/L	32251 ppb	20:21:30
1	Ca 317.933Radial†	3033.0	2865.9	4606.3 ug/L	4606.3 ppb	20:21:50
1	Fe 238.204 Radial†	3637.7	3454.4	32284 ug/L	32284 ppb	20:21:30
1	K 766.490 Radial†	23368.8	19733.8	3602.4 ug/L	3602.4 ppb	20:21:30
1	Mg 279.077 IEC†	150.6	142.3	5042.3 ug/L	5042.3 ppb	20:21:50
1	Na 589.592 Radial†	136.4	677.5	201.40 ug/L	201.40 ppb	20:21:30
1	Sr 421.552†	10376.8	9867.3	63.291 ug/L	63.291 ppb	20:21:30
1	Sc 361.383	950296.3	950296.3	105.84 %		20:22:48
1	Y 371.029	857957.4	857957.4	104.23 %		20:22:48
1	Ag 328.068†	-1874.5	-2067.1	2.0937 ug/L	2.0937 ppb	20:22:53
1	As 188.979†	-42.5	-10.0	14.404 ug/L	14.404 ppb	20:23:13
1	B 249.677†	410.5	628.3	8.4462 ug/L	8.4462 ppb	20:22:53
1	Ba 233.527†	85069.7	80379.9	634.70 ug/L	634.70 ppb	20:22:53
1	Be 313.107†	-6914.4	-1432.6	2.3570 ug/L	2.3570 ppb	20:22:53
1	Cd 226.502†	150.0	347.9	0.5543 ug/L	0.5543 ppb	20:23:13
1	Co 228.616†	1448.3	1438.4	28.718 ug/L	28.718 ppb	20:23:13
1	Cr 267.716†	2428.7	2200.8	24.608 ug/L	24.608 ppb	20:22:53
1	Cu 324.752†	14256.4	4341.9	13.925 ug/L	13.925 ppb	20:22:53
1	Mn 257.610†	2361123.9	2230382.2	2503.6 ug/L	2503.6 ppb	20:22:48
1	Mo 202.031†	12.2	-12.1	1.7336 ug/L	1.7336 ppb	20:23:13
1	Ni 231.604†	1129.6	973.6	24.449 ug/L	24.449 ppb	20:23:13
1	P 214.914†	616.3	343.6	173.31 ug/L	173.31 ppb	20:23:13
1	Pb 220.353†	193.0	242.7	34.347 ug/L	34.347 ppb	20:23:13
1	S 181.975 Axial†	135.3	50.9	64.007 ug/L	64.007 ppb	20:23:13
1	Sb 206.836†	38.7	6.3	-2.0417 ug/L	-2.0417 ppb	20:23:13
1	Se 196.026†	-177.4	-149.7	22.480 ug/L	22.480 ppb	20:23:13
1	Si 251.611†	297635.1	280720.1	8317.7 ug/L	8317.7 ppb	20:22:48
1	Sn 189.927†	-41.4	-38.8	-5.8844 ug/L	-5.8844 ppb	20:23:13
1	Ti 334.940†	874225.0	826904.8	1261.0 ug/L	1261.0 ppb	20:22:48
1	Tl 190.801†	-110.5	-67.5	0.5650 ug/L	0.5650 ppb	20:23:13
1	U 409.014†	-3888.9	-2611.5	-69.035 ug/L	-69.035 ppb	20:22:48
1	V 292.402†	10078.9	10916.5	61.803 ug/L	61.803 ppb	20:22:53
1	Zn 213.857†	7077.5	5953.7	52.152 ug/L	52.152 ppb	20:22:53
1	SiO2†	295524.1	278708.0	17627 ug/L	17627 ppb	20:24:20
2	Sc Radial	5389.8	5389.8	101 %		20:21:55
2	Y RADIAL	5983.8	5983.8	103.9 %		20:21:55
2	Al 396.153Radial†	43764.7	43352.1	32841 ug/L	32841 ppb	20:21:55
2	Ca 317.933Radial†	3021.3	2973.3	4778.9 ug/L	4778.9 ppb	20:22:15
2	Fe 238.204 Radial†	3555.7	3515.8	32858 ug/L	32858 ppb	20:21:55
2	K 766.490 Radial†	22875.0	20160.6	3680.4 ug/L	3680.4 ppb	20:21:55
2	Mg 279.077 IEC†	151.6	149.2	5289.2 ug/L	5289.2 ppb	20:22:15
2	Na 589.592 Radial†	105.1	651.8	193.77 ug/L	193.77 ppb	20:21:55
2	Sr 421.552†	10096.1	9995.9	64.115 ug/L	64.115 ppb	20:21:55
2	Sc 361.383	955240.1	955240.1	106.39 %		20:23:19
2	Y 371.029	860726.4	860726.4	104.57 %		20:23:19
2	Ag 328.068†	-1917.1	-2098.0	2.1418 ug/L	2.1418 ppb	20:23:24
2	As 188.979†	-40.2	-7.6	15.518 ug/L	15.518 ppb	20:23:44
2	B 249.677†	328.5	549.2	6.6184 ug/L	6.6184 ppb	20:23:24
2	Ba 233.527†	84831.3	79739.8	629.67 ug/L	629.67 ppb	20:23:24
2	Be 313.107†	-6860.2	-1347.8	2.3921 ug/L	2.3921 ppb	20:23:24
2	Cd 226.502†	132.4	330.6	0.3034 ug/L	0.3034 ppb	20:23:44
2	Co 228.616†	1446.8	1429.8	28.515 ug/L	28.515 ppb	20:23:44
2	Cr 267.716†	2438.8	2198.4	24.590 ug/L	24.590 ppb	20:23:24
2	Cu 324.752†	14151.6	4173.8	13.481 ug/L	13.481 ppb	20:23:24
2	Mn 257.610†	2372963.6	2229965.2	2503.2 ug/L	2503.2 ppb	20:23:19
2	Mo 202.031†	11.1	-13.2	1.7093 ug/L	1.7093 ppb	20:23:44
2	Ni 231.604†	1134.7	972.9	24.431 ug/L	24.431 ppb	20:23:44

2	P 214.914†	614.1	338.4	170.20 ug/L	170.20 ppb	20:23:44
2	Pb 220.353†	215.1	262.6	36.911 ug/L	36.911 ppb	20:23:44
2	S 181.975 Axial†	128.3	43.6	53.844 ug/L	53.844 ppb	20:23:44
2	Sb 206.836†	28.8	-3.2	-5.2101 ug/L	-5.2101 ppb	20:23:44
2	Se 196.026†	-182.8	-153.9	21.987 ug/L	21.987 ppb	20:23:44
2	Si 251.611†	299673.5	281180.6	8331.4 ug/L	8331.4 ppb	20:23:19
2	Sn 189.927†	-34.3	-31.9	-4.5835 ug/L	-4.5835 ppb	20:23:44
2	Ti 334.940†	880391.9	828426.5	1263.3 ug/L	1263.3 ppb	20:23:19
2	Tl 190.801†	-104.7	-61.5	2.4888 ug/L	2.4888 ppb	20:23:44
2	U 409.014†	-3675.1	-2391.5	-63.600 ug/L	-63.600 ppb	20:23:19
2	V 292.402†	10048.5	10838.6	61.246 ug/L	61.246 ppb	20:23:24
2	Zn 213.857†	7075.5	5917.2	51.757 ug/L	51.757 ppb	20:23:24
2	SiO2†	297734.1	279340.2	17667 ug/L	17667 ppb	20:24:26
3	Sc Radial	5422.4	5422.4	102 %		20:22:20
3	Y RADIAL	5985.4	5985.4	104.0 %		20:22:20
3	Al 396.153Radial†	44005.3	43328.1	32822 ug/L	32822 ppb	20:22:20
3	Ca 317.933Radial†	3011.0	2945.1	4733.6 ug/L	4733.6 ppb	20:22:40
3	Fe 238.204 Radial†	3549.0	3488.0	32598 ug/L	32598 ppb	20:22:20
3	K 766.490 Radial†	23035.4	20182.2	3684.3 ug/L	3684.3 ppb	20:22:20
3	Mg 279.077 IEC†	146.9	143.7	5092.8 ug/L	5092.8 ppb	20:22:40
3	Na 589.592 Radial†	96.2	642.4	190.97 ug/L	190.97 ppb	20:22:20
3	Sr 421.552†	10210.1	10048.0	64.449 ug/L	64.449 ppb	20:22:20
3	Sc 361.383	948804.7	948804.7	105.67 %		20:23:50
3	Y 371.029	855529.3	855529.3	103.94 %		20:23:50
3	Ag 328.068†	-1791.6	-1991.4	2.5031 ug/L	2.5031 ppb	20:23:55
3	As 188.979†	-35.0	-3.0	17.366 ug/L	17.366 ppb	20:24:15
3	B 249.677†	320.2	543.4	6.5344 ug/L	6.5344 ppb	20:23:55
3	Ba 233.527†	84178.7	79663.1	629.06 ug/L	629.06 ppb	20:23:55
3	Be 313.107†	-6806.0	-1340.2	2.3933 ug/L	2.3933 ppb	20:23:55
3	Cd 226.502†	162.2	359.6	0.6542 ug/L	0.6542 ppb	20:24:15
3	Co 228.616†	1440.0	1432.6	28.581 ug/L	28.581 ppb	20:24:15
3	Cr 267.716†	2445.6	2220.4	24.823 ug/L	24.823 ppb	20:23:55
3	Cu 324.752†	14034.4	4153.1	13.408 ug/L	13.408 ppb	20:23:55
3	Mn 257.610†	2357233.3	2230207.7	2503.5 ug/L	2503.5 ppb	20:23:50
3	Mo 202.031†	11.6	-12.7	1.7222 ug/L	1.7222 ppb	20:24:15
3	Ni 231.604†	1125.8	971.6	24.400 ug/L	24.400 ppb	20:24:15
3	P 214.914†	621.5	349.4	176.58 ug/L	176.58 ppb	20:24:15
3	Pb 220.353†	194.4	244.3	34.642 ug/L	34.642 ppb	20:24:15
3	S 181.975 Axial†	127.8	43.9	54.316 ug/L	54.316 ppb	20:24:15
3	Sb 206.836†	35.3	3.2	-3.0907 ug/L	-3.0907 ppb	20:24:15
3	Se 196.026†	-166.9	-140.0	29.143 ug/L	29.143 ppb	20:24:15
3	Si 251.611†	297428.6	280966.7	8325.0 ug/L	8325.0 ppb	20:23:50
3	Sn 189.927†	-40.1	-37.6	-5.6390 ug/L	-5.6390 ppb	20:24:15
3	Ti 334.940†	874000.6	827991.0	1262.7 ug/L	1262.7 ppb	20:23:50
3	Tl 190.801†	-104.6	-62.1	2.3058 ug/L	2.3058 ppb	20:24:15
3	U 409.014†	-3597.7	-2341.7	-62.325 ug/L	-62.325 ppb	20:23:50
3	V 292.402†	10022.6	10878.2	61.530 ug/L	61.530 ppb	20:23:55
3	Zn 213.857†	6990.3	5881.7	51.452 ug/L	51.452 ppb	20:23:55
3	SiO2†	295790.3	279398.9	17670 ug/L	17670 ppb	20:24:31

Mean Data: 1202011795|940124|5

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	951447.0	105.97 %		0.375			0.35%
Sc Radial	5474.6	103 %		2.2			2.19%
Y 371.029	858071.1	104.25 %		0.316			0.30%
Y RADIAL	6058.8	105.2 %		2.23			2.12%
Ag 328.068†	-2052.2	2.2462 ug/L		0.22380	2.2462 ppb	0.22380	9.96%
Al 396.153Radial†	43084.7	32638 ug/L		335.2	32638 ppb	335.2	1.03%
As 188.979†	-6.9	15.763 ug/L		1.4963	15.763 ppb	1.4963	9.49%
B 249.677†	573.6	7.1997 ug/L		1.08036	7.1997 ppb	1.08036	15.01%
Ba 233.527†	79927.6	631.15 ug/L		3.095	631.15 ppb	3.095	0.49%
Be 313.107†	-1373.5	2.3808 ug/L		0.02065	2.3808 ppb	0.02065	0.87%
Ca 317.933Radial†	2928.1	4706.3 ug/L		89.49	4706.3 ppb	89.49	1.90%
Cd 226.502†	346.1	0.5040 ug/L		0.18073	0.5040 ppb	0.18073	35.86%
Co 228.616†	1433.6	28.604 ug/L		0.1036	28.604 ppb	0.1036	0.36%
Cr 267.716†	2206.5	24.673 ug/L		0.1295	24.673 ppb	0.1295	0.52%
Cu 324.752†	4222.9	13.605 ug/L		0.2799	13.605 ppb	0.2799	2.06%
Fe 238.204 Radial†	3486.0	32580 ug/L		287.3	32580 ppb	287.3	0.88%
K 766.490 Radial†	20025.5	3655.7 ug/L		46.17	3655.7 ppb	46.17	1.26%

Mg 279.077 IEC†	145.1	5141.4 ug/L	130.47	5141.4 ppb	130.47	2.54%
Mn 257.610†	2230185.0	2503.4 ug/L	0.21	2503.4 ppb	0.21	0.01%
Mo 202.031†	-12.7	1.7217 ug/L	0.01217	1.7217 ppb	0.01217	0.71%
Na 589.592 Radial†	657.2	195.38 ug/L	5.398	195.38 ppb	5.398	2.76%
Ni 231.604†	972.7	24.426 ug/L	0.0246	24.426 ppb	0.0246	0.10%
P 214.914†	343.8	173.37 ug/L	3.188	173.37 ppb	3.188	1.84%
Pb 220.353†	249.9	35.300 ug/L	1.4030	35.300 ppb	1.4030	3.97%
S 181.975 Axial†	46.1	57.389 ug/L	5.7363	57.389 ppb	5.7363	10.00%
Sb 206.836†	2.1	-3.4475 ug/L	1.61407	-3.4475 ppb	1.61407	46.82%
Se 196.026†	-147.8	24.537 ug/L	3.9969	24.537 ppb	3.9969	16.29%
Si 251.611†	280955.8	8324.7 ug/L	6.83	8324.7 ppb	6.83	0.08%
Sn 189.927†	-36.1	-5.3690 ug/L	0.69122	-5.3690 ppb	0.69122	12.87%
Sr 421.552†	9970.4	63.952 ug/L	0.5963	63.952 ppb	0.5963	0.93%
Ti 334.940†	827774.1	1262.3 ug/L	1.20	1262.3 ppb	1.20	0.09%
Tl 190.801†	-63.7	1.7865 ug/L	1.06186	1.7865 ppb	1.06186	59.44%
U 409.014†	-2448.3	-64.987 ug/L	3.5635	-64.987 ppb	3.5635	5.48%
V 292.402†	10877.7	61.526 ug/L	0.2781	61.526 ppb	0.2781	0.45%
Zn 213.857†	5917.5	51.787 ug/L	0.3509	51.787 ppb	0.3509	0.68%
SiO2†	279149.1	17655 ug/L	24.2	17655 ppb	24.2	0.14%

Sequence No.: 42

Sample ID: 244128002|940124|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 71

Date Collected: 1/26/2010 20:26:42

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 244128002|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5499.0	5499.0	103 %		20:28:55
1	Y RADIAL	6493.6	6493.6	112.8 %		20:28:55
1	Al 396.153Radial†	88605.6	86035.3	65174 ug/L	65174 ppb	20:28:35
1	Ca 317.933Radial†	20407.1	19797.0	31820 ug/L	31820 ppb	20:28:35
1	Fe 238.204 Radial†	12730.2	12355.0	115470 ug/L	115470 ppb	20:28:35
1	K 766.490 Radial†	61905.6	57612.7	10513 ug/L	10513 ppb	20:28:35
1	Mg 279.077 IEC†	425.0	411.7	14565 ug/L	14565 ppb	20:28:55
1	Na 589.592 Radial†	4073.3	4503.2	1338.7 ug/L	1338.7 ppb	20:28:35
1	Sr 421.552†	33793.5	32809.6	210.32 ug/L	210.32 ppb	20:28:35
1	Sc 361.383	954775.3	954775.3	106.34 %		20:29:53
1	Y 371.029	918739.7	918739.7	111.62 %		20:29:53
1	Ag 328.068†	-7507.1	-7355.7	6.9867 ug/L	6.9867 ppb	20:29:58
1	As 188.979†	-55.1	-21.6	44.242 ug/L	44.242 ppb	20:30:18
1	B 249.677†	1138.0	1310.6	9.9188 ug/L	9.9188 ppb	20:29:58
1	Ba 233.527†	183819.2	172867.2	1366.4 ug/L	1366.4 ppb	20:29:58
1	Be 313.107†	-8702.8	-3083.7	5.7333 ug/L	5.7333 ppb	20:29:58
1	Cd 226.502†	921.0	1072.3	0.0355 ug/L	0.0355 ppb	20:30:18
1	Co 228.616†	1168.2	1168.5	18.273 ug/L	18.273 ppb	20:30:18
1	Cr 267.716†	6780.6	6282.6	70.634 ug/L	70.634 ppb	20:29:58
1	Cu 324.752†	22116.8	11670.7	38.998 ug/L	38.998 ppb	20:29:58
1	Mn 257.610†	1863155.4	1751626.0	1974.7 ug/L	1974.7 ppb	20:29:53
1	Mo 202.031†	-19.9	-42.3	6.4530 ug/L	6.4530 ppb	20:30:18
1	Ni 231.604†	2500.8	2258.1	56.734 ug/L	56.734 ppb	20:30:18
1	P 214.914†	3027.9	2608.7	1387.6 ug/L	1387.6 ppb	20:30:18
1	Pb 220.353†	291.2	334.2	45.415 ug/L	45.415 ppb	20:30:18
1	S 181.975 Axial†	240.1	148.8	192.61 ug/L	192.61 ppb	20:30:18
1	Sb 206.836†	56.6	23.0	-1.1283 ug/L	-1.1283 ppb	20:30:18
1	Se 196.026†	-591.5	-538.3	75.442 ug/L	75.442 ppb	20:30:18
1	Si 251.611†	1348036.8	1267201.1	37547 ug/L	37547 ppb	20:29:53
1	Sn 189.927†	-139.5	-130.9	-17.285 ug/L	-17.285 ppb	20:30:18
1	Ti 334.940†	2094495.0	1970574.7	3007.7 ug/L	3007.7 ppb	20:29:53
1	Tl 190.801†	-165.6	-118.9	-4.0563 ug/L	-4.0563 ppb	20:30:18
1	U 409.014†	-12435.3	-10631.3	-279.15 ug/L	-279.15 ppb	20:29:53
1	V 292.402†	19883.0	20091.6	104.66 ug/L	104.66 ppb	20:29:58
1	Zn 213.857†	37040.0	34099.1	306.01 ug/L	306.01 ppb	20:29:58
1	SiO2†	1350878.6	1269856.1	80311 ug/L	80311 ppb	20:31:27
2	Sc Radial	5546.3	5546.3	104 %		20:29:21
2	Y RADIAL	6556.4	6556.4	113.9 %		20:29:21
2	Al 396.153Radial†	87747.3	84474.9	63992 ug/L	63992 ppb	20:29:01
2	Ca 317.933Radial†	20155.7	19385.9	31159 ug/L	31159 ppb	20:29:01
2	Fe 238.204 Radial†	12565.1	12090.7	112990 ug/L	112990 ppb	20:29:01
2	K 766.490 Radial†	61216.9	56436.8	10298 ug/L	10298 ppb	20:29:01
2	Mg 279.077 IEC†	425.6	408.8	14464 ug/L	14464 ppb	20:29:21
2	Na 589.592 Radial†	3940.9	4342.0	1290.7 ug/L	1290.7 ppb	20:29:01
2	Sr 421.552†	33374.2	32126.0	205.94 ug/L	205.94 ppb	20:29:01
2	Sc 361.383	957475.9	957475.9	106.64 %		20:30:24
2	Y 371.029	922099.1	922099.1	112.02 %		20:30:24
2	Ag 328.068†	-7378.7	-7215.4	6.7735 ug/L	6.7735 ppb	20:30:29
2	As 188.979†	-57.9	-24.1	42.603 ug/L	42.603 ppb	20:30:49
2	B 249.677†	1159.1	1327.3	10.687 ug/L	10.687 ppb	20:30:29
2	Ba 233.527†	181335.8	170050.7	1344.1 ug/L	1344.1 ppb	20:30:29
2	Be 313.107†	-8653.3	-3014.2	5.7468 ug/L	5.7468 ppb	20:30:29
2	Cd 226.502†	913.5	1062.8	0.1840 ug/L	0.1840 ppb	20:30:49
2	Co 228.616†	1156.9	1154.8	18.011 ug/L	18.011 ppb	20:30:49
2	Cr 267.716†	6731.5	6218.5	69.889 ug/L	69.889 ppb	20:30:29
2	Cu 324.752†	21796.5	11311.7	37.860 ug/L	37.860 ppb	20:30:29
2	Mn 257.610†	1862111.7	1745705.4	1967.8 ug/L	1967.8 ppb	20:30:24
2	Mo 202.031†	-7.3	-30.4	7.0672 ug/L	7.0672 ppb	20:30:49
2	Ni 231.604†	2492.8	2243.9	56.378 ug/L	56.378 ppb	20:30:49

2	P 214.914†	3029.4	2602.1	1385.8 ug/L	1385.8 ppb	20:30:49
2	Pb 220.353†	300.9	342.6	46.438 ug/L	46.438 ppb	20:30:49
2	S 181.975 Axial†	237.8	146.0	189.05 ug/L	189.05 ppb	20:30:49
2	Sb 206.836†	64.7	30.4	1.3377 ug/L	1.3377 ppb	20:30:49
2	Se 196.026†	-589.4	-534.7	69.284 ug/L	69.284 ppb	20:30:49
2	Si 251.611†	1349761.9	1265243.2	37489 ug/L	37489 ppb	20:30:24
2	Sn 189.927†	-144.3	-135.0	-18.181 ug/L	-18.181 ppb	20:30:49
2	Ti 334.940†	2097015.8	1967383.0	3002.8 ug/L	3002.8 ppb	20:30:24
2	Tl 190.801†	-167.6	-120.2	-4.5557 ug/L	-4.5557 ppb	20:30:49
2	U 409.014†	-12497.9	-10657.1	-279.51 ug/L	-279.51 ppb	20:30:24
2	V 292.402†	19606.4	19779.5	103.09 ug/L	103.09 ppb	20:30:29
2	Zn 213.857†	36578.5	33568.0	301.31 ug/L	301.31 ppb	20:30:29
2	SiO2†	1352685.5	1267967.4	80192 ug/L	80192 ppb	20:31:33
3	Sc Radial	5562.0	5562.0	104 %		20:29:46
3	Y RADIAL	6562.1	6562.1	114.0 %		20:29:46
3	Al 396.153Radial†	88198.7	84669.9	64140 ug/L	64140 ppb	20:29:26
3	Ca 317.933Radial†	20311.1	19480.3	31311 ug/L	31311 ppb	20:29:26
3	Fe 238.204 Radial†	12635.1	12123.7	113300 ug/L	113300 ppb	20:29:26
3	K 766.490 Radial†	61612.8	56650.6	10337 ug/L	10337 ppb	20:29:26
3	Mg 279.077 IEC†	426.9	408.9	14466 ug/L	14466 ppb	20:29:46
3	Na 589.592 Radial†	3951.5	4341.4	1290.6 ug/L	1290.6 ppb	20:29:26
3	Sr 421.552†	33401.1	32061.1	205.52 ug/L	205.52 ppb	20:29:26
3	Sc 361.383	960717.5	960717.5	107.00 %		20:30:55
3	Y 371.029	924532.9	924532.9	112.32 %		20:30:55
3	Ag 328.068†	-7466.4	-7274.0	6.6299 ug/L	6.6299 ppb	20:31:00
3	As 188.979†	-64.9	-30.5	40.008 ug/L	40.008 ppb	20:31:21
3	B 249.677†	1143.7	1309.3	10.242 ug/L	10.242 ppb	20:31:00
3	Ba 233.527†	183599.3	171592.4	1356.2 ug/L	1356.2 ppb	20:31:00
3	Be 313.107†	-8890.5	-3208.5	5.6614 ug/L	5.6614 ppb	20:31:00
3	Cd 226.502†	932.2	1077.4	0.3166 ug/L	0.3166 ppb	20:31:21
3	Co 228.616†	1163.0	1156.9	18.073 ug/L	18.073 ppb	20:31:21
3	Cr 267.716†	6846.3	6304.5	70.828 ug/L	70.828 ppb	20:31:00
3	Cu 324.752†	22111.2	11536.8	38.506 ug/L	38.506 ppb	20:31:00
3	Mn 257.610†	1864451.4	1742000.2	1963.7 ug/L	1963.7 ppb	20:30:55
3	Mo 202.031†	-10.1	-33.0	6.9154 ug/L	6.9154 ppb	20:31:21
3	Ni 231.604†	2512.8	2254.7	56.649 ug/L	56.649 ppb	20:31:21
3	P 214.914†	3023.9	2587.4	1377.2 ug/L	1377.2 ppb	20:31:21
3	Pb 220.353†	278.9	321.1	43.741 ug/L	43.741 ppb	20:31:21
3	S 181.975 Axial†	244.7	151.7	196.84 ug/L	196.84 ppb	20:31:21
3	Sb 206.836†	56.3	22.4	-1.3130 ug/L	-1.3130 ppb	20:31:21
3	Se 196.026†	-598.8	-541.7	66.300 ug/L	66.300 ppb	20:31:21
3	Si 251.611†	1353238.9	1264222.1	37459 ug/L	37459 ppb	20:30:55
3	Sn 189.927†	-147.2	-137.2	-18.568 ug/L	-18.568 ppb	20:31:21
3	Ti 334.940†	2098910.3	1962518.5	2995.4 ug/L	2995.4 ppb	20:30:55
3	Tl 190.801†	-167.3	-119.5	-4.4041 ug/L	-4.4041 ppb	20:31:21
3	U 409.014†	-12365.0	-10493.3	-275.46 ug/L	-275.46 ppb	20:30:55
3	V 292.402†	19934.0	20023.6	104.57 ug/L	104.57 ppb	20:31:00
3	Zn 213.857†	37047.8	33891.0	304.28 ug/L	304.28 ppb	20:31:00
3	SiO2†	1365326.8	1275501.8	80669 ug/L	80669 ppb	20:31:39

Mean Data: 244128002|940124|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	957656.3	106.66 %	0.331			0.31%
Sc Radial	5535.8	104 %	0.6			0.59%
Y 371.029	921790.6	111.99 %	0.353			0.32%
Y RADIAL	6537.3	113.6 %	0.66			0.58%
Ag 328.068†	-7281.7	6.7967 ug/L	0.17954	6.7967 ppb	0.17954	2.64%
Al 396.153Radial†	85060.0	64436 ug/L	644.1	64436 ppb	644.1	1.00%
As 188.979†	-25.4	42.284 ug/L	2.1346	42.284 ppb	2.1346	5.05%
B 249.677†	1315.8	10.283 ug/L	0.3858	10.283 ppb	0.3858	3.75%
Ba 233.527†	171503.4	1355.6 ug/L	11.16	1355.6 ppb	11.16	0.82%
Be 313.107†	-3102.1	5.7138 ug/L	0.04589	5.7138 ppb	0.04589	0.80%
Ca 317.933Radial†	19554.4	31430 ug/L	346.1	31430 ppb	346.1	1.10%
Cd 226.502†	1070.8	0.1787 ug/L	0.14065	0.1787 ppb	0.14065	78.71%
Co 228.616†	1160.1	18.119 ug/L	0.1368	18.119 ppb	0.1368	0.76%
Cr 267.716†	6268.5	70.450 ug/L	0.4955	70.450 ppb	0.4955	0.70%
Cu 324.752†	11506.4	38.455 ug/L	0.5705	38.455 ppb	0.5705	1.48%
Fe 238.204 Radial†	12189.8	113920 ug/L	1346.2	113920 ppb	1346.2	1.18%
K 766.490 Radial†	56900.1	10383 ug/L	114.3	10383 ppb	114.3	1.10%

Mg 279.077 IEC†	409.8	14498 ug/L	57.7	14498 ppb	57.7	0.40%
Mn 257.610†	1746443.9	1968.7 ug/L	5.56	1968.7 ppb	5.56	0.28%
Mo 202.031†	-35.2	6.8119 ug/L	0.31992	6.8119 ppb	0.31992	4.70%
Na 589.592 Radial†	4395.5	1306.7 ug/L	27.73	1306.7 ppb	27.73	2.12%
Ni 231.604†	2252.2	56.587 ug/L	0.1860	56.587 ppb	0.1860	0.33%
P 214.914†	2599.4	1383.5 ug/L	5.59	1383.5 ppb	5.59	0.40%
Pb 220.353†	332.6	45.198 ug/L	1.3615	45.198 ppb	1.3615	3.01%
S 181.975 Axial†	148.8	192.83 ug/L	3.901	192.83 ppb	3.901	2.02%
Sb 206.836†	25.2	-0.3679 ug/L	1.47999	-0.3679 ppb	1.47999	402.30%
Se 196.026†	-538.2	70.342 ug/L	4.6621	70.342 ppb	4.6621	6.63%
Si 251.611†	1265555.5	37498 ug/L	44.9	37498 ppb	44.9	0.12%
Sn 189.927†	-134.3	-18.011 ug/L	0.6582	-18.011 ppb	0.6582	3.65%
Sr 421.552†	32332.3	207.26 ug/L	2.659	207.26 ppb	2.659	1.28%
Ti 334.940†	1966825.4	3002.0 ug/L	6.21	3002.0 ppb	6.21	0.21%
Tl 190.801†	-119.5	-4.3387 ug/L	0.25602	-4.3387 ppb	0.25602	5.90%
U 409.014†	-10593.9	-278.04 ug/L	2.245	-278.04 ppb	2.245	0.81%
V 292.402†	19964.9	104.11 ug/L	0.882	104.11 ppb	0.882	0.85%
Zn 213.857†	33852.7	303.87 ug/L	2.379	303.87 ppb	2.379	0.78%
SiO2†	1271108.4	80391 ug/L	247.9	80391 ppb	247.9	0.31%

Sequence No.: 43
 Sample ID: 244128003|940124|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 72
 Date Collected: 1/26/2010 20:33:50
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 244128003|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5765.5	5765.5	108 %		20:36:03
1	Y RADIAL	6825.1	6825.1	118.5 %		20:36:03
1	Al 396.153Radial†	111059.5	102855.0	77916 ug/L	77916 ppb	20:35:43
1	Ca 317.933Radial†	12779.8	11816.5	18993 ug/L	18993 ppb	20:35:43
1	Fe 238.204 Radial†	12484.2	11555.8	108000 ug/L	108000 ppb	20:35:43
1	K 766.490 Radial†	91363.2	82117.8	14994 ug/L	14994 ppb	20:35:43
1	Mg 279.077 IEC†	473.6	437.7	15500 ug/L	15500 ppb	20:36:03
1	Na 589.592 Radial†	944.8	1422.7	422.94 ug/L	422.94 ppb	20:35:43
1	Sr 421.552†	39014.1	36128.1	231.72 ug/L	231.72 ppb	20:35:43
1	Sc 361.383	935415.0	935415.0	104.18 %		20:37:01
1	Y 371.029	911152.2	911152.2	110.69 %		20:37:01
1	Ag 328.068†	-7263.0	-7267.6	5.4629 ug/L	5.4629 ppb	20:37:27
1	As 188.979†	-69.4	-36.4	53.090 ug/L	53.090 ppb	20:37:27
1	B 249.677†	1494.2	1674.7	19.009 ug/L	19.009 ppb	20:37:07
1	Ba 233.527†	208685.7	200313.4	1582.7 ug/L	1582.7 ppb	20:37:07
1	Be 313.107†	-20338.2	-14421.5	6.0962 ug/L	6.0962 ppb	20:37:07
1	Cd 226.502†	1025.6	1190.6	2.1678 ug/L	2.1678 ppb	20:37:27
1	Co 228.616†	2922.4	2875.0	51.858 ug/L	51.858 ppb	20:37:27
1	Cr 267.716†	8510.3	8074.8	90.021 ug/L	90.021 ppb	20:37:27
1	Cu 324.752†	42788.2	31942.9	95.372 ug/L	95.372 ppb	20:37:07
1	Mn 257.610†	3214919.9	3085402.3	3469.3 ug/L	3469.3 ppb	20:37:01
1	Mo 202.031†	-54.9	-76.3	3.4011 ug/L	3.4011 ppb	20:37:27
1	Ni 231.604†	2723.3	2520.3	63.302 ug/L	63.302 ppb	20:37:27
1	P 214.914†	2870.5	2516.5	1333.6 ug/L	1333.6 ppb	20:37:27
1	Pb 220.353†	928.0	951.2	126.01 ug/L	126.01 ppb	20:37:27
1	S 181.975 Axial†	961.4	845.8	1150.0 ug/L	1150.0 ppb	20:37:27
1	Sb 206.836†	88.3	54.5	2.8603 ug/L	2.8603 ppb	20:37:27
1	Se 196.026†	-579.1	-537.9	51.769 ug/L	51.769 ppb	20:37:27
1	Si 251.611†	1337611.8	1283432.1	38028 ug/L	38028 ppb	20:37:01
1	Sn 189.927†	-138.3	-132.4	-19.653 ug/L	-19.653 ppb	20:37:27
1	Ti 334.940†	3364987.2	3230843.3	4927.4 ug/L	4927.4 ppb	20:37:01
1	Tl 190.801†	-225.2	-179.3	-0.6910 ug/L	-0.6910 ppb	20:37:27
1	U 409.014†	-4711.1	-3459.2	-99.005 ug/L	-99.005 ppb	20:37:07
1	V 292.402†	40174.5	39955.7	227.56 ug/L	227.56 ppb	20:37:07
1	Zn 213.857†	32162.4	30138.2	269.72 ug/L	269.72 ppb	20:37:07
1	SiO2†	1347267.5	1292682.8	81755 ug/L	81755 ppb	20:38:37
2	Sc Radial	5613.0	5613.0	105 %		20:36:28
2	Y RADIAL	6678.6	6678.6	116.0 %		20:36:28
2	Al 396.153Radial†	112664.5	107177.1	81190 ug/L	81190 ppb	20:36:08
2	Ca 317.933Radial†	12933.3	12284.2	19744 ug/L	19744 ppb	20:36:08
2	Fe 238.204 Radial†	12654.1	12031.6	112440 ug/L	112440 ppb	20:36:08
2	K 766.490 Radial†	91986.7	85010.4	15522 ug/L	15522 ppb	20:36:08
2	Mg 279.077 IEC†	482.6	458.2	16225 ug/L	16225 ppb	20:36:28
2	Na 589.592 Radial†	901.0	1404.8	417.62 ug/L	417.62 ppb	20:36:08
2	Sr 421.552†	39448.2	37523.0	240.66 ug/L	240.66 ppb	20:36:08
2	Sc 361.383	959618.6	959618.6	106.88 %		20:37:34
2	Y 371.029	935951.7	935951.7	113.71 %		20:37:34
2	Ag 328.068†	-7281.2	-7108.7	7.5430 ug/L	7.5430 ppb	20:37:59
2	As 188.979†	-60.7	-26.6	57.443 ug/L	57.443 ppb	20:37:59
2	B 249.677†	1548.3	1689.1	18.608 ug/L	18.608 ppb	20:37:39
2	Ba 233.527†	211397.0	197798.0	1563.0 ug/L	1563.0 ppb	20:37:39
2	Be 313.107†	-21005.5	-14553.4	5.8692 ug/L	5.8692 ppb	20:37:39
2	Cd 226.502†	1038.5	1177.8	1.5647 ug/L	1.5647 ppb	20:37:59
2	Co 228.616†	2930.9	2812.3	50.576 ug/L	50.576 ppb	20:37:59
2	Cr 267.716†	8522.4	7880.1	87.992 ug/L	87.992 ppb	20:37:59
2	Cu 324.752†	43349.7	31432.4	94.175 ug/L	94.175 ppb	20:37:39
2	Mn 257.610†	3239323.7	3030403.2	3408.0 ug/L	3408.0 ppb	20:37:34
2	Mo 202.031†	-51.0	-71.3	4.0972 ug/L	4.0972 ppb	20:37:59
2	Ni 231.604†	2716.3	2447.8	61.480 ug/L	61.480 ppb	20:37:59

2	P 214.914†	2858.1	2435.5	1285.4 ug/L	1285.4 ppb	20:37:59
2	Pb 220.353†	967.2	965.4	128.08 ug/L	128.08 ppb	20:37:59
2	S 181.975 Axial†	962.5	823.6	1118.7 ug/L	1118.7 ppb	20:37:59
2	Sb 206.836†	83.2	47.6	0.8584 ug/L	0.8584 ppb	20:37:59
2	Se 196.026†	-595.7	-539.5	65.815 ug/L	65.815 ppb	20:37:59
2	Si 251.611†	1349281.9	1261967.9	37392 ug/L	37392 ppb	20:37:34
2	Sn 189.927†	-130.9	-122.2	-17.570 ug/L	-17.570 ppb	20:37:59
2	Ti 334.940†	3396349.2	3178721.5	4848.0 ug/L	4848.0 ppb	20:37:34
2	Tl 190.801†	-226.7	-175.2	-0.3217 ug/L	-0.3217 ppb	20:37:59
2	U 409.014†	-4822.9	-3449.7	-99.270 ug/L	-99.270 ppb	20:37:39
2	V 292.402†	40679.4	39455.5	223.91 ug/L	223.91 ppb	20:37:39
2	Zn 213.857†	32595.5	29764.8	265.83 ug/L	265.83 ppb	20:37:39
2	SiO2†	1354033.8	1266396.6	80093 ug/L	80093 ppb	20:38:43
3	Sc Radial	5454.1	5454.1	102 %		20:36:53
3	Y RADIAL	6526.7	6526.7	113.4 %		20:36:53
3	Al 396.153Radial†	111400.8	109062.0	82618 ug/L	82618 ppb	20:36:33
3	Ca 317.933Radial†	12809.3	12521.2	20125 ug/L	20125 ppb	20:36:33
3	Fe 238.204 Radial†	12490.1	12221.8	114220 ug/L	114220 ppb	20:36:33
3	K 766.490 Radial†	90435.8	86041.1	15710 ug/L	15710 ppb	20:36:33
3	Mg 279.077 IEC†	482.6	471.6	16701 ug/L	16701 ppb	20:36:53
3	Na 589.592 Radial†	880.8	1410.0	419.15 ug/L	419.15 ppb	20:36:33
3	Sr 421.552†	38815.2	37996.4	243.70 ug/L	243.70 ppb	20:36:33
3	Sc 361.383	952919.1	952919.1	106.13 %		20:38:06
3	Y 371.029	927466.1	927466.1	112.68 %		20:38:06
3	Ag 328.068†	-7279.7	-7155.2	7.9329 ug/L	7.9329 ppb	20:38:31
3	As 188.979†	-77.9	-43.2	51.244 ug/L	51.244 ppb	20:38:31
3	B 249.677†	1557.3	1707.8	18.727 ug/L	18.727 ppb	20:38:11
3	Ba 233.527†	213215.4	200902.0	1587.6 ug/L	1587.6 ppb	20:38:11
3	Be 313.107†	-20995.5	-14682.2	5.8673 ug/L	5.8673 ppb	20:38:11
3	Cd 226.502†	1030.1	1176.8	1.3701 ug/L	1.3701 ppb	20:38:31
3	Co 228.616†	2930.5	2831.2	50.937 ug/L	50.937 ppb	20:38:31
3	Cr 267.716†	8549.2	7961.4	88.913 ug/L	88.913 ppb	20:38:31
3	Cu 324.752†	43891.8	32228.3	96.502 ug/L	96.502 ppb	20:38:11
3	Mn 257.610†	3232314.7	3045108.0	3424.7 ug/L	3424.7 ppb	20:38:06
3	Mo 202.031†	-40.5	-61.8	4.8907 ug/L	4.8907 ppb	20:38:31
3	Ni 231.604†	2740.8	2488.8	62.510 ug/L	62.510 ppb	20:38:31
3	P 214.914†	2882.6	2477.4	1307.5 ug/L	1307.5 ppb	20:38:31
3	Pb 220.353†	963.8	968.5	128.61 ug/L	128.61 ppb	20:38:31
3	S 181.975 Axial†	953.9	821.8	1116.0 ug/L	1116.0 ppb	20:38:31
3	Sb 206.836†	68.1	33.9	-3.7921 ug/L	-3.7921 ppb	20:38:31
3	Se 196.026†	-595.1	-542.8	69.871 ug/L	69.871 ppb	20:38:31
3	Si 251.611†	1346747.9	1268456.1	37584 ug/L	37584 ppb	20:38:06
3	Sn 189.927†	-138.2	-129.9	-18.905 ug/L	-18.905 ppb	20:38:31
3	Ti 334.940†	3385968.1	3191281.9	4867.1 ug/L	4867.1 ppb	20:38:06
3	Tl 190.801†	-237.7	-187.1	-3.9027 ug/L	-3.9027 ppb	20:38:31
3	U 409.014†	-4787.0	-3447.6	-99.423 ug/L	-99.423 ppb	20:38:11
3	V 292.402†	40976.6	40003.1	227.05 ug/L	227.05 ppb	20:38:11
3	Zn 213.857†	32917.9	30282.9	270.47 ug/L	270.47 ppb	20:38:11
3	SiO2†	1348530.4	1270118.2	80328 ug/L	80328 ppb	20:38:49

Mean Data: 244128003|940124|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity		Units		Conc. Units		
Sc 361.383	949317.6	105.73	%	1.392			1.32%
Sc Radial	5610.9	105	%	2.9			2.78%
Y 371.029	924856.7	112.36	%	1.531			1.36%
Y RADIAL	6676.8	116.0	%	2.59			2.23%
Ag 328.068†	-7177.2	6.9796	ug/L	1.32790	6.9796 ppb	1.32790	19.03%
Al 396.153Radial†	106364.7	80575	ug/L	2410.6	80575 ppb	2410.6	2.99%
As 188.979†	-35.4	53.926	ug/L	3.1828	53.926 ppb	3.1828	5.90%
B 249.677†	1690.5	18.781	ug/L	0.2061	18.781 ppb	0.2061	1.10%
Ba 233.527†	199671.1	1577.8	ug/L	12.99	1577.8 ppb	12.99	0.82%
Be 313.107†	-14552.4	5.9442	ug/L	0.13161	5.9442 ppb	0.13161	2.21%
Ca 317.933Radial†	12207.3	19621	ug/L	576.3	19621 ppb	576.3	2.94%
Cd 226.502†	1181.7	1.7009	ug/L	0.41592	1.7009 ppb	0.41592	24.45%
Co 228.616†	2839.5	51.123	ug/L	0.6610	51.123 ppb	0.6610	1.29%
Cr 267.716†	7972.1	88.976	ug/L	1.0160	88.976 ppb	1.0160	1.14%
Cu 324.752†	31867.9	95.349	ug/L	1.1636	95.349 ppb	1.1636	1.22%
Fe 238.204 Radial†	11936.4	111550	ug/L	3206.1	111550 ppb	3206.1	2.87%
K 766.490 Radial†	84389.8	15409	ug/L	371.4	15409 ppb	371.4	2.41%

Mg 279.077 IEC†	455.8	16142 ug/L	604.8	16142 ppb	604.8	3.75%
Mn 257.610†	3053637.8	3434.0 ug/L	31.67	3434.0 ppb	31.67	0.92%
Mo 202.031†	-69.8	4.1297 ug/L	0.74534	4.1297 ppb	0.74534	18.05%
Na 589.592 Radial†	1412.5	419.90 ug/L	2.738	419.90 ppb	2.738	0.65%
Ni 231.604†	2485.6	62.431 ug/L	0.9136	62.431 ppb	0.9136	1.46%
P 214.914†	2476.5	1308.8 ug/L	24.11	1308.8 ppb	24.11	1.84%
Pb 220.353†	961.7	127.57 ug/L	1.377	127.57 ppb	1.377	1.08%
S 181.975 Axial†	830.4	1128.2 ug/L	18.87	1128.2 ppb	18.87	1.67%
Sb 206.836†	45.4	-0.0245 ug/L	3.41295	-0.0245 ppb	3.41295	>999.9%
Se 196.026†	-540.1	62.485 ug/L	9.4990	62.485 ppb	9.4990	15.20%
Si 251.611†	1271285.4	37668 ug/L	326.2	37668 ppb	326.2	0.87%
Sn 189.927†	-128.2	-18.709 ug/L	1.0548	-18.709 ppb	1.0548	5.64%
Sr 421.552†	37215.8	238.69 ug/L	6.229	238.69 ppb	6.229	2.61%
Ti 334.940†	3200282.2	4880.8 ug/L	41.45	4880.8 ppb	41.45	0.85%
Tl 190.801†	-180.5	-1.6385 ug/L	1.96952	-1.6385 ppb	1.96952	120.21%
U 409.014†	-3452.2	-99.232 ug/L	0.2115	-99.232 ppb	0.2115	0.21%
V 292.402†	39804.8	226.17 ug/L	1.979	226.17 ppb	1.979	0.87%
Zn 213.857†	30062.0	268.67 ug/L	2.493	268.67 ppb	2.493	0.93%
SiO2†	1276399.2	80725 ug/L	899.6	80725 ppb	899.6	1.11%

Sequence No.: 44

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 1/26/2010 20:41:01

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	5427.2	5427.2	102 %		20:42:53
1	Y RADIAL	5837.2	5837.2	101.4 %		20:42:53
1	Al 396.153Radial†	6703.7	6587.0	4966.0 ug/L	4966.0 ppb	20:42:53
1	Ca 317.933Radial†	3195.2	3123.7	5020.7 ug/L	5020.7 ppb	20:43:13
1	Fe 238.204 Radial†	568.8	552.5	5178.4 ug/L	5178.4 ppb	20:43:13
1	K 766.490 Radial†	30480.0	27487.2	5015.1 ug/L	5015.1 ppb	20:42:53
1	Mg 279.077 IEC†	149.5	146.2	5213.2 ug/L	5213.2 ppb	20:43:13
1	Na 589.592 Radial†	33341.8	33354.3	9915.3 ug/L	9915.3 ppb	20:42:53
1	Sr 421.552†	80474.9	79175.9	508.09 ug/L	508.09 ppb	20:42:53
1	Sc 361.383	923014.2	923014.2	102.80 %		20:44:10
1	Y 371.029	809047.3	809047.3	98.290 %		20:44:10
1	Ag 328.068†	122186.9	118562.7	497.98 ug/L	497.98 ppb	20:44:15
1	As 188.979†	1198.6	1196.1	493.71 ug/L	493.71 ppb	20:44:35
1	B 249.677†	22574.2	22199.8	484.57 ug/L	484.57 ppb	20:44:15
1	Ba 233.527†	64526.4	62771.9	496.03 ug/L	496.03 ppb	20:44:15
1	Be 313.107†	1429924.0	1396076.0	493.62 ug/L	493.62 ppb	20:44:10
1	Cd 226.502†	45568.8	44533.8	497.34 ug/L	497.34 ppb	20:44:15
1	Co 228.616†	23678.9	23103.9	506.54 ug/L	506.54 ppb	20:44:15
1	Cr 267.716†	47192.7	45813.3	497.25 ug/L	497.25 ppb	20:44:15
1	Cu 324.752†	189009.0	174732.7	490.17 ug/L	490.17 ppb	20:44:15
1	Mn 257.610†	450500.8	437740.2	491.08 ug/L	491.08 ppb	20:44:10
1	Mo 202.031†	7415.8	7190.2	491.18 ug/L	491.18 ppb	20:44:35
1	Ni 231.604†	20506.3	19854.1	498.66 ug/L	498.66 ppb	20:44:15
1	P 214.914†	4665.0	4299.2	2328.8 ug/L	2328.8 ppb	20:44:35
1	Pb 220.353†	3973.6	3925.8	494.36 ug/L	494.36 ppb	20:44:35
1	S 181.975 Axial†	781.2	682.9	939.32 ug/L	939.32 ppb	20:44:35
1	Sb 206.836†	1524.3	1452.5	504.01 ug/L	504.01 ppb	20:44:35
1	Se 196.026†	836.4	831.6	498.56 ug/L	498.56 ppb	20:44:35
1	Si 251.611†	87019.2	84153.0	2487.4 ug/L	2487.4 ppb	20:44:15
1	Sn 189.927†	2759.1	2684.3	494.46 ug/L	494.46 ppb	20:44:35
1	Ti 334.940†	336417.4	328160.5	500.20 ug/L	500.20 ppb	20:44:10
1	Tl 190.801†	1524.8	1520.2	489.60 ug/L	489.60 ppb	20:44:35
1	U 409.014†	19106.9	19649.3	489.63 ug/L	489.63 ppb	20:44:15
1	V 292.402†	80307.6	79513.8	500.99 ug/L	500.99 ppb	20:44:15
1	Zn 213.857†	55468.1	53223.9	491.41 ug/L	491.41 ppb	20:44:15
1	SiO2†	86246.0	83383.4	5260.2 ug/L	5260.2 ppb	20:45:43
2	Sc Radial	5371.1	5371.1	101 %		20:43:18
2	Y RADIAL	5739.5	5739.5	99.69 %		20:43:18
2	Al 396.153Radial†	6749.3	6701.2	5052.8 ug/L	5052.8 ppb	20:43:18
2	Ca 317.933Radial†	3192.8	3154.2	5069.7 ug/L	5069.7 ppb	20:43:38
2	Fe 238.204 Radial†	574.4	563.9	5285.1 ug/L	5285.1 ppb	20:43:38
2	K 766.490 Radial†	30443.9	27764.7	5065.8 ug/L	5065.8 ppb	20:43:18
2	Mg 279.077 IEC†	150.4	148.5	5298.3 ug/L	5298.3 ppb	20:43:38
2	Na 589.592 Radial†	33234.6	33590.3	9985.5 ug/L	9985.5 ppb	20:43:18
2	Sr 421.552†	80309.6	79838.9	512.34 ug/L	512.34 ppb	20:43:18
2	Sc 361.383	932769.8	932769.8	103.89 %		20:44:41
2	Y 371.029	819488.8	819488.8	99.559 %		20:44:41
2	Ag 328.068†	121414.9	116576.5	489.70 ug/L	489.70 ppb	20:44:47
2	As 188.979†	1199.2	1184.6	488.98 ug/L	488.98 ppb	20:45:07
2	B 249.677†	22440.9	21841.7	476.73 ug/L	476.73 ppb	20:44:47
2	Ba 233.527†	63703.9	61323.7	484.60 ug/L	484.60 ppb	20:44:47
2	Be 313.107†	1439378.3	1390628.7	491.69 ug/L	491.69 ppb	20:44:41
2	Cd 226.502†	45134.0	43651.6	487.46 ug/L	487.46 ppb	20:44:47
2	Co 228.616†	23426.3	22619.8	495.92 ug/L	495.92 ppb	20:44:47
2	Cr 267.716†	46869.1	45021.7	488.67 ug/L	488.67 ppb	20:44:47
2	Cu 324.752†	187280.9	171146.3	480.12 ug/L	480.12 ppb	20:44:47
2	Mn 257.610†	450854.2	433497.0	486.33 ug/L	486.33 ppb	20:44:41
2	Mo 202.031†	7421.6	7120.3	486.42 ug/L	486.42 ppb	20:45:07
2	Ni 231.604†	20266.9	19414.9	487.63 ug/L	487.63 ppb	20:44:47

2	P 214.914†	4692.9	4278.6	2319.0 ug/L	2319.0 ppb	20:45:07
2	Pb 220.353†	3960.4	3872.6	487.69 ug/L	487.69 ppb	20:45:07
2	S 181.975 Axial†	793.6	686.9	944.81 ug/L	944.81 ppb	20:45:07
2	Sb 206.836†	1529.8	1442.3	500.40 ug/L	500.40 ppb	20:45:07
2	Se 196.026†	856.4	842.3	505.09 ug/L	505.09 ppb	20:45:07
2	Si 251.611†	86181.9	82461.7	2437.3 ug/L	2437.3 ppb	20:44:47
2	Sn 189.927†	2761.2	2658.3	489.68 ug/L	489.68 ppb	20:45:07
2	Ti 334.940†	337314.0	325601.0	496.30 ug/L	496.30 ppb	20:44:41
2	Tl 190.801†	1535.9	1515.3	488.05 ug/L	488.05 ppb	20:45:07
2	U 409.014†	19046.5	19396.8	483.33 ug/L	483.33 ppb	20:44:47
2	V 292.402†	79802.6	78210.6	492.80 ug/L	492.80 ppb	20:44:47
2	Zn 213.857†	54887.1	52100.3	481.02 ug/L	481.02 ppb	20:44:47
2	SiO2†	86802.7	83041.8	5238.7 ug/L	5238.7 ppb	20:45:48
3	Sc Radial	5405.3	5405.3	101 %		20:43:43
3	Y RADIAL	5798.2	5798.2	100.7 %		20:43:43
3	Al 396.153Radial†	6808.7	6717.4	5064.6 ug/L	5064.6 ppb	20:43:43
3	Ca 317.933Radial†	3213.8	3154.8	5070.7 ug/L	5070.7 ppb	20:44:03
3	Fe 238.204 Radial†	580.1	566.0	5304.4 ug/L	5304.4 ppb	20:44:03
3	K 766.490 Radial†	30756.3	27881.8	5087.1 ug/L	5087.1 ppb	20:43:43
3	Mg 279.077 IEC†	152.4	149.6	5336.1 ug/L	5336.1 ppb	20:44:03
3	Na 589.592 Radial†	33914.0	34052.5	10123 ug/L	10123 ppb	20:43:43
3	Sr 421.552†	81729.6	80736.5	518.10 ug/L	518.10 ppb	20:43:43
3	Sc 361.383	917728.9	917728.9	102.21 %		20:45:13
3	Y 371.029	805879.4	805879.4	97.905 %		20:45:13
3	Ag 328.068†	122309.6	119367.3	501.38 ug/L	501.38 ppb	20:45:18
3	As 188.979†	1204.1	1208.2	498.65 ug/L	498.65 ppb	20:45:38
3	B 249.677†	22710.3	22459.4	490.24 ug/L	490.24 ppb	20:45:18
3	Ba 233.527†	64400.5	63010.3	497.92 ug/L	497.92 ppb	20:45:18
3	Be 313.107†	1416428.1	1390882.9	491.78 ug/L	491.78 ppb	20:45:13
3	Cd 226.502†	45582.5	44802.4	500.33 ug/L	500.33 ppb	20:45:18
3	Co 228.616†	23654.9	23213.0	508.94 ug/L	508.94 ppb	20:45:18
3	Cr 267.716†	47136.6	46022.9	499.53 ug/L	499.53 ppb	20:45:18
3	Cu 324.752†	188175.9	174976.6	490.86 ug/L	490.86 ppb	20:45:18
3	Mn 257.610†	444930.1	434813.8	487.81 ug/L	487.81 ppb	20:45:13
3	Mo 202.031†	7442.9	7258.3	495.83 ug/L	495.83 ppb	20:45:38
3	Ni 231.604†	20527.2	19989.4	502.06 ug/L	502.06 ppb	20:45:18
3	P 214.914†	4690.5	4350.3	2357.4 ug/L	2357.4 ppb	20:45:38
3	Pb 220.353†	3974.2	3948.6	497.25 ug/L	497.25 ppb	20:45:38
3	S 181.975 Axial†	789.4	695.3	956.35 ug/L	956.35 ppb	20:45:38
3	Sb 206.836†	1528.3	1465.0	508.33 ug/L	508.33 ppb	20:45:38
3	Se 196.026†	845.7	845.4	506.95 ug/L	506.95 ppb	20:45:38
3	Si 251.611†	86673.4	84302.2	2491.8 ug/L	2491.8 ppb	20:45:18
3	Sn 189.927†	2752.5	2693.3	496.12 ug/L	496.12 ppb	20:45:38
3	Ti 334.940†	332449.6	326163.3	497.15 ug/L	497.15 ppb	20:45:13
3	Tl 190.801†	1535.7	1539.4	495.69 ug/L	495.69 ppb	20:45:38
3	U 409.014†	19215.9	19863.0	494.96 ug/L	494.96 ppb	20:45:18
3	V 292.402†	80349.1	80004.2	504.10 ug/L	504.10 ppb	20:45:18
3	Zn 213.857†	55330.7	53400.1	493.02 ug/L	493.02 ppb	20:45:18
3	SiO2†	85535.7	83171.6	5246.7 ug/L	5246.7 ppb	20:45:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	924504.3	102.97 %	0.850			0.83%
Sc Radial	5401.2	101 %	0.5			0.52%
Y 371.029	811471.8	98.585 %	0.8652			0.88%
Y RADIAL	5791.7	100.6 %	0.85			0.85%
Ag 328.068†	118168.8	496.35 ug/L	6.011	496.35 ppb	6.011	1.21%
QC value within limits for Ag 328.068 Recovery = 99.27%						
Al 396.153Radial†	6668.5	5027.8 ug/L	53.83	5027.8 ppb	53.83	1.07%
QC value within limits for Al 396.153Radial Recovery = 100.56%						
As 188.979†	1196.3	493.78 ug/L	4.833	493.78 ppb	4.833	0.98%
QC value within limits for As 188.979 Recovery = 98.76%						
B 249.677†	22167.0	483.85 ug/L	6.782	483.85 ppb	6.782	1.40%
QC value within limits for B 249.677 Recovery = 96.77%						
Ba 233.527†	62368.6	492.85 ug/L	7.206	492.85 ppb	7.206	1.46%
QC value within limits for Ba 233.527 Recovery = 98.57%						
Be 313.107†	1392529.2	492.36 ug/L	1.089	492.36 ppb	1.089	0.22%
QC value within limits for Be 313.107 Recovery = 98.47%						
Ca 317.933Radial†	3144.2	5053.7 ug/L	28.59	5053.7 ppb	28.59	0.57%

QC value within limits for Ca 317.933 Radial Recovery = 101.07%

Cd	226.502†	44329.3	495.04 ug/L	6.732	495.04 ppb	6.732	1.36%
QC value within limits for Cd 226.502 Recovery = 99.01%							
Co	228.616†	22978.9	503.80 ug/L	6.931	503.80 ppb	6.931	1.38%
QC value within limits for Co 228.616 Recovery = 100.76%							
Cr	267.716†	45619.3	495.15 ug/L	5.730	495.15 ppb	5.730	1.16%
QC value within limits for Cr 267.716 Recovery = 99.03%							
Cu	324.752†	173618.5	487.05 ug/L	6.012	487.05 ppb	6.012	1.23%
QC value within limits for Cu 324.752 Recovery = 97.41%							
Fe	238.204 Radial†	560.8	5256.0 ug/L	67.89	5256.0 ppb	67.89	1.29%
QC value within limits for Fe 238.204 Radial Recovery = 105.12%							
K	766.490 Radial†	27711.2	5056.0 ug/L	36.98	5056.0 ppb	36.98	0.73%
QC value within limits for K 766.490 Radial Recovery = 101.12%							
Mg	279.077 IEC†	148.1	5282.5 ug/L	62.94	5282.5 ppb	62.94	1.19%
QC value within limits for Mg 279.077 IEC Recovery = 105.65%							
Mn	257.610†	435350.3	488.40 ug/L	2.431	488.40 ppb	2.431	0.50%
QC value within limits for Mn 257.610 Recovery = 97.68%							
Mo	202.031†	7189.6	491.14 ug/L	4.708	491.14 ppb	4.708	0.96%
QC value within limits for Mo 202.031 Recovery = 98.23%							
Na	589.592 Radial†	33665.7	10008 ug/L	105.6	10008 ppb	105.6	1.05%
QC value within limits for Na 589.592 Radial Recovery = 100.08%							
Ni	231.604†	19752.8	496.11 ug/L	7.543	496.11 ppb	7.543	1.52%
QC value within limits for Ni 231.604 Recovery = 99.22%							
P	214.914†	4309.3	2335.1 ug/L	19.95	2335.1 ppb	19.95	0.85%
QC value within limits for P 214.914 Recovery = 93.40%							
Pb	220.353†	3915.7	493.10 ug/L	4.903	493.10 ppb	4.903	0.99%
QC value within limits for Pb 220.353 Recovery = 98.62%							
S	181.975 Axial†	688.4	946.83 ug/L	8.692	946.83 ppb	8.692	0.92%
QC value within limits for S 181.975 Axial Recovery = 94.68%							
Sb	206.836†	1453.3	504.24 ug/L	3.970	504.24 ppb	3.970	0.79%
QC value within limits for Sb 206.836 Recovery = 100.85%							
Se	196.026†	839.8	503.53 ug/L	4.408	503.53 ppb	4.408	0.88%
QC value within limits for Se 196.026 Recovery = 100.71%							
Si	251.611†	83638.9	2472.2 ug/L	30.24	2472.2 ppb	30.24	1.22%
QC value within limits for Si 251.611 Recovery = 98.89%							
Sn	189.927†	2678.6	493.42 ug/L	3.345	493.42 ppb	3.345	0.68%
QC value within limits for Sn 189.927 Recovery = 98.68%							
Sr	421.552†	79917.1	512.85 ug/L	5.026	512.85 ppb	5.026	0.98%
QC value within limits for Sr 421.552 Recovery = 102.57%							
Ti	334.940†	326641.6	497.89 ug/L	2.050	497.89 ppb	2.050	0.41%
QC value within limits for Ti 334.940 Recovery = 99.58%							
Tl	190.801†	1524.9	491.12 ug/L	4.039	491.12 ppb	4.039	0.82%
QC value within limits for Tl 190.801 Recovery = 98.22%							
U	409.014†	19636.4	489.31 ug/L	5.823	489.31 ppb	5.823	1.19%
QC value within limits for U 409.014 Recovery = 97.86%							
V	292.402†	79242.9	499.30 ug/L	5.838	499.30 ppb	5.838	1.17%
QC value within limits for V 292.402 Recovery = 99.86%							
Zn	213.857†	52908.1	488.48 ug/L	6.514	488.48 ppb	6.514	1.33%
QC value within limits for Zn 213.857 Recovery = 97.70%							
SiO2†		83198.9	5248.5 ug/L	10.86	5248.5 ppb	10.86	0.21%
QC value within limits for SiO2 Recovery = 98.15%							

All analyte(s) passed QC.

Sequence No.: 45

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 1/26/2010 20:48:03

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5464.5	5464.5	102 %		20:49:55
1	Y RADIAL	5911.7	5911.7	102.7 %		20:49:55
1	Al 396.153Radial†	9.7	0.3	0.2733 ug/L	0.2733 ppb	20:50:15
1	Ca 317.933Radial†	13.4	-7.1	-11.433 ug/L	-11.433 ppb	20:50:15
1	Fe 238.204 Radial†	6.7	-0.6	-5.9463 ug/L	-5.9463 ppb	20:50:15
1	K 766.490 Radial†	2357.8	-199.4	-36.390 ug/L	-36.390 ppb	20:49:55
1	Mg 279.077 IEC†	3.5	2.4	85.650 ug/L	85.650 ppb	20:50:15
1	Na 589.592 Radial†	-890.9	-322.9	-95.998 ug/L	-95.998 ppb	20:49:55
1	Sr 421.552†	39.7	31.7	0.2036 ug/L	0.2036 ppb	20:49:55
1	Sc 361.383	893493.2	893493.2	99.512 %		20:51:12
1	Y 371.029	819200.1	819200.1	99.523 %		20:51:12
1	Ag 328.068†	294.3	-0.3	0.0009 ug/L	0.0009 ppb	20:51:12
1	As 188.979†	-22.5	7.6	3.1065 ug/L	3.1065 ppb	20:51:32
1	B 249.677†	-171.2	68.4	1.5004 ug/L	1.5004 ppb	20:51:32
1	Ba 233.527†	3.7	6.8	0.0545 ug/L	0.0545 ppb	20:51:32
1	Be 313.107†	-4879.7	196.8	0.0696 ug/L	0.0696 ppb	20:51:12
1	Cd 226.502†	-203.3	1.8	0.0211 ug/L	0.0211 ppb	20:51:32
1	Co 228.616†	-58.1	11.6	0.2533 ug/L	0.2533 ppb	20:51:32
1	Cr 267.716†	62.2	-31.4	-0.3394 ug/L	-0.3394 ppb	20:51:32
1	Cu 324.752†	8931.6	-152.6	-0.4271 ug/L	-0.4271 ppb	20:51:12
1	Mn 257.610†	582.8	95.8	0.1033 ug/L	0.1033 ppb	20:51:32
1	Mo 202.031†	20.4	-3.2	-0.2158 ug/L	-0.2158 ppb	20:51:32
1	Ni 231.604†	119.0	25.9	0.6512 ug/L	0.6512 ppb	20:51:32
1	P 214.914†	232.1	-5.5	-2.9950 ug/L	-2.9950 ppb	20:51:32
1	Pb 220.353†	-46.4	13.8	1.7288 ug/L	1.7288 ppb	20:51:32
1	S 181.975 Axial†	44.5	-32.3	-44.485 ug/L	-44.485 ppb	20:51:32
1	Sb 206.836†	32.4	2.3	0.7712 ug/L	0.7712 ppb	20:51:32
1	Se 196.026†	-13.9	4.0	2.2600 ug/L	2.2600 ppb	20:51:32
1	Si 251.611†	525.6	32.2	0.9581 ug/L	0.9581 ppb	20:51:32
1	Sn 189.927†	3.1	3.5	0.6338 ug/L	0.6338 ppb	20:51:32
1	Ti 334.940†	-844.8	57.6	0.0805 ug/L	0.0805 ppb	20:51:12
1	Tl 190.801†	-34.9	1.9	0.5918 ug/L	0.5918 ppb	20:51:32
1	U 409.014†	-1156.5	-99.3	-2.4818 ug/L	-2.4818 ppb	20:51:12
1	V 292.402†	-1307.7	79.4	0.4888 ug/L	0.4888 ppb	20:51:12
1	Zn 213.857†	696.5	-33.5	-0.3148 ug/L	-0.3148 ppb	20:51:32
1	SiO2†	547.8	37.1	2.3512 ug/L	2.3512 ppb	20:52:43
2	Sc Radial	5543.7	5543.7	104 %		20:50:20
2	Y RADIAL	5982.7	5982.7	103.9 %		20:50:20
2	Al 396.153Radial†	13.2	3.5	2.6687 ug/L	2.6687 ppb	20:50:40
2	Ca 317.933Radial†	15.1	-5.7	-9.2054 ug/L	-9.2054 ppb	20:50:40
2	Fe 238.204 Radial†	10.1	2.6	24.207 ug/L	24.207 ppb	20:50:40
2	K 766.490 Radial†	2411.8	-180.3	-32.907 ug/L	-32.907 ppb	20:50:20
2	Mg 279.077 IEC†	2.8	1.8	63.206 ug/L	63.206 ppb	20:50:40
2	Na 589.592 Radial†	-877.6	-297.7	-88.500 ug/L	-88.500 ppb	20:50:20
2	Sr 421.552†	3.0	-4.2	-0.0269 ug/L	-0.0269 ppb	20:50:20
2	Sc 361.383	888538.6	888538.6	98.960 %		20:51:37
2	Y 371.029	812060.0	812060.0	98.656 %		20:51:37
2	Ag 328.068†	321.5	28.9	0.1265 ug/L	0.1265 ppb	20:51:37
2	As 188.979†	-40.9	-11.1	-4.5418 ug/L	-4.5418 ppb	20:51:57
2	B 249.677†	-166.3	72.4	1.5843 ug/L	1.5843 ppb	20:51:57
2	Ba 233.527†	9.9	13.1	0.1036 ug/L	0.1036 ppb	20:51:57
2	Be 313.107†	-4807.9	242.1	0.0853 ug/L	0.0853 ppb	20:51:37
2	Cd 226.502†	-215.5	-11.6	-0.1318 ug/L	-0.1318 ppb	20:51:57
2	Co 228.616†	-73.6	-4.4	-0.0966 ug/L	-0.0966 ppb	20:51:57
2	Cr 267.716†	72.8	-20.3	-0.2210 ug/L	-0.2210 ppb	20:51:57
2	Cu 324.752†	8895.1	-139.5	-0.3911 ug/L	-0.3911 ppb	20:51:37
2	Mn 257.610†	592.1	108.4	0.1214 ug/L	0.1214 ppb	20:51:57
2	Mo 202.031†	24.3	0.9	0.0644 ug/L	0.0644 ppb	20:51:57
2	Ni 231.604†	103.3	10.7	0.2687 ug/L	0.2687 ppb	20:51:57

2	P 214.914†	231.4	-4.9	-2.6680 ug/L	-2.6680 ppb	20:51:57
2	Pb 220.353†	-43.2	16.8	2.1011 ug/L	2.1011 ppb	20:51:57
2	S 181.975 Axial†	44.3	-32.2	-44.305 ug/L	-44.305 ppb	20:51:57
2	Sb 206.836†	40.1	10.3	3.4687 ug/L	3.4687 ppb	20:51:57
2	Se 196.026†	-13.4	4.5	2.6485 ug/L	2.6485 ppb	20:51:57
2	Si 251.611†	612.8	123.3	3.6523 ug/L	3.6523 ppb	20:51:57
2	Sn 189.927†	8.0	8.4	1.5454 ug/L	1.5454 ppb	20:51:57
2	Ti 334.940†	-937.3	-40.6	-0.0692 ug/L	-0.0692 ppb	20:51:37
2	Tl 190.801†	-28.4	8.2	2.6363 ug/L	2.6363 ppb	20:51:57
2	U 409.014†	-968.0	84.7	2.1153 ug/L	2.1153 ppb	20:51:37
2	V 292.402†	-1387.6	-8.6	-0.0506 ug/L	-0.0506 ppb	20:51:37
2	Zn 213.857†	691.2	-35.0	-0.3292 ug/L	-0.3292 ppb	20:51:57
2	SiO2†	543.1	35.4	2.2360 ug/L	2.2360 ppb	20:53:03
3	Sc Radial	5401.9	5401.9	101 %		20:50:45
3	Y RADIAL	5783.1	5783.1	100.5 %		20:50:45
3	Al 396.153Radial†	12.2	2.9	2.2010 ug/L	2.2010 ppb	20:51:05
3	Ca 317.933Radial†	17.8	-2.7	-4.2813 ug/L	-4.2813 ppb	20:51:05
3	Fe 238.204 Radial†	10.1	2.8	26.138 ug/L	26.138 ppb	20:51:05
3	K 766.490 Radial†	2427.9	-103.4	-18.859 ug/L	-18.859 ppb	20:50:45
3	Mg 279.077 IEC†	2.5	1.5	52.346 ug/L	52.346 ppb	20:51:05
3	Na 589.592 Radial†	-870.2	-312.6	-92.916 ug/L	-92.916 ppb	20:50:45
3	Sr 421.552†	21.9	14.5	0.0932 ug/L	0.0932 ppb	20:50:45
3	Sc 361.383	884631.3	884631.3	98.525 %		20:52:03
3	Y 371.029	805307.0	805307.0	97.836 %		20:52:03
3	Ag 328.068†	401.9	111.9	0.4813 ug/L	0.4813 ppb	20:52:03
3	As 188.979†	-27.1	2.7	1.0959 ug/L	1.0959 ppb	20:52:23
3	B 249.677†	-166.3	71.7	1.5673 ug/L	1.5673 ppb	20:52:23
3	Ba 233.527†	-17.0	-14.1	-0.1106 ug/L	-0.1106 ppb	20:52:23
3	Be 313.107†	-4832.8	195.3	0.0690 ug/L	0.0690 ppb	20:52:03
3	Cd 226.502†	-195.5	7.7	0.0819 ug/L	0.0819 ppb	20:52:23
3	Co 228.616†	-63.6	5.3	0.1174 ug/L	0.1174 ppb	20:52:23
3	Cr 267.716†	87.7	-4.9	-0.0501 ug/L	-0.0501 ppb	20:52:23
3	Cu 324.752†	8794.5	-201.9	-0.5610 ug/L	-0.5610 ppb	20:52:03
3	Mn 257.610†	586.2	105.1	0.1183 ug/L	0.1183 ppb	20:52:23
3	Mo 202.031†	27.4	4.2	0.2860 ug/L	0.2860 ppb	20:52:23
3	Ni 231.604†	90.6	-1.7	-0.0433 ug/L	-0.0433 ppb	20:52:23
3	P 214.914†	235.0	-0.2	-0.0145 ug/L	-0.0145 ppb	20:52:23
3	Pb 220.353†	-50.2	9.4	1.1836 ug/L	1.1836 ppb	20:52:23
3	S 181.975 Axial†	37.1	-39.4	-54.179 ug/L	-54.179 ppb	20:52:23
3	Sb 206.836†	32.6	2.8	0.9571 ug/L	0.9571 ppb	20:52:23
3	Se 196.026†	-21.8	-4.1	-2.2913 ug/L	-2.2913 ppb	20:52:23
3	Si 251.611†	549.5	61.7	1.8252 ug/L	1.8252 ppb	20:52:23
3	Sn 189.927†	-0.2	0.1	0.0191 ug/L	0.0191 ppb	20:52:23
3	Ti 334.940†	-855.3	38.4	0.0568 ug/L	0.0568 ppb	20:52:03
3	Tl 190.801†	-34.1	2.3	0.7324 ug/L	0.7324 ppb	20:52:23
3	U 409.014†	-1320.9	-277.8	-6.9491 ug/L	-6.9491 ppb	20:52:03
3	V 292.402†	-1370.4	2.7	0.0047 ug/L	0.0047 ppb	20:52:03
3	Zn 213.857†	690.1	-32.9	-0.3084 ug/L	-0.3084 ppb	20:52:23
3	SiO2†	554.2	49.0	3.0944 ug/L	3.0944 ppb	20:53:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	888887.7	98.999 %		0.4946				0.50%
Sc Radial	5470.0	102 %		1.3				1.30%
Y 371.029	812189.0	98.672 %		0.8440				0.86%
Y RADIAL	5892.5	102.4 %		1.76				1.72%
Ag 328.068†	46.8	0.2029 ug/L		0.24917	0.2029 ppb		0.24917	122.79%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2.3	1.7143 ug/L		1.26969	1.7143 ppb		1.26969	74.06%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.3	-0.1131 ug/L		3.96490	-0.1131 ppb		3.96490	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	70.8	1.5507 ug/L		0.04434	1.5507 ppb		0.04434	2.86%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.9	0.0158 ug/L		0.11219	0.0158 ppb		0.11219	709.47%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	211.4	0.0746 ug/L		0.00920	0.0746 ppb		0.00920	12.33%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-5.2	-8.3064 ug/L		3.65942	-8.3064 ppb		3.65942	44.06%

QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-0.7	-0.0096 ug/L	0.11013	-0.0096 ppb	0.11013	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	4.2	0.0914 ug/L	0.17640	0.0914 ppb	0.17640	193.06%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-18.9	-0.2035 ug/L	0.14542	-0.2035 ppb	0.14542	71.46%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-164.6	-0.4597 ug/L	0.08954	-0.4597 ppb	0.08954	19.48%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.6	14.799 ug/L	17.9922	14.799 ppb	17.9922	121.57%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-161.1	-29.386 ug/L	9.2807	-29.386 ppb	9.2807	31.58%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.9	67.067 ug/L	16.9848	67.067 ppb	16.9848	25.32%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	103.1	0.1143 ug/L	0.00963	0.1143 ppb	0.00963	8.42%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	0.6	0.0449 ug/L	0.25143	0.0449 ppb	0.25143	560.37%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-311.1	-92.471 ug/L	3.7686	-92.471 ppb	3.7686	4.08%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	11.6	0.2922 ug/L	0.34784	0.2922 ppb	0.34784	119.04%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-3.5	-1.8925 ug/L	1.63462	-1.8925 ppb	1.63462	86.37%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	13.3	1.6712 ug/L	0.46144	1.6712 ppb	0.46144	27.61%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-34.6	-47.657 ug/L	5.6495	-47.657 ppb	5.6495	11.85%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	5.1	1.7323 ug/L	1.50660	1.7323 ppb	1.50660	86.97%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	1.4	0.8724 ug/L	2.74674	0.8724 ppb	2.74674	314.85%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	72.4	2.1452 ug/L	1.37527	2.1452 ppb	1.37527	64.11%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	4.0	0.7328 ug/L	0.76794	0.7328 ppb	0.76794	104.80%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	14.0	0.0900 ug/L	0.11531	0.0900 ppb	0.11531	128.19%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	18.5	0.0227 ug/L	0.08044	0.0227 ppb	0.08044	354.32%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	4.1	1.3202 ug/L	1.14195	1.3202 ppb	1.14195	86.50%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-97.5	-2.4385 ug/L	4.53237	-2.4385 ppb	4.53237	185.87%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	24.5	0.1476 ug/L	0.29672	0.1476 ppb	0.29672	201.01%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-33.8	-0.3175 ug/L	0.01066	-0.3175 ppb	0.01066	3.36%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	40.5	2.5605 ug/L	0.46593	2.5605 ppb	0.46593	18.20%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

Sequence No.: 46

Sample ID: 244128004|940124|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 73

Date Collected: 1/26/2010 20:55:34

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 244128004|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5555.8	5555.8	104 %		20:57:47
1	Y RADIAL	6612.2	6612.2	114.9 %		20:57:47
1	Al 396.153Radial†	183860.2	176713.2	133870 ug/L	133870 ppb	20:57:27
1	Ca 317.933Radial†	12286.1	11788.9	18948 ug/L	18948 ppb	20:57:27
1	Fe 238.204 Radial†	14408.7	13842.2	129360 ug/L	129360 ppb	20:57:27
1	K 766.490 Radial†	103720.1	97189.9	17747 ug/L	17747 ppb	20:57:27
1	Mg 279.077 IEC†	555.4	532.9	18872 ug/L	18872 ppb	20:57:47
1	Na 589.592 Radial†	1439.5	1931.3	574.11 ug/L	574.11 ppb	20:57:27
1	Sr 421.552†	36405.4	34985.0	224.38 ug/L	224.38 ppb	20:57:27
1	Sc 361.383	923103.7	923103.7	102.81 %		20:58:51
1	Y 371.029	920538.6	920538.6	111.83 %		20:58:46
1	Ag 328.068†	-8485.1	-8549.2	7.2279 ug/L	7.2279 ppb	20:59:11
1	As 188.979†	-71.2	-39.1	62.419 ug/L	62.419 ppb	20:59:11
1	B 249.677†	1600.3	1797.0	18.220 ug/L	18.220 ppb	20:58:51
1	Ba 233.527†	192053.8	186807.6	1477.0 ug/L	1477.0 ppb	20:58:51
1	Be 313.107†	-15009.8	-9499.1	9.2532 ug/L	9.2532 ppb	20:58:51
1	Cd 226.502†	1127.8	1303.1	1.2145 ug/L	1.2145 ppb	20:59:11
1	Co 228.616†	2907.3	2897.8	50.672 ug/L	50.672 ppb	20:59:11
1	Cr 267.716†	11033.9	10638.4	118.30 ug/L	118.30 ppb	20:59:11
1	Cu 324.752†	31932.6	21931.8	68.464 ug/L	68.464 ppb	20:58:51
1	Mn 257.610†	2826611.9	2748863.8	3094.0 ug/L	3094.0 ppb	20:58:46
1	Mo 202.031†	-58.2	-80.3	4.7899 ug/L	4.7899 ppb	20:59:11
1	Ni 231.604†	3478.8	3290.0	82.644 ug/L	82.644 ppb	20:59:11
1	P 214.914†	1872.0	1582.1	808.93 ug/L	808.93 ppb	20:59:11
1	Pb 220.353†	879.0	915.3	131.43 ug/L	131.43 ppb	20:59:11
1	S 181.975 Axial†	658.3	563.3	750.53 ug/L	750.53 ppb	20:59:11
1	Sb 206.836†	94.8	61.9	2.4495 ug/L	2.4495 ppb	20:59:11
1	Se 196.026†	-692.7	-655.8	57.991 ug/L	57.991 ppb	20:59:11
1	Si 251.611†	1508937.5	1467198.6	43473 ug/L	43473 ppb	20:58:46
1	Sn 189.927†	-115.0	-111.6	-15.458 ug/L	-15.458 ppb	20:59:11
1	Ti 334.940†	3742616.4	3641228.1	5552.8 ug/L	5552.8 ppb	20:58:46
1	Tl 190.801†	-242.9	-199.4	-3.7766 ug/L	-3.7766 ppb	20:59:11
1	U 409.014†	-7953.2	-6673.0	-181.86 ug/L	-181.86 ppb	20:58:51
1	V 292.402†	44840.2	45008.2	255.10 ug/L	255.10 ppb	20:58:51
1	Zn 213.857†	28272.0	26765.9	236.15 ug/L	236.15 ppb	20:59:11
1	SiO2†	1526206.0	1483977.7	93854 ug/L	93854 ppb	21:00:21
2	Sc Radial	5587.2	5587.2	105 %		20:58:13
2	Y RADIAL	6657.1	6657.1	115.6 %		20:58:13
2	Al 396.153Radial†	186627.4	178364.9	135120 ug/L	135120 ppb	20:57:52
2	Ca 317.933Radial†	12407.8	11838.9	19029 ug/L	19029 ppb	20:57:52
2	Fe 238.204 Radial†	14528.6	13878.9	129710 ug/L	129710 ppb	20:57:52
2	K 766.490 Radial†	105495.8	98326.9	17955 ug/L	17955 ppb	20:57:52
2	Mg 279.077 IEC†	559.6	533.8	18906 ug/L	18906 ppb	20:58:13
2	Na 589.592 Radial†	1447.4	1931.1	574.05 ug/L	574.05 ppb	20:57:52
2	Sr 421.552†	37072.2	35425.7	227.21 ug/L	227.21 ppb	20:57:52
2	Sc 361.383	925388.5	925388.5	103.06 %		20:59:23
2	Y 371.029	926508.6	926508.6	112.56 %		20:59:18
2	Ag 328.068†	-8435.3	-8480.5	7.6254 ug/L	7.6254 ppb	20:59:43
2	As 188.979†	-63.0	-30.9	65.955 ug/L	65.955 ppb	20:59:43
2	B 249.677†	1598.7	1791.6	18.047 ug/L	18.047 ppb	20:59:23
2	Ba 233.527†	192720.3	186993.1	1478.5 ug/L	1478.5 ppb	20:59:23
2	Be 313.107†	-14998.3	-9451.9	9.2995 ug/L	9.2995 ppb	20:59:23
2	Cd 226.502†	1158.4	1330.1	1.4799 ug/L	1.4799 ppb	20:59:43
2	Co 228.616†	2886.8	2870.9	50.053 ug/L	50.053 ppb	20:59:43
2	Cr 267.716†	10989.5	10568.8	117.56 ug/L	117.56 ppb	20:59:43
2	Cu 324.752†	31918.1	21841.0	68.227 ug/L	68.227 ppb	20:59:23
2	Mn 257.610†	2834089.8	2749331.2	3094.5 ug/L	3094.5 ppb	20:59:18
2	Mo 202.031†	-48.2	-70.3	5.4952 ug/L	5.4952 ppb	20:59:43
2	Ni 231.604†	3476.6	3279.6	82.382 ug/L	82.382 ppb	20:59:43

2	P 214.914†	1847.9	1554.2	793.35 ug/L	793.35 ppb	20:59:43
2	Pb 220.353†	855.7	890.7	128.57 ug/L	128.57 ppb	20:59:43
2	S 181.975 Axial†	655.4	559.0	744.28 ug/L	744.28 ppb	20:59:43
2	Sb 206.836†	76.2	43.7	-3.7009 ug/L	-3.7009 ppb	20:59:43
2	Se 196.026†	-681.5	-643.3	66.422 ug/L	66.422 ppb	20:59:43
2	Si 251.611†	1514585.1	1469054.5	43528 ug/L	43528 ppb	20:59:18
2	Sn 189.927†	-109.8	-106.2	-14.446 ug/L	-14.446 ppb	20:59:43
2	Ti 334.940†	3760726.0	3649811.1	5565.9 ug/L	5565.9 ppb	20:59:18
2	Tl 190.801†	-239.4	-195.4	-2.3821 ug/L	-2.3821 ppb	20:59:43
2	U 409.014†	-8003.8	-6703.0	-182.65 ug/L	-182.65 ppb	20:59:23
2	V 292.402†	44964.6	45021.2	255.13 ug/L	255.13 ppb	20:59:23
2	Zn 213.857†	28035.5	26468.4	233.35 ug/L	233.35 ppb	20:59:43
2	SiO2†	1514998.9	1469438.5	92934 ug/L	92934 ppb	21:00:27
3	Sc Radial	5561.0	5561.0	104 %		20:58:38
3	Y RADIAL	6637.0	6637.0	115.3 %		20:58:38
3	Al 396.153Radial†	182955.0	175678.9	133080 ug/L	133080 ppb	20:58:18
3	Ca 317.933Radial†	12189.1	11684.7	18781 ug/L	18781 ppb	20:58:18
3	Fe 238.204 Radial†	14270.8	13696.8	128010 ug/L	128010 ppb	20:58:18
3	K 766.490 Radial†	103203.4	96600.7	17640 ug/L	17640 ppb	20:58:18
3	Mg 279.077 IEC†	553.6	530.6	18794 ug/L	18794 ppb	20:58:38
3	Na 589.592 Radial†	1367.8	1861.1	553.25 ug/L	553.25 ppb	20:58:18
3	Sr 421.552†	36117.1	34675.5	222.40 ug/L	222.40 ppb	20:58:18
3	Sc 361.383	917059.4	917059.4	102.14 %		20:59:55
3	Y 371.029	924095.2	924095.2	112.27 %		20:59:49
3	Ag 328.068†	-8459.7	-8578.8	6.6640 ug/L	6.6640 ppb	21:00:15
3	As 188.979†	-80.5	-48.6	58.492 ug/L	58.492 ppb	21:00:15
3	B 249.677†	1556.4	1764.3	17.722 ug/L	17.722 ppb	20:59:55
3	Ba 233.527†	189884.1	185914.5	1469.9 ug/L	1469.9 ppb	20:59:55
3	Be 313.107†	-15173.6	-9755.7	9.2423 ug/L	9.2423 ppb	20:59:55
3	Cd 226.502†	1155.6	1337.6	1.7389 ug/L	1.7389 ppb	21:00:15
3	Co 228.616†	2907.0	2916.1	51.020 ug/L	51.020 ppb	21:00:15
3	Cr 267.716†	10994.5	10670.5	118.62 ug/L	118.62 ppb	21:00:15
3	Cu 324.752†	31468.8	21682.4	67.694 ug/L	67.694 ppb	20:59:55
3	Mn 257.610†	2822515.3	2762974.0	3109.6 ug/L	3109.6 ppb	20:59:49
3	Mo 202.031†	-44.0	-66.7	5.6078 ug/L	5.6078 ppb	21:00:15
3	Ni 231.604†	3455.7	3289.7	82.638 ug/L	82.638 ppb	21:00:15
3	P 214.914†	1852.7	1575.2	806.11 ug/L	806.11 ppb	21:00:15
3	Pb 220.353†	871.1	913.2	131.13 ug/L	131.13 ppb	21:00:15
3	S 181.975 Axial†	662.8	572.0	762.56 ug/L	762.56 ppb	21:00:15
3	Sb 206.836†	87.0	54.9	-0.0205 ug/L	-0.0205 ppb	21:00:15
3	Se 196.026†	-705.9	-673.2	43.441 ug/L	43.441 ppb	21:00:15
3	Si 251.611†	1506449.4	1474436.2	43687 ug/L	43687 ppb	20:59:49
3	Sn 189.927†	-113.4	-110.7	-15.354 ug/L	-15.354 ppb	21:00:15
3	Ti 334.940†	3741597.9	3664224.3	5587.9 ug/L	5587.9 ppb	20:59:49
3	Tl 190.801†	-236.7	-194.8	-1.9567 ug/L	-1.9567 ppb	21:00:15
3	U 409.014†	-8043.8	-6812.6	-185.20 ug/L	-185.20 ppb	20:59:55
3	V 292.402†	44325.8	44792.0	253.92 ug/L	253.92 ppb	20:59:55
3	Zn 213.857†	28136.8	26814.7	236.74 ug/L	236.74 ppb	21:00:15
3	SiO2†	1523401.2	1491015.9	94299 ug/L	94299 ppb	21:00:33

Mean Data: 244128004|940124|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	921850.5	102.67 %		0.479			0.47%
Sc Radial	5568.0	104 %		0.3			0.30%
Y 371.029	923714.1	112.22 %		0.365			0.33%
Y RADIAL	6635.4	115.3 %		0.39			0.34%
Ag 328.068†	-8536.1	7.1724 ug/L		0.48310	7.1724 ppb	0.48310	6.74%
Al 396.153Radial†	176919.0	134020 ug/L		1026.3	134020 ppb	1026.3	0.77%
As 188.979†	-39.6	62.289 ug/L		3.7332	62.289 ppb	3.7332	5.99%
B 249.677†	1784.3	17.996 ug/L		0.2525	17.996 ppb	0.2525	1.40%
Ba 233.527†	186571.7	1475.1 ug/L		4.57	1475.1 ppb	4.57	0.31%
Be 313.107†	-9568.9	9.2650 ug/L		0.03041	9.2650 ppb	0.03041	0.33%
Ca 317.933Radial†	11770.8	18919 ug/L		126.4	18919 ppb	126.4	0.67%
Cd 226.502†	1323.6	1.4778 ug/L		0.26222	1.4778 ppb	0.26222	17.74%
Co 228.616†	2894.9	50.581 ug/L		0.4897	50.581 ppb	0.4897	0.97%
Cr 267.716†	10625.9	118.16 ug/L		0.548	118.16 ppb	0.548	0.46%
Cu 324.752†	21818.4	68.128 ug/L		0.3942	68.128 ppb	0.3942	0.58%
Fe 238.204 Radial†	13806.0	129030 ug/L		900.1	129030 ppb	900.1	0.70%
K 766.490 Radial†	97372.5	17781 ug/L		160.3	17781 ppb	160.3	0.90%

Mg 279.077 IEC†	532.4	18857 ug/L	57.6	18857 ppb	57.6	0.31%
Mn 257.610†	2753723.0	3099.4 ug/L	8.90	3099.4 ppb	8.90	0.29%
Mo 202.031†	-72.4	5.2976 ug/L	0.44331	5.2976 ppb	0.44331	8.37%
Na 589.592 Radial†	1907.8	567.13 ug/L	12.028	567.13 ppb	12.028	2.12%
Ni 231.604†	3286.4	82.555 ug/L	0.1495	82.555 ppb	0.1495	0.18%
P 214.914†	1570.5	802.80 ug/L	8.302	802.80 ppb	8.302	1.03%
Pb 220.353†	906.4	130.38 ug/L	1.570	130.38 ppb	1.570	1.20%
S 181.975 Axial†	564.8	752.45 ug/L	9.291	752.45 ppb	9.291	1.23%
Sb 206.836†	53.5	-0.4239 ug/L	3.09498	-0.4239 ppb	3.09498	730.04%
Se 196.026†	-657.4	55.951 ug/L	11.6257	55.951 ppb	11.6257	20.78%
Si 251.611†	1470229.8	43563 ug/L	111.4	43563 ppb	111.4	0.26%
Sn 189.927†	-109.5	-15.086 ug/L	0.5564	-15.086 ppb	0.5564	3.69%
Sr 421.552†	35028.7	224.66 ug/L	2.419	224.66 ppb	2.419	1.08%
Ti 334.940†	3651754.5	5568.9 ug/L	17.71	5568.9 ppb	17.71	0.32%
Tl 190.801†	-196.5	-2.7051 ug/L	0.95196	-2.7051 ppb	0.95196	35.19%
U 409.014†	-6729.5	-183.24 ug/L	1.745	-183.24 ppb	1.745	0.95%
V 292.402†	44940.5	254.72 ug/L	0.688	254.72 ppb	0.688	0.27%
Zn 213.857†	26683.0	235.41 ug/L	1.811	235.41 ppb	1.811	0.77%
SiO2†	1481477.3	93695 ug/L	695.9	93695 ppb	695.9	0.74%

Sequence No.: 47

Sample ID: 244128005|940124|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 74

Date Collected: 1/26/2010 21:02:45

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 244128005|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5419.0	5419.0	101 %		21:04:58
1	Y RADIAL	6373.1	6373.1	110.7 %		21:04:58
1	Al 396.153Radial†	107120.2	105550.1	79958 ug/L	79958 ppb	21:04:38
1	Ca 317.933Radial†	13711.3	13491.2	21684 ug/L	21684 ppb	21:04:38
1	Fe 238.204 Radial†	10124.2	9969.5	93172 ug/L	93172 ppb	21:04:38
1	K 766.490 Radial†	81687.6	77993.8	14240 ug/L	14240 ppb	21:04:38
1	Mg 279.077 IEC†	427.1	419.9	14880 ug/L	14880 ppb	21:04:58
1	Na 589.592 Radial†	1035.3	1567.9	466.09 ug/L	466.09 ppb	21:04:38
1	Sr 421.552†	35346.8	34824.6	223.33 ug/L	223.33 ppb	21:04:38
1	Sc 361.383	941524.9	941524.9	104.86 %		21:05:56
1	Y 371.029	898852.5	898852.5	109.20 %		21:05:56
1	Ag 328.068†	-6135.6	-6147.1	5.1327 ug/L	5.1327 ppb	21:06:01
1	As 188.979†	-59.6	-26.6	47.012 ug/L	47.012 ppb	21:06:21
1	B 249.677†	1413.9	1588.8	19.571 ug/L	19.571 ppb	21:06:01
1	Ba 233.527†	183489.7	174985.6	1382.5 ug/L	1382.5 ppb	21:06:01
1	Be 313.107†	-18094.0	-12154.7	5.1644 ug/L	5.1644 ppb	21:06:01
1	Cd 226.502†	804.6	973.4	1.2680 ug/L	1.2680 ppb	21:06:21
1	Co 228.616†	2289.4	2253.2	39.940 ug/L	39.940 ppb	21:06:21
1	Cr 267.716†	9855.1	9304.2	103.01 ug/L	103.01 ppb	21:06:01
1	Cu 324.752†	28989.0	18517.0	56.943 ug/L	56.943 ppb	21:06:01
1	Mn 257.610†	2661459.0	2537576.1	2853.7 ug/L	2853.7 ppb	21:05:56
1	Mo 202.031†	-20.2	-42.9	4.5638 ug/L	4.5638 ppb	21:06:21
1	Ni 231.604†	2846.1	2620.5	65.827 ug/L	65.827 ppb	21:06:21
1	P 214.914†	2538.2	2181.8	1164.7 ug/L	1164.7 ppb	21:06:21
1	Pb 220.353†	724.0	750.8	102.79 ug/L	102.79 ppb	21:06:21
1	S 181.975 Axial†	726.4	615.7	832.75 ug/L	832.75 ppb	21:06:21
1	Sb 206.836†	85.0	50.8	3.5692 ug/L	3.5692 ppb	21:06:21
1	Se 196.026†	-487.7	-447.2	55.241 ug/L	55.241 ppb	21:06:21
1	Si 251.611†	1331643.5	1269408.7	37612 ug/L	37612 ppb	21:05:56
1	Sn 189.927†	-150.1	-142.8	-21.393 ug/L	-21.393 ppb	21:06:21
1	Ti 334.940†	2862437.8	2730633.3	4165.1 ug/L	4165.1 ppb	21:05:56
1	Tl 190.801†	-204.1	-157.8	-2.9170 ug/L	-2.9170 ppb	21:06:21
1	U 409.014†	-6190.0	-4840.2	-131.88 ug/L	-131.88 ppb	21:06:01
1	V 292.402†	32234.4	32133.5	181.83 ug/L	181.83 ppb	21:06:01
1	Zn 213.857†	24319.1	22458.2	199.66 ug/L	199.66 ppb	21:06:01
1	SiO2†	1357138.4	1293704.1	81820 ug/L	81820 ppb	21:07:30
2	Sc Radial	5527.4	5527.4	104 %		21:05:23
2	Y RADIAL	6473.9	6473.9	112.4 %		21:05:23
2	Al 396.153Radial†	107693.7	104034.4	78809 ug/L	78809 ppb	21:05:03
2	Ca 317.933Radial†	13833.5	13344.4	21448 ug/L	21448 ppb	21:05:03
2	Fe 238.204 Radial†	10246.8	9892.4	92451 ug/L	92451 ppb	21:05:03
2	K 766.490 Radial†	82283.8	76991.4	14057 ug/L	14057 ppb	21:05:03
2	Mg 279.077 IEC†	427.9	412.4	14613 ug/L	14613 ppb	21:05:23
2	Na 589.592 Radial†	1068.7	1580.1	469.72 ug/L	469.72 ppb	21:05:03
2	Sr 421.552†	35435.3	34227.2	219.50 ug/L	219.50 ppb	21:05:03
2	Sc 361.383	953161.8	953161.8	106.16 %		21:06:27
2	Y 371.029	911592.1	911592.1	110.75 %		21:06:27
2	Ag 328.068†	-6082.9	-6026.1	5.3999 ug/L	5.3999 ppb	21:06:32
2	As 188.979†	-55.6	-22.2	48.707 ug/L	48.707 ppb	21:06:52
2	B 249.677†	1443.6	1600.3	19.944 ug/L	19.944 ppb	21:06:32
2	Ba 233.527†	184321.2	173632.6	1371.9 ug/L	1371.9 ppb	21:06:32
2	Be 313.107†	-18484.3	-12311.7	5.1210 ug/L	5.1210 ppb	21:06:32
2	Cd 226.502†	823.8	982.1	1.4398 ug/L	1.4398 ppb	21:06:52
2	Co 228.616†	2277.0	2214.9	39.096 ug/L	39.096 ppb	21:06:52
2	Cr 267.716†	9848.8	9183.6	101.68 ug/L	101.68 ppb	21:06:32
2	Cu 324.752†	29070.4	18256.1	56.172 ug/L	56.172 ppb	21:06:32
2	Mn 257.610†	2691449.7	2534840.5	2850.5 ug/L	2850.5 ppb	21:06:27
2	Mo 202.031†	-12.0	-34.9	5.0503 ug/L	5.0503 ppb	21:06:52
2	Ni 231.604†	2848.5	2589.6	65.050 ug/L	65.050 ppb	21:06:52

2	P 214.914†	2520.0	2135.1	1138.8 ug/L	1138.8 ppb	21:06:52
2	Pb 220.353†	726.0	744.3	101.80 ug/L	101.80 ppb	21:06:52
2	S 181.975 Axial†	737.6	617.9	835.92 ug/L	835.92 ppb	21:06:52
2	Sb 206.836†	73.3	38.8	-0.4025 ug/L	-0.4025 ppb	21:06:52
2	Se 196.026†	-492.3	-445.8	53.602 ug/L	53.602 ppb	21:06:52
2	Si 251.611†	1347670.5	1269002.0	37600 ug/L	37600 ppb	21:06:27
2	Sn 189.927†	-139.8	-131.3	-19.335 ug/L	-19.335 ppb	21:06:52
2	Ti 334.940†	2901494.3	2734097.7	4170.4 ug/L	4170.4 ppb	21:06:27
2	Tl 190.801†	-193.1	-145.0	1.1959 ug/L	1.1959 ppb	21:06:52
2	U 409.014†	-6156.4	-4736.5	-129.20 ug/L	-129.20 ppb	21:06:32
2	V 292.402†	32406.4	31920.3	180.61 ug/L	180.61 ppb	21:06:32
2	Zn 213.857†	24369.7	22222.7	197.54 ug/L	197.54 ppb	21:06:32
2	SiO2†	1343875.0	1265409.2	80030 ug/L	80030 ppb	21:07:35
3	Sc Radial	5540.3	5540.3	104 %		21:05:49
3	Y RADIAL	6471.7	6471.7	112.4 %		21:05:49
3	Al 396.153Radial†	107469.5	103577.1	78463 ug/L	78463 ppb	21:05:29
3	Ca 317.933Radial†	13748.9	13231.9	21268 ug/L	21268 ppb	21:05:29
3	Fe 238.204 Radial†	10215.4	9839.1	91953 ug/L	91953 ppb	21:05:29
3	K 766.490 Radial†	82314.9	76837.1	14028 ug/L	14028 ppb	21:05:29
3	Mg 279.077 IEC†	429.5	413.0	14636 ug/L	14636 ppb	21:05:49
3	Na 589.592 Radial†	1049.8	1559.5	463.59 ug/L	463.59 ppb	21:05:29
3	Sr 421.552†	35517.8	34227.3	219.50 ug/L	219.50 ppb	21:05:29
3	Sc 361.383	961524.8	961524.8	107.09 %		21:06:58
3	Y 371.029	918910.1	918910.1	111.64 %		21:06:58
3	Ag 328.068†	-6118.8	-6009.8	5.2898 ug/L	5.2898 ppb	21:07:03
3	As 188.979†	-58.1	-24.0	47.738 ug/L	47.738 ppb	21:07:23
3	B 249.677†	1462.3	1606.0	20.149 ug/L	20.149 ppb	21:07:03
3	Ba 233.527†	181702.9	169677.5	1340.7 ug/L	1340.7 ppb	21:07:03
3	Be 313.107†	-18272.2	-11962.1	5.2212 ug/L	5.2212 ppb	21:07:03
3	Cd 226.502†	797.6	951.0	1.1430 ug/L	1.1430 ppb	21:07:23
3	Co 228.616†	2289.3	2207.7	38.954 ug/L	38.954 ppb	21:07:23
3	Cr 267.716†	9731.6	8993.5	99.604 ug/L	99.604 ppb	21:07:03
3	Cu 324.752†	28484.7	17471.0	53.943 ug/L	53.943 ppb	21:07:03
3	Mn 257.610†	2709090.2	2529261.8	2844.2 ug/L	2844.2 ppb	21:06:58
3	Mo 202.031†	-11.8	-34.7	5.0261 ug/L	5.0261 ppb	21:07:23
3	Ni 231.604†	2868.0	2584.5	64.923 ug/L	64.923 ppb	21:07:23
3	P 214.914†	2522.6	2116.9	1129.3 ug/L	1129.3 ppb	21:07:23
3	Pb 220.353†	718.4	731.3	100.13 ug/L	100.13 ppb	21:07:23
3	S 181.975 Axial†	744.2	617.9	836.10 ug/L	836.10 ppb	21:07:23
3	Sb 206.836†	73.2	38.1	-0.6487 ug/L	-0.6487 ppb	21:07:23
3	Se 196.026†	-493.4	-442.8	53.646 ug/L	53.646 ppb	21:07:23
3	Si 251.611†	1356300.0	1266018.6	37512 ug/L	37512 ppb	21:06:58
3	Sn 189.927†	-149.9	-139.7	-20.906 ug/L	-20.906 ppb	21:07:23
3	Ti 334.940†	2919816.4	2727434.6	4160.2 ug/L	4160.2 ppb	21:06:58
3	Tl 190.801†	-208.0	-157.4	-2.8580 ug/L	-2.8580 ppb	21:07:23
3	U 409.014†	-6200.2	-4726.9	-128.90 ug/L	-128.90 ppb	21:07:03
3	V 292.402†	31863.6	31147.8	175.89 ug/L	175.89 ppb	21:07:03
3	Zn 213.857†	24102.3	21773.3	193.41 ug/L	193.41 ppb	21:07:03
3	SiO2†	1351393.1	1261419.1	79778 ug/L	79778 ppb	21:07:41

Mean Data: 244128005|940124|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Units			Conc. Units		
Sc 361.383	952070.5	106.04 %		1.119			1.06%
Sc Radial	5495.6	103 %		1.2			1.21%
Y 371.029	909784.9	110.53 %		1.233			1.12%
Y RADIAL	6439.6	111.9 %		1.00			0.89%
Ag 328.068†	-6061.0	5.2741 ug/L		0.13429	5.2741 ppb	0.13429	2.55%
Al 396.153Radial†	104387.2	79077 ug/L		782.4	79077 ppb	782.4	0.99%
As 188.979†	-24.3	47.819 ug/L		0.8503	47.819 ppb	0.8503	1.78%
B 249.677†	1598.4	19.888 ug/L		0.2930	19.888 ppb	0.2930	1.47%
Ba 233.527†	172765.2	1365.0 ug/L		21.77	1365.0 ppb	21.77	1.59%
Be 313.107†	-12142.8	5.1689 ug/L		0.05027	5.1689 ppb	0.05027	0.97%
Ca 317.933Radial†	13355.8	21467 ug/L		209.0	21467 ppb	209.0	0.97%
Cd 226.502†	968.8	1.2836 ug/L		0.14903	1.2836 ppb	0.14903	11.61%
Co 228.616†	2225.3	39.330 ug/L		0.5333	39.330 ppb	0.5333	1.36%
Cr 267.716†	9160.4	101.43 ug/L		1.715	101.43 ppb	1.715	1.69%
Cu 324.752†	18081.4	55.686 ug/L		1.5580	55.686 ppb	1.5580	2.80%
Fe 238.204 Radial†	9900.4	92525 ug/L		612.8	92525 ppb	612.8	0.66%
K 766.490 Radial†	77274.1	14108 ug/L		114.7	14108 ppb	114.7	0.81%

Mg 279.077 IEC†	415.1	14710 ug/L	147.9	14710 ppb	147.9	1.01%
Mn 257.610†	2533892.8	2849.5 ug/L	4.80	2849.5 ppb	4.80	0.17%
Mo 202.031†	-37.5	4.8801 ug/L	0.27417	4.8801 ppb	0.27417	5.62%
Na 589.592 Radial†	1569.2	466.47 ug/L	3.081	466.47 ppb	3.081	0.66%
Ni 231.604†	2598.2	65.267 ug/L	0.4891	65.267 ppb	0.4891	0.75%
P 214.914†	2144.6	1144.3 ug/L	18.32	1144.3 ppb	18.32	1.60%
Pb 220.353†	742.1	101.57 ug/L	1.345	101.57 ppb	1.345	1.32%
S 181.975 Axial†	617.2	834.92 ug/L	1.885	834.92 ppb	1.885	0.23%
Sb 206.836†	42.5	0.8393 ug/L	2.36734	0.8393 ppb	2.36734	282.05%
Se 196.026†	-445.2	54.163 ug/L	0.9337	54.163 ppb	0.9337	1.72%
Si 251.611†	1268143.1	37575 ug/L	54.9	37575 ppb	54.9	0.15%
Sn 189.927†	-137.9	-20.545 ug/L	1.0756	-20.545 ppb	1.0756	5.24%
Sr 421.552†	34426.4	220.78 ug/L	2.212	220.78 ppb	2.212	1.00%
Ti 334.940†	2730721.9	4165.2 ug/L	5.09	4165.2 ppb	5.09	0.12%
Tl 190.801†	-153.4	-1.5264 ug/L	2.35773	-1.5264 ppb	2.35773	154.46%
U 409.014†	-4767.9	-129.99 ug/L	1.640	-129.99 ppb	1.640	1.26%
V 292.402†	31733.9	179.45 ug/L	3.136	179.45 ppb	3.136	1.75%
Zn 213.857†	22151.4	196.87 ug/L	3.179	196.87 ppb	3.179	1.61%
SiO2†	1273510.8	80543 ug/L	1113.2	80543 ppb	1113.2	1.38%

Sequence No.: 48

Sample ID: 244128006|940124|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 75

Date Collected: 1/26/2010 21:09:53

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 244128006|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5551.2	5551.2	104 %		21:12:06
1	Y RADIAL	6624.1	6624.1	115.1 %		21:12:06
1	Al 396.153Radial†	147534.1	141913.1	107500 ug/L	107500 ppb	21:11:46
1	Ca 317.933Radial†	12857.8	12348.4	19848 ug/L	19848 ppb	21:11:46
1	Fe 238.204 Radial†	13278.5	12766.2	119310 ug/L	119310 ppb	21:11:46
1	K 766.490 Radial†	88755.4	82875.9	15132 ug/L	15132 ppb	21:11:46
1	Mg 279.077 IEC†	520.4	499.6	17697 ug/L	17697 ppb	21:12:06
1	Na 589.592 Radial†	1596.1	2083.1	619.24 ug/L	619.24 ppb	21:11:46
1	Sr 421.552†	37593.2	36156.2	231.89 ug/L	231.89 ppb	21:11:46
1	Sc 361.383	955356.5	955356.5	106.40 %		21:13:04
1	Y 371.029	930793.5	930793.5	113.08 %		21:13:04
1	Ag 328.068†	-8117.9	-7925.5	6.3751 ug/L	6.3751 ppb	21:13:09
1	As 188.979†	-68.4	-34.1	54.873 ug/L	54.873 ppb	21:13:29
1	B 249.677†	1291.8	1454.5	12.371 ug/L	12.371 ppb	21:13:09
1	Ba 233.527†	260756.2	245069.7	1935.8 ug/L	1935.8 ppb	21:13:09
1	Be 313.107†	-13854.9	-7920.8	7.9152 ug/L	7.9152 ppb	21:13:09
1	Cd 226.502†	1037.3	1181.0	0.8880 ug/L	0.8880 ppb	21:13:29
1	Co 228.616†	2513.0	2431.8	42.566 ug/L	42.566 ppb	21:13:29
1	Cr 267.716†	12382.1	11543.1	127.85 ug/L	127.85 ppb	21:13:09
1	Cu 324.752†	33346.5	22212.0	68.717 ug/L	68.717 ppb	21:13:09
1	Mn 257.610†	2612732.6	2455035.7	2763.6 ug/L	2763.6 ppb	21:13:04
1	Mo 202.031†	-63.4	-83.2	3.8178 ug/L	3.8178 ppb	21:13:29
1	Ni 231.604†	3520.8	3215.3	80.773 ug/L	80.773 ppb	21:13:29
1	P 214.914†	2139.7	1772.2	917.51 ug/L	917.51 ppb	21:13:29
1	Pb 220.353†	756.6	771.5	108.72 ug/L	108.72 ppb	21:13:29
1	S 181.975 Axial†	427.8	325.0	427.37 ug/L	427.37 ppb	21:13:29
1	Sb 206.836†	78.9	43.9	-0.5485 ug/L	-0.5485 ppb	21:13:29
1	Se 196.026†	-644.6	-587.8	62.285 ug/L	62.285 ppb	21:13:29
1	Si 251.611†	1481896.5	1392235.4	41252 ug/L	41252 ppb	21:13:04
1	Sn 189.927†	-132.4	-124.1	-17.795 ug/L	-17.795 ppb	21:13:29
1	Ti 334.940†	3290959.2	3093850.0	4718.5 ug/L	4718.5 ppb	21:13:04
1	Tl 190.801†	-216.0	-166.1	-1.5066 ug/L	-1.5066 ppb	21:13:29
1	U 409.014†	-8171.9	-6617.3	-179.35 ug/L	-179.35 ppb	21:13:04
1	V 292.402†	38560.0	37633.4	211.56 ug/L	211.56 ppb	21:13:09
1	Zn 213.857†	31619.6	28983.7	257.80 ug/L	257.80 ppb	21:13:09
1	SiO2†	1493529.7	1403151.3	88742 ug/L	88742 ppb	21:14:37
2	Sc Radial	5477.9	5477.9	103 %		21:12:31
2	Y RADIAL	6547.5	6547.5	113.7 %		21:12:31
2	Al 396.153Radial†	146604.5	142907.9	108260 ug/L	108260 ppb	21:12:11
2	Ca 317.933Radial†	12725.2	12384.9	19906 ug/L	19906 ppb	21:12:11
2	Fe 238.204 Radial†	13187.1	12848.2	120070 ug/L	120070 ppb	21:12:11
2	K 766.490 Radial†	88230.1	83507.4	15247 ug/L	15247 ppb	21:12:11
2	Mg 279.077 IEC†	511.9	498.0	17638 ug/L	17638 ppb	21:12:31
2	Na 589.592 Radial†	1580.8	2088.7	620.92 ug/L	620.92 ppb	21:12:11
2	Sr 421.552†	37347.4	36400.9	233.46 ug/L	233.46 ppb	21:12:11
2	Sc 361.383	961226.8	961226.8	107.06 %		21:13:35
2	Y 371.029	936647.3	936647.3	113.79 %		21:13:35
2	Ag 328.068†	-8220.6	-7974.8	6.4168 ug/L	6.4168 ppb	21:13:40
2	As 188.979†	-68.2	-33.5	55.239 ug/L	55.239 ppb	21:14:00
2	B 249.677†	1319.2	1472.6	12.647 ug/L	12.647 ppb	21:13:40
2	Ba 233.527†	260869.4	243678.8	1924.9 ug/L	1924.9 ppb	21:13:40
2	Be 313.107†	-14037.5	-8011.9	7.8725 ug/L	7.8725 ppb	21:13:40
2	Cd 226.502†	1027.2	1165.7	0.6368 ug/L	0.6368 ppb	21:14:00
2	Co 228.616†	2475.6	2382.4	41.480 ug/L	41.480 ppb	21:14:00
2	Cr 267.716†	12481.9	11565.3	128.11 ug/L	128.11 ppb	21:13:40
2	Cu 324.752†	33261.5	21941.2	67.999 ug/L	67.999 ppb	21:13:40
2	Mn 257.610†	2626297.5	2452710.4	2761.0 ug/L	2761.0 ppb	21:13:35
2	Mo 202.031†	-45.7	-66.3	5.0304 ug/L	5.0304 ppb	21:14:00
2	Ni 231.604†	3527.9	3201.7	80.431 ug/L	80.431 ppb	21:14:00

2	P 214.914†	2147.5	1767.2	914.41 ug/L	914.41 ppb	21:14:00
2	Pb 220.353†	742.8	754.2	106.65 ug/L	106.65 ppb	21:14:00
2	S 181.975 Axial†	419.9	315.2	413.71 ug/L	413.71 ppb	21:14:00
2	Sb 206.836†	81.4	45.8	0.1409 ug/L	0.1409 ppb	21:14:00
2	Se 196.026†	-631.3	-571.8	74.125 ug/L	74.125 ppb	21:14:00
2	Si 251.611†	1490318.3	1391596.6	41233 ug/L	41233 ppb	21:13:35
2	Sn 189.927†	-126.6	-117.9	-16.641 ug/L	-16.641 ppb	21:14:00
2	Ti 334.940†	3307916.9	3090801.2	4713.8 ug/L	4713.8 ppb	21:13:35
2	Tl 190.801†	-213.5	-162.6	-0.4184 ug/L	-0.4184 ppb	21:14:00
2	U 409.014†	-8315.6	-6704.7	-181.62 ug/L	-181.62 ppb	21:13:35
2	V 292.402†	38719.1	37560.7	211.01 ug/L	211.01 ppb	21:13:40
2	Zn 213.857†	31664.8	28844.4	256.43 ug/L	256.43 ppb	21:13:40
2	SiO2†	1481075.6	1382945.7	87464 ug/L	87464 ppb	21:14:43
3	Sc Radial	5564.5	5564.5	104 %		21:12:56
3	Y RADIAL	6644.3	6644.3	115.4 %		21:12:56
3	Al 396.153Radial†	150541.5	144461.2	109430 ug/L	109430 ppb	21:12:36
3	Ca 317.933Radial†	13073.2	12525.8	20133 ug/L	20133 ppb	21:12:36
3	Fe 238.204 Radial†	13487.6	12936.5	120900 ug/L	120900 ppb	21:12:36
3	K 766.490 Radial†	90580.2	84423.7	15415 ug/L	15415 ppb	21:12:36
3	Mg 279.077 IEC†	517.6	495.7	17555 ug/L	17555 ppb	21:12:56
3	Na 589.592 Radial†	1651.4	2132.5	633.93 ug/L	633.93 ppb	21:12:36
3	Sr 421.552†	38503.8	36943.9	236.94 ug/L	236.94 ppb	21:12:36
3	Sc 361.383	943081.9	943081.9	105.04 %		21:14:06
3	Y 371.029	917959.8	917959.8	111.52 %		21:14:06
3	Ag 328.068†	-8271.5	-8171.0	5.8847 ug/L	5.8847 ppb	21:14:11
3	As 188.979†	-67.5	-34.1	55.273 ug/L	55.273 ppb	21:14:31
3	B 249.677†	1239.1	1420.1	11.357 ug/L	11.357 ppb	21:14:11
3	Ba 233.527†	262843.9	250247.0	1976.7 ug/L	1976.7 ppb	21:14:11
3	Be 313.107†	-13605.8	-7853.1	7.9422 ug/L	7.9422 ppb	21:14:11
3	Cd 226.502†	1025.9	1182.9	0.7451 ug/L	0.7451 ppb	21:14:31
3	Co 228.616†	2499.0	2449.1	42.940 ug/L	42.940 ppb	21:14:31
3	Cr 267.716†	12545.3	11849.9	131.22 ug/L	131.22 ppb	21:14:11
3	Cu 324.752†	33478.5	22745.6	70.299 ug/L	70.299 ppb	21:14:11
3	Mn 257.610†	2585287.6	2460865.9	2770.3 ug/L	2770.3 ppb	21:14:06
3	Mo 202.031†	-51.8	-72.9	4.6469 ug/L	4.6469 ppb	21:14:31
3	Ni 231.604†	3509.1	3247.2	81.576 ug/L	81.576 ppb	21:14:31
3	P 214.914†	2134.8	1793.8	928.59 ug/L	928.59 ppb	21:14:31
3	Pb 220.353†	776.4	799.5	112.51 ug/L	112.51 ppb	21:14:31
3	S 181.975 Axial†	419.4	322.3	423.23 ug/L	423.23 ppb	21:14:31
3	Sb 206.836†	79.2	45.1	-0.0941 ug/L	-0.0941 ppb	21:14:31
3	Se 196.026†	-628.8	-580.7	71.756 ug/L	71.756 ppb	21:14:31
3	Si 251.611†	1465396.3	1394653.1	41323 ug/L	41323 ppb	21:14:06
3	Sn 189.927†	-120.7	-114.6	-15.973 ug/L	-15.973 ppb	21:14:31
3	Ti 334.940†	3249632.5	3094760.2	4719.9 ug/L	4719.9 ppb	21:14:06
3	Tl 190.801†	-211.0	-164.0	-0.8140 ug/L	-0.8140 ppb	21:14:31
3	U 409.014†	-8147.0	-6693.6	-181.44 ug/L	-181.44 ppb	21:14:06
3	V 292.402†	38936.6	38463.6	216.49 ug/L	216.49 ppb	21:14:11
3	Zn 213.857†	31873.1	29611.8	263.49 ug/L	263.49 ppb	21:14:11
3	SiO2†	1475169.6	1403940.5	88792 ug/L	88792 ppb	21:14:49

Mean Data: 244128006|940124|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	953221.7	106.16 %		1.031			0.97%
Sc Radial	5531.2	104 %		0.9			0.84%
Y 371.029	928466.9	112.80 %		1.161			1.03%
Y RADIAL	6605.3	114.7 %		0.89			0.77%
Ag 328.068†	-8023.8	6.2256 ug/L		0.29589	6.2256 ppb	0.29589	4.75%
Al 396.153Radial†	143094.1	108400 ug/L		972.8	108400 ppb	972.8	0.90%
As 188.979†	-33.9	55.128 ug/L		0.2221	55.128 ppb	0.2221	0.40%
B 249.677†	1449.1	12.125 ug/L		0.6793	12.125 ppb	0.6793	5.60%
Ba 233.527†	246331.8	1945.8 ug/L		27.31	1945.8 ppb	27.31	1.40%
Be 313.107†	-7928.6	7.9100 ug/L		0.03515	7.9100 ppb	0.03515	0.44%
Ca 317.933Radial†	12419.7	19962 ug/L		150.5	19962 ppb	150.5	0.75%
Cd 226.502†	1176.5	0.7566 ug/L		0.12602	0.7566 ppb	0.12602	16.66%
Co 228.616†	2421.1	42.329 ug/L		0.7583	42.329 ppb	0.7583	1.79%
Cr 267.716†	11652.8	129.06 ug/L		1.873	129.06 ppb	1.873	1.45%
Cu 324.752†	22299.6	69.005 ug/L		1.1767	69.005 ppb	1.1767	1.71%
Fe 238.204 Radial†	12850.3	120090 ug/L		795.9	120090 ppb	795.9	0.66%
K 766.490 Radial†	83602.3	15265 ug/L		142.1	15265 ppb	142.1	0.93%

Mg 279.077 IEC†	497.8	17630 ug/L	71.4	17630 ppb	71.4	0.41%
Mn 257.610†	2456204.0	2765.0 ug/L	4.77	2765.0 ppb	4.77	0.17%
Mo 202.031†	-74.2	4.4984 ug/L	0.61978	4.4984 ppb	0.61978	13.78%
Na 589.592 Radial†	2101.4	624.69 ug/L	8.041	624.69 ppb	8.041	1.29%
Ni 231.604†	3221.4	80.927 ug/L	0.5875	80.927 ppb	0.5875	0.73%
P 214.914†	1777.7	920.17 ug/L	7.453	920.17 ppb	7.453	0.81%
Pb 220.353†	775.1	109.29 ug/L	2.974	109.29 ppb	2.974	2.72%
S 181.975 Axial†	320.9	421.44 ug/L	7.005	421.44 ppb	7.005	1.66%
Sb 206.836†	44.9	-0.1672 ug/L	0.35048	-0.1672 ppb	0.35048	209.56%
Se 196.026†	-580.1	69.389 ug/L	6.2651	69.389 ppb	6.2651	9.03%
Si 251.611†	1392828.4	41269 ug/L	47.8	41269 ppb	47.8	0.12%
Sn 189.927†	-118.9	-16.803 ug/L	0.9218	-16.803 ppb	0.9218	5.49%
Sr 421.552†	36500.4	234.10 ug/L	2.586	234.10 ppb	2.586	1.10%
Ti 334.940†	3093137.2	4717.4 ug/L	3.17	4717.4 ppb	3.17	0.07%
Tl 190.801†	-164.2	-0.9130 ug/L	0.55083	-0.9130 ppb	0.55083	60.33%
U 409.014†	-6671.9	-180.80 ug/L	1.264	-180.80 ppb	1.264	0.70%
V 292.402†	37885.9	213.02 ug/L	3.018	213.02 ppb	3.018	1.42%
Zn 213.857†	29146.6	259.24 ug/L	3.743	259.24 ppb	3.743	1.44%
SiO2†	1396679.1	88332 ug/L	752.6	88332 ppb	752.6	0.85%

Sequence No.: 49

Sample ID: 244128007|940124|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 76

Date Collected: 1/26/2010 21:17:01

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 244128007|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5556.6	5556.6	104 %		21:19:14
1	Y RADIAL	6696.9	6696.9	116.3 %		21:19:14
1	Al 396.153Radial†	225377.9	216587.1	164070 ug/L	164070 ppb	21:18:54
1	Ca 317.933Radial†	12704.3	12189.0	19591 ug/L	19591 ppb	21:18:54
1	Fe 238.204 Radial†	14947.5	14357.9	134180 ug/L	134180 ppb	21:18:54
1	K 766.490 Radial†	98730.0	92379.5	16868 ug/L	16868 ppb	21:18:54
1	Mg 279.077 IEC†	606.6	581.9	20617 ug/L	20617 ppb	21:19:14
1	Na 589.592 Radial†	2401.0	2855.1	848.73 ug/L	848.73 ppb	21:18:54
1	Sr 421.552†	41357.5	39738.9	254.89 ug/L	254.89 ppb	21:18:54
1	Sc 361.383	950798.3	950798.3	105.89 %		21:20:13
1	Y 371.029	934999.3	934999.3	113.59 %		21:20:13
1	Ag 328.068†	-9240.2	-9021.8	6.8021 ug/L	6.8021 ppb	21:20:18
1	As 188.979†	-96.4	-60.8	61.307 ug/L	61.307 ppb	21:20:38
1	B 249.677†	1328.8	1495.2	10.820 ug/L	10.820 ppb	21:20:18
1	Ba 233.527†	251967.4	237945.0	1880.2 ug/L	1880.2 ppb	21:20:18
1	Be 313.107†	-18150.5	-12039.7	10.101 ug/L	10.101 ppb	21:20:18
1	Cd 226.502†	1186.9	1327.0	0.9728 ug/L	0.9728 ppb	21:20:38
1	Co 228.616†	2977.7	2881.9	48.846 ug/L	48.846 ppb	21:20:38
1	Cr 267.716†	9475.9	8854.5	99.059 ug/L	99.059 ppb	21:20:18
1	Cu 324.752†	29965.8	19169.8	60.980 ug/L	60.980 ppb	21:20:18
1	Mn 257.610†	2803002.8	2646486.4	2979.6 ug/L	2979.6 ppb	21:20:13
1	Mo 202.031†	-65.2	-85.2	4.8338 ug/L	4.8338 ppb	21:20:38
1	Ni 231.604†	3125.7	2858.0	71.788 ug/L	71.788 ppb	21:20:38
1	P 214.914†	1617.8	1289.0	648.90 ug/L	648.90 ppb	21:20:38
1	Pb 220.353†	850.0	863.1	130.88 ug/L	130.88 ppb	21:20:38
1	S 181.975 Axial†	421.3	320.8	410.98 ug/L	410.98 ppb	21:20:38
1	Sb 206.836†	107.5	71.2	2.3193 ug/L	2.3193 ppb	21:20:38
1	Se 196.026†	-717.0	-659.2	73.921 ug/L	73.921 ppb	21:20:38
1	Si 251.611†	1387297.1	1309578.6	38803 ug/L	38803 ppb	21:20:13
1	Sn 189.927†	-111.7	-105.1	-14.091 ug/L	-14.091 ppb	21:20:38
1	Ti 334.940†	4388496.2	4145121.2	6321.1 ug/L	6321.1 ppb	21:20:13
1	Tl 190.801†	-259.5	-208.1	-0.7509 ug/L	-0.7509 ppb	21:20:38
1	U 409.014†	-8929.2	-7369.3	-199.78 ug/L	-199.78 ppb	21:20:13
1	V 292.402†	45363.6	44232.1	248.76 ug/L	248.76 ppb	21:20:18
1	Zn 213.857†	26773.4	24549.7	215.12 ug/L	215.12 ppb	21:20:18
1	SiO2†	1394183.3	1316063.9	83234 ug/L	83234 ppb	21:21:48
2	Sc Radial	5506.2	5506.2	103 %		21:19:39
2	Y RADIAL	6658.4	6658.4	115.7 %		21:19:39
2	Al 396.153Radial†	229715.3	222774.2	168760 ug/L	168760 ppb	21:19:19
2	Ca 317.933Radial†	12833.7	12426.2	19973 ug/L	19973 ppb	21:19:19
2	Fe 238.204 Radial†	15101.2	14638.3	136800 ug/L	136800 ppb	21:19:19
2	K 766.490 Radial†	100378.9	94846.3	17319 ug/L	17319 ppb	21:19:19
2	Mg 279.077 IEC†	609.7	590.3	20914 ug/L	20914 ppb	21:19:39
2	Na 589.592 Radial†	2538.5	3009.6	894.66 ug/L	894.66 ppb	21:19:19
2	Sr 421.552†	42220.5	40939.4	262.59 ug/L	262.59 ppb	21:19:19
2	Sc 361.383	955376.1	955376.1	106.40 %		21:20:45
2	Y 371.029	937058.9	937058.9	113.84 %		21:20:45
2	Ag 328.068†	-9192.3	-8935.1	7.9974 ug/L	7.9974 ppb	21:20:50
2	As 188.979†	-106.0	-69.5	58.415 ug/L	58.415 ppb	21:21:10
2	B 249.677†	1297.6	1459.9	9.6224 ug/L	9.6224 ppb	21:20:50
2	Ba 233.527†	251295.2	236173.1	1866.3 ug/L	1866.3 ppb	21:20:50
2	Be 313.107†	-17645.3	-11482.8	10.304 ug/L	10.304 ppb	21:20:50
2	Cd 226.502†	1195.8	1330.0	0.7348 ug/L	0.7348 ppb	21:21:10
2	Co 228.616†	2951.8	2844.1	47.968 ug/L	47.968 ppb	21:21:10
2	Cr 267.716†	9396.5	8737.0	97.832 ug/L	97.832 ppb	21:20:50
2	Cu 324.752†	29606.4	18696.4	59.790 ug/L	59.790 ppb	21:20:50
2	Mn 257.610†	2817841.0	2647748.4	2981.2 ug/L	2981.2 ppb	21:20:45
2	Mo 202.031†	-69.3	-88.7	4.8018 ug/L	4.8018 ppb	21:21:10
2	Ni 231.604†	3101.1	2820.8	70.853 ug/L	70.853 ppb	21:21:10

2	P 214.914†	1605.3	1270.0	637.47 ug/L	637.47 ppb	21:21:10
2	Pb 220.353†	814.9	826.3	127.02 ug/L	127.02 ppb	21:21:10
2	S 181.975 Axial†	405.7	304.3	387.37 ug/L	387.37 ppb	21:21:10
2	Sb 206.836†	93.8	57.9	-2.2070 ug/L	-2.2070 ppb	21:21:10
2	Se 196.026†	-702.6	-642.4	92.565 ug/L	92.565 ppb	21:21:10
2	Si 251.611†	1395060.4	1310597.3	38833 ug/L	38833 ppb	21:20:45
2	Sn 189.927†	-105.6	-98.9	-12.846 ug/L	-12.846 ppb	21:21:10
2	Ti 334.940†	4411491.9	4146875.5	6323.8 ug/L	6323.8 ppb	21:20:45
2	Tl 190.801†	-255.1	-202.9	0.9763 ug/L	0.9763 ppb	21:21:10
2	U 409.014†	-8929.4	-7329.2	-199.07 ug/L	-199.07 ppb	21:20:45
2	V 292.402†	45177.2	43851.7	246.02 ug/L	246.02 ppb	21:20:50
2	Zn 213.857†	26615.5	24280.1	212.36 ug/L	212.36 ppb	21:20:50
2	SiO2†	1400765.7	1315941.8	83226 ug/L	83226 ppb	21:21:54
3	Sc Radial	5476.5	5476.5	103 %		21:20:05
3	Y RADIAL	6621.1	6621.1	115.0 %		21:20:05
3	Al 396.153Radial†	226896.2	221233.8	167590 ug/L	167590 ppb	21:19:44
3	Ca 317.933Radial†	12703.2	12366.4	19877 ug/L	19877 ppb	21:19:44
3	Fe 238.204 Radial†	14933.0	14553.8	136010 ug/L	136010 ppb	21:19:44
3	K 766.490 Radial†	99020.9	94050.2	17173 ug/L	17173 ppb	21:19:44
3	Mg 279.077 IEC†	605.4	589.4	20881 ug/L	20881 ppb	21:20:05
3	Na 589.592 Radial†	2402.6	2890.4	859.22 ug/L	859.22 ppb	21:19:44
3	Sr 421.552†	41555.4	40512.9	259.85 ug/L	259.85 ppb	21:19:44
3	Sc 361.383	953223.4	953223.4	106.16 %		21:21:17
3	Y 371.029	935408.4	935408.4	113.64 %		21:21:17
3	Ag 328.068†	-9230.4	-8990.4	7.5058 ug/L	7.5058 ppb	21:21:22
3	As 188.979†	-82.8	-47.8	67.198 ug/L	67.198 ppb	21:21:42
3	B 249.677†	1244.3	1412.5	8.7088 ug/L	8.7088 ppb	21:21:22
3	Ba 233.527†	248272.9	233859.7	1848.1 ug/L	1848.1 ppb	21:21:22
3	Be 313.107†	-17484.7	-11369.0	10.375 ug/L	10.375 ppb	21:21:22
3	Cd 226.502†	1198.3	1334.9	0.8719 ug/L	0.8719 ppb	21:21:42
3	Co 228.616†	2984.8	2881.5	48.761 ug/L	48.761 ppb	21:21:42
3	Cr 267.716†	9266.1	8634.1	96.700 ug/L	96.700 ppb	21:21:22
3	Cu 324.752†	29453.7	18615.4	59.524 ug/L	59.524 ppb	21:21:22
3	Mn 257.610†	2815391.8	2651422.1	2985.3 ug/L	2985.3 ppb	21:21:17
3	Mo 202.031†	-74.4	-93.7	4.4000 ug/L	4.4000 ppb	21:21:42
3	Ni 231.604†	3145.9	2869.6	72.079 ug/L	72.079 ppb	21:21:42
3	P 214.914†	1622.9	1289.9	649.07 ug/L	649.07 ppb	21:21:42
3	Pb 220.353†	816.8	829.8	127.28 ug/L	127.28 ppb	21:21:42
3	S 181.975 Axial†	415.2	314.1	401.03 ug/L	401.03 ppb	21:21:42
3	Sb 206.836†	102.3	66.1	0.4250 ug/L	0.4250 ppb	21:21:42
3	Se 196.026†	-725.7	-665.6	76.452 ug/L	76.452 ppb	21:21:42
3	Si 251.611†	1395949.9	1314396.0	38945 ug/L	38945 ppb	21:21:17
3	Sn 189.927†	-125.6	-118.0	-16.382 ug/L	-16.382 ppb	21:21:42
3	Ti 334.940†	4411099.5	4155869.0	6337.5 ug/L	6337.5 ppb	21:21:17
3	Tl 190.801†	-246.1	-194.9	3.6590 ug/L	3.6590 ppb	21:21:42
3	U 409.014†	-9086.6	-7496.1	-203.16 ug/L	-203.16 ppb	21:21:17
3	V 292.402†	44679.0	43478.2	243.78 ug/L	243.78 ppb	21:21:22
3	Zn 213.857†	26321.4	24059.6	210.38 ug/L	210.38 ppb	21:21:22
3	SiO2†	1382375.5	1301592.4	82319 ug/L	82319 ppb	21:22:00

Mean Data: 244128007|940124|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Units			Conc. Units		
Sc 361.383	953132.6	106.15 %		0.255			0.24%
Sc Radial	5513.1	103 %		0.8			0.73%
Y 371.029	935822.2	113.69 %		0.132			0.12%
Y RADIAL	6658.8	115.7 %		0.66			0.57%
Ag 328.068†	-8982.4	7.4351 ug/L		0.60076	7.4351 ppb	0.60076	8.08%
Al 396.153Radial†	220198.4	166810 ug/L		2439.9	166810 ppb	2439.9	1.46%
As 188.979†	-59.4	62.307 ug/L		4.4761	62.307 ppb	4.4761	7.18%
B 249.677†	1455.9	9.7172 ug/L		1.05900	9.7172 ppb	1.05900	10.90%
Ba 233.527†	235992.6	1864.9 ug/L		16.13	1864.9 ppb	16.13	0.86%
Be 313.107†	-11630.5	10.260 ug/L		0.1421	10.260 ppb	0.1421	1.38%
Ca 317.933Radial†	12327.2	19813 ug/L		198.2	19813 ppb	198.2	1.00%
Cd 226.502†	1330.6	0.8599 ug/L		0.11947	0.8599 ppb	0.11947	13.89%
Co 228.616†	2869.1	48.525 ug/L		0.4841	48.525 ppb	0.4841	1.00%
Cr 267.716†	8741.9	97.864 ug/L		1.1799	97.864 ppb	1.1799	1.21%
Cu 324.752†	18827.2	60.098 ug/L		0.7755	60.098 ppb	0.7755	1.29%
Fe 238.204 Radial†	14516.7	135670 ug/L		1344.4	135670 ppb	1344.4	0.99%
K 766.490 Radial†	93758.7	17120 ug/L		229.9	17120 ppb	229.9	1.34%

Mg 279.077 IEC†	587.2	20804 ug/L	162.3	20804 ppb	162.3	0.78%
Mn 257.610†	2648552.3	2982.0 ug/L	2.93	2982.0 ppb	2.93	0.10%
Mo 202.031†	-89.2	4.6785 ug/L	0.24176	4.6785 ppb	0.24176	5.17%
Na 589.592 Radial†	2918.3	867.54 ug/L	24.068	867.54 ppb	24.068	2.77%
Ni 231.604†	2849.5	71.573 ug/L	0.6404	71.573 ppb	0.6404	0.89%
P 214.914†	1283.0	645.15 ug/L	6.649	645.15 ppb	6.649	1.03%
Pb 220.353†	839.7	128.39 ug/L	2.157	128.39 ppb	2.157	1.68%
S 181.975 Axial†	313.1	399.79 ug/L	11.858	399.79 ppb	11.858	2.97%
Sb 206.836†	65.1	0.1791 ug/L	2.27310	0.1791 ppb	2.27310	>999.9%
Se 196.026†	-655.7	80.980 ug/L	10.1127	80.980 ppb	10.1127	12.49%
Si 251.611†	1311524.0	38860 ug/L	75.2	38860 ppb	75.2	0.19%
Sn 189.927†	-107.3	-14.440 ug/L	1.7934	-14.440 ppb	1.7934	12.42%
Sr 421.552†	40397.1	259.11 ug/L	3.904	259.11 ppb	3.904	1.51%
Ti 334.940†	4149288.6	6327.5 ug/L	8.80	6327.5 ppb	8.80	0.14%
Tl 190.801†	-202.0	1.2948 ug/L	2.22211	1.2948 ppb	2.22211	171.62%
U 409.014†	-7398.2	-200.67 ug/L	2.182	-200.67 ppb	2.182	1.09%
V 292.402†	43854.0	246.19 ug/L	2.495	246.19 ppb	2.495	1.01%
Zn 213.857†	24296.5	212.62 ug/L	2.381	212.62 ppb	2.381	1.12%
SiO2†	1311199.4	82926 ug/L	526.2	82926 ppb	526.2	0.63%

Sequence No.: 50

Sample ID: 244128008|940124|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 77

Date Collected: 1/26/2010 21:24:11

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 244128008|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5546.5	5546.5	104 %		21:26:25
1	Y RADIAL	6669.6	6669.6	115.8 %		21:26:25
1	Al 396.153Radial†	198824.2	191414.7	145000 ug/L	145000 ppb	21:26:05
1	Ca 317.933Radial†	12789.7	12293.5	19759 ug/L	19759 ppb	21:26:05
1	Fe 238.204 Radial†	15069.9	14501.8	135530 ug/L	135530 ppb	21:26:05
1	K 766.490 Radial†	107859.3	101341.2	18505 ug/L	18505 ppb	21:26:05
1	Mg 279.077 IEC†	676.2	650.1	23047 ug/L	23047 ppb	21:26:25
1	Na 589.592 Radial†	2640.5	3089.8	918.52 ug/L	918.52 ppb	21:26:05
1	Sr 421.552†	44903.6	43225.2	277.26 ug/L	277.26 ppb	21:26:05
1	Sc 361.383	948545.5	948545.5	105.64 %		21:27:23
1	Y 371.029	930862.5	930862.5	113.09 %		21:27:23
1	Ag 328.068†	-9023.2	-8837.1	7.9763 ug/L	7.9763 ppb	21:27:48
1	As 188.979†	-75.6	-41.4	58.393 ug/L	58.393 ppb	21:27:48
1	B 249.677†	1353.4	1521.5	11.171 ug/L	11.171 ppb	21:27:28
1	Ba 233.527†	234639.8	222108.2	1755.4 ug/L	1755.4 ppb	21:27:28
1	Be 313.107†	-9984.7	-4350.9	9.8794 ug/L	9.8794 ppb	21:27:28
1	Cd 226.502†	1186.2	1329.0	0.8618 ug/L	0.8618 ppb	21:27:48
1	Co 228.616†	3097.1	3001.6	54.095 ug/L	54.095 ppb	21:27:48
1	Cr 267.716†	9504.7	8903.0	99.601 ug/L	99.601 ppb	21:27:48
1	Cu 324.752†	33022.1	22130.0	69.355 ug/L	69.355 ppb	21:27:28
1	Mn 257.610†	2907667.4	2751846.3	3097.7 ug/L	3097.7 ppb	21:27:23
1	Mo 202.031†	-85.1	-104.2	3.6455 ug/L	3.6455 ppb	21:27:48
1	Ni 231.604†	3454.2	3176.0	79.779 ug/L	79.779 ppb	21:27:48
1	P 214.914†	1770.1	1436.8	724.74 ug/L	724.74 ppb	21:27:48
1	Pb 220.353†	781.1	799.7	118.72 ug/L	118.72 ppb	21:27:48
1	S 181.975 Axial†	434.5	334.3	433.16 ug/L	433.16 ppb	21:27:48
1	Sb 206.836†	83.7	48.9	-0.3409 ug/L	-0.3409 ppb	21:27:48
1	Se 196.026†	-720.9	-664.4	74.114 ug/L	74.114 ppb	21:27:48
1	Si 251.611†	1474364.1	1395105.7	41337 ug/L	41337 ppb	21:27:23
1	Sn 189.927†	-103.5	-97.6	-12.673 ug/L	-12.673 ppb	21:27:48
1	Ti 334.940†	3482636.8	3297496.5	5028.5 ug/L	5028.5 ppb	21:27:23
1	Tl 190.801†	-247.5	-197.4	-7.4681 ug/L	-7.4681 ppb	21:27:48
1	U 409.014†	-8885.5	-7348.0	-199.40 ug/L	-199.40 ppb	21:27:28
1	V 292.402†	44024.9	43066.6	242.72 ug/L	242.72 ppb	21:27:28
1	Zn 213.857†	29535.6	27224.3	239.84 ug/L	239.84 ppb	21:27:48
1	SiO2†	1486913.4	1406967.2	88983 ug/L	88983 ppb	21:28:59
2	Sc Radial	5579.3	5579.3	104 %		21:26:50
2	Y RADIAL	6718.7	6718.7	116.7 %		21:26:50
2	Al 396.153Radial†	200559.4	191949.3	145410 ug/L	145410 ppb	21:26:30
2	Ca 317.933Radial†	12786.3	12217.8	19638 ug/L	19638 ppb	21:26:30
2	Fe 238.204 Radial†	15085.3	14431.2	134870 ug/L	134870 ppb	21:26:30
2	K 766.490 Radial†	108080.3	100941.7	18432 ug/L	18432 ppb	21:26:30
2	Mg 279.077 IEC†	667.2	637.6	22601 ug/L	22601 ppb	21:26:50
2	Na 589.592 Radial†	2714.0	3145.2	934.99 ug/L	934.99 ppb	21:26:30
2	Sr 421.552†	45393.2	43439.4	278.63 ug/L	278.63 ppb	21:26:30
2	Sc 361.383	955353.3	955353.3	106.40 %		21:27:55
2	Y 371.029	937809.9	937809.9	113.93 %		21:27:55
2	Ag 328.068†	-8936.1	-8694.5	8.3392 ug/L	8.3392 ppb	21:28:21
2	As 188.979†	-58.1	-24.4	65.419 ug/L	65.419 ppb	21:28:21
2	B 249.677†	1274.7	1438.4	9.4596 ug/L	9.4596 ppb	21:28:01
2	Ba 233.527†	231918.8	217968.2	1722.8 ug/L	1722.8 ppb	21:28:01
2	Be 313.107†	-10023.4	-4319.9	9.9519 ug/L	9.9519 ppb	21:28:01
2	Cd 226.502†	1170.9	1306.6	0.6793 ug/L	0.6793 ppb	21:28:21
2	Co 228.616†	3067.1	2952.5	52.958 ug/L	52.958 ppb	21:28:21
2	Cr 267.716†	9442.3	8780.3	98.250 ug/L	98.250 ppb	21:28:21
2	Cu 324.752†	32813.2	21710.9	68.143 ug/L	68.143 ppb	21:28:01
2	Mn 257.610†	2937757.7	2760513.3	3107.4 ug/L	3107.4 ppb	21:27:55
2	Mo 202.031†	-80.5	-99.3	3.9267 ug/L	3.9267 ppb	21:28:21
2	Ni 231.604†	3432.2	3132.0	78.673 ug/L	78.673 ppb	21:28:21

2	P 214.914†	1735.5	1392.3	700.51 ug/L	700.51 ppb	21:28:21
2	Pb 220.353†	765.7	780.0	116.40 ug/L	116.40 ppb	21:28:21
2	S 181.975 Axial†	441.8	338.2	438.37 ug/L	438.37 ppb	21:28:21
2	Sb 206.836†	79.5	44.5	-2.0059 ug/L	-2.0059 ppb	21:28:21
2	Se 196.026†	-733.9	-671.8	67.706 ug/L	67.706 ppb	21:28:21
2	Si 251.611†	1494110.1	1403718.8	41592 ug/L	41592 ppb	21:27:55
2	Sn 189.927†	-125.6	-117.7	-16.389 ug/L	-16.389 ppb	21:28:21
2	Ti 334.940†	3526550.3	3315276.7	5055.7 ug/L	5055.7 ppb	21:27:55
2	Tl 190.801†	-230.2	-179.5	-1.4500 ug/L	-1.4500 ppb	21:28:21
2	U 409.014†	-8841.3	-7246.5	-196.79 ug/L	-196.79 ppb	21:28:01
2	V 292.402†	43566.9	42339.2	238.26 ug/L	238.26 ppb	21:28:01
2	Zn 213.857†	29285.8	26790.4	235.87 ug/L	235.87 ppb	21:28:21
2	SiO2†	1493106.9	1402758.5	88717 ug/L	88717 ppb	21:29:05
3	Sc Radial	5523.3	5523.3	103 %		21:27:15
3	Y RADIAL	6640.4	6640.4	115.3 %		21:27:15
3	Al 396.153Radial†	198568.9	191973.0	145430 ug/L	145430 ppb	21:26:55
3	Ca 317.933Radial†	12647.3	12207.5	19621 ug/L	19621 ppb	21:26:55
3	Fe 238.204 Radial†	14948.6	14445.5	135000 ug/L	135000 ppb	21:26:55
3	K 766.490 Radial†	106929.8	100879.3	18421 ug/L	18421 ppb	21:26:55
3	Mg 279.077 IEC†	668.5	645.4	22880 ug/L	22880 ppb	21:27:15
3	Na 589.592 Radial†	2616.7	3077.5	914.87 ug/L	914.87 ppb	21:26:55
3	Sr 421.552†	44779.0	43286.5	277.65 ug/L	277.65 ppb	21:26:55
3	Sc 361.383	954489.2	954489.2	106.31 %		21:28:27
3	Y 371.029	936069.5	936069.5	113.72 %		21:28:27
3	Ag 328.068†	-8943.6	-8709.1	8.3374 ug/L	8.3374 ppb	21:28:53
3	As 188.979†	-64.7	-30.7	62.775 ug/L	62.775 ppb	21:28:53
3	B 249.677†	1320.9	1483.0	10.414 ug/L	10.414 ppb	21:28:33
3	Ba 233.527†	235285.9	221332.9	1749.3 ug/L	1749.3 ppb	21:28:33
3	Be 313.107†	-10183.4	-4478.9	9.8672 ug/L	9.8672 ppb	21:28:33
3	Cd 226.502†	1194.1	1329.5	0.9206 ug/L	0.9206 ppb	21:28:53
3	Co 228.616†	3062.5	2950.8	52.958 ug/L	52.958 ppb	21:28:53
3	Cr 267.716†	9501.5	8844.0	98.949 ug/L	98.949 ppb	21:28:53
3	Cu 324.752†	33080.6	21990.4	68.936 ug/L	68.936 ppb	21:28:33
3	Mn 257.610†	2925721.9	2751691.1	3097.5 ug/L	3097.5 ppb	21:28:27
3	Mo 202.031†	-75.8	-94.9	4.2362 ug/L	4.2362 ppb	21:28:53
3	Ni 231.604†	3447.7	3149.5	79.112 ug/L	79.112 ppb	21:28:53
3	P 214.914†	1748.2	1405.8	707.85 ug/L	707.85 ppb	21:28:53
3	Pb 220.353†	759.7	775.0	115.76 ug/L	115.76 ppb	21:28:53
3	S 181.975 Axial†	425.8	323.5	418.18 ug/L	418.18 ppb	21:28:53
3	Sb 206.836†	98.0	61.9	3.9048 ug/L	3.9048 ppb	21:28:53
3	Se 196.026†	-730.1	-668.8	69.863 ug/L	69.863 ppb	21:28:53
3	Si 251.611†	1487415.2	1398692.3	41443 ug/L	41443 ppb	21:28:27
3	Sn 189.927†	-118.5	-111.2	-15.190 ug/L	-15.190 ppb	21:28:53
3	Ti 334.940†	3514579.6	3307016.7	5043.0 ug/L	5043.0 ppb	21:28:27
3	Tl 190.801†	-233.0	-182.3	-2.5237 ug/L	-2.5237 ppb	21:28:53
3	U 409.014†	-8955.7	-7361.6	-199.68 ug/L	-199.68 ppb	21:28:33
3	V 292.402†	44078.7	42857.7	241.49 ug/L	241.49 ppb	21:28:33
3	Zn 213.857†	29330.8	26857.6	236.48 ug/L	236.48 ppb	21:28:53
3	SiO2†	1489820.5	1400937.4	88602 ug/L	88602 ppb	21:29:11

Mean Data: 244128008|940124|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	952796.0	106.12 %		0.413			0.39%
Sc Radial	5549.7	104 %		0.5			0.51%
Y 371.029	934914.0	113.58 %		0.439			0.39%
Y RADIAL	6676.3	116.0 %		0.69			0.59%
Ag 328.068†	-8746.9	8.2176 ug/L		0.20900	8.2176 ppb	0.20900	2.54%
Al 396.153Radial†	191779.0	145280 ug/L		239.2	145280 ppb	239.2	0.16%
As 188.979†	-32.1	62.196 ug/L		3.5488	62.196 ppb	3.5488	5.71%
B 249.677†	1481.0	10.348 ug/L		0.8576	10.348 ppb	0.8576	8.29%
Ba 233.527†	220469.7	1742.5 ug/L		17.36	1742.5 ppb	17.36	1.00%
Be 313.107†	-4383.2	9.8995 ug/L		0.04578	9.8995 ppb	0.04578	0.46%
Ca 317.933Radial†	12239.6	19673 ug/L		75.5	19673 ppb	75.5	0.38%
Cd 226.502†	1321.7	0.8205 ug/L		0.12584	0.8205 ppb	0.12584	15.34%
Co 228.616†	2968.3	53.337 ug/L		0.6568	53.337 ppb	0.6568	1.23%
Cr 267.716†	8842.4	98.933 ug/L		0.6755	98.933 ppb	0.6755	0.68%
Cu 324.752†	21943.8	68.812 ug/L		0.6155	68.812 ppb	0.6155	0.89%
Fe 238.204 Radial†	14459.5	135130 ug/L		348.7	135130 ppb	348.7	0.26%
K 766.490 Radial†	101054.1	18453 ug/L		45.8	18453 ppb	45.8	0.25%

Mg 279.077 IEC†	644.4	22842 ug/L	225.5	22842 ppb	225.5	0.99%
Mn 257.610†	2754683.5	3100.9 ug/L	5.65	3100.9 ppb	5.65	0.18%
Mo 202.031†	-99.5	3.9361 ug/L	0.29547	3.9361 ppb	0.29547	7.51%
Na 589.592 Radial†	3104.2	922.79 ug/L	10.719	922.79 ppb	10.719	1.16%
Ni 231.604†	3152.5	79.188 ug/L	0.5570	79.188 ppb	0.5570	0.70%
P 214.914†	1411.6	711.03 ug/L	12.427	711.03 ppb	12.427	1.75%
Pb 220.353†	784.9	116.96 ug/L	1.557	116.96 ppb	1.557	1.33%
S 181.975 Axial†	332.0	429.90 ug/L	10.483	429.90 ppb	10.483	2.44%
Sb 206.836†	51.8	0.5193 ug/L	3.04778	0.5193 ppb	3.04778	586.85%
Se 196.026†	-668.4	70.561 ug/L	3.2605	70.561 ppb	3.2605	4.62%
Si 251.611†	1399172.3	41457 ug/L	128.2	41457 ppb	128.2	0.31%
Sn 189.927†	-108.8	-14.751 ug/L	1.8962	-14.751 ppb	1.8962	12.85%
Sr 421.552†	43317.0	277.85 ug/L	0.708	277.85 ppb	0.708	0.25%
Ti 334.940†	3306596.6	5042.4 ug/L	13.58	5042.4 ppb	13.58	0.27%
Tl 190.801†	-186.4	-3.8139 ug/L	3.20983	-3.8139 ppb	3.20983	84.16%
U 409.014†	-7318.7	-198.63 ug/L	1.597	-198.63 ppb	1.597	0.80%
V 292.402†	42754.5	240.82 ug/L	2.300	240.82 ppb	2.300	0.96%
Zn 213.857†	26957.5	237.40 ug/L	2.137	237.40 ppb	2.137	0.90%
SiO2†	1403554.4	88767 ug/L	195.6	88767 ppb	195.6	0.22%

Sequence No.: 51
 Sample ID: 244128009|940124|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 78
 Date Collected: 1/26/2010 21:31:22
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 244128009|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5708.2	5708.2	107 %		21:33:36
1	Y RADIAL	6778.2	6778.2	117.7 %		21:33:36
1	Al 396.153Radial†	130541.3	122114.4	92506 ug/L	92506 ppb	21:33:15
1	Ca 317.933Radial†	11876.2	11090.2	17825 ug/L	17825 ppb	21:33:15
1	Fe 238.204 Radial†	13212.3	12353.1	115450 ug/L	115450 ppb	21:33:15
1	K 766.490 Radial†	93855.1	85299.5	15575 ug/L	15575 ppb	21:33:15
1	Mg 279.077 IEC†	497.6	464.5	16448 ug/L	16448 ppb	21:33:36
1	Na 589.592 Radial†	947.4	1433.9	426.27 ug/L	426.27 ppb	21:33:15
1	Sr 421.552†	36410.2	34055.3	218.42 ug/L	218.42 ppb	21:33:15
1	Sc 361.383	916925.4	916925.4	102.12 %		21:34:39
1	Y 371.029	939040.2	939040.2	114.08 %		21:34:34
1	Ag 328.068†	-7721.2	-7856.8	5.5527 ug/L	5.5527 ppb	21:34:59
1	As 188.979†	-69.1	-37.5	58.112 ug/L	58.112 ppb	21:34:59
1	B 249.677†	1102.1	1319.7	9.9910 ug/L	9.9910 ppb	21:34:39
1	Ba 233.527†	195762.9	191698.4	1515.1 ug/L	1515.1 ppb	21:34:39
1	Be 313.107†	-17568.7	-12103.2	7.8873 ug/L	7.8873 ppb	21:34:39
1	Cd 226.502†	1055.8	1240.0	1.9439 ug/L	1.9439 ppb	21:34:59
1	Co 228.616†	3223.3	3226.3	58.506 ug/L	58.506 ppb	21:34:59
1	Cr 267.716†	11176.8	10850.6	120.31 ug/L	120.31 ppb	21:34:59
1	Cu 324.752†	31577.9	21793.8	67.345 ug/L	67.345 ppb	21:34:39
1	Mn 257.610†	3298217.8	3229196.0	3631.2 ug/L	3631.2 ppb	21:34:34
1	Mo 202.031†	-56.3	-78.7	3.8035 ug/L	3.8035 ppb	21:34:59
1	Ni 231.604†	3366.3	3202.6	80.445 ug/L	80.445 ppb	21:34:59
1	P 214.914†	2106.8	1824.3	946.51 ug/L	946.51 ppb	21:34:59
1	Pb 220.353†	917.4	958.7	129.35 ug/L	129.35 ppb	21:34:59
1	S 181.975 Axial†	711.9	620.1	836.46 ug/L	836.46 ppb	21:34:59
1	Sb 206.836†	73.7	41.9	-2.9033 ug/L	-2.9033 ppb	21:34:59
1	Se 196.026†	-636.6	-605.4	38.439 ug/L	38.439 ppb	21:34:59
1	Si 251.611†	1409333.8	1379554.1	40876 ug/L	40876 ppb	21:34:34
1	Sn 189.927†	-122.1	-119.2	-17.268 ug/L	-17.268 ppb	21:34:59
1	Ti 334.940†	3585623.9	3512026.6	5355.9 ug/L	5355.9 ppb	21:34:34
1	Tl 190.801†	-237.1	-195.2	-1.5170 ug/L	-1.5170 ppb	21:34:59
1	U 409.014†	-8245.1	-7011.0	-188.73 ug/L	-188.73 ppb	21:34:39
1	V 292.402†	41293.0	41828.6	237.50 ug/L	237.50 ppb	21:34:39
1	Zn 213.857†	30770.8	29398.0	262.03 ug/L	262.03 ppb	21:34:59
1	SiO2†	1389285.4	1359904.8	86007 ug/L	86007 ppb	21:36:09
2	Sc Radial	5560.2	5560.2	104 %		21:34:01
2	Y RADIAL	6622.0	6622.0	115.0 %		21:34:01
2	Al 396.153Radial†	132679.0	127418.0	96523 ug/L	96523 ppb	21:33:41
2	Ca 317.933Radial†	11988.6	11493.8	18474 ug/L	18474 ppb	21:33:41
2	Fe 238.204 Radial†	13393.3	12856.0	120150 ug/L	120150 ppb	21:33:41
2	K 766.490 Radial†	94542.8	88297.0	16123 ug/L	16123 ppb	21:33:41
2	Mg 279.077 IEC†	498.3	477.6	16911 ug/L	16911 ppb	21:34:01
2	Na 589.592 Radial†	914.4	1425.8	423.86 ug/L	423.86 ppb	21:33:41
2	Sr 421.552†	36748.4	35286.7	226.32 ug/L	226.32 ppb	21:33:41
2	Sc 361.383	920815.7	920815.7	102.56 %		21:35:11
2	Y 371.029	925688.8	925688.8	112.46 %		21:35:06
2	Ag 328.068†	-7635.4	-7741.2	7.5493 ug/L	7.5493 ppb	21:35:31
2	As 188.979†	-56.5	-24.9	63.410 ug/L	63.410 ppb	21:35:31
2	B 249.677†	1161.8	1373.3	10.405 ug/L	10.405 ppb	21:35:11
2	Ba 233.527†	196298.2	191410.4	1513.0 ug/L	1513.0 ppb	21:35:11
2	Be 313.107†	-17843.5	-12298.5	7.5714 ug/L	7.5714 ppb	21:35:11
2	Cd 226.502†	1065.9	1245.5	1.5185 ug/L	1.5185 ppb	21:35:31
2	Co 228.616†	3205.9	3195.9	58.002 ug/L	58.002 ppb	21:35:31
2	Cr 267.716†	11140.4	10768.9	119.52 ug/L	119.52 ppb	21:35:31
2	Cu 324.752†	31725.9	21807.4	67.632 ug/L	67.632 ppb	21:35:11
2	Mn 257.610†	3238338.2	3157163.2	3550.9 ug/L	3550.9 ppb	21:35:06
2	Mo 202.031†	-42.4	-64.9	5.1153 ug/L	5.1153 ppb	21:35:31
2	Ni 231.604†	3342.6	3165.7	79.516 ug/L	79.516 ppb	21:35:31

2	P 214.914†	2084.5	1793.8	926.51 ug/L	926.51 ppb	21:35:31
2	Pb 220.353†	911.3	949.0	128.55 ug/L	128.55 ppb	21:35:31
2	S 181.975 Axial†	725.8	630.7	850.28 ug/L	850.28 ppb	21:35:31
2	Sb 206.836†	79.7	47.4	-0.6876 ug/L	-0.6876 ppb	21:35:31
2	Se 196.026†	-631.5	-597.8	58.608 ug/L	58.608 ppb	21:35:31
2	Si 251.611†	1386274.7	1351238.9	40037 ug/L	40037 ppb	21:35:06
2	Sn 189.927†	-127.4	-123.9	-17.951 ug/L	-17.951 ppb	21:35:31
2	Ti 334.940†	3527638.9	3440652.2	5247.1 ug/L	5247.1 ppb	21:35:06
2	Tl 190.801†	-227.7	-185.1	0.4417 ug/L	0.4417 ppb	21:35:31
2	U 409.014†	-8328.7	-7058.4	-190.45 ug/L	-190.45 ppb	21:35:11
2	V 292.402†	41468.5	41828.9	236.96 ug/L	236.96 ppb	21:35:11
2	Zn 213.857†	30674.0	29176.3	259.52 ug/L	259.52 ppb	21:35:31
2	SiO2†	1398451.1	1363094.4	86208 ug/L	86208 ppb	21:36:15
2	Sc Radial	5573.9	5573.9	104 %		21:34:26
3	Y RADIAL	6640.1	6640.1	115.3 %		21:34:26
3	Al 396.153Radial†	134415.4	128767.4	97545 ug/L	97545 ppb	21:34:06
3	Ca 317.933Radial†	12141.3	11611.7	18663 ug/L	18663 ppb	21:34:06
3	Fe 238.204 Radial†	13537.6	12962.6	121140 ug/L	121140 ppb	21:34:06
3	K 766.490 Radial†	95902.9	89376.1	16320 ug/L	16320 ppb	21:34:06
3	Mg 279.077 IEC†	502.1	480.1	16998 ug/L	16998 ppb	21:34:26
3	Na 589.592 Radial†	931.6	1440.2	428.12 ug/L	428.12 ppb	21:34:06
3	Sr 421.552†	37329.3	35756.2	229.33 ug/L	229.33 ppb	21:34:06
3	Sc 361.383	922924.5	922924.5	102.79 %		21:35:43
3	Y 371.029	940604.9	940604.9	114.27 %		21:35:38
3	Ag 328.068†	-7684.3	-7771.7	7.7368 ug/L	7.7368 ppb	21:36:03
3	As 188.979†	-60.0	-28.2	62.854 ug/L	62.854 ppb	21:36:03
3	B 249.677†	1166.0	1374.8	10.277 ug/L	10.277 ppb	21:35:43
3	Ba 233.527†	196408.1	191080.0	1510.4 ug/L	1510.4 ppb	21:35:43
3	Be 313.107†	-17846.0	-12261.2	7.7306 ug/L	7.7306 ppb	21:35:43
3	Cd 226.502†	1056.4	1233.9	1.2876 ug/L	1.2876 ppb	21:36:03
3	Co 228.616†	3199.2	3182.3	57.551 ug/L	57.551 ppb	21:36:03
3	Cr 267.716†	11183.9	10786.4	119.72 ug/L	119.72 ppb	21:36:03
3	Cu 324.752†	31843.7	21851.3	67.806 ug/L	67.806 ppb	21:35:43
3	Mn 257.610†	3283390.6	3193778.0	3592.0 ug/L	3592.0 ppb	21:35:38
3	Mo 202.031†	-46.9	-69.2	4.9030 ug/L	4.9030 ppb	21:36:03
3	Ni 231.604†	3377.0	3191.6	80.169 ug/L	80.169 ppb	21:36:03
3	P 214.914†	2093.6	1798.0	928.34 ug/L	928.34 ppb	21:36:03
3	Pb 220.353†	908.9	944.7	128.14 ug/L	128.14 ppb	21:36:03
3	S 181.975 Axial†	719.2	622.6	838.99 ug/L	838.99 ppb	21:36:03
3	Sb 206.836†	80.7	48.2	-0.5951 ug/L	-0.5951 ppb	21:36:03
3	Se 196.026†	-630.0	-594.9	63.626 ug/L	63.626 ppb	21:36:03
3	Si 251.611†	1405772.1	1367118.5	40508 ug/L	40508 ppb	21:35:38
3	Sn 189.927†	-109.8	-106.5	-14.710 ug/L	-14.710 ppb	21:36:03
3	Ti 334.940†	3579098.8	3482856.0	5311.5 ug/L	5311.5 ppb	21:35:38
3	Tl 190.801†	-236.6	-193.3	-1.4341 ug/L	-1.4341 ppb	21:36:03
3	U 409.014†	-8204.1	-6918.6	-187.07 ug/L	-187.07 ppb	21:35:43
3	V 292.402†	41471.9	41739.8	236.19 ug/L	236.19 ppb	21:35:43
3	Zn 213.857†	30777.1	29208.3	259.72 ug/L	259.72 ppb	21:36:03
3	SiO2†	1401013.5	1362471.6	86169 ug/L	86169 ppb	21:36:21

Mean Data: 244128009|940124|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Units			Conc. Units		
Sc 361.383	920221.8	102.49 %		0.339			0.33%
Sc Radial	5614.1	105 %		1.5			1.46%
Y 371.029	935111.3	113.61 %		0.996			0.88%
Y RADIAL	6680.1	116.0 %		1.48			1.28%
Ag 328.068†	-7789.9	6.9463 ug/L		1.21047	6.9463 ppb	1.21047	17.43%
Al 396.153Radial†	126099.9	95525 ug/L		2664.1	95525 ppb	2664.1	2.79%
As 188.979†	-30.2	61.459 ug/L		2.9117	61.459 ppb	2.9117	4.74%
B 249.677†	1355.9	10.224 ug/L		0.2121	10.224 ppb	0.2121	2.07%
Ba 233.527†	191396.2	1512.8 ug/L		2.35	1512.8 ppb	2.35	0.16%
Be 313.107†	-12220.9	7.7298 ug/L		0.15798	7.7298 ppb	0.15798	2.04%
Ca 317.933Radial†	11398.6	18321 ug/L		439.6	18321 ppb	439.6	2.40%
Cd 226.502†	1239.8	1.5834 ug/L		0.33293	1.5834 ppb	0.33293	21.03%
Co 228.616†	3201.5	58.020 ug/L		0.4776	58.020 ppb	0.4776	0.82%
Cr 267.716†	10802.0	119.85 ug/L		0.412	119.85 ppb	0.412	0.34%
Cu 324.752†	21817.5	67.594 ug/L		0.2331	67.594 ppb	0.2331	0.34%
Fe 238.204 Radial†	12723.9	118910 ug/L		3041.8	118910 ppb	3041.8	2.56%
K 766.490 Radial†	87657.5	16006 ug/L		385.7	16006 ppb	385.7	2.41%

Mg 279.077 IEC†	474.1	16786 ug/L	296.1	16786 ppb	296.1	1.76%
Mn 257.610†	3193379.1	3591.4 ug/L	40.16	3591.4 ppb	40.16	1.12%
Mo 202.031†	-70.9	4.6073 ug/L	0.70410	4.6073 ppb	0.70410	15.28%
Na 589.592 Radial†	1433.3	426.08 ug/L	2.133	426.08 ppb	2.133	0.50%
Ni 231.604†	3186.6	80.043 ug/L	0.4769	80.043 ppb	0.4769	0.60%
P 214.914†	1805.4	933.79 ug/L	11.057	933.79 ppb	11.057	1.18%
Pb 220.353†	950.8	128.68 ug/L	0.617	128.68 ppb	0.617	0.48%
S 181.975 Axial†	624.5	841.91 ug/L	7.358	841.91 ppb	7.358	0.87%
Sb 206.836†	45.9	-1.3953 ug/L	1.30676	-1.3953 ppb	1.30676	93.65%
Se 196.026†	-599.4	53.558 ug/L	13.3314	53.558 ppb	13.3314	24.89%
Si 251.611†	1365970.5	40474 ug/L	420.5	40474 ppb	420.5	1.04%
Sn 189.927†	-116.5	-16.643 ug/L	1.7089	-16.643 ppb	1.7089	10.27%
Sr 421.552†	35032.7	224.69 ug/L	5.634	224.69 ppb	5.634	2.51%
Ti 334.940†	3478511.6	5304.8 ug/L	54.69	5304.8 ppb	54.69	1.03%
Tl 190.801†	-191.2	-0.8365 ug/L	1.10768	-0.8365 ppb	1.10768	132.42%
U 409.014†	-6996.0	-188.75 ug/L	1.690	-188.75 ppb	1.690	0.90%
V 292.402†	41799.1	236.88 ug/L	0.658	236.88 ppb	0.658	0.28%
Zn 213.857†	29260.9	260.42 ug/L	1.399	260.42 ppb	1.399	0.54%
SiO2†	1361823.6	86128 ug/L	106.9	86128 ppb	106.9	0.12%

Sequence No.: 52

Sample ID: 244128010|940124|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 79

Date Collected: 1/26/2010 21:38:32

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 244128010|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5813.5	5813.5	109 %		21:40:46
1	Y RADIAL	7278.4	7278.4	126.4 %		21:40:46
1	Al 396.153Radial†	251458.1	230971.5	174970 ug/L	174970 ppb	21:40:26
1	Ca 317.933Radial†	14298.6	13113.9	21078 ug/L	21078 ppb	21:40:26
1	Fe 238.204 Radial†	16296.6	14962.3	139830 ug/L	139830 ppb	21:40:26
1	K 766.490 Radial†	113140.6	101423.5	18520 ug/L	18520 ppb	21:40:26
1	Mg 279.077 IEC†	683.5	626.8	22213 ug/L	22213 ppb	21:40:46
1	Na 589.592 Radial†	2322.2	2680.7	796.90 ug/L	796.90 ppb	21:40:26
1	Sr 421.552†	46647.1	42841.3	274.79 ug/L	274.79 ppb	21:40:26
1	Sc 361.383	909057.8	909057.8	101.25 %		21:41:50
1	Y 371.029	972254.1	972254.1	118.12 %		21:41:44
1	Ag 328.068†	-10022.1	-10194.9	3.8498 ug/L	3.8498 ppb	21:41:50
1	As 188.979†	-81.6	-50.4	69.611 ug/L	69.611 ppb	21:42:10
1	B 249.677†	1588.9	1809.8	16.802 ug/L	16.802 ppb	21:41:50
1	Ba 233.527†	250424.6	247346.5	1954.6 ug/L	1954.6 ppb	21:41:50
1	Be 313.107†	-13229.3	-7966.1	12.244 ug/L	12.244 ppb	21:41:50
1	Cd 226.502†	1282.1	1472.5	2.0176 ug/L	2.0176 ppb	21:42:10
1	Co 228.616†	2848.2	2883.1	48.168 ug/L	48.168 ppb	21:42:10
1	Cr 267.716†	10282.7	10062.3	112.31 ug/L	112.31 ppb	21:42:10
1	Cu 324.752†	33275.7	23738.3	74.109 ug/L	74.109 ppb	21:41:50
1	Mn 257.610†	2586428.9	2554116.4	2876.5 ug/L	2876.5 ppb	21:41:44
1	Mo 202.031†	-77.1	-99.7	4.2982 ug/L	4.2982 ppb	21:42:10
1	Ni 231.604†	3482.0	3345.4	84.038 ug/L	84.038 ppb	21:42:10
1	P 214.914†	1779.2	1518.6	773.94 ug/L	773.94 ppb	21:42:10
1	Pb 220.353†	815.0	865.4	132.98 ug/L	132.98 ppb	21:42:10
1	S 181.975 Axial†	382.8	301.1	381.79 ug/L	381.79 ppb	21:42:10
1	Sb 206.836†	87.4	56.0	-3.9255 ug/L	-3.9255 ppb	21:42:10
1	Se 196.026†	-805.2	-777.4	25.095 ug/L	25.095 ppb	21:42:10
1	Si 251.611†	1569374.7	1549569.6	45914 ug/L	45914 ppb	21:41:44
1	Sn 189.927†	-124.6	-122.7	-17.015 ug/L	-17.015 ppb	21:42:10
1	Ti 334.940†	4402382.9	4349123.9	6632.2 ug/L	6632.2 ppb	21:41:44
1	Tl 190.801†	-245.9	-206.0	1.9747 ug/L	1.9747 ppb	21:42:10
1	U 409.014†	-9599.6	-8418.6	-226.69 ug/L	-226.69 ppb	21:41:50
1	V 292.402†	47893.0	48697.4	275.34 ug/L	275.34 ppb	21:41:50
1	Zn 213.857†	30112.1	29008.2	256.01 ug/L	256.01 ppb	21:42:10
1	SiO2†	1574865.8	1554975.7	98344 ug/L	98344 ppb	21:43:20
2	Sc Radial	5627.5	5627.5	105 %		21:41:11
2	Y RADIAL	7081.2	7081.2	123.0 %		21:41:11
2	Al 396.153Radial†	249364.7	236617.7	179250 ug/L	179250 ppb	21:40:51
2	Ca 317.933Radial†	14199.6	13454.0	21625 ug/L	21625 ppb	21:40:51
2	Fe 238.204 Radial†	16170.0	15336.8	143330 ug/L	143330 ppb	21:40:51
2	K 766.490 Radial†	111856.5	103639.3	18925 ug/L	18925 ppb	21:40:51
2	Mg 279.077 IEC†	687.5	651.4	23084 ug/L	23084 ppb	21:41:11
2	Na 589.592 Radial†	2318.1	2747.4	816.71 ug/L	816.71 ppb	21:40:51
2	Sr 421.552†	46164.8	43799.6	280.93 ug/L	280.93 ppb	21:40:51
2	Sc 361.383	914758.0	914758.0	101.88 %		21:42:22
2	Y 371.029	980074.6	980074.6	119.07 %		21:42:16
2	Ag 328.068†	-10072.0	-10182.1	5.0235 ug/L	5.0235 ppb	21:42:22
2	As 188.979†	-72.3	-40.8	74.127 ug/L	74.127 ppb	21:42:42
2	B 249.677†	1606.9	1817.7	16.406 ug/L	16.406 ppb	21:42:22
2	Ba 233.527†	251296.5	246661.1	1949.3 ug/L	1949.3 ppb	21:42:22
2	Be 313.107†	-13373.9	-8026.6	12.165 ug/L	12.165 ppb	21:42:22
2	Cd 226.502†	1298.6	1480.8	1.7496 ug/L	1.7496 ppb	21:42:42
2	Co 228.616†	2867.5	2884.5	48.199 ug/L	48.199 ppb	21:42:42
2	Cr 267.716†	10309.8	10025.6	111.98 ug/L	111.98 ppb	21:42:42
2	Cu 324.752†	33367.8	23623.9	73.972 ug/L	73.972 ppb	21:42:22
2	Mn 257.610†	2593898.7	2545529.7	2867.2 ug/L	2867.2 ppb	21:42:16
2	Mo 202.031†	-81.3	-103.5	4.3235 ug/L	4.3235 ppb	21:42:42
2	Ni 231.604†	3516.7	3358.1	84.357 ug/L	84.357 ppb	21:42:42

2	P 214.914†	1788.2	1516.5	771.06 ug/L	771.06 ppb	21:42:42
2	Pb 220.353†	842.1	887.0	136.27 ug/L	136.27 ppb	21:42:42
2	S 181.975 Axial†	375.2	291.3	367.44 ug/L	367.44 ppb	21:42:42
2	Sb 206.836†	95.9	63.9	-1.2563 ug/L	-1.2563 ppb	21:42:42
2	Se 196.026†	-790.3	-757.7	48.274 ug/L	48.274 ppb	21:42:42
2	Si 251.611†	1573862.1	1544315.2	45758 ug/L	45758 ppb	21:42:16
2	Sn 189.927†	-127.3	-124.6	-17.214 ug/L	-17.214 ppb	21:42:42
2	Ti 334.940†	4412888.9	4332340.6	6606.6 ug/L	6606.6 ppb	21:42:16
2	Tl 190.801†	-250.8	-209.3	0.6645 ug/L	0.6645 ppb	21:42:42
2	U 409.014†	-9552.3	-8313.1	-224.45 ug/L	-224.45 ppb	21:42:22
2	V 292.402†	48061.0	48567.4	274.07 ug/L	274.07 ppb	21:42:22
2	Zn 213.857†	30205.0	28914.0	254.79 ug/L	254.79 ppb	21:42:42
2	SiO2†	1559959.0	1530651.3	96805 ug/L	96805 ppb	21:43:26
3	Sc Radial	5523.3	5523.3	103 %		21:41:36
3	Y RADIAL	6992.7	6992.7	121.5 %		21:41:36
3	Al 396.153Radial†	248569.1	240312.1	182040 ug/L	182040 ppb	21:41:16
3	Ca 317.933Radial†	14127.8	13638.8	21922 ug/L	21922 ppb	21:41:16
3	Fe 238.204 Radial†	16085.9	15545.0	145280 ug/L	145280 ppb	21:41:16
3	K 766.490 Radial†	111565.9	105360.5	19239 ug/L	19239 ppb	21:41:16
3	Mg 279.077 IEC†	684.7	661.0	23425 ug/L	23425 ppb	21:41:36
3	Na 589.592 Radial†	2266.5	2739.0	814.22 ug/L	814.22 ppb	21:41:16
3	Sr 421.552†	46047.9	44512.8	285.51 ug/L	285.51 ppb	21:41:16
3	Sc 361.383	922952.1	922952.1	102.79 %		21:42:53
3	Y 371.029	986284.1	986284.1	119.82 %		21:42:48
3	Ag 328.068†	-10175.4	-10194.9	5.5972 ug/L	5.5972 ppb	21:42:53
3	As 188.979†	-83.2	-50.7	70.240 ug/L	70.240 ppb	21:43:14
3	B 249.677†	1639.3	1835.1	16.475 ug/L	16.475 ppb	21:42:53
3	Ba 233.527†	253968.3	247070.4	1952.5 ug/L	1952.5 ppb	21:42:53
3	Be 313.107†	-13332.9	-7870.2	12.147 ug/L	12.147 ppb	21:42:53
3	Cd 226.502†	1308.0	1478.7	1.5236 ug/L	1.5236 ppb	21:43:14
3	Co 228.616†	2856.9	2849.3	47.466 ug/L	47.466 ppb	21:43:14
3	Cr 267.716†	10323.9	9949.4	111.19 ug/L	111.19 ppb	21:43:14
3	Cu 324.752†	33901.9	23852.7	74.717 ug/L	74.717 ppb	21:42:53
3	Mn 257.610†	2602819.9	2531604.5	2851.8 ug/L	2851.8 ppb	21:42:48
3	Mo 202.031†	-89.0	-110.2	4.0190 ug/L	4.0190 ppb	21:43:14
3	Ni 231.604†	3501.3	3312.5	83.210 ug/L	83.210 ppb	21:43:14
3	P 214.914†	1801.4	1513.7	768.49 ug/L	768.49 ppb	21:43:14
3	Pb 220.353†	823.2	861.2	133.45 ug/L	133.45 ppb	21:43:14
3	S 181.975 Axial†	380.3	293.0	369.30 ug/L	369.30 ppb	21:43:14
3	Sb 206.836†	88.3	55.7	-3.9281 ug/L	-3.9281 ppb	21:43:14
3	Se 196.026†	-800.0	-760.3	53.381 ug/L	53.381 ppb	21:43:14
3	Si 251.611†	1581503.8	1538034.2	45572 ug/L	45572 ppb	21:42:48
3	Sn 189.927†	-126.7	-122.9	-16.827 ug/L	-16.827 ppb	21:43:14
3	Ti 334.940†	4430640.7	4311154.9	6574.3 ug/L	6574.3 ppb	21:42:48
3	Tl 190.801†	-241.3	-197.9	3.9798 ug/L	3.9798 ppb	21:43:14
3	U 409.014†	-9636.1	-8311.4	-224.63 ug/L	-224.63 ppb	21:42:53
3	V 292.402†	48536.7	48611.4	274.09 ug/L	274.09 ppb	21:42:53
3	Zn 213.857†	30216.7	28662.2	252.26 ug/L	252.26 ppb	21:43:14
3	SiO2†	1570775.1	1527579.6	96611 ug/L	96611 ppb	21:43:32

Mean Data: 244128010|940124|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	915589.3	101.97 %	0.778			0.76%
Sc Radial	5654.8	106 %	2.8			2.60%
Y 371.029	979537.6	119.00 %	0.854			0.72%
Y RADIAL	7117.4	123.6 %	2.54			2.05%
Ag 328.068†	-10190.6	4.8235 ug/L	0.89068	4.8235 ppb	0.89068	18.47%
Al 396.153Radial†	235967.1	178750 ug/L	3563.5	178750 ppb	3563.5	1.99%
As 188.979†	-47.3	71.326 ug/L	2.4459	71.326 ppb	2.4459	3.43%
B 249.677†	1820.9	16.561 ug/L	0.2113	16.561 ppb	0.2113	1.28%
Ba 233.527†	247026.0	1952.1 ug/L	2.67	1952.1 ppb	2.67	0.14%
Be 313.107†	-7954.3	12.185 ug/L	0.0519	12.185 ppb	0.0519	0.43%
Ca 317.933Radial†	13402.3	21541 ug/L	427.9	21541 ppb	427.9	1.99%
Cd 226.502†	1477.3	1.7636 ug/L	0.24727	1.7636 ppb	0.24727	14.02%
Co 228.616†	2872.3	47.944 ug/L	0.4143	47.944 ppb	0.4143	0.86%
Cr 267.716†	10012.4	111.83 ug/L	0.575	111.83 ppb	0.575	0.51%
Cu 324.752†	23738.3	74.266 ug/L	0.3964	74.266 ppb	0.3964	0.53%
Fe 238.204 Radial†	15281.4	142810 ug/L	2759.2	142810 ppb	2759.2	1.93%
K 766.490 Radial†	103474.4	18894 ug/L	360.4	18894 ppb	360.4	1.91%

Mg 279.077 IEC†	646.4	22907 ug/L	625.5	22907 ppb	625.5	2.73%
Mn 257.610†	2543750.2	2865.1 ug/L	12.50	2865.1 ppb	12.50	0.44%
Mo 202.031†	-104.5	4.2136 ug/L	0.16899	4.2136 ppb	0.16899	4.01%
Na 589.592 Radial†	2722.3	809.28 ug/L	10.791	809.28 ppb	10.791	1.33%
Ni 231.604†	3338.7	83.868 ug/L	0.5922	83.868 ppb	0.5922	0.71%
P 214.914†	1516.3	771.16 ug/L	2.726	771.16 ppb	2.726	0.35%
Pb 220.353†	871.2	134.23 ug/L	1.780	134.23 ppb	1.780	1.33%
S 181.975 Axial†	295.1	372.84 ug/L	7.804	372.84 ppb	7.804	2.09%
Sb 206.836†	58.5	-3.0366 ug/L	1.54184	-3.0366 ppb	1.54184	50.77%
Se 196.026†	-765.2	42.250 ug/L	15.0742	42.250 ppb	15.0742	35.68%
Si 251.611†	1543973.0	45748 ug/L	171.1	45748 ppb	171.1	0.37%
Sn 189.927†	-123.4	-17.019 ug/L	0.1936	-17.019 ppb	0.1936	1.14%
Sr 421.552†	43717.9	280.41 ug/L	5.380	280.41 ppb	5.380	1.92%
Ti 334.940†	4330873.1	6604.4 ug/L	29.00	6604.4 ppb	29.00	0.44%
Tl 190.801†	-204.4	2.2063 ug/L	1.66975	2.2063 ppb	1.66975	75.68%
U 409.014†	-8347.7	-225.26 ug/L	1.245	-225.26 ppb	1.245	0.55%
V 292.402†	48625.4	274.50 ug/L	0.727	274.50 ppb	0.727	0.26%
Zn 213.857†	28861.5	254.35 ug/L	1.911	254.35 ppb	1.911	0.75%
SiO2†	1537735.5	97253 ug/L	949.2	97253 ppb	949.2	0.98%

Sequence No.: 53

Sample ID: 244128011|940124|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 80

Date Collected: 1/26/2010 21:45:43

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 244128011|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5524.3	5524.3	103 %		21:47:56
1	Y RADIAL	6636.8	6636.8	115.3 %		21:47:56
1	Al 396.153Radial†	118848.4	114875.5	87022 ug/L	87022 ppb	21:47:36
1	Ca 317.933Radial†	9549.6	9210.8	14805 ug/L	14805 ppb	21:47:36
1	Fe 238.204 Radial†	12137.5	11725.5	109580 ug/L	109580 ppb	21:47:36
1	K 766.490 Radial†	92528.4	86938.9	15876 ug/L	15876 ppb	21:47:36
1	Mg 279.077 IEC†	450.1	434.1	15369 ug/L	15369 ppb	21:47:56
1	Na 589.592 Radial†	1574.6	2069.7	615.27 ug/L	615.27 ppb	21:47:36
1	Sr 421.552†	30587.6	29560.4	189.60 ug/L	189.60 ppb	21:47:36
1	Sc 361.383	951866.4	951866.4	106.01 %		21:48:55
1	Y 371.029	935708.8	935708.8	113.68 %		21:48:55
1	Ag 328.068†	-7130.6	-7022.1	7.1055 ug/L	7.1055 ppb	21:49:20
1	As 188.979†	-53.9	-20.7	61.135 ug/L	61.135 ppb	21:49:20
1	B 249.677†	1519.7	1674.0	18.743 ug/L	18.743 ppb	21:49:00
1	Ba 233.527†	166620.4	157172.2	1242.7 ug/L	1242.7 ppb	21:49:00
1	Be 313.107†	-22878.7	-16480.5	5.6944 ug/L	5.6944 ppb	21:49:00
1	Cd 226.502†	958.7	1110.5	1.0916 ug/L	1.0916 ppb	21:49:20
1	Co 228.616†	2842.2	2750.9	48.654 ug/L	48.654 ppb	21:49:20
1	Cr 267.716†	8471.1	7896.6	88.145 ug/L	88.145 ppb	21:49:20
1	Cu 324.752†	25378.8	14811.2	47.436 ug/L	47.436 ppb	21:49:00
1	Mn 257.610†	2784296.2	2625870.9	2954.2 ug/L	2954.2 ppb	21:48:55
1	Mo 202.031†	-37.7	-59.2	4.6428 ug/L	4.6428 ppb	21:49:20
1	Ni 231.604†	2550.7	2312.3	58.076 ug/L	58.076 ppb	21:49:20
1	P 214.914†	2084.7	1727.7	899.30 ug/L	899.30 ppb	21:49:20
1	Pb 220.353†	818.2	832.2	112.82 ug/L	112.82 ppb	21:49:20
1	S 181.975 Axial†	780.6	659.4	891.53 ug/L	891.53 ppb	21:49:20
1	Sb 206.836†	83.5	48.5	0.2750 ug/L	0.2750 ppb	21:49:20
1	Se 196.026†	-586.6	-535.3	59.101 ug/L	59.101 ppb	21:49:20
1	Si 251.611†	1319134.2	1243812.1	36854 ug/L	36854 ppb	21:48:55
1	Sn 189.927†	-108.1	-101.7	-14.600 ug/L	-14.600 ppb	21:49:20
1	Ti 334.940†	3523549.9	3324587.7	5069.8 ug/L	5069.8 ppb	21:48:55
1	Tl 190.801†	-226.0	-176.3	-0.9817 ug/L	-0.9817 ppb	21:49:20
1	U 409.014†	-7787.7	-6283.1	-169.79 ug/L	-169.79 ppb	21:49:00
1	V 292.402†	40455.7	39554.5	224.56 ug/L	224.56 ppb	21:49:00
1	Zn 213.857†	26092.4	23878.9	211.37 ug/L	211.37 ppb	21:49:20
1	SiO2†	1321751.5	1246263.5	78819 ug/L	78819 ppb	21:50:31
2	Sc Radial	5500.5	5500.5	103 %		21:48:21
2	Y RADIAL	6624.2	6624.2	115.1 %		21:48:21
2	Al 396.153Radial†	117769.1	114325.5	86605 ug/L	86605 ppb	21:48:01
2	Ca 317.933Radial†	9499.0	9201.8	14790 ug/L	14790 ppb	21:48:01
2	Fe 238.204 Radial†	12132.1	11771.1	110010 ug/L	110010 ppb	21:48:01
2	K 766.490 Radial†	92110.7	86921.0	15873 ug/L	15873 ppb	21:48:01
2	Mg 279.077 IEC†	448.7	434.6	15387 ug/L	15387 ppb	21:48:21
2	Na 589.592 Radial†	1562.0	2064.1	613.61 ug/L	613.61 ppb	21:48:01
2	Sr 421.552†	30381.8	29488.7	189.14 ug/L	189.14 ppb	21:48:01
2	Sc 361.383	958111.1	958111.1	106.71 %		21:49:27
2	Y 371.029	940230.0	940230.0	114.23 %		21:49:27
2	Ag 328.068†	-7187.1	-7031.3	7.1939 ug/L	7.1939 ppb	21:49:52
2	As 188.979†	-59.7	-25.8	59.003 ug/L	59.003 ppb	21:49:52
2	B 249.677†	1435.2	1585.4	16.732 ug/L	16.732 ppb	21:49:32
2	Ba 233.527†	166083.5	155644.7	1230.7 ug/L	1230.7 ppb	21:49:32
2	Be 313.107†	-22467.1	-15954.1	5.8400 ug/L	5.8400 ppb	21:49:32
2	Cd 226.502†	965.8	1111.2	1.0572 ug/L	1.0572 ppb	21:49:52
2	Co 228.616†	2859.8	2750.0	48.659 ug/L	48.659 ppb	21:49:52
2	Cr 267.716†	8522.9	7893.1	88.111 ug/L	88.111 ppb	21:49:52
2	Cu 324.752†	25492.0	14761.3	47.317 ug/L	47.317 ppb	21:49:32
2	Mn 257.610†	2793698.3	2617563.9	2945.0 ug/L	2945.0 ppb	21:49:27
2	Mo 202.031†	-33.4	-54.9	4.9697 ug/L	4.9697 ppb	21:49:52
2	Ni 231.604†	2588.8	2332.4	58.580 ug/L	58.580 ppb	21:49:52

2	P 214.914†	2111.7	1740.2	905.94 ug/L	905.94 ppb	21:49:52
2	Pb 220.353†	823.6	832.2	112.69 ug/L	112.69 ppb	21:49:52
2	S 181.975 Axial†	789.8	663.1	896.76 ug/L	896.76 ppb	21:49:52
2	Sb 206.836†	89.6	53.7	2.1245 ug/L	2.1245 ppb	21:49:52
2	Se 196.026†	-591.7	-536.6	59.766 ug/L	59.766 ppb	21:49:52
2	Si 251.611†	1323306.5	1239612.0	36730 ug/L	36730 ppb	21:49:27
2	Sn 189.927†	-97.6	-91.1	-12.654 ug/L	-12.654 ppb	21:49:52
2	Ti 334.940†	3534328.2	3313025.7	5052.2 ug/L	5052.2 ppb	21:49:27
2	Tl 190.801†	-220.3	-169.6	0.9826 ug/L	0.9826 ppb	21:49:52
2	U 409.014†	-7711.8	-6164.1	-166.87 ug/L	-166.87 ppb	21:49:32
2	V 292.402†	40337.7	39195.2	222.29 ug/L	222.29 ppb	21:49:32
2	Zn 213.857†	26193.3	23813.0	210.71 ug/L	210.71 ppb	21:49:52
2	SiO2†	1325446.7	1241600.3	78524 ug/L	78524 ppb	21:50:36
3	Sc Radial	5546.3	5546.3	104 %		21:48:46
3	Y RADIAL	6672.9	6672.9	115.9 %		21:48:46
3	Al 396.153Radial†	120717.8	116220.5	88041 ug/L	88041 ppb	21:48:26
3	Ca 317.933Radial†	9675.5	9295.6	14941 ug/L	14941 ppb	21:48:26
3	Fe 238.204 Radial†	12322.4	11857.2	110810 ug/L	110810 ppb	21:48:26
3	K 766.490 Radial†	94117.6	88115.0	16091 ug/L	16091 ppb	21:48:26
3	Mg 279.077 IEC†	450.6	432.8	15323 ug/L	15323 ppb	21:48:46
3	Na 589.592 Radial†	1612.3	2100.0	624.27 ug/L	624.27 ppb	21:48:26
3	Sr 421.552†	31071.5	29909.2	191.84 ug/L	191.84 ppb	21:48:26
3	Sc 361.383	965709.7	965709.7	107.56 %		21:49:59
3	Y 371.029	947694.7	947694.7	115.13 %		21:49:59
3	Ag 328.068†	-7177.7	-6969.5	7.6897 ug/L	7.6897 ppb	21:50:24
3	As 188.979†	-69.7	-34.7	55.324 ug/L	55.324 ppb	21:50:24
3	B 249.677†	1455.1	1593.3	16.777 ug/L	16.777 ppb	21:50:04
3	Ba 233.527†	164639.8	153077.7	1210.5 ug/L	1210.5 ppb	21:50:04
3	Be 313.107†	-22599.9	-15911.9	5.7969 ug/L	5.7969 ppb	21:50:04
3	Cd 226.502†	960.3	1099.0	0.8376 ug/L	0.8376 ppb	21:50:24
3	Co 228.616†	2835.7	2706.5	47.738 ug/L	47.738 ppb	21:50:24
3	Cr 267.716†	8498.4	7807.5	87.191 ug/L	87.191 ppb	21:50:24
3	Cu 324.752†	25312.2	14406.1	46.362 ug/L	46.362 ppb	21:50:04
3	Mn 257.610†	2800205.8	2603014.4	2928.7 ug/L	2928.7 ppb	21:49:59
3	Mo 202.031†	-33.3	-54.6	5.0545 ug/L	5.0545 ppb	21:50:24
3	Ni 231.604†	2588.2	2312.7	58.087 ug/L	58.087 ppb	21:50:24
3	P 214.914†	2086.1	1700.8	883.64 ug/L	883.64 ppb	21:50:24
3	Pb 220.353†	797.2	801.6	109.08 ug/L	109.08 ppb	21:50:24
3	S 181.975 Axial†	767.1	636.2	859.47 ug/L	859.47 ppb	21:50:24
3	Sb 206.836†	67.7	32.7	-4.8683 ug/L	-4.8683 ppb	21:50:24
3	Se 196.026†	-573.3	-515.1	74.920 ug/L	74.920 ppb	21:50:24
3	Si 251.611†	1326572.9	1232891.3	36530 ug/L	36530 ppb	21:49:59
3	Sn 189.927†	-103.9	-96.3	-13.571 ug/L	-13.571 ppb	21:50:24
3	Ti 334.940†	3544320.3	3296254.6	5026.6 ug/L	5026.6 ppb	21:49:59
3	Tl 190.801†	-226.1	-173.3	-0.4962 ug/L	-0.4962 ppb	21:50:24
3	U 409.014†	-7669.5	-6067.9	-164.55 ug/L	-164.55 ppb	21:50:04
3	V 292.402†	39877.0	38469.4	217.69 ug/L	217.69 ppb	21:50:04
3	Zn 213.857†	26146.4	23576.4	208.43 ug/L	208.43 ppb	21:50:24
3	SiO2†	1329971.8	1236034.0	78172 ug/L	78172 ppb	21:50:42

Mean Data: 244128011|940124|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity		Units		Conc. Units		
Sc 361.383	958562.4	106.76	%	0.772			0.72%
Sc Radial	5523.7	103	%	0.4			0.41%
Y 371.029	941211.2	114.35	%	0.735			0.64%
Y RADIAL	6644.6	115.4	%	0.44			0.38%
Ag 328.068†	-7007.6	7.3297	ug/L	0.31491	7.3297 ppb	0.31491	4.30%
Al 396.153Radial†	115140.5	87223	ug/L	738.5	87223 ppb	738.5	0.85%
As 188.979†	-27.0	58.487	ug/L	2.9393	58.487 ppb	2.9393	5.03%
B 249.677†	1617.5	17.417	ug/L	1.1487	17.417 ppb	1.1487	6.59%
Ba 233.527†	155298.2	1228.0	ug/L	16.30	1228.0 ppb	16.30	1.33%
Be 313.107†	-16115.5	5.7771	ug/L	0.07483	5.7771 ppb	0.07483	1.30%
Ca 317.933Radial†	9236.1	14845	ug/L	83.2	14845 ppb	83.2	0.56%
Cd 226.502†	1106.9	0.9955	ug/L	0.13780	0.9955 ppb	0.13780	13.84%
Co 228.616†	2735.8	48.350	ug/L	0.5301	48.350 ppb	0.5301	1.10%
Cr 267.716†	7865.7	87.815	ug/L	0.5413	87.815 ppb	0.5413	0.62%
Cu 324.752†	14659.5	47.038	ug/L	0.5888	47.038 ppb	0.5888	1.25%
Fe 238.204 Radial†	11784.6	110130	ug/L	624.7	110130 ppb	624.7	0.57%
K 766.490 Radial†	87325.0	15946	ug/L	125.0	15946 ppb	125.0	0.78%

Mg 279.077 IEC†	433.8	15360 ug/L	32.7	15360 ppb	32.7	0.21%
Mn 257.610†	2615483.1	2942.7 ug/L	12.91	2942.7 ppb	12.91	0.44%
Mo 202.031†	-56.2	4.8890 ug/L	0.21743	4.8890 ppb	0.21743	4.45%
Na 589.592 Radial†	2078.0	617.72 ug/L	5.735	617.72 ppb	5.735	0.93%
Ni 231.604†	2319.2	58.248 ug/L	0.2879	58.248 ppb	0.2879	0.49%
P 214.914†	1722.9	896.30 ug/L	11.449	896.30 ppb	11.449	1.28%
Pb 220.353†	822.0	111.53 ug/L	2.125	111.53 ppb	2.125	1.91%
S 181.975 Axial†	652.9	882.58 ug/L	20.191	882.58 ppb	20.191	2.29%
Sb 206.836†	45.0	-0.8229 ug/L	3.62338	-0.8229 ppb	3.62338	440.30%
Se 196.026†	-529.0	64.596 ug/L	8.9475	64.596 ppb	8.9475	13.85%
Si 251.611†	1238771.8	36705 ug/L	163.2	36705 ppb	163.2	0.44%
Sn 189.927†	-96.3	-13.609 ug/L	0.9735	-13.609 ppb	0.9735	7.15%
Sr 421.552†	29652.8	190.19 ug/L	1.443	190.19 ppb	1.443	0.76%
Ti 334.940†	3311289.4	5049.5 ug/L	21.71	5049.5 ppb	21.71	0.43%
Tl 190.801†	-173.0	-0.1651 ug/L	1.02317	-0.1651 ppb	1.02317	619.68%
U 409.014†	-6171.7	-167.07 ug/L	2.628	-167.07 ppb	2.628	1.57%
V 292.402†	39073.0	221.52 ug/L	3.499	221.52 ppb	3.499	1.58%
Zn 213.857†	23756.1	210.17 ug/L	1.541	210.17 ppb	1.541	0.73%
SiO2†	1241299.2	78505 ug/L	323.9	78505 ppb	323.9	0.41%

Sequence No.: 54

Sample ID: 244128012|940124|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 81

Date Collected: 1/26/2010 21:52:53

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 244128012|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5602.3	5602.3	105 %		21:55:07
1	Y RADIAL	6982.6	6982.6	121.3 %		21:55:07
1	Al 396.153Radial†	283449.9	270171.2	204660 ug/L	204660 ppb	21:54:47
1	Ca 317.933Radial†	15390.5	14649.8	23547 ug/L	23547 ppb	21:54:47
1	Fe 238.204 Radial†	16747.4	15956.2	149120 ug/L	149120 ppb	21:54:47
1	K 766.490 Radial†	114459.5	106597.7	19464 ug/L	19464 ppb	21:54:47
1	Mg 279.077 IEC†	697.7	664.0	23529 ug/L	23529 ppb	21:55:07
1	Na 589.592 Radial†	3418.4	3806.0	1131.4 ug/L	1131.4 ppb	21:54:47
1	Sr 421.552†	48958.9	46659.8	299.27 ug/L	299.27 ppb	21:54:47
1	Sc 361.383	917780.4	917780.4	102.22 %		21:56:10
1	Y 371.029	966870.9	966870.9	117.46 %		21:56:05
1	Ag 328.068†	-10313.5	-10385.8	6.0344 ug/L	6.0344 ppb	21:56:10
1	As 188.979†	-73.0	-41.3	74.587 ug/L	74.587 ppb	21:56:30
1	B 249.677†	1694.9	1898.6	17.236 ug/L	17.236 ppb	21:56:10
1	Ba 233.527†	242945.4	237678.8	1878.6 ug/L	1878.6 ppb	21:56:10
1	Be 313.107†	-12971.3	-7589.5	12.136 ug/L	12.136 ppb	21:56:10
1	Cd 226.502†	1310.8	1488.5	1.2391 ug/L	1.2391 ppb	21:56:30
1	Co 228.616†	2960.1	2965.8	50.031 ug/L	50.031 ppb	21:56:30
1	Cr 267.716†	10639.5	10314.8	115.23 ug/L	115.23 ppb	21:56:30
1	Cu 324.752†	32521.0	22687.5	71.656 ug/L	71.656 ppb	21:56:10
1	Mn 257.610†	2823035.4	2761311.8	3109.7 ug/L	3109.7 ppb	21:56:05
1	Mo 202.031†	-78.5	-100.4	5.0060 ug/L	5.0060 ppb	21:56:30
1	Ni 231.604†	3720.6	3546.2	89.083 ug/L	89.083 ppb	21:56:30
1	P 214.914†	1846.4	1567.6	802.07 ug/L	802.07 ppb	21:56:30
1	Pb 220.353†	943.3	983.2	153.27 ug/L	153.27 ppb	21:56:30
1	S 181.975 Axial†	737.2	644.2	848.61 ug/L	848.61 ppb	21:56:30
1	Sb 206.836†	106.0	73.4	1.6919 ug/L	1.6919 ppb	21:56:30
1	Se 196.026†	-824.1	-788.3	51.410 ug/L	51.410 ppb	21:56:30
1	Si 251.611†	1339348.6	1309801.2	38809 ug/L	38809 ppb	21:56:05
1	Sn 189.927†	-122.9	-119.9	-15.964 ug/L	-15.964 ppb	21:56:30
1	Ti 334.940†	4373385.7	4279430.3	6526.2 ug/L	6526.2 ppb	21:56:05
1	Tl 190.801†	-260.6	-218.1	-1.6680 ug/L	-1.6680 ppb	21:56:30
1	U 409.014†	-9835.9	-8559.7	-231.29 ug/L	-231.29 ppb	21:56:10
1	V 292.402†	48511.6	48852.9	275.09 ug/L	275.09 ppb	21:56:10
1	Zn 213.857†	29923.5	28541.0	250.73 ug/L	250.73 ppb	21:56:30
1	SiO2†	1339069.2	1309510.4	82819 ug/L	82819 ppb	21:57:40
2	Sc Radial	5561.2	5561.2	104 %		21:55:32
2	Y RADIAL	6942.4	6942.4	120.6 %		21:55:32
2	Al 396.153Radial†	279736.7	268606.9	203480 ug/L	203480 ppb	21:55:12
2	Ca 317.933Radial†	15234.4	14608.5	23480 ug/L	23480 ppb	21:55:12
2	Fe 238.204 Radial†	16484.8	15822.3	147870 ug/L	147870 ppb	21:55:12
2	K 766.490 Radial†	112723.6	105738.9	19307 ug/L	19307 ppb	21:55:12
2	Mg 279.077 IEC†	695.9	667.2	23645 ug/L	23645 ppb	21:55:32
2	Na 589.592 Radial†	3396.6	3809.3	1132.4 ug/L	1132.4 ppb	21:55:12
2	Sr 421.552†	48225.2	46300.9	296.97 ug/L	296.97 ppb	21:55:12
2	Sc 361.383	910570.6	910570.6	101.41 %		21:56:42
2	Y 371.029	964405.5	964405.5	117.16 %		21:56:37
2	Ag 328.068†	-10202.1	-10355.8	5.7525 ug/L	5.7525 ppb	21:56:42
2	As 188.979†	-68.8	-37.7	76.105 ug/L	76.105 ppb	21:57:02
2	B 249.677†	1493.0	1712.6	13.361 ug/L	13.361 ppb	21:56:42
2	Ba 233.527†	240420.6	237071.2	1873.8 ug/L	1873.8 ppb	21:56:42
2	Be 313.107†	-12653.1	-7376.2	12.298 ug/L	12.298 ppb	21:56:42
2	Cd 226.502†	1347.2	1534.6	1.8834 ug/L	1.8834 ppb	21:57:02
2	Co 228.616†	2933.7	2962.8	49.899 ug/L	49.899 ppb	21:57:02
2	Cr 267.716†	10568.0	10326.7	115.34 ug/L	115.34 ppb	21:57:02
2	Cu 324.752†	32083.5	22508.1	71.086 ug/L	71.086 ppb	21:56:42
2	Mn 257.610†	2816971.9	2777200.4	3127.4 ug/L	3127.4 ppb	21:56:37
2	Mo 202.031†	-85.1	-107.5	4.4208 ug/L	4.4208 ppb	21:57:02
2	Ni 231.604†	3701.2	3555.9	89.327 ug/L	89.327 ppb	21:57:02

2	P 214.914†	1842.8	1578.4	808.99 ug/L	808.99 ppb	21:57:02
2	Pb 220.353†	928.0	975.5	152.16 ug/L	152.16 ppb	21:57:02
2	S 181.975 Axial†	729.7	642.6	846.55 ug/L	846.55 ppb	21:57:02
2	Sb 206.836†	90.3	58.8	-3.3483 ug/L	-3.3483 ppb	21:57:02
2	Se 196.026†	-809.5	-780.3	51.821 ug/L	51.821 ppb	21:57:02
2	Si 251.611†	1335842.9	1316719.1	39014 ug/L	39014 ppb	21:56:37
2	Sn 189.927†	-120.6	-118.6	-15.754 ug/L	-15.754 ppb	21:57:02
2	Ti 334.940†	4364402.4	4304448.9	6564.3 ug/L	6564.3 ppb	21:56:37
2	Tl 190.801†	-263.1	-222.5	-2.6881 ug/L	-2.6881 ppb	21:57:02
2	U 409.014†	-9753.2	-8554.3	-231.01 ug/L	-231.01 ppb	21:56:42
2	V 292.402†	48036.5	48760.2	274.65 ug/L	274.65 ppb	21:56:42
2	Zn 213.857†	29721.7	28573.8	251.15 ug/L	251.15 ppb	21:57:02
2	SiO2†	1349755.6	1330420.3	84142 ug/L	84142 ppb	21:57:46
3	Sc Radial	5566.2	5566.2	104 %		21:55:57
3	Y RADIAL	6947.8	6947.8	120.7 %		21:55:57
3	Al 396.153Radial†	280059.0	268671.6	203530 ug/L	203530 ppb	21:55:37
3	Ca 317.933Radial†	15239.3	14600.0	23466 ug/L	23466 ppb	21:55:37
3	Fe 238.204 Radial†	16489.6	15812.5	147780 ug/L	147780 ppb	21:55:37
3	K 766.490 Radial†	112830.0	105742.4	19308 ug/L	19308 ppb	21:55:37
3	Mg 279.077 IEC†	700.6	671.2	23787 ug/L	23787 ppb	21:55:57
3	Na 589.592 Radial†	3355.9	3767.2	1119.9 ug/L	1119.9 ppb	21:55:37
3	Sr 421.552†	48305.1	46335.4	297.19 ug/L	297.19 ppb	21:55:37
3	Sc 361.383	920184.9	920184.9	102.48 %		21:57:14
3	Y 371.029	973566.6	973566.6	118.28 %		21:57:09
3	Ag 328.068†	-10344.0	-10389.2	5.5890 ug/L	5.5890 ppb	21:57:14
3	As 188.979†	-83.6	-51.3	70.206 ug/L	70.206 ppb	21:57:34
3	B 249.677†	1534.3	1737.5	13.919 ug/L	13.919 ppb	21:57:14
3	Ba 233.527†	243530.1	237628.3	1878.2 ug/L	1878.2 ppb	21:57:14
3	Be 313.107†	-13470.3	-8043.3	11.990 ug/L	11.990 ppb	21:57:14
3	Cd 226.502†	1352.8	1526.2	1.7985 ug/L	1.7985 ppb	21:57:34
3	Co 228.616†	2985.4	2982.9	50.413 ug/L	50.413 ppb	21:57:34
3	Cr 267.716†	10662.6	10310.2	115.16 ug/L	115.16 ppb	21:57:34
3	Cu 324.752†	32742.5	22820.6	71.959 ug/L	71.959 ppb	21:57:14
3	Mn 257.610†	2829333.7	2760240.6	3108.3 ug/L	3108.3 ppb	21:57:09
3	Mo 202.031†	-80.5	-102.1	4.7806 ug/L	4.7806 ppb	21:57:34
3	Ni 231.604†	3756.6	3571.8	89.726 ug/L	89.726 ppb	21:57:34
3	P 214.914†	1858.5	1574.7	806.82 ug/L	806.82 ppb	21:57:34
3	Pb 220.353†	921.4	959.4	150.17 ug/L	150.17 ppb	21:57:34
3	S 181.975 Axial†	743.9	648.9	855.30 ug/L	855.30 ppb	21:57:34
3	Sb 206.836†	101.9	69.2	0.2671 ug/L	0.2671 ppb	21:57:34
3	Se 196.026†	-849.0	-810.5	34.102 ug/L	34.102 ppb	21:57:34
3	Si 251.611†	1343342.0	1310273.8	38823 ug/L	38823 ppb	21:57:09
3	Sn 189.927†	-113.5	-110.4	-14.242 ug/L	-14.242 ppb	21:57:34
3	Ti 334.940†	4388967.9	4283454.5	6532.3 ug/L	6532.3 ppb	21:57:09
3	Tl 190.801†	-266.1	-222.8	-3.1276 ug/L	-3.1276 ppb	21:57:34
3	U 409.014†	-9959.1	-8654.8	-233.51 ug/L	-233.51 ppb	21:57:14
3	V 292.402†	48682.3	48895.5	275.54 ug/L	275.54 ppb	21:57:14
3	Zn 213.857†	29986.0	28525.5	250.71 ug/L	250.71 ppb	21:57:34
3	SiO2†	1346416.6	1313256.4	83056 ug/L	83056 ppb	21:57:52

Mean Data: 244128012|940124|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	916178.6	102.04 %	0.557			0.55%
Sc Radial	5576.6	104 %	0.4			0.40%
Y 371.029	968281.0	117.64 %	0.576			0.49%
Y RADIAL	6957.6	120.9 %	0.38			0.31%
Ag 328.068†	-10376.9	5.7920 ug/L	0.22533	5.7920 ppb	0.22533	3.89%
Al 396.153Radial†	269149.9	203890 ug/L	670.4	203890 ppb	670.4	0.33%
As 188.979†	-43.4	73.633 ug/L	3.0634	73.633 ppb	3.0634	4.16%
B 249.677†	1782.9	14.839 ug/L	2.0947	14.839 ppb	2.0947	14.12%
Ba 233.527†	237459.4	1876.9 ug/L	2.67	1876.9 ppb	2.67	0.14%
Be 313.107†	-7669.7	12.141 ug/L	0.1541	12.141 ppb	0.1541	1.27%
Ca 317.933Radial†	14619.4	23498 ug/L	42.8	23498 ppb	42.8	0.18%
Cd 226.502†	1516.4	1.6403 ug/L	0.35007	1.6403 ppb	0.35007	21.34%
Co 228.616†	2970.5	50.114 ug/L	0.2666	50.114 ppb	0.2666	0.53%
Cr 267.716†	10317.2	115.24 ug/L	0.090	115.24 ppb	0.090	0.08%
Cu 324.752†	22672.1	71.567 ug/L	0.4433	71.567 ppb	0.4433	0.62%
Fe 238.204 Radial†	15863.7	148260 ug/L	750.6	148260 ppb	750.6	0.51%
K 766.490 Radial†	106026.3	19360 ug/L	90.4	19360 ppb	90.4	0.47%

Mg 279.077 IEC†	667.5	23654 ug/L	129.0	23654 ppb	129.0	0.55%
Mn 257.610†	2766251.0	3115.1 ug/L	10.62	3115.1 ppb	10.62	0.34%
Mo 202.031†	-103.3	4.7358 ug/L	0.29517	4.7358 ppb	0.29517	6.23%
Na 589.592 Radial†	3794.2	1127.9 ug/L	6.96	1127.9 ppb	6.96	0.62%
Ni 231.604†	3558.0	89.378 ug/L	0.3245	89.378 ppb	0.3245	0.36%
P 214.914†	1573.5	805.96 ug/L	3.539	805.96 ppb	3.539	0.44%
Pb 220.353†	972.7	151.86 ug/L	1.572	151.86 ppb	1.572	1.03%
S 181.975 Axial†	645.2	850.15 ug/L	4.573	850.15 ppb	4.573	0.54%
Sb 206.836†	67.1	-0.4631 ug/L	2.59822	-0.4631 ppb	2.59822	561.04%
Se 196.026†	-793.0	45.778 ug/L	10.1136	45.778 ppb	10.1136	22.09%
Si 251.611†	1312264.7	38882 ug/L	114.5	38882 ppb	114.5	0.29%
Sn 189.927†	-116.3	-15.320 ug/L	0.9395	-15.320 ppb	0.9395	6.13%
Sr 421.552†	46432.1	297.81 ug/L	1.270	297.81 ppb	1.270	0.43%
Ti 334.940†	4289111.2	6540.9 ug/L	20.48	6540.9 ppb	20.48	0.31%
Tl 190.801†	-221.1	-2.4945 ug/L	0.74878	-2.4945 ppb	0.74878	30.02%
U 409.014†	-8589.6	-231.94 ug/L	1.371	-231.94 ppb	1.371	0.59%
V 292.402†	48836.2	275.09 ug/L	0.446	275.09 ppb	0.446	0.16%
Zn 213.857†	28546.8	250.86 ug/L	0.252	250.86 ppb	0.252	0.10%
SiO2†	1317729.0	83339 ug/L	705.1	83339 ppb	705.1	0.85%

Sequence No.: 55

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 1/26/2010 22:00:03

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5433.0	5433.0	102 %		22:01:56
1	Y RADIAL	5886.0	5886.0	102.2 %		22:01:56
1	Al 396.153Radial†	6820.0	6694.2	5047.5 ug/L	5047.5 ppb	22:01:56
1	Ca 317.933Radial†	3226.8	3151.4	5065.3 ug/L	5065.3 ppb	22:02:16
1	Fe 238.204 Radial†	582.4	565.3	5298.1 ug/L	5298.1 ppb	22:02:16
1	K 766.490 Radial†	30688.3	27660.1	5046.7 ug/L	5046.7 ppb	22:01:56
1	Mg 279.077 IEC†	151.1	147.6	5264.2 ug/L	5264.2 ppb	22:02:16
1	Na 589.592 Radial†	33583.3	33556.8	9975.5 ug/L	9975.5 ppb	22:01:56
1	Sr 421.552†	81255.0	79858.8	512.47 ug/L	512.47 ppb	22:01:56
1	Sc 361.383	939192.9	939192.9	104.60 %		22:03:13
1	Y 371.029	822908.7	822908.7	99.974 %		22:03:13
1	Ag 328.068†	122932.7	117228.2	492.43 ug/L	492.43 ppb	22:03:19
1	As 188.979†	1214.3	1191.1	491.65 ug/L	491.65 ppb	22:03:39
1	B 249.677†	22631.6	21876.4	477.48 ug/L	477.48 ppb	22:03:19
1	Ba 233.527†	64931.2	62077.7	490.55 ug/L	490.55 ppb	22:03:19
1	Be 313.107†	1437423.5	1379284.3	487.68 ug/L	487.68 ppb	22:03:13
1	Cd 226.502†	45880.7	44068.3	492.12 ug/L	492.12 ppb	22:03:19
1	Co 228.616†	23756.2	22781.0	499.45 ug/L	499.45 ppb	22:03:19
1	Cr 267.716†	47429.1	45248.5	491.13 ug/L	491.13 ppb	22:03:19
1	Cu 324.752†	189683.8	172210.6	483.10 ug/L	483.10 ppb	22:03:19
1	Mn 257.610†	453618.3	433171.5	485.97 ug/L	485.97 ppb	22:03:13
1	Mo 202.031†	7474.1	7121.6	486.51 ug/L	486.51 ppb	22:03:39
1	Ni 231.604†	20594.5	19594.7	492.14 ug/L	492.14 ppb	22:03:19
1	P 214.914†	4713.0	4266.9	2311.8 ug/L	2311.8 ppb	22:03:39
1	Pb 220.353†	4005.7	3889.9	489.86 ug/L	489.86 ppb	22:03:39
1	S 181.975 Axial†	796.2	684.2	941.05 ug/L	941.05 ppb	22:03:39
1	Sb 206.836†	1528.2	1430.7	496.47 ug/L	496.47 ppb	22:03:39
1	Se 196.026†	852.4	832.9	499.69 ug/L	499.69 ppb	22:03:39
1	Si 251.611†	87399.5	83058.4	2455.0 ug/L	2455.0 ppb	22:03:19
1	Sn 189.927†	2761.9	2640.8	486.46 ug/L	486.46 ppb	22:03:39
1	Ti 334.940†	338769.9	324772.2	495.04 ug/L	495.04 ppb	22:03:13
1	Tl 190.801†	1547.4	1516.2	488.30 ug/L	488.30 ppb	22:03:39
1	U 409.014†	19251.7	19467.6	485.09 ug/L	485.09 ppb	22:03:19
1	V 292.402†	80713.8	78556.4	494.95 ug/L	494.95 ppb	22:03:19
1	Zn 213.857†	55754.0	52567.7	485.34 ug/L	485.34 ppb	22:03:19
1	SiO2†	86854.0	82519.4	5205.7 ug/L	5205.7 ppb	22:04:47
2	Sc Radial	5496.4	5496.4	103 %		22:02:21
2	Y RADIAL	5909.0	5909.0	102.6 %		22:02:21
2	Al 396.153Radial†	6861.5	6657.3	5019.6 ug/L	5019.6 ppb	22:02:21
2	Ca 317.933Radial†	3228.9	3116.8	5009.6 ug/L	5009.6 ppb	22:02:41
2	Fe 238.204 Radial†	581.8	558.1	5230.6 ug/L	5230.6 ppb	22:02:41
2	K 766.490 Radial†	30968.7	27584.5	5032.9 ug/L	5032.9 ppb	22:02:21
2	Mg 279.077 IEC†	154.8	149.4	5329.9 ug/L	5329.9 ppb	22:02:41
2	Na 589.592 Radial†	33659.5	33249.9	9884.3 ug/L	9884.3 ppb	22:02:21
2	Sr 421.552†	81775.5	79442.8	509.80 ug/L	509.80 ppb	22:02:21
2	Sc 361.383	939821.6	939821.6	104.67 %		22:03:45
2	Y 371.029	823996.9	823996.9	100.11 %		22:03:45
2	Ag 328.068†	122908.3	117126.4	491.98 ug/L	491.98 ppb	22:03:50
2	As 188.979†	1213.3	1189.3	490.89 ug/L	490.89 ppb	22:04:10
2	B 249.677†	22665.1	21893.9	477.88 ug/L	477.88 ppb	22:03:50
2	Ba 233.527†	64767.4	61879.6	488.98 ug/L	488.98 ppb	22:03:50
2	Be 313.107†	1440774.2	1381566.3	488.48 ug/L	488.48 ppb	22:03:45
2	Cd 226.502†	45702.7	43869.0	489.90 ug/L	489.90 ppb	22:03:50
2	Co 228.616†	23706.2	22718.0	498.07 ug/L	498.07 ppb	22:03:50
2	Cr 267.716†	47320.4	45114.3	489.67 ug/L	489.67 ppb	22:03:50
2	Cu 324.752†	189522.0	171934.7	482.32 ug/L	482.32 ppb	22:03:50
2	Mn 257.610†	452759.7	432061.1	484.71 ug/L	484.71 ppb	22:03:45
2	Mo 202.031†	7453.4	7097.2	484.83 ug/L	484.83 ppb	22:04:10
2	Ni 231.604†	20536.7	19526.4	490.43 ug/L	490.43 ppb	22:03:50

2	P 214.914†	4700.5	4251.9	2303.6 ug/L	2303.6 ppb	22:04:10
2	Pb 220.353†	3999.9	3881.7	488.83 ug/L	488.83 ppb	22:04:10
2	S 181.975 Axial†	789.1	676.9	931.01 ug/L	931.01 ppb	22:04:10
2	Sb 206.836†	1525.4	1427.1	495.25 ug/L	495.25 ppb	22:04:10
2	Se 196.026†	842.2	822.6	493.51 ug/L	493.51 ppb	22:04:10
2	Si 251.611†	87119.1	82734.6	2445.5 ug/L	2445.5 ppb	22:03:50
2	Sn 189.927†	2771.2	2647.9	487.76 ug/L	487.76 ppb	22:04:10
2	Ti 334.940†	338278.5	324086.1	493.98 ug/L	493.98 ppb	22:03:45
2	Tl 190.801†	1520.6	1489.7	479.81 ug/L	479.81 ppb	22:04:10
2	U 409.014†	19353.1	19552.1	487.21 ug/L	487.21 ppb	22:03:50
2	V 292.402†	80738.6	78528.4	494.77 ug/L	494.77 ppb	22:03:50
2	Zn 213.857†	55591.5	52376.8	483.58 ug/L	483.58 ppb	22:03:50
2	SiO2†	86670.9	82289.0	5191.1 ug/L	5191.1 ppb	22:04:52
3	Sc Radial	5502.2	5502.2	103 %		22:02:46
3	Y RADIAL	5932.5	5932.5	103.0 %		22:02:46
3	Al 396.153Radial†	6885.3	6673.3	5031.8 ug/L	5031.8 ppb	22:02:46
3	Ca 317.933Radial†	3200.0	3085.5	4959.3 ug/L	4959.3 ppb	22:03:06
3	Fe 238.204 Radial†	576.9	552.7	5180.3 ug/L	5180.3 ppb	22:03:06
3	K 766.490 Radial†	30945.5	27530.1	5023.0 ug/L	5023.0 ppb	22:02:46
3	Mg 279.077 IEC†	151.1	145.7	5196.2 ug/L	5196.2 ppb	22:03:06
3	Na 589.592 Radial†	33739.3	33292.7	9897.0 ug/L	9897.0 ppb	22:02:46
3	Sr 421.552†	81859.1	79439.8	509.78 ug/L	509.78 ppb	22:02:46
3	Sc 361.383	942782.7	942782.7	105.00 %		22:04:16
3	Y 371.029	827011.8	827011.8	100.47 %		22:04:16
3	Ag 328.068†	122785.1	116640.2	489.93 ug/L	489.93 ppb	22:04:21
3	As 188.979†	1213.9	1186.2	489.62 ug/L	489.62 ppb	22:04:41
3	B 249.677†	22624.2	21786.9	475.54 ug/L	475.54 ppb	22:04:21
3	Ba 233.527†	64727.4	61647.2	487.14 ug/L	487.14 ppb	22:04:21
3	Be 313.107†	1443131.6	1379488.2	487.75 ug/L	487.75 ppb	22:04:16
3	Cd 226.502†	45753.6	43780.3	488.91 ug/L	488.91 ppb	22:04:21
3	Co 228.616†	23704.8	22645.5	496.48 ug/L	496.48 ppb	22:04:21
3	Cr 267.716†	47482.7	45126.9	489.80 ug/L	489.80 ppb	22:04:21
3	Cu 324.752†	189335.7	171188.7	480.23 ug/L	480.23 ppb	22:04:21
3	Mn 257.610†	453444.8	431355.0	483.92 ug/L	483.92 ppb	22:04:16
3	Mo 202.031†	7473.9	7094.3	484.63 ug/L	484.63 ppb	22:04:41
3	Ni 231.604†	20521.4	19450.1	488.51 ug/L	488.51 ppb	22:04:21
3	P 214.914†	4727.2	4263.3	2310.4 ug/L	2310.4 ppb	22:04:41
3	Pb 220.353†	3984.7	3855.2	485.51 ug/L	485.51 ppb	22:04:41
3	S 181.975 Axial†	797.0	682.1	938.14 ug/L	938.14 ppb	22:04:41
3	Sb 206.836†	1535.6	1432.2	496.92 ug/L	496.92 ppb	22:04:41
3	Se 196.026†	859.2	836.3	501.24 ug/L	501.24 ppb	22:04:41
3	Si 251.611†	87159.6	82511.8	2438.9 ug/L	2438.9 ppb	22:04:21
3	Sn 189.927†	2767.7	2636.2	485.60 ug/L	485.60 ppb	22:04:41
3	Ti 334.940†	339236.8	323983.8	493.83 ug/L	493.83 ppb	22:04:16
3	Tl 190.801†	1547.7	1510.9	486.61 ug/L	486.61 ppb	22:04:41
3	U 409.014†	19087.3	19240.9	479.44 ug/L	479.44 ppb	22:04:21
3	V 292.402†	80575.1	78130.4	492.28 ug/L	492.28 ppb	22:04:21
3	Zn 213.857†	55666.2	52281.1	482.71 ug/L	482.71 ppb	22:04:21
3	SiO2†	87524.7	82842.0	5226.1 ug/L	5226.1 ppb	22:04:57

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	940599.1	104.76 %	0.214			0.20%
Sc Radial	5477.2	103 %	0.7			0.70%
Y 371.029	824639.1	100.18 %	0.258			0.26%
Y RADIAL	5909.2	102.6 %	0.40			0.39%
Ag 328.068†	116998.3	491.44 ug/L	1.331	491.44 ppb	1.331	0.27%
QC value within limits for Ag 328.068 Recovery = 98.29%						
Al 396.153Radial†	6674.9	5033.0 ug/L	14.00	5033.0 ppb	14.00	0.28%
QC value within limits for Al 396.153Radial Recovery = 100.66%						
As 188.979†	1188.9	490.72 ug/L	1.023	490.72 ppb	1.023	0.21%
QC value within limits for As 188.979 Recovery = 98.14%						
B 249.677†	21852.4	476.97 ug/L	1.248	476.97 ppb	1.248	0.26%
QC value within limits for B 249.677 Recovery = 95.39%						
Ba 233.527†	61868.2	488.89 ug/L	1.703	488.89 ppb	1.703	0.35%
QC value within limits for Ba 233.527 Recovery = 97.78%						
Be 313.107†	1380112.9	487.97 ug/L	0.445	487.97 ppb	0.445	0.09%
QC value within limits for Be 313.107 Recovery = 97.59%						
Ca 317.933Radial†	3117.9	5011.4 ug/L	53.01	5011.4 ppb	53.01	1.06%

QC value within limits for Ca 317.933 Radial Recovery = 100.23%							
Cd 226.502†	43905.9	490.31 ug/L	1.643	490.31 ppb	1.643	0.34%	
QC value within limits for Cd 226.502 Recovery = 98.06%							
Co 228.616†	22714.8	498.00 ug/L	1.486	498.00 ppb	1.486	0.30%	
QC value within limits for Co 228.616 Recovery = 99.60%							
Cr 267.716†	45163.2	490.20 ug/L	0.805	490.20 ppb	0.805	0.16%	
QC value within limits for Cr 267.716 Recovery = 98.04%							
Cu 324.752†	171778.0	481.89 ug/L	1.484	481.89 ppb	1.484	0.31%	
QC value within limits for Cu 324.752 Recovery = 96.38%							
Fe 238.204 Radial†	558.7	5236.3 ug/L	59.12	5236.3 ppb	59.12	1.13%	
QC value within limits for Fe 238.204 Radial Recovery = 104.73%							
K 766.490 Radial†	27591.6	5034.2 ug/L	11.89	5034.2 ppb	11.89	0.24%	
QC value within limits for K 766.490 Radial Recovery = 100.68%							
Mg 279.077 IEC†	147.6	5263.4 ug/L	66.86	5263.4 ppb	66.86	1.27%	
QC value within limits for Mg 279.077 IEC Recovery = 105.27%							
Mn 257.610†	432195.9	484.87 ug/L	1.031	484.87 ppb	1.031	0.21%	
QC value within limits for Mn 257.610 Recovery = 96.97%							
Mo 202.031†	7104.3	485.32 ug/L	1.032	485.32 ppb	1.032	0.21%	
QC value within limits for Mo 202.031 Recovery = 97.06%							
Na 589.592 Radial†	33366.5	9918.9 ug/L	49.42	9918.9 ppb	49.42	0.50%	
QC value within limits for Na 589.592 Radial Recovery = 99.19%							
Ni 231.604†	19523.7	490.36 ug/L	1.817	490.36 ppb	1.817	0.37%	
QC value within limits for Ni 231.604 Recovery = 98.07%							
P 214.914†	4260.7	2308.6 ug/L	4.40	2308.6 ppb	4.40	0.19%	
QC value within limits for P 214.914 Recovery = 92.34%							
Pb 220.353†	3875.6	488.07 ug/L	2.271	488.07 ppb	2.271	0.47%	
QC value within limits for Pb 220.353 Recovery = 97.61%							
S 181.975 Axial†	681.0	936.73 ug/L	5.165	936.73 ppb	5.165	0.55%	
QC value within limits for S 181.975 Axial Recovery = 93.67%							
Sb 206.836†	1430.0	496.21 ug/L	0.867	496.21 ppb	0.867	0.17%	
QC value within limits for Sb 206.836 Recovery = 99.24%							
Se 196.026†	830.6	498.15 ug/L	4.093	498.15 ppb	4.093	0.82%	
QC value within limits for Se 196.026 Recovery = 99.63%							
Si 251.611†	82768.3	2446.4 ug/L	8.13	2446.4 ppb	8.13	0.33%	
QC value within limits for Si 251.611 Recovery = 97.86%							
Sn 189.927†	2641.6	486.61 ug/L	1.088	486.61 ppb	1.088	0.22%	
QC value within limits for Sn 189.927 Recovery = 97.32%							
Sr 421.552†	79580.5	510.69 ug/L	1.546	510.69 ppb	1.546	0.30%	
QC value within limits for Sr 421.552 Recovery = 102.14%							
Ti 334.940†	324280.7	494.29 ug/L	0.659	494.29 ppb	0.659	0.13%	
QC value within limits for Ti 334.940 Recovery = 98.86%							
Tl 190.801†	1505.6	484.91 ug/L	4.493	484.91 ppb	4.493	0.93%	
QC value within limits for Tl 190.801 Recovery = 96.98%							
U 409.014†	19420.2	483.91 ug/L	4.019	483.91 ppb	4.019	0.83%	
QC value within limits for U 409.014 Recovery = 96.78%							
V 292.402†	78405.1	494.00 ug/L	1.491	494.00 ppb	1.491	0.30%	
QC value within limits for V 292.402 Recovery = 98.80%							
Zn 213.857†	52408.5	483.88 ug/L	1.340	483.88 ppb	1.340	0.28%	
QC value within limits for Zn 213.857 Recovery = 96.78%							
SiO2†	82550.1	5207.6 ug/L	17.57	5207.6 ppb	17.57	0.34%	
QC value within limits for SiO2 Recovery = 97.38%							
All analyte(s) passed QC.							

Sequence No.: 56

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 1/26/2010 22:07:07

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5354.5	5354.5	100 %		22:08:58
1	Y RADIAL	5830.2	5830.2	101.3 %		22:08:58
1	Al 396.153Radial†	6.7	-2.4	-1.8481 ug/L	-1.8481 ppb	22:09:18
1	Ca 317.933Radial†	18.2	-2.1	-3.3318 ug/L	-3.3318 ppb	22:09:18
1	Fe 238.204 Radial†	6.3	-0.8	-7.8457 ug/L	-7.8457 ppb	22:09:18
1	K 766.490 Radial†	2496.4	-13.8	-2.4885 ug/L	-2.4885 ppb	22:08:58
1	Mg 279.077 IEC†	2.8	1.8	63.599 ug/L	63.599 ppb	22:09:18
1	Na 589.592 Radial†	-893.7	-343.6	-102.15 ug/L	-102.15 ppb	22:08:58
1	Sr 421.552†	27.6	20.4	0.1310 ug/L	0.1310 ppb	22:08:58
1	Sc 361.383	941411.1	941411.1	104.85 %		22:10:15
1	Y 371.029	833476.2	833476.2	101.26 %		22:10:15
1	Ag 328.068†	425.5	109.8	0.4661 ug/L	0.4661 ppb	22:10:20
1	As 188.979†	-24.7	6.7	2.7200 ug/L	2.7200 ppb	22:10:40
1	B 249.677†	-284.8	-31.2	-0.6837 ug/L	-0.6837 ppb	22:10:40
1	Ba 233.527†	7.2	10.0	0.0797 ug/L	0.0797 ppb	22:10:40
1	Be 313.107†	-4762.1	558.6	0.1973 ug/L	0.1973 ppb	22:10:20
1	Cd 226.502†	-190.4	24.6	0.2733 ug/L	0.2733 ppb	22:10:40
1	Co 228.616†	-63.4	9.5	0.2086 ug/L	0.2086 ppb	22:10:40
1	Cr 267.716†	90.7	-7.4	-0.0756 ug/L	-0.0756 ppb	22:10:40
1	Cu 324.752†	8732.5	-799.3	-2.2372 ug/L	-2.2372 ppb	22:10:20
1	Mn 257.610†	580.0	63.3	0.0676 ug/L	0.0676 ppb	22:10:40
1	Mo 202.031†	28.8	3.9	0.2635 ug/L	0.2635 ppb	22:10:40
1	Ni 231.604†	101.7	3.3	0.0821 ug/L	0.0821 ppb	22:10:40
1	P 214.914†	221.2	-27.7	-15.194 ug/L	-15.194 ppb	22:10:40
1	Pb 220.353†	-39.2	23.0	2.8905 ug/L	2.8905 ppb	22:10:40
1	S 181.975 Axial†	45.2	-33.9	-46.675 ug/L	-46.675 ppb	22:10:40
1	Sb 206.836†	43.9	11.6	3.9011 ug/L	3.9011 ppb	22:10:40
1	Se 196.026†	-18.1	0.7	0.3563 ug/L	0.3563 ppb	22:10:40
1	Si 251.611†	524.8	4.6	0.1334 ug/L	0.1334 ppb	22:10:40
1	Sn 189.927†	1.6	1.9	0.3463 ug/L	0.3463 ppb	22:10:40
1	Ti 334.940†	-864.4	82.1	0.1240 ug/L	0.1240 ppb	22:10:20
1	Tl 190.801†	-34.0	4.4	1.4193 ug/L	1.4193 ppb	22:10:40
1	U 409.014†	-1532.4	-398.7	-9.9684 ug/L	-9.9684 ppb	22:10:20
1	V 292.402†	-1365.4	91.4	0.5551 ug/L	0.5551 ppb	22:10:20
1	Zn 213.857†	693.0	-72.5	-0.6718 ug/L	-0.6718 ppb	22:10:40
1	SiO2†	555.9	16.7	1.0514 ug/L	1.0514 ppb	22:12:01
2	Sc Radial	5401.7	5401.7	101 %		22:09:23
2	Y RADIAL	5865.5	5865.5	101.9 %		22:09:23
2	Al 396.153Radial†	12.4	3.1	2.3569 ug/L	2.3569 ppb	22:09:43
2	Ca 317.933Radial†	19.1	-1.4	-2.2357 ug/L	-2.2357 ppb	22:09:43
2	Fe 238.204 Radial†	8.7	1.5	13.800 ug/L	13.800 ppb	22:09:43
2	K 766.490 Radial†	2438.3	-93.0	-16.950 ug/L	-16.950 ppb	22:09:23
2	Mg 279.077 IEC†	1.8	0.8	28.690 ug/L	28.690 ppb	22:09:43
2	Na 589.592 Radial†	-923.5	-365.3	-108.60 ug/L	-108.60 ppb	22:09:23
2	Sr 421.552†	17.8	10.5	0.0674 ug/L	0.0674 ppb	22:09:23
2	Sc 361.383	932205.9	932205.9	103.82 %		22:10:45
2	Y 371.029	826659.0	826659.0	100.43 %		22:10:45
2	Ag 328.068†	330.5	22.3	0.1086 ug/L	0.1086 ppb	22:10:50
2	As 188.979†	-28.8	2.5	1.0169 ug/L	1.0169 ppb	22:11:10
2	B 249.677†	-273.6	-23.1	-0.5101 ug/L	-0.5101 ppb	22:11:10
2	Ba 233.527†	3.6	6.5	0.0527 ug/L	0.0527 ppb	22:11:10
2	Be 313.107†	-4944.1	338.4	0.1200 ug/L	0.1200 ppb	22:10:50
2	Cd 226.502†	-200.5	13.1	0.1426 ug/L	0.1426 ppb	22:11:10
2	Co 228.616†	-62.9	9.3	0.2033 ug/L	0.2033 ppb	22:11:10
2	Cr 267.716†	75.6	-21.1	-0.2238 ug/L	-0.2238 ppb	22:11:10
2	Cu 324.752†	8934.2	-522.9	-1.4596 ug/L	-1.4596 ppb	22:10:50
2	Mn 257.610†	571.9	61.0	0.0685 ug/L	0.0685 ppb	22:11:10
2	Mo 202.031†	21.0	-3.4	-0.2301 ug/L	-0.2301 ppb	22:11:10
2	Ni 231.604†	120.6	22.4	0.5636 ug/L	0.5636 ppb	22:11:10

2	P 214.914†	237.9	-9.6	-5.1279 ug/L	-5.1279 ppb	22:11:10
2	Pb 220.353†	-58.8	3.8	0.4749 ug/L	0.4749 ppb	22:11:10
2	S 181.975 Axial†	42.3	-36.2	-49.905 ug/L	-49.905 ppb	22:11:10
2	Sb 206.836†	31.7	0.3	0.0917 ug/L	0.0917 ppb	22:11:10
2	Se 196.026†	-3.8	14.3	8.2722 ug/L	8.2722 ppb	22:11:10
2	Si 251.611†	520.9	5.8	0.1738 ug/L	0.1738 ppb	22:11:10
2	Sn 189.927†	0.2	0.5	0.0952 ug/L	0.0952 ppb	22:11:10
2	Ti 334.940†	-748.8	185.3	0.2851 ug/L	0.2851 ppb	22:10:50
2	Tl 190.801†	-28.4	9.5	3.0389 ug/L	3.0389 ppb	22:11:10
2	U 409.014†	-1586.8	-465.5	-11.641 ug/L	-11.641 ppb	22:10:50
2	V 292.402†	-1377.5	66.8	0.3883 ug/L	0.3883 ppb	22:10:50
2	Zn 213.857†	686.6	-72.1	-0.6742 ug/L	-0.6742 ppb	22:11:10
2	SiO2†	528.0	-4.9	-0.3039 ug/L	-0.3039 ppb	22:12:21
3	Sc Radial	5416.4	5416.4	101 %		22:09:48
3	Y RADIAL	5890.3	5890.3	102.3 %		22:09:48
3	Al 396.153Radial†	17.7	8.3	6.2773 ug/L	6.2773 ppb	22:10:09
3	Ca 317.933Radial†	14.5	-5.9	-9.5454 ug/L	-9.5454 ppb	22:10:09
3	Fe 238.204 Radial†	9.3	2.1	19.240 ug/L	19.240 ppb	22:10:09
3	K 766.490 Radial†	2571.4	31.7	5.8308 ug/L	5.8308 ppb	22:09:48
3	Mg 279.077 IEC†	2.2	1.2	41.053 ug/L	41.053 ppb	22:10:09
3	Na 589.592 Radial†	-951.3	-390.3	-116.02 ug/L	-116.02 ppb	22:09:48
3	Sr 421.552†	-3.5	-10.6	-0.0677 ug/L	-0.0677 ppb	22:09:48
3	Sc 361.383	940716.6	940716.6	104.77 %		22:11:16
3	Y 371.029	835539.9	835539.9	101.51 %		22:11:16
3	Ag 328.068†	356.8	44.5	0.2033 ug/L	0.2033 ppb	22:11:21
3	As 188.979†	-36.7	-4.9	-1.9863 ug/L	-1.9863 ppb	22:11:41
3	B 249.677†	-309.0	-54.5	-1.1995 ug/L	-1.1995 ppb	22:11:41
3	Ba 233.527†	20.9	23.0	0.1823 ug/L	0.1823 ppb	22:11:41
3	Be 313.107†	-4835.6	485.1	0.1714 ug/L	0.1714 ppb	22:11:21
3	Cd 226.502†	-197.8	17.4	0.1897 ug/L	0.1897 ppb	22:11:41
3	Co 228.616†	-50.7	21.6	0.4733 ug/L	0.4733 ppb	22:11:41
3	Cr 267.716†	67.3	-29.7	-0.3166 ug/L	-0.3166 ppb	22:11:41
3	Cu 324.752†	8973.4	-563.3	-1.5721 ug/L	-1.5721 ppb	22:11:21
3	Mn 257.610†	553.5	38.4	0.0433 ug/L	0.0433 ppb	22:11:41
3	Mo 202.031†	25.8	1.0	0.0711 ug/L	0.0711 ppb	22:11:41
3	Ni 231.604†	107.3	8.7	0.2181 ug/L	0.2181 ppb	22:11:41
3	P 214.914†	239.0	-10.6	-5.6867 ug/L	-5.6867 ppb	22:11:41
3	Pb 220.353†	-68.5	-5.0	-0.6248 ug/L	-0.6248 ppb	22:11:41
3	S 181.975 Axial†	44.8	-34.2	-47.106 ug/L	-47.106 ppb	22:11:41
3	Sb 206.836†	26.3	-5.2	-1.7437 ug/L	-1.7437 ppb	22:11:41
3	Se 196.026†	-22.5	-3.5	-1.9504 ug/L	-1.9504 ppb	22:11:41
3	Si 251.611†	526.1	6.2	0.1826 ug/L	0.1826 ppb	22:11:41
3	Sn 189.927†	-3.8	-3.3	-0.6085 ug/L	-0.6085 ppb	22:11:41
3	Ti 334.940†	-863.1	82.8	0.1273 ug/L	0.1273 ppb	22:11:21
3	Tl 190.801†	-33.4	5.0	1.6076 ug/L	1.6076 ppb	22:11:41
3	U 409.014†	-1648.8	-510.9	-12.776 ug/L	-12.776 ppb	22:11:21
3	V 292.402†	-1433.7	25.2	0.1313 ug/L	0.1313 ppb	22:11:21
3	Zn 213.857†	679.5	-84.8	-0.7913 ug/L	-0.7913 ppb	22:11:41
3	SiO2†	554.8	16.1	1.0154 ug/L	1.0154 ppb	22:12:41

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	938111.2	104.48 %	0.571			0.55%
Sc Radial	5390.8	101 %	0.6			0.60%
Y 371.029	831891.7	101.07 %	0.565			0.56%
Y RADIAL	5862.0	101.8 %	0.52			0.51%
Ag 328.068†	58.9	0.2593 ug/L	0.18523	0.2593 ppb	0.18523	71.42%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	3.0	2.2620 ug/L	4.06351	2.2620 ppb	4.06351	179.64%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.4	0.5836 ug/L	2.38291	0.5836 ppb	2.38291	408.34%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-36.3	-0.7978 ug/L	0.35858	-0.7978 ppb	0.35858	44.95%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	13.2	0.1049 ug/L	0.06835	0.1049 ppb	0.06835	65.15%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	460.7	0.1629 ug/L	0.03935	0.1629 ppb	0.03935	24.15%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-3.1	-5.0377 ug/L	3.94212	-5.0377 ppb	3.94212	78.25%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	18.3	0.2019 ug/L	0.06620	0.2019 ppb	0.06620	32.79%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	13.5	0.2951 ug/L	0.15438	0.2951 ppb	0.15438	52.32%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-19.4	-0.2053 ug/L	0.12159	-0.2053 ppb	0.12159	59.22%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-628.5	-1.7563 ug/L	0.42023	-1.7563 ppb	0.42023	23.93%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.9	8.3981 ug/L	14.32808	8.3981 ppb	14.32808	170.61%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-25.1	-4.5358 ug/L	11.52738	-4.5358 ppb	11.52738	254.14%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	1.2	44.448 ug/L	17.7004	44.448 ppb	17.7004	39.82%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	54.2	0.0598 ug/L	0.01432	0.0598 ppb	0.01432	23.94%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	0.5	0.0348 ug/L	0.24876	0.0348 ppb	0.24876	714.05%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-366.4	-108.92 ug/L	6.939	-108.92 ppb	6.939	6.37%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	11.5	0.2879 ug/L	0.24821	0.2879 ppb	0.24821	86.20%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-16.0	-8.6696 ug/L	5.65731	-8.6696 ppb	5.65731	65.25%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	7.3	0.9135 ug/L	1.79820	0.9135 ppb	1.79820	196.84%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-34.8	-47.895 ug/L	1.7538	-47.895 ppb	1.7538	3.66%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	2.2	0.7497 ug/L	2.87936	0.7497 ppb	2.87936	384.05%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	3.8	2.2260 ug/L	5.36164	2.2260 ppb	5.36164	240.86%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	5.5	0.1633 ug/L	0.02625	0.1633 ppb	0.02625	16.08%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-0.3	-0.0557 ug/L	0.49496	-0.0557 ppb	0.49496	889.09%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	6.8	0.0436 ug/L	0.10147	0.0436 ppb	0.10147	232.89%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	116.7	0.1788 ug/L	0.09208	0.1788 ppb	0.09208	51.49%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	6.3	2.0220 ug/L	0.88575	2.0220 ppb	0.88575	43.81%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-458.4	-11.462 ug/L	1.4123	-11.462 ppb	1.4123	12.32%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	61.1	0.3582 ug/L	0.21347	0.3582 ppb	0.21347	59.59%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-76.5	-0.7124 ug/L	0.06834	-0.7124 ppb	0.06834	9.59%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	9.3	0.5876 ug/L	0.77231	0.5876 ppb	0.77231	131.42%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 57

Sample ID: 244128013|940124|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 82

Date Collected: 1/26/2010 22:14:51

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 244128013|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5505.9	5505.9	103 %		22:17:05
1	Y RADIAL	6604.2	6604.2	114.7 %		22:17:05
1	Al 396.153Radial†	143255.2	138931.7	105250 ug/L	105250 ppb	22:16:45
1	Ca 317.933Radial†	13002.5	12590.6	20237 ug/L	20237 ppb	22:16:45
1	Fe 238.204 Radial†	13455.1	13042.7	121890 ug/L	121890 ppb	22:16:45
1	K 766.490 Radial†	99665.0	94159.9	17193 ug/L	17193 ppb	22:16:45
1	Mg 279.077 IEC†	512.1	495.7	17554 ug/L	17554 ppb	22:17:05
1	Na 589.592 Radial†	1291.8	1800.6	535.26 ug/L	535.26 ppb	22:16:45
1	Sr 421.552†	40368.1	39145.3	251.07 ug/L	251.07 ppb	22:16:45
1	Sc 361.383	952823.7	952823.7	106.12 %		22:18:03
1	Y 371.029	935217.0	935217.0	113.62 %		22:18:03
1	Ag 328.068†	-7809.0	-7654.6	8.3751 ug/L	8.3751 ppb	22:18:29
1	As 188.979†	-84.0	-49.0	55.168 ug/L	55.168 ppb	22:18:29
1	B 249.677†	1319.6	1483.9	12.550 ug/L	12.550 ppb	22:18:08
1	Ba 233.527†	252668.5	238099.9	1881.0 ug/L	1881.0 ppb	22:18:08
1	Be 313.107†	-20991.5	-14680.5	7.0442 ug/L	7.0442 ppb	22:18:08
1	Cd 226.502†	1105.9	1248.3	1.4018 ug/L	1.4018 ppb	22:18:29
1	Co 228.616†	3301.3	3180.9	57.513 ug/L	57.513 ppb	22:18:29
1	Cr 267.716†	16752.9	15692.8	172.89 ug/L	172.89 ppb	22:18:29
1	Cu 324.752†	44519.1	32823.6	98.596 ug/L	98.596 ppb	22:18:08
1	Mn 257.610†	3882597.9	3658193.3	4112.8 ug/L	4112.8 ppb	22:18:03
1	Mo 202.031†	-33.5	-55.2	5.9353 ug/L	5.9353 ppb	22:18:29
1	Ni 231.604†	4835.9	4463.3	112.13 ug/L	112.13 ppb	22:18:29
1	P 214.914†	2415.8	2037.7	1058.7 ug/L	1058.7 ppb	22:18:29
1	Pb 220.353†	956.3	961.5	131.84 ug/L	131.84 ppb	22:18:29
1	S 181.975 Axial†	843.0	717.4	968.05 ug/L	968.05 ppb	22:18:29
1	Sb 206.836†	82.4	47.4	-1.2956 ug/L	-1.2956 ppb	22:18:29
1	Se 196.026†	-652.9	-597.3	65.222 ug/L	65.222 ppb	22:18:29
1	Si 251.611†	1339249.7	1261517.4	37379 ug/L	37379 ppb	22:18:03
1	Sn 189.927†	-121.7	-114.3	-15.892 ug/L	-15.892 ppb	22:18:29
1	Ti 334.940†	3746251.4	3531106.5	5385.2 ug/L	5385.2 ppb	22:18:03
1	Tl 190.801†	-253.6	-202.1	-1.1500 ug/L	-1.1500 ppb	22:18:29
1	U 409.014†	-6187.6	-4767.9	-133.50 ug/L	-133.50 ppb	22:18:08
1	V 292.402†	41662.6	40653.4	229.36 ug/L	229.36 ppb	22:18:08
1	Zn 213.857†	49635.2	46039.2	416.17 ug/L	416.17 ppb	22:18:08
1	SiO2†	1351490.4	1273034.7	80513 ug/L	80513 ppb	22:19:39
2	Sc Radial	5509.9	5509.9	103 %		22:17:30
2	Y RADIAL	6618.8	6618.8	115.0 %		22:17:30
2	Al 396.153Radial†	141658.6	137282.4	104000 ug/L	104000 ppb	22:17:10
2	Ca 317.933Radial†	12885.4	12468.0	20040 ug/L	20040 ppb	22:17:10
2	Fe 238.204 Radial†	13303.2	12885.9	120430 ug/L	120430 ppb	22:17:10
2	K 766.490 Radial†	98794.3	93245.2	17026 ug/L	17026 ppb	22:17:10
2	Mg 279.077 IEC†	513.5	496.7	17592 ug/L	17592 ppb	22:17:30
2	Na 589.592 Radial†	1283.3	1791.4	532.53 ug/L	532.53 ppb	22:17:10
2	Sr 421.552†	39896.3	38659.3	247.95 ug/L	247.95 ppb	22:17:10
2	Sc 361.383	956663.5	956663.5	106.55 %		22:18:35
2	Y 371.029	937887.1	937887.1	113.94 %		22:18:35
2	Ag 328.068†	-7721.5	-7543.0	8.3741 ug/L	8.3741 ppb	22:19:01
2	As 188.979†	-73.4	-38.7	59.032 ug/L	59.032 ppb	22:19:01
2	B 249.677†	1376.1	1532.0	13.845 ug/L	13.845 ppb	22:18:41
2	Ba 233.527†	253018.2	237472.4	1876.0 ug/L	1876.0 ppb	22:18:41
2	Be 313.107†	-20727.4	-14353.2	7.1641 ug/L	7.1641 ppb	22:18:41
2	Cd 226.502†	1099.0	1237.6	1.4325 ug/L	1.4325 ppb	22:19:01
2	Co 228.616†	3256.4	3126.2	56.332 ug/L	56.332 ppb	22:19:01
2	Cr 267.716†	16613.2	15498.3	170.76 ug/L	170.76 ppb	22:19:01
2	Cu 324.752†	44382.0	32526.6	97.686 ug/L	97.686 ppb	22:18:41
2	Mn 257.610†	3905049.4	3664580.2	4119.8 ug/L	4119.8 ppb	22:18:35
2	Mo 202.031†	-15.5	-38.1	6.9858 ug/L	6.9858 ppb	22:19:01
2	Ni 231.604†	4786.1	4398.3	110.49 ug/L	110.49 ppb	22:19:01

2	P 214.914†	2417.1	2029.8	1055.3 ug/L	1055.3 ppb	22:19:01
2	Pb 220.353†	931.4	934.5	128.33 ug/L	128.33 ppb	22:19:01
2	S 181.975 Axial†	827.6	699.7	943.92 ug/L	943.92 ppb	22:19:01
2	Sb 206.836†	96.2	60.0	2.9494 ug/L	2.9494 ppb	22:19:01
2	Se 196.026†	-647.4	-589.7	64.695 ug/L	64.695 ppb	22:19:01
2	Si 251.611†	1346486.1	1263243.8	37430 ug/L	37430 ppb	22:18:35
2	Sn 189.927†	-115.3	-107.9	-14.770 ug/L	-14.770 ppb	22:19:01
2	Ti 334.940†	3762717.1	3532391.2	5387.1 ug/L	5387.1 ppb	22:18:35
2	Tl 190.801†	-260.3	-207.4	-2.8068 ug/L	-2.8068 ppb	22:19:01
2	U 409.014†	-6299.0	-4849.1	-135.36 ug/L	-135.36 ppb	22:18:41
2	V 292.402†	41966.8	40781.3	230.38 ug/L	230.38 ppb	22:18:41
2	Zn 213.857†	49683.5	45896.9	415.00 ug/L	415.00 ppb	22:18:41
2	SiO2†	1360085.0	1275989.5	80699 ug/L	80699 ppb	22:19:45
3	Sc Radial	5535.4	5535.4	104 %		22:17:55
3	Y RADIAL	6668.5	6668.5	115.8 %		22:17:55
3	Al 396.153Radial†	143537.6	138463.1	104890 ug/L	104890 ppb	22:17:35
3	Ca 317.933Radial†	13011.1	12531.7	20142 ug/L	20142 ppb	22:17:35
3	Fe 238.204 Radial†	13428.7	12947.6	121000 ug/L	121000 ppb	22:17:35
3	K 766.490 Radial†	99793.5	93768.3	17121 ug/L	17121 ppb	22:17:35
3	Mg 279.077 IEC†	511.6	492.6	17444 ug/L	17444 ppb	22:17:55
3	Na 589.592 Radial†	1225.0	1729.4	514.10 ug/L	514.10 ppb	22:17:35
3	Sr 421.552†	40499.1	39062.8	250.54 ug/L	250.54 ppb	22:17:35
3	Sc 361.383	961026.9	961026.9	107.03 %		22:19:08
3	Y 371.029	941963.7	941963.7	114.44 %		22:19:08
3	Ag 328.068†	-7775.6	-7560.6	8.4818 ug/L	8.4818 ppb	22:19:33
3	As 188.979†	-68.5	-33.8	61.076 ug/L	61.076 ppb	22:19:33
3	B 249.677†	1481.3	1624.4	15.777 ug/L	15.777 ppb	22:19:13
3	Ba 233.527†	253394.4	236745.7	1870.3 ug/L	1870.3 ppb	22:19:13
3	Be 313.107†	-20898.2	-14424.4	7.1171 ug/L	7.1171 ppb	22:19:13
3	Cd 226.502†	1122.2	1254.7	1.5625 ug/L	1.5625 ppb	22:19:33
3	Co 228.616†	3278.7	3133.2	56.495 ug/L	56.495 ppb	22:19:33
3	Cr 267.716†	16680.3	15490.2	170.68 ug/L	170.68 ppb	22:19:33
3	Cu 324.752†	44979.6	32895.8	98.753 ug/L	98.753 ppb	22:19:13
3	Mn 257.610†	3907096.2	3649851.5	4103.3 ug/L	4103.3 ppb	22:19:08
3	Mo 202.031†	-8.0	-31.1	7.5138 ug/L	7.5138 ppb	22:19:33
3	Ni 231.604†	4787.0	4378.8	110.00 ug/L	110.00 ppb	22:19:33
3	P 214.914†	2400.2	2003.7	1040.1 ug/L	1040.1 ppb	22:19:33
3	Pb 220.353†	965.5	962.5	131.97 ug/L	131.97 ppb	22:19:33
3	S 181.975 Axial†	823.8	692.6	933.97 ug/L	933.97 ppb	22:19:33
3	Sb 206.836†	84.9	49.1	-0.6907 ug/L	-0.6907 ppb	22:19:33
3	Se 196.026†	-658.7	-597.5	62.161 ug/L	62.161 ppb	22:19:33
3	Si 251.611†	1349208.3	1260049.2	37335 ug/L	37335 ppb	22:19:08
3	Sn 189.927†	-119.8	-111.6	-15.417 ug/L	-15.417 ppb	22:19:33
3	Ti 334.940†	3773119.4	3526075.4	5377.5 ug/L	5377.5 ppb	22:19:08
3	Tl 190.801†	-248.5	-195.3	0.9161 ug/L	0.9161 ppb	22:19:33
3	U 409.014†	-6360.8	-4879.9	-136.19 ug/L	-136.19 ppb	22:19:13
3	V 292.402†	41956.5	40592.9	229.13 ug/L	229.13 ppb	22:19:13
3	Zn 213.857†	49697.8	45698.5	413.10 ug/L	413.10 ppb	22:19:13
3	SiO2†	1343609.0	1254800.4	79359 ug/L	79359 ppb	22:19:51

Mean Data: 244128013|940124|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	956838.0	106.57 %	0.457			0.43%
Sc Radial	5517.1	103 %	0.3			0.29%
Y 371.029	938355.9	114.00 %	0.413			0.36%
Y RADIAL	6630.5	115.2 %	0.59			0.51%
Ag 328.068†	-7586.1	8.4103 ug/L	0.06187	8.4103 ppb	0.06187	0.74%
Al 396.153Radial†	138225.7	104710 ug/L	643.8	104710 ppb	643.8	0.61%
As 188.979†	-40.5	58.425 ug/L	3.0007	58.425 ppb	3.0007	5.14%
B 249.677†	1546.8	14.057 ug/L	1.6242	14.057 ppb	1.6242	11.55%
Ba 233.527†	237439.3	1875.8 ug/L	5.36	1875.8 ppb	5.36	0.29%
Be 313.107†	-14486.0	7.1085 ug/L	0.06042	7.1085 ppb	0.06042	0.85%
Ca 317.933Radial†	12530.1	20140 ug/L	98.6	20140 ppb	98.6	0.49%
Cd 226.502†	1246.9	1.4656 ug/L	0.08528	1.4656 ppb	0.08528	5.82%
Co 228.616†	3146.7	56.780 ug/L	0.6399	56.780 ppb	0.6399	1.13%
Cr 267.716†	15560.4	171.45 ug/L	1.256	171.45 ppb	1.256	0.73%
Cu 324.752†	32748.7	98.345 ug/L	0.5759	98.345 ppb	0.5759	0.59%
Fe 238.204 Radial†	12958.7	121110 ug/L	738.1	121110 ppb	738.1	0.61%
K 766.490 Radial†	93724.5	17113 ug/L	83.8	17113 ppb	83.8	0.49%

Mg 279.077 IEC†	495.0	17530 ug/L	77.0	17530 ppb	77.0	0.44%
Mn 257.610†	3657541.7	4112.0 ug/L	8.25	4112.0 ppb	8.25	0.20%
Mo 202.031†	-41.5	6.8116 ug/L	0.80351	6.8116 ppb	0.80351	11.80%
Na 589.592 Radial†	1773.8	527.29 ug/L	11.508	527.29 ppb	11.508	2.18%
Ni 231.604†	4413.4	110.88 ug/L	1.112	110.88 ppb	1.112	1.00%
P 214.914†	2023.7	1051.4 ug/L	9.89	1051.4 ppb	9.89	0.94%
Pb 220.353†	952.8	130.71 ug/L	2.068	130.71 ppb	2.068	1.58%
S 181.975 Axial†	703.3	948.65 ug/L	17.522	948.65 ppb	17.522	1.85%
Sb 206.836†	52.1	0.3210 ug/L	2.29622	0.3210 ppb	2.29622	715.27%
Se 196.026†	-594.8	64.026 ug/L	1.6363	64.026 ppb	1.6363	2.56%
Si 251.611†	1261603.4	37381 ug/L	47.4	37381 ppb	47.4	0.13%
Sn 189.927†	-111.3	-15.360 ug/L	0.5631	-15.360 ppb	0.5631	3.67%
Sr 421.552†	38955.8	249.86 ug/L	1.669	249.86 ppb	1.669	0.67%
Ti 334.940†	3529857.7	5383.3 ug/L	5.08	5383.3 ppb	5.08	0.09%
Tl 190.801†	-201.6	-1.0136 ug/L	1.86516	-1.0136 ppb	1.86516	184.02%
U 409.014†	-4832.3	-135.02 ug/L	1.379	-135.02 ppb	1.379	1.02%
V 292.402†	40675.9	229.62 ug/L	0.663	229.62 ppb	0.663	0.29%
Zn 213.857†	45878.2	414.76 ug/L	1.551	414.76 ppb	1.551	0.37%
SiO2†	1267941.5	80190 ug/L	725.8	80190 ppb	725.8	0.91%

Sequence No.: 58

Sample ID: 244128014|940124|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 83

Date Collected: 1/26/2010 22:22:03

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 244128014|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5589.8	5589.8	105 %		22:24:16
1	Y RADIAL	6632.7	6632.7	115.2 %		22:24:16
1	Al 396.153Radial†	129616.9	123817.7	93796 ug/L	93796 ppb	22:23:56
1	Ca 317.933Radial†	13281.3	12667.8	20361 ug/L	20361 ppb	22:23:56
1	Fe 238.204 Radial†	12775.5	12197.6	114000 ug/L	114000 ppb	22:23:56
1	K 766.490 Radial†	87770.6	81346.4	14852 ug/L	14852 ppb	22:23:56
1	Mg 279.077 IEC†	464.4	442.7	15673 ug/L	15673 ppb	22:24:16
1	Na 589.592 Radial†	1241.4	1733.6	515.34 ug/L	515.34 ppb	22:23:56
1	Sr 421.552†	40781.8	38953.0	249.84 ug/L	249.84 ppb	22:23:56
1	Sc 361.383	919899.5	919899.5	102.45 %		22:25:19
1	Y 371.029	929130.9	929130.9	112.88 %		22:25:14
1	Ag 328.068†	-7367.2	-7486.8	6.5364 ug/L	6.5364 ppb	22:25:39
1	As 188.979†	-66.5	-34.7	59.778 ug/L	59.778 ppb	22:25:39
1	B 249.677†	1179.8	1392.0	11.819 ug/L	11.819 ppb	22:25:19
1	Ba 233.527†	220582.3	215303.7	1701.1 ug/L	1701.1 ppb	22:25:19
1	Be 313.107†	-21394.6	-15781.9	6.8200 ug/L	6.8200 ppb	22:25:19
1	Cd 226.502†	1014.0	1195.9	1.6192 ug/L	1.6192 ppb	22:25:39
1	Co 228.616†	3140.6	3135.4	56.407 ug/L	56.407 ppb	22:25:39
1	Cr 267.716†	14267.4	13831.9	152.58 ug/L	152.58 ppb	22:25:39
1	Cu 324.752†	32644.9	22735.2	69.893 ug/L	69.893 ppb	22:25:19
1	Mn 257.610†	3677917.9	3589362.5	4034.9 ug/L	4034.9 ppb	22:25:14
1	Mo 202.031†	12.2	-11.7	8.2922 ug/L	8.2922 ppb	22:25:39
1	Ni 231.604†	4177.7	3984.0	100.08 ug/L	100.08 ppb	22:25:39
1	P 214.914†	2117.4	1828.0	949.51 ug/L	949.51 ppb	22:25:39
1	Pb 220.353†	957.8	995.3	134.42 ug/L	134.42 ppb	22:25:39
1	S 181.975 Axial†	704.0	610.1	822.43 ug/L	822.43 ppb	22:25:39
1	Sb 206.836†	88.5	56.1	1.4788 ug/L	1.4788 ppb	22:25:39
1	Se 196.026†	-612.9	-580.2	48.234 ug/L	48.234 ppb	22:25:39
1	Si 251.611†	1413393.0	1379054.2	40861 ug/L	40861 ppb	22:25:14
1	Sn 189.927†	-139.3	-135.6	-19.925 ug/L	-19.925 ppb	22:25:39
1	Ti 334.940†	3665445.8	3578585.4	5457.8 ug/L	5457.8 ppb	22:25:14
1	Tl 190.801†	-241.3	-198.6	0.2036 ug/L	0.2036 ppb	22:25:39
1	U 409.014†	-7107.0	-5874.0	-160.21 ug/L	-160.21 ppb	22:25:19
1	V 292.402†	40131.2	40563.8	229.83 ug/L	229.83 ppb	22:25:19
1	Zn 213.857†	32115.4	30613.0	273.36 ug/L	273.36 ppb	22:25:39
1	SiO2†	1397885.2	1363900.3	86259 ug/L	86259 ppb	22:26:49
2	Sc Radial	5523.3	5523.3	103 %		22:24:41
2	Y RADIAL	6596.8	6596.8	114.6 %		22:24:41
2	Al 396.153Radial†	127800.1	123552.4	93595 ug/L	93595 ppb	22:24:21
2	Ca 317.933Radial†	13101.2	12646.4	20327 ug/L	20327 ppb	22:24:21
2	Fe 238.204 Radial†	12600.8	12175.8	113790 ug/L	113790 ppb	22:24:21
2	K 766.490 Radial†	86285.1	80919.9	14774 ug/L	14774 ppb	22:24:21
2	Mg 279.077 IEC†	462.6	446.3	15801 ug/L	15801 ppb	22:24:41
2	Na 589.592 Radial†	1180.3	1688.8	502.04 ug/L	502.04 ppb	22:24:21
2	Sr 421.552†	40021.3	38686.9	248.13 ug/L	248.13 ppb	22:24:21
2	Sc 361.383	917577.4	917577.4	102.19 %		22:25:51
2	Y 371.029	916254.8	916254.8	111.31 %		22:25:46
2	Ag 328.068†	-7284.8	-7424.4	6.7325 ug/L	6.7325 ppb	22:26:11
2	As 188.979†	-66.9	-35.2	59.030 ug/L	59.030 ppb	22:26:11
2	B 249.677†	1331.0	1542.9	15.163 ug/L	15.163 ppb	22:25:51
2	Ba 233.527†	220223.2	215497.1	1702.6 ug/L	1702.6 ppb	22:25:51
2	Be 313.107†	-21064.5	-15511.7	6.7900 ug/L	6.7900 ppb	22:25:51
2	Cd 226.502†	1016.4	1200.8	1.6932 ug/L	1.6932 ppb	22:26:11
2	Co 228.616†	3107.3	3110.5	55.979 ug/L	55.979 ppb	22:26:11
2	Cr 267.716†	14163.1	13765.0	151.85 ug/L	151.85 ppb	22:26:11
2	Cu 324.752†	32578.9	22751.3	69.929 ug/L	69.929 ppb	22:25:51
2	Mn 257.610†	3631543.9	3553069.1	3994.2 ug/L	3994.2 ppb	22:25:46
2	Mo 202.031†	0.8	-22.9	7.5144 ug/L	7.5144 ppb	22:26:11
2	Ni 231.604†	4114.9	3932.9	98.799 ug/L	98.799 ppb	22:26:11

2	P 214.914†	2100.5	1816.7	943.28 ug/L	943.28 ppb	22:26:11
2	Pb 220.353†	938.7	979.0	132.34 ug/L	132.34 ppb	22:26:11
2	S 181.975 Axial†	704.3	612.2	825.37 ug/L	825.37 ppb	22:26:11
2	Sb 206.836†	86.3	54.2	1.0824 ug/L	1.0824 ppb	22:26:11
2	Se 196.026†	-615.9	-584.7	44.956 ug/L	44.956 ppb	22:26:11
2	Si 251.611†	1396456.9	1365973.0	40474 ug/L	40474 ppb	22:25:46
2	Sn 189.927†	-112.5	-109.8	-15.182 ug/L	-15.182 ppb	22:26:11
2	Ti 334.940†	3619185.8	3542372.9	5402.5 ug/L	5402.5 ppb	22:25:46
2	Tl 190.801†	-238.4	-196.4	0.2591 ug/L	0.2591 ppb	22:26:11
2	U 409.014†	-7205.3	-5987.8	-163.03 ug/L	-163.03 ppb	22:25:51
2	V 292.402†	39982.0	40517.0	229.62 ug/L	229.62 ppb	22:25:51
2	Zn 213.857†	31835.6	30418.6	271.58 ug/L	271.58 ppb	22:26:11
2	SiO2†	1400151.9	1369571.2	86618 ug/L	86618 ppb	22:26:55
3	Sc Radial	5502.5	5502.5	103 %		22:25:06
3	Y RADIAL	6571.3	6571.3	114.1 %		22:25:06
3	Al 396.153Radial†	128458.1	124656.1	94431 ug/L	94431 ppb	22:24:46
3	Ca 317.933Radial†	13196.9	12787.0	20553 ug/L	20553 ppb	22:24:46
3	Fe 238.204 Radial†	12686.7	12305.0	115000 ug/L	115000 ppb	22:24:46
3	K 766.490 Radial†	86640.2	81578.5	14894 ug/L	14894 ppb	22:24:46
3	Mg 279.077 IEC†	465.4	450.7	15957 ug/L	15957 ppb	22:25:06
3	Na 589.592 Radial†	1137.1	1651.1	490.84 ug/L	490.84 ppb	22:24:46
3	Sr 421.552†	40098.9	38907.8	249.55 ug/L	249.55 ppb	22:24:46
3	Sc 361.383	913305.9	913305.9	101.72 %		22:26:23
3	Y 371.029	922398.4	922398.4	112.06 %		22:26:18
3	Ag 328.068†	-7391.7	-7562.8	6.5431 ug/L	6.5431 ppb	22:26:43
3	As 188.979†	-64.4	-33.1	60.717 ug/L	60.717 ppb	22:26:43
3	B 249.677†	1191.8	1412.1	12.097 ug/L	12.097 ppb	22:26:23
3	Ba 233.527†	219733.5	216023.6	1706.8 ug/L	1706.8 ppb	22:26:23
3	Be 313.107†	-21330.0	-15869.2	6.8078 ug/L	6.8078 ppb	22:26:23
3	Cd 226.502†	1030.6	1219.3	1.7774 ug/L	1.7774 ppb	22:26:43
3	Co 228.616†	3114.5	3131.9	56.301 ug/L	56.301 ppb	22:26:43
3	Cr 267.716†	14245.3	13910.7	153.45 ug/L	153.45 ppb	22:26:43
3	Cu 324.752†	32358.8	22684.0	69.802 ug/L	69.802 ppb	22:26:23
3	Mn 257.610†	3652119.9	3589917.1	4035.6 ug/L	4035.6 ppb	22:26:18
3	Mo 202.031†	11.7	-12.1	8.3470 ug/L	8.3470 ppb	22:26:43
3	Ni 231.604†	4152.0	3988.1	100.19 ug/L	100.19 ppb	22:26:43
3	P 214.914†	2122.9	1848.3	960.36 ug/L	960.36 ppb	22:26:43
3	Pb 220.353†	950.4	994.8	134.39 ug/L	134.39 ppb	22:26:43
3	S 181.975 Axial†	710.3	621.3	837.79 ug/L	837.79 ppb	22:26:43
3	Sb 206.836†	88.5	56.7	1.7188 ug/L	1.7188 ppb	22:26:43
3	Se 196.026†	-613.0	-584.7	49.040 ug/L	49.040 ppb	22:26:43
3	Si 251.611†	1404416.2	1380188.6	40895 ug/L	40895 ppb	22:26:18
3	Sn 189.927†	-122.5	-120.1	-17.027 ug/L	-17.027 ppb	22:26:43
3	Ti 334.940†	3644626.5	3583946.8	5465.9 ug/L	5465.9 ppb	22:26:18
3	Tl 190.801†	-252.8	-211.7	-3.9080 ug/L	-3.9080 ppb	22:26:43
3	U 409.014†	-7004.2	-5823.0	-159.05 ug/L	-159.05 ppb	22:26:23
3	V 292.402†	39940.1	40658.7	230.28 ug/L	230.28 ppb	22:26:23
3	Zn 213.857†	31973.6	30699.9	274.08 ug/L	274.08 ppb	22:26:43
3	SiO2†	1394680.9	1370600.4	86683 ug/L	86683 ppb	22:27:01

Mean Data: 244128014|940124|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	916927.6	102.12 %	0.372			0.36%
Sc Radial	5538.5	104 %	0.9			0.82%
Y 371.029	922594.7	112.08 %	0.782			0.70%
Y RADIAL	6600.3	114.6 %	0.54			0.47%
Ag 328.068†	-7491.3	6.6040 ug/L	0.11136	6.6040 ppb	0.11136	1.69%
Al 396.153Radial†	124008.7	93940 ug/L	436.4	93940 ppb	436.4	0.46%
As 188.979†	-34.4	59.842 ug/L	0.8451	59.842 ppb	0.8451	1.41%
B 249.677†	1449.0	13.026 ug/L	1.8553	13.026 ppb	1.8553	14.24%
Ba 233.527†	215608.1	1703.5 ug/L	2.96	1703.5 ppb	2.96	0.17%
Be 313.107†	-15720.9	6.8059 ug/L	0.01511	6.8059 ppb	0.01511	0.22%
Ca 317.933Radial†	12700.4	20413 ug/L	121.8	20413 ppb	121.8	0.60%
Cd 226.502†	1205.3	1.6966 ug/L	0.07914	1.6966 ppb	0.07914	4.66%
Co 228.616†	3125.9	56.229 ug/L	0.2225	56.229 ppb	0.2225	0.40%
Cr 267.716†	13835.9	152.63 ug/L	0.802	152.63 ppb	0.802	0.53%
Cu 324.752†	22723.5	69.874 ug/L	0.0655	69.874 ppb	0.0655	0.09%
Fe 238.204 Radial†	12226.1	114260 ug/L	646.2	114260 ppb	646.2	0.57%
K 766.490 Radial†	81281.6	14840 ug/L	61.0	14840 ppb	61.0	0.41%

Mg 279.077 IEC†	446.6	15810 ug/L	142.2	15810 ppb	142.2	0.90%
Mn 257.610†	3577449.6	4021.6 ug/L	23.72	4021.6 ppb	23.72	0.59%
Mo 202.031†	-15.6	8.0512 ug/L	0.46568	8.0512 ppb	0.46568	5.78%
Na 589.592 Radial†	1691.2	502.74 ug/L	12.264	502.74 ppb	12.264	2.44%
Ni 231.604†	3968.3	99.689 ug/L	0.7729	99.689 ppb	0.7729	0.78%
P 214.914†	1831.0	951.05 ug/L	8.644	951.05 ppb	8.644	0.91%
Pb 220.353†	989.7	133.72 ug/L	1.191	133.72 ppb	1.191	0.89%
S 181.975 Axial†	614.6	828.53 ug/L	8.152	828.53 ppb	8.152	0.98%
Sb 206.836†	55.7	1.4267 ug/L	0.32137	1.4267 ppb	0.32137	22.53%
Se 196.026†	-583.2	47.410 ug/L	2.1630	47.410 ppb	2.1630	4.56%
Si 251.611†	1375071.9	40743 ug/L	234.1	40743 ppb	234.1	0.57%
Sn 189.927†	-121.8	-17.378 ug/L	2.3907	-17.378 ppb	2.3907	13.76%
Sr 421.552†	38849.3	249.17 ug/L	0.913	249.17 ppb	0.913	0.37%
Ti 334.940†	3568301.7	5442.1 ug/L	34.49	5442.1 ppb	34.49	0.63%
Tl 190.801†	-202.2	-1.1484 ug/L	2.38999	-1.1484 ppb	2.38999	208.11%
U 409.014†	-5894.9	-160.76 ug/L	2.046	-160.76 ppb	2.046	1.27%
V 292.402†	40579.9	229.91 ug/L	0.336	229.91 ppb	0.336	0.15%
Zn 213.857†	30577.2	273.01 ug/L	1.285	273.01 ppb	1.285	0.47%
SiO2†	1368023.9	86520 ug/L	228.2	86520 ppb	228.2	0.26%

Sequence No.: 59

Sample ID: 244128015|940124|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 84

Date Collected: 1/26/2010 22:29:13

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 244128015|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5379.9	5379.9	101 %		22:31:26
1	Y RADIAL	6341.6	6341.6	110.2 %		22:31:26
1	Al 396.153Radial†	146341.9	145249.1	110030 ug/L	110030 ppb	22:31:06
1	Ca 317.933Radial†	9965.8	9871.8	15867 ug/L	15867 ppb	22:31:06
1	Fe 238.204 Radial†	14845.7	14728.6	137650 ug/L	137650 ppb	22:31:06
1	K 766.490 Radial†	92478.6	89290.3	16305 ug/L	16305 ppb	22:31:06
1	Mg 279.077 IEC†	556.3	551.2	19516 ug/L	19516 ppb	22:31:26
1	Na 589.592 Radial†	1970.9	2503.9	744.34 ug/L	744.34 ppb	22:31:06
1	Sr 421.552†	34056.9	33797.6	216.78 ug/L	216.78 ppb	22:31:06
1	Sc 361.383	951159.4	951159.4	105.93 %		22:32:24
1	Y 371.029	909018.8	909018.8	110.44 %		22:32:24
1	Ag 328.068†	-9383.5	-9153.8	7.2923 ug/L	7.2923 ppb	22:32:29
1	As 188.979†	-60.9	-27.3	56.525 ug/L	56.525 ppb	22:32:49
1	B 249.677†	1155.6	1331.3	6.6737 ug/L	6.6737 ppb	22:32:29
1	Ba 233.527†	161727.1	152669.8	1208.1 ug/L	1208.1 ppb	22:32:29
1	Be 313.107†	-10448.2	-4762.4	7.6081 ug/L	7.6081 ppb	22:32:29
1	Cd 226.502†	1128.8	1271.7	-0.0011 ug/L	-0.0011 ppb	22:32:49
1	Co 228.616†	2797.3	2710.5	49.380 ug/L	49.380 ppb	22:32:49
1	Cr 267.716†	11788.3	11033.9	122.71 ug/L	122.71 ppb	22:32:29
1	Cu 324.752†	27370.9	16709.5	54.273 ug/L	54.273 ppb	22:32:29
1	Mn 257.610†	2553156.3	2409632.1	2714.4 ug/L	2714.4 ppb	22:32:24
1	Mo 202.031†	-39.3	-60.7	6.7304 ug/L	6.7304 ppb	22:32:49
1	Ni 231.604†	3502.6	3212.7	80.705 ug/L	80.705 ppb	22:32:49
1	P 214.914†	1265.6	956.0	446.23 ug/L	446.23 ppb	22:32:49
1	Pb 220.353†	620.9	646.5	91.759 ug/L	91.759 ppb	22:32:49
1	S 181.975 Axial†	336.9	241.1	311.29 ug/L	311.29 ppb	22:32:49
1	Sb 206.836†	77.9	43.2	1.8735 ug/L	1.8735 ppb	22:32:49
1	Se 196.026†	-739.0	-679.6	70.131 ug/L	70.131 ppb	22:32:49
1	Si 251.611†	1445451.9	1363978.0	40415 ug/L	40415 ppb	22:32:24
1	Sn 189.927†	-84.3	-79.3	-9.8487 ug/L	-9.8487 ppb	22:32:49
1	Ti 334.940†	2841529.8	2683246.6	4091.7 ug/L	4091.7 ppb	22:32:24
1	Tl 190.801†	-195.2	-147.4	-0.9905 ug/L	-0.9905 ppb	22:32:49
1	U 409.014†	-9816.3	-8203.6	-221.09 ug/L	-221.09 ppb	22:32:24
1	V 292.402†	39129.4	38330.9	213.88 ug/L	213.88 ppb	22:32:29
1	Zn 213.857†	35036.6	32340.3	287.31 ug/L	287.31 ppb	22:32:29
1	SiO2†	1460225.2	1377906.2	87145 ug/L	87145 ppb	22:33:57
2	Sc Radial	5502.9	5502.9	103 %		22:31:51
2	Y RADIAL	6478.8	6478.8	112.5 %		22:31:51
2	Al 396.153Radial†	146241.1	141903.8	107500 ug/L	107500 ppb	22:31:31
2	Ca 317.933Radial†	9969.4	9654.1	15517 ug/L	15517 ppb	22:31:31
2	Fe 238.204 Radial†	14769.4	14325.2	133880 ug/L	133880 ppb	22:31:31
2	K 766.490 Radial†	92681.5	87435.0	15966 ug/L	15966 ppb	22:31:31
2	Mg 279.077 IEC†	564.5	546.9	19366 ug/L	19366 ppb	22:31:51
2	Na 589.592 Radial†	1954.7	2444.5	726.67 ug/L	726.67 ppb	22:31:31
2	Sr 421.552†	33929.6	32918.4	211.14 ug/L	211.14 ppb	22:31:31
2	Sc 361.383	954611.7	954611.7	106.32 %		22:32:55
2	Y 371.029	913039.1	913039.1	110.92 %		22:32:55
2	Ag 328.068†	-9511.4	-9242.1	5.7117 ug/L	5.7117 ppb	22:33:00
2	As 188.979†	-52.6	-19.2	58.851 ug/L	58.851 ppb	22:33:20
2	B 249.677†	1248.4	1414.6	9.1144 ug/L	9.1144 ppb	22:33:00
2	Ba 233.527†	162744.4	153074.5	1211.2 ug/L	1211.2 ppb	22:33:00
2	Be 313.107†	-10885.4	-5138.0	7.4528 ug/L	7.4528 ppb	22:33:00
2	Cd 226.502†	1176.7	1312.9	0.8487 ug/L	0.8487 ppb	22:33:20
2	Co 228.616†	2794.7	2698.5	49.196 ug/L	49.196 ppb	22:33:20
2	Cr 267.716†	11863.8	11064.7	122.97 ug/L	122.97 ppb	22:33:00
2	Cu 324.752†	27394.8	16638.5	53.875 ug/L	53.875 ppb	22:33:00
2	Mn 257.610†	2554136.5	2401838.1	2705.3 ug/L	2705.3 ppb	22:32:55
2	Mo 202.031†	-23.9	-46.1	7.4333 ug/L	7.4333 ppb	22:33:20
2	Ni 231.604†	3522.9	3219.8	80.884 ug/L	80.884 ppb	22:33:20

2	P 214.914†	1277.1	962.5	452.32 ug/L	452.32 ppb	22:33:20
2	Pb 220.353†	631.9	654.8	92.610 ug/L	92.610 ppb	22:33:20
2	S 181.975 Axial†	347.6	250.0	324.01 ug/L	324.01 ppb	22:33:20
2	Sb 206.836†	74.9	40.2	0.8830 ug/L	0.8830 ppb	22:33:20
2	Se 196.026†	-749.5	-687.0	53.254 ug/L	53.254 ppb	22:33:20
2	Si 251.611†	1446085.9	1359639.9	40286 ug/L	40286 ppb	22:32:55
2	Sn 189.927†	-90.5	-84.8	-10.977 ug/L	-10.977 ppb	22:33:20
2	Ti 334.940†	2844852.9	2676671.8	4081.7 ug/L	4081.7 ppb	22:32:55
2	Tl 190.801†	-199.4	-150.7	-2.1714 ug/L	-2.1714 ppb	22:33:20
2	U 409.014†	-9828.9	-8181.9	-220.12 ug/L	-220.12 ppb	22:32:55
2	V 292.402†	39448.6	38497.5	215.48 ug/L	215.48 ppb	22:33:00
2	Zn 213.857†	35255.8	32426.9	288.48 ug/L	288.48 ppb	22:33:00
2	SiO2†	1456016.3	1368962.6	86579 ug/L	86579 ppb	22:34:03
3	Sc Radial	5452.1	5452.1	102 %		22:32:16
3	Y RADIAL	6411.0	6411.0	111.4 %		22:32:16
3	Al 396.153Radial†	147027.5	143998.5	109080 ug/L	109080 ppb	22:31:56
3	Ca 317.933Radial†	10047.1	9820.5	15784 ug/L	15784 ppb	22:31:56
3	Fe 238.204 Radial†	14895.2	14582.1	136280 ug/L	136280 ppb	22:31:56
3	K 766.490 Radial†	93259.9	88840.9	16223 ug/L	16223 ppb	22:31:56
3	Mg 279.077 IEC†	554.6	542.3	19199 ug/L	19199 ppb	22:32:16
3	Na 589.592 Radial†	2006.2	2512.6	746.93 ug/L	746.93 ppb	22:31:56
3	Sr 421.552†	34208.0	33498.3	214.86 ug/L	214.86 ppb	22:31:56
3	Sc 361.383	956435.8	956435.8	106.52 %		22:33:26
3	Y 371.029	914804.9	914804.9	111.14 %		22:33:26
3	Ag 328.068†	-9333.1	-9057.7	7.2513 ug/L	7.2513 ppb	22:33:31
3	As 188.979†	-50.8	-17.5	60.106 ug/L	60.106 ppb	22:33:51
3	B 249.677†	1192.5	1359.9	7.5230 ug/L	7.5230 ppb	22:33:31
3	Ba 233.527†	162776.6	152812.8	1209.2 ug/L	1209.2 ppb	22:33:31
3	Be 313.107†	-10914.4	-5145.7	7.4482 ug/L	7.4482 ppb	22:33:31
3	Cd 226.502†	1128.8	1265.9	0.0754 ug/L	0.0754 ppb	22:33:51
3	Co 228.616†	2817.2	2714.6	49.513 ug/L	49.513 ppb	22:33:51
3	Cr 267.716†	11765.4	10951.0	121.78 ug/L	121.78 ppb	22:33:31
3	Cu 324.752†	27454.4	16645.3	54.019 ug/L	54.019 ppb	22:33:31
3	Mn 257.610†	2556273.6	2399262.6	2702.7 ug/L	2702.7 ppb	22:33:26
3	Mo 202.031†	-38.1	-59.4	6.7141 ug/L	6.7141 ppb	22:33:51
3	Ni 231.604†	3494.9	3187.2	80.065 ug/L	80.065 ppb	22:33:51
3	P 214.914†	1254.0	938.5	437.26 ug/L	437.26 ppb	22:33:51
3	Pb 220.353†	631.1	652.9	92.484 ug/L	92.484 ppb	22:33:51
3	S 181.975 Axial†	353.3	254.7	330.23 ug/L	330.23 ppb	22:33:51
3	Sb 206.836†	78.0	43.0	1.8220 ug/L	1.8220 ppb	22:33:51
3	Se 196.026†	-734.3	-671.4	70.302 ug/L	70.302 ppb	22:33:51
3	Si 251.611†	1449954.5	1360677.5	40317 ug/L	40317 ppb	22:33:26
3	Sn 189.927†	-84.9	-79.3	-9.8955 ug/L	-9.8955 ppb	22:33:51
3	Ti 334.940†	2849702.3	2676121.0	4080.9 ug/L	4080.9 ppb	22:33:26
3	Tl 190.801†	-201.3	-152.1	-2.6449 ug/L	-2.6449 ppb	22:33:51
3	U 409.014†	-9691.1	-8034.9	-216.71 ug/L	-216.71 ppb	22:33:26
3	V 292.402†	39492.5	38468.0	214.94 ug/L	214.94 ppb	22:33:31
3	Zn 213.857†	35248.4	32356.7	287.60 ug/L	287.60 ppb	22:33:31
3	SiO2†	1453074.4	1363589.0	86240 ug/L	86240 ppb	22:34:09

Mean Data: 244128015|940124|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	954069.0	106.26 %		0.298			0.28%
Sc Radial	5445.0	102 %		1.2			1.14%
Y 371.029	912287.6	110.83 %		0.360			0.33%
Y RADIAL	6410.5	111.3 %		1.19			1.07%
Ag 328.068†	-9151.2	6.7518 ug/L		0.90096	6.7518 ppb	0.90096	13.34%
Al 396.153Radial†	143717.1	108870 ug/L		1280.5	108870 ppb	1280.5	1.18%
As 188.979†	-21.4	58.494 ug/L		1.8169	58.494 ppb	1.8169	3.11%
B 249.677†	1368.6	7.7704 ug/L		1.23899	7.7704 ppb	1.23899	15.95%
Ba 233.527†	152852.4	1209.5 ug/L		1.56	1209.5 ppb	1.56	0.13%
Be 313.107†	-5015.4	7.5030 ug/L		0.09100	7.5030 ppb	0.09100	1.21%
Ca 317.933Radial†	9782.1	15723 ug/L		182.9	15723 ppb	182.9	1.16%
Cd 226.502†	1283.5	0.3077 ug/L		0.47011	0.3077 ppb	0.47011	152.79%
Co 228.616†	2707.9	49.363 ug/L		0.1594	49.363 ppb	0.1594	0.32%
Cr 267.716†	11016.6	122.49 ug/L		0.624	122.49 ppb	0.624	0.51%
Cu 324.752†	16664.4	54.056 ug/L		0.2020	54.056 ppb	0.2020	0.37%
Fe 238.204 Radial†	14545.3	135930 ug/L		1908.4	135930 ppb	1908.4	1.40%
K 766.490 Radial†	88522.1	16165 ug/L		176.8	16165 ppb	176.8	1.09%

Mg 279.077 IEC†	546.8	19361 ug/L	158.5	19361 ppb	158.5	0.82%
Mn 257.610†	2403577.6	2707.5 ug/L	6.16	2707.5 ppb	6.16	0.23%
Mo 202.031†	-55.4	6.9593 ug/L	0.41059	6.9593 ppb	0.41059	5.90%
Na 589.592 Radial†	2487.0	739.31 ug/L	11.027	739.31 ppb	11.027	1.49%
Ni 231.604†	3206.6	80.551 ug/L	0.4306	80.551 ppb	0.4306	0.53%
P 214.914†	952.3	445.27 ug/L	7.574	445.27 ppb	7.574	1.70%
Pb 220.353†	651.4	92.284 ug/L	0.4596	92.284 ppb	0.4596	0.50%
S 181.975 Axial†	248.6	321.84 ug/L	9.656	321.84 ppb	9.656	3.00%
Sb 206.836†	42.2	1.5262 ug/L	0.55757	1.5262 ppb	0.55757	36.53%
Se 196.026†	-679.4	64.562 ug/L	9.7933	64.562 ppb	9.7933	15.17%
Si 251.611†	1361431.8	40339 ug/L	67.1	40339 ppb	67.1	0.17%
Sn 189.927†	-81.1	-10.240 ug/L	0.6381	-10.240 ppb	0.6381	6.23%
Sr 421.552†	33404.8	214.26 ug/L	2.867	214.26 ppb	2.867	1.34%
Ti 334.940†	2678679.8	4084.8 ug/L	6.05	4084.8 ppb	6.05	0.15%
Tl 190.801†	-150.0	-1.9356 ug/L	0.85204	-1.9356 ppb	0.85204	44.02%
U 409.014†	-8140.1	-219.31 ug/L	2.299	-219.31 ppb	2.299	1.05%
V 292.402†	38432.1	214.77 ug/L	0.818	214.77 ppb	0.818	0.38%
Zn 213.857†	32374.7	287.79 ug/L	0.610	287.79 ppb	0.610	0.21%
SiO2†	1370152.6	86655 ug/L	457.4	86655 ppb	457.4	0.53%

Sequence No.: 60
 Sample ID: 244128016|940124|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 85
 Date Collected: 1/26/2010 22:36:21
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 244128016|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5590.8	5590.8	105 %		22:38:34
1	Y RADIAL	6669.5	6669.5	115.8 %		22:38:34
1	Al 396.153Radial†	146820.5	140225.9	106230 ug/L	106230 ppb	22:38:14
1	Ca 317.933Radial†	12830.3	12234.6	19665 ug/L	19665 ppb	22:38:14
1	Fe 238.204 Radial†	14327.6	13677.8	127830 ug/L	127830 ppb	22:38:14
1	K 766.490 Radial†	101956.2	94879.6	17325 ug/L	17325 ppb	22:38:14
1	Mg 279.077 IEC†	578.8	551.8	19550 ug/L	19550 ppb	22:38:34
1	Na 589.592 Radial†	1261.2	1752.3	520.90 ug/L	520.90 ppb	22:38:14
1	Sr 421.552†	42285.5	40381.8	259.01 ug/L	259.01 ppb	22:38:14
1	Sc 361.383	966834.7	966834.7	107.68 %		22:39:33
1	Y 371.029	938565.7	938565.7	114.03 %		22:39:33
1	Ag 328.068†	-8616.6	-8298.1	7.7727 ug/L	7.7727 ppb	22:39:38
1	As 188.979†	-65.0	-30.2	65.660 ug/L	65.660 ppb	22:39:58
1	B 249.677†	1386.4	1527.9	12.540 ug/L	12.540 ppb	22:39:38
1	Ba 233.527†	222564.4	206692.6	1633.7 ug/L	1633.7 ppb	22:39:38
1	Be 313.107†	-21452.0	-14821.4	7.3615 ug/L	7.3615 ppb	22:39:38
1	Cd 226.502†	1136.4	1261.5	0.9196 ug/L	0.9196 ppb	22:39:58
1	Co 228.616†	3552.7	3369.2	61.101 ug/L	61.101 ppb	22:39:58
1	Cr 267.716†	15877.3	14650.9	161.77 ug/L	161.77 ppb	22:39:38
1	Cu 324.752†	28226.9	17085.5	54.789 ug/L	54.789 ppb	22:39:38
1	Mn 257.610†	3672175.2	3409759.2	3834.8 ug/L	3834.8 ppb	22:39:33
1	Mo 202.031†	-45.9	-66.2	5.6359 ug/L	5.6359 ppb	22:39:58
1	Ni 231.604†	4431.5	4021.7	101.03 ug/L	101.03 ppb	22:39:58
1	P 214.914†	1797.2	1430.3	720.38 ug/L	720.38 ppb	22:39:58
1	Pb 220.353†	973.0	964.0	131.80 ug/L	131.80 ppb	22:39:58
1	S 181.975 Axial†	546.5	430.5	572.82 ug/L	572.82 ppb	22:39:58
1	Sb 206.836†	98.8	61.5	3.0383 ug/L	3.0383 ppb	22:39:58
1	Se 196.026†	-708.0	-639.5	60.571 ug/L	60.571 ppb	22:39:58
1	Si 251.611†	1481996.8	1375794.2	40765 ug/L	40765 ppb	22:39:33
1	Sn 189.927†	-131.4	-121.6	-17.230 ug/L	-17.230 ppb	22:39:58
1	Ti 334.940†	3915514.8	3637138.5	5546.6 ug/L	5546.6 ppb	22:39:33
1	Tl 190.801†	-247.7	-193.1	1.6586 ug/L	1.6586 ppb	22:39:58
1	U 409.014†	-8442.7	-6777.6	-184.40 ug/L	-184.40 ppb	22:39:33
1	V 292.402†	47058.2	45095.2	255.88 ug/L	255.88 ppb	22:39:38
1	Zn 213.857†	28137.1	25396.8	223.45 ug/L	223.45 ppb	22:39:38
1	SiO2†	1473610.7	1367988.8	86518 ug/L	86518 ppb	22:41:09
2	Sc Radial	5562.6	5562.6	104 %		22:39:00
2	Y RADIAL	6632.5	6632.5	115.2 %		22:39:00
2	Al 396.153Radial†	147865.0	141941.0	107520 ug/L	107520 ppb	22:38:40
2	Ca 317.933Radial†	12894.0	12358.0	19863 ug/L	19863 ppb	22:38:40
2	Fe 238.204 Radial†	14408.6	13825.0	129200 ug/L	129200 ppb	22:38:40
2	K 766.490 Radial†	102500.6	95896.9	17510 ug/L	17510 ppb	22:38:40
2	Mg 279.077 IEC†	579.2	555.1	19664 ug/L	19664 ppb	22:39:00
2	Na 589.592 Radial†	1362.6	1855.8	551.66 ug/L	551.66 ppb	22:38:40
2	Sr 421.552†	42733.4	41016.9	263.09 ug/L	263.09 ppb	22:38:40
2	Sc 361.383	964483.0	964483.0	107.42 %		22:40:05
2	Y 371.029	939063.3	939063.3	114.09 %		22:40:05
2	Ag 328.068†	-8782.5	-8472.0	7.5095 ug/L	7.5095 ppb	22:40:10
2	As 188.979†	-82.0	-46.2	59.463 ug/L	59.463 ppb	22:40:30
2	B 249.677†	1446.8	1587.3	13.618 ug/L	13.618 ppb	22:40:10
2	Ba 233.527†	225608.0	210030.0	1660.1 ug/L	1660.1 ppb	22:40:10
2	Be 313.107†	-22139.1	-15509.7	7.1274 ug/L	7.1274 ppb	22:40:10
2	Cd 226.502†	1163.8	1289.6	1.0901 ug/L	1.0901 ppb	22:40:30
2	Co 228.616†	3526.7	3353.0	60.728 ug/L	60.728 ppb	22:40:30
2	Cr 267.716†	16081.2	14876.6	164.25 ug/L	164.25 ppb	22:40:10
2	Cu 324.752†	28767.4	17652.6	56.453 ug/L	56.453 ppb	22:40:10
2	Mn 257.610†	3667179.5	3413423.8	3839.0 ug/L	3839.0 ppb	22:40:05
2	Mo 202.031†	-56.9	-76.6	5.0399 ug/L	5.0399 ppb	22:40:30
2	Ni 231.604†	4402.8	4005.1	100.61 ug/L	100.61 ppb	22:40:30

2	P 214.914†	1772.1	1411.0	708.41 ug/L	708.41 ppb	22:40:30
2	Pb 220.353†	979.2	971.9	132.95 ug/L	132.95 ppb	22:40:30
2	S 181.975 Axial†	555.7	440.3	586.12 ug/L	586.12 ppb	22:40:30
2	Sb 206.836†	89.1	52.7	0.1029 ug/L	0.1029 ppb	22:40:30
2	Se 196.026†	-689.3	-623.7	74.305 ug/L	74.305 ppb	22:40:30
2	Si 251.611†	1477777.0	1375221.5	40748 ug/L	40748 ppb	22:40:05
2	Sn 189.927†	-121.6	-112.8	-15.556 ug/L	-15.556 ppb	22:40:30
2	Ti 334.940†	3908677.3	3639639.5	5550.5 ug/L	5550.5 ppb	22:40:05
2	Tl 190.801†	-244.7	-190.9	2.4274 ug/L	2.4274 ppb	22:40:30
2	U 409.014†	-8445.7	-6799.6	-185.11 ug/L	-185.11 ppb	22:40:05
2	V 292.402†	47768.2	45862.8	260.44 ug/L	260.44 ppb	22:40:10
2	Zn 213.857†	28487.2	25786.4	226.95 ug/L	226.95 ppb	22:40:10
2	SiO2†	1490556.2	1387100.8	87727 ug/L	87727 ppb	22:41:14
3	Sc Radial	5565.8	5565.8	104 %		22:39:25
3	Y RADIAL	6624.0	6624.0	115.1 %		22:39:25
3	Al 396.153Radial†	150375.3	144266.9	109290 ug/L	109290 ppb	22:39:05
3	Ca 317.933Radial†	13045.3	12496.0	20085 ug/L	20085 ppb	22:39:05
3	Fe 238.204 Radial†	14612.6	14012.7	130960 ug/L	130960 ppb	22:39:05
3	K 766.490 Radial†	104428.5	97689.4	17838 ug/L	17838 ppb	22:39:05
3	Mg 279.077 IEC†	575.4	551.1	19520 ug/L	19520 ppb	22:39:25
3	Na 589.592 Radial†	1311.0	1805.5	536.72 ug/L	536.72 ppb	22:39:05
3	Sr 421.552†	43495.5	41724.3	267.62 ug/L	267.62 ppb	22:39:05
3	Sc 361.383	964747.1	964747.1	107.45 %		22:40:37
3	Y 371.029	936914.7	936914.7	113.82 %		22:40:37
3	Ag 328.068†	-8875.2	-8556.0	7.7255 ug/L	7.7255 ppb	22:40:42
3	As 188.979†	-71.4	-36.3	64.000 ug/L	64.000 ppb	22:41:02
3	B 249.677†	1404.0	1547.1	12.452 ug/L	12.452 ppb	22:40:42
3	Ba 233.527†	226470.6	210775.3	1666.0 ug/L	1666.0 ppb	22:40:42
3	Be 313.107†	-21680.6	-15077.3	7.2983 ug/L	7.2983 ppb	22:40:42
3	Cd 226.502†	1148.4	1275.0	0.7461 ug/L	0.7461 ppb	22:41:02
3	Co 228.616†	3545.6	3369.7	61.056 ug/L	61.056 ppb	22:41:02
3	Cr 267.716†	16194.2	14977.7	165.39 ug/L	165.39 ppb	22:40:42
3	Cu 324.752†	28771.8	17649.4	56.537 ug/L	56.537 ppb	22:40:42
3	Mn 257.610†	3673270.2	3418157.8	3844.5 ug/L	3844.5 ppb	22:40:37
3	Mo 202.031†	-48.2	-68.5	5.7314 ug/L	5.7314 ppb	22:41:02
3	Ni 231.604†	4428.5	4027.8	101.18 ug/L	101.18 ppb	22:41:02
3	P 214.914†	1783.8	1421.4	713.30 ug/L	713.30 ppb	22:41:02
3	Pb 220.353†	950.7	945.2	129.81 ug/L	129.81 ppb	22:41:02
3	S 181.975 Axial†	560.8	445.0	592.15 ug/L	592.15 ppb	22:41:02
3	Sb 206.836†	83.1	47.1	-1.8096 ug/L	-1.8096 ppb	22:41:02
3	Se 196.026†	-699.9	-633.5	74.605 ug/L	74.605 ppb	22:41:02
3	Si 251.611†	1481601.0	1378403.9	40842 ug/L	40842 ppb	22:40:37
3	Sn 189.927†	-128.8	-119.5	-16.718 ug/L	-16.718 ppb	22:41:02
3	Ti 334.940†	3915446.8	3644943.7	5558.6 ug/L	5558.6 ppb	22:40:37
3	Tl 190.801†	-253.9	-199.4	-0.2124 ug/L	-0.2124 ppb	22:41:02
3	U 409.014†	-8482.3	-6831.5	-186.11 ug/L	-186.11 ppb	22:40:37
3	V 292.402†	47811.7	45891.1	260.35 ug/L	260.35 ppb	22:40:42
3	Zn 213.857†	28558.9	25845.8	227.33 ug/L	227.33 ppb	22:40:42
3	SiO2†	1471721.1	1369191.4	86594 ug/L	86594 ppb	22:41:20

Mean Data: 244128016|940124|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	965354.9	107.52 %		0.143			0.13%
Sc Radial	5573.1	104 %		0.3			0.28%
Y 371.029	938181.3	113.98 %		0.137			0.12%
Y RADIAL	6642.0	115.4 %		0.42			0.36%
Ag 328.068†	-8442.0	7.6693 ug/L		0.14036	7.6693 ppb	0.14036	1.83%
Al 396.153Radial†	142144.6	107680 ug/L		1536.4	107680 ppb	1536.4	1.43%
As 188.979†	-37.5	63.041 ug/L		3.2076	63.041 ppb	3.2076	5.09%
B 249.677†	1554.1	12.870 ug/L		0.6495	12.870 ppb	0.6495	5.05%
Ba 233.527†	209166.0	1653.2 ug/L		17.19	1653.2 ppb	17.19	1.04%
Be 313.107†	-15136.2	7.2624 ug/L		0.12112	7.2624 ppb	0.12112	1.67%
Ca 317.933Radial†	12362.8	19871 ug/L		210.2	19871 ppb	210.2	1.06%
Cd 226.502†	1275.4	0.9186 ug/L		0.17197	0.9186 ppb	0.17197	18.72%
Co 228.616†	3364.0	60.962 ug/L		0.2032	60.962 ppb	0.2032	0.33%
Cr 267.716†	14835.1	163.80 ug/L		1.847	163.80 ppb	1.847	1.13%
Cu 324.752†	17462.5	55.926 ug/L		0.9859	55.926 ppb	0.9859	1.76%
Fe 238.204 Radial†	13838.5	129330 ug/L		1568.9	129330 ppb	1568.9	1.21%
K 766.490 Radial†	96155.3	17558 ug/L		259.8	17558 ppb	259.8	1.48%

Mg 279.077 IEC†	552.7	19578 ug/L	75.9	19578 ppb	75.9	0.39%
Mn 257.610†	3413780.3	3839.4 ug/L	4.88	3839.4 ppb	4.88	0.13%
Mo 202.031†	-70.4	5.4691 ug/L	0.37473	5.4691 ppb	0.37473	6.85%
Na 589.592 Radial†	1804.5	536.43 ug/L	15.386	536.43 ppb	15.386	2.87%
Ni 231.604†	4018.2	100.94 ug/L	0.296	100.94 ppb	0.296	0.29%
P 214.914†	1420.9	714.03 ug/L	6.016	714.03 ppb	6.016	0.84%
Pb 220.353†	960.4	131.52 ug/L	1.590	131.52 ppb	1.590	1.21%
S 181.975 Axial†	438.6	583.70 ug/L	9.889	583.70 ppb	9.889	1.69%
Sb 206.836†	53.7	0.4439 ug/L	2.44187	0.4439 ppb	2.44187	550.14%
Se 196.026†	-632.2	69.827 ug/L	8.0174	69.827 ppb	8.0174	11.48%
Si 251.611†	1376473.2	40785 ug/L	50.3	40785 ppb	50.3	0.12%
Sn 189.927†	-118.0	-16.501 ug/L	0.8576	-16.501 ppb	0.8576	5.20%
Sr 421.552†	41041.0	263.24 ug/L	4.308	263.24 ppb	4.308	1.64%
Ti 334.940†	3640573.9	5551.9 ug/L	6.11	5551.9 ppb	6.11	0.11%
Tl 190.801†	-194.5	1.2912 ug/L	1.35773	1.2912 ppb	1.35773	105.15%
U 409.014†	-6802.9	-185.21 ug/L	0.860	-185.21 ppb	0.860	0.46%
V 292.402†	45616.4	258.89 ug/L	2.608	258.89 ppb	2.608	1.01%
Zn 213.857†	25676.3	225.91 ug/L	2.137	225.91 ppb	2.137	0.95%
SiO2†	1374760.3	86946 ug/L	677.0	86946 ppb	677.0	0.78%

Sequence No.: 61

Sample ID: 244128017|940124|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 86

Date Collected: 1/26/2010 22:43:32

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 244128017|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5470.9	5470.9	102 %		22:45:46
1	Y RADIAL	6635.7	6635.7	115.3 %		22:45:46
1	Al 396.153Radial†	215976.2	210803.5	159690 ug/L	159690 ppb	22:45:26
1	Ca 317.933Radial†	14298.8	13936.7	22400 ug/L	22400 ppb	22:45:26
1	Fe 238.204 Radial†	14152.4	13806.9	129030 ug/L	129030 ppb	22:45:26
1	K 766.490 Radial†	93793.5	89047.6	16258 ug/L	16258 ppb	22:45:26
1	Mg 279.077 IEC†	597.0	581.7	20615 ug/L	20615 ppb	22:45:46
1	Na 589.592 Radial†	4117.6	4566.8	1357.6 ug/L	1357.6 ppb	22:45:26
1	Sr 421.552†	45327.6	44236.8	283.73 ug/L	283.73 ppb	22:45:26
1	Sc 361.383	950015.2	950015.2	105.81 %		22:46:44
1	Y 371.029	936910.2	936910.2	113.82 %		22:46:44
1	Ag 328.068†	-8656.2	-8477.1	7.2269 ug/L	7.2269 ppb	22:46:50
1	As 188.979†	-56.4	-23.1	65.425 ug/L	65.425 ppb	22:47:10
1	B 249.677†	1186.4	1361.7	8.7442 ug/L	8.7442 ppb	22:46:50
1	Ba 233.527†	266645.9	252013.9	1990.9 ug/L	1990.9 ppb	22:46:50
1	Be 313.107†	-9751.8	-4116.1	10.248 ug/L	10.248 ppb	22:46:50
1	Cd 226.502†	1105.7	1251.2	0.6582 ug/L	0.6582 ppb	22:47:10
1	Co 228.616†	2705.2	2626.7	45.821 ug/L	45.821 ppb	22:47:10
1	Cr 267.716†	10112.2	9463.3	105.51 ug/L	105.51 ppb	22:46:50
1	Cu 324.752†	29301.9	18565.6	59.023 ug/L	59.023 ppb	22:46:50
1	Mn 257.610†	2581580.3	2439398.8	2746.9 ug/L	2746.9 ppb	22:46:44
1	Mo 202.031†	-61.2	-81.4	4.7251 ug/L	4.7251 ppb	22:47:10
1	Ni 231.604†	3357.7	3079.7	77.364 ug/L	77.364 ppb	22:47:10
1	P 214.914†	1697.9	1365.9	695.61 ug/L	695.61 ppb	22:47:10
1	Pb 220.353†	663.5	687.4	108.44 ug/L	108.44 ppb	22:47:10
1	S 181.975 Axial†	399.0	300.2	383.34 ug/L	383.34 ppb	22:47:10
1	Sb 206.836†	71.9	37.7	-5.2334 ug/L	-5.2334 ppb	22:47:10
1	Se 196.026†	-720.8	-663.3	54.218 ug/L	54.218 ppb	22:47:10
1	Si 251.611†	1320899.5	1247905.1	36975 ug/L	36975 ppb	22:46:44
1	Sn 189.927†	-136.3	-128.5	-18.048 ug/L	-18.048 ppb	22:47:10
1	Ti 334.940†	3575241.5	3379918.6	5154.8 ug/L	5154.8 ppb	22:46:44
1	Tl 190.801†	-225.3	-176.0	-1.1631 ug/L	-1.1631 ppb	22:47:10
1	U 409.014†	-9676.3	-8082.3	-217.04 ug/L	-217.04 ppb	22:46:44
1	V 292.402†	38724.3	37992.5	211.91 ug/L	211.91 ppb	22:46:50
1	Zn 213.857†	28166.0	25886.6	228.04 ug/L	228.04 ppb	22:46:50
1	SiO2†	1328709.7	1255269.2	79389 ug/L	79389 ppb	22:48:20
2	Sc Radial	5542.1	5542.1	104 %		22:46:11
2	Y RADIAL	6707.6	6707.6	116.5 %		22:46:11
2	Al 396.153Radial†	218630.3	210652.0	159580 ug/L	159580 ppb	22:45:51
2	Ca 317.933Radial†	14410.4	13864.9	22285 ug/L	22285 ppb	22:45:51
2	Fe 238.204 Radial†	14339.6	13809.8	129060 ug/L	129060 ppb	22:45:51
2	K 766.490 Radial†	95065.3	89096.6	16267 ug/L	16267 ppb	22:45:51
2	Mg 279.077 IEC†	602.4	579.4	20533 ug/L	20533 ppb	22:46:11
2	Na 589.592 Radial†	4162.6	4558.5	1355.1 ug/L	1355.1 ppb	22:45:51
2	Sr 421.552†	45894.2	44214.2	283.59 ug/L	283.59 ppb	22:45:51
2	Sc 361.383	939959.2	939959.2	104.69 %		22:47:17
2	Y 371.029	926806.1	926806.1	112.60 %		22:47:17
2	Ag 328.068†	-8761.9	-8665.7	6.4645 ug/L	6.4645 ppb	22:47:22
2	As 188.979†	-54.2	-21.6	66.157 ug/L	66.157 ppb	22:47:42
2	B 249.677†	1163.8	1352.1	8.5298 ug/L	8.5298 ppb	22:47:22
2	Ba 233.527†	267495.7	255521.8	2018.5 ug/L	2018.5 ppb	22:47:22
2	Be 313.107†	-9620.5	-4089.3	10.286 ug/L	10.286 ppb	22:47:22
2	Cd 226.502†	1065.7	1224.1	0.3531 ug/L	0.3531 ppb	22:47:42
2	Co 228.616†	2678.0	2628.1	45.840 ug/L	45.840 ppb	22:47:42
2	Cr 267.716†	10213.6	9662.4	107.67 ug/L	107.67 ppb	22:47:22
2	Cu 324.752†	29128.6	18696.4	59.390 ug/L	59.390 ppb	22:47:22
2	Mn 257.610†	2566688.3	2451276.3	2760.2 ug/L	2760.2 ppb	22:47:17
2	Mo 202.031†	-42.7	-64.4	5.8862 ug/L	5.8862 ppb	22:47:42
2	Ni 231.604†	3314.9	3072.8	77.189 ug/L	77.189 ppb	22:47:42

2	P 214.914†	1715.5	1400.0	714.68 ug/L	714.68 ppb	22:47:42
2	Pb 220.353†	641.5	673.2	106.62 ug/L	106.62 ppb	22:47:42
2	S 181.975 Axial†	389.8	295.4	376.79 ug/L	376.79 ppb	22:47:42
2	Sb 206.836†	99.1	64.4	3.7060 ug/L	3.7060 ppb	22:47:42
2	Se 196.026†	-702.2	-652.8	60.388 ug/L	60.388 ppb	22:47:42
2	Si 251.611†	1309922.5	1250775.5	37060 ug/L	37060 ppb	22:47:17
2	Sn 189.927†	-139.1	-132.5	-18.815 ug/L	-18.815 ppb	22:47:42
2	Ti 334.940†	3546189.8	3388317.5	5167.6 ug/L	5167.6 ppb	22:47:17
2	Tl 190.801†	-237.4	-189.9	-5.4311 ug/L	-5.4311 ppb	22:47:42
2	U 409.014†	-9530.3	-8040.7	-216.01 ug/L	-216.01 ppb	22:47:17
2	V 292.402†	38931.0	38581.4	215.57 ug/L	215.57 ppb	22:47:22
2	Zn 213.857†	28187.7	26192.2	230.89 ug/L	230.89 ppb	22:47:22
2	SiO2†	1337647.7	1277241.8	80779 ug/L	80779 ppb	22:48:26
3	Sc Radial	5516.6	5516.6	103 %		22:46:36
3	Y RADIAL	6690.4	6690.4	116.2 %		22:46:36
3	Al 396.153Radial†	215581.4	208674.3	158080 ug/L	158080 ppb	22:46:16
3	Ca 317.933Radial†	14302.3	13824.4	22220 ug/L	22220 ppb	22:46:16
3	Fe 238.204 Radial†	14143.4	13683.7	127880 ug/L	127880 ppb	22:46:16
3	K 766.490 Radial†	93356.2	87865.6	16043 ug/L	16043 ppb	22:46:16
3	Mg 279.077 IEC†	594.9	574.9	20373 ug/L	20373 ppb	22:46:36
3	Na 589.592 Radial†	4149.2	4564.0	1356.8 ug/L	1356.8 ppb	22:46:16
3	Sr 421.552†	45169.1	43716.8	280.40 ug/L	280.40 ppb	22:46:16
3	Sc 361.383	954153.4	954153.4	106.27 %		22:47:49
3	Y 371.029	939689.1	939689.1	114.16 %		22:47:49
3	Ag 328.068†	-8730.5	-8511.5	6.7190 ug/L	6.7190 ppb	22:47:54
3	As 188.979†	-61.7	-27.9	63.240 ug/L	63.240 ppb	22:48:14
3	B 249.677†	1159.8	1331.8	8.2786 ug/L	8.2786 ppb	22:47:54
3	Ba 233.527†	267678.0	251892.2	1989.9 ug/L	1989.9 ppb	22:47:54
3	Be 313.107†	-9462.7	-3804.1	10.368 ug/L	10.368 ppb	22:47:54
3	Cd 226.502†	1081.4	1223.8	0.4693 ug/L	0.4693 ppb	22:48:14
3	Co 228.616†	2672.1	2584.4	44.901 ug/L	44.901 ppb	22:48:14
3	Cr 267.716†	10185.6	9490.9	105.79 ug/L	105.79 ppb	22:47:54
3	Cu 324.752†	29213.2	18362.0	58.394 ug/L	58.394 ppb	22:47:54
3	Mn 257.610†	2596646.9	2442995.0	2750.8 ug/L	2750.8 ppb	22:47:49
3	Mo 202.031†	-63.3	-83.2	4.5155 ug/L	4.5155 ppb	22:48:14
3	Ni 231.604†	3368.0	3075.7	77.263 ug/L	77.263 ppb	22:48:14
3	P 214.914†	1723.7	1383.3	706.04 ug/L	706.04 ppb	22:48:14
3	Pb 220.353†	657.4	679.0	107.15 ug/L	107.15 ppb	22:48:14
3	S 181.975 Axial†	396.0	295.7	377.44 ug/L	377.44 ppb	22:48:14
3	Sb 206.836†	67.7	33.5	-6.6398 ug/L	-6.6398 ppb	22:48:14
3	Se 196.026†	-712.8	-652.8	56.372 ug/L	56.372 ppb	22:48:14
3	Si 251.611†	1329212.0	1250313.0	37047 ug/L	37047 ppb	22:47:49
3	Sn 189.927†	-136.1	-127.7	-17.953 ug/L	-17.953 ppb	22:48:14
3	Ti 334.940†	3594137.9	3383045.8	5159.5 ug/L	5159.5 ppb	22:47:49
3	Tl 190.801†	-241.3	-190.2	-5.6369 ug/L	-5.6369 ppb	22:48:14
3	U 409.014†	-10004.0	-8351.1	-223.63 ug/L	-223.63 ppb	22:47:49
3	V 292.402†	38909.4	38008.0	212.15 ug/L	212.15 ppb	22:47:54
3	Zn 213.857†	28240.1	25841.0	227.73 ug/L	227.73 ppb	22:47:54
3	SiO2†	1325358.9	1246669.8	78845 ug/L	78845 ppb	22:48:32

Mean Data: 244128017|940124|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Conc.	Sample	Std.Dev.	RSD
	Intensity		Units		Units			
Sc 361.383	948042.6	105.59	%	0.813				0.77%
Sc Radial	5509.8	103	%	0.7				0.65%
Y 371.029	934468.5	113.53	%	0.824				0.73%
Y RADIAL	6677.9	116.0	%	0.65				0.56%
Ag 328.068†	-8551.4	6.8035	ug/L	0.38819	6.8035	ppb	0.38819	5.71%
Al 396.153Radial†	210043.3	159110	ug/L	899.9	159110	ppb	899.9	0.57%
As 188.979†	-24.2	64.940	ug/L	1.5179	64.940	ppb	1.5179	2.34%
B 249.677†	1348.5	8.5175	ug/L	0.23303	8.5175	ppb	0.23303	2.74%
Ba 233.527†	253142.7	1999.8	ug/L	16.26	1999.8	ppb	16.26	0.81%
Be 313.107†	-4003.1	10.301	ug/L	0.0618	10.301	ppb	0.0618	0.60%
Ca 317.933Radial†	13875.3	22302	ug/L	91.4	22302	ppb	91.4	0.41%
Cd 226.502†	1233.0	0.4935	ug/L	0.15399	0.4935	ppb	0.15399	31.20%
Co 228.616†	2613.0	45.521	ug/L	0.5368	45.521	ppb	0.5368	1.18%
Cr 267.716†	9538.8	106.33	ug/L	1.177	106.33	ppb	1.177	1.11%
Cu 324.752†	18541.3	58.936	ug/L	0.5036	58.936	ppb	0.5036	0.85%
Fe 238.204 Radial†	13766.8	128660	ug/L	672.4	128660	ppb	672.4	0.52%
K 766.490 Radial†	88669.9	16189	ug/L	127.3	16189	ppb	127.3	0.79%

Mg 279.077 IEC†	578.7	20507 ug/L	123.1	20507 ppb	123.1	0.60%
Mn 257.610†	2444556.7	2752.6 ug/L	6.85	2752.6 ppb	6.85	0.25%
Mo 202.031†	-76.4	5.0423 ug/L	0.73832	5.0423 ppb	0.73832	14.64%
Na 589.592 Radial†	4563.1	1356.5 ug/L	1.25	1356.5 ppb	1.25	0.09%
Ni 231.604†	3076.1	77.272 ug/L	0.0878	77.272 ppb	0.0878	0.11%
P 214.914†	1383.1	705.44 ug/L	9.552	705.44 ppb	9.552	1.35%
Pb 220.353†	679.9	107.41 ug/L	0.936	107.41 ppb	0.936	0.87%
S 181.975 Axial†	297.1	379.19 ug/L	3.606	379.19 ppb	3.606	0.95%
Sb 206.836†	45.2	-2.7224 ug/L	5.61137	-2.7224 ppb	5.61137	206.12%
Se 196.026†	-656.3	56.993 ug/L	3.1315	56.993 ppb	3.1315	5.49%
Si 251.611†	1249664.5	37027 ug/L	45.7	37027 ppb	45.7	0.12%
Sn 189.927†	-129.6	-18.272 ug/L	0.4726	-18.272 ppb	0.4726	2.59%
Sr 421.552†	44055.9	282.57 ug/L	1.886	282.57 ppb	1.886	0.67%
Ti 334.940†	3383760.6	5160.6 ug/L	6.47	5160.6 ppb	6.47	0.13%
Tl 190.801†	-185.4	-4.0770 ug/L	2.52564	-4.0770 ppb	2.52564	61.95%
U 409.014†	-8158.0	-218.89 ug/L	4.135	-218.89 ppb	4.135	1.89%
V 292.402†	38193.9	213.21 ug/L	2.048	213.21 ppb	2.048	0.96%
Zn 213.857†	25973.3	228.89 ug/L	1.739	228.89 ppb	1.739	0.76%
SiO2†	1259726.9	79671 ug/L	997.1	79671 ppb	997.1	1.25%

Sequence No.: 62
 Sample ID: 244128018|940124|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 87
 Date Collected: 1/26/2010 22:50:43
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 244128018|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5520.5	5520.5	103 %		22:52:56
1	Y RADIAL	6669.8	6669.8	115.9 %		22:52:56
1	Al 396.153Radial†	191494.2	185227.2	140320 ug/L	140320 ppb	22:52:36
1	Ca 317.933Radial†	12959.8	12516.0	20117 ug/L	20117 ppb	22:52:36
1	Fe 238.204 Radial†	14745.6	14256.6	133240 ug/L	133240 ppb	22:52:36
1	K 766.490 Radial†	115968.8	109675.5	20028 ug/L	20028 ppb	22:52:36
1	Mg 279.077 IEC†	613.1	592.1	20981 ug/L	20981 ppb	22:52:56
1	Na 589.592 Radial†	1523.2	2021.0	600.80 ug/L	600.80 ppb	22:52:36
1	Sr 421.552†	41688.1	40318.7	258.60 ug/L	258.60 ppb	22:52:36
1	Sc 361.383	963846.0	963846.0	107.35 %		22:53:55
1	Y 371.029	949935.2	949935.2	115.41 %		22:53:55
1	Ag 328.068†	-9460.9	-9109.3	6.0744 ug/L	6.0744 ppb	22:54:00
1	As 188.979†	-51.2	-17.5	67.307 ug/L	67.307 ppb	22:54:20
1	B 249.677†	1341.6	1490.2	10.860 ug/L	10.860 ppb	22:54:00
1	Ba 233.527†	212690.8	198135.7	1566.4 ug/L	1566.4 ppb	22:54:00
1	Be 313.107†	-8950.0	-3237.0	10.190 ug/L	10.190 ppb	22:54:00
1	Cd 226.502†	1194.1	1318.6	0.9732 ug/L	0.9732 ppb	22:54:20
1	Co 228.616†	3098.7	2956.5	53.130 ug/L	53.130 ppb	22:54:20
1	Cr 267.716†	9252.1	8524.9	95.451 ug/L	95.451 ppb	22:54:00
1	Cu 324.752†	32110.4	20784.5	65.463 ug/L	65.463 ppb	22:54:00
1	Mn 257.610†	3024547.1	2817034.2	3170.7 ug/L	3170.7 ppb	22:53:55
1	Mo 202.031†	-68.7	-87.6	4.6037 ug/L	4.6037 ppb	22:54:20
1	Ni 231.604†	3043.2	2741.2	68.853 ug/L	68.853 ppb	22:54:20
1	P 214.914†	1659.0	1306.7	652.74 ug/L	652.74 ppb	22:54:20
1	Pb 220.353†	840.9	843.8	123.48 ug/L	123.48 ppb	22:54:20
1	S 181.975 Axial†	451.8	343.9	447.23 ug/L	447.23 ppb	22:54:20
1	Sb 206.836†	91.2	54.7	1.6943 ug/L	1.6943 ppb	22:54:20
1	Se 196.026†	-773.4	-702.5	44.292 ug/L	44.292 ppb	22:54:20
1	Si 251.611†	1508326.9	1404589.6	41618 ug/L	41618 ppb	22:53:55
1	Sn 189.927†	-139.2	-129.4	-18.491 ug/L	-18.491 ppb	22:54:20
1	Ti 334.940†	3513215.5	3273650.7	4992.4 ug/L	4992.4 ppb	22:53:55
1	Tl 190.801†	-234.9	-182.0	-2.4654 ug/L	-2.4654 ppb	22:54:20
1	U 409.014†	-9327.0	-7625.8	-206.08 ug/L	-206.08 ppb	22:53:55
1	V 292.402†	43671.3	42075.7	236.89 ug/L	236.89 ppb	22:54:00
1	Zn 213.857†	30486.5	27666.3	244.26 ug/L	244.26 ppb	22:54:00
1	SiO2†	1491894.7	1389264.6	87863 ug/L	87863 ppb	22:55:30
2	Sc Radial	5554.1	5554.1	104 %		22:53:21
2	Y RADIAL	6730.1	6730.1	116.9 %		22:53:21
2	Al 396.153Radial†	192470.7	185044.1	140180 ug/L	140180 ppb	22:53:01
2	Ca 317.933Radial†	12973.6	12453.4	20016 ug/L	20016 ppb	22:53:01
2	Fe 238.204 Radial†	14781.1	14204.3	132750 ug/L	132750 ppb	22:53:01
2	K 766.490 Radial†	116262.9	109278.9	19955 ug/L	19955 ppb	22:53:01
2	Mg 279.077 IEC†	618.9	594.1	21052 ug/L	21052 ppb	22:53:21
2	Na 589.592 Radial†	1591.4	2077.7	617.64 ug/L	617.64 ppb	22:53:01
2	Sr 421.552†	41952.9	40329.0	258.67 ug/L	258.67 ppb	22:53:01
2	Sc 361.383	966586.8	966586.8	107.65 %		22:54:27
2	Y 371.029	950521.4	950521.4	115.48 %		22:54:27
2	Ag 328.068†	-9461.4	-9084.8	6.0266 ug/L	6.0266 ppb	22:54:32
2	As 188.979†	-64.2	-29.5	62.239 ug/L	62.239 ppb	22:54:52
2	B 249.677†	1336.5	1481.9	10.757 ug/L	10.757 ppb	22:54:32
2	Ba 233.527†	214357.6	199122.2	1574.1 ug/L	1574.1 ppb	22:54:32
2	Be 313.107†	-8630.6	-2916.6	10.288 ug/L	10.288 ppb	22:54:32
2	Cd 226.502†	1168.3	1291.4	0.7196 ug/L	0.7196 ppb	22:54:52
2	Co 228.616†	3100.0	2949.6	53.001 ug/L	53.001 ppb	22:54:52
2	Cr 267.716†	9321.7	8565.1	95.880 ug/L	95.880 ppb	22:54:32
2	Cu 324.752†	32407.6	20975.7	65.976 ug/L	65.976 ppb	22:54:32
2	Mn 257.610†	3031946.8	2815918.7	3169.4 ug/L	3169.4 ppb	22:54:27
2	Mo 202.031†	-84.7	-102.3	3.5599 ug/L	3.5599 ppb	22:54:52
2	Ni 231.604†	3036.8	2727.3	68.501 ug/L	68.501 ppb	22:54:52

2	P 214.914†	1635.1	1280.2	638.09 ug/L	638.09 ppb	22:54:52
2	Pb 220.353†	834.5	835.6	122.46 ug/L	122.46 ppb	22:54:52
2	S 181.975 Axial†	463.9	353.9	460.99 ug/L	460.99 ppb	22:54:52
2	Sb 206.836†	87.8	51.3	0.6256 ug/L	0.6256 ppb	22:54:52
2	Se 196.026†	-761.9	-689.7	50.011 ug/L	50.011 ppb	22:54:52
2	Si 251.611†	1513175.7	1405109.5	41633 ug/L	41633 ppb	22:54:27
2	Sn 189.927†	-105.9	-98.0	-12.755 ug/L	-12.755 ppb	22:54:52
2	Ti 334.940†	3518495.8	3269275.9	4985.7 ug/L	4985.7 ppb	22:54:27
2	Tl 190.801†	-236.5	-182.8	-2.7912 ug/L	-2.7912 ppb	22:54:52
2	U 409.014†	-9519.5	-7779.9	-209.88 ug/L	-209.88 ppb	22:54:27
2	V 292.402†	43960.8	42229.3	237.91 ug/L	237.91 ppb	22:54:32
2	Zn 213.857†	30677.0	27762.8	245.20 ug/L	245.20 ppb	22:54:32
2	SiO2†	1485805.2	1379667.3	87257 ug/L	87257 ppb	22:55:36
3	Sc Radial	5555.3	5555.3	104 %		22:53:46
3	Y RADIAL	6755.7	6755.7	117.3 %		22:53:46
3	Al 396.153Radial†	195368.0	187789.5	142260 ug/L	142260 ppb	22:53:26
3	Ca 317.933Radial†	13172.3	12641.7	20319 ug/L	20319 ppb	22:53:26
3	Fe 238.204 Radial†	14980.1	14392.6	134510 ug/L	134510 ppb	22:53:26
3	K 766.490 Radial†	117897.0	110825.7	20238 ug/L	20238 ppb	22:53:26
3	Mg 279.077 IEC†	622.6	597.5	21173 ug/L	21173 ppb	22:53:46
3	Na 589.592 Radial†	1612.4	2097.6	623.55 ug/L	623.55 ppb	22:53:26
3	Sr 421.552†	42464.2	40811.9	261.77 ug/L	261.77 ppb	22:53:26
3	Sc 361.383	967589.5	967589.5	107.76 %		22:54:59
3	Y 371.029	952267.1	952267.1	115.69 %		22:54:59
3	Ag 328.068†	-9414.2	-9031.9	6.7992 ug/L	6.7992 ppb	22:55:04
3	As 188.979†	-56.4	-22.2	65.594 ug/L	65.594 ppb	22:55:24
3	B 249.677†	1325.4	1470.3	10.217 ug/L	10.217 ppb	22:55:04
3	Ba 233.527†	211379.1	196152.0	1550.8 ug/L	1550.8 ppb	22:55:04
3	Be 313.107†	-8841.1	-3103.6	10.209 ug/L	10.209 ppb	22:55:04
3	Cd 226.502†	1185.3	1306.1	0.7020 ug/L	0.7020 ppb	22:55:24
3	Co 228.616†	3106.0	2952.1	53.032 ug/L	53.032 ppb	22:55:24
3	Cr 267.716†	9232.5	8473.3	94.915 ug/L	94.915 ppb	22:55:04
3	Cu 324.752†	31955.0	20524.6	64.804 ug/L	64.804 ppb	22:55:04
3	Mn 257.610†	3028816.0	2810094.7	3163.0 ug/L	3163.0 ppb	22:54:59
3	Mo 202.031†	-85.7	-103.2	3.6422 ug/L	3.6422 ppb	22:55:24
3	Ni 231.604†	3052.8	2739.2	68.801 ug/L	68.801 ppb	22:55:24
3	P 214.914†	1651.2	1293.5	644.97 ug/L	644.97 ppb	22:55:24
3	Pb 220.353†	854.9	853.7	125.01 ug/L	125.01 ppb	22:55:24
3	S 181.975 Axial†	461.7	351.4	457.21 ug/L	457.21 ppb	22:55:24
3	Sb 206.836†	65.9	30.9	-6.2227 ug/L	-6.2227 ppb	22:55:24
3	Se 196.026†	-756.5	-684.0	59.249 ug/L	59.249 ppb	22:55:24
3	Si 251.611†	1510293.9	1400978.6	41511 ug/L	41511 ppb	22:54:59
3	Sn 189.927†	-112.8	-104.4	-13.840 ug/L	-13.840 ppb	22:55:24
3	Ti 334.940†	3518202.9	3265616.9	4980.2 ug/L	4980.2 ppb	22:54:59
3	Tl 190.801†	-233.5	-179.8	-1.9202 ug/L	-1.9202 ppb	22:55:24
3	U 409.014†	-9543.8	-7793.3	-210.41 ug/L	-210.41 ppb	22:54:59
3	V 292.402†	43398.0	41664.7	234.15 ug/L	234.15 ppb	22:55:04
3	Zn 213.857†	30322.2	27404.1	241.69 ug/L	241.69 ppb	22:55:04
3	SiO2†	1505880.6	1396865.9	88344 ug/L	88344 ppb	22:55:42

Mean Data: 244128018|940124|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Units			Conc. Units		
Sc 361.383	966007.4	107.59 %		0.216			0.20%
Sc Radial	5543.3	104 %		0.4			0.36%
Y 371.029	950907.9	115.52 %		0.147			0.13%
Y RADIAL	6718.5	116.7 %		0.77			0.66%
Ag 328.068†	-9075.3	6.3001 ug/L		0.43293	6.3001 ppb	0.43293	6.87%
Al 396.153Radial†	186020.3	140920 ug/L		1162.8	140920 ppb	1162.8	0.83%
As 188.979†	-23.0	65.047 ug/L		2.5781	65.047 ppb	2.5781	3.96%
B 249.677†	1480.8	10.611 ug/L		0.3455	10.611 ppb	0.3455	3.26%
Ba 233.527†	197803.3	1563.8 ug/L		11.90	1563.8 ppb	11.90	0.76%
Be 313.107†	-3085.7	10.229 ug/L		0.0519	10.229 ppb	0.0519	0.51%
Ca 317.933Radial†	12537.0	20151 ug/L		154.1	20151 ppb	154.1	0.76%
Cd 226.502†	1305.4	0.7983 ug/L		0.15176	0.7983 ppb	0.15176	19.01%
Co 228.616†	2952.7	53.054 ug/L		0.0675	53.054 ppb	0.0675	0.13%
Cr 267.716†	8521.1	95.415 ug/L		0.4837	95.415 ppb	0.4837	0.51%
Cu 324.752†	20761.6	65.414 ug/L		0.5877	65.414 ppb	0.5877	0.90%
Fe 238.204 Radial†	14284.5	133500 ug/L		908.2	133500 ppb	908.2	0.68%
K 766.490 Radial†	109926.7	20074 ug/L		146.7	20074 ppb	146.7	0.73%

Mg 279.077 IEC†	594.6	21069 ug/L	96.8	21069 ppb	96.8	0.46%
Mn 257.610†	2814349.2	3167.7 ug/L	4.10	3167.7 ppb	4.10	0.13%
Mo 202.031†	-97.7	3.9353 ug/L	0.58035	3.9353 ppb	0.58035	14.75%
Na 589.592 Radial†	2065.4	614.00 ug/L	11.806	614.00 ppb	11.806	1.92%
Ni 231.604†	2735.9	68.718 ug/L	0.1897	68.718 ppb	0.1897	0.28%
P 214.914†	1293.5	645.27 ug/L	7.328	645.27 ppb	7.328	1.14%
Pb 220.353†	844.3	123.65 ug/L	1.286	123.65 ppb	1.286	1.04%
S 181.975 Axial†	349.8	455.14 ug/L	7.106	455.14 ppb	7.106	1.56%
Sb 206.836†	45.6	-1.3009 ug/L	4.29577	-1.3009 ppb	4.29577	330.21%
Se 196.026†	-692.1	51.184 ug/L	7.5473	51.184 ppb	7.5473	14.75%
Si 251.611†	1403559.2	41587 ug/L	66.7	41587 ppb	66.7	0.16%
Sn 189.927†	-110.6	-15.028 ug/L	3.0471	-15.028 ppb	3.0471	20.28%
Sr 421.552†	40486.5	259.68 ug/L	1.807	259.68 ppb	1.807	0.70%
Ti 334.940†	3269514.5	4986.1 ug/L	6.13	4986.1 ppb	6.13	0.12%
Tl 190.801†	-181.5	-2.3922 ug/L	0.44008	-2.3922 ppb	0.44008	18.40%
U 409.014†	-7733.0	-208.79 ug/L	2.363	-208.79 ppb	2.363	1.13%
V 292.402†	41989.9	236.31 ug/L	1.946	236.31 ppb	1.946	0.82%
Zn 213.857†	27611.1	243.72 ug/L	1.817	243.72 ppb	1.817	0.75%
SiO2†	1388599.3	87821 ug/L	545.1	87821 ppb	545.1	0.62%

Sequence No.: 63
 Sample ID: 244128019|940124|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 88
 Date Collected: 1/26/2010 22:57:54
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 244128019|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5599.6	5599.6	105 %		23:00:07
1	Y RADIAL	6760.0	6760.0	117.4 %		23:00:07
1	Al 396.153Radial†	233548.2	222715.6	168710 ug/L	168710 ppb	22:59:47
1	Ca 317.933Radial†	14728.3	14025.5	22543 ug/L	22543 ppb	22:59:47
1	Fe 238.204 Radial†	15669.2	14935.9	139590 ug/L	139590 ppb	22:59:47
1	K 766.490 Radial†	98170.8	91117.7	16636 ug/L	16636 ppb	22:59:47
1	Mg 279.077 IEC†	633.7	603.4	21376 ug/L	21376 ppb	23:00:07
1	Na 589.592 Radial†	4859.1	5181.5	1540.3 ug/L	1540.3 ppb	22:59:47
1	Sr 421.552†	49274.1	46983.5	301.36 ug/L	301.36 ppb	22:59:47
1	Sc 361.383	948966.5	948966.5	105.69 %		23:01:06
1	Y 371.029	932237.2	932237.2	113.26 %		23:01:06
1	Ag 328.068†	-9579.8	-9360.0	7.0514 ug/L	7.0514 ppb	23:01:11
1	As 188.979†	-70.8	-36.8	64.467 ug/L	64.467 ppb	23:01:31
1	B 249.677†	1364.8	1531.7	10.750 ug/L	10.750 ppb	23:01:11
1	Ba 233.527†	277575.3	262633.4	2074.9 ug/L	2074.9 ppb	23:01:11
1	Be 313.107†	-9847.2	-4216.6	10.784 ug/L	10.784 ppb	23:01:11
1	Cd 226.502†	1142.9	1287.5	-0.0233 ug/L	-0.0233 ppb	23:01:31
1	Co 228.616†	2873.6	2788.8	48.727 ug/L	48.727 ppb	23:01:31
1	Cr 267.716†	12202.6	11451.7	127.31 ug/L	127.31 ppb	23:01:11
1	Cu 324.752†	30848.8	20059.8	63.778 ug/L	63.778 ppb	23:01:11
1	Mn 257.610†	2733298.1	2585644.3	2911.9 ug/L	2911.9 ppb	23:01:06
1	Mo 202.031†	-63.7	-83.8	5.3826 ug/L	5.3826 ppb	23:01:31
1	Ni 231.604†	3639.1	3349.4	84.140 ug/L	84.140 ppb	23:01:31
1	P 214.914†	1766.9	1433.1	726.41 ug/L	726.41 ppb	23:01:31
1	Pb 220.353†	719.5	741.1	116.10 ug/L	116.10 ppb	23:01:31
1	S 181.975 Axial†	406.1	307.3	391.42 ug/L	391.42 ppb	23:01:31
1	Sb 206.836†	79.2	44.7	-3.5993 ug/L	-3.5993 ppb	23:01:31
1	Se 196.026†	-780.2	-720.2	56.870 ug/L	56.870 ppb	23:01:31
1	Si 251.611†	1365804.1	1291771.7	38275 ug/L	38275 ppb	23:01:06
1	Sn 189.927†	-121.1	-114.2	-15.235 ug/L	-15.235 ppb	23:01:31
1	Ti 334.940†	3745909.8	3545132.4	5406.6 ug/L	5406.6 ppb	23:01:06
1	Tl 190.801†	-244.9	-194.9	-4.3776 ug/L	-4.3776 ppb	23:01:31
1	U 409.014†	-10033.0	-8430.0	-226.98 ug/L	-226.98 ppb	23:01:06
1	V 292.402†	42326.1	41440.8	231.54 ug/L	231.54 ppb	23:01:11
1	Zn 213.857†	30059.7	27707.9	243.93 ug/L	243.93 ppb	23:01:11
1	SiO2†	1374394.1	1299881.8	82211 ug/L	82211 ppb	23:02:41
2	Sc Radial	5583.6	5583.6	105 %		23:00:32
2	Y RADIAL	6759.7	6759.7	117.4 %		23:00:32
2	Al 396.153Radial†	233491.6	223298.4	169160 ug/L	169160 ppb	23:00:12
2	Ca 317.933Radial†	14729.3	14066.6	22609 ug/L	22609 ppb	23:00:12
2	Fe 238.204 Radial†	15689.6	14998.1	140170 ug/L	140170 ppb	23:00:12
2	K 766.490 Radial†	98095.2	91313.1	16672 ug/L	16672 ppb	23:00:12
2	Mg 279.077 IEC†	629.2	600.8	21284 ug/L	21284 ppb	23:00:32
2	Na 589.592 Radial†	4812.9	5150.6	1531.1 ug/L	1531.1 ppb	23:00:12
2	Sr 421.552†	49023.3	46878.0	300.68 ug/L	300.68 ppb	23:00:12
2	Sc 361.383	952536.6	952536.6	106.09 %		23:01:38
2	Y 371.029	936078.9	936078.9	113.72 %		23:01:38
2	Ag 328.068†	-9374.6	-9132.7	8.1679 ug/L	8.1679 ppb	23:01:43
2	As 188.979†	-76.2	-41.6	62.664 ug/L	62.664 ppb	23:02:03
2	B 249.677†	1265.9	1433.6	8.5045 ug/L	8.5045 ppb	23:01:43
2	Ba 233.527†	271892.8	256292.7	2025.0 ug/L	2025.0 ppb	23:01:43
2	Be 313.107†	-9728.8	-4070.0	10.843 ug/L	10.843 ppb	23:01:43
2	Cd 226.502†	1171.8	1310.7	0.1756 ug/L	0.1756 ppb	23:02:03
2	Co 228.616†	2872.1	2777.2	48.438 ug/L	48.438 ppb	23:02:03
2	Cr 267.716†	11980.2	11198.7	124.57 ug/L	124.57 ppb	23:01:43
2	Cu 324.752†	30078.8	19224.7	61.467 ug/L	61.467 ppb	23:01:43
2	Mn 257.610†	2740591.3	2582826.1	2908.8 ug/L	2908.8 ppb	23:01:38
2	Mo 202.031†	-42.0	-63.2	6.8390 ug/L	6.8390 ppb	23:02:03
2	Ni 231.604†	3665.2	3361.2	84.435 ug/L	84.435 ppb	23:02:03

2	P 214.914†	1757.7	1418.1	718.05 ug/L	718.05 ppb	23:02:03
2	Pb 220.353†	722.6	741.5	116.19 ug/L	116.19 ppb	23:02:03
2	S 181.975 Axial†	409.7	309.2	394.00 ug/L	394.00 ppb	23:02:03
2	Sb 206.836†	81.3	46.4	-3.0468 ug/L	-3.0468 ppb	23:02:03
2	Se 196.026†	-763.0	-701.2	69.772 ug/L	69.772 ppb	23:02:03
2	Si 251.611†	1371748.3	1292531.3	38298 ug/L	38298 ppb	23:01:38
2	Sn 189.927†	-135.0	-126.9	-17.546 ug/L	-17.546 ppb	23:02:03
2	Ti 334.940†	3762124.8	3547132.8	5409.7 ug/L	5409.7 ppb	23:01:38
2	Tl 190.801†	-227.4	-177.5	1.2128 ug/L	1.2128 ppb	23:02:03
2	U 409.014†	-10181.5	-8534.4	-229.65 ug/L	-229.65 ppb	23:01:38
2	V 292.402†	41564.4	40572.7	226.07 ug/L	226.07 ppb	23:01:43
2	Zn 213.857†	29461.5	27037.4	237.63 ug/L	237.63 ppb	23:01:43
2	SiO2†	1375924.7	1296450.6	81993 ug/L	81993 ppb	23:02:47
3	Sc Radial	5598.0	5598.0	105 %		23:00:58
3	Y RADIAL	6757.0	6757.0	117.4 %		23:00:58
3	Al 396.153Radial†	232615.9	221890.2	168090 ug/L	168090 ppb	23:00:38
3	Ca 317.933Radial†	14731.0	14032.1	22554 ug/L	22554 ppb	23:00:38
3	Fe 238.204 Radial†	15585.0	14859.9	138870 ug/L	138870 ppb	23:00:38
3	K 766.490 Radial†	97992.5	90974.6	16610 ug/L	16610 ppb	23:00:38
3	Mg 279.077 IEC†	630.0	600.0	21257 ug/L	21257 ppb	23:00:58
3	Na 589.592 Radial†	4801.5	5128.0	1524.4 ug/L	1524.4 ppb	23:00:38
3	Sr 421.552†	48960.4	46697.8	299.52 ug/L	299.52 ppb	23:00:38
3	Sc 361.383	945541.8	945541.8	105.31 %		23:02:10
3	Y 371.029	930074.5	930074.5	112.99 %		23:02:10
3	Ag 328.068†	-9310.2	-9136.9	7.7431 ug/L	7.7431 ppb	23:02:15
3	As 188.979†	-66.8	-33.2	65.784 ug/L	65.784 ppb	23:02:35
3	B 249.677†	1231.1	1409.5	8.1831 ug/L	8.1831 ppb	23:02:15
3	Ba 233.527†	275198.0	261327.2	2064.6 ug/L	2064.6 ppb	23:02:15
3	Be 313.107†	-10043.7	-4437.0	10.709 ug/L	10.709 ppb	23:02:15
3	Cd 226.502†	1175.1	1322.1	0.4362 ug/L	0.4362 ppb	23:02:35
3	Co 228.616†	2886.0	2810.5	49.203 ug/L	49.203 ppb	23:02:35
3	Cr 267.716†	12104.1	11400.0	126.73 ug/L	126.73 ppb	23:02:15
3	Cu 324.752†	30487.4	19822.3	63.073 ug/L	63.073 ppb	23:02:15
3	Mn 257.610†	2719282.1	2581701.7	2907.4 ug/L	2907.4 ppb	23:02:10
3	Mo 202.031†	-69.1	-89.2	4.9595 ug/L	4.9595 ppb	23:02:35
3	Ni 231.604†	3637.6	3360.5	84.418 ug/L	84.418 ppb	23:02:35
3	P 214.914†	1767.3	1439.5	730.58 ug/L	730.58 ppb	23:02:35
3	Pb 220.353†	731.2	754.7	117.74 ug/L	117.74 ppb	23:02:35
3	S 181.975 Axial†	407.9	310.3	395.79 ug/L	395.79 ppb	23:02:35
3	Sb 206.836†	89.1	54.3	-0.4173 ug/L	-0.4173 ppb	23:02:35
3	Se 196.026†	-762.7	-706.3	62.480 ug/L	62.480 ppb	23:02:35
3	Si 251.611†	1360048.0	1290986.2	38252 ug/L	38252 ppb	23:02:10
3	Sn 189.927†	-130.6	-123.7	-16.974 ug/L	-16.974 ppb	23:02:35
3	Ti 334.940†	3733346.7	3546039.3	5408.0 ug/L	5408.0 ppb	23:02:10
3	Tl 190.801†	-222.4	-174.3	2.2030 ug/L	2.2030 ppb	23:02:35
3	U 409.014†	-9916.1	-8353.3	-224.98 ug/L	-224.98 ppb	23:02:10
3	V 292.402†	41849.0	41132.8	229.73 ug/L	229.73 ppb	23:02:15
3	Zn 213.857†	29704.8	27473.9	241.82 ug/L	241.82 ppb	23:02:15
3	SiO2†	1377692.7	1307723.9	82706 ug/L	82706 ppb	23:02:53

Mean Data: 244128019|940124|1

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	949015.0	105.70 %	0.390			0.37%
Sc Radial	5593.7	105 %	0.2			0.16%
Y 371.029	932796.9	113.32 %	0.369			0.33%
Y RADIAL	6758.9	117.4 %	0.03			0.02%
Ag 328.068†	-9209.9	7.6541 ug/L	0.56358	7.6541 ppb	0.56358	7.36%
Al 396.153Radial†	222634.7	168650 ug/L	536.0	168650 ppb	536.0	0.32%
As 188.979†	-37.2	64.305 ug/L	1.5663	64.305 ppb	1.5663	2.44%
B 249.677†	1458.3	9.1458 ug/L	1.39846	9.1458 ppb	1.39846	15.29%
Ba 233.527†	260084.4	2054.8 ug/L	26.38	2054.8 ppb	26.38	1.28%
Be 313.107†	-4241.2	10.779 ug/L	0.0668	10.779 ppb	0.0668	0.62%
Ca 317.933Radial†	14041.4	22569 ug/L	35.5	22569 ppb	35.5	0.16%
Cd 226.502†	1306.8	0.1962 ug/L	0.23047	0.1962 ppb	0.23047	117.48%
Co 228.616†	2792.2	48.789 ug/L	0.3861	48.789 ppb	0.3861	0.79%
Cr 267.716†	11350.1	126.20 ug/L	1.443	126.20 ppb	1.443	1.14%
Cu 324.752†	19702.3	62.772 ug/L	1.1842	62.772 ppb	1.1842	1.89%
Fe 238.204 Radial†	14931.3	139540 ug/L	647.1	139540 ppb	647.1	0.46%
K 766.490 Radial†	91135.1	16640 ug/L	31.0	16640 ppb	31.0	0.19%

Mg 279.077 IEC†	601.4	21306 ug/L	62.0	21306 ppb	62.0	0.29%
Mn 257.610†	2583390.7	2909.3 ug/L	2.30	2909.3 ppb	2.30	0.08%
Mo 202.031†	-78.7	5.7270 ug/L	0.98597	5.7270 ppb	0.98597	17.22%
Na 589.592 Radial†	5153.4	1531.9 ug/L	7.99	1531.9 ppb	7.99	0.52%
Ni 231.604†	3357.0	84.331 ug/L	0.1658	84.331 ppb	0.1658	0.20%
P 214.914†	1430.2	725.01 ug/L	6.382	725.01 ppb	6.382	0.88%
Pb 220.353†	745.8	116.68 ug/L	0.919	116.68 ppb	0.919	0.79%
S 181.975 Axial†	308.9	393.73 ug/L	2.195	393.73 ppb	2.195	0.56%
Sb 206.836†	48.5	-2.3545 ug/L	1.70022	-2.3545 ppb	1.70022	72.21%
Se 196.026†	-709.2	63.041 ug/L	6.4694	63.041 ppb	6.4694	10.26%
Si 251.611†	1291763.1	38275 ug/L	22.9	38275 ppb	22.9	0.06%
Sn 189.927†	-121.6	-16.585 ug/L	1.2039	-16.585 ppb	1.2039	7.26%
Sr 421.552†	46853.1	300.52 ug/L	0.927	300.52 ppb	0.927	0.31%
Ti 334.940†	3546101.5	5408.1 ug/L	1.54	5408.1 ppb	1.54	0.03%
Tl 190.801†	-182.2	-0.3206 ug/L	3.54818	-0.3206 ppb	3.54818	>999.9%
U 409.014†	-8439.2	-227.21 ug/L	2.343	-227.21 ppb	2.343	1.03%
V 292.402†	41048.8	229.11 ug/L	2.787	229.11 ppb	2.787	1.22%
Zn 213.857†	27406.4	241.13 ug/L	3.207	241.13 ppb	3.207	1.33%
SiO2†	1301352.1	82303 ug/L	365.5	82303 ppb	365.5	0.44%

Sequence No.: 64

Sample ID: 244128020|940124|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 89

Date Collected: 1/26/2010 23:05:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 244128020|940124|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5577.8	5577.8	104 %		23:07:18
1	Y RADIAL	6768.7	6768.7	117.6 %		23:07:18
1	Al 396.153Radial†	225308.0	215694.7	163400 ug/L	163400 ppb	23:06:58
1	Ca 317.933Radial†	13640.8	13039.1	20958 ug/L	20958 ppb	23:06:58
1	Fe 238.204 Radial†	16897.7	16170.3	151120 ug/L	151120 ppb	23:06:58
1	K 766.490 Radial†	111544.8	104286.5	19043 ug/L	19043 ppb	23:06:58
1	Mg 279.077 IEC†	705.0	673.9	23881 ug/L	23881 ppb	23:07:18
1	Na 589.592 Radial†	2626.4	3062.1	910.27 ug/L	910.27 ppb	23:06:58
1	Sr 421.552†	49012.2	46915.9	300.94 ug/L	300.94 ppb	23:06:58
1	Sc 361.383	963472.0	963472.0	107.31 %		23:08:17
1	Y 371.029	950195.8	950195.8	115.44 %		23:08:17
1	Ag 328.068†	-10171.5	-9775.0	9.2000 ug/L	9.2000 ppb	23:08:22
1	As 188.979†	-75.5	-40.2	66.900 ug/L	66.900 ppb	23:08:42
1	B 249.677†	1350.3	1498.8	8.1455 ug/L	8.1455 ppb	23:08:22
1	Ba 233.527†	245587.5	228869.6	1809.2 ug/L	1809.2 ppb	23:08:22
1	Be 313.107†	-11760.8	-5859.6	10.493 ug/L	10.493 ppb	23:08:22
1	Cd 226.502†	1320.5	1436.8	0.4539 ug/L	0.4539 ppb	23:08:42
1	Co 228.616†	3071.1	2931.9	51.310 ug/L	51.310 ppb	23:08:42
1	Cr 267.716†	10477.2	9670.0	108.25 ug/L	108.25 ppb	23:08:42
1	Cu 324.752†	33697.0	22274.6	70.591 ug/L	70.591 ppb	23:08:22
1	Mn 257.610†	3008803.0	2803455.7	3157.1 ug/L	3157.1 ppb	23:08:17
1	Mo 202.031†	-68.0	-87.0	6.0423 ug/L	6.0423 ppb	23:08:42
1	Ni 231.604†	3537.7	3203.1	80.460 ug/L	80.460 ppb	23:08:42
1	P 214.914†	1910.5	1541.7	775.79 ug/L	775.79 ppb	23:08:42
1	Pb 220.353†	864.2	865.7	129.47 ug/L	129.47 ppb	23:08:42
1	S 181.975 Axial†	452.5	344.7	443.92 ug/L	443.92 ppb	23:08:42
1	Sb 206.836†	86.8	50.6	-1.4977 ug/L	-1.4977 ppb	23:08:42
1	Se 196.026†	-832.6	-758.0	72.877 ug/L	72.877 ppb	23:08:42
1	Si 251.611†	1533849.0	1428919.4	42339 ug/L	42339 ppb	23:08:17
1	Sn 189.927†	-122.3	-113.7	-15.173 ug/L	-15.173 ppb	23:08:42
1	Ti 334.940†	3892693.1	3628561.6	5533.4 ug/L	5533.4 ppb	23:08:17
1	Tl 190.801†	-234.6	-181.7	1.9784 ug/L	1.9784 ppb	23:08:42
1	U 409.014†	-9354.2	-7654.5	-208.86 ug/L	-208.86 ppb	23:08:22
1	V 292.402†	48886.2	46951.3	264.09 ug/L	264.09 ppb	23:08:22
1	Zn 213.857†	30727.6	27902.0	244.64 ug/L	244.64 ppb	23:08:42
1	SiO2†	1540876.0	1435450.4	90784 ug/L	90784 ppb	23:09:53
2	Sc Radial	5602.2	5602.2	105 %		23:07:43
2	Y RADIAL	6792.9	6792.9	118.0 %		23:07:43
2	Al 396.153Radial†	220619.5	210288.9	159300 ug/L	159300 ppb	23:07:23
2	Ca 317.933Radial†	13358.4	12713.2	20434 ug/L	20434 ppb	23:07:23
2	Fe 238.204 Radial†	16627.8	15842.7	148060 ug/L	148060 ppb	23:07:23
2	K 766.490 Radial†	110162.9	102505.6	18718 ug/L	18718 ppb	23:07:23
2	Mg 279.077 IEC†	691.5	658.2	23323 ug/L	23323 ppb	23:07:43
2	Na 589.592 Radial†	2553.0	2981.2	886.24 ug/L	886.24 ppb	23:07:23
2	Sr 421.552†	47949.5	45699.1	293.13 ug/L	293.13 ppb	23:07:23
2	Sc 361.383	964832.5	964832.5	107.46 %		23:08:49
2	Y 371.029	952065.6	952065.6	115.67 %		23:08:49
2	Ag 328.068†	-10051.5	-9650.0	8.7287 ug/L	8.7287 ppb	23:08:54
2	As 188.979†	-64.3	-29.6	70.486 ug/L	70.486 ppb	23:09:14
2	B 249.677†	1258.7	1411.8	6.7343 ug/L	6.7343 ppb	23:08:54
2	Ba 233.527†	244232.9	227286.2	1796.7 ug/L	1796.7 ppb	23:08:54
2	Be 313.107†	-11991.0	-6058.4	10.416 ug/L	10.416 ppb	23:08:54
2	Cd 226.502†	1328.6	1442.6	0.8359 ug/L	0.8359 ppb	23:09:14
2	Co 228.616†	3059.3	2916.9	51.023 ug/L	51.023 ppb	23:09:14
2	Cr 267.716†	10498.2	9675.7	108.25 ug/L	108.25 ppb	23:09:14
2	Cu 324.752†	33223.9	21790.2	69.068 ug/L	69.068 ppb	23:08:54
2	Mn 257.610†	3009003.3	2799688.2	3152.6 ug/L	3152.6 ppb	23:08:49
2	Mo 202.031†	-86.1	-103.7	4.6579 ug/L	4.6579 ppb	23:09:14
2	Ni 231.604†	3589.6	3246.8	81.560 ug/L	81.560 ppb	23:09:14

2	P 214.914†	1921.0	1548.9	781.62 ug/L	781.62 ppb	23:09:14
2	Pb 220.353†	830.5	833.3	124.80 ug/L	124.80 ppb	23:09:14
2	S 181.975 Axial†	455.6	347.0	447.90 ug/L	447.90 ppb	23:09:14
2	Sb 206.836†	95.3	58.4	1.1318 ug/L	1.1318 ppb	23:09:14
2	Se 196.026†	-832.1	-756.4	63.437 ug/L	63.437 ppb	23:09:14
2	Si 251.611†	1533354.3	1426443.3	42265 ug/L	42265 ppb	23:08:49
2	Sn 189.927†	-123.6	-114.7	-15.493 ug/L	-15.493 ppb	23:09:14
2	Ti 334.940†	3895917.3	3626446.7	5530.1 ug/L	5530.1 ppb	23:08:49
2	Tl 190.801†	-246.2	-192.3	-1.4394 ug/L	-1.4394 ppb	23:09:14
2	U 409.014†	-9275.0	-7568.5	-206.36 ug/L	-206.36 ppb	23:08:54
2	V 292.402†	48659.9	46676.5	262.80 ug/L	262.80 ppb	23:08:54
2	Zn 213.857†	30757.5	27889.5	244.81 ug/L	244.81 ppb	23:09:14
2	SiO2†	1549474.0	1441426.9	91162 ug/L	91162 ppb	23:09:58
3	Sc Radial	5647.7	5647.7	106 %		23:08:08
3	Y RADIAL	6853.8	6853.8	119.0 %		23:08:08
3	Al 396.153Radial†	217656.9	205790.4	155890 ug/L	155890 ppb	23:07:48
3	Ca 317.933Radial†	13284.3	12540.3	20156 ug/L	20156 ppb	23:07:48
3	Fe 238.204 Radial†	16467.0	15562.7	145440 ug/L	145440 ppb	23:07:48
3	K 766.490 Radial†	108724.4	100297.9	18314 ug/L	18314 ppb	23:07:48
3	Mg 279.077 IEC†	700.9	661.8	23453 ug/L	23453 ppb	23:08:08
3	Na 589.592 Radial†	2486.3	2898.5	861.63 ug/L	861.63 ppb	23:07:48
3	Sr 421.552†	47349.7	44763.1	287.13 ug/L	287.13 ppb	23:07:48
3	Sc 361.383	977515.0	977515.0	108.87 %		23:09:21
3	Y 371.029	963686.0	963686.0	117.08 %		23:09:21
3	Ag 328.068†	-10127.7	-9598.6	8.0900 ug/L	8.0900 ppb	23:09:26
3	As 188.979†	-86.3	-49.1	61.989 ug/L	61.989 ppb	23:09:46
3	B 249.677†	1354.4	1484.5	8.7573 ug/L	8.7573 ppb	23:09:26
3	Ba 233.527†	245682.8	225669.1	1783.8 ug/L	1783.8 ppb	23:09:26
3	Be 313.107†	-11897.8	-5828.0	10.520 ug/L	10.520 ppb	23:09:26
3	Cd 226.502†	1308.2	1407.8	0.7173 ug/L	0.7173 ppb	23:09:46
3	Co 228.616†	3049.5	2871.0	50.028 ug/L	50.028 ppb	23:09:46
3	Cr 267.716†	10493.3	9544.4	106.78 ug/L	106.78 ppb	23:09:46
3	Cu 324.752†	33599.0	21733.5	68.770 ug/L	68.770 ppb	23:09:26
3	Mn 257.610†	3049081.3	2800171.0	3152.9 ug/L	3152.9 ppb	23:09:21
3	Mo 202.031†	-83.9	-100.7	4.6572 ug/L	4.6572 ppb	23:09:46
3	Ni 231.604†	3580.9	3195.5	80.270 ug/L	80.270 ppb	23:09:46
3	P 214.914†	1913.6	1519.0	766.02 ug/L	766.02 ppb	23:09:46
3	Pb 220.353†	849.4	840.6	125.24 ug/L	125.24 ppb	23:09:46
3	S 181.975 Axial†	459.5	345.0	445.84 ug/L	445.84 ppb	23:09:46
3	Sb 206.836†	73.5	37.3	-5.9473 ug/L	-5.9473 ppb	23:09:46
3	Se 196.026†	-821.8	-736.9	65.774 ug/L	65.774 ppb	23:09:46
3	Si 251.611†	1558479.5	1431008.1	42401 ug/L	42401 ppb	23:09:21
3	Sn 189.927†	-120.6	-110.4	-14.798 ug/L	-14.798 ppb	23:09:46
3	Ti 334.940†	3954424.1	3633148.4	5540.3 ug/L	5540.3 ppb	23:09:21
3	Tl 190.801†	-234.1	-178.1	3.1821 ug/L	3.1821 ppb	23:09:46
3	U 409.014†	-9317.5	-7495.6	-204.24 ug/L	-204.24 ppb	23:09:26
3	V 292.402†	48942.1	46348.2	261.14 ug/L	261.14 ppb	23:09:26
3	Zn 213.857†	30759.4	27519.9	241.63 ug/L	241.63 ppb	23:09:46
3	SiO2†	1535141.0	1409553.7	89147 ug/L	89147 ppb	23:10:04

Mean Data: 244128020|940124|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	968606.5	107.88 %	0.863			0.80%
Sc Radial	5609.2	105 %	0.7			0.63%
Y 371.029	955315.8	116.06 %	0.888			0.77%
Y RADIAL	6805.2	118.2 %	0.76			0.64%
Ag 328.068†	-9674.5	8.6729 ug/L	0.55707	8.6729 ppb	0.55707	6.42%
Al 396.153Radial†	210591.4	159530 ug/L	3756.6	159530 ppb	3756.6	2.35%
As 188.979†	-39.6	66.459 ug/L	4.2658	66.459 ppb	4.2658	6.42%
B 249.677†	1465.0	7.8791 ug/L	1.03751	7.8791 ppb	1.03751	13.17%
Ba 233.527†	227275.0	1796.6 ug/L	12.70	1796.6 ppb	12.70	0.71%
Be 313.107†	-5915.3	10.476 ug/L	0.0542	10.476 ppb	0.0542	0.52%
Ca 317.933Radial†	12764.2	20516 ug/L	407.1	20516 ppb	407.1	1.98%
Cd 226.502†	1429.1	0.6690 ug/L	0.19554	0.6690 ppb	0.19554	29.23%
Co 228.616†	2906.6	50.787 ug/L	0.6730	50.787 ppb	0.6730	1.33%
Cr 267.716†	9630.0	107.76 ug/L	0.853	107.76 ppb	0.853	0.79%
Cu 324.752†	21932.8	69.476 ug/L	0.9765	69.476 ppb	0.9765	1.41%
Fe 238.204 Radial†	15858.6	148210 ug/L	2841.7	148210 ppb	2841.7	1.92%
K 766.490 Radial†	102363.3	18692 ug/L	364.9	18692 ppb	364.9	1.95%

Mg 279.077 IEC†	664.6	23552 ug/L	292.2	23552 ppb	292.2	1.24%
Mn 257.610†	2801104.9	3154.2 ug/L	2.52	3154.2 ppb	2.52	0.08%
Mo 202.031†	-97.1	5.1191 ug/L	0.79948	5.1191 ppb	0.79948	15.62%
Na 589.592 Radial†	2980.6	886.05 ug/L	24.320	886.05 ppb	24.320	2.74%
Ni 231.604†	3215.1	80.763 ug/L	0.6962	80.763 ppb	0.6962	0.86%
P 214.914†	1536.5	774.48 ug/L	7.884	774.48 ppb	7.884	1.02%
Pb 220.353†	846.5	126.50 ug/L	2.579	126.50 ppb	2.579	2.04%
S 181.975 Axial†	345.6	445.89 ug/L	1.990	445.89 ppb	1.990	0.45%
Sb 206.836†	48.8	-2.1044 ug/L	3.57834	-2.1044 ppb	3.57834	170.04%
Se 196.026†	-750.4	67.363 ug/L	4.9166	67.363 ppb	4.9166	7.30%
Si 251.611†	1428790.3	42335 ug/L	67.7	42335 ppb	67.7	0.16%
Sn 189.927†	-112.9	-15.155 ug/L	0.3479	-15.155 ppb	0.3479	2.30%
Sr 421.552†	45792.7	293.73 ug/L	6.924	293.73 ppb	6.924	2.36%
Ti 334.940†	3629385.6	5534.6 ug/L	5.19	5534.6 ppb	5.19	0.09%
Tl 190.801†	-184.0	1.2404 ug/L	2.39750	1.2404 ppb	2.39750	193.29%
U 409.014†	-7572.8	-206.49 ug/L	2.314	-206.49 ppb	2.314	1.12%
V 292.402†	46658.7	262.68 ug/L	1.476	262.68 ppb	1.476	0.56%
Zn 213.857†	27770.5	243.69 ug/L	1.788	243.69 ppb	1.788	0.73%
SiO2†	1428810.3	90365 ug/L	1071.5	90365 ppb	1071.5	1.19%

Sequence No.: 65

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 1/26/2010 23:12:16

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5563.3	5563.3	104 %		23:14:08
1	Y RADIAL	5992.2	5992.2	104.1 %		23:14:08
1	Al 396.153Radial†	6617.3	6342.6	4780.9 ug/L	4780.9 ppb	23:14:08
1	Ca 317.933Radial†	3232.5	3082.5	4954.5 ug/L	4954.5 ppb	23:14:28
1	Fe 238.204 Radial†	585.9	555.3	5204.3 ug/L	5204.3 ppb	23:14:28
1	K 766.490 Radial†	30194.1	26479.0	4831.1 ug/L	4831.1 ppb	23:14:08
1	Mg 279.077 IEC†	154.4	147.3	5253.1 ug/L	5253.1 ppb	23:14:28
1	Na 589.592 Radial†	33401.2	32608.6	9693.6 ug/L	9693.6 ppb	23:14:08
1	Sr 421.552†	79877.8	76665.5	491.98 ug/L	491.98 ppb	23:14:08
1	Sc 361.383	930047.2	930047.2	103.58 %		23:15:25
1	Y 371.029	815703.5	815703.5	99.099 %		23:15:25
1	Ag 328.068†	122714.1	118172.9	496.36 ug/L	496.36 ppb	23:15:30
1	As 188.979†	1215.0	1203.2	496.62 ug/L	496.62 ppb	23:15:50
1	B 249.677†	22583.7	22042.9	481.13 ug/L	481.13 ppb	23:15:30
1	Ba 233.527†	64878.2	62636.9	494.96 ug/L	494.96 ppb	23:15:30
1	Be 313.107†	1454470.1	1409254.5	498.27 ug/L	498.27 ppb	23:15:25
1	Cd 226.502†	45903.3	44521.5	497.20 ug/L	497.20 ppb	23:15:30
1	Co 228.616†	23733.2	22982.1	503.86 ug/L	503.86 ppb	23:15:30
1	Cr 267.716†	47657.9	45915.3	498.36 ug/L	498.36 ppb	23:15:30
1	Cu 324.752†	189302.5	173625.8	487.07 ug/L	487.07 ppb	23:15:30
1	Mn 257.610†	455976.6	439712.6	493.29 ug/L	493.29 ppb	23:15:25
1	Mo 202.031†	7491.3	7208.5	492.43 ug/L	492.43 ppb	23:15:50
1	Ni 231.604†	20652.5	19844.3	498.41 ug/L	498.41 ppb	23:15:30
1	P 214.914†	4715.7	4313.8	2337.6 ug/L	2337.6 ppb	23:15:50
1	Pb 220.353†	4034.4	3955.2	498.02 ug/L	498.02 ppb	23:15:50
1	S 181.975 Axial†	792.7	688.3	946.76 ug/L	946.76 ppb	23:15:50
1	Sb 206.836†	1517.2	1434.5	497.98 ug/L	497.98 ppb	23:15:50
1	Se 196.026†	851.4	839.9	503.42 ug/L	503.42 ppb	23:15:50
1	Si 251.611†	87205.3	83692.6	2473.7 ug/L	2473.7 ppb	23:15:30
1	Sn 189.927†	2774.5	2678.9	493.44 ug/L	493.44 ppb	23:15:50
1	Ti 334.940†	340831.3	329947.1	502.91 ug/L	502.91 ppb	23:15:25
1	Tl 190.801†	1556.1	1539.1	495.72 ug/L	495.72 ppb	23:15:50
1	U 409.014†	19272.6	19668.7	490.11 ug/L	490.11 ppb	23:15:30
1	V 292.402†	80931.3	79525.1	501.07 ug/L	501.07 ppb	23:15:30
1	Zn 213.857†	55701.4	53041.1	489.71 ug/L	489.71 ppb	23:15:30
1	SiO2†	85919.5	82433.8	5200.1 ug/L	5200.1 ppb	23:16:58
2	Sc Radial	5320.9	5320.9	99.6 %		23:14:33
2	Y RADIAL	5732.0	5732.0	99.56 %		23:14:33
2	Al 396.153Radial†	6801.6	6817.0	5140.1 ug/L	5140.1 ppb	23:14:33
2	Ca 317.933Radial†	3245.0	3236.5	5202.0 ug/L	5202.0 ppb	23:14:53
2	Fe 238.204 Radial†	587.2	582.1	5455.2 ug/L	5455.2 ppb	23:14:53
2	K 766.490 Radial†	30695.8	28302.9	5163.9 ug/L	5163.9 ppb	23:14:33
2	Mg 279.077 IEC†	158.4	158.0	5634.9 ug/L	5634.9 ppb	23:14:53
2	Na 589.592 Radial†	33946.8	34616.7	10291 ug/L	10291 ppb	23:14:33
2	Sr 421.552†	81416.9	81703.1	524.31 ug/L	524.31 ppb	23:14:33
2	Sc 361.383	929926.0	929926.0	103.57 %		23:15:56
2	Y 371.029	815733.9	815733.9	99.102 %		23:15:56
2	Ag 328.068†	122767.9	118240.3	496.72 ug/L	496.72 ppb	23:16:01
2	As 188.979†	1220.8	1208.9	499.01 ug/L	499.01 ppb	23:16:22
2	B 249.677†	22606.7	22067.9	481.64 ug/L	481.64 ppb	23:16:01
2	Ba 233.527†	65070.3	62830.6	496.50 ug/L	496.50 ppb	23:16:01
2	Be 313.107†	1453911.3	1408897.9	498.14 ug/L	498.14 ppb	23:15:56
2	Cd 226.502†	46002.1	44622.7	498.30 ug/L	498.30 ppb	23:16:01
2	Co 228.616†	23749.0	23000.4	504.27 ug/L	504.27 ppb	23:16:01
2	Cr 267.716†	47665.3	45928.5	498.51 ug/L	498.51 ppb	23:16:01
2	Cu 324.752†	189178.0	173529.4	486.81 ug/L	486.81 ppb	23:16:01
2	Mn 257.610†	455143.9	438966.0	492.46 ug/L	492.46 ppb	23:15:56
2	Mo 202.031†	7532.7	7249.4	495.24 ug/L	495.24 ppb	23:16:22
2	Ni 231.604†	20702.9	19895.6	499.70 ug/L	499.70 ppb	23:16:01

2	P 214.914†	4736.0	4334.0	2348.9 ug/L	2348.9 ppb	23:16:22
2	Pb 220.353†	4019.3	3941.2	496.32 ug/L	496.32 ppb	23:16:22
2	S 181.975 Axial†	787.3	683.2	939.70 ug/L	939.70 ppb	23:16:22
2	Sb 206.836†	1540.2	1456.8	505.53 ug/L	505.53 ppb	23:16:22
2	Se 196.026†	851.5	840.1	504.43 ug/L	504.43 ppb	23:16:22
2	Si 251.611†	87257.6	83754.1	2475.5 ug/L	2475.5 ppb	23:16:01
2	Sn 189.927†	2779.8	2684.3	494.49 ug/L	494.49 ppb	23:16:22
2	Ti 334.940†	339936.1	329125.7	501.66 ug/L	501.66 ppb	23:15:56
2	Tl 190.801†	1558.2	1541.4	496.42 ug/L	496.42 ppb	23:16:22
2	U 409.014†	19269.1	19667.8	490.06 ug/L	490.06 ppb	23:16:01
2	V 292.402†	81054.0	79653.8	501.89 ug/L	501.89 ppb	23:16:01
2	Zn 213.857†	55935.0	53273.6	491.85 ug/L	491.85 ppb	23:16:01
2	SiO2†	87835.7	84294.7	5317.7 ug/L	5317.7 ppb	23:17:03
3	Sc Radial	5203.7	5203.7	97.4 %		23:14:58
3	Y RADIAL	5615.7	5615.7	97.54 %		23:14:58
3	Al 396.153Radial†	6740.5	6908.1	5209.3 ug/L	5209.3 ppb	23:14:58
3	Ca 317.933Radial†	3245.8	3310.7	5321.2 ug/L	5321.2 ppb	23:15:18
3	Fe 238.204 Radial†	588.9	597.1	5595.5 ug/L	5595.5 ppb	23:15:18
3	K 766.490 Radial†	30251.7	28541.2	5207.4 ug/L	5207.4 ppb	23:14:58
3	Mg 279.077 IEC†	155.1	158.1	5640.3 ug/L	5640.3 ppb	23:15:18
3	Na 589.592 Radial†	33441.7	34866.0	10365 ug/L	10365 ppb	23:14:58
3	Sr 421.552†	80080.0	82172.1	527.32 ug/L	527.32 ppb	23:14:58
3	Sc 361.383	937089.1	937089.1	104.37 %		23:16:27
3	Y 371.029	821036.7	821036.7	99.747 %		23:16:27
3	Ag 328.068†	122665.3	117235.9	492.56 ug/L	492.56 ppb	23:16:33
3	As 188.979†	1231.3	1210.0	499.49 ug/L	499.49 ppb	23:16:53
3	B 249.677†	22622.0	21915.7	478.30 ug/L	478.30 ppb	23:16:33
3	Ba 233.527†	64738.6	62032.5	490.20 ug/L	490.20 ppb	23:16:33
3	Be 313.107†	1460076.4	1404074.4	496.44 ug/L	496.44 ppb	23:16:27
3	Cd 226.502†	45773.2	44063.8	492.04 ug/L	492.04 ppb	23:16:33
3	Co 228.616†	23667.8	22747.2	498.71 ug/L	498.71 ppb	23:16:33
3	Cr 267.716†	47409.7	45331.8	492.04 ug/L	492.04 ppb	23:16:33
3	Cu 324.752†	188868.7	171836.8	482.07 ug/L	482.07 ppb	23:16:33
3	Mn 257.610†	458689.8	439004.3	492.52 ug/L	492.52 ppb	23:16:27
3	Mo 202.031†	7530.9	7192.1	491.34 ug/L	491.34 ppb	23:16:53
3	Ni 231.604†	20607.5	19651.4	493.57 ug/L	493.57 ppb	23:16:33
3	P 214.914†	4750.8	4313.2	2338.0 ug/L	2338.0 ppb	23:16:53
3	Pb 220.353†	4032.2	3923.9	494.15 ug/L	494.15 ppb	23:16:53
3	S 181.975 Axial†	793.0	682.8	939.14 ug/L	939.14 ppb	23:16:53
3	Sb 206.836†	1543.2	1448.3	502.52 ug/L	502.52 ppb	23:16:53
3	Se 196.026†	862.5	844.4	507.34 ug/L	507.34 ppb	23:16:53
3	Si 251.611†	86989.9	82853.5	2448.9 ug/L	2448.9 ppb	23:16:33
3	Sn 189.927†	2777.3	2661.4	490.30 ug/L	490.30 ppb	23:16:53
3	Ti 334.940†	342375.8	328954.3	501.42 ug/L	501.42 ppb	23:16:27
3	Tl 190.801†	1556.1	1527.9	492.13 ug/L	492.13 ppb	23:16:53
3	U 409.014†	19049.3	19314.9	481.24 ug/L	481.24 ppb	23:16:33
3	V 292.402†	80629.9	78649.2	495.55 ug/L	495.55 ppb	23:16:33
3	Zn 213.857†	55726.9	52661.4	486.18 ug/L	486.18 ppb	23:16:33
3	SiO2†	86340.0	82213.4	5186.2 ug/L	5186.2 ppb	23:17:08

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	932354.1	103.84 %	0.457			0.44%
Sc Radial	5362.6	100 %	3.4			3.42%
Y 371.029	817491.3	99.316 %	0.3730			0.38%
Y RADIAL	5780.0	100.4 %	3.35			3.34%
Ag 328.068†	117883.0	495.21 ug/L	2.308	495.21 ppb	2.308	0.47%
QC value within limits for Ag 328.068 Recovery = 99.04%						
Al 396.153Radial†	6689.2	5043.4 ug/L	229.99	5043.4 ppb	229.99	4.56%
QC value within limits for Al 396.153Radial Recovery = 100.87%						
As 188.979†	1207.3	498.37 ug/L	1.537	498.37 ppb	1.537	0.31%
QC value within limits for As 188.979 Recovery = 99.67%						
B 249.677†	22008.8	480.36 ug/L	1.802	480.36 ppb	1.802	0.38%
QC value within limits for B 249.677 Recovery = 96.07%						
Ba 233.527†	62500.0	493.89 ug/L	3.285	493.89 ppb	3.285	0.67%
QC value within limits for Ba 233.527 Recovery = 98.78%						
Be 313.107†	1407409.0	497.62 ug/L	1.022	497.62 ppb	1.022	0.21%
QC value within limits for Be 313.107 Recovery = 99.52%						
Ca 317.933Radial†	3209.9	5159.2 ug/L	187.04	5159.2 ppb	187.04	3.63%

QC value within limits for Ca 317.933Radial Recovery = 103.18%							
Cd 226.502†	44402.7	495.85 ug/L	3.343	495.85 ppb	3.343	0.67%	
QC value within limits for Cd 226.502 Recovery = 99.17%							
Co 228.616†	22909.9	502.28 ug/L	3.100	502.28 ppb	3.100	0.62%	
QC value within limits for Co 228.616 Recovery = 100.46%							
Cr 267.716†	45725.2	496.30 ug/L	3.694	496.30 ppb	3.694	0.74%	
QC value within limits for Cr 267.716 Recovery = 99.26%							
Cu 324.752†	172997.3	485.32 ug/L	2.811	485.32 ppb	2.811	0.58%	
QC value within limits for Cu 324.752 Recovery = 97.06%							
Fe 238.204 Radial†	578.2	5418.3 ug/L	198.21	5418.3 ppb	198.21	3.66%	
QC value within limits for Fe 238.204 Radial Recovery = 108.37%							
K 766.490 Radial†	27774.4	5067.5 ug/L	205.89	5067.5 ppb	205.89	4.06%	
QC value within limits for K 766.490 Radial Recovery = 101.35%							
Mg 279.077 IEC†	154.5	5509.4 ug/L	222.03	5509.4 ppb	222.03	4.03%	
QC value greater than the upper limit for Mg 279.077 IEC Recovery = 110.19%							
Mn 257.610†	439227.7	492.76 ug/L	0.462	492.76 ppb	0.462	0.09%	
QC value within limits for Mn 257.610 Recovery = 98.55%							
Mo 202.031†	7216.7	493.00 ug/L	2.013	493.00 ppb	2.013	0.41%	
QC value within limits for Mo 202.031 Recovery = 98.60%							
Na 589.592 Radial†	34030.4	10116 ug/L	367.9	10116 ppb	367.9	3.64%	
QC value within limits for Na 589.592 Radial Recovery = 101.16%							
Ni 231.604†	19797.1	497.23 ug/L	3.235	497.23 ppb	3.235	0.65%	
QC value within limits for Ni 231.604 Recovery = 99.45%							
P 214.914†	4320.4	2341.5 ug/L	6.44	2341.5 ppb	6.44	0.27%	
QC value within limits for P 214.914 Recovery = 93.66%							
Pb 220.353†	3940.1	496.16 ug/L	1.938	496.16 ppb	1.938	0.39%	
QC value within limits for Pb 220.353 Recovery = 99.23%							
S 181.975 Axial†	684.8	941.87 ug/L	4.246	941.87 ppb	4.246	0.45%	
QC value within limits for S 181.975 Axial Recovery = 94.19%							
Sb 206.836†	1446.5	502.01 ug/L	3.799	502.01 ppb	3.799	0.76%	
QC value within limits for Sb 206.836 Recovery = 100.40%							
Se 196.026†	841.5	505.07 ug/L	2.036	505.07 ppb	2.036	0.40%	
QC value within limits for Se 196.026 Recovery = 101.01%							
Si 251.611†	83433.4	2466.1 ug/L	14.89	2466.1 ppb	14.89	0.60%	
QC value within limits for Si 251.611 Recovery = 98.64%							
Sn 189.927†	2674.9	492.75 ug/L	2.182	492.75 ppb	2.182	0.44%	
QC value within limits for Sn 189.927 Recovery = 98.55%							
Sr 421.552†	80180.2	514.53 ug/L	19.591	514.53 ppb	19.591	3.81%	
QC value within limits for Sr 421.552 Recovery = 102.91%							
Ti 334.940†	329342.4	502.00 ug/L	0.800	502.00 ppb	0.800	0.16%	
QC value within limits for Ti 334.940 Recovery = 100.40%							
Tl 190.801†	1536.1	494.76 ug/L	2.298	494.76 ppb	2.298	0.46%	
QC value within limits for Tl 190.801 Recovery = 98.95%							
U 409.014†	19550.4	487.14 ug/L	5.110	487.14 ppb	5.110	1.05%	
QC value within limits for U 409.014 Recovery = 97.43%							
V 292.402†	79276.0	499.50 ug/L	3.448	499.50 ppb	3.448	0.69%	
QC value within limits for V 292.402 Recovery = 99.90%							
Zn 213.857†	52992.0	489.25 ug/L	2.864	489.25 ppb	2.864	0.59%	
QC value within limits for Zn 213.857 Recovery = 97.85%							
SiO2†	82980.6	5234.7 ug/L	72.26	5234.7 ppb	72.26	1.38%	
QC value within limits for SiO2 Recovery = 97.89%							
QC Failed. Continue with analysis.							

Sequence No.: 66

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 1/26/2010 23:19:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5443.9	5443.9	102 %		23:21:11
1	Y RADIAL	5882.4	5882.4	102.2 %		23:21:11
1	Al 396.153Radial†	6.9	-2.4	-1.8423 ug/L	-1.8423 ppb	23:21:31
1	Ca 317.933Radial†	12.6	-7.9	-12.677 ug/L	-12.677 ppb	23:21:31
1	Fe 238.204 Radial†	9.9	2.5	23.431 ug/L	23.431 ppb	23:21:31
1	K 766.490 Radial†	2498.9	-52.2	-9.4893 ug/L	-9.4893 ppb	23:21:11
1	Mg 279.077 IEC†	3.1	2.0	72.813 ug/L	72.813 ppb	23:21:31
1	Na 589.592 Radial†	-1006.1	-439.2	-130.57 ug/L	-130.57 ppb	23:21:11
1	Sr 421.552†	5.5	-1.7	-0.0110 ug/L	-0.0110 ppb	23:21:11
1	Sc 361.383	927498.5	927498.5	103.30 %		23:22:28
1	Y 371.029	823008.5	823008.5	99.986 %		23:22:28
1	Ag 328.068†	438.6	128.5	0.5541 ug/L	0.5541 ppb	23:22:33
1	As 188.979†	-29.1	2.0	0.8438 ug/L	0.8438 ppb	23:22:53
1	B 249.677†	-280.6	-31.2	-0.6889 ug/L	-0.6889 ppb	23:22:53
1	Ba 233.527†	16.0	18.6	0.1471 ug/L	0.1471 ppb	23:22:53
1	Be 313.107†	-4862.5	393.3	0.1391 ug/L	0.1391 ppb	23:22:33
1	Cd 226.502†	-205.0	7.7	0.0813 ug/L	0.0813 ppb	23:22:53
1	Co 228.616†	-62.4	9.6	0.2099 ug/L	0.2099 ppb	23:22:53
1	Cr 267.716†	71.2	-25.0	-0.2657 ug/L	-0.2657 ppb	23:22:53
1	Cu 324.752†	8947.0	-466.8	-1.3013 ug/L	-1.3013 ppb	23:22:33
1	Mn 257.610†	589.5	80.8	0.0899 ug/L	0.0899 ppb	23:22:53
1	Mo 202.031†	27.7	3.2	0.2206 ug/L	0.2206 ppb	23:22:53
1	Ni 231.604†	121.8	24.3	0.6093 ug/L	0.6093 ppb	23:22:53
1	P 214.914†	232.9	-13.3	-7.2215 ug/L	-7.2215 ppb	23:22:53
1	Pb 220.353†	-54.8	7.3	0.9197 ug/L	0.9197 ppb	23:22:53
1	S 181.975 Axial†	38.7	-39.5	-54.421 ug/L	-54.421 ppb	23:22:53
1	Sb 206.836†	25.5	-5.6	-1.8450 ug/L	-1.8450 ppb	23:22:53
1	Se 196.026†	-25.3	-6.6	-3.7038 ug/L	-3.7038 ppb	23:22:53
1	Si 251.611†	560.1	46.3	1.3680 ug/L	1.3680 ppb	23:22:53
1	Sn 189.927†	5.8	6.0	1.1010 ug/L	1.1010 ppb	23:22:53
1	Ti 334.940†	-831.9	101.2	0.1523 ug/L	0.1523 ppb	23:22:33
1	Tl 190.801†	-32.5	5.4	1.7365 ug/L	1.7365 ppb	23:22:53
1	U 409.014†	-1617.7	-503.2	-12.585 ug/L	-12.585 ppb	23:22:33
1	V 292.402†	-1451.3	-11.4	-0.0937 ug/L	-0.0937 ppb	23:22:33
1	Zn 213.857†	688.8	-66.6	-0.6247 ug/L	-0.6247 ppb	23:22:53
1	SiO2†	513.1	-16.7	-1.0632 ug/L	-1.0632 ppb	23:23:59
2	Sc Radial	5482.8	5482.8	103 %		23:21:36
2	Y RADIAL	5945.3	5945.3	103.3 %		23:21:36
2	Al 396.153Radial†	15.7	6.1	4.6352 ug/L	4.6352 ppb	23:21:56
2	Ca 317.933Radial†	15.1	-5.5	-8.8675 ug/L	-8.8675 ppb	23:21:56
2	Fe 238.204 Radial†	11.3	3.9	36.235 ug/L	36.235 ppb	23:21:56
2	K 766.490 Radial†	2470.0	-97.8	-17.814 ug/L	-17.814 ppb	23:21:36
2	Mg 279.077 IEC†	4.3	3.2	115.61 ug/L	115.61 ppb	23:21:56
2	Na 589.592 Radial†	-951.6	-379.1	-112.71 ug/L	-112.71 ppb	23:21:36
2	Sr 421.552†	6.9	-0.4	-0.0025 ug/L	-0.0025 ppb	23:21:36
2	Sc 361.383	934588.6	934588.6	104.09 %		23:22:58
2	Y 371.029	828788.8	828788.8	100.69 %		23:22:58
2	Ag 328.068†	499.9	184.2	0.7923 ug/L	0.7923 ppb	23:23:03
2	As 188.979†	-28.1	3.2	1.3020 ug/L	1.3020 ppb	23:23:23
2	B 249.677†	-298.4	-46.3	-1.0210 ug/L	-1.0210 ppb	23:23:23
2	Ba 233.527†	15.3	17.8	0.1417 ug/L	0.1417 ppb	23:23:23
2	Be 313.107†	-4879.2	412.9	0.1462 ug/L	0.1462 ppb	23:23:03
2	Cd 226.502†	-201.3	12.7	0.1363 ug/L	0.1363 ppb	23:23:23
2	Co 228.616†	-68.3	4.3	0.0937 ug/L	0.0937 ppb	23:23:23
2	Cr 267.716†	79.2	-17.9	-0.1873 ug/L	-0.1873 ppb	23:23:23
2	Cu 324.752†	9018.7	-463.7	-1.2915 ug/L	-1.2915 ppb	23:23:03
2	Mn 257.610†	589.4	76.4	0.0845 ug/L	0.0845 ppb	23:23:23
2	Mo 202.031†	26.2	1.6	0.1122 ug/L	0.1122 ppb	23:23:23
2	Ni 231.604†	111.1	13.0	0.3270 ug/L	0.3270 ppb	23:23:23

2	P 214.914†	232.7	-15.2	-8.3552 ug/L	-8.3552 ppb	23:23:23
2	Pb 220.353†	-58.2	4.5	0.5657 ug/L	0.5657 ppb	23:23:23
2	S 181.975 Axial†	38.3	-40.2	-55.294 ug/L	-55.294 ppb	23:23:23
2	Sb 206.836†	24.5	-6.7	-2.2404 ug/L	-2.2404 ppb	23:23:23
2	Se 196.026†	-22.2	-3.4	-1.8281 ug/L	-1.8281 ppb	23:23:23
2	Si 251.611†	526.8	10.2	0.3006 ug/L	0.3006 ppb	23:23:23
2	Sn 189.927†	1.1	1.4	0.2631 ug/L	0.2631 ppb	23:23:23
2	Ti 334.940†	-773.3	163.6	0.2447 ug/L	0.2447 ppb	23:23:03
2	Tl 190.801†	-26.6	11.3	3.6261 ug/L	3.6261 ppb	23:23:23
2	U 409.014†	-1651.1	-523.4	-13.091 ug/L	-13.091 ppb	23:23:03
2	V 292.402†	-1406.4	42.4	0.2372 ug/L	0.2372 ppb	23:23:03
2	Zn 213.857†	687.7	-72.7	-0.6812 ug/L	-0.6812 ppb	23:23:23
2	SiO2†	506.8	-26.5	-1.6789 ug/L	-1.6789 ppb	23:24:04
3	Sc Radial	5464.5	5464.5	102 %		23:22:01
3	Y RADIAL	5933.3	5933.3	103.1 %		23:22:01
3	Al 396.153Radial†	13.9	4.4	3.3670 ug/L	3.3670 ppb	23:22:21
3	Ca 317.933Radial†	17.0	-3.6	-5.7571 ug/L	-5.7571 ppb	23:22:21
3	Fe 238.204 Radial†	8.3	1.0	9.2471 ug/L	9.2471 ppb	23:22:21
3	K 766.490 Radial†	2447.6	-111.7	-20.353 ug/L	-20.353 ppb	23:22:01
3	Mg 279.077 IEC†	0.5	-0.4	-15.878 ug/L	-15.878 ppb	23:22:21
3	Na 589.592 Radial†	-970.5	-400.8	-119.14 ug/L	-119.14 ppb	23:22:01
3	Sr 421.552†	18.0	10.5	0.0676 ug/L	0.0676 ppb	23:22:01
3	Sc 361.383	946006.0	946006.0	105.36 %		23:23:28
3	Y 371.029	838653.8	838653.8	101.89 %		23:23:28
3	Ag 328.068†	361.5	47.1	0.2096 ug/L	0.2096 ppb	23:23:33
3	As 188.979†	-28.2	3.4	1.4078 ug/L	1.4078 ppb	23:23:53
3	B 249.677†	-299.6	-43.9	-0.9657 ug/L	-0.9657 ppb	23:23:53
3	Ba 233.527†	11.8	14.3	0.1139 ug/L	0.1139 ppb	23:23:53
3	Be 313.107†	-4862.4	485.5	0.1714 ug/L	0.1714 ppb	23:23:33
3	Cd 226.502†	-205.3	11.3	0.1237 ug/L	0.1237 ppb	23:23:53
3	Co 228.616†	-66.5	6.8	0.1489 ug/L	0.1489 ppb	23:23:53
3	Cr 267.716†	76.8	-21.0	-0.2228 ug/L	-0.2228 ppb	23:23:53
3	Cu 324.752†	8897.6	-683.1	-1.9100 ug/L	-1.9100 ppb	23:23:33
3	Mn 257.610†	591.4	71.5	0.0817 ug/L	0.0817 ppb	23:23:53
3	Mo 202.031†	24.6	-0.3	-0.0176 ug/L	-0.0176 ppb	23:23:53
3	Ni 231.604†	119.9	20.1	0.5043 ug/L	0.5043 ppb	23:23:53
3	P 214.914†	232.4	-18.1	-9.8651 ug/L	-9.8651 ppb	23:23:53
3	Pb 220.353†	-40.6	21.8	2.7433 ug/L	2.7433 ppb	23:23:53
3	S 181.975 Axial†	43.1	-36.1	-49.657 ug/L	-49.657 ppb	23:23:53
3	Sb 206.836†	33.2	1.3	0.4166 ug/L	0.4166 ppb	23:23:53
3	Se 196.026†	-20.2	-1.2	-0.6588 ug/L	-0.6588 ppb	23:23:53
3	Si 251.611†	526.9	4.1	0.1218 ug/L	0.1218 ppb	23:23:53
3	Sn 189.927†	-4.1	-3.6	-0.6538 ug/L	-0.6538 ppb	23:23:53
3	Ti 334.940†	-904.5	48.1	0.0786 ug/L	0.0786 ppb	23:23:33
3	Tl 190.801†	-39.0	-0.2	-0.0495 ug/L	-0.0495 ppb	23:23:53
3	U 409.014†	-1565.7	-423.2	-10.584 ug/L	-10.584 ppb	23:23:33
3	V 292.402†	-1409.0	56.3	0.3280 ug/L	0.3280 ppb	23:23:33
3	Zn 213.857†	694.9	-73.9	-0.6898 ug/L	-0.6898 ppb	23:23:53
3	SiO2†	541.3	0.4	0.0248 ug/L	0.0248 ppb	23:24:09

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	936031.0	104.25 %	1.040			1.00%
Sc Radial	5463.8	102 %	0.4			0.36%
Y 371.029	830150.3	100.85 %	0.961			0.95%
Y RADIAL	5920.3	102.8 %	0.58			0.56%
Ag 328.068†	119.9	0.5187 ug/L	0.29300	0.5187 ppb	0.29300	56.49%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	2.7	2.0533 ug/L	3.43273	2.0533 ppb	3.43273	167.18%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	2.9	1.1845 ug/L	0.29980	1.1845 ppb	0.29980	25.31%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-40.5	-0.8919 ug/L	0.17797	-0.8919 ppb	0.17797	19.96%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	16.9	0.1342 ug/L	0.01783	0.1342 ppb	0.01783	13.28%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	430.6	0.1522 ug/L	0.01699	0.1522 ppb	0.01699	11.16%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-5.7	-9.1004 ug/L	3.46567	-9.1004 ppb	3.46567	38.08%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd	226.502†	10.6	0.1138 ug/L	0.02880	0.1138 ppb	0.02880	25.31%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	6.9	0.1508 ug/L	0.05815	0.1508 ppb	0.05815	38.55%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	-21.3	-0.2253 ug/L	0.03923	-0.2253 ppb	0.03923	17.41%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	-537.9	-1.5009 ug/L	0.35429	-1.5009 ppb	0.35429	23.60%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	2.5	22.971 ug/L	13.4996	22.971 ppb	13.4996	58.77%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	-87.2	-15.885 ug/L	5.6827	-15.885 ppb	5.6827	35.77%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	1.6	57.515 ug/L	67.0649	57.515 ppb	67.0649	116.60%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	76.2	0.0854 ug/L	0.00417	0.0854 ppb	0.00417	4.89%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	1.5	0.1051 ug/L	0.11926	0.1051 ppb	0.11926	113.47%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	-406.4	-120.81 ug/L	9.046	-120.81 ppb	9.046	7.49%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	19.1	0.4802 ug/L	0.14271	0.4802 ppb	0.14271	29.72%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	-15.5	-8.4806 ug/L	1.32625	-8.4806 ppb	1.32625	15.64%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	11.2	1.4096 ug/L	1.16850	1.4096 ppb	1.16850	82.90%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	-38.6	-53.124 ug/L	3.0338	-53.124 ppb	3.0338	5.71%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	-3.7	-1.2229 ug/L	1.43358	-1.2229 ppb	1.43358	117.22%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	-3.7	-2.0636 ug/L	1.53611	-2.0636 ppb	1.53611	74.44%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	20.2	0.5968 ug/L	0.67381	0.5968 ppb	0.67381	112.90%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	1.3	0.2367 ug/L	0.87770	0.2367 ppb	0.87770	370.74%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	2.8	0.0181 ug/L	0.04313	0.0181 ppb	0.04313	238.95%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	104.3	0.1585 ug/L	0.08324	0.1585 ppb	0.08324	52.52%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	5.5	1.7710 ug/L	1.83805	1.7710 ppb	1.83805	103.79%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	-483.3	-12.086 ug/L	1.3259	-12.086 ppb	1.3259	10.97%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	29.1	0.1572 ug/L	0.22193	0.1572 ppb	0.22193	141.22%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	-71.1	-0.6652 ug/L	0.03535	-0.6652 ppb	0.03535	5.31%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†		-14.3	-0.9058 ug/L	0.86273	-0.9058 ppb	0.86273	95.25%		
QC value within limits for SiO2 Recovery = Not calculated									
All analyte(s) passed QC.									

1/27/2010 10:15:47 Hg ReAlign... Actual peak offset (nm): -0.009
Drift (nm): 0.001 Slit adjustment: 2

Analysis Begun

Start Time: 1/27/2010 10:19:42 Plasma On Time: 00:00:00
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\012710.sif

Batch ID:

Results Data Set: 012710

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

Method Loaded

Method Name: General Eng.2AX

IEC File: 011110.iec

Method Description:

Method Last Saved: 1/26/2010 10:43:52

MSF File:

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

Sample ID: S0

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 1/27/2010 10:19:44

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S0

Net

Corrected

Calib.

Analysis

Repl#	Analyte	Intensity	Intensity	Conc. Units	Time
1	Sc Radial	5702.4	5702.4	0.000 %	10:21:36
1	Y RADIAL	6143.6	6143.6	0.000 %	10:21:36
1	Al 396.153Radial†	4.9	4.8	[0.00] ug/L	10:21:56
1	Ca 317.933Radial†	18.1	17.8	[0.00] ug/L	10:21:56
1	Fe 238.204 Radial†	11.4	11.3	[0.00] ug/L	10:21:56
1	K 766.490 Radial†	2359.8	2326.2	[0.00] ug/L	10:21:36
1	Mg 279.077 IEC†	1.0	1.0	[0.00] ug/L	10:21:56
1	Na 589.592 Radial†	-1011.8	-997.4	[0.00] ug/L	10:21:36
1	Sr 421.552†	17.2	17.0	[0.00] ug/L	10:21:36
1	Sc 361.383	971505.0	971505.0	0.0000 %	10:22:53
1	Y 371.029	859442.7	859442.7	0.0000 %	10:22:53
1	Ag 328.068†	391.0	387.8	[0.00] ug/L	10:22:58
1	As 188.979†	-28.3	-28.1	[0.00] ug/L	10:23:18
1	B 249.677†	-423.5	-420.0	[0.00] ug/L	10:23:18
1	Ba 233.527†	-17.8	-17.7	[0.00] ug/L	10:23:18
1	Be 313.107†	-5070.8	-5029.3	[0.00] ug/L	10:22:58
1	Cd 226.502†	-192.2	-190.6	[0.00] ug/L	10:23:18
1	Co 228.616†	-59.2	-58.7	[0.00] ug/L	10:23:18
1	Cr 267.716†	71.0	70.4	[0.00] ug/L	10:23:18
1	Cu 324.752†	9008.0	8934.2	[0.00] ug/L	10:22:58
1	Mn 257.610†	497.9	493.8	[0.00] ug/L	10:23:18
1	Mo 202.031†	27.1	26.8	[0.00] ug/L	10:23:18
1	Ni 231.604†	93.7	92.9	[0.00] ug/L	10:23:18
1	P 214.914†	228.6	226.7	[0.00] ug/L	10:23:18
1	Pb 220.353†	-55.5	-55.0	[0.00] ug/L	10:23:18
1	S 181.975 Axial†	43.8	43.4	[0.00] ug/L	10:23:18
1	Sb 206.836†	32.0	31.8	[0.00] ug/L	10:23:18
1	Se 196.026†	-25.4	-25.2	[0.00] ug/L	10:23:18
1	Si 251.611†	450.9	447.2	[0.00] ug/L	10:23:18
1	Sn 189.927†	-0.3	-0.3	[0.00] ug/L	10:23:18
1	Ti 334.940†	-1023.3	-1014.9	[0.00] ug/L	10:22:58
1	Tl 190.801†	-39.1	-38.8	[0.00] ug/L	10:23:18
1	U 409.014†	-1622.2	-1608.9	[0.00] ug/L	10:22:53
1	V 292.402†	-1413.7	-1402.1	[0.00] ug/L	10:22:58
1	Zn 213.857†	688.9	683.2	[0.00] ug/L	10:23:18
1	SiO2†	457.1	453.4	[0.00] ug/L	10:24:24
2	Sc Radial	5591.0	5591.0	0.000 %	10:22:01
2	Y RADIAL	6032.2	6032.2	0.000 %	10:22:01
2	Al 396.153Radial†	0.2	0.2	[0.00] ug/L	10:22:22
2	Ca 317.933Radial†	15.8	15.8	[0.00] ug/L	10:22:22
2	Fe 238.204 Radial†	9.0	9.0	[0.00] ug/L	10:22:22
2	K 766.490 Radial†	2361.1	2373.9	[0.00] ug/L	10:22:01
2	Mg 279.077 IEC†	2.6	2.6	[0.00] ug/L	10:22:22
2	Na 589.592 Radial†	-1018.0	-1023.5	[0.00] ug/L	10:22:01
2	Sr 421.552†	38.1	38.3	[0.00] ug/L	10:22:01
2	Sc 361.383	963578.2	963578.2	0.0000 %	10:23:24
2	Y 371.029	853880.5	853880.5	0.0000 %	10:23:24
2	Ag 328.068†	317.3	317.3	[0.00] ug/L	10:23:29
2	As 188.979†	-36.1	-36.1	[0.00] ug/L	10:23:49
2	B 249.677†	-438.8	-438.8	[0.00] ug/L	10:23:49
2	Ba 233.527†	-18.5	-18.5	[0.00] ug/L	10:23:49
2	Be 313.107†	-4969.8	-4969.6	[0.00] ug/L	10:23:29
2	Cd 226.502†	-218.4	-218.4	[0.00] ug/L	10:23:49
2	Co 228.616†	-65.3	-65.3	[0.00] ug/L	10:23:49
2	Cr 267.716†	56.2	56.2	[0.00] ug/L	10:23:49
2	Cu 324.752†	9077.5	9077.2	[0.00] ug/L	10:23:29
2	Mn 257.610†	481.6	481.6	[0.00] ug/L	10:23:49
2	Mo 202.031†	35.5	35.5	[0.00] ug/L	10:23:49
2	Ni 231.604†	91.1	91.1	[0.00] ug/L	10:23:49
2	P 214.914†	234.0	234.0	[0.00] ug/L	10:23:49
2	Pb 220.353†	-52.0	-52.0	[0.00] ug/L	10:23:49
2	S 181.975 Axial†	44.7	44.7	[0.00] ug/L	10:23:49
2	Sb 206.836†	33.2	33.2	[0.00] ug/L	10:23:49
2	Se 196.026†	-16.1	-16.1	[0.00] ug/L	10:23:49
2	Si 251.611†	472.8	472.8	[0.00] ug/L	10:23:49
2	Sn 189.927†	-1.9	-1.9	[0.00] ug/L	10:23:49
2	Ti 334.940†	-1045.5	-1045.4	[0.00] ug/L	10:23:29
2	Tl 190.801†	-39.1	-39.1	[0.00] ug/L	10:23:49
2	U 409.014†	-1475.6	-1475.5	[0.00] ug/L	10:23:24
2	V 292.402†	-1378.8	-1378.7	[0.00] ug/L	10:23:29

2	Zn 213.857†	697.6	697.5	[0.00]	ug/L	10:23:49
2	SiO2†	447.8	447.8	[0.00]	ug/L	10:24:29
3	Sc Radial	5570.2	5570.2	0.000	%	10:22:27
3	Y RADIAL	6011.7	6011.7	0.000	%	10:22:27
3	Al 396.153Radial†	6.7	6.7	[0.00]	ug/L	10:22:47
3	Ca 317.933Radial†	20.9	21.1	[0.00]	ug/L	10:22:47
3	Fe 238.204 Radial†	8.9	9.0	[0.00]	ug/L	10:22:47
3	K 766.490 Radial†	2459.3	2481.8	[0.00]	ug/L	10:22:27
3	Mg 279.077 IEC†	1.0	1.0	[0.00]	ug/L	10:22:47
3	Na 589.592 Radial†	-958.4	-967.2	[0.00]	ug/L	10:22:27
3	Sr 421.552†	45.4	45.8	[0.00]	ug/L	10:22:27
3	Sc 361.383	955539.3	955539.3	0.0000	%	10:23:54
3	Y 371.029	845563.3	845563.3	0.0000	%	10:23:54
3	Ag 328.068†	349.4	352.3	[0.00]	ug/L	10:23:59
3	As 188.979†	-31.6	-31.9	[0.00]	ug/L	10:24:19
3	B 249.677†	-436.8	-440.5	[0.00]	ug/L	10:24:19
3	Ba 233.527†	-21.4	-21.6	[0.00]	ug/L	10:24:19
3	Be 313.107†	-5091.3	-5134.0	[0.00]	ug/L	10:23:59
3	Cd 226.502†	-205.9	-207.6	[0.00]	ug/L	10:24:19
3	Co 228.616†	-73.7	-74.3	[0.00]	ug/L	10:24:19
3	Cr 267.716†	81.9	82.6	[0.00]	ug/L	10:24:19
3	Cu 324.752†	9049.9	9125.7	[0.00]	ug/L	10:23:59
3	Mn 257.610†	498.5	502.7	[0.00]	ug/L	10:24:19
3	Mo 202.031†	14.9	15.0	[0.00]	ug/L	10:24:19
3	Ni 231.604†	100.4	101.2	[0.00]	ug/L	10:24:19
3	P 214.914†	242.5	244.5	[0.00]	ug/L	10:24:19
3	Pb 220.353†	-66.2	-66.8	[0.00]	ug/L	10:24:19
3	S 181.975 Axial†	46.7	47.0	[0.00]	ug/L	10:24:19
3	Sb 206.836†	34.0	34.3	[0.00]	ug/L	10:24:19
3	Se 196.026†	-20.1	-20.3	[0.00]	ug/L	10:24:19
3	Si 251.611†	451.5	455.2	[0.00]	ug/L	10:24:19
3	Sn 189.927†	2.2	2.3	[0.00]	ug/L	10:24:19
3	Ti 334.940†	-1064.2	-1073.1	[0.00]	ug/L	10:23:59
3	Tl 190.801†	-34.8	-35.1	[0.00]	ug/L	10:24:19
3	U 409.014†	-1506.5	-1519.1	[0.00]	ug/L	10:23:54
3	V 292.402†	-1452.2	-1464.4	[0.00]	ug/L	10:23:59
3	Zn 213.857†	683.7	689.4	[0.00]	ug/L	10:24:19
3	SiO2†	438.5	442.2	[0.00]	ug/L	10:24:34

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	963540.8	7982.94	0.83%	0.0000 %
Sc Radial	5621.2	71.11	1.27%	0.000 %
Y 371.029	852962.2	6985.14	0.82%	0.0000 %
Y RADIAL	6062.5	70.99	1.17%	0.000 %
Ag 328.068†	352.5	35.29	10.01%	[0.00] ug/L
Al 396.153Radial†	3.9	3.34	85.13%	[0.00] ug/L
As 188.979†	-32.0	4.02	12.56%	[0.00] ug/L
B 249.677†	-433.1	11.39	2.63%	[0.00] ug/L
Ba 233.527†	-19.3	2.08	10.83%	[0.00] ug/L
Be 313.107†	-5044.3	83.20	1.65%	[0.00] ug/L
Ca 317.933Radial†	18.3	2.65	14.52%	[0.00] ug/L
Cd 226.502†	-205.5	14.00	6.81%	[0.00] ug/L
Co 228.616†	-66.1	7.80	11.80%	[0.00] ug/L
Cr 267.716†	69.7	13.21	18.95%	[0.00] ug/L
Cu 324.752†	9045.7	99.57	1.10%	[0.00] ug/L
Fe 238.204 Radial†	9.8	1.32	13.48%	[0.00] ug/L
K 766.490 Radial†	2394.0	79.73	3.33%	[0.00] ug/L
Mg 279.077 IEC†	1.5	0.93	61.04%	[0.00] ug/L
Mn 257.610†	492.7	10.59	2.15%	[0.00] ug/L
Mo 202.031†	25.8	10.30	39.96%	[0.00] ug/L
Na 589.592 Radial†	-996.0	28.18	2.83%	[0.00] ug/L
Ni 231.604†	95.1	5.39	5.67%	[0.00] ug/L
P 214.914†	235.1	8.92	3.80%	[0.00] ug/L
Pb 220.353†	-57.9	7.79	13.45%	[0.00] ug/L
S 181.975 Axial†	45.0	1.84	4.09%	[0.00] ug/L
Sb 206.836†	33.1	1.29	3.91%	[0.00] ug/L
Se 196.026†	-20.5	4.55	22.21%	[0.00] ug/L
Si 251.611†	458.4	13.08	2.85%	[0.00] ug/L

Sn 189.927†	0.0	2.11	>999.9%	[0.00]	ug/L
Sr 421.552†	33.7	14.95	44.37%	[0.00]	ug/L
Ti 334.940†	-1044.5	29.11	2.79%	[0.00]	ug/L
Tl 190.801†	-37.7	2.21	5.86%	[0.00]	ug/L
U 409.014†	-1534.5	67.98	4.43%	[0.00]	ug/L
V 292.402†	-1415.1	44.26	3.13%	[0.00]	ug/L
Zn 213.857†	690.0	7.19	1.04%	[0.00]	ug/L
SiO2†	447.8	5.60	1.25%	[0.00]	ug/L

Sequence No.: 2
 Sample ID: S0.1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 1/27/2010 10:26:45
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	5635.6	5635.6	100 %	10:28:43
1	Y RADIAL	6079.5	6079.5	100.3 %	10:28:43
1	K 766.490 Radial†	8205.0	5790.0	[1000] ug/L	10:28:38
1	Sr 421.552†	16879.1	16802.1	[100] ug/L	10:28:43
1	Sc 361.383	967311.3	967311.3	100.39 %	10:29:10
1	Y 371.029	853238.6	853238.6	100.03 %	10:29:10
1	Ag 328.068†	25162.1	24711.5	[100] ug/L	10:29:15
1	As 188.979†	218.0	249.2	[100] ug/L	10:29:35
1	B 249.677†	4142.0	4559.0	[100] ug/L	10:29:15
1	Ba 233.527†	13200.0	13167.8	[100] ug/L	10:29:15
1	Be 313.107†	287910.3	291832.3	[100] ug/L	10:29:10
1	Cd 226.502†	9287.1	9456.4	[100] ug/L	10:29:15
1	Co 228.616†	4718.2	4766.0	[100] ug/L	10:29:35
1	Cr 267.716†	9753.7	9645.9	[100] ug/L	10:29:15
1	Cu 324.752†	45125.6	35904.1	[100] ug/L	10:29:15
1	Mn 257.610†	92808.4	91954.0	[100] ug/L	10:29:15
1	Mo 202.031†	1547.7	1515.9	[100] ug/L	10:29:35
1	Ni 231.604†	4209.8	4098.3	[100] ug/L	10:29:35
1	P 214.914†	1160.0	920.4	[500] ug/L	10:29:35
1	Pb 220.353†	785.5	840.4	[100] ug/L	10:29:35
1	S 181.975 Axial†	195.7	149.9	[200] ug/L	10:29:35
1	Sb 206.836†	337.5	303.1	[100] ug/L	10:29:35
1	Se 196.026†	153.1	173.0	[100] ug/L	10:29:35
1	Si 251.611†	17748.7	17221.0	[500] ug/L	10:29:15
1	Sn 189.927†	561.3	559.1	[100] ug/L	10:29:35
1	Ti 334.940†	66433.1	67218.6	[100] ug/L	10:29:15
1	Tl 190.801†	287.9	324.5	[100] ug/L	10:29:35
1	U 409.014†	2635.2	4159.4	[100] ug/L	10:29:10
1	V 292.402†	15093.8	16450.0	[100] ug/L	10:29:15
1	Zn 213.857†	11937.6	11201.1	[100] ug/L	10:29:15
1	SiO2†	17857.5	17340.1	[1069.5] ug/L	10:30:41
2	Sc Radial	5571.7	5571.7	99.1 %	10:28:53
2	Y RADIAL	6008.5	6008.5	99.11 %	10:28:53
2	K 766.490 Radial†	8385.8	6066.3	[1000] ug/L	10:28:48
2	Sr 421.552†	16681.6	16796.0	[100] ug/L	10:28:53
2	Sc 361.383	972995.5	972995.5	100.98 %	10:29:40
2	Y 371.029	858859.5	858859.5	100.69 %	10:29:40
2	Ag 328.068†	25253.7	24655.8	[100] ug/L	10:29:45
2	As 188.979†	224.9	254.7	[100] ug/L	10:30:06
2	B 249.677†	4110.5	4503.7	[100] ug/L	10:29:45
2	Ba 233.527†	13250.1	13140.6	[100] ug/L	10:29:45
2	Be 313.107†	288562.2	290802.5	[100] ug/L	10:29:40
2	Cd 226.502†	9282.9	9398.2	[100] ug/L	10:29:45
2	Co 228.616†	4704.5	4724.9	[100] ug/L	10:30:06
2	Cr 267.716†	9698.1	9534.1	[100] ug/L	10:29:45
2	Cu 324.752†	45326.0	35839.8	[100] ug/L	10:29:45
2	Mn 257.610†	92855.1	91460.2	[100] ug/L	10:29:45
2	Mo 202.031†	1550.4	1509.6	[100] ug/L	10:30:06
2	Ni 231.604†	4211.0	4075.0	[100] ug/L	10:30:06
2	P 214.914†	1158.9	912.6	[500] ug/L	10:30:06
2	Pb 220.353†	786.2	836.5	[100] ug/L	10:30:06
2	S 181.975 Axial†	197.0	150.0	[200] ug/L	10:30:06
2	Sb 206.836†	333.1	296.8	[100] ug/L	10:30:06
2	Se 196.026†	155.7	174.7	[100] ug/L	10:30:06
2	Si 251.611†	17708.5	17078.0	[500] ug/L	10:29:45
2	Sn 189.927†	563.6	558.2	[100] ug/L	10:30:06
2	Ti 334.940†	66643.8	67040.7	[100] ug/L	10:29:45
2	Tl 190.801†	291.1	326.0	[100] ug/L	10:30:06
2	U 409.014†	2742.7	4250.6	[100] ug/L	10:29:40

2	V 292.402†	15052.2	16321.0	[100]	ug/L	10:29:45
2	Zn 213.857†	11929.3	11123.3	[100]	ug/L	10:29:45
2	SiO2†	17679.4	17059.8	[1069.5]	ug/L	10:30:46
3	Sc Radial	5590.0	5590.0	99.4	%	10:29:03
3	Y RADIAL	6048.4	6048.4	99.77	%	10:29:03
3	K 766.490 Radial†	8354.3	6006.9	[1000]	ug/L	10:28:58
3	Sr 421.552†	16747.7	16807.3	[100]	ug/L	10:29:03
3	Sc 361.383	964640.5	964640.5	100.11	%	10:30:11
3	Y 371.029	851897.0	851897.0	99.875	%	10:30:11
3	Ag 328.068†	25203.1	24821.9	[100]	ug/L	10:30:16
3	As 188.979†	218.9	250.7	[100]	ug/L	10:30:36
3	B 249.677†	4104.5	4533.0	[100]	ug/L	10:30:16
3	Ba 233.527†	13181.7	13185.9	[100]	ug/L	10:30:16
3	Be 313.107†	287688.2	292404.5	[100]	ug/L	10:30:11
3	Cd 226.502†	9210.9	9405.9	[100]	ug/L	10:30:16
3	Co 228.616†	4705.3	4766.1	[100]	ug/L	10:30:36
3	Cr 267.716†	9744.6	9663.8	[100]	ug/L	10:30:16
3	Cu 324.752†	45001.8	35904.8	[100]	ug/L	10:30:16
3	Mn 257.610†	92650.2	92051.9	[100]	ug/L	10:30:16
3	Mo 202.031†	1548.0	1520.4	[100]	ug/L	10:30:36
3	Ni 231.604†	4199.4	4099.6	[100]	ug/L	10:30:36
3	P 214.914†	1148.3	911.9	[500]	ug/L	10:30:36
3	Pb 220.353†	779.6	836.6	[100]	ug/L	10:30:36
3	S 181.975 Axial†	184.6	139.4	[200]	ug/L	10:30:36
3	Sb 206.836†	340.8	307.4	[100]	ug/L	10:30:36
3	Se 196.026†	152.6	172.9	[100]	ug/L	10:30:36
3	Si 251.611†	17624.4	17145.9	[500]	ug/L	10:30:16
3	Sn 189.927†	562.6	561.9	[100]	ug/L	10:30:36
3	Ti 334.940†	66484.7	67453.4	[100]	ug/L	10:30:16
3	Tl 190.801†	281.6	319.0	[100]	ug/L	10:30:36
3	U 409.014†	2761.1	4292.5	[100]	ug/L	10:30:11
3	V 292.402†	15072.0	16469.9	[100]	ug/L	10:30:16
3	Zn 213.857†	11955.3	11251.6	[100]	ug/L	10:30:16
3	SiO2†	17793.5	17325.4	[1069.5]	ug/L	10:30:51

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	968315.8	4267.14	0.44%	100.50	%
Sc Radial	5599.1	32.93	0.59%	99.6	%
Y 371.029	854665.0	3693.93	0.43%	100.20	%
Y RADIAL	6045.5	35.60	0.59%	99.72	%
Ag 328.068†	24729.8	84.53	0.34%	[100]	ug/L
As 188.979†	251.5	2.85	1.13%	[100]	ug/L
B 249.677†	4531.9	27.66	0.61%	[100]	ug/L
Ba 233.527†	13164.8	22.79	0.17%	[100]	ug/L
Be 313.107†	291679.8	811.82	0.28%	[100]	ug/L
Cd 226.502†	9420.2	31.62	0.34%	[100]	ug/L
Co 228.616†	4752.3	23.72	0.50%	[100]	ug/L
Cr 267.716†	9614.6	70.30	0.73%	[100]	ug/L
Cu 324.752†	35882.9	37.28	0.10%	[100]	ug/L
K 766.490 Radial†	5954.4	145.45	2.44%	[1000]	ug/L
Mn 257.610†	91822.0	317.19	0.35%	[100]	ug/L
Mo 202.031†	1515.3	5.46	0.36%	[100]	ug/L
Ni 231.604†	4091.0	13.85	0.34%	[100]	ug/L
P 214.914†	915.0	4.72	0.52%	[500]	ug/L
Pb 220.353†	837.9	2.20	0.26%	[100]	ug/L
S 181.975 Axial†	146.4	6.09	4.16%	[200]	ug/L
Sb 206.836†	302.4	5.33	1.76%	[100]	ug/L
Se 196.026†	173.5	0.97	0.56%	[100]	ug/L
Si 251.611†	17148.3	71.54	0.42%	[500]	ug/L
Sn 189.927†	559.7	1.95	0.35%	[100]	ug/L
Sr 421.552†	16801.8	5.68	0.03%	[100]	ug/L
Ti 334.940†	67237.6	206.99	0.31%	[100]	ug/L
Tl 190.801†	323.1	3.67	1.14%	[100]	ug/L
U 409.014†	4234.2	68.03	1.61%	[100]	ug/L
V 292.402†	16413.6	80.80	0.49%	[100]	ug/L
Zn 213.857†	11192.0	64.64	0.58%	[100]	ug/L
SiO2†	17241.8	157.76	0.91%	[1069.5]	ug/L

Sequence No.: 3

Sample ID: S0.5

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 1/27/2010 10:33:02

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	5628.0	5628.0	100 %	10:34:54
1	Y RADIAL	6046.7	6046.7	99.74 %	10:34:54
1	Al 396.153Radial†	7057.7	7045.2	[5000] ug/L	10:34:54
1	Ca 317.933Radial†	3353.5	3331.2	[5000] ug/L	10:35:14
1	K 766.490 Radial†	32076.7	29643.8	[5000] ug/L	10:34:54
1	Mg 279.077 IEC†	165.0	163.3	[5000] ug/L	10:35:14
1	Sr 421.552†	87365.9	87226.1	[500] ug/L	10:34:54
1	Sc 361.383	969417.4	969417.4	100.61 %	10:36:12
1	Y 371.029	847595.3	847595.3	99.371 %	10:36:12
1	Ag 328.068†	124994.7	123884.5	[500] ug/L	10:36:17
1	As 188.979†	1267.5	1291.9	[500] ug/L	10:36:37
1	B 249.677†	23160.7	23453.4	[500] ug/L	10:36:17
1	Ba 233.527†	66285.8	65903.2	[500] ug/L	10:36:17
1	Be 313.107†	1492265.6	1488263.8	[500] ug/L	10:36:12
1	Cd 226.502†	47052.4	46972.7	[500] ug/L	10:36:17
1	Co 228.616†	24359.1	24277.6	[500] ug/L	10:36:17
1	Cr 267.716†	48437.5	48074.1	[500] ug/L	10:36:17
1	Cu 324.752†	192266.3	182055.1	[500] ug/L	10:36:17
1	Mn 257.610†	471982.3	468628.4	[500] ug/L	10:36:12
1	Mo 202.031†	7705.8	7633.3	[500] ug/L	10:36:37
1	Ni 231.604†	21048.1	20825.4	[500] ug/L	10:36:17
1	P 214.914†	4903.9	4639.1	[2500] ug/L	10:36:37
1	Pb 220.353†	4135.8	4168.7	[500] ug/L	10:36:37
1	S 181.975 Axial†	833.2	783.1	[1000] ug/L	10:36:37
1	Sb 206.836†	1617.5	1574.5	[500] ug/L	10:36:37
1	Se 196.026†	895.5	910.6	[500] ug/L	10:36:37
1	Si 251.611†	88958.7	87961.0	[2500] ug/L	10:36:17
1	Sn 189.927†	2890.8	2873.3	[500] ug/L	10:36:37
1	Ti 334.940†	351953.8	350864.7	[500] ug/L	10:36:12
1	Tl 190.801†	1606.3	1634.2	[500] ug/L	10:36:37
1	U 409.014†	19380.4	20797.4	[500] ug/L	10:36:17
1	V 292.402†	82214.5	83131.2	[500] ug/L	10:36:17
1	Zn 213.857†	56864.6	55829.8	[500] ug/L	10:36:17
1	SiO2†	89147.5	88159.4	[5347.5] ug/L	10:37:45
2	Sc Radial	5569.5	5569.5	99.1 %	10:35:19
2	Y RADIAL	5972.4	5972.4	98.51 %	10:35:19
2	Al 396.153Radial†	7023.7	7084.9	[5000] ug/L	10:35:19
2	Ca 317.933Radial†	3354.5	3367.4	[5000] ug/L	10:35:39
2	K 766.490 Radial†	31662.3	29561.9	[5000] ug/L	10:35:19
2	Mg 279.077 IEC†	159.9	159.9	[5000] ug/L	10:35:39
2	Sr 421.552†	86222.0	86987.7	[500] ug/L	10:35:19
2	Sc 361.383	961649.8	961649.8	99.804 %	10:36:43
2	Y 371.029	842469.9	842469.9	98.770 %	10:36:43
2	Ag 328.068†	125193.5	125087.2	[500] ug/L	10:36:48
2	As 188.979†	1262.6	1297.2	[500] ug/L	10:37:08
2	B 249.677†	23291.7	23770.6	[500] ug/L	10:36:48
2	Ba 233.527†	66381.0	66530.8	[500] ug/L	10:36:48
2	Be 313.107†	1481359.6	1489316.9	[500] ug/L	10:36:43
2	Cd 226.502†	47136.5	47434.7	[500] ug/L	10:36:48
2	Co 228.616†	24381.7	24495.7	[500] ug/L	10:36:48
2	Cr 267.716†	48480.9	48506.5	[500] ug/L	10:36:48
2	Cu 324.752†	192222.3	183554.6	[500] ug/L	10:36:48
2	Mn 257.610†	467059.3	467485.1	[500] ug/L	10:36:43
2	Mo 202.031†	7691.8	7681.1	[500] ug/L	10:37:08
2	Ni 231.604†	21051.1	20997.5	[500] ug/L	10:36:48
2	P 214.914†	4895.0	4669.6	[2500] ug/L	10:37:08
2	Pb 220.353†	4133.2	4199.3	[500] ug/L	10:37:08
2	S 181.975 Axial†	831.5	788.1	[1000] ug/L	10:37:08
2	Sb 206.836†	1608.4	1578.5	[500] ug/L	10:37:08

2	Se 196.026†	879.7	902.0	[500]	ug/L	10:37:08
2	Si 251.611†	89198.4	88915.3	[2500]	ug/L	10:36:48
2	Sn 189.927†	2878.6	2884.3	[500]	ug/L	10:37:08
2	Ti 334.940†	347853.0	349581.5	[500]	ug/L	10:36:43
2	Tl 190.801†	1598.2	1639.0	[500]	ug/L	10:37:08
2	U 409.014†	19544.7	21117.7	[500]	ug/L	10:36:48
2	V 292.402†	82272.3	83849.2	[500]	ug/L	10:36:48
2	Zn 213.857†	57055.1	56477.2	[500]	ug/L	10:36:48
2	SiO2†	88900.8	88627.8	[5347.5]	ug/L	10:37:50
3	Sc Radial	5547.5	5547.5	98.7	%	10:35:45
3	Y RADIAL	5950.8	5950.8	98.16	%	10:35:45
3	Al 396.153Radial†	7020.6	7109.9	[5000]	ug/L	10:35:45
3	Ca 317.933Radial†	3363.0	3389.4	[5000]	ug/L	10:36:05
3	K 766.490 Radial†	31784.0	29812.3	[5000]	ug/L	10:35:45
3	Mg 279.077 IEC†	165.0	165.6	[5000]	ug/L	10:36:05
3	Sr 421.552†	86264.0	87376.3	[500]	ug/L	10:35:45
3	Sc 361.383	964829.1	964829.1	100.13	%	10:37:14
3	Y 371.029	845541.3	845541.3	99.130	%	10:37:14
3	Ag 328.068†	125282.8	124763.1	[500]	ug/L	10:37:20
3	As 188.979†	1253.0	1283.3	[500]	ug/L	10:37:40
3	B 249.677†	23303.2	23705.2	[500]	ug/L	10:37:20
3	Ba 233.527†	66637.3	66567.6	[500]	ug/L	10:37:20
3	Be 313.107†	1487483.5	1490541.6	[500]	ug/L	10:37:14
3	Cd 226.502†	47302.4	47444.8	[500]	ug/L	10:37:20
3	Co 228.616†	24481.8	24515.2	[500]	ug/L	10:37:20
3	Cr 267.716†	48618.4	48483.8	[500]	ug/L	10:37:20
3	Cu 324.752†	192810.2	183507.1	[500]	ug/L	10:37:20
3	Mn 257.610†	469377.5	468258.1	[500]	ug/L	10:37:14
3	Mo 202.031†	7673.7	7637.7	[500]	ug/L	10:37:40
3	Ni 231.604†	21237.2	21113.8	[500]	ug/L	10:37:20
3	P 214.914†	4869.5	4628.0	[2500]	ug/L	10:37:40
3	Pb 220.353†	4135.9	4188.4	[500]	ug/L	10:37:40
3	S 181.975 Axial†	818.4	772.3	[1000]	ug/L	10:37:40
3	Sb 206.836†	1614.4	1579.1	[500]	ug/L	10:37:40
3	Se 196.026†	881.9	901.3	[500]	ug/L	10:37:40
3	Si 251.611†	89411.3	88833.5	[2500]	ug/L	10:37:20
3	Sn 189.927†	2878.3	2874.5	[500]	ug/L	10:37:40
3	Ti 334.940†	349231.7	349809.9	[500]	ug/L	10:37:14
3	Tl 190.801†	1598.2	1633.8	[500]	ug/L	10:37:40
3	U 409.014†	19393.9	20902.5	[500]	ug/L	10:37:20
3	V 292.402†	82682.2	83986.9	[500]	ug/L	10:37:20
3	Zn 213.857†	57122.7	56356.4	[500]	ug/L	10:37:20
3	SiO2†	88457.0	87891.1	[5347.5]	ug/L	10:37:55

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	965298.8	3905.05	0.40%	100.18 %
Sc Radial	5581.7	41.62	0.75%	99.3 %
Y 371.029	845202.2	2579.47	0.31%	99.090 %
Y RADIAL	5990.0	50.33	0.84%	98.80 %
Ag 328.068†	124578.3	622.28	0.50%	[500] ug/L
Al 396.153Radial†	7080.0	32.63	0.46%	[5000] ug/L
As 188.979†	1290.8	6.97	0.54%	[500] ug/L
B 249.677†	23643.1	167.52	0.71%	[500] ug/L
Ba 233.527†	66333.8	373.40	0.56%	[500] ug/L
Be 313.107†	1489374.1	1139.98	0.08%	[500] ug/L
Ca 317.933Radial†	3362.7	29.40	0.87%	[5000] ug/L
Cd 226.502†	47284.1	269.69	0.57%	[500] ug/L
Co 228.616†	24429.5	131.96	0.54%	[500] ug/L
Cr 267.716†	48354.8	243.34	0.50%	[500] ug/L
Cu 324.752†	183038.9	852.35	0.47%	[500] ug/L
K 766.490 Radial†	29672.6	127.66	0.43%	[5000] ug/L
Mg 279.077 IEC†	162.9	2.91	1.79%	[5000] ug/L
Mn 257.610†	468123.9	583.37	0.12%	[500] ug/L
Mo 202.031†	7650.7	26.42	0.35%	[500] ug/L
Ni 231.604†	20978.9	145.10	0.69%	[500] ug/L
P 214.914†	4645.6	21.54	0.46%	[2500] ug/L
Pb 220.353†	4185.4	15.48	0.37%	[500] ug/L
S 181.975 Axial†	781.2	8.08	1.03%	[1000] ug/L

Sb 206.836†	1577.4	2.48	0.16%	[500]	ug/L
Se 196.026†	904.6	5.18	0.57%	[500]	ug/L
Si 251.611†	88569.9	528.94	0.60%	[2500]	ug/L
Sn 189.927†	2877.3	6.04	0.21%	[500]	ug/L
Sr 421.552†	87196.7	195.98	0.22%	[500]	ug/L
Ti 334.940†	350085.4	684.53	0.20%	[500]	ug/L
Tl 190.801†	1635.7	2.92	0.18%	[500]	ug/L
U 409.014†	20939.2	163.25	0.78%	[500]	ug/L
V 292.402†	83655.7	459.48	0.55%	[500]	ug/L
Zn 213.857†	56221.1	344.25	0.61%	[500]	ug/L
SiO2†	88226.1	372.86	0.42%	[5347.5]	ug/L

Sequence No.: 4
 Sample ID: SCAL
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 1/27/2010 10:40:06
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	5491.1	5491.1	97.7 %	10:41:59
1	Y RADIAL	5925.4	5925.4	97.74 %	10:41:59
1	Al 396.153Radial†	14088.5	14418.3	[10000] ug/L	10:41:59
1	Ca 317.933Radial†	6707.8	6848.4	[10000] ug/L	10:41:59
1	Fe 238.204 Radial†	1200.1	1218.8	[10000] ug/L	10:42:19
1	K 766.490 Radial†	61044.9	60096.9	[10000] ug/L	10:41:59
1	Mg 279.077 IEC†	315.5	321.5	[10000] ug/L	10:42:19
1	Na 589.592 Radial†	34883.0	36705.3	[10000] ug/L	10:41:59
1	Sr 421.552†	168136.8	172085.7	[1000] ug/L	10:41:59
1	Sc 361.383	954535.0	954535.0	99.065 %	10:43:18
1	Y 371.029	816950.0	816950.0	95.778 %	10:43:23
1	Ag 328.068†	249217.6	251216.4	[1000] ug/L	10:43:23
1	As 188.979†	2537.3	2593.3	[1000] ug/L	10:43:43
1	B 249.677†	47287.9	48167.1	[1000] ug/L	10:43:23
1	Ba 233.527†	132764.2	134036.1	[1000] ug/L	10:43:23
1	Be 313.107†	2948789.4	2981654.8	[1000] ug/L	10:43:18
1	Cd 226.502†	94078.8	95171.9	[1000] ug/L	10:43:23
1	Co 228.616†	48656.5	49181.7	[1000] ug/L	10:43:23
1	Cr 267.716†	96906.8	97751.4	[1000] ug/L	10:43:23
1	Cu 324.752†	377938.1	372458.2	[1000] ug/L	10:43:23
1	Mn 257.610†	925856.3	934098.8	[1000] ug/L	10:43:18
1	Mo 202.031†	15283.7	15402.1	[1000] ug/L	10:43:43
1	Ni 231.604†	41773.7	42072.8	[1000] ug/L	10:43:23
1	P 214.914†	9554.9	9409.9	[5000] ug/L	10:43:43
1	Pb 220.353†	8275.4	8411.4	[1000] ug/L	10:43:43
1	S 181.975 Axial†	1620.3	1590.5	[2000] ug/L	10:43:43
1	Sb 206.836†	3195.1	3192.1	[1000] ug/L	10:43:43
1	Se 196.026†	1787.1	1824.4	[1000] ug/L	10:43:43
1	Si 251.611†	176468.5	177675.0	[5000] ug/L	10:43:23
1	Sn 189.927†	5767.1	5821.5	[1000] ug/L	10:43:43
1	Ti 334.940†	693516.7	701104.4	[1000] ug/L	10:43:18
1	Tl 190.801†	3218.1	3286.1	[1000] ug/L	10:43:43
1	U 409.014†	40075.4	41988.0	[1000] ug/L	10:43:23
1	V 292.402†	166588.5	169575.3	[1000] ug/L	10:43:23
1	Zn 213.857†	113183.1	113560.9	[1000] ug/L	10:43:23
1	SiO2†	174090.0	175284.7	[10695] ug/L	10:44:53
2	Sc Radial	5498.8	5498.8	97.8 %	10:42:24
2	Y RADIAL	5868.1	5868.1	96.79 %	10:42:24
2	Al 396.153Radial†	14025.7	14334.0	[10000] ug/L	10:42:24
2	Ca 317.933Radial†	6684.4	6814.9	[10000] ug/L	10:42:24
2	Fe 238.204 Radial†	1188.6	1205.3	[10000] ug/L	10:42:45
2	K 766.490 Radial†	61051.6	60016.6	[10000] ug/L	10:42:24
2	Mg 279.077 IEC†	317.4	323.0	[10000] ug/L	10:42:45
2	Na 589.592 Radial†	34728.2	36497.3	[10000] ug/L	10:42:24
2	Sr 421.552†	167406.7	171099.3	[1000] ug/L	10:42:24
2	Sc 361.383	957665.6	957665.6	99.390 %	10:43:50
2	Y 371.029	816442.5	816442.5	95.718 %	10:43:55
2	Ag 328.068†	249053.1	250228.5	[1000] ug/L	10:43:55
2	As 188.979†	2544.7	2592.3	[1000] ug/L	10:44:15
2	B 249.677†	47330.9	48054.3	[1000] ug/L	10:43:55
2	Ba 233.527†	132556.7	133389.2	[1000] ug/L	10:43:55
2	Be 313.107†	2961123.3	2984333.7	[1000] ug/L	10:43:50
2	Cd 226.502†	93954.0	94735.9	[1000] ug/L	10:43:55
2	Co 228.616†	48497.3	48861.0	[1000] ug/L	10:43:55
2	Cr 267.716†	96647.5	97170.7	[1000] ug/L	10:43:55
2	Cu 324.752†	377879.7	371152.3	[1000] ug/L	10:43:55
2	Mn 257.610†	928671.3	933876.0	[1000] ug/L	10:43:50
2	Mo 202.031†	15300.6	15368.7	[1000] ug/L	10:44:15
2	Ni 231.604†	41753.4	41914.4	[1000] ug/L	10:43:55

2	P 214.914†	9576.6	9400.3	[5000]	ug/L	10:44:15
2	Pb 220.353†	8274.4	8383.1	[1000]	ug/L	10:44:15
2	S 181.975 Axial†	1618.6	1583.4	[2000]	ug/L	10:44:15
2	Sb 206.836†	3198.5	3185.0	[1000]	ug/L	10:44:15
2	Se 196.026†	1785.7	1817.2	[1000]	ug/L	10:44:15
2	Si 251.611†	176077.1	176698.9	[5000]	ug/L	10:43:55
2	Sn 189.927†	5786.7	5822.2	[1000]	ug/L	10:44:15
2	Ti 334.940†	695247.7	700557.5	[1000]	ug/L	10:43:50
2	Tl 190.801†	3213.4	3270.8	[1000]	ug/L	10:44:15
2	U 409.014†	40078.4	41858.8	[1000]	ug/L	10:43:55
2	V 292.402†	166444.4	168880.6	[1000]	ug/L	10:43:55
2	Zn 213.857†	113055.9	113059.4	[1000]	ug/L	10:43:55
2	SiO2†	174823.4	175448.1	[10695]	ug/L	10:44:58
3	Sc Radial	5448.3	5448.3	96.9	%	10:42:50
3	Y RADIAL	5832.2	5832.2	96.20	%	10:42:50
3	Al 396.153Radial†	14000.1	14440.4	[10000]	ug/L	10:42:50
3	Ca 317.933Radial†	6686.3	6880.2	[10000]	ug/L	10:42:50
3	Fe 238.204 Radial†	1188.5	1216.4	[10000]	ug/L	10:43:10
3	K 766.490 Radial†	60765.2	60299.4	[10000]	ug/L	10:42:50
3	Mg 279.077 IEC†	314.7	323.2	[10000]	ug/L	10:43:10
3	Na 589.592 Radial†	34725.4	36823.3	[10000]	ug/L	10:42:50
3	Sr 421.552†	166936.6	172199.8	[1000]	ug/L	10:42:50
3	Sc 361.383	940302.6	940302.6	97.588	%	10:44:22
3	Y 371.029	812107.4	812107.4	95.210	%	10:44:27
3	Ag 328.068†	248402.9	254189.4	[1000]	ug/L	10:44:27
3	As 188.979†	2526.5	2621.0	[1000]	ug/L	10:44:47
3	B 249.677†	47209.8	48809.6	[1000]	ug/L	10:44:27
3	Ba 233.527†	132317.3	135606.6	[1000]	ug/L	10:44:27
3	Be 313.107†	2910336.3	2987305.4	[1000]	ug/L	10:44:22
3	Cd 226.502†	93609.9	96128.8	[1000]	ug/L	10:44:27
3	Co 228.616†	48438.6	49701.8	[1000]	ug/L	10:44:27
3	Cr 267.716†	96307.0	98617.3	[1000]	ug/L	10:44:27
3	Cu 324.752†	377435.5	377717.6	[1000]	ug/L	10:44:27
3	Mn 257.610†	913973.7	936068.6	[1000]	ug/L	10:44:22
3	Mo 202.031†	15203.8	15553.7	[1000]	ug/L	10:44:47
3	Ni 231.604†	41590.3	42523.1	[1000]	ug/L	10:44:27
3	P 214.914†	9509.7	9509.6	[5000]	ug/L	10:44:47
3	Pb 220.353†	8252.6	8514.5	[1000]	ug/L	10:44:47
3	S 181.975 Axial†	1595.4	1589.8	[2000]	ug/L	10:44:47
3	Sb 206.836†	3163.8	3208.8	[1000]	ug/L	10:44:47
3	Se 196.026†	1777.0	1841.4	[1000]	ug/L	10:44:47
3	Si 251.611†	175982.6	179873.3	[5000]	ug/L	10:44:27
3	Sn 189.927†	5740.1	5881.9	[1000]	ug/L	10:44:47
3	Ti 334.940†	683954.2	701901.6	[1000]	ug/L	10:44:22
3	Tl 190.801†	3212.8	3329.9	[1000]	ug/L	10:44:47
3	U 409.014†	40019.7	42543.2	[1000]	ug/L	10:44:27
3	V 292.402†	165817.5	171330.5	[1000]	ug/L	10:44:27
3	Zn 213.857†	112800.0	114897.7	[1000]	ug/L	10:44:27
3	SiO2†	176145.6	180051.0	[10695]	ug/L	10:45:03

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	950834.4	9254.18	0.97%	98.681	%
Sc Radial	5479.4	27.20	0.50%	97.5	%
Y 371.029	815166.6	2661.50	0.33%	95.569	%
Y RADIAL	5875.2	47.02	0.80%	96.91	%
Ag 328.068†	251878.1	2061.68	0.82%	[1000]	ug/L
Al 396.153Radial†	14397.5	56.14	0.39%	[10000]	ug/L
As 188.979†	2602.2	16.29	0.63%	[1000]	ug/L
B 249.677†	48343.7	407.44	0.84%	[1000]	ug/L
Ba 233.527†	134344.0	1140.30	0.85%	[1000]	ug/L
Be 313.107†	2984431.3	2826.59	0.09%	[1000]	ug/L
Ca 317.933Radial†	6847.9	32.65	0.48%	[10000]	ug/L
Cd 226.502†	95345.5	712.53	0.75%	[1000]	ug/L
Co 228.616†	49248.2	424.37	0.86%	[1000]	ug/L
Cr 267.716†	97846.5	727.98	0.74%	[1000]	ug/L
Cu 324.752†	373776.0	3475.40	0.93%	[1000]	ug/L
Fe 238.204 Radial†	1213.5	7.17	0.59%	[10000]	ug/L
K 766.490 Radial†	60137.6	145.70	0.24%	[10000]	ug/L

Mg 279.077 IEC†	322.5	0.92	0.28%	[10000]	ug/L
Mn 257.610†	934681.1	1206.72	0.13%	[1000]	ug/L
Mo 202.031†	15441.5	98.59	0.64%	[1000]	ug/L
Na 589.592 Radial†	36675.3	165.09	0.45%	[10000]	ug/L
Ni 231.604†	42170.1	315.79	0.75%	[1000]	ug/L
P 214.914†	9439.9	60.53	0.64%	[5000]	ug/L
Pb 220.353†	8436.4	69.14	0.82%	[1000]	ug/L
S 181.975 Axial†	1587.9	3.90	0.25%	[2000]	ug/L
Sb 206.836†	3195.3	12.22	0.38%	[1000]	ug/L
Se 196.026†	1827.7	12.44	0.68%	[1000]	ug/L
Si 251.611†	178082.4	1625.95	0.91%	[5000]	ug/L
Sn 189.927†	5841.8	34.70	0.59%	[1000]	ug/L
Sr 421.552†	171794.9	605.13	0.35%	[1000]	ug/L
Ti 334.940†	701187.8	675.94	0.10%	[1000]	ug/L
Tl 190.801†	3295.6	30.67	0.93%	[1000]	ug/L
U 409.014†	42130.0	363.62	0.86%	[1000]	ug/L
V 292.402†	169928.8	1262.65	0.74%	[1000]	ug/L
Zn 213.857†	113839.3	950.21	0.83%	[1000]	ug/L
SiO2†	176927.9	2705.88	1.53%	[10695]	ug/L

Sequence No.: 5

Sample ID: S10

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 1/27/2010 10:47:14

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	5357.0	5357.0	95.3 %	10:49:28
1	Y RADIAL	5745.8	5745.8	94.78 %	10:49:28
1	Al 396.153Radial†	68517.7	71893.3	[50000] ug/L	10:49:08
1	Ca 317.933Radial†	31848.8	33401.4	[50000] ug/L	10:49:08
1	Fe 238.204 Radial†	2256.8	2358.3	[20000] ug/L	10:49:28
1	Mg 279.077 IEC†	1472.0	1543.0	[50000] ug/L	10:49:28
1	Na 589.592 Radial†	68825.2	73215.9	[20000] ug/L	10:49:08
1	Sc 361.383	932190.7	932190.7	96.746 %	10:50:25
1	Y 371.029	812397.9	812397.9	95.244 %	10:50:25
2	Sc Radial	5359.8	5359.8	95.4 %	10:49:53
2	Y RADIAL	5742.6	5742.6	94.72 %	10:49:53
2	Al 396.153Radial†	68753.0	72101.8	[50000] ug/L	10:49:33
2	Ca 317.933Radial†	31848.4	33383.2	[50000] ug/L	10:49:33
2	Fe 238.204 Radial†	2265.5	2366.2	[20000] ug/L	10:49:53
2	Mg 279.077 IEC†	1470.0	1540.2	[50000] ug/L	10:49:53
2	Na 589.592 Radial†	69525.5	73911.9	[20000] ug/L	10:49:33
2	Sc 361.383	925845.5	925845.5	96.088 %	10:50:31
2	Y 371.029	807028.0	807028.0	94.615 %	10:50:31
3	Sc Radial	5419.5	5419.5	96.4 %	10:50:18
3	Y RADIAL	5825.4	5825.4	96.09 %	10:50:18
3	Al 396.153Radial†	68220.7	70755.5	[50000] ug/L	10:49:58
3	Ca 317.933Radial†	31629.2	32788.0	[50000] ug/L	10:49:58
3	Fe 238.204 Radial†	2278.9	2353.9	[20000] ug/L	10:50:18
3	Mg 279.077 IEC†	1480.5	1534.0	[50000] ug/L	10:50:18
3	Na 589.592 Radial†	68815.4	72372.3	[20000] ug/L	10:49:58
3	Sc 361.383	930912.8	930912.8	96.614 %	10:50:36
3	Y 371.029	810544.3	810544.3	95.027 %	10:50:36

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	929649.7	3355.86	0.36%	96.483 %
Sc Radial	5378.7	35.31	0.66%	95.7 %
Y 371.029	809990.0	2727.52	0.34%	94.962 %
Y RADIAL	5771.3	46.88	0.81%	95.20 %
Al 396.153Radial†	71583.5	724.61	1.01%	[50000] ug/L
Ca 317.933Radial†	33190.9	349.00	1.05%	[50000] ug/L
Fe 238.204 Radial†	2359.5	6.21	0.26%	[20000] ug/L
Mg 279.077 IEC†	1539.1	4.61	0.30%	[50000] ug/L
Na 589.592 Radial†	73166.7	770.97	1.05%	[20000] ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	251.3	0.00000	0.999990	
Al 396.153Radial	3	Lin Thru 0	0.0	1.432	0.00000	0.999999	
As 188.979	3	Lin Thru 0	0.0	2.597	0.00000	0.999991	
B 249.677	3	Lin Thru 0	0.0	48.11	0.00000	0.999948	
Ba 233.527	3	Lin Thru 0	0.0	134.0	0.00000	0.999986	
Be 313.107	3	Lin Thru 0	0.0	2983	0.00000	0.999998	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6647	0.00000	0.999981	
Cd 226.502	3	Lin Thru 0	0.0	95.18	0.00000	0.999994	
Co 228.616	3	Lin Thru 0	0.0	49.16	0.00000	0.999991	
Cr 267.716	3	Lin Thru 0	0.0	97.61	0.00000	0.999988	
Cu 324.752	3	Lin Thru 0	0.0	372.1	0.00000	0.999961	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1186	0.00000	0.999935	
K 766.490 Radial	3	Lin Thru 0	0.0	5.998	0.00000	0.999986	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0309	0.00000	0.999943
Mn 257.610	3	Lin Thru 0	0.0	934.9	0.00000	0.999999
Mo 202.031	3	Lin Thru 0	0.0	15.41	0.00000	0.999992
Na 589.592 Radia	2	Lin Thru 0	0.0	3.660	0.00000	0.999999
Ni 231.604	3	Lin Thru 0	0.0	42.12	0.00000	0.999995
P 214.914	3	Lin Thru 0	0.0	1.882	0.00000	0.999977
Pb 220.353	3	Lin Thru 0	0.0	8.423	0.00000	0.999995
S 181.975 Axial	3	Lin Thru 0	0.0	0.7909	0.00000	0.999957
Sb 206.836	3	Lin Thru 0	0.0	3.186	0.00000	0.999977
Se 196.026	3	Lin Thru 0	0.0	1.823	0.00000	0.999983
Si 251.611	3	Lin Thru 0	0.0	35.57	0.00000	0.999993
Sn 189.927	3	Lin Thru 0	0.0	5.823	0.00000	0.999976
Sr 421.552	3	Lin Thru 0	0.0	172.3	0.00000	0.999979
Ti 334.940	3	Lin Thru 0	0.0	700.8	0.00000	0.999993
Tl 190.801	3	Lin Thru 0	0.0	3.290	0.00000	0.999994
U 409.014	3	Lin Thru 0	0.0	42.08	0.00000	0.999997
V 292.402	3	Lin Thru 0	0.0	169.4	0.00000	0.999977
Zn 213.857	3	Lin Thru 0	0.0	113.5	0.00000	0.999987
SiO2	3	Lin Thru 0	0.0	16.53	0.00000	0.999997

Sequence No.: 6
 Sample ID: ICV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 9
 Date Collected: 1/27/2010 10:52:48
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5442.4	5442.4	96.8 %		10:54:41
1	Y RADIAL	5890.6	5890.6	97.16 %		10:54:41
1	Al 396.153Radial†	7044.1	7271.6	5052.2 ug/L	5052.2 ppb	10:54:41
1	Ca 317.933Radial†	3285.0	3374.6	5076.9 ug/L	5076.9 ppb	10:55:01
1	Fe 238.204 Radial†	609.6	619.8	5239.3 ug/L	5239.3 ppb	10:55:01
1	K 766.490 Radial†	16920.9	15082.7	2511.3 ug/L	2511.3 ppb	10:54:41
1	Mg 279.077 IEC†	165.2	169.1	5480.4 ug/L	5480.4 ppb	10:55:01
1	Na 589.592 Radial†	8028.1	9287.8	2537.5 ug/L	2537.5 ppb	10:54:41
1	Sr 421.552†	88138.1	90999.5	528.17 ug/L	528.17 ppb	10:54:41
1	Sc 361.383	949113.5	949113.5	98.503 %		10:55:59
1	Y 371.029	835184.3	835184.3	97.916 %		10:55:59
1	Ag 328.068†	64757.5	65389.4	263.49 ug/L	263.49 ppb	10:55:59
1	As 188.979†	1183.6	1233.6	479.17 ug/L	479.17 ppb	10:56:19
1	B 249.677†	24231.0	25032.4	518.03 ug/L	518.03 ppb	10:55:59
1	Ba 233.527†	67327.1	68369.8	511.54 ug/L	511.54 ppb	10:55:59
1	Be 313.107†	764959.9	781632.2	263.18 ug/L	263.18 ppb	10:55:59
1	Cd 226.502†	46733.9	47649.8	500.49 ug/L	500.49 ppb	10:55:59
1	Co 228.616†	24330.2	24766.2	503.99 ug/L	503.99 ppb	10:56:19
1	Cr 267.716†	47257.9	47906.5	491.44 ug/L	491.44 ppb	10:55:59
1	Cu 324.752†	196665.3	190609.1	512.22 ug/L	512.22 ppb	10:55:59
1	Mn 257.610†	476398.4	483147.3	517.10 ug/L	517.10 ppb	10:55:59
1	Mo 202.031†	8275.2	8375.2	543.91 ug/L	543.91 ppb	10:56:19
1	Ni 231.604†	20977.0	21200.8	503.06 ug/L	503.06 ppb	10:56:19
1	P 214.914†	4917.9	4757.6	2428.8 ug/L	2428.8 ppb	10:56:19
1	Pb 220.353†	4130.1	4250.8	506.41 ug/L	506.41 ppb	10:56:19
1	S 181.975 Axial†	1991.1	1976.3	2497.7 ug/L	2497.7 ppb	10:56:19
1	Sb 206.836†	1605.9	1597.2	521.04 ug/L	521.04 ppb	10:56:19
1	Se 196.026†	4585.8	4676.0	2583.9 ug/L	2583.9 ppb	10:56:19
1	Si 251.611†	173508.5	175687.6	4932.7 ug/L	4932.7 ppb	10:55:59
1	Sn 189.927†	3097.5	3144.6	540.92 ug/L	540.92 ppb	10:56:19
1	Ti 334.940†	343969.4	350242.4	499.65 ug/L	499.65 ppb	10:55:59
1	Tl 190.801†	1687.6	1750.9	535.59 ug/L	535.59 ppb	10:56:19
1	U 409.014†	18735.8	20555.1	486.76 ug/L	486.76 ppb	10:55:59
1	V 292.402†	83786.0	86474.7	517.83 ug/L	517.83 ppb	10:55:59
1	Zn 213.857†	58322.1	58518.6	510.96 ug/L	510.96 ppb	10:55:59
1	SiO2†	174816.5	177026.0	10694 ug/L	10694 ppb	10:57:16
2	Sc Radial	5439.6	5439.6	96.8 %		10:55:06
2	Y RADIAL	5838.3	5838.3	96.30 %		10:55:06
2	Al 396.153Radial†	7027.7	7258.4	5042.5 ug/L	5042.5 ppb	10:55:06
2	Ca 317.933Radial†	3270.7	3361.6	5057.3 ug/L	5057.3 ppb	10:55:26
2	Fe 238.204 Radial†	609.4	619.9	5240.4 ug/L	5240.4 ppb	10:55:26
2	K 766.490 Radial†	16922.5	15093.4	2513.0 ug/L	2513.0 ppb	10:55:06
2	Mg 279.077 IEC†	166.2	170.2	5517.2 ug/L	5517.2 ppb	10:55:26
2	Na 589.592 Radial†	7931.5	9192.3	2511.4 ug/L	2511.4 ppb	10:55:06
2	Sr 421.552†	87590.1	90480.1	525.15 ug/L	525.15 ppb	10:55:06
2	Sc 361.383	941153.2	941153.2	97.677 %		10:56:25
2	Y 371.029	826720.6	826720.6	96.923 %		10:56:25
2	Ag 328.068†	64785.5	65974.1	265.84 ug/L	265.84 ppb	10:56:25
2	As 188.979†	1193.6	1254.0	487.04 ug/L	487.04 ppb	10:56:45
2	B 249.677†	24331.7	25343.6	524.47 ug/L	524.47 ppb	10:56:25
2	Ba 233.527†	67506.8	69131.8	517.24 ug/L	517.24 ppb	10:56:25
2	Be 313.107†	766245.5	789516.8	265.84 ug/L	265.84 ppb	10:56:25
2	Cd 226.502†	46982.8	48305.9	507.39 ug/L	507.39 ppb	10:56:25
2	Co 228.616†	24562.4	25212.8	513.09 ug/L	513.09 ppb	10:56:45
2	Cr 267.716†	47388.5	48446.0	496.97 ug/L	496.97 ppb	10:56:25
2	Cu 324.752†	196507.4	192136.2	516.32 ug/L	516.32 ppb	10:56:25
2	Mn 257.610†	477699.0	488569.6	522.90 ug/L	522.90 ppb	10:56:25
2	Mo 202.031†	8352.8	8525.7	553.67 ug/L	553.67 ppb	10:56:45
2	Ni 231.604†	21155.6	21563.7	511.67 ug/L	511.67 ppb	10:56:45

2	P 214.914†	4962.7	4845.6	2474.9 ug/L	2474.9 ppb	10:56:45
2	Pb 220.353†	4158.2	4315.0	514.06 ug/L	514.06 ppb	10:56:45
2	S 181.975 Axial†	2010.2	2012.9	2544.1 ug/L	2544.1 ppb	10:56:45
2	Sb 206.836†	1627.9	1633.5	532.84 ug/L	532.84 ppb	10:56:45
2	Se 196.026†	4639.6	4770.5	2635.7 ug/L	2635.7 ppb	10:56:45
2	Si 251.611†	173855.4	177532.6	4984.5 ug/L	4984.5 ppb	10:56:25
2	Sn 189.927†	3140.5	3215.1	553.04 ug/L	553.04 ppb	10:56:45
2	Ti 334.940†	344549.1	353789.5	504.70 ug/L	504.70 ppb	10:56:25
2	Tl 190.801†	1697.6	1775.7	543.14 ug/L	543.14 ppb	10:56:45
2	U 409.014†	18699.9	20679.2	489.70 ug/L	489.70 ppb	10:56:25
2	V 292.402†	83987.8	87400.7	523.44 ug/L	523.44 ppb	10:56:25
2	Zn 213.857†	58483.3	59184.4	516.77 ug/L	516.77 ppb	10:56:25
2	SiO2†	174223.7	177920.3	10748 ug/L	10748 ppb	10:57:22
3	Sc Radial	5479.6	5479.6	97.5 %		10:55:31
3	Y RADIAL	5887.7	5887.7	97.12 %		10:55:31
3	Al 396.153Radial†	7091.7	7271.1	5051.8 ug/L	5051.8 ppb	10:55:31
3	Ca 317.933Radial†	3279.7	3346.2	5034.1 ug/L	5034.1 ppb	10:55:51
3	Fe 238.204 Radial†	607.4	613.3	5184.4 ug/L	5184.4 ppb	10:55:51
3	K 766.490 Radial†	16938.2	14982.0	2494.5 ug/L	2494.5 ppb	10:55:31
3	Mg 279.077 IEC†	164.3	167.0	5413.6 ug/L	5413.6 ppb	10:55:51
3	Na 589.592 Radial†	7918.4	9119.1	2491.4 ug/L	2491.4 ppb	10:55:31
3	Sr 421.552†	88091.9	90334.9	524.31 ug/L	524.31 ppb	10:55:31
3	Sc 361.383	949504.4	949504.4	98.543 %		10:56:51
3	Y 371.029	834084.7	834084.7	97.787 %		10:56:51
3	Ag 328.068†	65307.5	65920.5	265.60 ug/L	265.60 ppb	10:56:51
3	As 188.979†	1188.7	1238.3	481.03 ug/L	481.03 ppb	10:57:11
3	B 249.677†	24461.4	25256.1	522.69 ug/L	522.69 ppb	10:56:51
3	Ba 233.527†	67855.5	68877.8	515.34 ug/L	515.34 ppb	10:56:51
3	Be 313.107†	769454.1	785873.1	264.62 ug/L	264.62 ppb	10:56:51
3	Cd 226.502†	47054.2	47955.3	503.71 ug/L	503.71 ppb	10:56:51
3	Co 228.616†	24345.2	24771.2	504.08 ug/L	504.08 ppb	10:57:11
3	Cr 267.716†	47538.2	48171.3	494.15 ug/L	494.15 ppb	10:56:51
3	Cu 324.752†	198665.9	192557.1	517.45 ug/L	517.45 ppb	10:56:51
3	Mn 257.610†	480281.3	486888.5	521.10 ug/L	521.10 ppb	10:56:51
3	Mo 202.031†	8278.2	8374.7	543.87 ug/L	543.87 ppb	10:57:11
3	Ni 231.604†	20984.9	21200.0	503.04 ug/L	503.04 ppb	10:57:11
3	P 214.914†	4901.5	4738.9	2417.9 ug/L	2417.9 ppb	10:57:11
3	Pb 220.353†	4142.7	4261.9	507.73 ug/L	507.73 ppb	10:57:11
3	S 181.975 Axial†	1991.0	1975.4	2496.6 ug/L	2496.6 ppb	10:57:11
3	Sb 206.836†	1604.9	1595.6	520.54 ug/L	520.54 ppb	10:57:11
3	Se 196.026†	4598.7	4687.2	2589.9 ug/L	2589.9 ppb	10:57:11
3	Si 251.611†	175072.7	177202.3	4975.3 ug/L	4975.3 ppb	10:56:51
3	Sn 189.927†	3104.1	3149.9	541.83 ug/L	541.83 ppb	10:57:11
3	Ti 334.940†	347260.8	353438.8	504.21 ug/L	504.21 ppb	10:56:51
3	Tl 190.801†	1683.6	1746.2	534.19 ug/L	534.19 ppb	10:57:11
3	U 409.014†	18821.9	20634.7	488.65 ug/L	488.65 ppb	10:56:51
3	V 292.402†	84537.1	87201.9	522.13 ug/L	522.13 ppb	10:56:51
3	Zn 213.857†	58838.4	59018.1	515.36 ug/L	515.36 ppb	10:56:51
3	SiO2†	174776.3	176912.2	10687 ug/L	10687 ppb	10:57:27

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	946590.4	98.241 %	0.4891			0.50%
Sc Radial	5453.9	97.0 %	0.40			0.41%
Y 371.029	831996.5	97.542 %	0.5395			0.55%
Y RADIAL	5872.2	96.86 %	0.484			0.50%
Ag 328.068†	65761.3	264.98 ug/L	1.293	264.98 ppb	1.293	0.49%
QC value within limits for Ag 328.068 Recovery = 105.99%						
Al 396.153Radial†	7267.0	5048.8 ug/L	5.50	5048.8 ppb	5.50	0.11%
QC value within limits for Al 396.153Radial Recovery = 100.98%						
As 188.979†	1242.0	482.41 ug/L	4.111	482.41 ppb	4.111	0.85%
QC value within limits for As 188.979 Recovery = 96.48%						
B 249.677†	25210.7	521.73 ug/L	3.326	521.73 ppb	3.326	0.64%
QC value within limits for B 249.677 Recovery = 104.35%						
Ba 233.527†	68793.1	514.71 ug/L	2.902	514.71 ppb	2.902	0.56%
QC value within limits for Ba 233.527 Recovery = 102.94%						
Be 313.107†	785674.0	264.55 ug/L	1.329	264.55 ppb	1.329	0.50%
QC value within limits for Be 313.107 Recovery = 105.82%						
Ca 317.933Radial†	3360.8	5056.1 ug/L	21.45	5056.1 ppb	21.45	0.42%

QC value within limits for Ca 317.933 Radial Recovery = 101.12%							
Cd 226.502†	47970.3	503.86 ug/L	3.452	503.86 ppb	3.452	0.69%	
QC value within limits for Cd 226.502 Recovery = 100.77%							
Co 228.616†	24916.7	507.05 ug/L	5.226	507.05 ppb	5.226	1.03%	
QC value within limits for Co 228.616 Recovery = 101.41%							
Cr 267.716†	48174.6	494.19 ug/L	2.767	494.19 ppb	2.767	0.56%	
QC value within limits for Cr 267.716 Recovery = 98.84%							
Cu 324.752†	191767.5	515.33 ug/L	2.753	515.33 ppb	2.753	0.53%	
QC value within limits for Cu 324.752 Recovery = 103.07%							
Fe 238.204 Radial†	617.7	5221.4 ug/L	31.99	5221.4 ppb	31.99	0.61%	
QC value within limits for Fe 238.204 Radial Recovery = 104.43%							
K 766.490 Radial†	15052.7	2506.3 ug/L	10.23	2506.3 ppb	10.23	0.41%	
QC value within limits for K 766.490 Radial Recovery = 100.25%							
Mg 279.077 IEC†	168.8	5470.4 ug/L	52.51	5470.4 ppb	52.51	0.96%	
QC value within limits for Mg 279.077 IEC Recovery = 109.41%							
Mn 257.610†	486201.8	520.37 ug/L	2.968	520.37 ppb	2.968	0.57%	
QC value within limits for Mn 257.610 Recovery = 104.07%							
Mo 202.031†	8425.2	547.15 ug/L	5.646	547.15 ppb	5.646	1.03%	
QC value within limits for Mo 202.031 Recovery = 109.43%							
Na 589.592 Radial†	9199.7	2513.5 ug/L	23.11	2513.5 ppb	23.11	0.92%	
QC value within limits for Na 589.592 Radial Recovery = 100.54%							
Ni 231.604†	21321.5	505.93 ug/L	4.977	505.93 ppb	4.977	0.98%	
QC value within limits for Ni 231.604 Recovery = 101.19%							
P 214.914†	4780.7	2440.6 ug/L	30.25	2440.6 ppb	30.25	1.24%	
QC value within limits for P 214.914 Recovery = 97.62%							
Pb 220.353†	4275.9	509.40 ug/L	4.088	509.40 ppb	4.088	0.80%	
QC value within limits for Pb 220.353 Recovery = 101.88%							
S 181.975 Axial†	1988.2	2512.8 ug/L	27.11	2512.8 ppb	27.11	1.08%	
QC value within limits for S 181.975 Axial Recovery = 100.51%							
Sb 206.836†	1608.7	524.80 ug/L	6.961	524.80 ppb	6.961	1.33%	
QC value within limits for Sb 206.836 Recovery = 104.96%							
Se 196.026†	4711.2	2603.1 ug/L	28.38	2603.1 ppb	28.38	1.09%	
QC value within limits for Se 196.026 Recovery = 104.13%							
Si 251.611†	176807.5	4964.2 ug/L	27.62	4964.2 ppb	27.62	0.56%	
QC value within limits for Si 251.611 Recovery = 99.28%							
Sn 189.927†	3169.9	545.26 ug/L	6.749	545.26 ppb	6.749	1.24%	
QC value within limits for Sn 189.927 Recovery = 109.05%							
Sr 421.552†	90604.8	525.88 ug/L	2.028	525.88 ppb	2.028	0.39%	
QC value within limits for Sr 421.552 Recovery = 105.18%							
Ti 334.940†	352490.2	502.85 ug/L	2.786	502.85 ppb	2.786	0.55%	
QC value within limits for Ti 334.940 Recovery = 100.57%							
Tl 190.801†	1757.6	537.64 ug/L	4.810	537.64 ppb	4.810	0.89%	
QC value within limits for Tl 190.801 Recovery = 107.53%							
U 409.014†	20623.0	488.37 ug/L	1.489	488.37 ppb	1.489	0.30%	
QC value within limits for U 409.014 Recovery = 97.67%							
V 292.402†	87025.8	521.14 ug/L	2.932	521.14 ppb	2.932	0.56%	
QC value within limits for V 292.402 Recovery = 104.23%							
Zn 213.857†	58907.1	514.36 ug/L	3.027	514.36 ppb	3.027	0.59%	
QC value within limits for Zn 213.857 Recovery = 102.87%							
SiO2†	177286.2	10710 ug/L	33.2	10710 ppb	33.2	0.31%	
QC value within limits for SiO2 Recovery = 100.14%							
All analyte(s) passed QC.							

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 1/27/2010 10:59:38

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5543.3	5543.3	98.6 %		11:01:32
1	Y RADIAL	5988.8	5988.8	98.78 %		11:01:32
1	Al 396.153Radial†	9.1	5.3	3.7016 ug/L	3.7016 ppb	11:01:52
1	Ca 317.933Radial†	14.0	-4.1	-6.1415 ug/L	-6.1415 ppb	11:01:52
1	Fe 238.204 Radial†	7.6	-2.1	-17.372 ug/L	-17.372 ppb	11:01:52
1	K 766.490 Radial†	2361.8	1.1	0.1841 ug/L	0.1841 ppb	11:01:32
1	Mg 279.077 IEC†	-0.2	-1.8	-56.992 ug/L	-56.992 ppb	11:01:52
1	Na 589.592 Radial†	-1038.5	-57.1	-15.599 ug/L	-15.599 ppb	11:01:32
1	Sr 421.552†	20.9	-12.5	-0.0723 ug/L	-0.0723 ppb	11:01:32
1	Sc 361.383	971663.2	971663.2	100.84 %		11:02:48
1	Y 371.029	862800.2	862800.2	101.15 %		11:02:48
1	Ag 328.068†	368.2	12.6	0.0503 ug/L	0.0503 ppb	11:02:53
1	As 188.979†	-22.3	9.9	3.8164 ug/L	3.8164 ppb	11:03:13
1	B 249.677†	-76.0	357.8	7.4400 ug/L	7.4400 ppb	11:03:13
1	Ba 233.527†	10.7	29.9	0.2227 ug/L	0.2227 ppb	11:03:13
1	Be 313.107†	-4874.3	210.7	0.0710 ug/L	0.0710 ppb	11:02:53
1	Cd 226.502†	-207.6	-0.3	-0.0026 ug/L	-0.0026 ppb	11:03:13
1	Co 228.616†	-75.3	-8.6	-0.1744 ug/L	-0.1744 ppb	11:03:13
1	Cr 267.716†	66.9	-3.3	-0.0318 ug/L	-0.0318 ppb	11:03:13
1	Cu 324.752†	9134.7	12.7	0.0368 ug/L	0.0368 ppb	11:02:53
1	Mn 257.610†	508.9	12.0	0.0134 ug/L	0.0134 ppb	11:03:13
1	Mo 202.031†	25.6	-0.4	-0.0255 ug/L	-0.0255 ppb	11:03:13
1	Ni 231.604†	101.4	5.5	0.1303 ug/L	0.1303 ppb	11:03:13
1	P 214.914†	233.0	-4.0	-2.1153 ug/L	-2.1153 ppb	11:03:13
1	Pb 220.353†	-62.2	-3.7	-0.4362 ug/L	-0.4362 ppb	11:03:13
1	S 181.975 Axial†	40.4	-5.0	-6.3355 ug/L	-6.3355 ppb	11:03:13
1	Sb 206.836†	42.3	8.9	2.7915 ug/L	2.7915 ppb	11:03:13
1	Se 196.026†	-21.3	-0.6	-0.3847 ug/L	-0.3847 ppb	11:03:13
1	Si 251.611†	503.8	41.2	1.1572 ug/L	1.1572 ppb	11:03:13
1	Sn 189.927†	4.3	4.3	0.7361 ug/L	0.7361 ppb	11:03:13
1	Ti 334.940†	-946.8	105.6	0.1574 ug/L	0.1574 ppb	11:02:53
1	Tl 190.801†	-43.5	-5.5	-1.6699 ug/L	-1.6699 ppb	11:03:13
1	U 409.014†	-1828.9	-279.1	-6.6313 ug/L	-6.6313 ppb	11:02:53
1	V 292.402†	-1414.7	12.1	0.0600 ug/L	0.0600 ppb	11:02:53
1	Zn 213.857†	701.9	5.9	0.0531 ug/L	0.0531 ppb	11:03:13
1	SiO2†	508.7	56.6	3.4275 ug/L	3.4275 ppb	11:04:19
2	Sc Radial	5663.7	5663.7	101 %		11:01:57
2	Y RADIAL	6102.9	6102.9	100.7 %		11:01:57
2	Al 396.153Radial†	8.7	4.7	3.2567 ug/L	3.2567 ppb	11:02:17
2	Ca 317.933Radial†	16.6	-1.7	-2.6283 ug/L	-2.6283 ppb	11:02:17
2	Fe 238.204 Radial†	10.5	0.6	5.2567 ug/L	5.2567 ppb	11:02:17
2	K 766.490 Radial†	2422.8	10.6	1.7759 ug/L	1.7759 ppb	11:01:57
2	Mg 279.077 IEC†	-0.2	-1.7	-54.744 ug/L	-54.744 ppb	11:02:17
2	Na 589.592 Radial†	-1004.9	-1.3	-0.3642 ug/L	-0.3642 ppb	11:01:57
2	Sr 421.552†	16.9	-16.9	-0.0980 ug/L	-0.0980 ppb	11:01:57
2	Sc 361.383	974615.7	974615.7	101.15 %		11:03:19
2	Y 371.029	863465.5	863465.5	101.23 %		11:03:19
2	Ag 328.068†	388.1	31.3	0.1302 ug/L	0.1302 ppb	11:03:24
2	As 188.979†	-28.6	3.8	1.4515 ug/L	1.4515 ppb	11:03:44
2	B 249.677†	-72.1	361.8	7.5184 ug/L	7.5184 ppb	11:03:44
2	Ba 233.527†	-13.7	5.7	0.0432 ug/L	0.0432 ppb	11:03:44
2	Be 313.107†	-4976.3	124.6	0.0422 ug/L	0.0422 ppb	11:03:24
2	Cd 226.502†	-207.4	0.5	0.0042 ug/L	0.0042 ppb	11:03:44
2	Co 228.616†	-54.5	12.3	0.2495 ug/L	0.2495 ppb	11:03:44
2	Cr 267.716†	75.2	4.6	0.0488 ug/L	0.0488 ppb	11:03:44
2	Cu 324.752†	8906.9	-240.0	-0.6423 ug/L	-0.6423 ppb	11:03:24
2	Mn 257.610†	494.5	-3.8	-0.0013 ug/L	-0.0013 ppb	11:03:44
2	Mo 202.031†	29.0	2.9	0.1883 ug/L	0.1883 ppb	11:03:44
2	Ni 231.604†	110.3	14.0	0.3326 ug/L	0.3326 ppb	11:03:44

2	P 214.914†	230.2	-7.5	-3.8734 ug/L	-3.8734 ppb	11:03:44
2	Pb 220.353†	-66.2	-7.5	-0.8885 ug/L	-0.8885 ppb	11:03:44
2	S 181.975 Axial†	44.4	-1.1	-1.4112 ug/L	-1.4112 ppb	11:03:44
2	Sb 206.836†	47.0	13.3	4.1866 ug/L	4.1866 ppb	11:03:44
2	Se 196.026†	-26.8	-5.9	-3.2401 ug/L	-3.2401 ppb	11:03:44
2	Si 251.611†	487.1	23.1	0.6481 ug/L	0.6481 ppb	11:03:44
2	Sn 189.927†	1.8	1.8	0.3090 ug/L	0.3090 ppb	11:03:44
2	Ti 334.940†	-928.3	126.8	0.1868 ug/L	0.1868 ppb	11:03:24
2	Tl 190.801†	-42.9	-4.7	-1.4292 ug/L	-1.4292 ppb	11:03:44
2	U 409.014†	-1730.2	-176.0	-4.1836 ug/L	-4.1836 ppb	11:03:24
2	V 292.402†	-1404.0	27.0	0.1518 ug/L	0.1518 ppb	11:03:24
2	Zn 213.857†	699.0	1.0	0.0068 ug/L	0.0068 ppb	11:03:44
2	SiO2†	496.0	42.6	2.5734 ug/L	2.5734 ppb	11:04:24
3	Sc Radial	5556.5	5556.5	98.8 %		11:02:22
3	Y RADIAL	6019.0	6019.0	99.28 %		11:02:22
3	Al 396.153Radial†	10.4	6.6	4.6133 ug/L	4.6133 ppb	11:02:42
3	Ca 317.933Radial†	19.1	1.1	1.5801 ug/L	1.5801 ppb	11:02:42
3	Fe 238.204 Radial†	8.3	-1.3	-11.336 ug/L	-11.336 ppb	11:02:42
3	K 766.490 Radial†	2429.3	63.6	10.617 ug/L	10.617 ppb	11:02:22
3	Mg 279.077 IEC†	3.5	2.0	65.376 ug/L	65.376 ppb	11:02:42
3	Na 589.592 Radial†	-1072.7	-89.2	-24.369 ug/L	-24.369 ppb	11:02:22
3	Sr 421.552†	37.9	4.7	0.0272 ug/L	0.0272 ppb	11:02:22
3	Sc 361.383	955347.8	955347.8	99.150 %		11:03:49
3	Y 371.029	846513.6	846513.6	99.244 %		11:03:49
3	Ag 328.068†	308.5	-41.4	-0.1644 ug/L	-0.1644 ppb	11:03:54
3	As 188.979†	-35.4	-3.6	-1.4058 ug/L	-1.4058 ppb	11:04:14
3	B 249.677†	-96.7	335.6	6.9769 ug/L	6.9769 ppb	11:04:14
3	Ba 233.527†	7.0	26.3	0.1958 ug/L	0.1958 ppb	11:04:14
3	Be 313.107†	-4856.8	145.9	0.0491 ug/L	0.0491 ppb	11:03:54
3	Cd 226.502†	-199.6	4.2	0.0447 ug/L	0.0447 ppb	11:04:14
3	Co 228.616†	-71.5	-6.0	-0.1204 ug/L	-0.1204 ppb	11:04:14
3	Cr 267.716†	82.3	13.2	0.1373 ug/L	0.1373 ppb	11:04:14
3	Cu 324.752†	8850.6	-119.1	-0.3180 ug/L	-0.3180 ppb	11:03:54
3	Mn 257.610†	490.2	1.7	-0.0019 ug/L	-0.0019 ppb	11:04:14
3	Mo 202.031†	31.7	6.2	0.4024 ug/L	0.4024 ppb	11:04:14
3	Ni 231.604†	116.4	22.3	0.5294 ug/L	0.5294 ppb	11:04:14
3	P 214.914†	245.6	12.6	6.7990 ug/L	6.7990 ppb	11:04:14
3	Pb 220.353†	-66.5	-9.2	-1.0857 ug/L	-1.0857 ppb	11:04:14
3	S 181.975 Axial†	38.8	-5.9	-7.4717 ug/L	-7.4717 ppb	11:04:14
3	Sb 206.836†	33.6	0.7	0.2662 ug/L	0.2662 ppb	11:04:14
3	Se 196.026†	-20.5	-0.2	-0.1388 ug/L	-0.1388 ppb	11:04:14
3	Si 251.611†	487.7	33.4	0.9347 ug/L	0.9347 ppb	11:04:14
3	Sn 189.927†	8.6	8.6	1.4809 ug/L	1.4809 ppb	11:04:14
3	Ti 334.940†	-986.1	49.9	0.0683 ug/L	0.0683 ppb	11:03:54
3	Tl 190.801†	-33.3	4.1	1.2544 ug/L	1.2544 ppb	11:04:14
3	U 409.014†	-1728.2	-208.5	-4.9532 ug/L	-4.9532 ppb	11:03:54
3	V 292.402†	-1410.7	-7.8	-0.0469 ug/L	-0.0469 ppb	11:03:54
3	Zn 213.857†	689.1	5.0	0.0422 ug/L	0.0422 ppb	11:04:14
3	SiO2†	501.6	58.1	3.5038 ug/L	3.5038 ppb	11:04:29

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	967208.9	100.38 %		1.077				1.07%
Sc Radial	5587.8	99.4 %		1.18				1.18%
Y 371.029	857593.1	100.54 %		1.126				1.12%
Y RADIAL	6036.9	99.58 %		0.975				0.98%
Ag 328.068†	0.8	0.0054 ug/L		0.15235	0.0054 ppb		0.15235	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	5.5	3.8572 ug/L		0.69157	3.8572 ppb		0.69157	17.93%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.3	1.2874 ug/L		2.61496	1.2874 ppb		2.61496	203.12%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	351.7	7.3117 ug/L		0.29263	7.3117 ppb		0.29263	4.00%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	20.6	0.1539 ug/L		0.09680	0.1539 ppb		0.09680	62.88%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	160.4	0.0541 ug/L		0.01505	0.0541 ppb		0.01505	27.83%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.6	-2.3965 ug/L		3.86602	-2.3965 ppb		3.86602	161.32%

QC value within limits for Ca 317.933 Radial	Recovery = Not calculated		
Cd 226.502†	1.5 0.0154 ug/L	0.02557 0.0154 ppb	0.02557 165.92%
QC value within limits for Cd 226.502	Recovery = Not calculated		
Co 228.616†	-0.8 -0.0151 ug/L	0.23072 -0.0151 ppb	0.23072 >999.9%
QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	4.8 0.0514 ug/L	0.08461 0.0514 ppb	0.08461 164.46%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-115.5 -0.3078 ug/L	0.33969 -0.3078 ppb	0.33969 110.35%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	-0.9 -7.8169 ug/L	11.71747 -7.8169 ppb	11.71747 149.90%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	25.1 4.1925 ug/L	5.62082 4.1925 ppb	5.62082 134.07%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-0.5 -15.453 ug/L	70.0092 -15.453 ppb	70.0092 453.03%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	3.3 0.0034 ug/L	0.00870 0.0034 ppb	0.00870 256.73%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	2.9 0.1884 ug/L	0.21394 0.1884 ppb	0.21394 113.55%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	-49.2 -13.444 ug/L	12.1466 -13.444 ppb	12.1466 90.35%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	13.9 0.3308 ug/L	0.19957 0.3308 ppb	0.19957 60.33%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	0.4 0.2701 ug/L	5.72214 0.2701 ppb	5.72214 >999.9%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-6.8 -0.8035 ug/L	0.33297 -0.8035 ppb	0.33297 41.44%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-4.0 -5.0728 ug/L	3.22153 -5.0728 ppb	3.22153 63.51%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	7.6 2.4148 ug/L	1.98720 2.4148 ppb	1.98720 82.29%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-2.2 -1.2545 ug/L	1.72395 -1.2545 ppb	1.72395 137.42%
QC value within limits for Se 196.026	Recovery = Not calculated		
Si 251.611†	32.6 0.9134 ug/L	0.25522 0.9134 ppb	0.25522 27.94%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	4.9 0.8420 ug/L	0.59307 0.8420 ppb	0.59307 70.44%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-8.2 -0.0477 ug/L	0.06612 -0.0477 ppb	0.06612 138.64%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	94.1 0.1375 ug/L	0.06173 0.1375 ppb	0.06173 44.89%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-2.0 -0.6149 ug/L	1.62333 -0.6149 ppb	1.62333 263.99%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	-221.2 -5.2560 ug/L	1.25161 -5.2560 ppb	1.25161 23.81%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	10.4 0.0550 ug/L	0.09945 0.0550 ppb	0.09945 180.91%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	4.0 0.0340 ug/L	0.02421 0.0340 ppb	0.02421 71.11%
QC value within limits for Zn 213.857	Recovery = Not calculated		
SiO2†	52.5 3.1683 ug/L	0.51653 3.1683 ppb	0.51653 16.30%
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: 1/27/2010 11:06:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5755.3	5755.3	102 %		11:08:34
1	Y RADIAL	6244.3	6244.3	103.0 %		11:08:34
1	Al 396.153Radial†	316.9	305.5	212.91 ug/L	212.91 ppb	11:08:34
1	Ca 317.933Radial†	153.5	131.7	198.07 ug/L	198.07 ppb	11:08:54
1	Fe 238.204 Radial†	19.4	9.2	77.826 ug/L	77.826 ppb	11:08:54
1	K 766.490 Radial†	3367.0	894.5	148.95 ug/L	148.95 ppb	11:08:34
1	Mg 279.077 IEC†	13.0	11.2	362.53 ug/L	362.53 ppb	11:08:54
1	Na 589.592 Radial†	155.4	1147.8	313.60 ug/L	313.60 ppb	11:08:34
1	Sr 421.552†	925.6	870.4	5.0506 ug/L	5.0506 ppb	11:08:34
1	Sc 361.383	983433.7	983433.7	102.06 %		11:09:51
1	Y 371.029	871122.0	871122.0	102.13 %		11:09:51
1	Ag 328.068†	1788.0	1399.4	5.5672 ug/L	5.5672 ppb	11:09:56
1	As 188.979†	41.1	72.3	27.870 ug/L	27.870 ppb	11:10:16
1	B 249.677†	2133.2	2523.2	52.420 ug/L	52.420 ppb	11:09:56
1	Ba 233.527†	677.8	683.4	5.1133 ug/L	5.1133 ppb	11:10:16
1	Be 313.107†	10216.7	15054.3	5.0585 ug/L	5.0585 ppb	11:09:56
1	Cd 226.502†	273.5	473.5	4.9800 ug/L	4.9800 ppb	11:10:16
1	Co 228.616†	173.6	236.2	4.8160 ug/L	4.8160 ppb	11:10:16
1	Cr 267.716†	581.7	500.2	5.1121 ug/L	5.1121 ppb	11:10:16
1	Cu 324.752†	12867.2	3561.3	9.5446 ug/L	9.5446 ppb	11:09:56
1	Mn 257.610†	10497.1	9792.0	10.467 ug/L	10.467 ppb	11:09:56
1	Mo 202.031†	181.8	152.4	9.8959 ug/L	9.8959 ppb	11:10:16
1	Ni 231.604†	309.1	207.8	4.9299 ug/L	4.9299 ppb	11:10:16
1	P 214.914†	509.5	264.1	138.54 ug/L	138.54 ppb	11:10:16
1	Pb 220.353†	28.3	85.7	10.238 ug/L	10.238 ppb	11:10:16
1	S 181.975 Axial†	130.4	82.7	104.56 ug/L	104.56 ppb	11:10:16
1	Sb 206.836†	60.5	26.1	8.5660 ug/L	8.5660 ppb	11:10:16
1	Se 196.026†	35.5	55.2	30.601 ug/L	30.601 ppb	11:10:16
1	Si 251.611†	3960.0	3421.4	96.071 ug/L	96.071 ppb	11:10:16
1	Sn 189.927†	62.3	61.0	10.516 ug/L	10.516 ppb	11:10:16
1	Ti 334.940†	2532.7	3525.9	5.0034 ug/L	5.0034 ppb	11:09:56
1	Tl 190.801†	30.4	67.5	20.568 ug/L	20.568 ppb	11:10:16
1	U 409.014†	719.0	2238.9	53.184 ug/L	53.184 ppb	11:09:51
1	V 292.402†	-603.0	824.2	5.0967 ug/L	5.0967 ppb	11:09:56
1	Zn 213.857†	1862.9	1135.2	9.9458 ug/L	9.9458 ppb	11:10:16
1	SiO2†	4075.4	3545.2	214.19 ug/L	214.19 ppb	11:11:22
2	Sc Radial	5652.4	5652.4	101 %		11:08:59
2	Y RADIAL	6105.6	6105.6	100.7 %		11:08:59
2	Al 396.153Radial†	291.8	286.2	199.44 ug/L	199.44 ppb	11:08:59
2	Ca 317.933Radial†	156.3	137.1	206.33 ug/L	206.33 ppb	11:09:19
2	Fe 238.204 Radial†	20.3	10.5	88.355 ug/L	88.355 ppb	11:09:19
2	K 766.490 Radial†	3365.0	952.5	158.61 ug/L	158.61 ppb	11:08:59
2	Mg 279.077 IEC†	11.2	9.6	311.89 ug/L	311.89 ppb	11:09:19
2	Na 589.592 Radial†	66.7	1062.3	290.24 ug/L	290.24 ppb	11:08:59
2	Sr 421.552†	891.8	853.1	4.9505 ug/L	4.9505 ppb	11:08:59
2	Sc 361.383	978171.5	978171.5	101.52 %		11:10:21
2	Y 371.029	866055.1	866055.1	101.53 %		11:10:21
2	Ag 328.068†	1661.0	1283.7	5.1133 ug/L	5.1133 ppb	11:10:26
2	As 188.979†	47.6	79.0	30.441 ug/L	30.441 ppb	11:10:46
2	B 249.677†	2170.3	2571.0	53.412 ug/L	53.412 ppb	11:10:26
2	Ba 233.527†	694.1	703.0	5.2610 ug/L	5.2610 ppb	11:10:46
2	Be 313.107†	10191.7	15083.6	5.0685 ug/L	5.0685 ppb	11:10:26
2	Cd 226.502†	288.8	490.0	5.1525 ug/L	5.1525 ppb	11:10:46
2	Co 228.616†	164.8	228.5	4.6593 ug/L	4.6593 ppb	11:10:46
2	Cr 267.716†	581.0	502.6	5.1382 ug/L	5.1382 ppb	11:10:46
2	Cu 324.752†	12777.7	3540.9	9.4913 ug/L	9.4913 ppb	11:10:26
2	Mn 257.610†	10386.1	9738.0	10.413 ug/L	10.413 ppb	11:10:26
2	Mo 202.031†	179.3	150.8	9.7956 ug/L	9.7956 ppb	11:10:46
2	Ni 231.604†	352.5	252.2	5.9840 ug/L	5.9840 ppb	11:10:46

2	P 214.914†	521.9	279.0	146.45 ug/L	146.45 ppb	11:10:46
2	Pb 220.353†	36.2	93.6	11.165 ug/L	11.165 ppb	11:10:46
2	S 181.975 Axial†	118.4	71.6	90.492 ug/L	90.492 ppb	11:10:46
2	Sb 206.836†	58.8	24.8	8.1507 ug/L	8.1507 ppb	11:10:46
2	Se 196.026†	38.0	57.9	32.092 ug/L	32.092 ppb	11:10:46
2	Si 251.611†	3961.4	3443.7	96.699 ug/L	96.699 ppb	11:10:46
2	Sn 189.927†	59.9	59.0	10.159 ug/L	10.159 ppb	11:10:46
2	Ti 334.940†	2575.6	3581.5	5.0886 ug/L	5.0886 ppb	11:10:26
2	Tl 190.801†	24.7	62.0	18.912 ug/L	18.912 ppb	11:10:46
2	U 409.014†	648.3	2173.1	51.618 ug/L	51.618 ppb	11:10:21
2	V 292.402†	-527.4	895.6	5.5108 ug/L	5.5108 ppb	11:10:26
2	Zn 213.857†	1863.8	1145.8	10.032 ug/L	10.032 ppb	11:10:46
2	SiO2†	4084.0	3575.1	216.00 ug/L	216.00 ppb	11:11:27
3	Sc Radial	5652.8	5652.8	101 %		11:09:24
3	Y RADIAL	6102.0	6102.0	100.7 %		11:09:24
3	Al 396.153Radial†	296.3	290.8	202.58 ug/L	202.58 ppb	11:09:24
3	Ca 317.933Radial†	155.8	136.7	205.65 ug/L	205.65 ppb	11:09:44
3	Fe 238.204 Radial†	21.2	11.3	95.328 ug/L	95.328 ppb	11:09:44
3	K 766.490 Radial†	3372.1	959.3	159.75 ug/L	159.75 ppb	11:09:24
3	Mg 279.077 IEC†	12.0	10.4	337.77 ug/L	337.77 ppb	11:09:44
3	Na 589.592 Radial†	49.7	1045.4	285.63 ug/L	285.63 ppb	11:09:24
3	Sr 421.552†	862.4	823.9	4.7807 ug/L	4.7807 ppb	11:09:24
3	Sc 361.383	969980.9	969980.9	100.67 %		11:10:51
3	Y 371.029	861155.6	861155.6	100.96 %		11:10:51
3	Ag 328.068†	1644.0	1280.6	5.0991 ug/L	5.0991 ppb	11:10:56
3	As 188.979†	45.5	77.2	29.770 ug/L	29.770 ppb	11:11:17
3	B 249.677†	2208.1	2626.5	54.565 ug/L	54.565 ppb	11:10:56
3	Ba 233.527†	693.2	707.9	5.2967 ug/L	5.2967 ppb	11:11:17
3	Be 313.107†	10383.6	15359.0	5.1611 ug/L	5.1611 ppb	11:10:56
3	Cd 226.502†	265.1	468.9	4.9304 ug/L	4.9304 ppb	11:11:17
3	Co 228.616†	188.8	253.6	5.1711 ug/L	5.1711 ppb	11:11:17
3	Cr 267.716†	576.3	502.8	5.1379 ug/L	5.1379 ppb	11:11:17
3	Cu 324.752†	12865.7	3734.6	10.010 ug/L	10.010 ppb	11:10:56
3	Mn 257.610†	10440.3	9878.3	10.562 ug/L	10.562 ppb	11:10:56
3	Mo 202.031†	184.7	157.7	10.244 ug/L	10.244 ppb	11:11:17
3	Ni 231.604†	332.3	235.1	5.5780 ug/L	5.5780 ppb	11:11:17
3	P 214.914†	513.2	274.7	144.07 ug/L	144.07 ppb	11:11:17
3	Pb 220.353†	24.0	81.8	9.7685 ug/L	9.7685 ppb	11:11:17
3	S 181.975 Axial†	123.8	78.0	98.544 ug/L	98.544 ppb	11:11:17
3	Sb 206.836†	67.1	33.6	10.922 ug/L	10.922 ppb	11:11:17
3	Se 196.026†	41.4	61.6	34.143 ug/L	34.143 ppb	11:11:17
3	Si 251.611†	3953.6	3468.9	97.402 ug/L	97.402 ppb	11:11:17
3	Sn 189.927†	64.4	63.9	11.012 ug/L	11.012 ppb	11:11:17
3	Ti 334.940†	2622.4	3649.5	5.1820 ug/L	5.1820 ppb	11:10:56
3	Tl 190.801†	26.4	63.9	19.472 ug/L	19.472 ppb	11:11:17
3	U 409.014†	770.2	2299.6	54.623 ug/L	54.623 ppb	11:10:51
3	V 292.402†	-591.8	827.2	5.1184 ug/L	5.1184 ppb	11:10:56
3	Zn 213.857†	1849.2	1146.9	10.042 ug/L	10.042 ppb	11:11:17
3	SiO2†	4096.9	3621.9	218.82 ug/L	218.82 ppb	11:11:32

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	977195.4	101.42 %		0.704			0.69%
Sc Radial	5686.8	101 %		1.1			1.04%
Y 371.029	866110.9	101.54 %		0.584			0.58%
Y RADIAL	6150.6	101.5 %		1.34			1.32%
Ag 328.068†	1321.2	5.2598 ug/L		0.26624	5.2598 ppb	0.26624	5.06%
QC value within limits for Ag 328.068 Recovery = 105.20%							
Al 396.153Radial†	294.2	204.98 ug/L		7.050	204.98 ppb	7.050	3.44%
QC value within limits for Al 396.153Radial Recovery = 102.49%							
As 188.979†	76.2	29.361 ug/L		1.3334	29.361 ppb	1.3334	4.54%
QC value within limits for As 188.979 Recovery = 97.87%							
B 249.677†	2573.6	53.466 ug/L		1.0733	53.466 ppb	1.0733	2.01%
QC value within limits for B 249.677 Recovery = 106.93%							
Ba 233.527†	698.1	5.2236 ug/L		0.09726	5.2236 ppb	0.09726	1.86%
QC value within limits for Ba 233.527 Recovery = 104.47%							
Be 313.107†	15165.6	5.0960 ug/L		0.05654	5.0960 ppb	0.05654	1.11%
QC value within limits for Be 313.107 Recovery = 101.92%							
Ca 317.933Radial†	135.2	203.35 ug/L		4.587	203.35 ppb	4.587	2.26%

QC value within limits for Ca 317.933 Radial Recovery = 101.68%							
Cd 226.502†	477.4	5.0210 ug/L	0.11658	5.0210 ppb	0.11658	2.32%	
QC value within limits for Cd 226.502 Recovery = 100.42%							
Co 228.616†	239.4	4.8821 ug/L	0.26221	4.8821 ppb	0.26221	5.37%	
QC value within limits for Co 228.616 Recovery = 97.64%							
Cr 267.716†	501.9	5.1294 ug/L	0.01498	5.1294 ppb	0.01498	0.29%	
QC value within limits for Cr 267.716 Recovery = 102.59%							
Cu 324.752†	3612.3	9.6821 ug/L	0.28562	9.6821 ppb	0.28562	2.95%	
QC value within limits for Cu 324.752 Recovery = 96.82%							
Fe 238.204 Radial†	10.3	87.169 ug/L	8.8109	87.169 ppb	8.8109	10.11%	
QC value within limits for Fe 238.204 Radial Recovery = 87.17%							
K 766.490 Radial†	935.4	155.77 ug/L	5.936	155.77 ppb	5.936	3.81%	
QC value within limits for K 766.490 Radial Recovery = 103.85%							
Mg 279.077 IEC†	10.4	337.40 ug/L	25.320	337.40 ppb	25.320	7.50%	
QC value within limits for Mg 279.077 IEC Recovery = 112.47%							
Mn 257.610†	9802.8	10.481 ug/L	0.0757	10.481 ppb	0.0757	0.72%	
QC value within limits for Mn 257.610 Recovery = 104.81%							
Mo 202.031†	153.6	9.9785 ug/L	0.23534	9.9785 ppb	0.23534	2.36%	
QC value within limits for Mo 202.031 Recovery = 99.78%							
Na 589.592 Radial†	1085.2	296.49 ug/L	14.994	296.49 ppb	14.994	5.06%	
QC value within limits for Na 589.592 Radial Recovery = 98.83%							
Ni 231.604†	231.7	5.4973 ug/L	0.53168	5.4973 ppb	0.53168	9.67%	
QC value within limits for Ni 231.604 Recovery = 109.95%							
P 214.914†	272.6	143.02 ug/L	4.057	143.02 ppb	4.057	2.84%	
QC value within limits for P 214.914 Recovery = 95.35%							
Pb 220.353†	87.0	10.390 ug/L	0.7107	10.390 ppb	0.7107	6.84%	
QC value within limits for Pb 220.353 Recovery = 103.90%							
S 181.975 Axial†	77.4	97.866 ug/L	7.0590	97.866 ppb	7.0590	7.21%	
QC value within limits for S 181.975 Axial Recovery = 97.87%							
Sb 206.836†	28.2	9.2130 ug/L	1.49474	9.2130 ppb	1.49474	16.22%	
QC value within limits for Sb 206.836 Recovery = 92.13%							
Se 196.026†	58.2	32.279 ug/L	1.7784	32.279 ppb	1.7784	5.51%	
QC value within limits for Se 196.026 Recovery = 107.60%							
Si 251.611†	3444.7	96.724 ug/L	0.6658	96.724 ppb	0.6658	0.69%	
QC value within limits for Si 251.611 Recovery = 96.72%							
Sn 189.927†	61.3	10.562 ug/L	0.4287	10.562 ppb	0.4287	4.06%	
QC value within limits for Sn 189.927 Recovery = 105.62%							
Sr 421.552†	849.1	4.9273 ug/L	0.13644	4.9273 ppb	0.13644	2.77%	
QC value within limits for Sr 421.552 Recovery = 98.55%							
Ti 334.940†	3585.7	5.0913 ug/L	0.08936	5.0913 ppb	0.08936	1.76%	
QC value within limits for Ti 334.940 Recovery = 101.83%							
Tl 190.801†	64.5	19.651 ug/L	0.8426	19.651 ppb	0.8426	4.29%	
QC value within limits for Tl 190.801 Recovery = 98.25%							
U 409.014†	2237.2	53.142 ug/L	1.5030	53.142 ppb	1.5030	2.83%	
QC value within limits for U 409.014 Recovery = 106.28%							
V 292.402†	849.0	5.2420 ug/L	0.23309	5.2420 ppb	0.23309	4.45%	
QC value within limits for V 292.402 Recovery = 104.84%							
Zn 213.857†	1142.6	10.007 ug/L	0.0529	10.007 ppb	0.0529	0.53%	
QC value within limits for Zn 213.857 Recovery = 100.07%							
SiO2†	3580.8	216.34 ug/L	2.334	216.34 ppb	2.334	1.08%	
QC value within limits for SiO2 Recovery = 101.57%							
All analyte(s) passed QC.							

Sequence No.: 9

Sample ID: ICSA

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 13

Date Collected: 1/27/2010 11:13:44

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICSA

Rep#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4879.5	4879.5	86.8 %		11:15:42
1	Y RADIAL	5246.8	5246.8	86.54 %		11:15:42
1	Al 396.153Radial†	669537.8	771304.4	538690 ug/L	538690 ppb	11:15:37
1	Ca 317.933Radial†	283991.8	327140.7	492160 ug/L	492160 ppb	11:15:37
1	Fe 238.204 Radial†	19790.0	22788.3	192070 ug/L	192070 ppb	11:15:42
1	K 766.490 Radial†	2265.3	215.7	-128.66 ug/L	-128.66 ppb	11:15:42
1	Mg 279.077 IEC†	13573.4	15635.1	506530 ug/L	506530 ppb	11:15:42
1	Na 589.592 Radial†	-799.9	74.6	20.370 ug/L	20.370 ppb	11:15:42
1	Sr 421.552†	550.1	600.0	-0.1922 ug/L	-0.1922 ppb	11:15:42
1	Sc 361.383	810122.0	810122.0	84.078 %		11:16:09
1	Y 371.029	702327.9	702327.9	82.340 %		11:16:09
1	Ag 328.068†	-10832.0	-13235.9	2.8813 ug/L	2.8813 ppb	11:16:09
1	As 188.979†	-81.7	-65.1	19.725 ug/L	19.725 ppb	11:16:29
1	B 249.677†	693.8	1258.3	-5.0376 ug/L	-5.0376 ppb	11:16:09
1	Ba 233.527†	-552.2	-637.5	1.1244 ug/L	1.1244 ppb	11:16:29
1	Be 313.107†	-5292.1	-1250.0	-0.4828 ug/L	-0.4828 ppb	11:16:09
1	Cd 226.502†	1515.5	2008.0	1.2666 ug/L	1.2666 ppb	11:16:29
1	Co 228.616†	-14.2	49.2	-1.7572 ug/L	-1.7572 ppb	11:16:29
1	Cr 267.716†	-87.2	-173.4	1.9664 ug/L	1.9664 ppb	11:16:29
1	Cu 324.752†	5876.1	-2056.8	4.6191 ug/L	4.6191 ppb	11:16:09
1	Mn 257.610†	-1170.2	-1884.5	-3.7650 ug/L	-3.7650 ppb	11:16:09
1	Mo 202.031†	-207.6	-272.7	3.0712 ug/L	3.0712 ppb	11:16:29
1	Ni 231.604†	193.3	134.8	3.1997 ug/L	3.1997 ppb	11:16:29
1	P 214.914†	191.5	-7.3	-23.841 ug/L	-23.841 ppb	11:16:29
1	Pb 220.353†	-765.3	-852.3	4.7956 ug/L	4.7956 ppb	11:16:29
1	S 181.975 Axial†	80.3	50.5	-37.089 ug/L	-37.089 ppb	11:16:29
1	Sb 206.836†	77.4	59.0	7.4491 ug/L	7.4491 ppb	11:16:29
1	Se 196.026†	-1045.2	-1222.6	-1.2528 ug/L	-1.2528 ppb	11:16:29
1	Si 251.611†	417.4	38.1	1.2880 ug/L	1.2880 ppb	11:16:29
1	Sn 189.927†	-365.0	-434.1	3.4709 ug/L	3.4709 ppb	11:16:29
1	Ti 334.940†	-17426.7	-19682.4	-3.4795 ug/L	-3.4795 ppb	11:16:09
1	Tl 190.801†	-92.2	-72.0	-22.160 ug/L	-22.160 ppb	11:16:29
1	U 409.014†	-16.2	1515.3	14.117 ug/L	14.117 ppb	11:16:09
1	V 292.402†	1305.2	2967.4	-0.8162 ug/L	-0.8162 ppb	11:16:29
1	Zn 213.857†	3298.5	3233.1	9.8291 ug/L	9.8291 ppb	11:16:29
1	SiO2†	467.5	108.3	7.0338 ug/L	7.0338 ppb	11:17:26
2	Sc Radial	4891.7	4891.7	87.0 %		11:15:52
2	Y RADIAL	5277.5	5277.5	87.05 %		11:15:52
2	Al 396.153Radial†	679472.9	780791.2	545310 ug/L	545310 ppb	11:15:47
2	Ca 317.933Radial†	288220.4	331181.3	498240 ug/L	498240 ppb	11:15:47
2	Fe 238.204 Radial†	19916.0	22876.0	192800 ug/L	192800 ppb	11:15:52
2	K 766.490 Radial†	2172.2	102.1	-149.63 ug/L	-149.63 ppb	11:15:52
2	Mg 279.077 IEC†	13615.6	15644.5	506830 ug/L	506830 ppb	11:15:52
2	Na 589.592 Radial†	-810.4	64.8	17.705 ug/L	17.705 ppb	11:15:52
2	Sr 421.552†	569.8	621.1	-0.1151 ug/L	-0.1151 ppb	11:15:52
2	Sc 361.383	812139.9	812139.9	84.287 %		11:16:35
2	Y 371.029	703432.9	703432.9	82.469 %		11:16:35
2	Ag 328.068†	-10869.8	-13248.7	2.9834 ug/L	2.9834 ppb	11:16:35
2	As 188.979†	-84.8	-68.6	18.546 ug/L	18.546 ppb	11:16:55
2	B 249.677†	593.1	1136.7	-7.6850 ug/L	-7.6850 ppb	11:16:35
2	Ba 233.527†	-577.2	-665.6	0.9363 ug/L	0.9363 ppb	11:16:55
2	Be 313.107†	-5236.3	-1168.2	-0.4560 ug/L	-0.4560 ppb	11:16:35
2	Cd 226.502†	1499.9	1985.0	0.9491 ug/L	0.9491 ppb	11:16:55
2	Co 228.616†	-21.1	41.1	-1.9298 ug/L	-1.9298 ppb	11:16:55
2	Cr 267.716†	-120.0	-212.1	1.5831 ug/L	1.5831 ppb	11:16:55
2	Cu 324.752†	5918.9	-2023.3	4.7466 ug/L	4.7466 ppb	11:16:35
2	Mn 257.610†	-1293.8	-2027.7	-3.8575 ug/L	-3.8575 ppb	11:16:35
2	Mo 202.031†	-197.9	-260.6	3.9880 ug/L	3.9880 ppb	11:16:55
2	Ni 231.604†	220.8	166.9	3.9631 ug/L	3.9631 ppb	11:16:55

2	P 214.914†	193.5	-5.6	-21.880 ug/L	-21.880 ppb	11:16:55
2	Pb 220.353†	-769.2	-854.7	5.9669 ug/L	5.9669 ppb	11:16:55
2	S 181.975 Axial†	66.8	34.2	-58.932 ug/L	-58.932 ppb	11:16:55
2	Sb 206.836†	60.4	38.5	0.9045 ug/L	0.9045 ppb	11:16:55
2	Se 196.026†	-1054.0	-1230.0	-2.4399 ug/L	-2.4399 ppb	11:16:55
2	Si 251.611†	468.0	96.8	2.9288 ug/L	2.9288 ppb	11:16:55
2	Sn 189.927†	-354.8	-421.0	6.6597 ug/L	6.6597 ppb	11:16:55
2	Ti 334.940†	-17612.5	-19851.4	-2.9313 ug/L	-2.9313 ppb	11:16:35
2	Tl 190.801†	-86.6	-65.1	-20.060 ug/L	-20.060 ppb	11:16:55
2	U 409.014†	80.8	1630.3	16.767 ug/L	16.767 ppb	11:16:35
2	V 292.402†	1255.9	2905.1	-1.2693 ug/L	-1.2693 ppb	11:16:55
2	Zn 213.857†	3314.4	3242.3	9.8334 ug/L	9.8334 ppb	11:16:55
2	SiO2†	470.4	110.3	7.1332 ug/L	7.1332 ppb	11:17:31
3	Sc Radial	4991.8	4991.8	88.8 %		11:16:02
3	Y RADIAL	5366.7	5366.7	88.52 %		11:16:02
3	Al 396.153Radial†	672646.7	757448.5	529010 ug/L	529010 ppb	11:15:57
3	Ca 317.933Radial†	284982.1	320893.8	482770 ug/L	482770 ppb	11:15:57
3	Fe 238.204 Radial†	20097.2	22621.3	190660 ug/L	190660 ppb	11:16:02
3	K 766.490 Radial†	2214.4	99.6	-144.87 ug/L	-144.87 ppb	11:16:02
3	Mg 279.077 IEC†	13752.1	15484.4	501650 ug/L	501650 ppb	11:16:02
3	Na 589.592 Radial†	-789.9	106.6	29.126 ug/L	29.126 ppb	11:16:02
3	Sr 421.552†	601.9	644.0	0.1335 ug/L	0.1335 ppb	11:16:02
3	Sc 361.383	810579.7	810579.7	84.125 %		11:17:00
3	Y 371.029	700673.4	700673.4	82.146 %		11:17:00
3	Ag 328.068†	-11072.3	-13514.2	1.4478 ug/L	1.4478 ppb	11:17:00
3	As 188.979†	-105.4	-93.3	8.5462 ug/L	8.5462 ppb	11:17:20
3	B 249.677†	648.2	1203.6	-5.9447 ug/L	-5.9447 ppb	11:17:00
3	Ba 233.527†	-573.7	-662.7	0.8932 ug/L	0.8932 ppb	11:17:20
3	Be 313.107†	-5291.0	-1245.1	-0.4816 ug/L	-0.4816 ppb	11:17:00
3	Cd 226.502†	1519.8	2012.1	1.4547 ug/L	1.4547 ppb	11:17:20
3	Co 228.616†	-34.7	24.9	-2.2329 ug/L	-2.2329 ppb	11:17:20
3	Cr 267.716†	-116.9	-208.7	1.5791 ug/L	1.5791 ppb	11:17:20
3	Cu 324.752†	5962.8	-1957.6	4.8130 ug/L	4.8130 ppb	11:17:00
3	Mn 257.610†	-1297.3	-2034.8	-3.8652 ug/L	-3.8652 ppb	11:17:00
3	Mo 202.031†	-217.8	-284.7	2.0715 ug/L	2.0715 ppb	11:17:20
3	Ni 231.604†	210.7	155.4	3.6884 ug/L	3.6884 ppb	11:17:20
3	P 214.914†	181.5	-19.4	-31.584 ug/L	-31.584 ppb	11:17:20
3	Pb 220.353†	-743.5	-825.9	5.8130 ug/L	5.8130 ppb	11:17:20
3	S 181.975 Axial†	95.1	68.0	-13.151 ug/L	-13.151 ppb	11:17:20
3	Sb 206.836†	63.8	42.7	2.6009 ug/L	2.6009 ppb	11:17:20
3	Se 196.026†	-1059.3	-1238.6	-15.334 ug/L	-15.334 ppb	11:17:20
3	Si 251.611†	442.0	67.0	2.1110 ug/L	2.1110 ppb	11:17:20
3	Sn 189.927†	-348.0	-413.7	5.5252 ug/L	5.5252 ppb	11:17:20
3	Ti 334.940†	-17535.0	-19799.5	-4.5066 ug/L	-4.5066 ppb	11:17:00
3	Tl 190.801†	-93.2	-73.1	-22.493 ug/L	-22.493 ppb	11:17:20
3	U 409.014†	-141.3	1366.6	10.743 ug/L	10.743 ppb	11:17:00
3	V 292.402†	1275.2	2930.9	-0.9388 ug/L	-0.9388 ppb	11:17:20
3	Zn 213.857†	3310.2	3244.8	10.065 ug/L	10.065 ppb	11:17:20
3	SiO2†	469.3	110.1	7.1645 ug/L	7.1645 ppb	11:17:36

Mean Data: ICSSA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	810947.2	84.163 %	0.1098			0.13%
Sc Radial	4921.0	87.5 %	1.10			1.25%
Y 371.029	702144.7	82.318 %	0.1628			0.20%
Y RADIAL	5297.0	87.37 %	1.027			1.18%
Ag 328.068†	-13332.9	2.4375 ug/L	0.85861	2.4375 ppb	0.85861	35.23%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	769848.0	537670 ug/L	8198.8	537670 ppb	8198.8	1.52%
QC value within limits for Al 396.153Radial Recovery = 107.53%						
As 188.979†	-75.7	15.606 ug/L	6.1423	15.606 ppb	6.1423	39.36%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	1199.6	-6.2224 ug/L	1.34534	-6.2224 ppb	1.34534	21.62%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-655.3	0.9846 ug/L	0.12294	0.9846 ppb	0.12294	12.49%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-1221.1	-0.4735 ug/L	0.01517	-0.4735 ppb	0.01517	3.20%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	326405.2	491060 ug/L	7797.6	491060 ppb	7797.6	1.59%

QC value within limits for Ca 317.933 Radial Recovery = 98.21%							
Cd	226.502†	2001.7	1.2235 ug/L	0.25552	1.2235 ppb	0.25552	20.89%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	38.4	-1.9733 ug/L	0.24083	-1.9733 ppb	0.24083	12.20%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	-198.1	1.7095 ug/L	0.22241	1.7095 ppb	0.22241	13.01%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-2012.6	4.7262 ug/L	0.09854	4.7262 ppb	0.09854	2.08%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	22761.9	191840 ug/L	1090.7	191840 ppb	1090.7	0.57%
QC value within limits for Fe 238.204 Radial Recovery = 95.92%							
K	766.490 Radial†	139.1	-141.05 ug/L	10.994	-141.05 ppb	10.994	7.79%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	15588.0	505000 ug/L	2909.7	505000 ppb	2909.7	0.58%
QC value within limits for Mg 279.077 IEC Recovery = 101.00%							
Mn	257.610†	-1982.3	-3.8293 ug/L	0.05576	-3.8293 ppb	0.05576	1.46%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	-272.7	3.0436 ug/L	0.95856	3.0436 ppb	0.95856	31.49%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	82.0	22.400 ug/L	5.9750	22.400 ppb	5.9750	26.67%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	152.4	3.6170 ug/L	0.38665	3.6170 ppb	0.38665	10.69%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-10.7	-25.768 ug/L	5.1314	-25.768 ppb	5.1314	19.91%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-844.3	5.5252 ug/L	0.63654	5.5252 ppb	0.63654	11.52%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	50.9	-36.391 ug/L	22.8986	-36.391 ppb	22.8986	62.92%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	46.7	3.6515 ug/L	3.39645	3.6515 ppb	3.39645	93.01%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-1230.4	-6.3424 ug/L	7.80991	-6.3424 ppb	7.80991	123.14%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	67.3	2.1093 ug/L	0.82037	2.1093 ppb	0.82037	38.89%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	-422.9	5.2186 ug/L	1.61637	5.2186 ppb	1.61637	30.97%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	621.7	-0.0580 ug/L	0.17021	-0.0580 ppb	0.17021	293.71%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	-19777.8	-3.6391 ug/L	0.79971	-3.6391 ppb	0.79971	21.98%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	-70.1	-21.571 ug/L	1.3192	-21.571 ppb	1.3192	6.12%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	1504.1	13.876 ug/L	3.0191	13.876 ppb	3.0191	21.76%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	2934.4	-1.0081 ug/L	0.23437	-1.0081 ppb	0.23437	23.25%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	3240.0	9.9093 ug/L	0.13522	9.9093 ppb	0.13522	1.36%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		109.6	7.1105 ug/L	0.06824	7.1105 ppb	0.06824	0.96%
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: 1/27/2010 11:19:47
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4836.6	4836.6	86.0 %		11:21:45
1	Y RADIAL	5261.6	5261.6	86.79 %		11:21:45
1	Al 396.153Radial†	686510.3	797870.3	557220 ug/L	557220 ppb	11:21:40
1	Ca 317.933Radial†	285768.9	332107.3	499640 ug/L	499640 ppb	11:21:40
1	Fe 238.204 Radial†	19497.6	22650.6	190920 ug/L	190920 ppb	11:21:45
1	K 766.490 Radial†	31635.8	34373.7	5561.2 ug/L	5561.2 ppb	11:21:40
1	Mg 279.077 IEC†	13607.3	15813.2	512310 ug/L	512310 ppb	11:21:45
1	Na 589.592 Radial†	16276.7	19913.1	5440.5 ug/L	5440.5 ppb	11:21:45
1	Sr 421.552†	75705.1	87952.0	506.79 ug/L	506.79 ppb	11:21:40
1	Sc 361.383	815184.2	815184.2	84.603 %		11:22:13
1	Y 371.029	701693.9	701693.9	82.266 %		11:22:13
1	Ag 328.068†	48120.0	56525.0	281.67 ug/L	281.67 ppb	11:22:13
1	As 188.979†	1078.0	1306.3	550.78 ug/L	550.78 ppb	11:22:33
1	B 249.677†	22362.7	26865.7	526.09 ug/L	526.09 ppb	11:22:13
1	Ba 233.527†	57590.3	68090.5	515.15 ug/L	515.15 ppb	11:22:13
1	Be 313.107†	626592.7	745671.5	251.13 ug/L	251.13 ppb	11:22:13
1	Cd 226.502†	38950.9	46245.2	466.53 ug/L	466.53 ppb	11:22:33
1	Co 228.616†	19293.4	22870.7	462.61 ug/L	462.61 ppb	11:22:33
1	Cr 267.716†	40550.5	47860.6	494.59 ug/L	494.59 ppb	11:22:13
1	Cu 324.752†	190309.0	215898.0	589.98 ug/L	589.98 ppb	11:22:13
1	Mn 257.610†	398663.6	470724.3	501.42 ug/L	501.42 ppb	11:22:13
1	Mo 202.031†	6331.3	7457.7	504.67 ug/L	504.67 ppb	11:22:33
1	Ni 231.604†	16265.7	19130.9	453.94 ug/L	453.94 ppb	11:22:33
1	P 214.914†	4418.7	4987.7	2524.7 ug/L	2524.7 ppb	11:22:33
1	Pb 220.353†	2662.6	3205.1	491.62 ug/L	491.62 ppb	11:22:33
1	S 181.975 Axial†	1904.5	2206.1	2684.8 ug/L	2684.8 ppb	11:22:33
1	Sb 206.836†	1578.9	1833.1	581.98 ug/L	581.98 ppb	11:22:33
1	Se 196.026†	3050.8	3626.6	2657.2 ug/L	2657.2 ppb	11:22:33
1	Si 251.611†	165889.2	195621.2	5493.9 ug/L	5493.9 ppb	11:22:13
1	Sn 189.927†	2120.8	2506.8	509.66 ug/L	509.66 ppb	11:22:33
1	Ti 334.940†	295132.2	349888.2	524.04 ug/L	524.04 ppb	11:22:13
1	Tl 190.801†	1308.1	1583.8	484.88 ug/L	484.88 ppb	11:22:33
1	U 409.014†	17573.5	22306.3	507.21 ug/L	507.21 ppb	11:22:13
1	V 292.402†	74643.0	89642.4	518.53 ug/L	518.53 ppb	11:22:13
1	Zn 213.857†	52799.6	61718.7	521.36 ug/L	521.36 ppb	11:22:13
1	SiO2†	165781.3	195504.4	11813 ug/L	11813 ppb	11:23:30
2	Sc Radial	4833.4	4833.4	86.0 %		11:21:55
2	Y RADIAL	5224.9	5224.9	86.18 %		11:21:55
2	Al 396.153Radial†	677709.5	788159.4	550430 ug/L	550430 ppb	11:21:50
2	Ca 317.933Radial†	282914.3	329005.7	494970 ug/L	494970 ppb	11:21:50
2	Fe 238.204 Radial†	19323.8	22463.5	189340 ug/L	189340 ppb	11:21:55
2	K 766.490 Radial†	31189.3	33878.6	5480.3 ug/L	5480.3 ppb	11:21:50
2	Mg 279.077 IEC†	13526.2	15729.1	509590 ug/L	509590 ppb	11:21:55
2	Na 589.592 Radial†	16092.7	19711.6	5385.4 ug/L	5385.4 ppb	11:21:55
2	Sr 421.552†	74690.8	86830.3	500.31 ug/L	500.31 ppb	11:21:50
2	Sc 361.383	818711.3	818711.3	84.969 %		11:22:39
2	Y 371.029	706198.8	706198.8	82.794 %		11:22:39
2	Ag 328.068†	48516.9	56747.0	282.10 ug/L	282.10 ppb	11:22:39
2	As 188.979†	1081.1	1304.4	549.69 ug/L	549.69 ppb	11:22:59
2	B 249.677†	22585.5	27014.0	529.44 ug/L	529.44 ppb	11:22:39
2	Ba 233.527†	57865.2	68120.7	515.33 ug/L	515.33 ppb	11:22:39
2	Be 313.107†	630437.1	747005.3	251.57 ug/L	251.57 ppb	11:22:39
2	Cd 226.502†	38963.3	46061.4	464.76 ug/L	464.76 ppb	11:22:59
2	Co 228.616†	19277.6	22754.0	460.25 ug/L	460.25 ppb	11:22:59
2	Cr 267.716†	40757.3	47897.5	494.93 ug/L	494.93 ppb	11:22:39
2	Cu 324.752†	192107.8	217045.8	592.98 ug/L	592.98 ppb	11:22:39
2	Mn 257.610†	399954.3	470213.3	500.83 ug/L	500.83 ppb	11:22:39
2	Mo 202.031†	6331.0	7425.2	502.38 ug/L	502.38 ppb	11:22:59
2	Ni 231.604†	16322.3	19114.6	453.56 ug/L	453.56 ppb	11:22:59

2	P 214.914†	4393.0	4935.1	2495.7 ug/L	2495.7 ppb	11:22:59
2	Pb 220.353†	2653.9	3181.3	487.41 ug/L	487.41 ppb	11:22:59
2	S 181.975 Axial†	1905.5	2197.6	2675.3 ug/L	2675.3 ppb	11:22:59
2	Sb 206.836†	1556.8	1799.1	571.30 ug/L	571.30 ppb	11:22:59
2	Se 196.026†	3073.1	3637.2	2657.4 ug/L	2657.4 ppb	11:22:59
2	Si 251.611†	166714.6	195747.9	5497.5 ug/L	5497.5 ppb	11:22:39
2	Sn 189.927†	2103.9	2476.1	503.65 ug/L	503.65 ppb	11:22:59
2	Ti 334.940†	296236.1	349684.6	523.35 ug/L	523.35 ppb	11:22:39
2	Tl 190.801†	1285.6	1550.7	474.82 ug/L	474.82 ppb	11:22:59
2	U 409.014†	17529.1	22164.5	504.02 ug/L	504.02 ppb	11:22:39
2	V 292.402†	74781.0	89424.8	517.38 ug/L	517.38 ppb	11:22:39
2	Zn 213.857†	53292.6	62030.0	524.25 ug/L	524.25 ppb	11:22:39
2	SiO2†	165352.9	194156.0	11732 ug/L	11732 ppb	11:23:35
3	Sc Radial	4799.5	4799.5	85.4 %		11:22:05
3	Y RADIAL	5185.8	5185.8	85.54 %		11:22:05
3	Al 396.153Radial†	675294.1	790893.3	552340 ug/L	552340 ppb	11:22:00
3	Ca 317.933Radial†	281666.4	329866.4	496260 ug/L	496260 ppb	11:22:00
3	Fe 238.204 Radial†	19238.9	22522.7	189840 ug/L	189840 ppb	11:22:05
3	K 766.490 Radial†	31085.9	34013.5	5502.3 ug/L	5502.3 ppb	11:22:00
3	Mg 279.077 IEC†	13436.9	15735.6	509800 ug/L	509800 ppb	11:22:05
3	Na 589.592 Radial†	16080.8	19829.7	5417.7 ug/L	5417.7 ppb	11:22:05
3	Sr 421.552†	74495.7	87214.8	502.53 ug/L	502.53 ppb	11:22:00
3	Sc 361.383	816735.4	816735.4	84.764 %		11:23:05
3	Y 371.029	703892.2	703892.2	82.523 %		11:23:05
3	Ag 328.068†	48436.9	56790.8	282.42 ug/L	282.42 ppb	11:23:05
3	As 188.979†	1084.9	1312.0	552.74 ug/L	552.74 ppb	11:23:25
3	B 249.677†	22471.7	26944.0	527.90 ug/L	527.90 ppb	11:23:05
3	Ba 233.527†	57675.2	68061.4	514.90 ug/L	514.90 ppb	11:23:05
3	Be 313.107†	629366.2	747536.9	251.75 ug/L	251.75 ppb	11:23:05
3	Cd 226.502†	39011.9	46229.6	466.48 ug/L	466.48 ppb	11:23:25
3	Co 228.616†	19260.9	22789.1	460.96 ug/L	460.96 ppb	11:23:25
3	Cr 267.716†	40668.0	47908.2	495.05 ug/L	495.05 ppb	11:23:05
3	Cu 324.752†	191969.1	217429.2	594.04 ug/L	594.04 ppb	11:23:05
3	Mn 257.610†	399278.3	470554.5	501.24 ug/L	501.24 ppb	11:23:05
3	Mo 202.031†	6318.7	7428.7	502.67 ug/L	502.67 ppb	11:23:25
3	Ni 231.604†	16294.6	19128.4	453.88 ug/L	453.88 ppb	11:23:25
3	P 214.914†	4399.9	4955.7	2506.5 ug/L	2506.5 ppb	11:23:25
3	Pb 220.353†	2640.3	3172.9	486.79 ug/L	486.79 ppb	11:23:25
3	S 181.975 Axial†	1891.6	2186.5	2661.0 ug/L	2661.0 ppb	11:23:25
3	Sb 206.836†	1549.9	1795.4	570.14 ug/L	570.14 ppb	11:23:25
3	Se 196.026†	3054.8	3624.4	2652.1 ug/L	2652.1 ppb	11:23:25
3	Si 251.611†	166452.9	195913.8	5502.1 ug/L	5502.1 ppb	11:23:05
3	Sn 189.927†	2112.2	2491.9	506.58 ug/L	506.58 ppb	11:23:25
3	Ti 334.940†	295918.2	350153.0	524.18 ug/L	524.18 ppb	11:23:05
3	Tl 190.801†	1298.5	1569.6	480.57 ug/L	480.57 ppb	11:23:25
3	U 409.014†	17490.8	22169.2	504.07 ug/L	504.07 ppb	11:23:05
3	V 292.402†	74660.9	89495.9	517.74 ug/L	517.74 ppb	11:23:05
3	Zn 213.857†	53257.9	62140.8	525.17 ug/L	525.17 ppb	11:23:05
3	SiO2†	166550.1	196039.2	11846 ug/L	11846 ppb	11:23:41

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	816876.9	84.779 %		0.1835			0.22%
Sc Radial	4823.2	85.8 %		0.37			0.43%
Y 371.029	703928.3	82.527 %		0.2641			0.32%
Y RADIAL	5224.1	86.17 %		0.625			0.73%
Ag 328.068†	56687.6	282.06 ug/L		0.378	282.06 ppb	0.378	0.13%
QC value within limits for Ag 328.068 Recovery = 112.83%							
Al 396.153Radial†	792307.7	553330 ug/L		3497.3	553330 ppb	3497.3	0.63%
QC value within limits for Al 396.153Radial Recovery = 110.67%							
As 188.979†	1307.5	551.07 ug/L		1.544	551.07 ppb	1.544	0.28%
QC value within limits for As 188.979 Recovery = 110.21%							
B 249.677†	26941.2	527.81 ug/L		1.675	527.81 ppb	1.675	0.32%
QC value within limits for B 249.677 Recovery = 105.56%							
Ba 233.527†	68090.9	515.12 ug/L		0.214	515.12 ppb	0.214	0.04%
QC value within limits for Ba 233.527 Recovery = 103.02%							
Be 313.107†	746737.9	251.48 ug/L		0.322	251.48 ppb	0.322	0.13%
QC value within limits for Be 313.107 Recovery = 100.59%							
Ca 317.933Radial†	330326.5	496960 ug/L		2408.8	496960 ppb	2408.8	0.48%

QC value within limits for Ca 317.933 Radial Recovery = 99.39%							
Cd	226.502†	46178.7	465.93 ug/L	1.006	465.93 ppb	1.006	0.22%
QC value within limits for Cd 226.502 Recovery = 93.19%							
Co	228.616†	22804.6	461.27 ug/L	1.209	461.27 ppb	1.209	0.26%
QC value within limits for Co 228.616 Recovery = 92.25%							
Cr	267.716†	47888.8	494.86 ug/L	0.242	494.86 ppb	0.242	0.05%
QC value within limits for Cr 267.716 Recovery = 98.97%							
Cu	324.752†	216791.0	592.33 ug/L	2.106	592.33 ppb	2.106	0.36%
QC value within limits for Cu 324.752 Recovery = 118.47%							
Fe	238.204 Radial†	22545.6	190030 ug/L	806.4	190030 ppb	806.4	0.42%
QC value within limits for Fe 238.204 Radial Recovery = 95.02%							
K	766.490 Radial†	34088.6	5514.6 ug/L	41.86	5514.6 ppb	41.86	0.76%
QC value within limits for K 766.490 Radial Recovery = 110.29%							
Mg	279.077 IEC†	15759.3	510560 ug/L	1514.3	510560 ppb	1514.3	0.30%
QC value within limits for Mg 279.077 IEC Recovery = 102.11%							
Mn	257.610†	470497.4	501.16 ug/L	0.302	501.16 ppb	0.302	0.06%
QC value within limits for Mn 257.610 Recovery = 100.23%							
Mo	202.031†	7437.2	503.24 ug/L	1.247	503.24 ppb	1.247	0.25%
QC value within limits for Mo 202.031 Recovery = 100.65%							
Na	589.592 Radial†	19818.1	5414.5 ug/L	27.66	5414.5 ppb	27.66	0.51%
QC value within limits for Na 589.592 Radial Recovery = 108.29%							
Ni	231.604†	19124.6	453.79 ug/L	0.207	453.79 ppb	0.207	0.05%
QC value within limits for Ni 231.604 Recovery = 90.76%							
P	214.914†	4959.5	2509.0 ug/L	14.69	2509.0 ppb	14.69	0.59%
QC value within limits for P 214.914 Recovery = 100.36%							
Pb	220.353†	3186.4	488.61 ug/L	2.631	488.61 ppb	2.631	0.54%
QC value within limits for Pb 220.353 Recovery = 97.72%							
S	181.975 Axial†	2196.7	2673.7 ug/L	12.00	2673.7 ppb	12.00	0.45%
QC value within limits for S 181.975 Axial Recovery = 106.95%							
Sb	206.836†	1809.2	574.47 ug/L	6.525	574.47 ppb	6.525	1.14%
QC value within limits for Sb 206.836 Recovery = 114.89%							
Se	196.026†	3629.4	2655.6 ug/L	2.97	2655.6 ppb	2.97	0.11%
QC value within limits for Se 196.026 Recovery = 106.22%							
Si	251.611†	195760.9	5497.8 ug/L	4.14	5497.8 ppb	4.14	0.08%
QC value within limits for Si 251.611 Recovery = 109.96%							
Sn	189.927†	2491.6	506.63 ug/L	3.003	506.63 ppb	3.003	0.59%
QC value within limits for Sn 189.927 Recovery = 101.33%							
Sr	421.552†	87332.4	503.21 ug/L	3.291	503.21 ppb	3.291	0.65%
QC value within limits for Sr 421.552 Recovery = 100.64%							
Ti	334.940†	349908.6	523.86 ug/L	0.443	523.86 ppb	0.443	0.08%
QC value within limits for Ti 334.940 Recovery = 104.77%							
Tl	190.801†	1568.1	480.09 ug/L	5.046	480.09 ppb	5.046	1.05%
QC value within limits for Tl 190.801 Recovery = 96.02%							
U	409.014†	22213.3	505.10 ug/L	1.826	505.10 ppb	1.826	0.36%
QC value within limits for U 409.014 Recovery = 101.02%							
V	292.402†	89521.1	517.88 ug/L	0.586	517.88 ppb	0.586	0.11%
QC value within limits for V 292.402 Recovery = 103.58%							
Zn	213.857†	61963.1	523.59 ug/L	1.991	523.59 ppb	1.991	0.38%
QC value within limits for Zn 213.857 Recovery = 104.72%							
SiO2†		195233.2	11797 ug/L	58.7	11797 ppb	58.7	0.50%
QC value within limits for SiO2 Recovery = 110.30%							
All analyte(s) passed QC.							

Sequence No.: 11

Sample ID: LR1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 15

Date Collected: 1/27/2010 11:25:51

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4756.5	4756.5	84.6 %		11:27:49
1	Y RADIAL	5197.0	5197.0	85.72 %		11:27:49
1	Al 396.153Radial†	666414.2	787557.0	550040 ug/L	550040 ppb	11:27:44
1	Ca 317.933Radial†	279381.8	330152.0	496690 ug/L	496690 ppb	11:27:44
1	Fe 238.204 Radial†	45456.7	53710.4	452680 ug/L	452680 ppb	11:27:49
1	K 766.490 Radial†	2647.3	734.6	-251.96 ug/L	-251.96 ppb	11:27:49
1	Mg 279.077 IEC†	13310.6	15728.8	509300 ug/L	509300 ppb	11:27:49
1	Na 589.592 Radial†	1653492.8	1955075.6	534150 ug/L	534150 ppb	11:27:44
1	Sr 421.552†	811.4	925.2	1.6614 ug/L	1.6614 ppb	11:27:49
1	Sc 361.383	789849.0	789849.0	81.974 %		11:28:17
1	Y 371.029	684149.4	684149.4	80.209 %		11:28:17
1	Ag 328.068†	-25744.9	-31758.8	1.4567 ug/L	1.4567 ppb	11:28:17
1	As 188.979†	-215.8	-231.3	16.845 ug/L	16.845 ppb	11:28:37
1	B 249.677†	1916.3	2770.8	-15.938 ug/L	-15.938 ppb	11:28:17
1	Ba 233.527†	-1644.5	-1986.9	-0.9907 ug/L	-0.9907 ppb	11:28:37
1	Be 313.107†	-12854.9	-10637.5	-3.6314 ug/L	-3.6314 ppb	11:28:17
1	Cd 226.502†	3837.9	4887.3	7.4871 ug/L	7.4871 ppb	11:28:37
1	Co 228.616†	199.2	309.1	-0.2895 ug/L	-0.2895 ppb	11:28:37
1	Cr 267.716†	121.2	78.1	3.7473 ug/L	3.7473 ppb	11:28:37
1	Cu 324.752†	2855.7	-5562.0	0.7855 ug/L	0.7855 ppb	11:28:17
1	Mn 257.610†	-27380.2	-33894.0	-12.389 ug/L	-12.389 ppb	11:28:17
1	Mo 202.031†	-477.2	-607.9	1.6052 ug/L	1.6052 ppb	11:28:37
1	Ni 231.604†	316.7	291.3	6.9117 ug/L	6.9117 ppb	11:28:37
1	P 214.914†	602.6	500.1	40.541 ug/L	40.541 ppb	11:28:37
1	Pb 220.353†	-531.9	-590.9	13.388 ug/L	13.388 ppb	11:28:37
1	S 181.975 Axial†	102.4	79.9	-2.0939 ug/L	-2.0939 ppb	11:28:37
1	Sb 206.836†	46.0	23.0	1.9199 ug/L	1.9199 ppb	11:28:37
1	Se 196.026†	-2511.0	-3042.6	-136.99 ug/L	-136.99 ppb	11:28:37
1	Si 251.611†	-481.8	-1046.1	-28.927 ug/L	-28.927 ppb	11:28:37
1	Sn 189.927†	-377.1	-460.1	4.0787 ug/L	4.0787 ppb	11:28:37
1	Ti 334.940†	-17325.4	-20090.9	-10.216 ug/L	-10.216 ppb	11:28:17
1	Tl 190.801†	-104.1	-89.4	-27.656 ug/L	-27.656 ppb	11:28:37
1	U 409.014†	511496.8	625512.0	14813 ug/L	14813 ppb	11:28:17
1	V 292.402†	2940.5	5002.2	1.3704 ug/L	1.3704 ppb	11:28:17
1	Zn 213.857†	6427.2	7150.5	19.038 ug/L	19.038 ppb	11:28:37
1	SiO2†	-571.4	-1144.8	-68.179 ug/L	-68.179 ppb	11:29:34
2	Sc Radial	4755.5	4755.5	84.6 %		11:27:59
2	Y RADIAL	5189.5	5189.5	85.60 %		11:27:59
2	Al 396.153Radial†	664032.2	784901.3	548180 ug/L	548180 ppb	11:27:54
2	Ca 317.933Radial†	278755.5	329478.8	495680 ug/L	495680 ppb	11:27:54
2	Fe 238.204 Radial†	45326.7	53567.7	451480 ug/L	451480 ppb	11:27:59
2	K 766.490 Radial†	2692.7	788.9	-241.28 ug/L	-241.28 ppb	11:27:59
2	Mg 279.077 IEC†	13330.2	15755.2	510150 ug/L	510150 ppb	11:27:59
2	Na 589.592 Radial†	1642947.9	1943008.1	530850 ug/L	530850 ppb	11:27:54
2	Sr 421.552†	815.2	929.9	1.6963 ug/L	1.6963 ppb	11:27:59
2	Sc 361.383	796642.9	796642.9	82.679 %		11:28:42
2	Y 371.029	688571.5	688571.5	80.727 %		11:28:42
2	Ag 328.068†	-25894.1	-31671.5	1.4168 ug/L	1.4168 ppb	11:28:42
2	As 188.979†	-197.0	-206.3	26.191 ug/L	26.191 ppb	11:29:03
2	B 249.677†	1830.3	2646.9	-18.318 ug/L	-18.318 ppb	11:28:42
2	Ba 233.527†	-1570.7	-1880.5	-0.2333 ug/L	-0.2333 ppb	11:29:03
2	Be 313.107†	-12932.5	-10597.5	-3.6181 ug/L	-3.6181 ppb	11:28:42
2	Cd 226.502†	3844.0	4854.8	7.2723 ug/L	7.2723 ppb	11:29:03
2	Co 228.616†	196.5	303.7	-0.3842 ug/L	-0.3842 ppb	11:29:03
2	Cr 267.716†	113.3	67.3	3.6068 ug/L	3.6068 ppb	11:29:03
2	Cu 324.752†	2850.5	-5598.1	0.6169 ug/L	0.6169 ppb	11:28:42
2	Mn 257.610†	-27816.1	-34136.2	-12.802 ug/L	-12.802 ppb	11:28:42
2	Mo 202.031†	-500.4	-631.0	0.0002 ug/L	0.0002 ppb	11:29:03
2	Ni 231.604†	305.4	274.3	6.5081 ug/L	6.5081 ppb	11:29:03

2	P 214.914†	658.9	561.8	73.850 ug/L	73.850 ppb	11:29:03
2	Pb 220.353†	-537.4	-592.0	12.953 ug/L	12.953 ppb	11:29:03
2	S 181.975 Axial†	100.8	76.9	-5.5197 ug/L	-5.5197 ppb	11:29:03
2	Sb 206.836†	44.9	21.1	1.2861 ug/L	1.2861 ppb	11:29:03
2	Se 196.026†	-2502.7	-3006.5	-121.26 ug/L	-121.26 ppb	11:29:03
2	Si 251.611†	-501.5	-1065.0	-29.437 ug/L	-29.437 ppb	11:29:03
2	Sn 189.927†	-392.4	-474.7	1.3977 ug/L	1.3977 ppb	11:29:03
2	Ti 334.940†	-17509.3	-20133.0	-10.487 ug/L	-10.487 ppb	11:29:03
2	Tl 190.801†	-126.6	-115.5	-35.602 ug/L	-35.602 ppb	11:29:03
2	U 409.014†	516396.4	626116.7	14827 ug/L	14827 ppb	11:28:42
2	V 292.402†	2969.5	5006.7	1.5948 ug/L	1.5948 ppb	11:28:42
2	Zn 213.857†	6484.3	7152.7	19.176 ug/L	19.176 ppb	11:29:03
2	SiO2†	-569.1	-1136.1	-67.612 ug/L	-67.612 ppb	11:29:39
3	Sc Radial	4829.5	4829.5	85.9 %		11:28:10
3	Y RADIAL	5273.1	5273.1	86.98 %		11:28:10
3	Al 396.153Radial†	663877.5	772700.7	539660 ug/L	539660 ppb	11:28:05
3	Ca 317.933Radial†	278120.1	323693.1	486980 ug/L	486980 ppb	11:28:05
3	Fe 238.204 Radial†	46034.5	53571.0	451510 ug/L	451510 ppb	11:28:10
3	K 766.490 Radial†	2549.3	573.2	-271.09 ug/L	-271.09 ppb	11:28:10
3	Mg 279.077 IEC†	13513.4	15727.0	509240 ug/L	509240 ppb	11:28:10
3	Na 589.592 Radial†	1642310.8	1912525.2	522520 ug/L	522520 ppb	11:28:05
3	Sr 421.552†	845.2	950.1	1.8784 ug/L	1.8784 ppb	11:28:10
3	Sc 361.383	794909.4	794909.4	82.499 %		11:29:08
3	Y 371.029	687126.0	687126.0	80.558 %		11:29:08
3	Ag 328.068†	-25929.2	-31782.3	1.0951 ug/L	1.0951 ppb	11:29:08
3	As 188.979†	-185.3	-192.5	31.486 ug/L	31.486 ppb	11:29:28
3	B 249.677†	1982.8	2836.5	-14.381 ug/L	-14.381 ppb	11:29:08
3	Ba 233.527†	-1598.5	-1918.4	-0.5177 ug/L	-0.5177 ppb	11:29:28
3	Be 313.107†	-12783.8	-10451.4	-3.5694 ug/L	-3.5694 ppb	11:29:08
3	Cd 226.502†	3832.0	4850.4	7.2238 ug/L	7.2238 ppb	11:29:28
3	Co 228.616†	197.5	305.5	-0.3466 ug/L	-0.3466 ppb	11:29:28
3	Cr 267.716†	98.4	49.5	3.4222 ug/L	3.4222 ppb	11:29:28
3	Cu 324.752†	2794.1	-5658.9	0.4528 ug/L	0.4528 ppb	11:29:08
3	Mn 257.610†	-27788.4	-34176.1	-12.804 ug/L	-12.804 ppb	11:29:08
3	Mo 202.031†	-485.9	-614.7	0.9564 ug/L	0.9564 ppb	11:29:28
3	Ni 231.604†	306.5	276.4	6.5597 ug/L	6.5597 ppb	11:29:28
3	P 214.914†	600.4	492.7	35.024 ug/L	35.024 ppb	11:29:28
3	Pb 220.353†	-504.3	-553.4	15.551 ug/L	15.551 ppb	11:29:28
3	S 181.975 Axial†	120.7	101.3	26.906 ug/L	26.906 ppb	11:29:28
3	Sb 206.836†	58.1	37.4	6.6651 ug/L	6.6651 ppb	11:29:28
3	Se 196.026†	-2524.6	-3039.7	-139.93 ug/L	-139.93 ppb	11:29:28
3	Si 251.611†	-475.4	-1034.7	-28.600 ug/L	-28.600 ppb	11:29:28
3	Sn 189.927†	-380.1	-460.8	2.4621 ug/L	2.4621 ppb	11:29:28
3	Ti 334.940†	-17531.5	-20206.2	-11.687 ug/L	-11.687 ppb	11:29:08
3	Tl 190.801†	-92.9	-74.9	-23.258 ug/L	-23.258 ppb	11:29:28
3	U 409.014†	515403.3	626275.0	14831 ug/L	14831 ppb	11:29:08
3	V 292.402†	2794.7	4802.6	0.3906 ug/L	0.3906 ppb	11:29:08
3	Zn 213.857†	6415.9	7087.0	18.595 ug/L	18.595 ppb	11:29:28
3	SiO2†	-517.8	-1075.4	-63.970 ug/L	-63.970 ppb	11:29:44

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	793800.5	82.384 %	0.3664			0.44%
Sc Radial	4780.5	85.0 %	0.75			0.89%
Y 371.029	686615.6	80.498 %	0.2643			0.33%
Y RADIAL	5219.9	86.10 %	0.763			0.89%
Ag 328.068†	-31737.5	1.3228 ug/L	0.19824	1.3228 ppb	0.19824	14.99%
Al 396.153Radial†	781719.7	545960 ug/L	5533.3	545960 ppb	5533.3	1.01%
QC value within limits for Al 396.153Radial Recovery = 109.19%						
As 188.979†	-210.0	24.841 ug/L	7.4132	24.841 ppb	7.4132	29.84%
B 249.677†	2751.4	-16.212 ug/L	1.9825	-16.212 ppb	1.9825	12.23%
Ba 233.527†	-1928.6	-0.5806 ug/L	0.38260	-0.5806 ppb	0.38260	65.90%
Be 313.107†	-10562.2	-3.6063 ug/L	0.03265	-3.6063 ppb	0.03265	0.91%
Ca 317.933Radial†	327774.6	493120 ug/L	5341.9	493120 ppb	5341.9	1.08%
QC value within limits for Ca 317.933Radial Recovery = 98.62%						
Cd 226.502†	4864.2	7.3277 ug/L	0.14011	7.3277 ppb	0.14011	1.91%
Co 228.616†	306.1	-0.3401 ug/L	0.04768	-0.3401 ppb	0.04768	14.02%
Cr 267.716†	65.0	3.5921 ug/L	0.16303	3.5921 ppb	0.16303	4.54%
Cu 324.752†	-5606.3	0.6184 ug/L	0.16638	0.6184 ppb	0.16638	26.90%

Fe 238.204 Radial†	53616.4	451890 ug/L	686.7	451890 ppb	686.7	0.15%
QC value within limits for Fe 238.204 Radial Recovery = 90.38%						
K 766.490 Radial†	698.9	-254.78 ug/L	15.103	-254.78 ppb	15.103	5.93%
Mg 279.077 IEC†	15737.0	509560 ug/L	510.6	509560 ppb	510.6	0.10%
QC value within limits for Mg 279.077 IEC Recovery = 101.91%						
Mn 257.610†	-34068.8	-12.665 ug/L	0.2392	-12.665 ppb	0.2392	1.89%
Mo 202.031†	-617.9	0.8540 ug/L	0.80739	0.8540 ppb	0.80739	94.55%
Na 589.592 Radial†	1936869.6	529170 ug/L	5991.3	529170 ppb	5991.3	1.13%
QC value within limits for Na 589.592 Radial Recovery = 105.83%						
Ni 231.604†	280.7	6.6598 ug/L	0.21961	6.6598 ppb	0.21961	3.30%
P 214.914†	518.2	49.805 ug/L	21.0058	49.805 ppb	21.0058	42.18%
Pb 220.353†	-578.8	13.964 ug/L	1.3914	13.964 ppb	1.3914	9.96%
S 181.975 Axial†	86.0	6.4310 ug/L	17.81485	6.4310 ppb	17.81485	277.02%
Sb 206.836†	27.2	3.2904 ug/L	2.93974	3.2904 ppb	2.93974	89.34%
Se 196.026†	-3029.6	-132.73 ug/L	10.038	-132.73 ppb	10.038	7.56%
Si 251.611†	-1048.6	-28.988 ug/L	0.4219	-28.988 ppb	0.4219	1.46%
Sn 189.927†	-465.2	2.6462 ug/L	1.34994	2.6462 ppb	1.34994	51.01%
Sr 421.552†	935.0	1.7454 ug/L	0.11652	1.7454 ppb	0.11652	6.68%
Ti 334.940†	-20143.4	-10.797 ug/L	0.7827	-10.797 ppb	0.7827	7.25%
Tl 190.801†	-93.3	-28.839 ug/L	6.2565	-28.839 ppb	6.2565	21.69%
U 409.014†	625967.9	14824 ug/L	9.6	14824 ppb	9.6	0.07%
QC value within limits for U 409.014 Recovery = 98.82%						
V 292.402†	4937.1	1.1186 ug/L	0.64037	1.1186 ppb	0.64037	57.25%
Zn 213.857†	7130.1	18.936 ug/L	0.3039	18.936 ppb	0.3039	1.60%
SiO2†	-1118.8	-66.587 ug/L	2.2838	-66.587 ppb	2.2838	3.43%
All analyte(s) passed QC.						

Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 16

Date Collected: 1/27/2010 11:31:55

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5419.1	5419.1	96.4 %		11:33:53
1	Y RADIAL	5794.7	5794.7	95.58 %		11:33:53
1	Al 396.153Radial†	649.8	670.1	-5.4664 ug/L	-5.4664 ppb	11:33:53
1	Ca 317.933Radial†	107.7	93.5	140.67 ug/L	140.67 ppb	11:34:13
1	Fe 238.204 Radial†	-22.7	-33.3	7.0890 ug/L	7.0890 ppb	11:34:13
1	K 766.490 Radial†	1748404.4	1811190.5	301970 ug/L	301970 ppb	11:33:48
1	Mg 279.077 IEC†	-3.0	-4.6	-46.374 ug/L	-46.374 ppb	11:34:13
1	Na 589.592 Radial†	-308.9	675.6	184.59 ug/L	184.59 ppb	11:33:53
1	Sr 421.552†	1638707.2	1699764.0	9866.3 ug/L	9866.3 ppb	11:33:48
1	Sc 361.383	932871.5	932871.5	96.817 %		11:35:30
1	Y 371.029	804282.6	804282.6	94.293 %		11:35:30
1	Ag 328.068†	-8592.8	-9227.7	4.3807 ug/L	4.3807 ppb	11:35:35
1	As 188.979†	24805.5	25653.1	9938.1 ug/L	9938.1 ppb	11:35:35
1	B 249.677†	239067.2	247359.9	5114.1 ug/L	5114.1 ppb	11:35:30
1	Ba 233.527†	1758882.1	1816726.8	13581 ug/L	13581 ppb	11:35:30
1	Be 313.107†	8332563.3	8611551.3	2909.5 ug/L	2909.5 ppb	11:35:23
1	Cd 226.502†	916168.9	946494.6	9950.5 ug/L	9950.5 ppb	11:35:30
1	Co 228.616†	458355.3	473490.5	9629.9 ug/L	9629.9 ppb	11:35:35
1	Cr 267.716†	2312809.5	2388776.4	24488 ug/L	24488 ppb	11:35:30
1	Cu 324.752†	7435559.1	7670967.0	20614 ug/L	20614 ppb	11:35:23
1	Mn 257.610†	8716353.7	9002422.4	9629.7 ug/L	9629.7 ppb	11:35:23
1	Mo 202.031†	145692.8	150456.9	9762.7 ug/L	9762.7 ppb	11:35:35
1	Ni 231.604†	411247.4	424672.6	10077 ug/L	10077 ppb	11:35:30
1	P 214.914†	33059.8	33911.6	14028 ug/L	14028 ppb	11:35:35
1	Pb 220.353†	200289.1	206931.8	24580 ug/L	24580 ppb	11:35:35
1	S 181.975 Axial†	39540.6	40795.5	51579 ug/L	51579 ppb	11:35:35
1	Sb 206.836†	32748.8	33792.3	10976 ug/L	10976 ppb	11:35:35
1	Se 196.026†	18141.5	18758.5	10317 ug/L	10317 ppb	11:35:35
1	Si 251.611†	1681437.9	1736258.9	48694 ug/L	48694 ppb	11:35:30
1	Sn 189.927†	59910.3	61879.9	10628 ug/L	10628 ppb	11:35:35
1	Ti 334.940†	6685565.7	6906406.7	9846.8 ug/L	9846.8 ppb	11:35:23
1	Tl 190.801†	31758.6	32840.3	10047 ug/L	10047 ppb	11:35:35
1	U 409.014†	223.7	1765.6	-12.779 ug/L	-12.779 ppb	11:35:35
1	V 292.402†	1670293.4	1726621.5	10313 ug/L	10313 ppb	11:35:30
1	Zn 213.857†	1568631.7	1619512.4	14171 ug/L	14171 ppb	11:35:30
1	SiO2†	1658088.7	1712152.7	103310 ug/L	103310 ppb	11:36:23
2	Sc Radial	5424.6	5424.6	96.5 %		11:34:23
2	Y RADIAL	5795.0	5795.0	95.59 %		11:34:23
2	Al 396.153Radial†	668.3	688.6	-4.1083 ug/L	-4.1083 ppb	11:34:23
2	Ca 317.933Radial†	109.9	95.6	143.79 ug/L	143.79 ppb	11:34:43
2	Fe 238.204 Radial†	-21.0	-31.6	28.933 ug/L	28.933 ppb	11:34:43
2	K 766.490 Radial†	1762005.8	1823454.1	304020 ug/L	304020 ppb	11:34:18
2	Mg 279.077 IEC†	-6.2	-7.9	-151.67 ug/L	-151.67 ppb	11:34:43
2	Na 589.592 Radial†	-344.2	639.3	174.68 ug/L	174.68 ppb	11:34:23
2	Sr 421.552†	1658841.8	1718912.4	9977.4 ug/L	9977.4 ppb	11:34:18
2	Sc 361.383	923410.7	923410.7	95.835 %		11:35:50
2	Y 371.029	795930.8	795930.8	93.314 %		11:35:50
2	Ag 328.068†	-8609.7	-9336.3	3.9428 ug/L	3.9428 ppb	11:35:55
2	As 188.979†	25270.7	26401.0	10227 ug/L	10227 ppb	11:35:55
2	B 249.677†	236917.0	247646.2	5119.4 ug/L	5119.4 ppb	11:35:50
2	Ba 233.527†	1739944.4	1815579.1	13573 ug/L	13573 ppb	11:35:50
2	Be 313.107†	8378970.0	8748151.9	2955.6 ug/L	2955.6 ppb	11:35:43
2	Cd 226.502†	904890.8	944421.5	9928.7 ug/L	9928.7 ppb	11:35:50
2	Co 228.616†	464330.0	484575.2	9855.6 ug/L	9855.6 ppb	11:35:55
2	Cr 267.716†	2289502.3	2388930.9	24489 ug/L	24489 ppb	11:35:50
2	Cu 324.752†	7459104.6	7774220.6	20891 ug/L	20891 ppb	11:35:43
2	Mn 257.610†	8763531.9	9143889.4	9781.0 ug/L	9781.0 ppb	11:35:43
2	Mo 202.031†	147751.9	154147.2	10002 ug/L	10002 ppb	11:35:55
2	Ni 231.604†	406282.2	423843.6	10057 ug/L	10057 ppb	11:35:50

2	P 214.914†	33474.3	34694.0	14391 ug/L	14391 ppb	11:35:55
2	Pb 220.353†	202615.8	211479.1	25121 ug/L	25121 ppb	11:35:55
2	S 181.975 Axial†	40171.9	41872.7	52941 ug/L	52941 ppb	11:35:55
2	Sb 206.836†	33202.2	34612.0	11241 ug/L	11241 ppb	11:35:55
2	Se 196.026†	18358.2	19176.5	10547 ug/L	10547 ppb	11:35:55
2	Si 251.611†	1665121.1	1737026.3	48713 ug/L	48713 ppb	11:35:50
2	Sn 189.927†	60615.8	63250.0	10863 ug/L	10863 ppb	11:35:55
2	Ti 334.940†	6721678.8	7014837.5	10002 ug/L	10002 ppb	11:35:43
2	Tl 190.801†	32083.4	33515.4	10254 ug/L	10254 ppb	11:35:55
2	U 409.014†	339.4	1888.6	-9.8610 ug/L	-9.8610 ppb	11:35:55
2	V 292.402†	1653019.8	1726272.7	10315 ug/L	10315 ppb	11:35:50
2	Zn 213.857†	1552453.5	1619230.7	14168 ug/L	14168 ppb	11:35:50
2	SiO2†	1665268.1	1737190.5	104820 ug/L	104820 ppb	11:36:30
3	Sc Radial	5392.2	5392.2	95.9 %		11:34:54
3	Y RADIAL	5783.6	5783.6	95.40 %		11:34:54
3	Al 396.153Radial†	676.6	701.4	10.999 ug/L	10.999 ppb	11:34:54
3	Ca 317.933Radial†	111.1	97.6	146.84 ug/L	146.84 ppb	11:35:14
3	Fe 238.204 Radial†	-23.3	-34.1	3.8999 ug/L	3.8999 ppb	11:35:14
3	K 766.490 Radial†	1764834.9	1837391.9	306340 ug/L	306340 ppb	11:34:48
3	Mg 279.077 IEC†	-4.9	-6.7	-112.42 ug/L	-112.42 ppb	11:35:14
3	Na 589.592 Radial†	-338.6	643.1	175.70 ug/L	175.70 ppb	11:34:54
3	Sr 421.552†	1654948.1	1725198.6	10014 ug/L	10014 ppb	11:34:48
3	Sc 361.383	921619.5	921619.5	95.649 %		11:36:10
3	Y 371.029	796223.7	796223.7	93.348 %		11:36:10
3	Ag 328.068†	-8432.7	-9168.7	4.6897 ug/L	4.6897 ppb	11:36:15
3	As 188.979†	24849.4	26011.8	10077 ug/L	10077 ppb	11:36:15
3	B 249.677†	236422.6	247609.8	5119.0 ug/L	5119.0 ppb	11:36:10
3	Ba 233.527†	1735803.1	1814778.0	13567 ug/L	13567 ppb	11:36:10
3	Be 313.107†	8356429.2	8741578.8	2953.3 ug/L	2953.3 ppb	11:36:03
3	Cd 226.502†	904505.2	945853.6	9943.7 ug/L	9943.7 ppb	11:36:10
3	Co 228.616†	457511.9	478388.7	9729.5 ug/L	9729.5 ppb	11:36:15
3	Cr 267.716†	2289913.5	2394004.1	24541 ug/L	24541 ppb	11:36:10
3	Cu 324.752†	7414315.8	7742522.0	20806 ug/L	20806 ppb	11:36:03
3	Mn 257.610†	8719155.8	9115267.6	9750.4 ug/L	9750.4 ppb	11:36:03
3	Mo 202.031†	145592.5	152189.2	9875.1 ug/L	9875.1 ppb	11:36:15
3	Ni 231.604†	405863.5	424229.7	10067 ug/L	10067 ppb	11:36:10
3	P 214.914†	32838.4	34097.1	14090 ug/L	14090 ppb	11:36:15
3	Pb 220.353†	199702.9	208844.7	24808 ug/L	24808 ppb	11:36:15
3	S 181.975 Axial†	39466.7	41216.9	52112 ug/L	52112 ppb	11:36:15
3	Sb 206.836†	32728.6	34184.2	11103 ug/L	11103 ppb	11:36:15
3	Se 196.026†	18115.3	18959.8	10428 ug/L	10428 ppb	11:36:15
3	Si 251.611†	1659680.8	1734715.6	48649 ug/L	48649 ppb	11:36:10
3	Sn 189.927†	59928.2	62654.1	10760 ug/L	10760 ppb	11:36:15
3	Ti 334.940†	6686221.4	6991399.1	9968.1 ug/L	9968.1 ppb	11:36:03
3	Tl 190.801†	31696.7	33176.1	10151 ug/L	10151 ppb	11:36:15
3	U 409.014†	160.0	1701.7	-14.416 ug/L	-14.416 ppb	11:36:15
3	V 292.402†	1653155.0	1729766.4	10333 ug/L	10333 ppb	11:36:10
3	Zn 213.857†	1549756.8	1619559.9	14171 ug/L	14171 ppb	11:36:10
3	SiO2†	1669909.1	1745419.7	105320 ug/L	105320 ppb	11:36:37

Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	925967.2	96.100 %		0.6275			0.65%
Sc Radial	5412.0	96.3 %		0.31			0.32%
Y 371.029	798812.4	93.652 %		0.5557			0.59%
Y RADIAL	5791.1	95.52 %		0.107			0.11%
Ag 328.068†	-9244.3	4.3377 ug/L		0.37532	4.3377 ppb	0.37532	8.65%
Al 396.153Radial†	686.7	0.4746 ug/L		9.13929	0.4746 ppb	9.13929	>999.9%
As 188.979†	26022.0	10081 ug/L		144.4	10081 ppb	144.4	1.43%
QC value within limits for As 188.979 Recovery = 100.81%							
B 249.677†	247538.6	5117.5 ug/L		2.95	5117.5 ppb	2.95	0.06%
QC value within limits for B 249.677 Recovery = 102.35%							
Ba 233.527†	1815694.7	13573 ug/L		7.3	13573 ppb	7.3	0.05%
QC value within limits for Ba 233.527 Recovery = 90.49%							
Be 313.107†	8700427.3	2939.5 ug/L		26.01	2939.5 ppb	26.01	0.88%
QC value within limits for Be 313.107 Recovery = 97.98%							
Ca 317.933Radial†	95.6	143.77 ug/L		3.087	143.77 ppb	3.087	2.15%
Cd 226.502†	945589.9	9941.0 ug/L		11.16	9941.0 ppb	11.16	0.11%
QC value within limits for Cd 226.502 Recovery = 99.41%							

Co 228.616†	478818.1	9738.4 ug/L	113.12	9738.4 ppb	113.12	1.16%
QC value within limits for Co 228.616 Recovery = 97.38%						
Cr 267.716†	2390570.5	24506 ug/L	30.5	24506 ppb	30.5	0.12%
QC value within limits for Cr 267.716 Recovery = 98.02%						
Cu 324.752†	7729236.5	20770 ug/L	142.1	20770 ppb	142.1	0.68%
QC value within limits for Cu 324.752 Recovery = 103.85%						
Fe 238.204 Radial†	-33.0	13.307 ug/L	13.6257	13.307 ppb	13.6257	102.39%
K 766.490 Radial†	1824012.2	304110 ug/L	2185.7	304110 ppb	2185.7	0.72%
QC value within limits for K 766.490 Radial Recovery = 101.37%						
Mg 279.077 IEC†	-6.4	-103.49 ug/L	53.215	-103.49 ppb	53.215	51.42%
Mn 257.610†	9087193.1	9720.3 ug/L	80.01	9720.3 ppb	80.01	0.82%
QC value within limits for Mn 257.610 Recovery = 97.20%						
Mo 202.031†	152264.4	9879.9 ug/L	119.80	9879.9 ppb	119.80	1.21%
QC value within limits for Mo 202.031 Recovery = 98.80%						
Na 589.592 Radial†	652.7	178.32 ug/L	5.452	178.32 ppb	5.452	3.06%
Ni 231.604†	424248.6	10067 ug/L	9.9	10067 ppb	9.9	0.10%
QC value within limits for Ni 231.604 Recovery = 100.67%						
P 214.914†	34234.2	14170 ug/L	194.2	14170 ppb	194.2	1.37%
QC value within limits for P 214.914 Recovery = 94.46%						
Pb 220.353†	209085.2	24836 ug/L	271.3	24836 ppb	271.3	1.09%
QC value within limits for Pb 220.353 Recovery = 99.34%						
S 181.975 Axial†	41295.0	52211 ug/L	686.3	52211 ppb	686.3	1.31%
QC value within limits for S 181.975 Axial Recovery = 104.42%						
Sb 206.836†	34196.2	11107 ug/L	132.7	11107 ppb	132.7	1.19%
QC value greater than the upper limit for Sb 206.836 Recovery = 111.07%						
Se 196.026†	18964.9	10431 ug/L	115.1	10431 ppb	115.1	1.10%
QC value within limits for Se 196.026 Recovery = 104.31%						
Si 251.611†	1736000.3	48685 ug/L	32.6	48685 ppb	32.6	0.07%
QC value within limits for Si 251.611 Recovery = 97.37%						
Sn 189.927†	62594.7	10750 ug/L	118.0	10750 ppb	118.0	1.10%
QC value within limits for Sn 189.927 Recovery = 107.50%						
Sr 421.552†	1714625.0	9952.5 ug/L	76.90	9952.5 ppb	76.90	0.77%
QC value within limits for Sr 421.552 Recovery = 99.53%						
Ti 334.940†	6970881.1	9938.8 ug/L	81.42	9938.8 ppb	81.42	0.82%
QC value within limits for Ti 334.940 Recovery = 99.39%						
Tl 190.801†	33177.3	10150 ug/L	103.1	10150 ppb	103.1	1.02%
QC value within limits for Tl 190.801 Recovery = 101.50%						
U 409.014†	1785.3	-12.352 ug/L	2.3072	-12.352 ppb	2.3072	18.68%
V 292.402†	1727553.5	10320 ug/L	11.2	10320 ppb	11.2	0.11%
QC value within limits for V 292.402 Recovery = 103.20%						
Zn 213.857†	1619434.4	14170 ug/L	1.6	14170 ppb	1.6	0.01%
QC value within limits for Zn 213.857 Recovery = 94.47%						
SiO2†	1731587.6	104480 ug/L	1045.9	104480 ppb	1045.9	1.00%
QC value within limits for SiO2 Recovery = 97.64%						
QC Failed. Continue with analysis.						

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 1/27/2010 11:38:47

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5631.6	5631.6	100 %		11:40:39
1	Y RADIAL	6062.9	6062.9	100.0 %		11:40:39
1	Al 396.153Radial†	7263.8	7246.4	5036.8 ug/L	5036.8 ppb	11:40:39
1	Ca 317.933Radial†	3336.6	3312.1	4982.9 ug/L	4982.9 ppb	11:40:59
1	Fe 238.204 Radial†	603.5	592.6	5009.8 ug/L	5009.8 ppb	11:40:59
1	K 766.490 Radial†	33121.1	30665.5	5106.9 ug/L	5106.9 ppb	11:40:39
1	Mg 279.077 IEC†	161.1	159.3	5162.8 ug/L	5162.8 ppb	11:40:59
1	Na 589.592 Radial†	33547.2	34480.8	9420.5 ug/L	9420.5 ppb	11:40:39
1	Sr 421.552†	83456.1	83267.1	483.29 ug/L	483.29 ppb	11:40:39
1	Sc 361.383	967225.2	967225.2	100.38 %		11:41:57
1	Y 371.029	845732.6	845732.6	99.152 %		11:41:57
1	Ag 328.068†	125736.1	124904.7	500.18 ug/L	500.18 ppb	11:42:02
1	As 188.979†	1371.0	1397.8	542.44 ug/L	542.44 ppb	11:42:22
1	B 249.677†	25385.6	25722.0	532.40 ug/L	532.40 ppb	11:42:02
1	Ba 233.527†	67266.9	67029.9	501.51 ug/L	501.51 ppb	11:42:02
1	Be 313.107†	1485348.5	1484734.7	498.90 ug/L	498.90 ppb	11:41:57
1	Cd 226.502†	47934.3	47957.2	503.75 ug/L	503.75 ppb	11:42:02
1	Co 228.616†	24772.5	24744.2	503.43 ug/L	503.43 ppb	11:42:02
1	Cr 267.716†	48969.5	48713.2	499.67 ug/L	499.67 ppb	11:42:02
1	Cu 324.752†	193358.3	183576.0	493.30 ug/L	493.30 ppb	11:42:02
1	Mn 257.610†	470201.4	467917.6	500.80 ug/L	500.80 ppb	11:41:57
1	Mo 202.031†	7731.0	7675.8	498.51 ug/L	498.51 ppb	11:42:22
1	Ni 231.604†	21308.1	21131.8	501.43 ug/L	501.43 ppb	11:42:02
1	P 214.914†	4930.4	4676.5	2389.3 ug/L	2389.3 ppb	11:42:22
1	Pb 220.353†	4223.3	4265.2	508.03 ug/L	508.03 ppb	11:42:22
1	S 181.975 Axial†	844.2	795.9	1005.3 ug/L	1005.3 ppb	11:42:22
1	Sb 206.836†	1667.6	1628.1	529.11 ug/L	529.11 ppb	11:42:22
1	Se 196.026†	896.9	913.9	519.63 ug/L	519.63 ppb	11:42:22
1	Si 251.611†	90551.6	89748.2	2517.1 ug/L	2517.1 ppb	11:42:02
1	Sn 189.927†	2906.2	2895.1	498.06 ug/L	498.06 ppb	11:42:22
1	Ti 334.940†	349674.9	349387.3	498.43 ug/L	498.43 ppb	11:41:57
1	Tl 190.801†	1607.1	1638.7	501.41 ug/L	501.41 ppb	11:42:22
1	U 409.014†	19531.0	20991.1	497.13 ug/L	497.13 ppb	11:42:02
1	V 292.402†	82973.7	84072.7	503.06 ug/L	503.06 ppb	11:42:02
1	Zn 213.857†	57896.8	56986.2	497.53 ug/L	497.53 ppb	11:42:02
1	SiO2†	90976.3	90181.9	5441.8 ug/L	5441.8 ppb	11:43:30
2	Sc Radial	5526.0	5526.0	98.3 %		11:41:05
2	Y RADIAL	5982.6	5982.6	98.68 %		11:41:05
2	Al 396.153Radial†	7133.3	7252.2	5040.9 ug/L	5040.9 ppb	11:41:05
2	Ca 317.933Radial†	3336.2	3375.3	5078.0 ug/L	5078.0 ppb	11:41:25
2	Fe 238.204 Radial†	599.4	599.9	5071.4 ug/L	5071.4 ppb	11:41:25
2	K 766.490 Radial†	32629.9	30797.6	5128.9 ug/L	5128.9 ppb	11:41:05
2	Mg 279.077 IEC†	158.9	160.1	5187.8 ug/L	5187.8 ppb	11:41:25
2	Na 589.592 Radial†	32821.6	34382.6	9393.7 ug/L	9393.7 ppb	11:41:05
2	Sr 421.552†	81575.5	82946.0	481.42 ug/L	481.42 ppb	11:41:05
2	Sc 361.383	972761.0	972761.0	100.96 %		11:42:28
2	Y 371.029	849809.9	849809.9	99.630 %		11:42:28
2	Ag 328.068†	127040.9	125484.3	502.51 ug/L	502.51 ppb	11:42:33
2	As 188.979†	1359.3	1378.4	534.99 ug/L	534.99 ppb	11:42:54
2	B 249.677†	25488.6	25680.1	531.52 ug/L	531.52 ppb	11:42:33
2	Ba 233.527†	67832.6	67208.9	502.85 ug/L	502.85 ppb	11:42:33
2	Be 313.107†	1492090.1	1482991.7	498.32 ug/L	498.32 ppb	11:42:28
2	Cd 226.502†	48159.0	47908.0	503.23 ug/L	503.23 ppb	11:42:33
2	Co 228.616†	24879.5	24709.8	502.73 ug/L	502.73 ppb	11:42:33
2	Cr 267.716†	49377.8	48840.0	500.97 ug/L	500.97 ppb	11:42:33
2	Cu 324.752†	196039.2	185135.3	497.49 ug/L	497.49 ppb	11:42:33
2	Mn 257.610†	472385.0	467414.9	500.27 ug/L	500.27 ppb	11:42:28
2	Mo 202.031†	7765.8	7666.4	497.90 ug/L	497.90 ppb	11:42:54
2	Ni 231.604†	21509.7	21210.8	503.30 ug/L	503.30 ppb	11:42:33

2	P 214.914†	4940.7	4658.8	2379.0 ug/L	2379.0 ppb	11:42:54
2	Pb 220.353†	4238.0	4255.7	506.90 ug/L	506.90 ppb	11:42:54
2	S 181.975 Axial†	840.8	787.8	995.13 ug/L	995.13 ppb	11:42:54
2	Sb 206.836†	1680.8	1631.7	530.26 ug/L	530.26 ppb	11:42:54
2	Se 196.026†	894.2	906.2	515.61 ug/L	515.61 ppb	11:42:54
2	Si 251.611†	91136.5	89814.3	2519.0 ug/L	2519.0 ppb	11:42:33
2	Sn 189.927†	2927.5	2899.8	498.88 ug/L	498.88 ppb	11:42:54
2	Ti 334.940†	351170.0	348886.0	497.72 ug/L	497.72 ppb	11:42:28
2	Tl 190.801†	1616.0	1638.3	501.30 ug/L	501.30 ppb	11:42:54
2	U 409.014†	19876.6	21222.7	502.62 ug/L	502.62 ppb	11:42:33
2	V 292.402†	83696.5	84318.2	504.50 ug/L	504.50 ppb	11:42:33
2	Zn 213.857†	58201.9	56960.2	497.27 ug/L	497.27 ppb	11:42:33
2	SiO2†	90296.6	88993.0	5369.9 ug/L	5369.9 ppb	11:43:35
3	Sc Radial	5597.7	5597.7	99.6 %		11:41:30
3	Y RADIAL	6065.4	6065.4	100.0 %		11:41:30
3	Al 396.153Radial†	7180.5	7206.6	5008.8 ug/L	5008.8 ppb	11:41:30
3	Ca 317.933Radial†	3329.6	3325.2	5002.6 ug/L	5002.6 ppb	11:41:50
3	Fe 238.204 Radial†	604.9	597.7	5052.4 ug/L	5052.4 ppb	11:41:50
3	K 766.490 Radial†	32845.7	30589.3	5094.2 ug/L	5094.2 ppb	11:41:30
3	Mg 279.077 IEC†	164.0	163.2	5288.9 ug/L	5288.9 ppb	11:41:50
3	Na 589.592 Radial†	33225.5	34360.6	9387.7 ug/L	9387.7 ppb	11:41:30
3	Sr 421.552†	82683.7	82996.2	481.71 ug/L	481.71 ppb	11:41:30
3	Sc 361.383	962199.9	962199.9	99.861 %		11:42:59
3	Y 371.029	842094.6	842094.6	98.726 %		11:42:59
3	Ag 328.068†	125854.8	125677.7	503.28 ug/L	503.28 ppb	11:43:05
3	As 188.979†	1343.1	1377.0	534.44 ug/L	534.44 ppb	11:43:25
3	B 249.677†	25256.6	25724.9	532.46 ug/L	532.46 ppb	11:43:05
3	Ba 233.527†	67075.1	67187.8	502.69 ug/L	502.69 ppb	11:43:05
3	Be 313.107†	1482393.8	1489503.9	500.50 ug/L	500.50 ppb	11:42:59
3	Cd 226.502†	47612.1	47883.9	502.97 ug/L	502.97 ppb	11:43:05
3	Co 228.616†	24581.3	24681.7	502.17 ug/L	502.17 ppb	11:43:05
3	Cr 267.716†	48916.1	48914.6	501.74 ug/L	501.74 ppb	11:43:05
3	Cu 324.752†	194547.6	185773.1	499.20 ug/L	499.20 ppb	11:43:05
3	Mn 257.610†	468013.0	468172.5	501.07 ug/L	501.07 ppb	11:42:59
3	Mo 202.031†	7750.3	7735.3	502.37 ug/L	502.37 ppb	11:43:25
3	Ni 231.604†	21220.9	21155.4	501.99 ug/L	501.99 ppb	11:43:05
3	P 214.914†	4922.4	4694.2	2397.5 ug/L	2397.5 ppb	11:43:25
3	Pb 220.353†	4223.1	4286.9	510.61 ug/L	510.61 ppb	11:43:25
3	S 181.975 Axial†	830.6	786.8	993.78 ug/L	993.78 ppb	11:43:25
3	Sb 206.836†	1658.2	1627.4	529.05 ug/L	529.05 ppb	11:43:25
3	Se 196.026†	889.1	910.8	518.06 ug/L	518.06 ppb	11:43:25
3	Si 251.611†	90226.6	89893.9	2521.2 ug/L	2521.2 ppb	11:43:05
3	Sn 189.927†	2922.6	2926.7	503.48 ug/L	503.48 ppb	11:43:25
3	Ti 334.940†	348001.7	349531.1	498.63 ug/L	498.63 ppb	11:42:59
3	Tl 190.801†	1608.5	1648.4	504.39 ug/L	504.39 ppb	11:43:25
3	U 409.014†	19632.6	21194.4	501.95 ug/L	501.95 ppb	11:43:05
3	V 292.402†	82967.3	84498.0	505.63 ug/L	505.63 ppb	11:43:05
3	Zn 213.857†	57672.0	57062.3	498.18 ug/L	498.18 ppb	11:43:05
3	SiO2†	90443.4	90121.7	5438.0 ug/L	5438.0 ppb	11:43:40

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	967395.4	100.40 %	0.548			0.55%
Sc Radial	5585.1	99.4 %	0.96			0.97%
Y 371.029	845879.1	99.170 %	0.4525			0.46%
Y RADIAL	6037.0	99.58 %	0.777			0.78%
Ag 328.068†	125355.6	501.99 ug/L	1.612	501.99 ppb	1.612	0.32%
QC value within limits for Ag 328.068 Recovery = 100.40%						
Al 396.153Radial†	7235.1	5028.8 ug/L	17.44	5028.8 ppb	17.44	0.35%
QC value within limits for Al 396.153Radial Recovery = 100.58%						
As 188.979†	1384.4	537.29 ug/L	4.465	537.29 ppb	4.465	0.83%
QC value within limits for As 188.979 Recovery = 107.46%						
B 249.677†	25709.0	532.13 ug/L	0.524	532.13 ppb	0.524	0.10%
QC value within limits for B 249.677 Recovery = 106.43%						
Ba 233.527†	67142.2	502.35 ug/L	0.734	502.35 ppb	0.734	0.15%
QC value within limits for Ba 233.527 Recovery = 100.47%						
Be 313.107†	1485743.4	499.24 ug/L	1.131	499.24 ppb	1.131	0.23%
QC value within limits for Be 313.107 Recovery = 99.85%						
Ca 317.933Radial†	3337.6	5021.1 ug/L	50.20	5021.1 ppb	50.20	1.00%

QC value within limits for Ca 317.933 Radial Recovery = 100.42%							
Cd	226.502†	47916.4	503.32 ug/L	0.394	503.32 ppb	0.394	0.08%
QC value within limits for Cd 226.502 Recovery = 100.66%							
Co	228.616†	24711.9	502.78 ug/L	0.634	502.78 ppb	0.634	0.13%
QC value within limits for Co 228.616 Recovery = 100.56%							
Cr	267.716†	48822.6	500.80 ug/L	1.044	500.80 ppb	1.044	0.21%
QC value within limits for Cr 267.716 Recovery = 100.16%							
Cu	324.752†	184828.1	496.66 ug/L	3.037	496.66 ppb	3.037	0.61%
QC value within limits for Cu 324.752 Recovery = 99.33%							
Fe	238.204 Radial†	596.7	5044.5 ug/L	31.52	5044.5 ppb	31.52	0.62%
QC value within limits for Fe 238.204 Radial Recovery = 100.89%							
K	766.490 Radial†	30684.1	5110.0 ug/L	17.56	5110.0 ppb	17.56	0.34%
QC value within limits for K 766.490 Radial Recovery = 102.20%							
Mg	279.077 IEC†	160.9	5213.2 ug/L	66.76	5213.2 ppb	66.76	1.28%
QC value within limits for Mg 279.077 IEC Recovery = 104.26%							
Mn	257.610†	467835.0	500.72 ug/L	0.409	500.72 ppb	0.409	0.08%
QC value within limits for Mn 257.610 Recovery = 100.14%							
Mo	202.031†	7692.5	499.59 ug/L	2.424	499.59 ppb	2.424	0.49%
QC value within limits for Mo 202.031 Recovery = 99.92%							
Na	589.592 Radial†	34408.0	9400.6 ug/L	17.48	9400.6 ppb	17.48	0.19%
QC value within limits for Na 589.592 Radial Recovery = 94.01%							
Ni	231.604†	21166.0	502.24 ug/L	0.962	502.24 ppb	0.962	0.19%
QC value within limits for Ni 231.604 Recovery = 100.45%							
P	214.914†	4676.5	2388.6 ug/L	9.27	2388.6 ppb	9.27	0.39%
QC value within limits for P 214.914 Recovery = 95.54%							
Pb	220.353†	4269.3	508.51 ug/L	1.900	508.51 ppb	1.900	0.37%
QC value within limits for Pb 220.353 Recovery = 101.70%							
S	181.975 Axial†	790.2	998.09 ug/L	6.327	998.09 ppb	6.327	0.63%
QC value within limits for S 181.975 Axial Recovery = 99.81%							
Sb	206.836†	1629.1	529.47 ug/L	0.680	529.47 ppb	0.680	0.13%
QC value within limits for Sb 206.836 Recovery = 105.89%							
Se	196.026†	910.3	517.77 ug/L	2.029	517.77 ppb	2.029	0.39%
QC value within limits for Se 196.026 Recovery = 103.55%							
Si	251.611†	89818.8	2519.1 ug/L	2.03	2519.1 ppb	2.03	0.08%
QC value within limits for Si 251.611 Recovery = 100.76%							
Sn	189.927†	2907.2	500.14 ug/L	2.924	500.14 ppb	2.924	0.58%
QC value within limits for Sn 189.927 Recovery = 100.03%							
Sr	421.552†	83069.8	482.14 ug/L	1.003	482.14 ppb	1.003	0.21%
QC value within limits for Sr 421.552 Recovery = 96.43%							
Ti	334.940†	349268.1	498.26 ug/L	0.475	498.26 ppb	0.475	0.10%
QC value within limits for Ti 334.940 Recovery = 99.65%							
Tl	190.801†	1641.8	502.37 ug/L	1.754	502.37 ppb	1.754	0.35%
QC value within limits for Tl 190.801 Recovery = 100.47%							
U	409.014†	21136.1	500.57 ug/L	2.996	500.57 ppb	2.996	0.60%
QC value within limits for U 409.014 Recovery = 100.11%							
V	292.402†	84296.3	504.39 ug/L	1.288	504.39 ppb	1.288	0.26%
QC value within limits for V 292.402 Recovery = 100.88%							
Zn	213.857†	57002.9	497.66 ug/L	0.468	497.66 ppb	0.468	0.09%
QC value within limits for Zn 213.857 Recovery = 99.53%							
SiO2†		89765.5	5416.6 ug/L	40.48	5416.6 ppb	40.48	0.75%
QC value within limits for SiO2 Recovery = 101.29%							
All analyte(s) passed QC.							

Sequence No.: 14

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 1/27/2010 11:45:50

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5570.9	5570.9	99.1 %		11:47:43
1	Y RADIAL	6023.4	6023.4	99.35 %		11:47:43
1	Al 396.153Radial†	0.4	-3.5	-2.4759 ug/L	-2.4759 ppb	11:48:03
1	Ca 317.933Radial†	15.3	-2.9	-4.3128 ug/L	-4.3128 ppb	11:48:03
1	Fe 238.204 Radial†	7.8	-1.9	-15.961 ug/L	-15.961 ppb	11:48:03
1	K 766.490 Radial†	2815.7	447.1	74.558 ug/L	74.558 ppb	11:47:43
1	Mg 279.077 IEC†	0.7	-0.8	-25.784 ug/L	-25.784 ppb	11:48:03
1	Na 589.592 Radial†	-1006.2	-19.2	-5.2496 ug/L	-5.2496 ppb	11:47:43
1	Sr 421.552†	24.4	-9.1	-0.0528 ug/L	-0.0528 ppb	11:47:43
1	Sc 361.383	965010.5	965010.5	100.15 %		11:49:00
1	Y 371.029	853161.8	853161.8	100.02 %		11:49:00
1	Ag 328.068†	409.0	55.9	0.2153 ug/L	0.2153 ppb	11:49:05
1	As 188.979†	3.1	35.1	13.510 ug/L	13.510 ppb	11:49:25
1	B 249.677†	859.8	1291.6	26.850 ug/L	26.850 ppb	11:49:05
1	Ba 233.527†	21.4	40.6	0.3028 ug/L	0.3028 ppb	11:49:25
1	Be 313.107†	-4983.7	68.2	0.0229 ug/L	0.0229 ppb	11:49:05
1	Cd 226.502†	-176.0	29.7	0.3144 ug/L	0.3144 ppb	11:49:25
1	Co 228.616†	-65.1	1.1	0.0228 ug/L	0.0228 ppb	11:49:25
1	Cr 267.716†	88.1	18.2	0.1856 ug/L	0.1856 ppb	11:49:25
1	Cu 324.752†	9305.0	245.1	0.6567 ug/L	0.6567 ppb	11:49:05
1	Mn 257.610†	531.8	38.3	0.0405 ug/L	0.0405 ppb	11:49:25
1	Mo 202.031†	28.4	2.6	0.1680 ug/L	0.1680 ppb	11:49:25
1	Ni 231.604†	88.6	-6.6	-0.1577 ug/L	-0.1577 ppb	11:49:25
1	P 214.914†	248.1	12.7	6.6371 ug/L	6.6371 ppb	11:49:25
1	Pb 220.353†	-11.1	46.8	5.5614 ug/L	5.5614 ppb	11:49:25
1	S 181.975 Axial†	47.8	2.7	3.3922 ug/L	3.3922 ppb	11:49:25
1	Sb 206.836†	62.3	29.1	9.1688 ug/L	9.1688 ppb	11:49:25
1	Se 196.026†	-23.9	-3.4	-1.8944 ug/L	-1.8944 ppb	11:49:25
1	Si 251.611†	607.5	148.2	4.1633 ug/L	4.1633 ppb	11:49:25
1	Sn 189.927†	14.2	14.2	2.4325 ug/L	2.4325 ppb	11:49:25
1	Ti 334.940†	-1044.7	1.4	0.0025 ug/L	0.0025 ppb	11:49:05
1	Tl 190.801†	-30.9	6.8	2.0740 ug/L	2.0740 ppb	11:49:25
1	U 409.014†	-1449.8	87.0	2.0680 ug/L	2.0680 ppb	11:49:00
1	V 292.402†	-1426.5	-9.3	-0.0469 ug/L	-0.0469 ppb	11:49:05
1	Zn 213.857†	807.4	116.2	1.0247 ug/L	1.0247 ppb	11:49:25
1	SiO2†	586.3	137.6	8.3203 ug/L	8.3203 ppb	11:50:31
2	Sc Radial	5675.6	5675.6	101 %		11:48:08
2	Y RADIAL	6144.2	6144.2	101.3 %		11:48:08
2	Al 396.153Radial†	8.8	4.8	3.3040 ug/L	3.3040 ppb	11:48:28
2	Ca 317.933Radial†	21.3	2.8	4.2355 ug/L	4.2355 ppb	11:48:28
2	Fe 238.204 Radial†	5.1	-4.7	-39.961 ug/L	-39.961 ppb	11:48:28
2	K 766.490 Radial†	2707.9	288.0	48.007 ug/L	48.007 ppb	11:48:08
2	Mg 279.077 IEC†	1.6	0.1	2.8964 ug/L	2.8964 ppb	11:48:28
2	Na 589.592 Radial†	-963.0	42.2	11.539 ug/L	11.539 ppb	11:48:08
2	Sr 421.552†	23.5	-10.4	-0.0605 ug/L	-0.0605 ppb	11:48:08
2	Sc 361.383	970232.3	970232.3	100.69 %		11:49:30
2	Y 371.029	857360.6	857360.6	100.52 %		11:49:30
2	Ag 328.068†	328.8	-26.0	-0.1226 ug/L	-0.1226 ppb	11:49:35
2	As 188.979†	0.0	32.1	12.339 ug/L	12.339 ppb	11:49:55
2	B 249.677†	865.9	1293.0	26.883 ug/L	26.883 ppb	11:49:35
2	Ba 233.527†	41.3	60.2	0.4479 ug/L	0.4479 ppb	11:49:55
2	Be 313.107†	-4881.4	196.5	0.0662 ug/L	0.0662 ppb	11:49:35
2	Cd 226.502†	-178.8	27.9	0.2989 ug/L	0.2989 ppb	11:49:55
2	Co 228.616†	-66.8	-0.3	-0.0042 ug/L	-0.0042 ppb	11:49:55
2	Cr 267.716†	106.2	35.7	0.3621 ug/L	0.3621 ppb	11:49:55
2	Cu 324.752†	9102.3	-6.2	-0.0225 ug/L	-0.0225 ppb	11:49:35
2	Mn 257.610†	503.6	7.5	0.0040 ug/L	0.0040 ppb	11:49:55
2	Mo 202.031†	31.4	5.4	0.3448 ug/L	0.3448 ppb	11:49:55
2	Ni 231.604†	104.6	8.8	0.2093 ug/L	0.2093 ppb	11:49:55

2	P 214.914†	241.5	4.8	2.6208 ug/L	2.6208 ppb	11:49:55
2	Pb 220.353†	-26.6	31.6	3.7533 ug/L	3.7533 ppb	11:49:55
2	S 181.975 Axial†	47.2	1.8	2.2950 ug/L	2.2950 ppb	11:49:55
2	Sb 206.836†	58.7	25.1	7.9427 ug/L	7.9427 ppb	11:49:55
2	Se 196.026†	-21.5	-0.9	-0.6199 ug/L	-0.6199 ppb	11:49:55
2	Si 251.611†	612.1	149.5	4.1983 ug/L	4.1983 ppb	11:49:55
2	Sn 189.927†	17.8	17.7	3.0401 ug/L	3.0401 ppb	11:49:55
2	Ti 334.940†	-961.8	89.3	0.1246 ug/L	0.1246 ppb	11:49:35
2	Tl 190.801†	-43.5	-5.5	-1.6704 ug/L	-1.6704 ppb	11:49:55
2	U 409.014†	-1253.9	289.2	6.8773 ug/L	6.8773 ppb	11:49:30
2	V 292.402†	-1450.9	-25.8	-0.1289 ug/L	-0.1289 ppb	11:49:35
2	Zn 213.857†	792.8	97.2	0.8590 ug/L	0.8590 ppb	11:49:55
2	SiO2†	597.9	146.0	8.8252 ug/L	8.8252 ppb	11:50:36
3	Sc Radial	5603.4	5603.4	99.7 %		11:48:33
3	Y RADIAL	6078.0	6078.0	100.3 %		11:48:33
3	Al 396.153Radial†	8.7	4.8	3.3927 ug/L	3.3927 ppb	11:48:53
3	Ca 317.933Radial†	17.2	-1.0	-1.4386 ug/L	-1.4386 ppb	11:48:53
3	Fe 238.204 Radial†	10.0	0.3	2.2229 ug/L	2.2229 ppb	11:48:53
3	K 766.490 Radial†	2807.0	421.9	70.348 ug/L	70.348 ppb	11:48:33
3	Mg 279.077 IEC†	2.5	1.0	30.970 ug/L	30.970 ppb	11:48:53
3	Na 589.592 Radial†	-1021.3	-28.5	-7.7771 ug/L	-7.7771 ppb	11:48:33
3	Sr 421.552†	25.0	-8.6	-0.0499 ug/L	-0.0499 ppb	11:48:33
3	Sc 361.383	973818.6	973818.6	101.07 %		11:50:01
3	Y 371.029	862332.9	862332.9	101.10 %		11:50:01
3	Ag 328.068†	357.1	0.9	0.0013 ug/L	0.0013 ppb	11:50:06
3	As 188.979†	-5.4	26.7	10.288 ug/L	10.288 ppb	11:50:26
3	B 249.677†	809.0	1233.6	25.640 ug/L	25.640 ppb	11:50:06
3	Ba 233.527†	27.2	46.1	0.3437 ug/L	0.3437 ppb	11:50:26
3	Be 313.107†	-4934.2	162.2	0.0547 ug/L	0.0547 ppb	11:50:06
3	Cd 226.502†	-172.3	35.1	0.3684 ug/L	0.3684 ppb	11:50:26
3	Co 228.616†	-62.1	4.6	0.0935 ug/L	0.0935 ppb	11:50:26
3	Cr 267.716†	61.4	-8.9	-0.0928 ug/L	-0.0928 ppb	11:50:26
3	Cu 324.752†	9043.2	-97.9	-0.2642 ug/L	-0.2642 ppb	11:50:06
3	Mn 257.610†	500.8	2.8	0.0020 ug/L	0.0020 ppb	11:50:26
3	Mo 202.031†	22.8	-3.2	-0.2099 ug/L	-0.2099 ppb	11:50:26
3	Ni 231.604†	89.8	-6.2	-0.1482 ug/L	-0.1482 ppb	11:50:26
3	P 214.914†	250.1	12.4	6.6387 ug/L	6.6387 ppb	11:50:26
3	Pb 220.353†	-24.2	34.0	4.0342 ug/L	4.0342 ppb	11:50:26
3	S 181.975 Axial†	42.0	-3.5	-4.3736 ug/L	-4.3736 ppb	11:50:26
3	Sb 206.836†	54.5	20.8	6.5585 ug/L	6.5585 ppb	11:50:26
3	Se 196.026†	-21.4	-0.7	-0.3595 ug/L	-0.3595 ppb	11:50:26
3	Si 251.611†	585.8	121.2	3.4089 ug/L	3.4089 ppb	11:50:26
3	Sn 189.927†	13.1	13.0	2.2303 ug/L	2.2303 ppb	11:50:26
3	Ti 334.940†	-951.1	103.4	0.1439 ug/L	0.1439 ppb	11:50:06
3	Tl 190.801†	-36.7	1.4	0.4135 ug/L	0.4135 ppb	11:50:26
3	U 409.014†	-1458.7	91.2	2.1668 ug/L	2.1668 ppb	11:50:01
3	V 292.402†	-1477.4	-46.8	-0.2750 ug/L	-0.2750 ppb	11:50:06
3	Zn 213.857†	776.7	78.5	0.6920 ug/L	0.6920 ppb	11:50:26
3	SiO2†	595.8	141.7	8.5802 ug/L	8.5802 ppb	11:50:41

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	969687.1	100.64 %		0.460			0.46%
Sc Radial	5616.6	99.9 %		0.95			0.95%
Y 371.029	857618.4	100.55 %		0.538			0.54%
Y RADIAL	6081.8	100.3 %		1.00			0.99%
Ag 328.068†	10.2	0.0313 ug/L		0.17095	0.0313 ppb	0.17095	545.83%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	2.0	1.4069 ug/L		3.36292	1.4069 ppb	3.36292	239.03%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	31.3	12.046 ug/L		1.6309	12.046 ppb	1.6309	13.54%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	1272.7	26.458 ug/L		0.7081	26.458 ppb	0.7081	2.68%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	49.0	0.3648 ug/L		0.07482	0.3648 ppb	0.07482	20.51%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	142.3	0.0479 ug/L		0.02243	0.0479 ppb	0.02243	46.82%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-0.3	-0.5053 ug/L		4.34991	-0.5053 ppb	4.34991	860.89%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	30.9	0.3272 ug/L	0.03647	0.3272 ppb	0.03647	11.15%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	1.8	0.0374 ug/L	0.05046	0.0374 ppb	0.05046	135.00%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	15.0	0.1517 ug/L	0.22934	0.1517 ppb	0.22934	151.22%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	47.0	0.1233 ug/L	0.47743	0.1233 ppb	0.47743	387.10%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-2.1	-17.899 ug/L	21.1585	-17.899 ppb	21.1585	118.21%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	385.7	64.304 ug/L	14.2700	64.304 ppb	14.2700	22.19%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	0.1	2.6941 ug/L	28.37761	2.6941 ppb	28.37761	>999.9%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	16.2	0.0155 ug/L	0.02168	0.0155 ppb	0.02168	140.09%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	1.6	0.1010 ug/L	0.28335	0.1010 ppb	0.28335	280.55%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-1.8	-0.4960 ug/L	10.49868	-0.4960 ppb	10.49868	>999.9%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-1.4	-0.0322 ug/L	0.20922	-0.0322 ppb	0.20922	649.30%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	9.9	5.2989 ug/L	2.31930	5.2989 ppb	2.31930	43.77%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	37.5	4.4496 ug/L	0.97298	4.4496 ppb	0.97298	21.87%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	0.3	0.4379 ug/L	4.20278	0.4379 ppb	4.20278	959.82%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	25.0	7.8900 ug/L	1.30592	7.8900 ppb	1.30592	16.55%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-1.6	-0.9579 ug/L	0.82135	-0.9579 ppb	0.82135	85.74%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	139.6	3.9235 ug/L	0.44600	3.9235 ppb	0.44600	11.37%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	15.0	2.5676 ug/L	0.42152	2.5676 ppb	0.42152	16.42%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-9.4	-0.0544 ug/L	0.00547	-0.0544 ppb	0.00547	10.05%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	64.7	0.0903 ug/L	0.07666	0.0903 ppb	0.07666	84.88%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	0.9	0.2724 ug/L	1.87621	0.2724 ppb	1.87621	688.89%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	155.8	3.7040 ug/L	2.74855	3.7040 ppb	2.74855	74.20%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-27.3	-0.1503 ug/L	0.11550	-0.1503 ppb	0.11550	76.86%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	97.3	0.8586 ug/L	0.16635	0.8586 ppb	0.16635	19.37%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	141.8	8.5753 ug/L	0.25248	8.5753 ppb	0.25248	2.94%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

=====
Analysis Begun

Start Time: 1/27/2010 11:51:28

Plasma On Time: 00:00:00

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\012710.sif

Batch ID:

Results Data Set: 012710

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

=====
Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 1/27/2010 10:24:36

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: 37

Sample ID: LR2

Date Collected: 1/27/2010 11:51:30

Analyst: HSC

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5581.4	5581.4	99.3 %			11:53:23
1	Y RADIAL	6061.1	6061.1	99.98 %			11:53:23
1	Al 396.153Radial†	10.6	6.7	4.6834 ug/L		4.6834 ppb	11:53:43

1	Ca 317.933Radial†	27.2	9.1	13.700 ug/L	13.700 ppb	11:53:43
1	Fe 238.204 Radial†	7.8	-1.9	-16.013 ug/L	-16.013 ppb	11:53:43
1	K 766.490 Radial†	2667.5	292.5	48.771 ug/L	48.771 ppb	11:53:23
1	Mg 279.077 IEC†	2.9	1.4	46.394 ug/L	46.394 ppb	11:53:43
1	Na 589.592 Radial†	-981.3	7.7	2.1117 ug/L	2.1117 ppb	11:53:23
1	Sr 421.552†	27.8	-5.7	-0.0331 ug/L	-0.0331 ppb	11:53:23
1	Sc 361.383	965001.2	965001.2	100.15 %		11:54:40
1	Y 371.029	853318.4	853318.4	100.04 %		11:54:40
1	Ag 328.068†	296.4	-56.5	-0.2278 ug/L	-0.2278 ppb	11:54:45
1	As 188.979†	-4.1	27.9	10.735 ug/L	10.735 ppb	11:55:05
1	B 249.677†	437.1	869.6	18.077 ug/L	18.077 ppb	11:55:05
1	Ba 233.527†	7.6	26.8	0.2004 ug/L	0.2004 ppb	11:55:05
1	Be 313.107†	-4958.8	93.0	0.0314 ug/L	0.0314 ppb	11:54:45
1	Cd 226.502†	-194.6	11.2	0.1188 ug/L	0.1188 ppb	11:55:05
1	Co 228.616†	-59.7	6.5	0.1330 ug/L	0.1330 ppb	11:55:05
1	Cr 267.716†	82.6	12.8	0.1316 ug/L	0.1316 ppb	11:55:05
1	Cu 324.752†	9171.3	111.8	0.3002 ug/L	0.3002 ppb	11:54:45
1	Mn 257.610†	504.6	11.2	0.0085 ug/L	0.0085 ppb	11:55:05
1	Mo 202.031†	26.2	0.4	0.0218 ug/L	0.0218 ppb	11:55:05
1	Ni 231.604†	98.3	3.1	0.0729 ug/L	0.0729 ppb	11:55:05
1	P 214.914†	246.0	10.5	5.5549 ug/L	5.5549 ppb	11:55:05
1	Pb 220.353†	-41.9	16.1	1.9144 ug/L	1.9144 ppb	11:55:05
1	S 181.975 Axial†	46.0	0.9	1.0815 ug/L	1.0815 ppb	11:55:05
1	Sb 206.836†	15454.9	15398.4	4833.3 ug/L	4833.3 ppb	11:54:45
1	Se 196.026†	-28.4	-7.9	-4.3723 ug/L	-4.3723 ppb	11:55:05
1	Si 251.611†	929.2	469.4	13.196 ug/L	13.196 ppb	11:55:05
1	Sn 189.927†	10.5	10.5	1.8011 ug/L	1.8011 ppb	11:55:05
1	Ti 334.940†	-958.9	87.0	0.1228 ug/L	0.1228 ppb	11:54:45
1	Tl 190.801†	-30.7	7.0	2.1342 ug/L	2.1342 ppb	11:55:05
1	U 409.014†	-1591.2	-54.3	-1.2886 ug/L	-1.2886 ppb	11:54:45
1	V 292.402†	-1363.1	54.0	0.3197 ug/L	0.3197 ppb	11:54:45
1	Zn 213.857†	770.4	79.2	0.6981 ug/L	0.6981 ppb	11:55:05
1	SiO2†	916.6	467.4	28.275 ug/L	28.275 ppb	11:56:11
2	Sc Radial	5607.6	5607.6	99.8 %		11:53:48
2	Y RADIAL	6077.3	6077.3	100.2 %		11:53:48
2	Al 396.153Radial†	2.8	-1.1	-0.8101 ug/L	-0.8101 ppb	11:54:08
2	Ca 317.933Radial†	18.9	0.7	1.1069 ug/L	1.1069 ppb	11:54:08
2	Fe 238.204 Radial†	7.0	-2.7	-22.950 ug/L	-22.950 ppb	11:54:08
2	K 766.490 Radial†	2637.9	250.3	41.739 ug/L	41.739 ppb	11:53:48
2	Mg 279.077 IEC†	3.1	1.6	51.298 ug/L	51.298 ppb	11:54:08
2	Na 589.592 Radial†	-1040.7	-47.2	-12.890 ug/L	-12.890 ppb	11:53:48
2	Sr 421.552†	-15.4	-49.2	-0.2855 ug/L	-0.2855 ppb	11:53:48
2	Sc 361.383	962196.1	962196.1	99.860 %		11:55:10
2	Y 371.029	852639.0	852639.0	99.962 %		11:55:10
2	Ag 328.068†	450.1	98.2	0.3877 ug/L	0.3877 ppb	11:55:15
2	As 188.979†	-12.8	19.2	7.3934 ug/L	7.3934 ppb	11:55:35
2	B 249.677†	448.6	882.3	18.344 ug/L	18.344 ppb	11:55:35
2	Ba 233.527†	7.3	26.5	0.1976 ug/L	0.1976 ppb	11:55:35
2	Be 313.107†	-4970.0	67.3	0.0229 ug/L	0.0229 ppb	11:55:15
2	Cd 226.502†	-204.1	1.1	0.0133 ug/L	0.0133 ppb	11:55:35
2	Co 228.616†	-71.7	-5.7	-0.1147 ug/L	-0.1147 ppb	11:55:35
2	Cr 267.716†	88.5	18.9	0.1952 ug/L	0.1952 ppb	11:55:35
2	Cu 324.752†	9190.9	158.0	0.4258 ug/L	0.4258 ppb	11:55:15
2	Mn 257.610†	485.5	-6.5	-0.0113 ug/L	-0.0113 ppb	11:55:35
2	Mo 202.031†	37.8	12.1	0.7836 ug/L	0.7836 ppb	11:55:35
2	Ni 231.604†	98.6	3.6	0.0867 ug/L	0.0867 ppb	11:55:35
2	P 214.914†	236.2	1.4	0.6882 ug/L	0.6882 ppb	11:55:35
2	Pb 220.353†	-30.5	27.4	3.2593 ug/L	3.2593 ppb	11:55:35
2	S 181.975 Axial†	53.7	8.7	11.031 ug/L	11.031 ppb	11:55:35
2	Sb 206.836†	15663.5	15652.2	4912.9 ug/L	4912.9 ppb	11:55:15
2	Se 196.026†	-33.2	-12.7	-7.0485 ug/L	-7.0485 ppb	11:55:35
2	Si 251.611†	943.8	486.7	13.672 ug/L	13.672 ppb	11:55:35
2	Sn 189.927†	2.4	2.4	0.4038 ug/L	0.4038 ppb	11:55:35
2	Ti 334.940†	-929.8	113.4	0.1595 ug/L	0.1595 ppb	11:55:15
2	Tl 190.801†	-36.7	0.9	0.2821 ug/L	0.2821 ppb	11:55:35
2	U 409.014†	-1713.1	-181.0	-4.2989 ug/L	-4.2989 ppb	11:55:15
2	V 292.402†	-1385.6	27.5	0.1693 ug/L	0.1693 ppb	11:55:15
2	Zn 213.857†	755.2	66.2	0.5845 ug/L	0.5845 ppb	11:55:35
2	SiO2†	963.8	517.3	31.274 ug/L	31.274 ppb	11:56:16
3	Sc Radial	5685.2	5685.2	101 %		11:54:13
3	Y RADIAL	6131.2	6131.2	101.1 %		11:54:13

3	Al 396.153Radial†	-5.1	-9.0	-6.3032 ug/L	-6.3032 ppb	11:54:33
3	Ca 317.933Radial†	16.2	-2.3	-3.4319 ug/L	-3.4319 ppb	11:54:33
3	Fe 238.204 Radial†	8.5	-1.4	-11.494 ug/L	-11.494 ppb	11:54:33
3	K 766.490 Radial†	2661.8	237.8	39.661 ug/L	39.661 ppb	11:54:13
3	Mg 279.077 IEC†	2.2	0.6	20.956 ug/L	20.956 ppb	11:54:33
3	Na 589.592 Radial†	-1049.5	-41.7	-11.388 ug/L	-11.388 ppb	11:54:13
3	Sr 421.552†	-2.4	-36.1	-0.2095 ug/L	-0.2095 ppb	11:54:13
3	Sc 361.383	967460.2	967460.2	100.41 %		11:55:41
3	Y 371.029	856634.6	856634.6	100.43 %		11:55:41
3	Ag 328.068†	390.3	36.3	0.1453 ug/L	0.1453 ppb	11:55:46
3	As 188.979†	-14.0	18.1	6.9590 ug/L	6.9590 ppb	11:56:06
3	B 249.677†	401.3	832.7	17.311 ug/L	17.311 ppb	11:56:06
3	Ba 233.527†	5.6	24.8	0.1851 ug/L	0.1851 ppb	11:56:06
3	Be 313.107†	-4972.3	92.1	0.0312 ug/L	0.0312 ppb	11:55:46
3	Cd 226.502†	-193.1	13.1	0.1384 ug/L	0.1384 ppb	11:56:06
3	Co 228.616†	-71.7	-5.3	-0.1061 ug/L	-0.1061 ppb	11:56:06
3	Cr 267.716†	82.5	12.4	0.1290 ug/L	0.1290 ppb	11:56:06
3	Cu 324.752†	9213.9	130.8	0.3541 ug/L	0.3541 ppb	11:55:46
3	Mn 257.610†	490.2	-4.5	-0.0068 ug/L	-0.0068 ppb	11:56:06
3	Mo 202.031†	34.7	8.7	0.5665 ug/L	0.5665 ppb	11:56:06
3	Ni 231.604†	109.7	14.2	0.3376 ug/L	0.3376 ppb	11:56:06
3	P 214.914†	245.1	9.0	4.7358 ug/L	4.7358 ppb	11:56:06
3	Pb 220.353†	-13.6	44.4	5.2772 ug/L	5.2772 ppb	11:56:06
3	S 181.975 Axial†	49.6	4.3	5.4836 ug/L	5.4836 ppb	11:56:06
3	Sb 206.836†	15644.5	15548.0	4880.2 ug/L	4880.2 ppb	11:55:46
3	Se 196.026†	-26.1	-5.5	-3.0715 ug/L	-3.0715 ppb	11:56:06
3	Si 251.611†	926.6	464.4	13.050 ug/L	13.050 ppb	11:56:06
3	Sn 189.927†	11.9	11.8	2.0279 ug/L	2.0279 ppb	11:56:06
3	Ti 334.940†	-963.4	85.0	0.1215 ug/L	0.1215 ppb	11:55:46
3	Tl 190.801†	-45.8	-8.0	-2.4257 ug/L	-2.4257 ppb	11:56:06
3	U 409.014†	-1779.8	-238.1	-5.6572 ug/L	-5.6572 ppb	11:55:46
3	V 292.402†	-1421.5	-0.7	-0.0050 ug/L	-0.0050 ppb	11:55:46
3	Zn 213.857†	777.4	84.3	0.7405 ug/L	0.7405 ppb	11:56:06
3	SiO2†	933.6	482.1	29.147 ug/L	29.147 ppb	11:56:21

Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	964885.9	100.14 %	%	0.273			0.27%
Sc Radial	5624.7	100 %	%	1.0			0.96%
Y 371.029	854197.3	100.14 %	%	0.251			0.25%
Y RADIAL	6089.9	100.5 %	%	0.61			0.60%
Ag 328.068†	26.0	0.1017 ug/L	ug/L	0.31005	0.1017 ppb	0.31005	304.80%
Al 396.153Radial†	-1.1	-0.8099 ug/L	ug/L	5.49330	-0.8099 ppb	5.49330	678.24%
As 188.979†	21.7	8.3625 ug/L	ug/L	2.06614	8.3625 ppb	2.06614	24.71%
B 249.677†	861.6	17.911 ug/L	ug/L	0.5361	17.911 ppb	0.5361	2.99%
Ba 233.527†	26.1	0.1943 ug/L	ug/L	0.00813	0.1943 ppb	0.00813	4.18%
Be 313.107†	84.1	0.0285 ug/L	ug/L	0.00484	0.0285 ppb	0.00484	16.97%
Ca 317.933Radial†	2.5	3.7916 ug/L	ug/L	8.87585	3.7916 ppb	8.87585	234.09%
Cd 226.502†	8.5	0.0902 ug/L	ug/L	0.06727	0.0902 ppb	0.06727	74.59%
Co 228.616†	-1.5	-0.0293 ug/L	ug/L	0.14059	-0.0293 ppb	0.14059	480.39%
Cr 267.716†	14.7	0.1519 ug/L	ug/L	0.03747	0.1519 ppb	0.03747	24.67%
Cu 324.752†	133.5	0.3600 ug/L	ug/L	0.06304	0.3600 ppb	0.06304	17.51%
Fe 238.204 Radial†	-2.0	-16.819 ug/L	ug/L	5.7703	-16.819 ppb	5.7703	34.31%
K 766.490 Radial†	260.2	43.390 ug/L	ug/L	4.7740	43.390 ppb	4.7740	11.00%
Mg 279.077 IEC†	1.2	39.550 ug/L	ug/L	16.2880	39.550 ppb	16.2880	41.18%
Mn 257.610†	0.1	-0.0032 ug/L	ug/L	0.01039	-0.0032 ppb	0.01039	323.13%
Mo 202.031†	7.1	0.4573 ug/L	ug/L	0.39248	0.4573 ppb	0.39248	85.82%
Na 589.592 Radial†	-27.0	-7.3887 ug/L	ug/L	8.26177	-7.3887 ppb	8.26177	111.82%
Ni 231.604†	7.0	0.1657 ug/L	ug/L	0.14898	0.1657 ppb	0.14898	89.88%
P 214.914†	7.0	3.6596 ug/L	ug/L	2.60575	3.6596 ppb	2.60575	71.20%
Pb 220.353†	29.3	3.4836 ug/L	ug/L	1.69263	3.4836 ppb	1.69263	48.59%
S 181.975 Axial†	4.6	5.8655 ug/L	ug/L	4.98589	5.8655 ppb	4.98589	85.00%
Sb 206.836†	15532.9	4875.5 ug/L	ug/L	40.04	4875.5 ppb	40.04	0.82%
Se 196.026†	-8.7	-4.8308 ug/L	ug/L	2.02773	-4.8308 ppb	2.02773	41.98%
Si 251.611†	473.5	13.306 ug/L	ug/L	0.3252	13.306 ppb	0.3252	2.44%
Sn 189.927†	8.2	1.4109 ug/L	ug/L	0.87957	1.4109 ppb	0.87957	62.34%
Sr 421.552†	-30.3	-0.1760 ug/L	ug/L	0.12947	-0.1760 ppb	0.12947	73.56%
Ti 334.940†	95.1	0.1346 ug/L	ug/L	0.02160	0.1346 ppb	0.02160	16.05%
Tl 190.801†	-0.0	-0.0031 ug/L	ug/L	2.29331	-0.0031 ppb	2.29331	>999.9%

U 409.014†	-157.8	-3.7482 ug/L	2.23573	-3.7482 ppb	2.23573	59.65%
V 292.402†	26.9	0.1613 ug/L	0.16250	0.1613 ppb	0.16250	100.72%
Zn 213.857†	76.6	0.6743 ug/L	0.08068	0.6743 ppb	0.08068	11.96%
SiO2†	489.0	29.566 ug/L	1.5429	29.566 ppb	1.5429	5.22%

Sequence No.: 2
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 1/27/2010 11:58:33
 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	5558.1	5558.1	98.9 %		12:00:26
1	Y RADIAL	6018.8	6018.8	99.28 %		12:00:26
1	Al 396.153Radial†	7247.5	7325.8	5092.2 ug/L	5092.2 ppb	12:00:26
1	Ca 317.933Radial†	3361.1	3381.0	5086.5 ug/L	5086.5 ppb	12:00:46
1	Fe 238.204 Radial†	610.5	607.7	5136.7 ug/L	5136.7 ppb	12:00:46
1	K 766.490 Radial†	32528.9	30504.3	5079.8 ug/L	5079.8 ppb	12:00:26
1	Mg 279.077 IEC†	163.6	163.9	5312.6 ug/L	5312.6 ppb	12:00:46
1	Na 589.592 Radial†	34618.9	36008.1	9837.8 ug/L	9837.8 ppb	12:00:26
1	Sr 421.552†	84393.6	85318.2	495.19 ug/L	495.19 ppb	12:00:26
1	Sc 361.383	964282.3	964282.3	100.08 %		12:01:43
1	Y 371.029	844110.9	844110.9	98.962 %		12:01:43
1	Ag 328.068†	125589.6	125140.5	501.16 ug/L	501.16 ppb	12:01:49
1	As 188.979†	1286.0	1317.0	511.38 ug/L	511.38 ppb	12:02:09
1	B 249.677†	23930.6	24345.3	503.77 ug/L	503.77 ppb	12:01:49
1	Ba 233.527†	67084.8	67052.5	501.68 ug/L	501.68 ppb	12:01:49
1	Be 313.107†	1487617.7	1491518.0	501.18 ug/L	501.18 ppb	12:01:43
1	Cd 226.502†	47589.7	47758.6	501.65 ug/L	501.65 ppb	12:01:49
1	Co 228.616†	24600.2	24647.4	501.46 ug/L	501.46 ppb	12:01:49
1	Cr 267.716†	48898.1	48790.8	500.47 ug/L	500.47 ppb	12:01:49
1	Cu 324.752†	193583.7	184389.2	495.49 ug/L	495.49 ppb	12:01:49
1	Mn 257.610†	469692.9	468839.0	501.80 ug/L	501.80 ppb	12:01:43
1	Mo 202.031†	7740.7	7708.9	500.67 ug/L	500.67 ppb	12:02:09
1	Ni 231.604†	21271.6	21160.2	502.10 ug/L	502.10 ppb	12:01:49
1	P 214.914†	4913.6	4674.7	2387.8 ug/L	2387.8 ppb	12:02:09
1	Pb 220.353†	4190.9	4245.6	505.72 ug/L	505.72 ppb	12:02:09
1	S 181.975 Axial†	838.5	792.8	1001.4 ug/L	1001.4 ppb	12:02:09
1	Sb 206.836†	1666.0	1631.6	530.29 ug/L	530.29 ppb	12:02:09
1	Se 196.026†	890.8	910.6	518.23 ug/L	518.23 ppb	12:02:09
1	Si 251.611†	89876.6	89349.0	2505.9 ug/L	2505.9 ppb	12:01:49
1	Sn 189.927†	2909.2	2906.9	500.11 ug/L	500.11 ppb	12:02:09
1	Ti 334.940†	349962.8	350738.1	500.36 ug/L	500.36 ppb	12:01:43
1	Tl 190.801†	1603.2	1639.6	501.74 ug/L	501.74 ppb	12:02:09
1	U 409.014†	19707.0	21226.3	502.70 ug/L	502.70 ppb	12:01:49
1	V 292.402†	83027.1	84378.3	504.88 ug/L	504.88 ppb	12:01:49
1	Zn 213.857†	57454.7	56720.4	495.17 ug/L	495.17 ppb	12:01:49
1	SiO2†	90506.3	89989.0	5430.1 ug/L	5430.1 ppb	12:03:16
2	Sc Radial	5568.0	5568.0	99.1 %		12:00:51
2	Y RADIAL	5995.8	5995.8	98.90 %		12:00:51
2	Al 396.153Radial†	7219.5	7284.5	5063.3 ug/L	5063.3 ppb	12:00:51
2	Ca 317.933Radial†	3332.6	3346.2	5034.2 ug/L	5034.2 ppb	12:01:11
2	Fe 238.204 Radial†	611.8	607.9	5138.9 ug/L	5138.9 ppb	12:01:11
2	K 766.490 Radial†	32540.6	30457.4	5072.0 ug/L	5072.0 ppb	12:00:51
2	Mg 279.077 IEC†	160.3	160.3	5195.7 ug/L	5195.7 ppb	12:01:11
2	Na 589.592 Radial†	34523.2	35849.0	9794.3 ug/L	9794.3 ppb	12:00:51
2	Sr 421.552†	84159.9	84930.1	492.94 ug/L	492.94 ppb	12:00:51
2	Sc 361.383	962708.8	962708.8	99.914 %		12:02:15
2	Y 371.029	842676.3	842676.3	98.794 %		12:02:15
2	Ag 328.068†	127222.4	126979.9	508.50 ug/L	508.50 ppb	12:02:20
2	As 188.979†	1282.4	1315.5	510.80 ug/L	510.80 ppb	12:02:40
2	B 249.677†	24369.7	24823.8	513.70 ug/L	513.70 ppb	12:02:20
2	Ba 233.527†	67844.1	67922.0	508.18 ug/L	508.18 ppb	12:02:20
2	Be 313.107†	1487845.3	1494175.4	502.07 ug/L	502.07 ppb	12:02:15
2	Cd 226.502†	48043.5	48290.6	507.24 ug/L	507.24 ppb	12:02:20
2	Co 228.616†	24866.0	24953.6	507.69 ug/L	507.69 ppb	12:02:20
2	Cr 267.716†	49406.9	49379.8	506.51 ug/L	506.51 ppb	12:02:20
2	Cu 324.752†	196643.2	187767.5	504.56 ug/L	504.56 ppb	12:02:20
2	Mn 257.610†	470366.5	470280.3	503.34 ug/L	503.34 ppb	12:02:15
2	Mo 202.031†	7720.6	7701.5	500.18 ug/L	500.18 ppb	12:02:40
2	Ni 231.604†	21440.8	21364.2	506.94 ug/L	506.94 ppb	12:02:20

2	P 214.914†	4910.2	4679.4	2388.5 ug/L	2388.5 ppb	12:02:40
2	Pb 220.353†	4166.0	4227.5	503.55 ug/L	503.55 ppb	12:02:40
2	S 181.975 Axial†	835.1	790.8	998.88 ug/L	998.88 ppb	12:02:40
2	Sb 206.836†	1665.3	1633.7	530.91 ug/L	530.91 ppb	12:02:40
2	Se 196.026†	896.8	918.1	522.33 ug/L	522.33 ppb	12:02:40
2	Si 251.611†	91044.9	90665.1	2542.9 ug/L	2542.9 ppb	12:02:20
2	Sn 189.927†	2895.9	2898.4	498.64 ug/L	498.64 ppb	12:02:40
2	Ti 334.940†	349577.2	350923.8	500.62 ug/L	500.62 ppb	12:02:15
2	Tl 190.801†	1597.7	1636.8	500.84 ug/L	500.84 ppb	12:02:40
2	U 409.014†	19851.3	21402.9	506.89 ug/L	506.89 ppb	12:02:20
2	V 292.402†	83820.8	85308.3	510.37 ug/L	510.37 ppb	12:02:20
2	Zn 213.857†	58081.7	57441.8	501.48 ug/L	501.48 ppb	12:02:20
2	SiO2†	89420.6	89050.1	5373.3 ug/L	5373.3 ppb	12:03:22
3	Sc Radial	5482.7	5482.7	97.5 %		12:01:16
3	Y RADIAL	5905.2	5905.2	97.41 %		12:01:16
3	Al 396.153Radial†	7095.1	7270.4	5053.6 ug/L	5053.6 ppb	12:01:16
3	Ca 317.933Radial†	3340.5	3406.6	5125.0 ug/L	5125.0 ppb	12:01:36
3	Fe 238.204 Radial†	615.7	621.5	5252.8 ug/L	5252.8 ppb	12:01:36
3	K 766.490 Radial†	32014.2	30428.6	5067.2 ug/L	5067.2 ppb	12:01:16
3	Mg 279.077 IEC†	163.2	165.7	5371.6 ug/L	5371.6 ppb	12:01:36
3	Na 589.592 Radial†	33927.8	35780.6	9775.7 ug/L	9775.7 ppb	12:01:16
3	Sr 421.552†	82669.8	84723.6	491.74 ug/L	491.74 ppb	12:01:16
3	Sc 361.383	967101.7	967101.7	100.37 %		12:02:46
3	Y 371.029	844778.8	844778.8	99.041 %		12:02:46
3	Ag 328.068†	125404.3	124590.1	499.00 ug/L	499.00 ppb	12:02:51
3	As 188.979†	1277.8	1305.1	506.83 ug/L	506.83 ppb	12:03:11
3	B 249.677†	23896.8	24241.9	501.61 ug/L	501.61 ppb	12:02:51
3	Ba 233.527†	66821.0	66594.2	498.26 ug/L	498.26 ppb	12:02:51
3	Be 313.107†	1487836.9	1487403.0	499.80 ug/L	499.80 ppb	12:02:46
3	Cd 226.502†	47386.2	47417.3	498.05 ug/L	498.05 ppb	12:02:51
3	Co 228.616†	24506.2	24482.1	498.08 ug/L	498.08 ppb	12:02:51
3	Cr 267.716†	48653.2	48404.4	496.51 ug/L	496.51 ppb	12:02:51
3	Cu 324.752†	193153.7	183396.8	492.83 ug/L	492.83 ppb	12:02:51
3	Mn 257.610†	471935.9	469705.5	502.73 ug/L	502.73 ppb	12:02:46
3	Mo 202.031†	7692.5	7638.4	496.10 ug/L	496.10 ppb	12:03:11
3	Ni 231.604†	21195.8	21022.7	498.84 ug/L	498.84 ppb	12:02:51
3	P 214.914†	4873.1	4620.1	2359.2 ug/L	2359.2 ppb	12:03:11
3	Pb 220.353†	4147.3	4190.0	499.09 ug/L	499.09 ppb	12:03:11
3	S 181.975 Axial†	828.7	780.6	985.96 ug/L	985.96 ppb	12:03:11
3	Sb 206.836†	1664.3	1625.0	528.05 ug/L	528.05 ppb	12:03:11
3	Se 196.026†	894.5	911.7	519.18 ug/L	519.18 ppb	12:03:11
3	Si 251.611†	89603.6	88815.3	2490.9 ug/L	2490.9 ppb	12:02:51
3	Sn 189.927†	2895.6	2884.9	496.33 ug/L	496.33 ppb	12:03:11
3	Ti 334.940†	351295.8	351046.8	500.80 ug/L	500.80 ppb	12:02:46
3	Tl 190.801†	1588.8	1620.6	495.98 ug/L	495.98 ppb	12:03:11
3	U 409.014†	19502.9	20965.6	496.50 ug/L	496.50 ppb	12:02:51
3	V 292.402†	82644.6	83755.4	501.11 ug/L	501.11 ppb	12:02:51
3	Zn 213.857†	57232.0	56331.2	491.75 ug/L	491.75 ppb	12:02:51
3	SiO2†	90885.5	90103.0	5437.1 ug/L	5437.1 ppb	12:03:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	964697.6	100.12 %	0.231			0.23%
Sc Radial	5536.3	98.5 %	0.83			0.84%
Y 371.029	843855.3	98.932 %	0.1259			0.13%
Y RADIAL	5973.3	98.53 %	0.990			1.01%
Ag 328.068†	125570.2	502.89 ug/L	4.981	502.89 ppb	4.981	0.99%
QC value within limits for Ag 328.068 Recovery = 100.58%						
Al 396.153Radial†	7293.6	5069.7 ug/L	20.03	5069.7 ppb	20.03	0.40%
QC value within limits for Al 396.153Radial Recovery = 101.39%						
As 188.979†	1312.5	509.67 ug/L	2.477	509.67 ppb	2.477	0.49%
QC value within limits for As 188.979 Recovery = 101.93%						
B 249.677†	24470.3	506.36 ug/L	6.446	506.36 ppb	6.446	1.27%
QC value within limits for B 249.677 Recovery = 101.27%						
Ba 233.527†	67189.6	502.71 ug/L	5.042	502.71 ppb	5.042	1.00%
QC value within limits for Ba 233.527 Recovery = 100.54%						
Be 313.107†	1491032.1	501.02 ug/L	1.144	501.02 ppb	1.144	0.23%
QC value within limits for Be 313.107 Recovery = 100.20%						
Ca 317.933Radial†	3377.9	5081.9 ug/L	45.59	5081.9 ppb	45.59	0.90%

QC value within limits for Ca 317.933 Radial Recovery = 101.64%							
Cd 226.502†	47822.1	502.31 ug/L	4.633	502.31 ppb	4.633	0.92%	
QC value within limits for Cd 226.502 Recovery = 100.46%							
Co 228.616†	24694.4	502.41 ug/L	4.872	502.41 ppb	4.872	0.97%	
QC value within limits for Co 228.616 Recovery = 100.48%							
Cr 267.716†	48858.3	501.16 ug/L	5.036	501.16 ppb	5.036	1.00%	
QC value within limits for Cr 267.716 Recovery = 100.23%							
Cu 324.752†	185184.5	497.63 ug/L	6.152	497.63 ppb	6.152	1.24%	
QC value within limits for Cu 324.752 Recovery = 99.53%							
Fe 238.204 Radial†	612.4	5176.1 ug/L	66.43	5176.1 ppb	66.43	1.28%	
QC value within limits for Fe 238.204 Radial Recovery = 103.52%							
K 766.490 Radial†	30463.5	5073.0 ug/L	6.36	5073.0 ppb	6.36	0.13%	
QC value within limits for K 766.490 Radial Recovery = 101.46%							
Mg 279.077 IEC†	163.3	5293.3 ug/L	89.52	5293.3 ppb	89.52	1.69%	
QC value within limits for Mg 279.077 IEC Recovery = 105.87%							
Mn 257.610†	469608.3	502.62 ug/L	0.779	502.62 ppb	0.779	0.15%	
QC value within limits for Mn 257.610 Recovery = 100.52%							
Mo 202.031†	7682.9	498.98 ug/L	2.510	498.98 ppb	2.510	0.50%	
QC value within limits for Mo 202.031 Recovery = 99.80%							
Na 589.592 Radial†	35879.2	9802.6 ug/L	31.89	9802.6 ppb	31.89	0.33%	
QC value within limits for Na 589.592 Radial Recovery = 98.03%							
Ni 231.604†	21182.4	502.63 ug/L	4.077	502.63 ppb	4.077	0.81%	
QC value within limits for Ni 231.604 Recovery = 100.53%							
P 214.914†	4658.1	2378.5 ug/L	16.72	2378.5 ppb	16.72	0.70%	
QC value within limits for P 214.914 Recovery = 95.14%							
Pb 220.353†	4221.1	502.79 ug/L	3.382	502.79 ppb	3.382	0.67%	
QC value within limits for Pb 220.353 Recovery = 100.56%							
S 181.975 Axial†	788.1	995.42 ug/L	8.288	995.42 ppb	8.288	0.83%	
QC value within limits for S 181.975 Axial Recovery = 99.54%							
Sb 206.836†	1630.1	529.75 ug/L	1.505	529.75 ppb	1.505	0.28%	
QC value within limits for Sb 206.836 Recovery = 105.95%							
Se 196.026†	913.5	519.91 ug/L	2.149	519.91 ppb	2.149	0.41%	
QC value within limits for Se 196.026 Recovery = 103.98%							
Si 251.611†	89609.8	2513.2 ug/L	26.75	2513.2 ppb	26.75	1.06%	
QC value within limits for Si 251.611 Recovery = 100.53%							
Sn 189.927†	2896.8	498.36 ug/L	1.904	498.36 ppb	1.904	0.38%	
QC value within limits for Sn 189.927 Recovery = 99.67%							
Sr 421.552†	84990.6	493.29 ug/L	1.752	493.29 ppb	1.752	0.36%	
QC value within limits for Sr 421.552 Recovery = 98.66%							
Ti 334.940†	350902.9	500.60 ug/L	0.224	500.60 ppb	0.224	0.04%	
QC value within limits for Ti 334.940 Recovery = 100.12%							
Tl 190.801†	1632.3	499.52 ug/L	3.101	499.52 ppb	3.101	0.62%	
QC value within limits for Tl 190.801 Recovery = 99.90%							
U 409.014†	21198.3	502.03 ug/L	5.224	502.03 ppb	5.224	1.04%	
QC value within limits for U 409.014 Recovery = 100.41%							
V 292.402†	84480.7	505.46 ug/L	4.655	505.46 ppb	4.655	0.92%	
QC value within limits for V 292.402 Recovery = 101.09%							
Zn 213.857†	56831.2	496.13 ug/L	4.933	496.13 ppb	4.933	0.99%	
QC value within limits for Zn 213.857 Recovery = 99.23%							
SiO2†	89714.0	5413.5 ug/L	34.99	5413.5 ppb	34.99	0.65%	
QC value within limits for SiO2 Recovery = 101.23%							
All analyte(s) passed QC.							

Sequence No.: 3

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 1/27/2010 12:05:36

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5658.9	5658.9	101 %		12:07:29
1	Y RADIAL	6139.5	6139.5	101.3 %		12:07:29
1	Al 396.153Radial†	-5.0	-8.9	-6.1924 ug/L	-6.1924 ppb	12:07:49
1	Ca 317.933Radial†	20.3	1.9	2.8610 ug/L	2.8610 ppb	12:07:49
1	Fe 238.204 Radial†	8.8	-1.0	-8.7863 ug/L	-8.7863 ppb	12:07:49
1	K 766.490 Radial†	2541.8	130.9	21.824 ug/L	21.824 ppb	12:07:29
1	Mg 279.077 IEC†	3.9	2.4	77.253 ug/L	77.253 ppb	12:07:49
1	Na 589.592 Radial†	-1004.7	-2.0	-0.5364 ug/L	-0.5364 ppb	12:07:29
1	Sr 421.552†	27.4	-6.5	-0.0377 ug/L	-0.0377 ppb	12:07:29
1	Sc 361.383	906170.8	906170.8	94.046 %		12:08:46
1	Y 371.029	839912.7	839912.7	98.470 %		12:08:46
1	Ag 328.068†	337.9	6.9	0.0208 ug/L	0.0208 ppb	12:08:46
1	As 188.979†	-13.7	17.5	6.7401 ug/L	6.7401 ppb	12:09:06
1	B 249.677†	247.8	696.6	14.480 ug/L	14.480 ppb	12:09:06
1	Ba 233.527†	53.6	76.2	0.5675 ug/L	0.5675 ppb	12:09:06
1	Be 313.107†	-4864.3	-128.0	-0.0429 ug/L	-0.0429 ppb	12:08:46
1	Cd 226.502†	-191.2	2.2	0.0252 ug/L	0.0252 ppb	12:09:06
1	Co 228.616†	-56.2	6.4	0.1300 ug/L	0.1300 ppb	12:09:06
1	Cr 267.716†	92.6	28.7	0.2928 ug/L	0.2928 ppb	12:09:06
1	Cu 324.752†	9104.7	635.4	1.7059 ug/L	1.7059 ppb	12:08:46
1	Mn 257.610†	537.0	78.3	0.0797 ug/L	0.0797 ppb	12:09:06
1	Mo 202.031†	25.5	1.3	0.0846 ug/L	0.0846 ppb	12:09:06
1	Ni 231.604†	109.6	21.5	0.5097 ug/L	0.5097 ppb	12:09:06
1	P 214.914†	256.1	37.3	19.514 ug/L	19.514 ppb	12:09:06
1	Pb 220.353†	-31.3	24.6	2.9233 ug/L	2.9233 ppb	12:09:06
1	S 181.975 Axial†	40.0	-2.5	-3.2047 ug/L	-3.2047 ppb	12:09:06
1	Sb 206.836†	69.4	40.6	12.815 ug/L	12.815 ppb	12:09:06
1	Se 196.026†	-26.3	-7.4	-4.1144 ug/L	-4.1144 ppb	12:09:06
1	Si 251.611†	538.6	114.2	3.2101 ug/L	3.2101 ppb	12:09:06
1	Sn 189.927†	20.6	21.8	3.7514 ug/L	3.7514 ppb	12:09:06
1	Ti 334.940†	-967.7	15.5	0.0152 ug/L	0.0152 ppb	12:08:46
1	Tl 190.801†	-39.0	-3.8	-1.1504 ug/L	-1.1504 ppb	12:09:06
1	U 409.014†	-1365.7	82.4	1.9577 ug/L	1.9577 ppb	12:08:46
1	V 292.402†	-1407.6	-81.7	-0.4749 ug/L	-0.4749 ppb	12:08:46
1	Zn 213.857†	763.0	121.3	1.0635 ug/L	1.0635 ppb	12:09:06
1	SiO2†	543.2	129.8	7.8479 ug/L	7.8479 ppb	12:10:02
2	Sc Radial	5561.5	5561.5	98.9 %		12:07:54
2	Y RADIAL	5999.3	5999.3	98.96 %		12:07:54
2	Al 396.153Radial†	-7.4	-11.4	-7.9653 ug/L	-7.9653 ppb	12:08:14
2	Ca 317.933Radial†	25.5	7.5	11.326 ug/L	11.326 ppb	12:08:14
2	Fe 238.204 Radial†	9.4	-0.3	-2.4173 ug/L	-2.4173 ppb	12:08:14
2	K 766.490 Radial†	2591.3	225.2	37.544 ug/L	37.544 ppb	12:07:54
2	Mg 279.077 IEC†	6.1	4.7	151.21 ug/L	151.21 ppb	12:08:14
2	Na 589.592 Radial†	-1047.4	-62.6	-17.106 ug/L	-17.106 ppb	12:07:54
2	Sr 421.552†	24.4	-9.0	-0.0525 ug/L	-0.0525 ppb	12:07:54
2	Sc 361.383	899553.7	899553.7	93.359 %		12:09:11
2	Y 371.029	826801.1	826801.1	96.933 %		12:09:11
2	Ag 328.068†	356.6	29.4	0.1117 ug/L	0.1117 ppb	12:09:11
2	As 188.979†	-12.7	18.4	7.0748 ug/L	7.0748 ppb	12:09:31
2	B 249.677†	206.9	654.7	13.609 ug/L	13.609 ppb	12:09:31
2	Ba 233.527†	41.0	63.1	0.4699 ug/L	0.4699 ppb	12:09:31
2	Be 313.107†	-4882.5	-185.5	-0.0622 ug/L	-0.0622 ppb	12:09:11
2	Cd 226.502†	-207.7	-16.9	-0.1767 ug/L	-0.1767 ppb	12:09:31
2	Co 228.616†	-71.0	-10.0	-0.2027 ug/L	-0.2027 ppb	12:09:31
2	Cr 267.716†	106.9	44.8	0.4571 ug/L	0.4571 ppb	12:09:31
2	Cu 324.752†	9010.0	605.3	1.6247 ug/L	1.6247 ppb	12:09:11
2	Mn 257.610†	533.3	78.6	0.0776 ug/L	0.0776 ppb	12:09:31
2	Mo 202.031†	26.2	2.3	0.1466 ug/L	0.1466 ppb	12:09:31
2	Ni 231.604†	112.8	25.8	0.6119 ug/L	0.6119 ppb	12:09:31

2	P 214.914†	231.3	12.7	6.4496 ug/L	6.4496 ppb	12:09:31
2	Pb 220.353†	-37.9	17.3	2.0528 ug/L	2.0528 ppb	12:09:31
2	S 181.975 Axial†	44.3	2.4	3.0418 ug/L	3.0418 ppb	12:09:31
2	Sb 206.836†	60.7	31.9	10.024 ug/L	10.024 ppb	12:09:31
2	Se 196.026†	-20.9	-1.9	-1.0459 ug/L	-1.0459 ppb	12:09:31
2	Si 251.611†	548.7	129.3	3.6336 ug/L	3.6336 ppb	12:09:31
2	Sn 189.927†	6.8	7.3	1.2498 ug/L	1.2498 ppb	12:09:31
2	Ti 334.940†	-964.9	11.0	0.0034 ug/L	0.0034 ppb	12:09:11
2	Tl 190.801†	-31.8	3.7	1.1137 ug/L	1.1137 ppb	12:09:31
2	U 409.014†	-1320.2	120.5	2.8617 ug/L	2.8617 ppb	12:09:11
2	V 292.402†	-1406.7	-91.7	-0.5308 ug/L	-0.5308 ppb	12:09:11
2	Zn 213.857†	760.2	124.2	1.0881 ug/L	1.0881 ppb	12:09:31
2	SiO2†	550.2	141.6	8.5609 ug/L	8.5609 ppb	12:10:07
3	Sc Radial	5780.2	5780.2	103 %		12:08:19
3	Y RADIAL	6272.8	6272.8	103.5 %		12:08:19
3	Al 396.153Radial†	6.3	2.2	1.5452 ug/L	1.5452 ppb	12:08:39
3	Ca 317.933Radial†	20.7	1.9	2.8431 ug/L	2.8431 ppb	12:08:39
3	Fe 238.204 Radial†	10.4	0.3	2.7510 ug/L	2.7510 ppb	12:08:39
3	K 766.490 Radial†	2548.5	84.4	14.070 ug/L	14.070 ppb	12:08:19
3	Mg 279.077 IEC†	3.1	1.5	48.771 ug/L	48.771 ppb	12:08:39
3	Na 589.592 Radial†	-1000.4	23.1	6.3235 ug/L	6.3235 ppb	12:08:19
3	Sr 421.552†	-8.5	-42.0	-0.2436 ug/L	-0.2436 ppb	12:08:19
3	Sc 361.383	901854.6	901854.6	93.598 %		12:09:36
3	Y 371.029	831135.7	831135.7	97.441 %		12:09:36
3	Ag 328.068†	321.9	-8.6	-0.0404 ug/L	-0.0404 ppb	12:09:36
3	As 188.979†	-10.5	20.8	8.0259 ug/L	8.0259 ppb	12:09:56
3	B 249.677†	240.4	690.0	14.341 ug/L	14.341 ppb	12:09:56
3	Ba 233.527†	46.4	68.9	0.5129 ug/L	0.5129 ppb	12:09:56
3	Be 313.107†	-4941.4	-235.1	-0.0789 ug/L	-0.0789 ppb	12:09:36
3	Cd 226.502†	-209.5	-18.4	-0.1917 ug/L	-0.1917 ppb	12:09:56
3	Co 228.616†	-71.8	-10.6	-0.2134 ug/L	-0.2134 ppb	12:09:56
3	Cr 267.716†	72.5	7.7	0.0756 ug/L	0.0756 ppb	12:09:56
3	Cu 324.752†	9061.4	635.5	1.7044 ug/L	1.7044 ppb	12:09:36
3	Mn 257.610†	504.6	46.4	0.0479 ug/L	0.0479 ppb	12:09:56
3	Mo 202.031†	31.0	7.3	0.4735 ug/L	0.4735 ppb	12:09:56
3	Ni 231.604†	105.6	17.8	0.4228 ug/L	0.4228 ppb	12:09:56
3	P 214.914†	249.5	31.5	16.406 ug/L	16.406 ppb	12:09:56
3	Pb 220.353†	-34.2	21.4	2.5360 ug/L	2.5360 ppb	12:09:56
3	S 181.975 Axial†	45.2	3.3	4.1186 ug/L	4.1186 ppb	12:09:56
3	Sb 206.836†	70.7	42.4	13.356 ug/L	13.356 ppb	12:09:56
3	Se 196.026†	-21.9	-2.9	-1.5668 ug/L	-1.5668 ppb	12:09:56
3	Si 251.611†	544.4	123.2	3.4581 ug/L	3.4581 ppb	12:09:56
3	Sn 189.927†	12.4	13.2	2.2687 ug/L	2.2687 ppb	12:09:56
3	Ti 334.940†	-1002.5	-26.6	-0.0444 ug/L	-0.0444 ppb	12:09:36
3	Tl 190.801†	-37.0	-1.9	-0.5748 ug/L	-0.5748 ppb	12:09:56
3	U 409.014†	-1186.0	267.4	6.3529 ug/L	6.3529 ppb	12:09:36
3	V 292.402†	-1397.9	-78.5	-0.4439 ug/L	-0.4439 ppb	12:09:36
3	Zn 213.857†	757.7	119.5	1.0470 ug/L	1.0470 ppb	12:09:56
3	SiO2†	553.9	144.0	8.7000 ug/L	8.7000 ppb	12:10:12

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	902526.4	93.668 %		0.3486			0.37%
Sc Radial	5666.9	101 %		1.9			1.93%
Y 371.029	832616.5	97.615 %		0.7832			0.80%
Y RADIAL	6137.2	101.2 %		2.26			2.23%
Ag 328.068†	9.2	0.0307 ug/L		0.07652	0.0307 ppb	0.07652	249.12%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-6.0	-4.2042 ug/L		5.05737	-4.2042 ppb	5.05737	120.29%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	18.9	7.2803 ug/L		0.66707	7.2803 ppb	0.66707	9.16%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	680.4	14.143 ug/L		0.4680	14.143 ppb	0.4680	3.31%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	69.4	0.5168 ug/L		0.04890	0.5168 ppb	0.04890	9.46%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-182.9	-0.0613 ug/L		0.01803	-0.0613 ppb	0.01803	29.41%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	3.8	5.6767 ug/L		4.89240	5.6767 ppb	4.89240	86.18%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-11.0	-0.1144 ug/L	0.12113	-0.1144 ppb	0.12113	105.87%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-4.7	-0.0954 ug/L	0.19526	-0.0954 ppb	0.19526	204.71%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	27.1	0.2752 ug/L	0.19137	0.2752 ppb	0.19137	69.54%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	625.4	1.6784 ug/L	0.04644	1.6784 ppb	0.04644	2.77%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.3	-2.8175 ug/L	5.77908	-2.8175 ppb	5.77908	205.11%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	146.8	24.479 ug/L	11.9603	24.479 ppb	11.9603	48.86%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	2.9	92.412 ug/L	52.8758	92.412 ppb	52.8758	57.22%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	67.8	0.0684 ug/L	0.01777	0.0684 ppb	0.01777	25.97%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	3.6	0.2349 ug/L	0.20898	0.2349 ppb	0.20898	88.97%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-13.8	-3.7731 ug/L	12.04558	-3.7731 ppb	12.04558	319.25%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	21.7	0.5148 ug/L	0.09467	0.5148 ppb	0.09467	18.39%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	27.2	14.123 ug/L	6.8246	14.123 ppb	6.8246	48.32%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	21.1	2.5040 ug/L	0.43611	2.5040 ppb	0.43611	17.42%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	1.0	1.3186 ug/L	3.95407	1.3186 ppb	3.95407	299.87%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	38.3	12.065 ug/L	1.7885	12.065 ppb	1.7885	14.82%
QC value greater than the upper limit for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-4.1	-2.2424 ug/L	1.64203	-2.2424 ppb	1.64203	73.23%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	122.2	3.4339 ug/L	0.21281	3.4339 ppb	0.21281	6.20%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	14.1	2.4233 ug/L	1.25797	2.4233 ppb	1.25797	51.91%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-19.2	-0.1113 ug/L	0.11484	-0.1113 ppb	0.11484	103.20%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-0.1	-0.0086 ug/L	0.03155	-0.0086 ppb	0.03155	366.91%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-0.7	-0.2039 ug/L	1.17674	-0.2039 ppb	1.17674	577.23%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	156.7	3.7241 ug/L	2.32104	3.7241 ppb	2.32104	62.33%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-84.0	-0.4832 ug/L	0.04407	-0.4832 ppb	0.04407	9.12%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	121.7	1.0662 ug/L	0.02066	1.0662 ppb	0.02066	1.94%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	138.5	8.3696 ug/L	0.45714	8.3696 ppb	0.45714	5.46%
QC value within limits for SiO2 Recovery = Not calculated						
QC Failed. Continue with analysis.						

User canceled analysis.

=====
Analysis Begun

Start Time: 1/27/2010 12:27:17

Plasma On Time: 00:00:00

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\012710.sif

Batch ID:

Results Data Set: 012710

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

=====
Sequence No.: 2

Autosampler Location: 7

Sample ID: CCV

Date Collected: 1/27/2010 12:27:18

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5632.3	5632.3	100 %		12:29:11
1	Y RADIAL	6096.6	6096.6	100.6 %		12:29:11
1	Al 396.153Radial†	7222.1	7203.9	5007.3 ug/L	5007.3 ppb	12:29:11
1	Ca 317.933Radial†	3361.9	3337.0	5020.3 ug/L	5020.3 ppb	12:29:31
1	Fe 238.204 Radial†	612.8	601.8	5087.4 ug/L	5087.4 ppb	12:29:31
1	K 766.490 Radial†	32510.6	30052.2	5004.4 ug/L	5004.4 ppb	12:29:11
1	Mg 279.077 IEC†	163.8	161.9	5248.1 ug/L	5248.1 ppb	12:29:31
1	Na 589.592 Radial†	35390.1	36316.0	9921.9 ug/L	9921.9 ppb	12:29:11
1	Sr 421.552†	85225.5	85022.9	493.48 ug/L	493.48 ppb	12:29:11
1	Sc 361.383	977268.1	977268.1	101.42 %		12:30:28
1	Y 371.029	855072.6	855072.6	100.25 %		12:30:28
1	Ag 328.068†	126858.7	124724.3	499.48 ug/L	499.48 ppb	12:30:34
1	As 188.979†	1272.5	1286.6	499.67 ug/L	499.67 ppb	12:30:54
1	B 249.677†	23950.6	24047.3	497.59 ug/L	497.59 ppb	12:30:34
1	Ba 233.527†	67570.8	66640.9	498.60 ug/L	498.60 ppb	12:30:34
1	Be 313.107†	1501097.1	1485056.0	499.01 ug/L	499.01 ppb	12:30:28
1	Cd 226.502†	47860.5	47393.7	497.82 ug/L	497.82 ppb	12:30:34
1	Co 228.616†	24812.3	24529.8	499.06 ug/L	499.06 ppb	12:30:34
1	Cr 267.716†	49068.6	48309.6	495.54 ug/L	495.54 ppb	12:30:34
1	Cu 324.752†	196309.5	184506.3	495.80 ug/L	495.80 ppb	12:30:34
1	Mn 257.610†	475079.7	467913.8	500.80 ug/L	500.80 ppb	12:30:28
1	Mo 202.031†	7735.6	7601.1	493.67 ug/L	493.67 ppb	12:30:54
1	Ni 231.604†	21327.0	20932.4	496.69 ug/L	496.69 ppb	12:30:34
1	P 214.914†	4910.3	4606.2	2351.3 ug/L	2351.3 ppb	12:30:54
1	Pb 220.353†	4166.6	4166.0	496.23 ug/L	496.23 ppb	12:30:54
1	S 181.975 Axial†	839.2	782.3	988.18 ug/L	988.18 ppb	12:30:54
1	Sb 206.836†	1618.1	1562.3	508.23 ug/L	508.23 ppb	12:30:54
1	Se 196.026†	889.9	897.9	511.09 ug/L	511.09 ppb	12:30:54
1	Si 251.611†	90806.7	89072.8	2498.2 ug/L	2498.2 ppb	12:30:34
1	Sn 189.927†	2896.2	2855.5	491.26 ug/L	491.26 ppb	12:30:54
1	Ti 334.940†	354150.7	350220.5	499.62 ug/L	499.62 ppb	12:30:28
1	Tl 190.801†	1610.1	1625.2	497.34 ug/L	497.34 ppb	12:30:54
1	U 409.014†	20032.6	21285.8	504.13 ug/L	504.13 ppb	12:30:34
1	V 292.402†	83579.1	83820.1	501.50 ug/L	501.50 ppb	12:30:34
1	Zn 213.857†	57848.7	56346.1	491.91 ug/L	491.91 ppb	12:30:34
1	SiO2†	90294.8	88578.6	5344.9 ug/L	5344.9 ppb	12:32:01
2	Sc Radial	5660.6	5660.6	101 %		12:29:36
2	Y RADIAL	6086.6	6086.6	100.4 %		12:29:36
2	Al 396.153Radial†	7292.1	7237.4	5030.4 ug/L	5030.4 ppb	12:29:36
2	Ca 317.933Radial†	3353.8	3312.1	4982.9 ug/L	4982.9 ppb	12:29:56
2	Fe 238.204 Radial†	617.8	603.7	5103.3 ug/L	5103.3 ppb	12:29:56
2	K 766.490 Radial†	32683.5	30061.9	5006.0 ug/L	5006.0 ppb	12:29:36
2	Mg 279.077 IEC†	163.7	161.0	5219.2 ug/L	5219.2 ppb	12:29:56
2	Na 589.592 Radial†	35456.1	36205.2	9891.7 ug/L	9891.7 ppb	12:29:36
2	Sr 421.552†	85889.5	85257.6	494.84 ug/L	494.84 ppb	12:29:36
2	Sc 361.383	969258.0	969258.0	100.59 %		12:31:00

2	Y 371.029	848764.2	848764.2	99.508 %		12:31:00
2	Ag 328.068†	126930.2	125829.1	503.90 ug/L	503.90 ppb	12:31:05
2	As 188.979†	1285.5	1309.9	508.62 ug/L	508.62 ppb	12:31:25
2	B 249.677†	23827.3	24119.9	499.09 ug/L	499.09 ppb	12:31:05
2	Ba 233.527†	67650.7	67270.9	503.31 ug/L	503.31 ppb	12:31:05
2	Be 313.107†	1492935.2	1489173.4	500.39 ug/L	500.39 ppb	12:31:00
2	Cd 226.502†	48003.3	47925.7	503.41 ug/L	503.41 ppb	12:31:05
2	Co 228.616†	24838.2	24757.9	503.71 ug/L	503.71 ppb	12:31:05
2	Cr 267.716†	49180.1	48820.2	500.77 ug/L	500.77 ppb	12:31:05
2	Cu 324.752†	194950.6	184755.0	496.47 ug/L	496.47 ppb	12:31:05
2	Mn 257.610†	472342.2	469063.4	502.04 ug/L	502.04 ppb	12:31:00
2	Mo 202.031†	7784.6	7712.9	500.92 ug/L	500.92 ppb	12:31:25
2	Ni 231.604†	21472.3	21250.6	504.25 ug/L	504.25 ppb	12:31:05
2	P 214.914†	4962.6	4698.3	2400.2 ug/L	2400.2 ppb	12:31:25
2	Pb 220.353†	4203.0	4236.1	504.58 ug/L	504.58 ppb	12:31:25
2	S 181.975 Axial†	835.7	785.8	992.52 ug/L	992.52 ppb	12:31:25
2	Sb 206.836†	1639.0	1596.2	519.19 ug/L	519.19 ppb	12:31:25
2	Se 196.026†	899.8	915.0	520.51 ug/L	520.51 ppb	12:31:25
2	Si 251.611†	90521.5	89529.1	2510.9 ug/L	2510.9 ppb	12:31:05
2	Sn 189.927†	2930.8	2913.5	501.22 ug/L	501.22 ppb	12:31:25
2	Ti 334.940†	351500.9	350472.0	499.98 ug/L	499.98 ppb	12:31:00
2	Tl 190.801†	1614.0	1642.1	502.48 ug/L	502.48 ppb	12:31:25
2	U 409.014†	19604.1	21022.9	497.87 ug/L	497.87 ppb	12:31:05
2	V 292.402†	83560.5	84482.7	505.50 ug/L	505.50 ppb	12:31:05
2	Zn 213.857†	57920.5	56888.8	496.64 ug/L	496.64 ppb	12:31:05
2	SiO2†	90408.6	89427.6	5396.1 ug/L	5396.1 ppb	12:32:07
3	Sc Radial	5654.2	5654.2	101 %		12:30:01
3	Y RADIAL	6087.6	6087.6	100.4 %		12:30:01
3	Al 396.153Radial†	7215.8	7169.7	4983.3 ug/L	4983.3 ppb	12:30:01
3	Ca 317.933Radial†	3370.5	3332.5	5013.6 ug/L	5013.6 ppb	12:30:21
3	Fe 238.204 Radial†	621.0	607.6	5136.0 ug/L	5136.0 ppb	12:30:21
3	K 766.490 Radial†	32635.0	30050.2	5004.1 ug/L	5004.1 ppb	12:30:01
3	Mg 279.077 IEC†	162.2	159.7	5175.6 ug/L	5175.6 ppb	12:30:21
3	Na 589.592 Radial†	35515.6	36303.9	9918.6 ug/L	9918.6 ppb	12:30:01
3	Sr 421.552†	85703.5	85168.5	494.32 ug/L	494.32 ppb	12:30:01
3	Sc 361.383	975896.4	975896.4	101.28 %		12:31:31
3	Y 371.029	852803.0	852803.0	99.981 %		12:31:31
3	Ag 328.068†	127665.9	125697.0	503.37 ug/L	503.37 ppb	12:31:36
3	As 188.979†	1275.7	1291.5	501.58 ug/L	501.58 ppb	12:31:56
3	B 249.677†	24153.7	24281.0	502.44 ug/L	502.44 ppb	12:31:36
3	Ba 233.527†	67971.3	67130.0	502.26 ug/L	502.26 ppb	12:31:36
3	Be 313.107†	1500337.0	1486385.9	499.46 ug/L	499.46 ppb	12:31:31
3	Cd 226.502†	48139.5	47735.6	501.41 ug/L	501.41 ppb	12:31:36
3	Co 228.616†	24905.4	24656.2	501.63 ug/L	501.63 ppb	12:31:36
3	Cr 267.716†	49252.3	48559.0	498.09 ug/L	498.09 ppb	12:31:36
3	Cu 324.752†	197297.6	185754.0	499.16 ug/L	499.16 ppb	12:31:36
3	Mn 257.610†	476442.2	469917.4	502.95 ug/L	502.95 ppb	12:31:31
3	Mo 202.031†	7774.2	7650.0	496.84 ug/L	496.84 ppb	12:31:56
3	Ni 231.604†	21492.5	21125.3	501.27 ug/L	501.27 ppb	12:31:36
3	P 214.914†	4976.1	4678.0	2388.8 ug/L	2388.8 ppb	12:31:56
3	Pb 220.353†	4215.4	4220.0	502.63 ug/L	502.63 ppb	12:31:56
3	S 181.975 Axial†	840.5	784.8	991.30 ug/L	991.30 ppb	12:31:56
3	Sb 206.836†	1659.0	1604.9	521.80 ug/L	521.80 ppb	12:31:56
3	Se 196.026†	901.3	910.3	518.07 ug/L	518.07 ppb	12:31:56
3	Si 251.611†	91229.5	89616.0	2513.4 ug/L	2513.4 ppb	12:31:36
3	Sn 189.927†	2935.2	2898.0	498.57 ug/L	498.57 ppb	12:31:56
3	Ti 334.940†	354373.9	350931.7	500.64 ug/L	500.64 ppb	12:31:31
3	Tl 190.801†	1631.5	1648.5	504.44 ug/L	504.44 ppb	12:31:56
3	U 409.014†	20005.1	21286.3	504.14 ug/L	504.14 ppb	12:31:36
3	V 292.402†	83885.4	84238.3	504.00 ug/L	504.00 ppb	12:31:36
3	Zn 213.857†	58204.3	56777.3	495.67 ug/L	495.67 ppb	12:31:36
3	SiO2†	90676.9	89081.1	5375.2 ug/L	5375.2 ppb	12:32:12

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	974140.8	101.10 %	0.445			0.44%
Sc Radial	5649.1	100 %	0.3			0.26%
Y 371.029	852213.3	99.912 %	0.3746			0.37%
Y RADIAL	6090.2	100.5 %	0.09			0.09%

Ag	328.068†	125416.8	502.25 ug/L	2.416	502.25 ppb	2.416	0.48%
	QC value within limits for Ag 328.068 Recovery = 100.45%						
Al	396.153Radial†	7203.7	5007.0 ug/L	23.53	5007.0 ppb	23.53	0.47%
	QC value within limits for Al 396.153Radial Recovery = 100.14%						
As	188.979†	1296.0	503.29 ug/L	4.718	503.29 ppb	4.718	0.94%
	QC value within limits for As 188.979 Recovery = 100.66%						
B	249.677†	24149.4	499.70 ug/L	2.480	499.70 ppb	2.480	0.50%
	QC value within limits for B 249.677 Recovery = 99.94%						
Ba	233.527†	67013.9	501.39 ug/L	2.472	501.39 ppb	2.472	0.49%
	QC value within limits for Ba 233.527 Recovery = 100.28%						
Be	313.107†	1486871.8	499.62 ug/L	0.705	499.62 ppb	0.705	0.14%
	QC value within limits for Be 313.107 Recovery = 99.92%						
Ca	317.933Radial†	3327.2	5005.6 ug/L	19.94	5005.6 ppb	19.94	0.40%
	QC value within limits for Ca 317.933Radial Recovery = 100.11%						
Cd	226.502†	47685.0	500.88 ug/L	2.833	500.88 ppb	2.833	0.57%
	QC value within limits for Cd 226.502 Recovery = 100.18%						
Co	228.616†	24648.0	501.47 ug/L	2.332	501.47 ppb	2.332	0.46%
	QC value within limits for Co 228.616 Recovery = 100.29%						
Cr	267.716†	48563.0	498.13 ug/L	2.620	498.13 ppb	2.620	0.53%
	QC value within limits for Cr 267.716 Recovery = 99.63%						
Cu	324.752†	185005.1	497.14 ug/L	1.775	497.14 ppb	1.775	0.36%
	QC value within limits for Cu 324.752 Recovery = 99.43%						
Fe	238.204 Radial†	604.4	5108.9 ug/L	24.78	5108.9 ppb	24.78	0.49%
	QC value within limits for Fe 238.204 Radial Recovery = 102.18%						
K	766.490 Radial†	30054.8	5004.8 ug/L	1.05	5004.8 ppb	1.05	0.02%
	QC value within limits for K 766.490 Radial Recovery = 100.10%						
Mg	279.077 IEC†	160.9	5214.3 ug/L	36.49	5214.3 ppb	36.49	0.70%
	QC value within limits for Mg 279.077 IEC Recovery = 104.29%						
Mn	257.610†	468964.9	501.93 ug/L	1.079	501.93 ppb	1.079	0.22%
	QC value within limits for Mn 257.610 Recovery = 100.39%						
Mo	202.031†	7654.7	497.14 ug/L	3.637	497.14 ppb	3.637	0.73%
	QC value within limits for Mo 202.031 Recovery = 99.43%						
Na	589.592 Radial†	36275.0	9910.7 ug/L	16.61	9910.7 ppb	16.61	0.17%
	QC value within limits for Na 589.592 Radial Recovery = 99.11%						
Ni	231.604†	21102.7	500.74 ug/L	3.805	500.74 ppb	3.805	0.76%
	QC value within limits for Ni 231.604 Recovery = 100.15%						
P	214.914†	4660.8	2380.1 ug/L	25.57	2380.1 ppb	25.57	1.07%
	QC value within limits for P 214.914 Recovery = 95.20%						
Pb	220.353†	4207.4	501.15 ug/L	4.365	501.15 ppb	4.365	0.87%
	QC value within limits for Pb 220.353 Recovery = 100.23%						
S	181.975 Axial†	784.3	990.67 ug/L	2.237	990.67 ppb	2.237	0.23%
	QC value within limits for S 181.975 Axial Recovery = 99.07%						
Sb	206.836†	1587.8	516.41 ug/L	7.201	516.41 ppb	7.201	1.39%
	QC value within limits for Sb 206.836 Recovery = 103.28%						
Se	196.026†	907.7	516.55 ug/L	4.890	516.55 ppb	4.890	0.95%
	QC value within limits for Se 196.026 Recovery = 103.31%						
Si	251.611†	89406.0	2507.5 ug/L	8.17	2507.5 ppb	8.17	0.33%
	QC value within limits for Si 251.611 Recovery = 100.30%						
Sn	189.927†	2889.0	497.02 ug/L	5.156	497.02 ppb	5.156	1.04%
	QC value within limits for Sn 189.927 Recovery = 99.40%						
Sr	421.552†	85149.7	494.21 ug/L	0.688	494.21 ppb	0.688	0.14%
	QC value within limits for Sr 421.552 Recovery = 98.84%						
Ti	334.940†	350541.4	500.08 ug/L	0.517	500.08 ppb	0.517	0.10%
	QC value within limits for Ti 334.940 Recovery = 100.02%						
Tl	190.801†	1638.6	501.42 ug/L	3.663	501.42 ppb	3.663	0.73%
	QC value within limits for Tl 190.801 Recovery = 100.28%						
U	409.014†	21198.3	502.05 ug/L	3.614	502.05 ppb	3.614	0.72%
	QC value within limits for U 409.014 Recovery = 100.41%						
V	292.402†	84180.4	503.67 ug/L	2.020	503.67 ppb	2.020	0.40%
	QC value within limits for V 292.402 Recovery = 100.73%						
Zn	213.857†	56670.7	494.74 ug/L	2.498	494.74 ppb	2.498	0.50%
	QC value within limits for Zn 213.857 Recovery = 98.95%						
SiO2†		89029.1	5372.1 ug/L	25.72	5372.1 ppb	25.72	0.48%
	QC value within limits for SiO2 Recovery = 100.46%						
All analyte(s) passed QC.							

Sequence No.: 3

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 1/27/2010 12:34:22

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5511.4	5511.4	98.0 %		12:36:14
1	Y RADIAL	5989.0	5989.0	98.79 %		12:36:14
1	Al 396.153Radial†	-1.2	-5.1	-3.6052 ug/L	-3.6052 ppb	12:36:14
1	Ca 317.933Radial†	20.0	2.2	3.2396 ug/L	3.2396 ppb	12:36:35
1	Fe 238.204 Radial†	9.4	-0.2	-1.4829 ug/L	-1.4829 ppb	12:36:35
1	K 766.490 Radial†	2624.4	282.7	47.150 ug/L	47.150 ppb	12:36:14
1	Mg 279.077 IEC†	2.6	1.1	36.874 ug/L	36.874 ppb	12:36:35
1	Na 589.592 Radial†	-1071.4	-96.7	-26.421 ug/L	-26.421 ppb	12:36:14
1	Sr 421.552†	38.5	5.6	0.0323 ug/L	0.0323 ppb	12:36:14
1	Sc 361.383	964375.2	964375.2	100.09 %		12:37:31
1	Y 371.029	854321.0	854321.0	100.16 %		12:37:31
1	Ag 328.068†	309.8	-43.0	-0.1678 ug/L	-0.1678 ppb	12:37:36
1	As 188.979†	-22.2	9.8	3.7732 ug/L	3.7732 ppb	12:37:56
1	B 249.677†	38.9	471.9	9.8102 ug/L	9.8102 ppb	12:37:56
1	Ba 233.527†	8.1	27.3	0.2044 ug/L	0.2044 ppb	12:37:56
1	Be 313.107†	-5075.1	-26.5	-0.0086 ug/L	-0.0086 ppb	12:37:36
1	Cd 226.502†	-204.5	1.2	0.0120 ug/L	0.0120 ppb	12:37:56
1	Co 228.616†	-71.3	-5.1	-0.1038 ug/L	-0.1038 ppb	12:37:56
1	Cr 267.716†	80.2	10.4	0.1080 ug/L	0.1080 ppb	12:37:56
1	Cu 324.752†	9166.6	113.0	0.3052 ug/L	0.3052 ppb	12:37:36
1	Mn 257.610†	471.2	-21.9	-0.0251 ug/L	-0.0251 ppb	12:37:56
1	Mo 202.031†	32.4	6.6	0.4300 ug/L	0.4300 ppb	12:37:56
1	Ni 231.604†	101.3	6.2	0.1461 ug/L	0.1461 ppb	12:37:56
1	P 214.914†	246.3	11.0	5.8186 ug/L	5.8186 ppb	12:37:56
1	Pb 220.353†	-30.4	27.6	3.2761 ug/L	3.2761 ppb	12:37:56
1	S 181.975 Axial†	49.2	4.1	5.2072 ug/L	5.2072 ppb	12:37:56
1	Sb 206.836†	37.5	4.4	1.4127 ug/L	1.4127 ppb	12:37:56
1	Se 196.026†	-17.0	3.6	1.9467 ug/L	1.9467 ppb	12:37:56
1	Si 251.611†	493.3	34.4	0.9630 ug/L	0.9630 ppb	12:37:56
1	Sn 189.927†	11.8	11.7	2.0144 ug/L	2.0144 ppb	12:37:56
1	Ti 334.940†	-965.8	79.5	0.1121 ug/L	0.1121 ppb	12:37:36
1	Tl 190.801†	-40.3	-2.6	-0.7918 ug/L	-0.7918 ppb	12:37:56
1	U 409.014†	-1661.8	-125.9	-2.9908 ug/L	-2.9908 ppb	12:37:36
1	V 292.402†	-1363.9	52.3	0.3100 ug/L	0.3100 ppb	12:37:36
1	Zn 213.857†	700.5	9.8	0.0854 ug/L	0.0854 ppb	12:37:56
1	SiO2†	528.0	79.8	4.8162 ug/L	4.8162 ppb	12:39:02
2	Sc Radial	5502.8	5502.8	97.9 %		12:36:40
2	Y RADIAL	5978.4	5978.4	98.61 %		12:36:40
2	Al 396.153Radial†	4.8	1.0	0.7291 ug/L	0.7291 ppb	12:36:40
2	Ca 317.933Radial†	21.3	3.5	5.2326 ug/L	5.2326 ppb	12:37:00
2	Fe 238.204 Radial†	8.6	-1.0	-8.4110 ug/L	-8.4110 ppb	12:37:00
2	K 766.490 Radial†	2615.6	277.9	46.347 ug/L	46.347 ppb	12:36:40
2	Mg 279.077 IEC†	4.5	3.0	98.608 ug/L	98.608 ppb	12:37:00
2	Na 589.592 Radial†	-1015.5	-41.3	-11.284 ug/L	-11.284 ppb	12:36:40
2	Sr 421.552†	12.0	-21.4	-0.1245 ug/L	-0.1245 ppb	12:36:40
2	Sc 361.383	960699.3	960699.3	99.705 %		12:38:01
2	Y 371.029	849922.9	849922.9	99.644 %		12:38:01
2	Ag 328.068†	346.6	-4.9	-0.0185 ug/L	-0.0185 ppb	12:38:07
2	As 188.979†	-21.4	10.5	4.0484 ug/L	4.0484 ppb	12:38:27
2	B 249.677†	9.2	442.3	9.1949 ug/L	9.1949 ppb	12:38:27
2	Ba 233.527†	-2.3	16.9	0.1261 ug/L	0.1261 ppb	12:38:27
2	Be 313.107†	-4942.2	87.4	0.0295 ug/L	0.0295 ppb	12:38:07
2	Cd 226.502†	-207.0	-2.1	-0.0221 ug/L	-0.0221 ppb	12:38:27
2	Co 228.616†	-64.6	1.3	0.0261 ug/L	0.0261 ppb	12:38:27
2	Cr 267.716†	85.5	16.1	0.1663 ug/L	0.1663 ppb	12:38:27
2	Cu 324.752†	8969.8	-49.3	-0.1304 ug/L	-0.1304 ppb	12:38:07
2	Mn 257.610†	492.8	1.6	-0.0032 ug/L	-0.0032 ppb	12:38:27
2	Mo 202.031†	22.3	-3.4	-0.2242 ug/L	-0.2242 ppb	12:38:27
2	Ni 231.604†	94.5	-0.3	-0.0072 ug/L	-0.0072 ppb	12:38:27

2	P 214.914†	227.2	-7.2	-3.7786 ug/L	-3.7786 ppb	12:38:27
2	Pb 220.353†	-43.5	14.3	1.7029 ug/L	1.7029 ppb	12:38:27
2	S 181.975 Axial†	43.0	-1.9	-2.3786 ug/L	-2.3786 ppb	12:38:27
2	Sb 206.836†	45.1	12.1	3.8306 ug/L	3.8306 ppb	12:38:27
2	Se 196.026†	-22.2	-1.8	-1.0014 ug/L	-1.0014 ppb	12:38:27
2	Si 251.611†	480.3	23.3	0.6577 ug/L	0.6577 ppb	12:38:27
2	Sn 189.927†	12.3	12.3	2.1183 ug/L	2.1183 ppb	12:38:27
2	Ti 334.940†	-968.2	73.4	0.0992 ug/L	0.0992 ppb	12:38:07
2	Tl 190.801†	-34.5	3.0	0.9264 ug/L	0.9264 ppb	12:38:27
2	U 409.014†	-1719.2	-189.8	-4.5086 ug/L	-4.5086 ppb	12:38:07
2	V 292.402†	-1407.7	3.2	0.0099 ug/L	0.0099 ppb	12:38:07
2	Zn 213.857†	701.7	13.8	0.1222 ug/L	0.1222 ppb	12:38:27
2	SiO2†	509.8	63.6	3.8520 ug/L	3.8520 ppb	12:39:07
3	Sc Radial	5602.4	5602.4	99.7 %		12:37:05
3	Y RADIAL	6073.3	6073.3	100.2 %		12:37:05
3	Al 396.153Radial†	-5.5	-9.4	-6.5688 ug/L	-6.5688 ppb	12:37:05
3	Ca 317.933Radial†	19.5	1.3	2.0225 ug/L	2.0225 ppb	12:37:25
3	Fe 238.204 Radial†	8.6	-1.1	-9.6760 ug/L	-9.6760 ppb	12:37:25
3	K 766.490 Radial†	2518.5	133.0	22.178 ug/L	22.178 ppb	12:37:05
3	Mg 279.077 IEC†	0.5	-1.0	-32.997 ug/L	-32.997 ppb	12:37:25
3	Na 589.592 Radial†	-977.2	15.5	4.2403 ug/L	4.2403 ppb	12:37:05
3	Sr 421.552†	43.0	9.4	0.0547 ug/L	0.0547 ppb	12:37:05
3	Sc 361.383	972635.3	972635.3	100.94 %		12:38:32
3	Y 371.029	859863.6	859863.6	100.81 %		12:38:32
3	Ag 328.068†	338.8	-16.8	-0.0680 ug/L	-0.0680 ppb	12:38:37
3	As 188.979†	-25.9	6.3	2.4383 ug/L	2.4383 ppb	12:38:57
3	B 249.677†	39.3	472.0	9.8136 ug/L	9.8136 ppb	12:38:57
3	Ba 233.527†	1.2	20.5	0.1532 ug/L	0.1532 ppb	12:38:57
3	Be 313.107†	-4948.5	142.1	0.0480 ug/L	0.0480 ppb	12:38:37
3	Cd 226.502†	-190.1	17.2	0.1812 ug/L	0.1812 ppb	12:38:57
3	Co 228.616†	-79.5	-12.6	-0.2564 ug/L	-0.2564 ppb	12:38:57
3	Cr 267.716†	86.6	16.1	0.1652 ug/L	0.1652 ppb	12:38:57
3	Cu 324.752†	9133.2	2.1	0.0058 ug/L	0.0058 ppb	12:38:37
3	Mn 257.610†	467.4	-29.7	-0.0313 ug/L	-0.0313 ppb	12:38:57
3	Mo 202.031†	27.3	1.3	0.0842 ug/L	0.0842 ppb	12:38:57
3	Ni 231.604†	100.6	4.6	0.1099 ug/L	0.1099 ppb	12:38:57
3	P 214.914†	242.6	5.2	2.7810 ug/L	2.7810 ppb	12:38:57
3	Pb 220.353†	-47.3	11.0	1.3114 ug/L	1.3114 ppb	12:38:57
3	S 181.975 Axial†	44.5	-1.0	-1.2489 ug/L	-1.2489 ppb	12:38:57
3	Sb 206.836†	46.8	13.2	4.1611 ug/L	4.1611 ppb	12:38:57
3	Se 196.026†	-20.1	0.6	0.3045 ug/L	0.3045 ppb	12:38:57
3	Si 251.611†	501.2	38.1	1.0688 ug/L	1.0688 ppb	12:38:57
3	Sn 189.927†	2.1	2.0	0.3518 ug/L	0.3518 ppb	12:38:57
3	Ti 334.940†	-927.6	125.6	0.1827 ug/L	0.1827 ppb	12:38:37
3	Tl 190.801†	-42.3	-4.2	-1.2746 ug/L	-1.2746 ppb	12:38:57
3	U 409.014†	-1604.3	-54.8	-1.3018 ug/L	-1.3018 ppb	12:38:37
3	V 292.402†	-1379.5	48.5	0.2855 ug/L	0.2855 ppb	12:38:37
3	Zn 213.857†	689.2	-7.3	-0.0641 ug/L	-0.0641 ppb	12:38:57
3	SiO2†	504.3	51.8	3.1320 ug/L	3.1320 ppb	12:39:12

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	965903.3	100.25 %		0.634			0.63%
Sc Radial	5538.9	98.5 %		0.98			1.00%
Y 371.029	854702.5	100.20 %		0.584			0.58%
Y RADIAL	6013.6	99.19 %		0.858			0.86%
Ag 328.068†	-21.6	-0.0848 ug/L		0.07609	-0.0848 ppb	0.07609	89.77%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-4.5	-3.1483 ug/L		3.67035	-3.1483 ppb	3.67035	116.58%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	8.9	3.4199 ug/L		0.86122	3.4199 ppb	0.86122	25.18%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	462.1	9.6062 ug/L		0.35623	9.6062 ppb	0.35623	3.71%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	21.6	0.1612 ug/L		0.03975	0.1612 ppb	0.03975	24.65%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	67.7	0.0230 ug/L		0.02889	0.0230 ppb	0.02889	125.67%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	2.3	3.4982 ug/L		1.62061	3.4982 ppb	1.62061	46.33%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	5.4	0.0570 ug/L	0.10885	0.0570 ppb	0.10885	190.91%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-5.5	-0.1114 ug/L	0.14143	-0.1114 ppb	0.14143	127.00%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	14.2	0.1465 ug/L	0.03337	0.1465 ppb	0.03337	22.78%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	21.9	0.0602 ug/L	0.22288	0.0602 ppb	0.22288	370.27%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.8	-6.5233 ug/L	4.41074	-6.5233 ppb	4.41074	67.62%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	231.2	38.558 ug/L	14.1913	38.558 ppb	14.1913	36.80%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.1	34.162 ug/L	65.8444	34.162 ppb	65.8444	192.74%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-16.7	-0.0199 ug/L	0.01477	-0.0199 ppb	0.01477	74.41%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	1.5	0.0967 ug/L	0.32729	0.0967 ppb	0.32729	338.64%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-40.8	-11.155 ug/L	15.3312	-11.155 ppb	15.3312	137.44%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	3.5	0.0829 ug/L	0.08015	0.0829 ppb	0.08015	96.62%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	3.0	1.6070 ug/L	4.90513	1.6070 ppb	4.90513	305.23%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	17.7	2.0968 ug/L	1.03992	2.0968 ppb	1.03992	49.60%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	0.4	0.5266 ug/L	4.09271	0.5266 ppb	4.09271	777.27%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	9.9	3.1348 ug/L	1.50053	3.1348 ppb	1.50053	47.87%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.8	0.4166 ug/L	1.47726	0.4166 ppb	1.47726	354.60%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	31.9	0.8965 ug/L	0.21343	0.8965 ppb	0.21343	23.81%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	8.7	1.4948 ug/L	0.99126	1.4948 ppb	0.99126	66.31%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-2.1	-0.0125 ug/L	0.09765	-0.0125 ppb	0.09765	780.95%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	92.8	0.1313 ug/L	0.04491	0.1313 ppb	0.04491	34.19%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-1.3	-0.3800 ug/L	1.15681	-0.3800 ppb	1.15681	304.44%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-123.5	-2.9338 ug/L	1.60414	-2.9338 ppb	1.60414	54.68%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	34.7	0.2018 ug/L	0.16662	0.2018 ppb	0.16662	82.57%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	5.4	0.0478 ug/L	0.09863	0.0478 ppb	0.09863	206.18%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	65.1	3.9334 ug/L	0.84503	3.9334 ppb	0.84503	21.48%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

Sequence No.: 12

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 1/27/2010 13:36:54

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5500.6	5500.6	97.9 %		13:38:46
1	Y RADIAL	5973.8	5973.8	98.54 %		13:38:46
1	Al 396.153Radial†	7047.6	7198.2	5003.1 ug/L	5003.1 ppb	13:38:46
1	Ca 317.933Radial†	3326.8	3381.5	5087.3 ug/L	5087.3 ppb	13:39:06
1	Fe 238.204 Radial†	616.8	620.6	5245.5 ug/L	5245.5 ppb	13:39:06
1	K 766.490 Radial†	32045.2	30353.8	5054.6 ug/L	5054.6 ppb	13:38:46
1	Mg 279.077 IEC†	158.8	160.7	5208.5 ug/L	5208.5 ppb	13:39:06
1	Na 589.592 Radial†	35284.0	37053.6	10123 ug/L	10123 ppb	13:38:46
1	Sr 421.552†	84051.6	85860.5	498.34 ug/L	498.34 ppb	13:38:46
1	Sc 361.383	961019.4	961019.4	99.738 %		13:40:04
1	Y 371.029	841022.8	841022.8	98.600 %		13:40:04
1	Ag 328.068†	125863.9	125841.7	503.98 ug/L	503.98 ppb	13:40:09
1	As 188.979†	1252.6	1287.9	500.20 ug/L	500.20 ppb	13:40:29
1	B 249.677†	23403.3	23897.8	494.45 ug/L	494.45 ppb	13:40:09
1	Ba 233.527†	66901.4	67096.2	502.01 ug/L	502.01 ppb	13:40:09
1	Be 313.107†	1471581.9	1480487.1	497.48 ug/L	497.48 ppb	13:40:04
1	Cd 226.502†	47449.3	47779.3	501.85 ug/L	501.85 ppb	13:40:09
1	Co 228.616†	24553.0	24683.6	502.19 ug/L	502.19 ppb	13:40:09
1	Cr 267.716†	48627.3	48685.1	499.39 ug/L	499.39 ppb	13:40:09
1	Cu 324.752†	192997.1	184457.7	495.68 ug/L	495.68 ppb	13:40:09
1	Mn 257.610†	467100.9	467833.7	500.73 ug/L	500.73 ppb	13:40:04
1	Mo 202.031†	7683.4	7677.8	498.65 ug/L	498.65 ppb	13:40:29
1	Ni 231.604†	21159.0	21119.4	501.13 ug/L	501.13 ppb	13:40:09
1	P 214.914†	4885.1	4662.8	2381.3 ug/L	2381.3 ppb	13:40:29
1	Pb 220.353†	4126.8	4195.6	499.74 ug/L	499.74 ppb	13:40:29
1	S 181.975 Axial†	826.2	783.3	989.42 ug/L	989.42 ppb	13:40:29
1	Sb 206.836†	1620.6	1591.7	517.69 ug/L	517.69 ppb	13:40:29
1	Se 196.026†	887.2	910.1	518.29 ug/L	518.29 ppb	13:40:29
1	Si 251.611†	89548.7	89325.2	2505.2 ug/L	2505.2 ppb	13:40:09
1	Sn 189.927†	2885.4	2893.0	497.71 ug/L	497.71 ppb	13:40:29
1	Ti 334.940†	348335.9	350294.3	499.73 ug/L	499.73 ppb	13:40:04
1	Tl 190.801†	1585.1	1626.9	497.85 ug/L	497.85 ppb	13:40:29
1	U 409.014†	19784.7	21371.1	506.14 ug/L	506.14 ppb	13:40:09
1	V 292.402†	82688.5	84320.5	504.50 ug/L	504.50 ppb	13:40:09
1	Zn 213.857†	57131.4	56591.3	494.02 ug/L	494.02 ppb	13:40:09
1	SiO2†	89337.4	89124.0	5377.8 ug/L	5377.8 ppb	13:41:37
2	Sc Radial	5616.6	5616.6	99.9 %		13:39:11
2	Y RADIAL	6032.7	6032.7	99.51 %		13:39:11
2	Al 396.153Radial†	7183.9	7185.8	4994.6 ug/L	4994.6 ppb	13:39:11
2	Ca 317.933Radial†	3302.9	3287.3	4945.6 ug/L	4945.6 ppb	13:39:31
2	Fe 238.204 Radial†	607.1	597.8	5053.8 ug/L	5053.8 ppb	13:39:31
2	K 766.490 Radial†	32468.4	30100.7	5012.5 ug/L	5012.5 ppb	13:39:11
2	Mg 279.077 IEC†	157.4	156.0	5056.3 ug/L	5056.3 ppb	13:39:31
2	Na 589.592 Radial†	35833.4	36858.4	10070 ug/L	10070 ppb	13:39:11
2	Sr 421.552†	85547.7	85583.2	496.73 ug/L	496.73 ppb	13:39:11
2	Sc 361.383	967693.2	967693.2	100.43 %		13:40:35
2	Y 371.029	845698.1	845698.1	99.148 %		13:40:35
2	Ag 328.068†	126418.7	125523.7	502.65 ug/L	502.65 ppb	13:40:40
2	As 188.979†	1249.3	1275.9	495.54 ug/L	495.54 ppb	13:41:00
2	B 249.677†	23618.1	23949.8	495.57 ug/L	495.57 ppb	13:40:40
2	Ba 233.527†	67081.3	66812.7	499.89 ug/L	499.89 ppb	13:40:40
2	Be 313.107†	1477302.9	1476008.0	495.98 ug/L	495.98 ppb	13:40:35
2	Cd 226.502†	47405.8	47407.9	497.97 ug/L	497.97 ppb	13:40:40
2	Co 228.616†	24638.8	24599.2	500.47 ug/L	500.47 ppb	13:40:40
2	Cr 267.716†	48721.7	48442.9	496.90 ug/L	496.90 ppb	13:40:40
2	Cu 324.752†	195201.7	185318.4	497.98 ug/L	497.98 ppb	13:40:40
2	Mn 257.610†	470265.6	467755.0	500.64 ug/L	500.64 ppb	13:40:35
2	Mo 202.031†	7692.3	7633.5	495.76 ug/L	495.76 ppb	13:41:00
2	Ni 231.604†	21172.6	20986.7	497.98 ug/L	497.98 ppb	13:40:40

2	P 214.914†	4886.6	4630.5	2363.8 ug/L	2363.8 ppb	13:41:00
2	Pb 220.353†	4146.1	4186.3	498.64 ug/L	498.64 ppb	13:41:00
2	S 181.975 Axial†	841.6	792.9	1001.6 ug/L	1001.6 ppb	13:41:00
2	Sb 206.836†	1624.2	1584.2	515.16 ug/L	515.16 ppb	13:41:00
2	Se 196.026†	876.4	893.1	508.35 ug/L	508.35 ppb	13:41:00
2	Si 251.611†	90169.3	89323.9	2505.2 ug/L	2505.2 ppb	13:40:40
2	Sn 189.927†	2873.6	2861.3	492.24 ug/L	492.24 ppb	13:41:00
2	Ti 334.940†	350796.1	350335.3	499.79 ug/L	499.79 ppb	13:40:35
2	Tl 190.801†	1586.6	1617.4	494.98 ug/L	494.98 ppb	13:41:00
2	U 409.014†	19897.6	21346.7	505.58 ug/L	505.58 ppb	13:40:40
2	V 292.402†	83043.1	84101.8	503.20 ug/L	503.20 ppb	13:40:40
2	Zn 213.857†	57294.5	56358.6	492.01 ug/L	492.01 ppb	13:40:40
2	SiO2†	89486.9	88655.1	5349.5 ug/L	5349.5 ppb	13:41:42
3	Sc Radial	5589.1	5589.1	99.4 %		13:39:36
3	Y RADIAL	6067.5	6067.5	100.1 %		13:39:36
3	Al 396.153Radial†	7168.6	7205.8	5008.4 ug/L	5008.4 ppb	13:39:36
3	Ca 317.933Radial†	3321.8	3322.6	4998.7 ug/L	4998.7 ppb	13:39:56
3	Fe 238.204 Radial†	613.8	607.6	5135.8 ug/L	5135.8 ppb	13:39:56
3	K 766.490 Radial†	32292.1	30083.5	5009.5 ug/L	5009.5 ppb	13:39:36
3	Mg 279.077 IEC†	160.6	160.0	5184.9 ug/L	5184.9 ppb	13:39:56
3	Na 589.592 Radial†	36011.0	37213.8	10167 ug/L	10167 ppb	13:39:36
3	Sr 421.552†	85647.5	86105.4	499.76 ug/L	499.76 ppb	13:39:36
3	Sc 361.383	952349.3	952349.3	98.839 %		13:41:06
3	Y 371.029	830318.4	830318.4	97.345 %		13:41:06
3	Ag 328.068†	125742.1	126867.2	508.04 ug/L	508.04 ppb	13:41:11
3	As 188.979†	1248.4	1295.1	502.92 ug/L	502.92 ppb	13:41:31
3	B 249.677†	23451.2	24159.9	499.90 ug/L	499.90 ppb	13:41:11
3	Ba 233.527†	67081.2	67888.8	507.93 ug/L	507.93 ppb	13:41:11
3	Be 313.107†	1455399.6	1477546.9	496.50 ug/L	496.50 ppb	13:41:06
3	Cd 226.502†	47579.5	48344.2	507.80 ug/L	507.80 ppb	13:41:11
3	Co 228.616†	24588.7	24943.8	507.49 ug/L	507.49 ppb	13:41:11
3	Cr 267.716†	48668.0	49170.2	504.36 ug/L	504.36 ppb	13:41:11
3	Cu 324.752†	193377.6	186604.3	501.44 ug/L	501.44 ppb	13:41:11
3	Mn 257.610†	464026.3	468986.6	501.96 ug/L	501.96 ppb	13:41:06
3	Mo 202.031†	7632.5	7696.4	499.85 ug/L	499.85 ppb	13:41:31
3	Ni 231.604†	21196.2	21350.2	506.61 ug/L	506.61 ppb	13:41:11
3	P 214.914†	4880.1	4702.4	2401.3 ug/L	2401.3 ppb	13:41:31
3	Pb 220.353†	4121.3	4227.7	503.56 ug/L	503.56 ppb	13:41:31
3	S 181.975 Axial†	824.1	788.8	996.32 ug/L	996.32 ppb	13:41:31
3	Sb 206.836†	1612.5	1598.3	519.80 ug/L	519.80 ppb	13:41:31
3	Se 196.026†	883.9	914.8	520.50 ug/L	520.50 ppb	13:41:31
3	Si 251.611†	89894.1	90492.0	2538.0 ug/L	2538.0 ppb	13:41:11
3	Sn 189.927†	2857.9	2891.5	497.44 ug/L	497.44 ppb	13:41:31
3	Ti 334.940†	345633.1	350739.3	500.36 ug/L	500.36 ppb	13:41:06
3	Tl 190.801†	1589.9	1646.2	503.71 ug/L	503.71 ppb	13:41:31
3	U 409.014†	19719.0	21485.2	508.85 ug/L	508.85 ppb	13:41:11
3	V 292.402†	82610.2	84996.1	508.53 ug/L	508.53 ppb	13:41:11
3	Zn 213.857†	57231.0	57213.5	499.47 ug/L	499.47 ppb	13:41:11
3	SiO2†	89131.1	89730.8	5414.5 ug/L	5414.5 ppb	13:41:47

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	960354.0	99.669 %	0.7985			0.80%
Sc Radial	5568.8	99.1 %	1.08			1.09%
Y 371.029	839013.1	98.365 %	0.9243			0.94%
Y RADIAL	6024.7	99.38 %	0.781			0.79%
Ag 328.068†	126077.6	504.89 ug/L	2.808	504.89 ppb	2.808	0.56%
QC value within limits for Ag 328.068 Recovery = 100.98%						
Al 396.153Radial†	7196.6	5002.0 ug/L	6.94	5002.0 ppb	6.94	0.14%
QC value within limits for Al 396.153Radial Recovery = 100.04%						
As 188.979†	1286.3	499.55 ug/L	3.730	499.55 ppb	3.730	0.75%
QC value within limits for As 188.979 Recovery = 99.91%						
B 249.677†	24002.5	496.64 ug/L	2.878	496.64 ppb	2.878	0.58%
QC value within limits for B 249.677 Recovery = 99.33%						
Ba 233.527†	67265.9	503.28 ug/L	4.169	503.28 ppb	4.169	0.83%
QC value within limits for Ba 233.527 Recovery = 100.66%						
Be 313.107†	1478014.0	496.65 ug/L	0.763	496.65 ppb	0.763	0.15%
QC value within limits for Be 313.107 Recovery = 99.33%						
Ca 317.933Radial†	3330.5	5010.5 ug/L	71.60	5010.5 ppb	71.60	1.43%

QC value within limits for Ca 317.933 Radial Recovery = 100.21%

Cd 226.502†	47843.8	502.54 ug/L	4.953	502.54 ppb	4.953	0.99%
QC value within limits for Cd 226.502 Recovery = 100.51%						
Co 228.616†	24742.2	503.38 ug/L	3.657	503.38 ppb	3.657	0.73%
QC value within limits for Co 228.616 Recovery = 100.68%						
Cr 267.716†	48766.1	500.22 ug/L	3.798	500.22 ppb	3.798	0.76%
QC value within limits for Cr 267.716 Recovery = 100.04%						
Cu 324.752†	185460.2	498.36 ug/L	2.900	498.36 ppb	2.900	0.58%
QC value within limits for Cu 324.752 Recovery = 99.67%						
Fe 238.204 Radial†	608.7	5145.0 ug/L	96.19	5145.0 ppb	96.19	1.87%
QC value within limits for Fe 238.204 Radial Recovery = 102.90%						
K 766.490 Radial†	30179.3	5025.5 ug/L	25.21	5025.5 ppb	25.21	0.50%
QC value within limits for K 766.490 Radial Recovery = 100.51%						
Mg 279.077 IEC†	158.9	5149.9 ug/L	81.88	5149.9 ppb	81.88	1.59%
QC value within limits for Mg 279.077 IEC Recovery = 103.00%						
Mn 257.610†	468191.8	501.11 ug/L	0.736	501.11 ppb	0.736	0.15%
QC value within limits for Mn 257.610 Recovery = 100.22%						
Mo 202.031†	7669.2	498.09 ug/L	2.102	498.09 ppb	2.102	0.42%
QC value within limits for Mo 202.031 Recovery = 99.62%						
Na 589.592 Radial†	37041.9	10120 ug/L	48.6	10120 ppb	48.6	0.48%
QC value within limits for Na 589.592 Radial Recovery = 101.20%						
Ni 231.604†	21152.1	501.91 ug/L	4.365	501.91 ppb	4.365	0.87%
QC value within limits for Ni 231.604 Recovery = 100.38%						
P 214.914†	4665.2	2382.1 ug/L	18.77	2382.1 ppb	18.77	0.79%
QC value within limits for P 214.914 Recovery = 95.29%						
Pb 220.353†	4203.2	500.65 ug/L	2.582	500.65 ppb	2.582	0.52%
QC value within limits for Pb 220.353 Recovery = 100.13%						
S 181.975 Axial†	788.3	995.78 ug/L	6.111	995.78 ppb	6.111	0.61%
QC value within limits for S 181.975 Axial Recovery = 99.58%						
Sb 206.836†	1591.4	517.55 ug/L	2.324	517.55 ppb	2.324	0.45%
QC value within limits for Sb 206.836 Recovery = 103.51%						
Se 196.026†	906.0	515.71 ug/L	6.472	515.71 ppb	6.472	1.26%
QC value within limits for Se 196.026 Recovery = 103.14%						
Si 251.611†	89713.7	2516.1 ug/L	18.93	2516.1 ppb	18.93	0.75%
QC value within limits for Si 251.611 Recovery = 100.65%						
Sn 189.927†	2881.9	495.80 ug/L	3.085	495.80 ppb	3.085	0.62%
QC value within limits for Sn 189.927 Recovery = 99.16%						
Sr 421.552†	85849.7	498.28 ug/L	1.516	498.28 ppb	1.516	0.30%
QC value within limits for Sr 421.552 Recovery = 99.66%						
Ti 334.940†	350456.3	499.96 ug/L	0.345	499.96 ppb	0.345	0.07%
QC value within limits for Ti 334.940 Recovery = 99.99%						
Tl 190.801†	1630.2	498.85 ug/L	4.447	498.85 ppb	4.447	0.89%
QC value within limits for Tl 190.801 Recovery = 99.77%						
U 409.014†	21401.0	506.86 ug/L	1.748	506.86 ppb	1.748	0.34%
QC value within limits for U 409.014 Recovery = 101.37%						
V 292.402†	84472.8	505.41 ug/L	2.779	505.41 ppb	2.779	0.55%
QC value within limits for V 292.402 Recovery = 101.08%						
Zn 213.857†	56721.1	495.17 ug/L	3.861	495.17 ppb	3.861	0.78%
QC value within limits for Zn 213.857 Recovery = 99.03%						
SiO2†	89170.0	5380.6 ug/L	32.57	5380.6 ppb	32.57	0.61%
QC value within limits for SiO2 Recovery = 100.62%						

All analyte(s) passed QC.

Sequence No.: 13

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 1/27/2010 13:43:58

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5678.3	5678.3	101 %		13:45:51
1	Y RADIAL	6130.9	6130.9	101.1 %		13:45:51
1	Al 396.153Radial†	320.5	313.3	218.33 ug/L	218.33 ppb	13:46:11
1	Ca 317.933Radial†	155.2	135.4	203.64 ug/L	203.64 ppb	13:46:11
1	Fe 238.204 Radial†	21.8	11.8	99.812 ug/L	99.812 ppb	13:46:11
1	K 766.490 Radial†	3284.0	857.0	142.68 ug/L	142.68 ppb	13:45:51
1	Mg 279.077 IEC†	12.0	10.4	336.10 ug/L	336.10 ppb	13:46:11
1	Na 589.592 Radial†	145.9	1140.5	311.59 ug/L	311.59 ppb	13:45:51
1	Sr 421.552†	900.8	858.1	4.9792 ug/L	4.9792 ppb	13:45:51
1	Sc 361.383	977328.1	977328.1	101.43 %		13:47:07
1	Y 371.029	863245.1	863245.1	101.21 %		13:47:07
1	Ag 328.068†	1605.5	1230.4	4.9071 ug/L	4.9071 ppb	13:47:13
1	As 188.979†	51.7	83.0	32.012 ug/L	32.012 ppb	13:47:33
1	B 249.677†	2292.5	2693.3	55.951 ug/L	55.951 ppb	13:47:13
1	Ba 233.527†	706.4	715.7	5.3561 ug/L	5.3561 ppb	13:47:33
1	Be 313.107†	9925.7	14830.0	4.9835 ug/L	4.9835 ppb	13:47:13
1	Cd 226.502†	289.1	490.5	5.1560 ug/L	5.1560 ppb	13:47:33
1	Co 228.616†	195.2	258.6	5.2724 ug/L	5.2724 ppb	13:47:33
1	Cr 267.716†	584.3	506.3	5.1773 ug/L	5.1773 ppb	13:47:33
1	Cu 324.752†	12737.3	3511.9	9.4158 ug/L	9.4158 ppb	13:47:13
1	Mn 257.610†	10382.8	9743.6	10.419 ug/L	10.419 ppb	13:47:13
1	Mo 202.031†	187.9	159.5	10.360 ug/L	10.360 ppb	13:47:33
1	Ni 231.604†	332.4	232.6	5.5196 ug/L	5.5196 ppb	13:47:33
1	P 214.914†	523.4	281.0	147.53 ug/L	147.53 ppb	13:47:33
1	Pb 220.353†	48.7	105.9	12.637 ug/L	12.637 ppb	13:47:33
1	S 181.975 Axial†	130.7	83.8	105.93 ug/L	105.93 ppb	13:47:33
1	Sb 206.836†	72.6	38.5	12.456 ug/L	12.456 ppb	13:47:33
1	Se 196.026†	42.0	61.9	34.325 ug/L	34.325 ppb	13:47:33
1	Si 251.611†	3995.5	3480.7	97.731 ug/L	97.731 ppb	13:47:33
1	Sn 189.927†	65.1	64.2	11.052 ug/L	11.052 ppb	13:47:33
1	Ti 334.940†	2576.6	3584.7	5.0922 ug/L	5.0922 ppb	13:47:13
1	Tl 190.801†	23.2	60.5	18.448 ug/L	18.448 ppb	13:47:33
1	U 409.014†	514.9	2042.1	48.505 ug/L	48.505 ppb	13:47:13
1	V 292.402†	-535.9	886.7	5.4593 ug/L	5.4593 ppb	13:47:13
1	Zn 213.857†	1851.6	1135.4	9.9421 ug/L	9.9421 ppb	13:47:33
1	SiO2†	4121.0	3615.1	218.41 ug/L	218.41 ppb	13:48:38
2	Sc Radial	5655.7	5655.7	101 %		13:46:16
2	Y RADIAL	6117.4	6117.4	100.9 %		13:46:16
2	Al 396.153Radial†	312.3	306.5	213.54 ug/L	213.54 ppb	13:46:36
2	Ca 317.933Radial†	157.1	137.9	207.46 ug/L	207.46 ppb	13:46:36
2	Fe 238.204 Radial†	21.5	11.6	98.263 ug/L	98.263 ppb	13:46:36
2	K 766.490 Radial†	3304.4	890.3	148.24 ug/L	148.24 ppb	13:46:16
2	Mg 279.077 IEC†	12.0	10.4	337.94 ug/L	337.94 ppb	13:46:36
2	Na 589.592 Radial†	138.5	1133.7	309.74 ug/L	309.74 ppb	13:46:16
2	Sr 421.552†	878.9	839.9	4.8735 ug/L	4.8735 ppb	13:46:16
2	Sc 361.383	968372.4	968372.4	100.50 %		13:47:38
2	Y 371.029	855991.1	855991.1	100.36 %		13:47:38
2	Ag 328.068†	1665.3	1304.5	5.1986 ug/L	5.1986 ppb	13:47:43
2	As 188.979†	45.3	77.1	29.707 ug/L	29.707 ppb	13:48:03
2	B 249.677†	2246.6	2668.5	55.436 ug/L	55.436 ppb	13:47:43
2	Ba 233.527†	685.8	701.7	5.2506 ug/L	5.2506 ppb	13:48:03
2	Be 313.107†	10081.1	15075.0	5.0658 ug/L	5.0658 ppb	13:47:43
2	Cd 226.502†	280.6	484.7	5.0955 ug/L	5.0955 ppb	13:48:03
2	Co 228.616†	178.2	243.5	4.9661 ug/L	4.9661 ppb	13:48:03
2	Cr 267.716†	596.2	523.5	5.3518 ug/L	5.3518 ppb	13:48:03
2	Cu 324.752†	12799.2	3689.6	9.8921 ug/L	9.8921 ppb	13:47:43
2	Mn 257.610†	10354.5	9810.2	10.490 ug/L	10.490 ppb	13:47:43
2	Mo 202.031†	194.4	167.7	10.890 ug/L	10.890 ppb	13:48:03
2	Ni 231.604†	328.9	232.2	5.5103 ug/L	5.5103 ppb	13:48:03

2	P 214.914†	526.6	288.9	151.62 ug/L	151.62 ppb	13:48:03
2	Pb 220.353†	37.5	95.2	11.366 ug/L	11.366 ppb	13:48:03
2	S 181.975 Axial†	120.1	74.5	94.146 ug/L	94.146 ppb	13:48:03
2	Sb 206.836†	74.4	40.9	13.188 ug/L	13.188 ppb	13:48:03
2	Se 196.026†	42.0	62.3	34.566 ug/L	34.566 ppb	13:48:03
2	Si 251.611†	3996.5	3518.2	98.778 ug/L	98.778 ppb	13:48:03
2	Sn 189.927†	45.6	45.4	7.8304 ug/L	7.8304 ppb	13:48:03
2	Ti 334.940†	2587.5	3619.1	5.1406 ug/L	5.1406 ppb	13:47:43
2	Tl 190.801†	20.8	58.4	17.799 ug/L	17.799 ppb	13:48:03
2	U 409.014†	595.5	2127.1	50.523 ug/L	50.523 ppb	13:47:43
2	V 292.402†	-580.5	837.4	5.1797 ug/L	5.1797 ppb	13:47:43
2	Zn 213.857†	1848.9	1149.6	10.067 ug/L	10.067 ppb	13:48:03
2	SiO2†	4128.6	3660.2	221.12 ug/L	221.12 ppb	13:48:44
3	Sc Radial	5558.5	5558.5	98.9 %		13:46:41
3	Y RADIAL	6010.1	6010.1	99.14 %		13:46:41
3	Al 396.153Radial†	322.1	321.8	224.22 ug/L	224.22 ppb	13:47:01
3	Ca 317.933Radial†	158.1	141.6	213.08 ug/L	213.08 ppb	13:47:01
3	Fe 238.204 Radial†	20.4	10.9	91.718 ug/L	91.718 ppb	13:47:01
3	K 766.490 Radial†	3318.6	962.0	160.19 ug/L	160.19 ppb	13:46:41
3	Mg 279.077 IEC†	12.1	10.7	347.01 ug/L	347.01 ppb	13:47:01
3	Na 589.592 Radial†	150.0	1147.7	313.56 ug/L	313.56 ppb	13:46:41
3	Sr 421.552†	867.5	843.6	4.8951 ug/L	4.8951 ppb	13:46:41
3	Sc 361.383	969259.7	969259.7	100.59 %		13:48:08
3	Y 371.029	856246.4	856246.4	100.39 %		13:48:08
3	Ag 328.068†	1595.0	1233.1	4.9134 ug/L	4.9134 ppb	13:48:13
3	As 188.979†	46.8	78.6	30.285 ug/L	30.285 ppb	13:48:33
3	B 249.677†	2315.0	2734.5	56.809 ug/L	56.809 ppb	13:48:13
3	Ba 233.527†	697.9	713.1	5.3363 ug/L	5.3363 ppb	13:48:33
3	Be 313.107†	9987.2	14972.5	5.0314 ug/L	5.0314 ppb	13:48:13
3	Cd 226.502†	290.6	494.4	5.1977 ug/L	5.1977 ppb	13:48:33
3	Co 228.616†	171.1	236.2	4.8174 ug/L	4.8174 ppb	13:48:33
3	Cr 267.716†	588.4	515.2	5.2675 ug/L	5.2675 ppb	13:48:33
3	Cu 324.752†	12874.4	3752.8	10.061 ug/L	10.061 ppb	13:48:13
3	Mn 257.610†	10433.7	9879.5	10.563 ug/L	10.563 ppb	13:48:13
3	Mo 202.031†	186.1	159.2	10.342 ug/L	10.342 ppb	13:48:33
3	Ni 231.604†	320.6	223.7	5.3079 ug/L	5.3079 ppb	13:48:33
3	P 214.914†	541.8	303.5	159.39 ug/L	159.39 ppb	13:48:33
3	Pb 220.353†	43.5	101.2	12.078 ug/L	12.078 ppb	13:48:33
3	S 181.975 Axial†	121.8	76.1	96.120 ug/L	96.120 ppb	13:48:33
3	Sb 206.836†	65.9	32.4	10.568 ug/L	10.568 ppb	13:48:33
3	Se 196.026†	45.9	66.1	36.607 ug/L	36.607 ppb	13:48:33
3	Si 251.611†	3995.0	3513.0	98.640 ug/L	98.640 ppb	13:48:33
3	Sn 189.927†	65.0	64.6	11.135 ug/L	11.135 ppb	13:48:33
3	Ti 334.940†	2596.8	3626.0	5.1502 ug/L	5.1502 ppb	13:48:13
3	Tl 190.801†	29.8	67.3	20.528 ug/L	20.528 ppb	13:48:33
3	U 409.014†	624.4	2155.2	51.193 ug/L	51.193 ppb	13:48:13
3	V 292.402†	-515.2	902.9	5.5608 ug/L	5.5608 ppb	13:48:13
3	Zn 213.857†	1845.3	1144.4	10.022 ug/L	10.022 ppb	13:48:33
3	SiO2†	4116.1	3644.1	220.16 ug/L	220.16 ppb	13:48:49

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	971653.4	100.84 %		0.512			0.51%
Sc Radial	5630.8	100 %		1.1			1.13%
Y 371.029	858494.2	100.65 %		0.483			0.48%
Y RADIAL	6086.1	100.4 %		1.09			1.09%
Ag 328.068†	1256.0	5.0064 ug/L		0.16648	5.0064 ppb	0.16648	3.33%
QC value within limits for Ag 328.068 Recovery = 100.13%							
Al 396.153Radial†	313.9	218.70 ug/L		5.353	218.70 ppb	5.353	2.45%
QC value within limits for Al 396.153Radial Recovery = 109.35%							
As 188.979†	79.5	30.668 ug/L		1.1989	30.668 ppb	1.1989	3.91%
QC value within limits for As 188.979 Recovery = 102.23%							
B 249.677†	2698.7	56.065 ug/L		0.6938	56.065 ppb	0.6938	1.24%
QC value within limits for B 249.677 Recovery = 112.13%							
Ba 233.527†	710.1	5.3143 ug/L		0.05605	5.3143 ppb	0.05605	1.05%
QC value within limits for Ba 233.527 Recovery = 106.29%							
Be 313.107†	14959.2	5.0269 ug/L		0.04132	5.0269 ppb	0.04132	0.82%
QC value within limits for Be 313.107 Recovery = 100.54%							
Ca 317.933Radial†	138.3	208.06 ug/L		4.749	208.06 ppb	4.749	2.28%

QC value within limits for Ca 317.933 Radial Recovery = 104.03%							
Cd 226.502†	489.9	5.1497 ug/L	0.05135	5.1497 ppb	0.05135	1.00%	
QC value within limits for Cd 226.502 Recovery = 102.99%							
Co 228.616†	246.1	5.0186 ug/L	0.23202	5.0186 ppb	0.23202	4.62%	
QC value within limits for Co 228.616 Recovery = 100.37%							
Cr 267.716†	515.0	5.2655 ug/L	0.08727	5.2655 ppb	0.08727	1.66%	
QC value within limits for Cr 267.716 Recovery = 105.31%							
Cu 324.752†	3651.5	9.7897 ug/L	0.33462	9.7897 ppb	0.33462	3.42%	
QC value within limits for Cu 324.752 Recovery = 97.90%							
Fe 238.204 Radial†	11.4	96.598 ug/L	4.2964	96.598 ppb	4.2964	4.45%	
QC value within limits for Fe 238.204 Radial Recovery = 96.60%							
K 766.490 Radial†	903.1	150.37 ug/L	8.946	150.37 ppb	8.946	5.95%	
QC value within limits for K 766.490 Radial Recovery = 100.25%							
Mg 279.077 IEC†	10.5	340.35 ug/L	5.842	340.35 ppb	5.842	1.72%	
QC value within limits for Mg 279.077 IEC Recovery = 113.45%							
Mn 257.610†	9811.1	10.490 ug/L	0.0720	10.490 ppb	0.0720	0.69%	
QC value within limits for Mn 257.610 Recovery = 104.90%							
Mo 202.031†	162.1	10.531 ug/L	0.3112	10.531 ppb	0.3112	2.96%	
QC value within limits for Mo 202.031 Recovery = 105.31%							
Na 589.592 Radial†	1140.6	311.63 ug/L	1.914	311.63 ppb	1.914	0.61%	
QC value within limits for Na 589.592 Radial Recovery = 103.88%							
Ni 231.604†	229.5	5.4459 ug/L	0.11962	5.4459 ppb	0.11962	2.20%	
QC value within limits for Ni 231.604 Recovery = 108.92%							
P 214.914†	291.1	152.85 ug/L	6.021	152.85 ppb	6.021	3.94%	
QC value within limits for P 214.914 Recovery = 101.90%							
Pb 220.353†	100.8	12.027 ug/L	0.6371	12.027 ppb	0.6371	5.30%	
QC value within limits for Pb 220.353 Recovery = 120.27%							
S 181.975 Axial†	78.1	98.733 ug/L	6.3135	98.733 ppb	6.3135	6.39%	
QC value within limits for S 181.975 Axial Recovery = 98.73%							
Sb 206.836†	37.3	12.071 ug/L	1.3522	12.071 ppb	1.3522	11.20%	
QC value within limits for Sb 206.836 Recovery = 120.71%							
Se 196.026†	63.5	35.166 ug/L	1.2541	35.166 ppb	1.2541	3.57%	
QC value within limits for Se 196.026 Recovery = 117.22%							
Si 251.611†	3504.0	98.383 ug/L	0.5692	98.383 ppb	0.5692	0.58%	
QC value within limits for Si 251.611 Recovery = 98.38%							
Sn 189.927†	58.1	10.006 ug/L	1.8845	10.006 ppb	1.8845	18.83%	
QC value within limits for Sn 189.927 Recovery = 100.06%							
Sr 421.552†	847.2	4.9159 ug/L	0.05585	4.9159 ppb	0.05585	1.14%	
QC value within limits for Sr 421.552 Recovery = 98.32%							
Ti 334.940†	3609.9	5.1277 ug/L	0.03111	5.1277 ppb	0.03111	0.61%	
QC value within limits for Ti 334.940 Recovery = 102.55%							
Tl 190.801†	62.1	18.925 ug/L	1.4256	18.925 ppb	1.4256	7.53%	
QC value within limits for Tl 190.801 Recovery = 94.63%							
U 409.014†	2108.1	50.074 ug/L	1.3992	50.074 ppb	1.3992	2.79%	
QC value within limits for U 409.014 Recovery = 100.15%							
V 292.402†	875.7	5.3999 ug/L	0.19737	5.3999 ppb	0.19737	3.65%	
QC value within limits for V 292.402 Recovery = 108.00%							
Zn 213.857†	1143.1	10.010 ug/L	0.0631	10.010 ppb	0.0631	0.63%	
QC value within limits for Zn 213.857 Recovery = 100.10%							
SiO2†	3639.8	219.90 ug/L	1.374	219.90 ppb	1.374	0.63%	
QC value within limits for SiO2 Recovery = 103.24%							
All analyte(s) passed QC.							

Sequence No.: 14

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 1/27/2010 13:51:00

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5490.6	5490.6	97.7 %		13:52:52
1	Y RADIAL	5949.1	5949.1	98.13 %		13:52:52
1	Al 396.153Radial†	4.5	0.7	0.4417 ug/L	0.4417 ppb	13:53:12
1	Ca 317.933Radial†	14.2	-3.7	-5.5978 ug/L	-5.5978 ppb	13:53:12
1	Fe 238.204 Radial†	9.3	-0.2	-1.9943 ug/L	-1.9943 ppb	13:53:12
1	K 766.490 Radial†	2380.4	43.1	7.1868 ug/L	7.1868 ppb	13:52:52
1	Mg 279.077 IEC†	2.8	1.3	42.138 ug/L	42.138 ppb	13:53:12
1	Na 589.592 Radial†	-955.2	18.1	4.9558 ug/L	4.9558 ppb	13:52:52
1	Sr 421.552†	14.9	-18.5	-0.1072 ug/L	-0.1072 ppb	13:52:52
1	Sc 361.383	927831.4	927831.4	96.294 %		13:54:09
1	Y 371.029	815732.0	815732.0	95.635 %		13:54:09
1	Ag 328.068†	351.6	12.7	0.0453 ug/L	0.0453 ppb	13:54:09
1	As 188.979†	-24.5	6.6	2.5298 ug/L	2.5298 ppb	13:54:29
1	B 249.677†	-207.7	217.4	4.5195 ug/L	4.5195 ppb	13:54:29
1	Ba 233.527†	12.8	32.5	0.2429 ug/L	0.2429 ppb	13:54:29
1	Be 313.107†	-4958.1	-104.7	-0.0352 ug/L	-0.0352 ppb	13:54:09
1	Cd 226.502†	-205.3	-7.7	-0.0799 ug/L	-0.0799 ppb	13:54:29
1	Co 228.616†	-77.9	-14.7	-0.2980 ug/L	-0.2980 ppb	13:54:29
1	Cr 267.716†	101.2	35.4	0.3600 ug/L	0.3600 ppb	13:54:29
1	Cu 324.752†	8979.0	278.9	0.7459 ug/L	0.7459 ppb	13:54:09
1	Mn 257.610†	483.4	9.3	0.0080 ug/L	0.0080 ppb	13:54:29
1	Mo 202.031†	35.7	11.3	0.7298 ug/L	0.7298 ppb	13:54:29
1	Ni 231.604†	88.5	-3.1	-0.0740 ug/L	-0.0740 ppb	13:54:29
1	P 214.914†	233.2	7.1	3.6624 ug/L	3.6624 ppb	13:54:29
1	Pb 220.353†	-44.8	11.4	1.3554 ug/L	1.3554 ppb	13:54:29
1	S 181.975 Axial†	47.1	3.8	4.8485 ug/L	4.8485 ppb	13:54:29
1	Sb 206.836†	46.7	15.4	4.8695 ug/L	4.8695 ppb	13:54:29
1	Se 196.026†	-27.2	-7.7	-4.2418 ug/L	-4.2418 ppb	13:54:29
1	Si 251.611†	477.1	37.1	1.0329 ug/L	1.0329 ppb	13:54:29
1	Sn 189.927†	7.8	8.1	1.3954 ug/L	1.3954 ppb	13:54:29
1	Ti 334.940†	-1047.6	-43.5	-0.0691 ug/L	-0.0691 ppb	13:54:09
1	Tl 190.801†	-35.4	0.9	0.2769 ug/L	0.2769 ppb	13:54:29
1	U 409.014†	-1228.2	259.1	6.1557 ug/L	6.1557 ppb	13:54:09
1	V 292.402†	-1344.9	18.3	0.1314 ug/L	0.1314 ppb	13:54:09
1	Zn 213.857†	694.8	31.5	0.2767 ug/L	0.2767 ppb	13:54:29
1	SiO2†	502.9	74.4	4.4833 ug/L	4.4833 ppb	13:55:25
2	Sc Radial	5500.0	5500.0	97.8 %		13:53:17
2	Y RADIAL	5996.7	5996.7	98.91 %		13:53:17
2	Al 396.153Radial†	-4.7	-8.7	-6.1018 ug/L	-6.1018 ppb	13:53:37
2	Ca 317.933Radial†	16.7	-1.1	-1.7160 ug/L	-1.7160 ppb	13:53:37
2	Fe 238.204 Radial†	10.2	0.7	5.5830 ug/L	5.5830 ppb	13:53:37
2	K 766.490 Radial†	2466.7	127.1	21.195 ug/L	21.195 ppb	13:53:17
2	Mg 279.077 IEC†	4.0	2.6	83.253 ug/L	83.253 ppb	13:53:37
2	Na 589.592 Radial†	-964.7	10.1	2.7624 ug/L	2.7624 ppb	13:53:17
2	Sr 421.552†	30.0	-3.0	-0.0177 ug/L	-0.0177 ppb	13:53:17
2	Sc 361.383	922504.2	922504.2	95.741 %		13:54:34
2	Y 371.029	809368.8	809368.8	94.889 %		13:54:34
2	Ag 328.068†	300.7	-38.4	-0.1604 ug/L	-0.1604 ppb	13:54:34
2	As 188.979†	-33.0	-2.5	-0.9500 ug/L	-0.9500 ppb	13:54:54
2	B 249.677†	-177.0	248.2	5.1577 ug/L	5.1577 ppb	13:54:54
2	Ba 233.527†	-8.8	10.1	0.0747 ug/L	0.0747 ppb	13:54:54
2	Be 313.107†	-4862.5	-34.5	-0.0117 ug/L	-0.0117 ppb	13:54:34
2	Cd 226.502†	-214.2	-18.2	-0.1905 ug/L	-0.1905 ppb	13:54:54
2	Co 228.616†	-62.7	0.7	0.0138 ug/L	0.0138 ppb	13:54:54
2	Cr 267.716†	89.6	23.9	0.2406 ug/L	0.2406 ppb	13:54:54
2	Cu 324.752†	8958.5	311.3	0.8314 ug/L	0.8314 ppb	13:54:34
2	Mn 257.610†	480.9	9.6	0.0074 ug/L	0.0074 ppb	13:54:54
2	Mo 202.031†	24.6	-0.0	-0.0025 ug/L	-0.0025 ppb	13:54:54
2	Ni 231.604†	86.4	-4.8	-0.1139 ug/L	-0.1139 ppb	13:54:54

2	P 214.914†	244.9	20.7	10.823 ug/L	10.823 ppb	13:54:54
2	Pb 220.353†	-70.7	-15.9	-1.8864 ug/L	-1.8864 ppb	13:54:54
2	S 181.975 Axial†	44.0	1.0	1.2059 ug/L	1.2059 ppb	13:54:54
2	Sb 206.836†	36.2	4.7	1.4711 ug/L	1.4711 ppb	13:54:54
2	Se 196.026†	-16.0	3.8	2.1019 ug/L	2.1019 ppb	13:54:54
2	Si 251.611†	454.1	15.8	0.4454 ug/L	0.4454 ppb	13:54:54
2	Sn 189.927†	2.2	2.2	0.3833 ug/L	0.3833 ppb	13:54:54
2	Ti 334.940†	-1049.2	-51.5	-0.0848 ug/L	-0.0848 ppb	13:54:34
2	Tl 190.801†	-42.1	-6.3	-1.9191 ug/L	-1.9191 ppb	13:54:54
2	U 409.014†	-1078.7	407.9	9.6912 ug/L	9.6912 ppb	13:54:34
2	V 292.402†	-1412.3	-60.0	-0.3352 ug/L	-0.3352 ppb	13:54:34
2	Zn 213.857†	694.3	35.1	0.3085 ug/L	0.3085 ppb	13:54:54
2	SiO2†	508.8	83.6	5.0582 ug/L	5.0582 ppb	13:55:30
3	Sc Radial	5497.0	5497.0	97.8 %		13:53:42
3	Y RADIAL	5951.2	5951.2	98.16 %		13:53:42
3	Al 396.153Radial†	9.4	5.6	3.9277 ug/L	3.9277 ppb	13:54:02
3	Ca 317.933Radial†	15.6	-2.3	-3.4750 ug/L	-3.4750 ppb	13:54:02
3	Fe 238.204 Radial†	7.4	-2.2	-18.865 ug/L	-18.865 ppb	13:54:02
3	K 766.490 Radial†	2406.9	67.4	11.232 ug/L	11.232 ppb	13:53:42
3	Mg 279.077 IEC†	1.1	-0.4	-13.643 ug/L	-13.643 ppb	13:54:02
3	Na 589.592 Radial†	-971.6	2.5	0.6751 ug/L	0.6751 ppb	13:53:42
3	Sr 421.552†	16.7	-16.6	-0.0965 ug/L	-0.0965 ppb	13:53:42
3	Sc 361.383	933131.9	933131.9	96.844 %		13:55:00
3	Y 371.029	818897.2	818897.2	96.006 %		13:55:00
3	Ag 328.068†	317.1	-25.0	-0.1125 ug/L	-0.1125 ppb	13:55:00
3	As 188.979†	-30.1	1.0	0.3793 ug/L	0.3793 ppb	13:55:20
3	B 249.677†	-203.8	222.6	4.6307 ug/L	4.6307 ppb	13:55:20
3	Ba 233.527†	-15.1	3.7	0.0262 ug/L	0.0262 ppb	13:55:20
3	Be 313.107†	-5010.8	-129.8	-0.0430 ug/L	-0.0430 ppb	13:55:00
3	Cd 226.502†	-205.3	-6.5	-0.0644 ug/L	-0.0644 ppb	13:55:20
3	Co 228.616†	-64.0	-0.0	0.0001 ug/L	0.0001 ppb	13:55:20
3	Cr 267.716†	82.0	14.9	0.1496 ug/L	0.1496 ppb	13:55:20
3	Cu 324.752†	9040.1	289.0	0.7719 ug/L	0.7719 ppb	13:55:00
3	Mn 257.610†	470.6	-6.8	-0.0085 ug/L	-0.0085 ppb	13:55:20
3	Mo 202.031†	28.0	3.2	0.2041 ug/L	0.2041 ppb	13:55:20
3	Ni 231.604†	102.7	11.0	0.2616 ug/L	0.2616 ppb	13:55:20
3	P 214.914†	252.1	25.2	13.265 ug/L	13.265 ppb	13:55:20
3	Pb 220.353†	-48.6	7.8	0.9233 ug/L	0.9233 ppb	13:55:20
3	S 181.975 Axial†	39.3	-4.4	-5.6103 ug/L	-5.6103 ppb	13:55:20
3	Sb 206.836†	32.2	0.1	0.0250 ug/L	0.0250 ppb	13:55:20
3	Se 196.026†	-16.1	3.9	2.0750 ug/L	2.0750 ppb	13:55:20
3	Si 251.611†	486.5	43.9	1.2331 ug/L	1.2331 ppb	13:55:20
3	Sn 189.927†	-2.8	-2.9	-0.4976 ug/L	-0.4976 ppb	13:55:20
3	Ti 334.940†	-849.4	167.4	0.2365 ug/L	0.2365 ppb	13:55:00
3	Tl 190.801†	-36.3	0.2	0.0713 ug/L	0.0713 ppb	13:55:20
3	U 409.014†	-1209.3	285.8	6.7939 ug/L	6.7939 ppb	13:55:00
3	V 292.402†	-1421.2	-52.4	-0.2916 ug/L	-0.2916 ppb	13:55:00
3	Zn 213.857†	682.3	14.5	0.1271 ug/L	0.1271 ppb	13:55:20
3	SiO2†	487.0	55.1	3.3280 ug/L	3.3280 ppb	13:55:35

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	927822.5	96.293 %		0.5515			0.57%
Sc Radial	5495.8	97.8 %		0.09			0.09%
Y 371.029	814666.0	95.510 %		0.5689			0.60%
Y RADIAL	5965.6	98.40 %		0.444			0.45%
Ag 328.068†	-16.9	-0.0759 ug/L		0.10763	-0.0759 ppb	0.10763	141.89%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-0.8	-0.5775 ug/L		5.09183	-0.5775 ppb	5.09183	881.77%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	1.7	0.6530 ug/L		1.75595	0.6530 ppb	1.75595	268.90%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	229.4	4.7693 ug/L		0.34094	4.7693 ppb	0.34094	7.15%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	15.4	0.1146 ug/L		0.11370	0.1146 ppb	0.11370	99.22%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-89.7	-0.0300 ug/L		0.01628	-0.0300 ppb	0.01628	54.27%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-2.4	-3.5963 ug/L		1.94370	-3.5963 ppb	1.94370	54.05%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	-10.8	-0.1116 ug/L	0.06877	-0.1116 ppb	0.06877	61.63%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	-4.7	-0.0947 ug/L	0.17620	-0.0947 ppb	0.17620	186.03%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	24.7	0.2501 ug/L	0.10553	0.2501 ppb	0.10553	42.20%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	293.1	0.7831 ug/L	0.04384	0.7831 ppb	0.04384	5.60%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	-0.6	-5.0919 ug/L	12.51466	-5.0919 ppb	12.51466	245.77%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	79.2	13.205 ug/L	7.2092	13.205 ppb	7.2092	54.60%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	1.1	37.249 ug/L	48.6330	37.249 ppb	48.6330	130.56%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	4.1	0.0023 ug/L	0.00940	0.0023 ppb	0.00940	406.52%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	4.8	0.3105 ug/L	0.37758	0.3105 ppb	0.37758	121.62%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	10.2	2.7978 ug/L	2.14059	2.7978 ppb	2.14059	76.51%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	1.0	0.0246 ug/L	0.20628	0.0246 ppb	0.20628	839.70%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	17.7	9.2501 ug/L	4.99066	9.2501 ppb	4.99066	53.95%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	1.1	0.1307 ug/L	1.76022	0.1307 ppb	1.76022	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	0.1	0.1480 ug/L	5.30905	0.1480 ppb	5.30905	>999.9%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	6.7	2.1219 ug/L	2.48691	2.1219 ppb	2.48691	117.20%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-0.0	-0.0216 ug/L	3.65482	-0.0216 ppb	3.65482	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	32.3	0.9038 ug/L	0.40942	0.9038 ppb	0.40942	45.30%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	2.5	0.4270 ug/L	0.94725	0.4270 ppb	0.94725	221.84%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	-12.7	-0.0738 ug/L	0.04890	-0.0738 ppb	0.04890	66.26%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	24.2	0.0275 ug/L	0.18117	0.0275 ppb	0.18117	657.62%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	-1.7	-0.5236 ug/L	1.21288	-0.5236 ppb	1.21288	231.63%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	317.6	7.5470 ug/L	1.88422	7.5470 ppb	1.88422	24.97%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-31.4	-0.1651 ug/L	0.25773	-0.1651 ppb	0.25773	156.10%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	27.0	0.2374 ug/L	0.09687	0.2374 ppb	0.09687	40.80%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		71.1	4.2899 ug/L	0.88116	4.2899 ppb	0.88116	20.54%
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 20

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 1/27/2010 14:32:00

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	5592.1	5592.1	99.5 %		14:33:53
1	Y RADIAL	6015.9	6015.9	99.23 %		14:33:53
1	Al 396.153Radial†	7028.0	7060.6	4906.7 ug/L	4906.7 ppb	14:33:53
1	Ca 317.933Radial†	3341.9	3341.1	5026.4 ug/L	5026.4 ppb	14:34:13
1	Fe 238.204 Radial†	614.4	607.8	5138.2 ug/L	5138.2 ppb	14:34:13
1	K 766.490 Radial†	31926.8	29698.8	4945.5 ug/L	4945.5 ppb	14:33:53
1	Mg 279.077 IEC†	158.9	158.2	5126.7 ug/L	5126.7 ppb	14:34:13
1	Na 589.592 Radial†	34784.7	35961.6	9825.1 ug/L	9825.1 ppb	14:33:53
1	Sr 421.552†	83338.5	83738.0	486.02 ug/L	486.02 ppb	14:33:53
1	Sc 361.383	957995.0	957995.0	99.424 %		14:35:11
1	Y 371.029	838953.2	838953.2	98.358 %		14:35:11
1	Ag 328.068†	126555.4	126935.6	508.32 ug/L	508.32 ppb	14:35:16
1	As 188.979†	1281.5	1321.0	512.99 ug/L	512.99 ppb	14:35:36
1	B 249.677†	23431.9	24000.6	496.59 ug/L	496.59 ppb	14:35:16
1	Ba 233.527†	67221.6	67630.0	506.01 ug/L	506.01 ppb	14:35:16
1	Be 313.107†	1510281.1	1524068.2	512.12 ug/L	512.12 ppb	14:35:11
1	Cd 226.502†	47760.5	48242.5	506.74 ug/L	506.74 ppb	14:35:16
1	Co 228.616†	24685.9	24895.0	506.48 ug/L	506.48 ppb	14:35:16
1	Cr 267.716†	49020.4	49234.4	505.02 ug/L	505.02 ppb	14:35:16
1	Cu 324.752†	195522.9	187609.1	504.14 ug/L	504.14 ppb	14:35:16
1	Mn 257.610†	477667.5	479940.0	513.68 ug/L	513.68 ppb	14:35:11
1	Mo 202.031†	7762.4	7781.5	505.38 ug/L	505.38 ppb	14:35:36
1	Ni 231.604†	21345.1	21373.6	507.16 ug/L	507.16 ppb	14:35:16
1	P 214.914†	4944.1	4737.7	2419.6 ug/L	2419.6 ppb	14:35:36
1	Pb 220.353†	4171.8	4253.9	506.66 ug/L	506.66 ppb	14:35:36
1	S 181.975 Axial†	834.3	794.1	1003.1 ug/L	1003.1 ppb	14:35:36
1	Sb 206.836†	1636.4	1612.7	524.51 ug/L	524.51 ppb	14:35:36
1	Se 196.026†	895.1	920.8	523.84 ug/L	523.84 ppb	14:35:36
1	Si 251.611†	90418.0	90483.0	2537.7 ug/L	2537.7 ppb	14:35:16
1	Sn 189.927†	2915.7	2932.5	504.50 ug/L	504.50 ppb	14:35:36
1	Ti 334.940†	356042.0	359147.5	512.36 ug/L	512.36 ppb	14:35:11
1	Tl 190.801†	1614.1	1661.1	508.39 ug/L	508.39 ppb	14:35:36
1	U 409.014†	19959.6	21609.6	511.80 ug/L	511.80 ppb	14:35:16
1	V 292.402†	83471.5	85369.8	510.80 ug/L	510.80 ppb	14:35:16
1	Zn 213.857†	57688.3	57332.2	500.51 ug/L	500.51 ppb	14:35:16
1	SiO2†	89862.7	89935.1	5426.7 ug/L	5426.7 ppb	14:36:44
2	Sc Radial	5475.5	5475.5	97.4 %		14:34:18
2	Y RADIAL	5905.1	5905.1	97.40 %		14:34:18
2	Al 396.153Radial†	7208.8	7396.6	5141.0 ug/L	5141.0 ppb	14:34:18
2	Ca 317.933Radial†	3331.2	3401.6	5117.5 ug/L	5117.5 ppb	14:34:38
2	Fe 238.204 Radial†	613.5	620.1	5241.6 ug/L	5241.6 ppb	14:34:38
2	K 766.490 Radial†	32067.2	30526.1	5083.3 ug/L	5083.3 ppb	14:34:18
2	Mg 279.077 IEC†	161.7	164.5	5330.3 ug/L	5330.3 ppb	14:34:38
2	Na 589.592 Radial†	35048.0	36976.2	10102 ug/L	10102 ppb	14:34:18
2	Sr 421.552†	84805.3	87027.0	505.11 ug/L	505.11 ppb	14:34:18
2	Sc 361.383	946152.9	946152.9	98.195 %		14:35:42
2	Y 371.029	826875.1	826875.1	96.942 %		14:35:42
2	Ag 328.068†	126376.2	128346.2	513.99 ug/L	513.99 ppb	14:35:47
2	As 188.979†	1273.1	1328.6	515.92 ug/L	515.92 ppb	14:36:07
2	B 249.677†	23529.8	24395.3	504.76 ug/L	504.76 ppb	14:35:47
2	Ba 233.527†	67202.1	68456.4	512.19 ug/L	512.19 ppb	14:35:47
2	Be 313.107†	1485445.9	1517788.8	510.02 ug/L	510.02 ppb	14:35:42
2	Cd 226.502†	47536.3	48615.4	510.65 ug/L	510.65 ppb	14:35:47
2	Co 228.616†	24702.2	25222.3	513.16 ug/L	513.16 ppb	14:35:47
2	Cr 267.716†	48884.3	49713.0	509.93 ug/L	509.93 ppb	14:35:47
2	Cu 324.752†	195316.4	189860.1	510.19 ug/L	510.19 ppb	14:35:47
2	Mn 257.610†	472085.7	480268.8	514.03 ug/L	514.03 ppb	14:35:42
2	Mo 202.031†	7776.0	7893.1	512.62 ug/L	512.62 ppb	14:36:07
2	Ni 231.604†	21243.3	21538.6	511.08 ug/L	511.08 ppb	14:35:47

2	P 214.914†	4949.8	4805.7	2454.5 ug/L	2454.5 ppb	14:36:07
2	Pb 220.353†	4166.0	4300.5	512.26 ug/L	512.26 ppb	14:36:07
2	S 181.975 Axial†	840.5	810.9	1024.3 ug/L	1024.3 ppb	14:36:07
2	Sb 206.836†	1636.5	1633.5	531.28 ug/L	531.28 ppb	14:36:07
2	Se 196.026†	891.5	928.4	528.38 ug/L	528.38 ppb	14:36:07
2	Si 251.611†	90367.2	91569.5	2568.1 ug/L	2568.1 ppb	14:35:47
2	Sn 189.927†	2915.7	2969.2	510.81 ug/L	510.81 ppb	14:36:07
2	Ti 334.940†	351864.3	359375.1	512.68 ug/L	512.68 ppb	14:35:42
2	Tl 190.801†	1604.1	1671.2	511.44 ug/L	511.44 ppb	14:36:07
2	U 409.014†	19664.8	21560.7	510.62 ug/L	510.62 ppb	14:35:47
2	V 292.402†	83160.0	86103.4	515.22 ug/L	515.22 ppb	14:35:47
2	Zn 213.857†	57518.6	57885.6	505.34 ug/L	505.34 ppb	14:35:47
2	SiO2†	90439.1	91653.3	5530.4 ug/L	5530.4 ppb	14:36:49
3	Sc Radial	5439.1	5439.1	96.8 %		14:34:43
3	Y RADIAL	5874.1	5874.1	96.89 %		14:34:43
3	Al 396.153Radial†	7160.2	7396.0	5140.7 ug/L	5140.7 ppb	14:34:43
3	Ca 317.933Radial†	3359.1	3453.3	5195.3 ug/L	5195.3 ppb	14:35:03
3	Fe 238.204 Radial†	612.7	623.5	5270.1 ug/L	5270.1 ppb	14:35:03
3	K 766.490 Radial†	32154.2	30836.6	5135.0 ug/L	5135.0 ppb	14:34:43
3	Mg 279.077 IEC†	157.9	161.6	5238.8 ug/L	5238.8 ppb	14:35:03
3	Na 589.592 Radial†	35016.7	37184.9	10159 ug/L	10159 ppb	14:34:43
3	Sr 421.552†	84544.6	87341.0	506.93 ug/L	506.93 ppb	14:34:43
3	Sc 361.383	949078.7	949078.7	98.499 %		14:36:13
3	Y 371.029	831013.2	831013.2	97.427 %		14:36:13
3	Ag 328.068†	126039.2	127607.3	511.04 ug/L	511.04 ppb	14:36:18
3	As 188.979†	1272.2	1323.6	514.01 ug/L	514.01 ppb	14:36:38
3	B 249.677†	23296.2	24084.3	498.31 ug/L	498.31 ppb	14:36:18
3	Ba 233.527†	66764.2	67800.8	507.29 ug/L	507.29 ppb	14:36:18
3	Be 313.107†	1492604.8	1520393.5	510.89 ug/L	510.89 ppb	14:36:13
3	Cd 226.502†	47280.0	48205.9	506.34 ug/L	506.34 ppb	14:36:18
3	Co 228.616†	24498.4	24937.8	507.37 ug/L	507.37 ppb	14:36:18
3	Cr 267.716†	48808.1	49482.1	507.56 ug/L	507.56 ppb	14:36:18
3	Cu 324.752†	194472.7	188390.4	506.24 ug/L	506.24 ppb	14:36:18
3	Mn 257.610†	472246.6	478950.1	512.63 ug/L	512.63 ppb	14:36:13
3	Mo 202.031†	7761.5	7854.0	510.09 ug/L	510.09 ppb	14:36:38
3	Ni 231.604†	21179.1	21406.7	507.95 ug/L	507.95 ppb	14:36:18
3	P 214.914†	4949.6	4790.0	2446.9 ug/L	2446.9 ppb	14:36:38
3	Pb 220.353†	4156.4	4277.7	509.54 ug/L	509.54 ppb	14:36:38
3	S 181.975 Axial†	842.5	810.2	1023.5 ug/L	1023.5 ppb	14:36:38
3	Sb 206.836†	1629.9	1621.6	527.47 ug/L	527.47 ppb	14:36:38
3	Se 196.026†	903.6	937.9	533.65 ug/L	533.65 ppb	14:36:38
3	Si 251.611†	89931.8	90843.8	2547.8 ug/L	2547.8 ppb	14:36:18
3	Sn 189.927†	2915.6	2960.0	509.24 ug/L	509.24 ppb	14:36:38
3	Ti 334.940†	352023.3	358431.9	511.35 ug/L	511.35 ppb	14:36:13
3	Tl 190.801†	1618.1	1680.4	514.24 ug/L	514.24 ppb	14:36:38
3	U 409.014†	19634.3	21468.0	508.42 ug/L	508.42 ppb	14:36:18
3	V 292.402†	82907.6	85586.0	512.12 ug/L	512.12 ppb	14:36:18
3	Zn 213.857†	57315.2	57498.5	501.95 ug/L	501.95 ppb	14:36:18
3	SiO2†	90643.4	91576.9	5525.9 ug/L	5525.9 ppb	14:36:54

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	951075.6	98.706 %	0.6402			0.65%
Sc Radial	5502.2	97.9 %	1.42			1.45%
Y 371.029	832280.5	97.575 %	0.7196			0.74%
Y RADIAL	5931.7	97.84 %	1.230			1.26%
Ag 328.068†	127629.7	511.12 ug/L	2.833	511.12 ppb	2.833	0.55%
QC value within limits for Ag 328.068 Recovery = 102.22%						
Al 396.153Radial†	7284.4	5062.8 ug/L	135.20	5062.8 ppb	135.20	2.67%
QC value within limits for Al 396.153Radial Recovery = 101.26%						
As 188.979†	1324.4	514.30 ug/L	1.489	514.30 ppb	1.489	0.29%
QC value within limits for As 188.979 Recovery = 102.86%						
B 249.677†	24160.1	499.89 ug/L	4.307	499.89 ppb	4.307	0.86%
QC value within limits for B 249.677 Recovery = 99.98%						
Ba 233.527†	67962.4	508.49 ug/L	3.262	508.49 ppb	3.262	0.64%
QC value within limits for Ba 233.527 Recovery = 101.70%						
Be 313.107†	1520750.2	511.01 ug/L	1.057	511.01 ppb	1.057	0.21%
QC value within limits for Be 313.107 Recovery = 102.20%						
Ca 317.933Radial†	3398.6	5113.1 ug/L	84.52	5113.1 ppb	84.52	1.65%

QC value within limits for Ca 317.933 Radial Recovery = 102.26%							
Cd	226.502†	48354.6	507.91 ug/L	2.381	507.91 ppb	2.381	0.47%
QC value within limits for Cd 226.502 Recovery = 101.58%							
Co	228.616†	25018.4	509.00 ug/L	3.626	509.00 ppb	3.626	0.71%
QC value within limits for Co 228.616 Recovery = 101.80%							
Cr	267.716†	49476.5	507.51 ug/L	2.456	507.51 ppb	2.456	0.48%
QC value within limits for Cr 267.716 Recovery = 101.50%							
Cu	324.752†	188619.9	506.86 ug/L	3.074	506.86 ppb	3.074	0.61%
QC value within limits for Cu 324.752 Recovery = 101.37%							
Fe	238.204 Radial†	617.1	5216.6 ug/L	69.44	5216.6 ppb	69.44	1.33%
QC value within limits for Fe 238.204 Radial Recovery = 104.33%							
K	766.490 Radial†	30353.8	5054.6 ug/L	97.96	5054.6 ppb	97.96	1.94%
QC value within limits for K 766.490 Radial Recovery = 101.09%							
Mg	279.077 IEC†	161.4	5232.0 ug/L	101.95	5232.0 ppb	101.95	1.95%
QC value within limits for Mg 279.077 IEC Recovery = 104.64%							
Mn	257.610†	479719.6	513.45 ug/L	0.730	513.45 ppb	0.730	0.14%
QC value within limits for Mn 257.610 Recovery = 102.69%							
Mo	202.031†	7842.9	509.36 ug/L	3.678	509.36 ppb	3.678	0.72%
QC value within limits for Mo 202.031 Recovery = 101.87%							
Na	589.592 Radial†	36707.5	10029 ug/L	178.8	10029 ppb	178.8	1.78%
QC value within limits for Na 589.592 Radial Recovery = 100.29%							
Ni	231.604†	21439.7	508.73 ug/L	2.071	508.73 ppb	2.071	0.41%
QC value within limits for Ni 231.604 Recovery = 101.75%							
P	214.914†	4777.8	2440.3 ug/L	18.40	2440.3 ppb	18.40	0.75%
QC value within limits for P 214.914 Recovery = 97.61%							
Pb	220.353†	4277.4	509.49 ug/L	2.799	509.49 ppb	2.799	0.55%
QC value within limits for Pb 220.353 Recovery = 101.90%							
S	181.975 Axial†	805.1	1017.0 ug/L	11.99	1017.0 ppb	11.99	1.18%
QC value within limits for S 181.975 Axial Recovery = 101.70%							
Sb	206.836†	1622.6	527.75 ug/L	3.394	527.75 ppb	3.394	0.64%
QC value within limits for Sb 206.836 Recovery = 105.55%							
Se	196.026†	929.0	528.62 ug/L	4.913	528.62 ppb	4.913	0.93%
QC value within limits for Se 196.026 Recovery = 105.72%							
Si	251.611†	90965.4	2551.2 ug/L	15.52	2551.2 ppb	15.52	0.61%
QC value within limits for Si 251.611 Recovery = 102.05%							
Sn	189.927†	2953.9	508.18 ug/L	3.288	508.18 ppb	3.288	0.65%
QC value within limits for Sn 189.927 Recovery = 101.64%							
Sr	421.552†	86035.3	499.35 ug/L	11.584	499.35 ppb	11.584	2.32%
QC value within limits for Sr 421.552 Recovery = 99.87%							
Ti	334.940†	358984.8	512.13 ug/L	0.692	512.13 ppb	0.692	0.14%
QC value within limits for Ti 334.940 Recovery = 102.43%							
Tl	190.801†	1670.9	511.35 ug/L	2.925	511.35 ppb	2.925	0.57%
QC value within limits for Tl 190.801 Recovery = 102.27%							
U	409.014†	21546.1	510.28 ug/L	1.719	510.28 ppb	1.719	0.34%
QC value within limits for U 409.014 Recovery = 102.06%							
V	292.402†	85686.4	512.72 ug/L	2.268	512.72 ppb	2.268	0.44%
QC value within limits for V 292.402 Recovery = 102.54%							
Zn	213.857†	57572.1	502.60 ug/L	2.480	502.60 ppb	2.480	0.49%
QC value within limits for Zn 213.857 Recovery = 100.52%							
SiO2†		91055.1	5494.3 ug/L	58.63	5494.3 ppb	58.63	1.07%
QC value within limits for SiO2 Recovery = 102.75%							
All analyte(s) passed QC.							

Sequence No.: 21

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 1/27/2010 14:39:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5527.6	5527.6	98.3 %		14:40:57
1	Y RADIAL	5999.3	5999.3	98.96 %		14:40:57
1	Al 396.153Radial†	5.5	1.6	1.1197 ug/L	1.1197 ppb	14:41:17
1	Ca 317.933Radial†	21.9	4.0	6.0270 ug/L	6.0270 ppb	14:41:17
1	Fe 238.204 Radial†	8.5	-1.1	-9.3774 ug/L	-9.3774 ppb	14:41:17
1	K 766.490 Radial†	2364.6	10.7	1.7739 ug/L	1.7739 ppb	14:40:57
1	Mg 279.077 IEC†	3.2	1.7	56.315 ug/L	56.315 ppb	14:41:17
1	Na 589.592 Radial†	-978.8	0.7	0.1922 ug/L	0.1922 ppb	14:40:57
1	Sr 421.552†	46.4	13.5	0.0785 ug/L	0.0785 ppb	14:40:57
1	Sc 361.383	900114.3	900114.3	93.417 %		14:42:14
1	Y 371.029	827854.2	827854.2	97.056 %		14:42:14
1	Ag 328.068†	266.7	-66.9	-0.2798 ug/L	-0.2798 ppb	14:42:14
1	As 188.979†	-35.0	-5.4	-2.0960 ug/L	-2.0960 ppb	14:42:34
1	B 249.677†	-209.9	208.4	4.3351 ug/L	4.3351 ppb	14:42:34
1	Ba 233.527†	-5.8	13.1	0.0950 ug/L	0.0950 ppb	14:42:34
1	Be 313.107†	-4981.1	-287.8	-0.0964 ug/L	-0.0964 ppb	14:42:14
1	Cd 226.502†	-186.2	6.2	0.0676 ug/L	0.0676 ppb	14:42:34
1	Co 228.616†	-87.4	-27.4	-0.5567 ug/L	-0.5567 ppb	14:42:34
1	Cr 267.716†	94.6	31.5	0.3183 ug/L	0.3183 ppb	14:42:34
1	Cu 324.752†	8941.8	526.2	1.4095 ug/L	1.4095 ppb	14:42:14
1	Mn 257.610†	504.7	47.6	0.0477 ug/L	0.0477 ppb	14:42:34
1	Mo 202.031†	29.7	6.0	0.3905 ug/L	0.3905 ppb	14:42:34
1	Ni 231.604†	101.5	13.5	0.3219 ug/L	0.3219 ppb	14:42:34
1	P 214.914†	249.0	31.5	16.469 ug/L	16.469 ppb	14:42:34
1	Pb 220.353†	-34.2	21.3	2.5328 ug/L	2.5328 ppb	14:42:34
1	S 181.975 Axial†	37.9	-4.4	-5.6172 ug/L	-5.6172 ppb	14:42:34
1	Sb 206.836†	44.2	14.2	4.4947 ug/L	4.4947 ppb	14:42:34
1	Se 196.026†	-16.8	2.5	1.3635 ug/L	1.3635 ppb	14:42:34
1	Si 251.611†	520.1	98.3	2.7593 ug/L	2.7593 ppb	14:42:34
1	Sn 189.927†	8.3	8.8	1.5185 ug/L	1.5185 ppb	14:42:34
1	Ti 334.940†	-964.8	11.6	0.0094 ug/L	0.0094 ppb	14:42:14
1	Tl 190.801†	-44.7	-10.2	-3.1018 ug/L	-3.1018 ppb	14:42:34
1	U 409.014†	-1139.7	314.6	7.4752 ug/L	7.4752 ppb	14:42:14
1	V 292.402†	-1484.7	-174.3	-1.0069 ug/L	-1.0069 ppb	14:42:14
1	Zn 213.857†	730.7	92.2	0.8087 ug/L	0.8087 ppb	14:42:34
1	SiO2†	524.7	113.9	6.8809 ug/L	6.8809 ppb	14:43:45
2	Sc Radial	5485.8	5485.8	97.6 %		14:41:22
2	Y RADIAL	5940.3	5940.3	97.98 %		14:41:22
2	Al 396.153Radial†	3.6	-0.2	-0.1184 ug/L	-0.1184 ppb	14:41:42
2	Ca 317.933Radial†	22.4	4.7	7.0486 ug/L	7.0486 ppb	14:41:42
2	Fe 238.204 Radial†	9.5	0.0	0.1520 ug/L	0.1520 ppb	14:41:42
2	K 766.490 Radial†	2353.2	17.3	2.8806 ug/L	2.8806 ppb	14:41:22
2	Mg 279.077 IEC†	3.9	2.5	80.984 ug/L	80.984 ppb	14:41:42
2	Na 589.592 Radial†	-981.5	-9.7	-2.6469 ug/L	-2.6469 ppb	14:41:22
2	Sr 421.552†	-9.7	-43.7	-0.2536 ug/L	-0.2536 ppb	14:41:22
2	Sc 361.383	894930.1	894930.1	92.879 %		14:42:39
2	Y 371.029	818526.3	818526.3	95.963 %		14:42:39
2	Ag 328.068†	349.2	23.5	0.0872 ug/L	0.0872 ppb	14:42:39
2	As 188.979†	-27.7	2.2	0.8530 ug/L	0.8530 ppb	14:42:59
2	B 249.677†	-232.3	183.0	3.8044 ug/L	3.8044 ppb	14:42:59
2	Ba 233.527†	-2.1	17.0	0.1255 ug/L	0.1255 ppb	14:42:59
2	Be 313.107†	-5037.5	-379.4	-0.1273 ug/L	-0.1273 ppb	14:42:39
2	Cd 226.502†	-204.9	-15.1	-0.1573 ug/L	-0.1573 ppb	14:42:59
2	Co 228.616†	-65.4	-4.3	-0.0884 ug/L	-0.0884 ppb	14:42:59
2	Cr 267.716†	92.1	29.5	0.2994 ug/L	0.2994 ppb	14:42:59
2	Cu 324.752†	8879.1	514.1	1.3791 ug/L	1.3791 ppb	14:42:39
2	Mn 257.610†	504.8	50.8	0.0510 ug/L	0.0510 ppb	14:42:59
2	Mo 202.031†	16.8	-7.7	-0.4977 ug/L	-0.4977 ppb	14:42:59
2	Ni 231.604†	105.8	18.9	0.4485 ug/L	0.4485 ppb	14:42:59

2	P 214.914†	243.0	26.6	13.881 ug/L	13.881 ppb	14:42:59
2	Pb 220.353†	-62.3	-9.1	-1.0838 ug/L	-1.0838 ppb	14:42:59
2	S 181.975 Axial†	49.8	8.5	10.807 ug/L	10.807 ppb	14:42:59
2	Sb 206.836†	40.9	10.9	3.4317 ug/L	3.4317 ppb	14:42:59
2	Se 196.026†	-15.8	3.5	1.9033 ug/L	1.9033 ppb	14:42:59
2	Si 251.611†	527.2	109.1	3.0746 ug/L	3.0746 ppb	14:42:59
2	Sn 189.927†	10.0	10.8	1.8502 ug/L	1.8502 ppb	14:42:59
2	Ti 334.940†	-989.6	-21.0	-0.0377 ug/L	-0.0377 ppb	14:42:39
2	Tl 190.801†	-36.1	-1.2	-0.3643 ug/L	-0.3643 ppb	14:42:59
2	U 409.014†	-1246.8	192.1	4.5643 ug/L	4.5643 ppb	14:42:39
2	V 292.402†	-1407.1	-99.9	-0.5866 ug/L	-0.5866 ppb	14:42:39
2	Zn 213.857†	730.7	96.7	0.8467 ug/L	0.8467 ppb	14:42:59
2	SiO2†	543.3	137.2	8.3113 ug/L	8.3113 ppb	14:44:05
3	Sc Radial	5477.5	5477.5	97.4 %		14:41:47
3	Y RADIAL	5929.1	5929.1	97.80 %		14:41:47
3	Al 396.153Radial†	11.8	8.2	5.7526 ug/L	5.7526 ppb	14:42:07
3	Ca 317.933Radial†	19.4	1.7	2.5259 ug/L	2.5259 ppb	14:42:07
3	Fe 238.204 Radial†	9.2	-0.3	-2.8829 ug/L	-2.8829 ppb	14:42:07
3	K 766.490 Radial†	2474.2	145.1	24.196 ug/L	24.196 ppb	14:41:47
3	Mg 279.077 IEC†	4.1	2.6	85.728 ug/L	85.728 ppb	14:42:07
3	Na 589.592 Radial†	-1001.3	-31.5	-8.6151 ug/L	-8.6151 ppb	14:41:47
3	Sr 421.552†	8.3	-25.2	-0.1462 ug/L	-0.1462 ppb	14:41:47
3	Sc 361.383	898360.6	898360.6	93.235 %		14:43:04
3	Y 371.029	824291.8	824291.8	96.639 %		14:43:04
3	Ag 328.068†	349.1	22.0	0.0804 ug/L	0.0804 ppb	14:43:04
3	As 188.979†	-28.7	1.2	0.4692 ug/L	0.4692 ppb	14:43:25
3	B 249.677†	-223.0	194.0	4.0320 ug/L	4.0320 ppb	14:43:25
3	Ba 233.527†	-15.6	2.5	0.0179 ug/L	0.0179 ppb	14:43:25
3	Be 313.107†	-4889.4	-199.9	-0.0671 ug/L	-0.0671 ppb	14:43:04
3	Cd 226.502†	-204.0	-13.2	-0.1375 ug/L	-0.1375 ppb	14:43:25
3	Co 228.616†	-59.9	1.9	0.0377 ug/L	0.0377 ppb	14:43:25
3	Cr 267.716†	88.7	25.4	0.2574 ug/L	0.2574 ppb	14:43:25
3	Cu 324.752†	8964.9	569.6	1.5276 ug/L	1.5276 ppb	14:43:04
3	Mn 257.610†	516.6	61.4	0.0619 ug/L	0.0619 ppb	14:43:25
3	Mo 202.031†	20.8	-3.5	-0.2273 ug/L	-0.2273 ppb	14:43:25
3	Ni 231.604†	108.8	21.6	0.5125 ug/L	0.5125 ppb	14:43:25
3	P 214.914†	242.1	24.6	12.757 ug/L	12.757 ppb	14:43:25
3	Pb 220.353†	-37.0	18.3	2.1668 ug/L	2.1668 ppb	14:43:25
3	S 181.975 Axial†	38.8	-3.5	-4.3932 ug/L	-4.3932 ppb	14:43:25
3	Sb 206.836†	38.5	8.2	2.5696 ug/L	2.5696 ppb	14:43:25
3	Se 196.026†	-17.2	2.1	1.1433 ug/L	1.1433 ppb	14:43:25
3	Si 251.611†	504.3	82.4	2.3197 ug/L	2.3197 ppb	14:43:25
3	Sn 189.927†	-0.0	-0.0	-0.0036 ug/L	-0.0036 ppb	14:43:25
3	Ti 334.940†	-986.6	-13.7	-0.0286 ug/L	-0.0286 ppb	14:43:04
3	Tl 190.801†	-39.1	-4.3	-1.3000 ug/L	-1.3000 ppb	14:43:25
3	U 409.014†	-1224.2	221.5	5.2621 ug/L	5.2621 ppb	14:43:04
3	V 292.402†	-1390.5	-76.4	-0.4421 ug/L	-0.4421 ppb	14:43:04
3	Zn 213.857†	750.1	114.5	1.0034 ug/L	1.0034 ppb	14:43:25
3	SiO2†	535.4	126.5	7.6568 ug/L	7.6568 ppb	14:44:25

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	897801.6	93.177 %		0.2737			0.29%
Sc Radial	5497.0	97.8 %		0.48			0.49%
Y 371.029	823557.4	96.553 %		0.5519			0.57%
Y RADIAL	5956.3	98.25 %		0.622			0.63%
Ag 328.068†	-7.2	-0.0374 ug/L		0.20996	-0.0374 ppb	0.20996	561.82%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	3.2	2.2513 ug/L		3.09473	2.2513 ppb	3.09473	137.47%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-0.7	-0.2579 ug/L		1.60338	-0.2579 ppb	1.60338	621.60%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	195.1	4.0572 ug/L		0.26624	4.0572 ppb	0.26624	6.56%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	10.9	0.0795 ug/L		0.05546	0.0795 ppb	0.05546	69.76%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-289.0	-0.0969 ug/L		0.03010	-0.0969 ppb	0.03010	31.06%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	3.5	5.2005 ug/L		2.37195	5.2005 ppb	2.37195	45.61%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated			
Cd 226.502†	-7.4	-0.0757 ug/L	0.12454 -0.0757 ppb 0.12454 164.41%
QC value within limits for Cd 226.502 Recovery = Not calculated			
Co 228.616†	-9.9	-0.2025 ug/L	0.31318 -0.2025 ppb 0.31318 154.66%
QC value within limits for Co 228.616 Recovery = Not calculated			
Cr 267.716†	28.8	0.2917 ug/L	0.03116 0.2917 ppb 0.03116 10.68%
QC value within limits for Cr 267.716 Recovery = Not calculated			
Cu 324.752†	536.7	1.4387 ug/L	0.07848 1.4387 ppb 0.07848 5.45%
QC value within limits for Cu 324.752 Recovery = Not calculated			
Fe 238.204 Radial†	-0.5	-4.0361 ug/L	4.86822 -4.0361 ppb 4.86822 120.62%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated			
K 766.490 Radial†	57.7	9.6168 ug/L	12.63800 9.6168 ppb 12.63800 131.42%
QC value within limits for K 766.490 Radial Recovery = Not calculated			
Mg 279.077 IEC†	2.3	74.343 ug/L	15.7912 74.343 ppb 15.7912 21.24%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated			
Mn 257.610†	53.2	0.0535 ug/L	0.00742 0.0535 ppb 0.00742 13.87%
QC value within limits for Mn 257.610 Recovery = Not calculated			
Mo 202.031†	-1.7	-0.1115 ug/L	0.45529 -0.1115 ppb 0.45529 408.33%
QC value within limits for Mo 202.031 Recovery = Not calculated			
Na 589.592 Radial†	-13.5	-3.6899 ug/L	4.49534 -3.6899 ppb 4.49534 121.83%
QC value within limits for Na 589.592 Radial Recovery = Not calculated			
Ni 231.604†	18.0	0.4276 ug/L	0.09701 0.4276 ppb 0.09701 22.68%
QC value within limits for Ni 231.604 Recovery = Not calculated			
P 214.914†	27.5	14.369 ug/L	1.9033 14.369 ppb 1.9033 13.25%
QC value within limits for P 214.914 Recovery = Not calculated			
Pb 220.353†	10.2	1.2053 ug/L	1.99081 1.2053 ppb 1.99081 165.17%
QC value within limits for Pb 220.353 Recovery = Not calculated			
S 181.975 Axial†	0.2	0.2656 ug/L	9.14982 0.2656 ppb 9.14982 >999.9%
QC value within limits for S 181.975 Axial Recovery = Not calculated			
Sb 206.836†	11.1	3.4987 ug/L	0.96429 3.4987 ppb 0.96429 27.56%
QC value within limits for Sb 206.836 Recovery = Not calculated			
Se 196.026†	2.7	1.4700 ug/L	0.39104 1.4700 ppb 0.39104 26.60%
QC value within limits for Se 196.026 Recovery = Not calculated			
Si 251.611†	96.6	2.7179 ug/L	0.37915 2.7179 ppb 0.37915 13.95%
QC value within limits for Si 251.611 Recovery = Not calculated			
Sn 189.927†	6.5	1.1217 ug/L	0.98857 1.1217 ppb 0.98857 88.13%
QC value within limits for Sn 189.927 Recovery = Not calculated			
Sr 421.552†	-18.4	-0.1071 ug/L	0.16948 -0.1071 ppb 0.16948 158.24%
QC value within limits for Sr 421.552 Recovery = Not calculated			
Ti 334.940†	-7.7	-0.0190 ug/L	0.02501 -0.0190 ppb 0.02501 131.80%
QC value within limits for Ti 334.940 Recovery = Not calculated			
Tl 190.801†	-5.2	-1.5887 ug/L	1.39142 -1.5887 ppb 1.39142 87.58%
QC value within limits for Tl 190.801 Recovery = Not calculated			
U 409.014†	242.7	5.7672 ug/L	1.51978 5.7672 ppb 1.51978 26.35%
QC value within limits for U 409.014 Recovery = Not calculated			
V 292.402†	-116.8	-0.6785 ug/L	0.29337 -0.6785 ppb 0.29337 43.24%
QC value within limits for V 292.402 Recovery = Not calculated			
Zn 213.857†	101.1	0.8863 ug/L	0.10322 0.8863 ppb 0.10322 11.65%
QC value within limits for Zn 213.857 Recovery = Not calculated			
SiO2†	125.9	7.6163 ug/L	0.71604 7.6163 ppb 0.71604 9.40%
QC value within limits for SiO2 Recovery = Not calculated			

All analyte(s) passed QC.

=====

Analysis Begun

Start Time: 1/27/2010 14:44:41

Plasma On Time: 00:00:00

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\012710.sif

Batch ID:

Results Data Set: 012710

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

=====

Sequence No.: 1

Autosampler Location: 38

Sample ID: 244128001|940124|5

Date Collected: 1/27/2010 14:44:43

Analyst: HSC

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: 244128001|940124|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5683.2	5683.2	101 %		14:46:35
1	Y RADIAL	6302.6	6302.6	104.0 %		14:46:35
1	Al 396.153Radial†	47840.6	47314.4	33045 ug/L	33045 ppb	14:46:35
1	Ca 317.933Radial†	3139.9	3087.3	4644.7 ug/L	4644.7 ppb	14:46:55
1	Fe 238.204 Radial†	3874.9	3822.9	32221 ug/L	32221 ppb	14:46:35
1	K 766.490 Radial†	24493.6	21832.2	3637.5 ug/L	3637.5 ppb	14:46:35
1	Mg 279.077 IEC†	158.7	155.5	5005.0 ug/L	5005.0 ppb	14:46:55
1	Na 589.592 Radial†	143.7	1138.1	310.95 ug/L	310.95 ppb	14:46:35
1	Sr 421.552†	11221.0	11064.8	64.191 ug/L	64.191 ppb	14:46:35
1	Sc 361.383	988887.2	988887.2	102.63 %		14:47:53
1	Y 371.029	889840.0	889840.0	104.32 %		14:47:53
1	Ag 328.068†	-1928.8	-2231.8	1.8041 ug/L	1.8041 ppb	14:47:58
1	As 188.979†	-41.7	-8.6	15.044 ug/L	15.044 ppb	14:48:18
1	B 249.677†	160.2	589.2	6.9260 ug/L	6.9260 ppb	14:47:58
1	Ba 233.527†	84849.1	82693.6	618.29 ug/L	618.29 ppb	14:47:58
1	Be 313.107†	-6823.7	-1604.5	2.2906 ug/L	2.2906 ppb	14:47:58
1	Cd 226.502†	137.3	339.3	0.2405 ug/L	0.2405 ppb	14:48:18
1	Co 228.616†	1479.4	1507.6	27.876 ug/L	27.876 ppb	14:48:18
1	Cr 267.716†	2470.0	2337.0	24.685 ug/L	24.685 ppb	14:47:58
1	Cu 324.752†	13963.5	4559.9	13.990 ug/L	13.990 ppb	14:47:58
1	Mn 257.610†	2409486.3	2347235.5	2513.8 ug/L	2513.8 ppb	14:47:53
1	Mo 202.031†	-5.3	-31.0	0.5468 ug/L	0.5468 ppb	14:48:18
1	Ni 231.604†	1138.5	1014.2	24.062 ug/L	24.062 ppb	14:48:18
1	P 214.914†	622.6	371.6	177.28 ug/L	177.28 ppb	14:48:18
1	Pb 220.353†	194.3	247.3	33.413 ug/L	33.413 ppb	14:48:18
1	S 181.975 Axial†	127.6	79.3	94.036 ug/L	94.036 ppb	14:48:18
1	Sb 206.836†	49.0	14.7	0.4587 ug/L	0.4587 ppb	14:48:18
1	Se 196.026†	-174.5	-149.5	26.635 ug/L	26.635 ppb	14:48:18
1	Si 251.611†	322113.7	313399.0	8811.1 ug/L	8811.1 ppb	14:47:53
1	Sn 189.927†	-42.4	-41.3	-5.8457 ug/L	-5.8457 ppb	14:48:18
1	Ti 334.940†	894977.5	873082.6	1246.1 ug/L	1246.1 ppb	14:47:53
1	Tl 190.801†	-112.7	-72.1	0.1545 ug/L	0.1545 ppb	14:48:18
1	U 409.014†	-3994.9	-2358.0	-59.760 ug/L	-59.760 ppb	14:47:53
1	V 292.402†	10075.4	11232.2	60.260 ug/L	60.260 ppb	14:47:58
1	Zn 213.857†	7122.6	6250.0	51.748 ug/L	51.748 ppb	14:47:58
1	SiO2†	317297.2	308716.7	18675 ug/L	18675 ppb	14:49:25
2	Sc Radial	5601.1	5601.1	99.6 %		14:47:00
2	Y RADIAL	6207.2	6207.2	102.4 %		14:47:00
2	Al 396.153Radial†	46901.0	47065.4	32871 ug/L	32871 ppb	14:47:00
2	Ca 317.933Radial†	3128.7	3121.7	4696.3 ug/L	4696.3 ppb	14:47:20
2	Fe 238.204 Radial†	3807.6	3811.5	32125 ug/L	32125 ppb	14:47:00
2	K 766.490 Radial†	24328.9	22022.3	3669.2 ug/L	3669.2 ppb	14:47:00
2	Mg 279.077 IEC†	156.1	155.1	4992.9 ug/L	4992.9 ppb	14:47:20
2	Na 589.592 Radial†	67.5	1063.8	290.64 ug/L	290.64 ppb	14:47:00
2	Sr 421.552†	10965.2	10970.9	63.645 ug/L	63.645 ppb	14:47:00
2	Sc 361.383	989608.6	989608.6	102.71 %		14:48:24
2	Y 371.029	890317.2	890317.2	104.38 %		14:48:24

2	Ag 328.068†	-1938.7	-2240.1	1.7417 ug/L	1.7417 ppb	14:48:29
2	As 188.979†	-45.3	-12.1	13.581 ug/L	13.581 ppb	14:48:49
2	B 249.677†	77.2	508.3	5.2619 ug/L	5.2619 ppb	14:48:29
2	Ba 233.527†	85940.7	83696.2	625.77 ug/L	625.77 ppb	14:48:29
2	Be 313.107†	-6809.2	-1585.5	2.2743 ug/L	2.2743 ppb	14:48:29
2	Cd 226.502†	150.9	352.4	0.3893 ug/L	0.3893 ppb	14:48:49
2	Co 228.616†	1463.7	1491.2	27.569 ug/L	27.569 ppb	14:48:49
2	Cr 267.716†	2502.8	2367.1	24.992 ug/L	24.992 ppb	14:48:29
2	Cu 324.752†	14119.9	4702.3	14.365 ug/L	14.365 ppb	14:48:29
2	Mn 257.610†	2394143.6	2330585.5	2495.9 ug/L	2495.9 ppb	14:48:24
2	Mo 202.031†	0.8	-25.0	0.9295 ug/L	0.9295 ppb	14:48:49
2	Ni 231.604†	1137.6	1012.5	24.022 ug/L	24.022 ppb	14:48:49
2	P 214.914†	612.8	361.6	171.93 ug/L	171.93 ppb	14:48:49
2	Pb 220.353†	194.5	247.3	33.390 ug/L	33.390 ppb	14:48:49
2	S 181.975 Axial†	128.1	79.7	94.590 ug/L	94.590 ppb	14:48:49
2	Sb 206.836†	43.7	9.4	-1.1430 ug/L	-1.1430 ppb	14:48:49
2	Se 196.026†	-179.2	-154.0	23.860 ug/L	23.860 ppb	14:48:49
2	Si 251.611†	319911.2	311025.8	8744.4 ug/L	8744.4 ppb	14:48:24
2	Sn 189.927†	-40.8	-39.7	-5.5700 ug/L	-5.5700 ppb	14:48:49
2	Ti 334.940†	888425.4	866067.4	1236.1 ug/L	1236.1 ppb	14:48:24
2	Tl 190.801†	-116.6	-75.8	-1.1404 ug/L	-1.1404 ppb	14:48:49
2	U 409.014†	-3832.9	-2197.4	-55.934 ug/L	-55.934 ppb	14:48:24
2	V 292.402†	10309.5	11453.0	61.601 ug/L	61.601 ppb	14:48:29
2	Zn 213.857†	7209.1	6329.1	52.454 ug/L	52.454 ppb	14:48:29
2	SiO2†	312701.4	304016.6	18391 ug/L	18391 ppb	14:49:31
3	Sc Radial	5718.9	5718.9	102 %		14:47:25
3	Y RADIAL	6295.5	6295.5	103.8 %		14:47:25
3	Al 396.153Radial†	47434.2	46619.9	32560 ug/L	32560 ppb	14:47:25
3	Ca 317.933Radial†	3109.6	3038.2	4570.8 ug/L	4570.8 ppb	14:47:45
3	Fe 238.204 Radial†	3848.6	3773.1	31801 ug/L	31801 ppb	14:47:25
3	K 766.490 Radial†	24603.8	21789.5	3630.4 ug/L	3630.4 ppb	14:47:25
3	Mg 279.077 IEC†	155.7	151.5	4877.3 ug/L	4877.3 ppb	14:47:45
3	Na 589.592 Radial†	103.5	1097.8	299.92 ug/L	299.92 ppb	14:47:25
3	Sr 421.552†	11120.4	10896.7	63.216 ug/L	63.216 ppb	14:47:25
3	Sc 361.383	993847.5	993847.5	103.15 %		14:48:55
3	Y 371.029	893520.6	893520.6	104.76 %		14:48:55
3	Ag 328.068†	-1852.2	-2148.2	1.9945 ug/L	1.9945 ppb	14:49:00
3	As 188.979†	-52.3	-18.7	10.920 ug/L	10.920 ppb	14:49:20
3	B 249.677†	143.7	572.4	6.6488 ug/L	6.6488 ppb	14:49:00
3	Ba 233.527†	84676.2	82113.3	613.94 ug/L	613.94 ppb	14:49:00
3	Be 313.107†	-6721.5	-1472.2	2.2981 ug/L	2.2981 ppb	14:49:00
3	Cd 226.502†	126.9	328.5	0.1723 ug/L	0.1723 ppb	14:49:20
3	Co 228.616†	1440.7	1462.8	27.003 ug/L	27.003 ppb	14:49:20
3	Cr 267.716†	2427.5	2283.7	24.128 ug/L	24.128 ppb	14:49:00
3	Cu 324.752†	14000.0	4527.4	13.876 ug/L	13.876 ppb	14:49:00
3	Mn 257.610†	2389830.4	2316461.4	2480.8 ug/L	2480.8 ppb	14:48:55
3	Mo 202.031†	-2.8	-28.5	0.6727 ug/L	0.6727 ppb	14:49:20
3	Ni 231.604†	1113.7	984.7	23.361 ug/L	23.361 ppb	14:49:20
3	P 214.914†	608.6	355.0	168.67 ug/L	168.67 ppb	14:49:20
3	Pb 220.353†	174.8	227.4	30.989 ug/L	30.989 ppb	14:49:20
3	S 181.975 Axial†	131.7	82.7	98.396 ug/L	98.396 ppb	14:49:20
3	Sb 206.836†	42.0	7.6	-1.6978 ug/L	-1.6978 ppb	14:49:20
3	Se 196.026†	-171.7	-146.0	27.174 ug/L	27.174 ppb	14:49:20
3	Si 251.611†	319912.2	309698.2	8707.1 ug/L	8707.1 ppb	14:48:55
3	Sn 189.927†	-39.7	-38.5	-5.3889 ug/L	-5.3889 ppb	14:49:20
3	Ti 334.940†	887719.6	861693.7	1229.9 ug/L	1229.9 ppb	14:48:55
3	Tl 190.801†	-113.6	-72.5	-0.2341 ug/L	-0.2341 ppb	14:49:20
3	U 409.014†	-3687.9	-2040.9	-52.177 ug/L	-52.177 ppb	14:48:55
3	V 292.402†	10058.3	11166.7	59.966 ug/L	59.966 ppb	14:49:00
3	Zn 213.857†	7092.7	6186.3	51.232 ug/L	51.232 ppb	14:49:00
3	SiO2†	314246.8	304216.3	18403 ug/L	18403 ppb	14:49:36

Mean Data: 244128001|940124|5

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	990781.1	102.83 %	0.278			0.27%
Sc Radial	5667.7	101 %	1.1			1.07%
Y 371.029	891225.9	104.49 %	0.235			0.22%
Y RADIAL	6268.4	103.4 %	0.88			0.85%
Ag 328.068†	-2206.7	1.8468 ug/L	0.13172	1.8468 ppb	0.13172	7.13%

Al 396.153Radial†	46999.9	32825 ug/L	245.7	32825 ppb	245.7	0.75%
As 188.979†	-13.1	13.182 ug/L	2.0907	13.182 ppb	2.0907	15.86%
B 249.677†	556.6	6.2789 ug/L	0.89158	6.2789 ppb	0.89158	14.20%
Ba 233.527†	82834.4	619.34 ug/L	5.982	619.34 ppb	5.982	0.97%
Be 313.107†	-1554.1	2.2877 ug/L	0.01218	2.2877 ppb	0.01218	0.53%
Ca 317.933Radial†	3082.4	4637.3 ug/L	63.10	4637.3 ppb	63.10	1.36%
Cd 226.502†	340.1	0.2674 ug/L	0.11095	0.2674 ppb	0.11095	41.50%
Co 228.616†	1487.2	27.483 ug/L	0.4425	27.483 ppb	0.4425	1.61%
Cr 267.716†	2329.3	24.601 ug/L	0.4382	24.601 ppb	0.4382	1.78%
Cu 324.752†	4596.5	14.077 ug/L	0.2560	14.077 ppb	0.2560	1.82%
Fe 238.204 Radial†	3802.5	32049 ug/L	219.8	32049 ppb	219.8	0.69%
K 766.490 Radial†	21881.4	3645.7 ug/L	20.65	3645.7 ppb	20.65	0.57%
Mg 279.077 IEC†	154.0	4958.4 ug/L	70.50	4958.4 ppb	70.50	1.42%
Mn 257.610†	2331427.5	2496.8 ug/L	16.50	2496.8 ppb	16.50	0.66%
Mo 202.031†	-28.2	0.7163 ug/L	0.19507	0.7163 ppb	0.19507	27.23%
Na 589.592 Radial†	1099.9	300.50 ug/L	10.170	300.50 ppb	10.170	3.38%
Ni 231.604†	1003.8	23.815 ug/L	0.3937	23.815 ppb	0.3937	1.65%
P 214.914†	362.7	172.63 ug/L	4.346	172.63 ppb	4.346	2.52%
Pb 220.353†	240.7	32.598 ug/L	1.3931	32.598 ppb	1.3931	4.27%
S 181.975 Axial†	80.5	95.674 ug/L	2.3739	95.674 ppb	2.3739	2.48%
Sb 206.836†	10.5	-0.7940 ug/L	1.11979	-0.7940 ppb	1.11979	141.03%
Se 196.026†	-149.8	25.890 ug/L	1.7781	25.890 ppb	1.7781	6.87%
Si 251.611†	311374.4	8754.2 ug/L	52.71	8754.2 ppb	52.71	0.60%
Sn 189.927†	-39.9	-5.6016 ug/L	0.22999	-5.6016 ppb	0.22999	4.11%
Sr 421.552†	10977.4	63.684 ug/L	0.4887	63.684 ppb	0.4887	0.77%
Ti 334.940†	866947.9	1237.4 ug/L	8.20	1237.4 ppb	8.20	0.66%
Tl 190.801†	-73.5	-0.4066 ug/L	0.66444	-0.4066 ppb	0.66444	163.40%
U 409.014†	-2198.8	-55.957 ug/L	3.7917	-55.957 ppb	3.7917	6.78%
V 292.402†	11284.0	60.609 ug/L	0.8715	60.609 ppb	0.8715	1.44%
Zn 213.857†	6255.1	51.811 ug/L	0.6131	51.811 ppb	0.6131	1.18%
SiO2†	305649.9	18490 ug/L	160.8	18490 ppb	160.8	0.87%

Sequence No.: 2
 Sample ID: 1202011793|940124|5
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 39
 Date Collected: 1/27/2010 14:51:46
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202011793|940124|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5580.8	5580.8	99.3 %		14:53:39
1	Y RADIAL	6204.4	6204.4	102.3 %		14:53:39
1	Al 396.153Radial†	44600.3	44919.0	31372 ug/L	31372 ppb	14:53:39
1	Ca 317.933Radial†	2993.2	2996.6	4508.1 ug/L	4508.1 ppb	14:53:59
1	Fe 238.204 Radial†	3342.7	3357.1	28295 ug/L	28295 ppb	14:53:59
1	K 766.490 Radial†	24644.3	22428.6	3737.8 ug/L	3737.8 ppb	14:53:39
1	Mg 279.077 IEC†	140.6	140.1	4510.6 ug/L	4510.6 ppb	14:53:59
1	Na 589.592 Radial†	-190.7	804.0	219.65 ug/L	219.65 ppb	14:53:39
1	Sr 421.552†	9867.7	9905.4	57.462 ug/L	57.462 ppb	14:53:39
1	Sc 361.383	960974.4	960974.4	99.734 %		14:54:56
1	Y 371.029	866195.4	866195.4	101.55 %		14:54:56
1	Ag 328.068†	-1705.7	-2062.8	1.1593 ug/L	1.1593 ppb	14:55:01
1	As 188.979†	-32.3	-0.4	16.921 ug/L	16.921 ppb	14:55:21
1	B 249.677†	71.4	504.7	5.8587 ug/L	5.8587 ppb	14:55:01
1	Ba 233.527†	54516.6	54681.5	409.09 ug/L	409.09 ppb	14:55:01
1	Be 313.107†	-6831.1	-1805.1	2.1276 ug/L	2.1276 ppb	14:55:01
1	Cd 226.502†	86.4	292.2	0.1509 ug/L	0.1509 ppb	14:55:21
1	Co 228.616†	564.7	632.3	10.116 ug/L	10.116 ppb	14:55:21
1	Cr 267.716†	2273.9	2210.3	23.291 ug/L	23.291 ppb	14:55:01
1	Cu 324.752†	13570.1	4560.7	13.772 ug/L	13.772 ppb	14:55:01
1	Mn 257.610†	626577.9	627758.5	674.11 ug/L	674.11 ppb	14:54:56
1	Mo 202.031†	5.5	-20.2	0.9363 ug/L	0.9363 ppb	14:55:21
1	Ni 231.604†	789.8	696.9	16.538 ug/L	16.538 ppb	14:55:21
1	P 214.914†	610.8	377.3	183.08 ug/L	183.08 ppb	14:55:21
1	Pb 220.353†	141.3	199.6	27.773 ug/L	27.773 ppb	14:55:21
1	S 181.975 Axial†	130.5	85.8	102.60 ug/L	102.60 ppb	14:55:21
1	Sb 206.836†	37.3	4.3	-2.7257 ug/L	-2.7257 ppb	14:55:21
1	Se 196.026†	-169.6	-149.6	13.529 ug/L	13.529 ppb	14:55:21
1	Si 251.611†	330561.3	330985.6	9305.6 ug/L	9305.6 ppb	14:54:56
1	Sn 189.927†	-38.9	-39.0	-5.5350 ug/L	-5.5350 ppb	14:55:21
1	Ti 334.940†	840239.3	843527.7	1204.0 ug/L	1204.0 ppb	14:54:56
1	Tl 190.801†	-101.4	-64.0	-6.4111 ug/L	-6.4111 ppb	14:55:21
1	U 409.014†	-2962.3	-1435.7	-37.393 ug/L	-37.393 ppb	14:54:56
1	V 292.402†	8524.4	9962.2	53.421 ug/L	53.421 ppb	14:55:01
1	Zn 213.857†	6772.4	6100.4	50.859 ug/L	50.859 ppb	14:55:01
1	SiO2†	329352.5	329784.3	19950 ug/L	19950 ppb	14:56:28
2	Sc Radial	5425.2	5425.2	96.5 %		14:54:04
2	Y RADIAL	6075.7	6075.7	100.2 %		14:54:04
2	Al 396.153Radial†	43762.1	45339.1	31665 ug/L	31665 ppb	14:54:04
2	Ca 317.933Radial†	2987.0	3076.7	4628.7 ug/L	4628.7 ppb	14:54:24
2	Fe 238.204 Radial†	3336.6	3447.4	29056 ug/L	29056 ppb	14:54:24
2	K 766.490 Radial†	24240.0	22721.8	3786.6 ug/L	3786.6 ppb	14:54:04
2	Mg 279.077 IEC†	135.8	139.1	4478.8 ug/L	4478.8 ppb	14:54:24
2	Na 589.592 Radial†	-167.8	822.2	224.63 ug/L	224.63 ppb	14:54:04
2	Sr 421.552†	9731.6	10049.5	58.298 ug/L	58.298 ppb	14:54:04
2	Sc 361.383	952480.2	952480.2	98.852 %		14:55:26
2	Y 371.029	858496.6	858496.6	100.65 %		14:55:26
2	Ag 328.068†	-1680.2	-2052.2	1.4499 ug/L	1.4499 ppb	14:55:31
2	As 188.979†	-43.3	-11.7	12.713 ug/L	12.713 ppb	14:55:51
2	B 249.677†	51.9	485.7	5.3401 ug/L	5.3401 ppb	14:55:31
2	Ba 233.527†	54170.1	54818.4	410.14 ug/L	410.14 ppb	14:55:31
2	Be 313.107†	-6743.0	-1777.0	2.1365 ug/L	2.1365 ppb	14:55:31
2	Cd 226.502†	91.8	298.3	0.1364 ug/L	0.1364 ppb	14:55:51
2	Co 228.616†	550.3	622.8	9.9114 ug/L	9.9114 ppb	14:55:51
2	Cr 267.716†	2288.9	2245.7	23.670 ug/L	23.670 ppb	14:55:31
2	Cu 324.752†	13349.6	4458.9	13.540 ug/L	13.540 ppb	14:55:31
2	Mn 257.610†	620879.8	627597.0	674.01 ug/L	674.01 ppb	14:55:26
2	Mo 202.031†	0.7	-25.1	0.6831 ug/L	0.6831 ppb	14:55:51
2	Ni 231.604†	776.6	690.5	16.388 ug/L	16.388 ppb	14:55:51

2	P 214.914†	607.8	379.7	183.86 ug/L	183.86 ppb	14:55:51
2	Pb 220.353†	150.2	209.9	28.984 ug/L	28.984 ppb	14:55:51
2	S 181.975 Axial†	124.0	80.4	95.699 ug/L	95.699 ppb	14:55:51
2	Sb 206.836†	46.5	13.9	0.2947 ug/L	0.2947 ppb	14:55:51
2	Se 196.026†	-159.1	-140.4	21.088 ug/L	21.088 ppb	14:55:51
2	Si 251.611†	328197.9	331550.7	9321.5 ug/L	9321.5 ppb	14:55:26
2	Sn 189.927†	-43.1	-43.6	-6.3022 ug/L	-6.3022 ppb	14:55:51
2	Ti 334.940†	832646.2	843359.7	1203.8 ug/L	1203.8 ppb	14:55:26
2	Tl 190.801†	-90.3	-53.7	-3.2805 ug/L	-3.2805 ppb	14:55:51
2	U 409.014†	-3052.2	-1553.1	-40.270 ug/L	-40.270 ppb	14:55:26
2	V 292.402†	8515.6	10029.6	53.698 ug/L	53.698 ppb	14:55:31
2	Zn 213.857†	6753.9	6142.3	51.156 ug/L	51.156 ppb	14:55:31
2	SiO2†	327912.9	331273.0	20040 ug/L	20040 ppb	14:56:33
3	Sc Radial	5555.0	5555.0	98.8 %		14:54:29
3	Y RADIAL	6161.2	6161.2	101.6 %		14:54:29
3	Al 396.153Radial†	44496.0	45022.3	31444 ug/L	31444 ppb	14:54:29
3	Ca 317.933Radial†	3003.8	3021.3	4545.4 ug/L	4545.4 ppb	14:54:49
3	Fe 238.204 Radial†	3336.6	3366.6	28375 ug/L	28375 ppb	14:54:49
3	K 766.490 Radial†	24530.0	22428.3	3737.7 ug/L	3737.7 ppb	14:54:29
3	Mg 279.077 IEC†	140.6	140.7	4530.9 ug/L	4530.9 ppb	14:54:49
3	Na 589.592 Radial†	-210.8	782.8	213.86 ug/L	213.86 ppb	14:54:29
3	Sr 421.552†	9931.0	10015.6	58.101 ug/L	58.101 ppb	14:54:29
3	Sc 361.383	965091.1	965091.1	100.16 %		14:55:57
3	Y 371.029	869920.7	869920.7	101.99 %		14:55:57
3	Ag 328.068†	-1744.6	-2094.3	1.0602 ug/L	1.0602 ppb	14:56:02
3	As 188.979†	-42.3	-10.2	13.113 ug/L	13.113 ppb	14:56:22
3	B 249.677†	119.9	552.8	6.8466 ug/L	6.8466 ppb	14:56:02
3	Ba 233.527†	54886.6	54817.7	410.11 ug/L	410.11 ppb	14:56:02
3	Be 313.107†	-6798.6	-1743.4	2.1361 ug/L	2.1361 ppb	14:56:02
3	Cd 226.502†	97.8	303.1	0.2573 ug/L	0.2573 ppb	14:56:22
3	Co 228.616†	545.3	610.6	9.6835 ug/L	9.6835 ppb	14:56:22
3	Cr 267.716†	2260.4	2187.1	23.055 ug/L	23.055 ppb	14:56:02
3	Cu 324.752†	13551.4	4484.0	13.570 ug/L	13.570 ppb	14:56:02
3	Mn 257.610†	627380.4	625879.9	672.11 ug/L	672.11 ppb	14:55:57
3	Mo 202.031†	-0.5	-26.3	0.5519 ug/L	0.5519 ppb	14:56:22
3	Ni 231.604†	771.3	674.9	16.017 ug/L	16.017 ppb	14:56:22
3	P 214.914†	614.9	378.9	183.87 ug/L	183.87 ppb	14:56:22
3	Pb 220.353†	140.2	197.9	27.577 ug/L	27.577 ppb	14:56:22
3	S 181.975 Axial†	122.3	77.1	91.546 ug/L	91.546 ppb	14:56:22
3	Sb 206.836†	43.4	10.3	-0.8503 ug/L	-0.8503 ppb	14:56:22
3	Se 196.026†	-168.2	-147.4	14.964 ug/L	14.964 ppb	14:56:22
3	Si 251.611†	330975.4	329985.3	9277.5 ug/L	9277.5 ppb	14:55:57
3	Sn 189.927†	-46.8	-46.8	-6.8671 ug/L	-6.8671 ppb	14:56:22
3	Ti 334.940†	840059.1	839754.1	1198.6 ug/L	1198.6 ppb	14:55:57
3	Tl 190.801†	-80.4	-42.6	0.0430 ug/L	0.0430 ppb	14:56:22
3	U 409.014†	-2963.7	-1424.4	-37.133 ug/L	-37.133 ppb	14:55:57
3	V 292.402†	8609.4	10010.7	53.696 ug/L	53.696 ppb	14:56:02
3	Zn 213.857†	6769.7	6068.7	50.576 ug/L	50.576 ppb	14:56:02
3	SiO2†	326869.6	325896.7	19714 ug/L	19714 ppb	14:56:38

Mean Data: 1202011793|940124|5

Analyte	Mean Corrected	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	959515.3	99.582 %		0.6674			0.67%
Sc Radial	5520.3	98.2 %		1.48			1.51%
Y 371.029	864870.9	101.40 %		0.683			0.67%
Y RADIAL	6147.1	101.4 %		1.08			1.07%
Ag 328.068†	-2069.8	1.2231 ug/L		0.20258	1.2231 ppb	0.20258	16.56%
Al 396.153Radial†	45093.5	31494 ug/L		152.9	31494 ppb	152.9	0.49%
As 188.979†	-7.4	14.249 ug/L		2.3226	14.249 ppb	2.3226	16.30%
B 249.677†	514.4	6.0151 ug/L		0.76537	6.0151 ppb	0.76537	12.72%
Ba 233.527†	54772.5	409.78 ug/L		0.596	409.78 ppb	0.596	0.15%
Be 313.107†	-1775.1	2.1334 ug/L		0.00500	2.1334 ppb	0.00500	0.23%
Ca 317.933Radial†	3031.5	4560.7 ug/L		61.70	4560.7 ppb	61.70	1.35%
Cd 226.502†	297.9	0.1815 ug/L		0.06599	0.1815 ppb	0.06599	36.35%
Co 228.616†	621.9	9.9036 ug/L		0.21633	9.9036 ppb	0.21633	2.18%
Cr 267.716†	2214.4	23.339 ug/L		0.3104	23.339 ppb	0.3104	1.33%
Cu 324.752†	4501.2	13.628 ug/L		0.1261	13.628 ppb	0.1261	0.93%
Fe 238.204 Radial†	3390.4	28575 ug/L		417.9	28575 ppb	417.9	1.46%
K 766.490 Radial†	22526.2	3754.0 ug/L		28.21	3754.0 ppb	28.21	0.75%

Mg 279.077 IEC†	140.0	4506.8 ug/L	26.23	4506.8 ppb	26.23	0.58%
Mn 257.610†	627078.5	673.41 ug/L	1.129	673.41 ppb	1.129	0.17%
Mo 202.031†	-23.9	0.7238 ug/L	0.19541	0.7238 ppb	0.19541	27.00%
Na 589.592 Radial†	803.0	219.38 ug/L	5.388	219.38 ppb	5.388	2.46%
Ni 231.604†	687.4	16.314 ug/L	0.2678	16.314 ppb	0.2678	1.64%
P 214.914†	378.7	183.60 ug/L	0.454	183.60 ppb	0.454	0.25%
Pb 220.353†	202.5	28.111 ug/L	0.7622	28.111 ppb	0.7622	2.71%
S 181.975 Axial†	81.1	96.614 ug/L	5.5822	96.614 ppb	5.5822	5.78%
Sb 206.836†	9.5	-1.0938 ug/L	1.52488	-1.0938 ppb	1.52488	139.42%
Se 196.026†	-145.8	16.527 ug/L	4.0141	16.527 ppb	4.0141	24.29%
Si 251.611†	330840.5	9301.5 ug/L	22.29	9301.5 ppb	22.29	0.24%
Sn 189.927†	-43.1	-6.2348 ug/L	0.66857	-6.2348 ppb	0.66857	10.72%
Sr 421.552†	9990.2	57.954 ug/L	0.4369	57.954 ppb	0.4369	0.75%
Ti 334.940†	842213.8	1202.1 ug/L	3.05	1202.1 ppb	3.05	0.25%
Tl 190.801†	-53.4	-3.2162 ug/L	3.22754	-3.2162 ppb	3.22754	100.35%
U 409.014†	-1471.1	-38.266 ug/L	1.7412	-38.266 ppb	1.7412	4.55%
V 292.402†	10000.8	53.605 ug/L	0.1596	53.605 ppb	0.1596	0.30%
Zn 213.857†	6103.8	50.864 ug/L	0.2899	50.864 ppb	0.2899	0.57%
SiO2†	328984.7	19901 ug/L	167.9	19901 ppb	167.9	0.84%

Sequence No.: 3
 Sample ID: 1202011794|940124|5
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 40
 Date Collected: 1/27/2010 14:58:49
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202011794|940124|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5631.6	5631.6	100 %		15:00:42
1	Y RADIAL	6239.7	6239.7	102.9 %		15:00:42
1	Al 396.153Radial†	69712.4	69579.3	48591 ug/L	48591 ppb	15:00:42
1	Ca 317.933Radial†	3509.7	3484.9	5242.9 ug/L	5242.9 ppb	15:01:02
1	Fe 238.204 Radial†	4031.0	4013.7	33832 ug/L	33832 ppb	15:00:42
1	K 766.490 Radial†	34257.6	31800.2	5299.5 ug/L	5299.5 ppb	15:00:42
1	Mg 279.077 IEC†	194.9	193.0	6219.4 ug/L	6219.4 ppb	15:01:02
1	Na 589.592 Radial†	3896.2	4885.0	1334.6 ug/L	1334.6 ppb	15:00:42
1	Sr 421.552†	27406.3	27321.8	158.55 ug/L	158.55 ppb	15:00:42
1	Sc 361.383	964597.9	964597.9	100.11 %		15:01:59
1	Y 371.029	865211.4	865211.4	101.44 %		15:01:59
1	Ag 328.068†	22650.5	22273.2	100.10 ug/L	100.10 ppb	15:01:59
1	As 188.979†	204.8	236.6	111.89 ug/L	111.89 ppb	15:02:19
1	B 249.677†	4291.8	4720.2	92.312 ug/L	92.312 ppb	15:01:59
1	Ba 233.527†	68742.9	68686.8	514.00 ug/L	514.00 ppb	15:01:59
1	Be 313.107†	283041.3	287775.4	99.912 ug/L	99.912 ppb	15:01:59
1	Cd 226.502†	9173.2	9368.6	95.018 ug/L	95.018 ppb	15:02:19
1	Co 228.616†	5239.4	5299.7	104.55 ug/L	104.55 ppb	15:02:19
1	Cr 267.716†	11719.1	11636.5	120.07 ug/L	120.07 ppb	15:01:59
1	Cu 324.752†	50492.2	41391.1	112.98 ug/L	112.98 ppb	15:01:59
1	Mn 257.610†	710253.2	708982.1	761.47 ug/L	761.47 ppb	15:01:59
1	Mo 202.031†	1338.2	1311.0	87.754 ug/L	87.754 ppb	15:02:19
1	Ni 231.604†	4868.6	4768.2	113.15 ug/L	113.15 ppb	15:02:19
1	P 214.914†	825.8	589.8	277.07 ug/L	277.07 ppb	15:02:19
1	Pb 220.353†	928.0	985.0	124.33 ug/L	124.33 ppb	15:02:19
1	S 181.975 Axial†	900.3	854.3	1071.0 ug/L	1071.0 ppb	15:02:19
1	Sb 206.836†	212.2	178.9	54.378 ug/L	54.378 ppb	15:02:19
1	Se 196.026†	-18.4	2.1	116.38 ug/L	116.38 ppb	15:02:19
1	Si 251.611†	334897.1	334071.7	9391.3 ug/L	9391.3 ppb	15:01:59
1	Sn 189.927†	527.5	526.9	91.862 ug/L	91.862 ppb	15:02:19
1	Ti 334.940†	1059780.3	1059663.4	1512.3 ug/L	1512.3 ppb	15:01:59
1	Tl 190.801†	223.0	260.4	94.563 ug/L	94.563 ppb	15:02:19
1	U 409.014†	1008.2	2541.6	56.274 ug/L	56.274 ppb	15:01:59
1	V 292.402†	25021.5	26409.1	150.80 ug/L	150.80 ppb	15:01:59
1	Zn 213.857†	18800.4	18089.7	155.16 ug/L	155.16 ppb	15:01:59
1	SiO2†	329699.4	328890.3	19893 ug/L	19893 ppb	15:03:17
2	Sc Radial	5591.8	5591.8	99.5 %		15:01:07
2	Y RADIAL	6170.3	6170.3	101.8 %		15:01:07
2	Al 396.153Radial†	69129.1	69488.5	48527 ug/L	48527 ppb	15:01:07
2	Ca 317.933Radial†	3550.8	3551.2	5342.5 ug/L	5342.5 ppb	15:01:27
2	Fe 238.204 Radial†	4006.0	4017.3	33862 ug/L	33862 ppb	15:01:07
2	K 766.490 Radial†	33863.7	31647.7	5274.1 ug/L	5274.1 ppb	15:01:07
2	Mg 279.077 IEC†	198.3	197.8	6375.6 ug/L	6375.6 ppb	15:01:27
2	Na 589.592 Radial†	3797.2	4813.2	1315.0 ug/L	1315.0 ppb	15:01:07
2	Sr 421.552†	27018.5	27126.8	157.42 ug/L	157.42 ppb	15:01:07
2	Sc 361.383	964506.5	964506.5	100.10 %		15:02:25
2	Y 371.029	864277.3	864277.3	101.33 %		15:02:25
2	Ag 328.068†	22481.8	22106.8	99.434 ug/L	99.434 ppb	15:02:25
2	As 188.979†	199.0	230.8	109.64 ug/L	109.64 ppb	15:02:45
2	B 249.677†	4252.9	4681.8	91.508 ug/L	91.508 ppb	15:02:25
2	Ba 233.527†	68340.2	68291.1	511.04 ug/L	511.04 ppb	15:02:25
2	Be 313.107†	281049.8	285812.7	99.241 ug/L	99.241 ppb	15:02:25
2	Cd 226.502†	9122.1	9318.5	94.489 ug/L	94.489 ppb	15:02:45
2	Co 228.616†	5235.4	5296.3	104.49 ug/L	104.49 ppb	15:02:45
2	Cr 267.716†	11650.0	11568.6	119.37 ug/L	119.37 ppb	15:02:25
2	Cu 324.752†	50547.7	41451.4	113.15 ug/L	113.15 ppb	15:02:25
2	Mn 257.610†	706831.8	705631.4	757.88 ug/L	757.88 ppb	15:02:25
2	Mo 202.031†	1324.6	1297.4	86.879 ug/L	86.879 ppb	15:02:45
2	Ni 231.604†	4852.1	4752.2	112.77 ug/L	112.77 ppb	15:02:45

2	P 214.914†	830.4	594.5	279.51 ug/L	279.51 ppb	15:02:45
2	Pb 220.353†	947.4	1004.4	126.62 ug/L	126.62 ppb	15:02:45
2	S 181.975 Axial†	896.2	850.3	1065.9 ug/L	1065.9 ppb	15:02:45
2	Sb 206.836†	207.0	173.7	52.744 ug/L	52.744 ppb	15:02:45
2	Se 196.026†	-5.6	14.9	123.46 ug/L	123.46 ppb	15:02:45
2	Si 251.611†	333571.8	332779.3	9354.9 ug/L	9354.9 ppb	15:02:25
2	Sn 189.927†	525.7	525.1	91.569 ug/L	91.569 ppb	15:02:45
2	Ti 334.940†	1055461.1	1055448.8	1506.3 ug/L	1506.3 ppb	15:02:25
2	Tl 190.801†	219.4	256.9	93.405 ug/L	93.405 ppb	15:02:45
2	U 409.014†	1229.8	2763.0	61.534 ug/L	61.534 ppb	15:02:25
2	V 292.402†	24802.5	26192.7	149.52 ug/L	149.52 ppb	15:02:25
2	Zn 213.857†	18680.1	17971.4	154.12 ug/L	154.12 ppb	15:02:25
2	SiO2†	328256.1	327479.6	19808 ug/L	19808 ppb	15:03:22
3	Sc Radial	5606.5	5606.5	99.7 %		15:01:32
3	Y RADIAL	6196.4	6196.4	102.2 %		15:01:32
3	Al 396.153Radial†	69431.7	69610.0	48612 ug/L	48612 ppb	15:01:32
3	Ca 317.933Radial†	3503.5	3494.4	5257.1 ug/L	5257.1 ppb	15:01:52
3	Fe 238.204 Radial†	3986.8	3987.5	33611 ug/L	33611 ppb	15:01:32
3	K 766.490 Radial†	33944.5	31639.7	5272.8 ug/L	5272.8 ppb	15:01:32
3	Mg 279.077 IEC†	191.0	190.0	6122.4 ug/L	6122.4 ppb	15:01:52
3	Na 589.592 Radial†	3784.8	4790.8	1308.9 ug/L	1308.9 ppb	15:01:32
3	Sr 421.552†	27101.2	27138.6	157.49 ug/L	157.49 ppb	15:01:32
3	Sc 361.383	962882.4	962882.4	99.932 %		15:02:51
3	Y 371.029	863200.1	863200.1	101.20 %		15:02:51
3	Ag 328.068†	22253.0	21915.7	98.594 ug/L	98.594 ppb	15:02:51
3	As 188.979†	187.3	219.5	105.13 ug/L	105.13 ppb	15:03:11
3	B 249.677†	4216.8	4652.8	90.950 ug/L	90.950 ppb	15:02:51
3	Ba 233.527†	67786.3	67851.9	507.76 ug/L	507.76 ppb	15:02:51
3	Be 313.107†	278767.5	284002.3	98.612 ug/L	98.612 ppb	15:02:51
3	Cd 226.502†	9020.0	9231.7	93.602 ug/L	93.602 ppb	15:03:11
3	Co 228.616†	5152.5	5222.1	103.00 ug/L	103.00 ppb	15:03:11
3	Cr 267.716†	11542.0	11480.1	118.46 ug/L	118.46 ppb	15:02:51
3	Cu 324.752†	50067.2	41055.7	112.07 ug/L	112.07 ppb	15:02:51
3	Mn 257.610†	701264.5	701251.3	753.18 ug/L	753.18 ppb	15:02:51
3	Mo 202.031†	1307.8	1282.9	85.913 ug/L	85.913 ppb	15:03:11
3	Ni 231.604†	4776.3	4684.5	111.16 ug/L	111.16 ppb	15:03:11
3	P 214.914†	799.6	565.1	264.29 ug/L	264.29 ppb	15:03:11
3	Pb 220.353†	905.3	963.9	121.85 ug/L	121.85 ppb	15:03:11
3	S 181.975 Axial†	892.4	848.0	1063.1 ug/L	1063.1 ppb	15:03:11
3	Sb 206.836†	202.8	169.8	51.506 ug/L	51.506 ppb	15:03:11
3	Se 196.026†	-19.8	0.7	114.87 ug/L	114.87 ppb	15:03:11
3	Si 251.611†	330539.6	330307.2	9285.5 ug/L	9285.5 ppb	15:02:51
3	Sn 189.927†	521.5	521.8	90.982 ug/L	90.982 ppb	15:03:11
3	Ti 334.940†	1047002.4	1048762.8	1496.7 ug/L	1496.7 ppb	15:02:51
3	Tl 190.801†	224.1	261.9	94.853 ug/L	94.853 ppb	15:03:11
3	U 409.014†	1145.3	2680.6	59.605 ug/L	59.605 ppb	15:02:51
3	V 292.402†	24740.6	26172.5	149.43 ug/L	149.43 ppb	15:02:51
3	Zn 213.857†	18593.8	17916.4	153.67 ug/L	153.67 ppb	15:02:51
3	SiO2†	328475.5	328252.3	19855 ug/L	19855 ppb	15:03:27

Mean Data: 1202011794|940124|5

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Units			Conc. Units		
Sc 361.383	963995.6	100.05 %		0.100			0.10%
Sc Radial	5609.9	99.8 %		0.36			0.36%
Y 371.029	864229.6	101.32 %		0.118			0.12%
Y RADIAL	6202.1	102.3 %		0.58			0.57%
Ag 328.068†	22098.6	99.375 ug/L		0.7531	99.375 ppb	0.7531	0.76%
Al 396.153Radial†	69559.3	48577 ug/L		44.1	48577 ppb	44.1	0.09%
As 188.979†	229.0	108.89 ug/L		3.442	108.89 ppb	3.442	3.16%
B 249.677†	4684.9	91.590 ug/L		0.6847	91.590 ppb	0.6847	0.75%
Ba 233.527†	68276.6	510.93 ug/L		3.122	510.93 ppb	3.122	0.61%
Be 313.107†	285863.5	99.255 ug/L		0.6503	99.255 ppb	0.6503	0.66%
Ca 317.933Radial†	3510.2	5280.8 ug/L		53.87	5280.8 ppb	53.87	1.02%
Cd 226.502†	9306.3	94.369 ug/L		0.7156	94.369 ppb	0.7156	0.76%
Co 228.616†	5272.7	104.01 ug/L		0.878	104.01 ppb	0.878	0.84%
Cr 267.716†	11561.8	119.30 ug/L		0.807	119.30 ppb	0.807	0.68%
Cu 324.752†	41299.4	112.73 ug/L		0.580	112.73 ppb	0.580	0.51%
Fe 238.204 Radial†	4006.2	33768 ug/L		137.2	33768 ppb	137.2	0.41%
K 766.490 Radial†	31695.9	5282.1 ug/L		15.08	5282.1 ppb	15.08	0.29%

Mg 279.077 IEC†	193.6	6239.1 ug/L	127.73	6239.1 ppb	127.73	2.05%
Mn 257.610†	705288.3	757.51 ug/L	4.156	757.51 ppb	4.156	0.55%
Mo 202.031†	1297.1	86.849 ug/L	0.9209	86.849 ppb	0.9209	1.06%
Na 589.592 Radial†	4829.7	1319.5 ug/L	13.46	1319.5 ppb	13.46	1.02%
Ni 231.604†	4735.0	112.36 ug/L	1.055	112.36 ppb	1.055	0.94%
P 214.914†	583.1	273.62 ug/L	8.171	273.62 ppb	8.171	2.99%
Pb 220.353†	984.4	124.27 ug/L	2.386	124.27 ppb	2.386	1.92%
S 181.975 Axial†	850.9	1066.7 ug/L	4.03	1066.7 ppb	4.03	0.38%
Sb 206.836†	174.1	52.876 ug/L	1.4404	52.876 ppb	1.4404	2.72%
Se 196.026†	5.9	118.24 ug/L	4.589	118.24 ppb	4.589	3.88%
Si 251.611†	332386.1	9343.9 ug/L	53.77	9343.9 ppb	53.77	0.58%
Sn 189.927†	524.6	91.471 ug/L	0.4482	91.471 ppb	0.4482	0.49%
Sr 421.552†	27195.7	157.82 ug/L	0.635	157.82 ppb	0.635	0.40%
Ti 334.940†	1054625.0	1505.1 ug/L	7.84	1505.1 ppb	7.84	0.52%
Tl 190.801†	259.7	94.274 ug/L	0.7656	94.274 ppb	0.7656	0.81%
U 409.014†	2661.7	59.137 ug/L	2.6609	59.137 ppb	2.6609	4.50%
V 292.402†	26258.1	149.92 ug/L	0.765	149.92 ppb	0.765	0.51%
Zn 213.857†	17992.5	154.32 ug/L	0.765	154.32 ppb	0.765	0.50%
SiO2†	328207.4	19852 ug/L	42.7	19852 ppb	42.7	0.22%

Sequence No.: 4
 Sample ID: 1202011796|940124|5
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 41
 Date Collected: 1/27/2010 15:05:38
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202011796|940124|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5602.0	5602.0	99.7 %			15:07:30
1	Y RADIAL	6205.7	6205.7	102.4 %			15:07:30
1	Al 396.153Radial†	68558.1	68789.4	48039 ug/L		48039 ppb	15:07:30
1	Ca 317.933Radial†	3628.3	3622.5	5449.9 ug/L		5449.9 ppb	15:07:50
1	Fe 238.204 Radial†	3911.4	3915.1	33001 ug/L		33001 ppb	15:07:30
1	K 766.490 Radial†	34193.5	31916.8	5318.8 ug/L		5318.8 ppb	15:07:30
1	Mg 279.077 IEC†	192.5	191.6	6177.4 ug/L		6177.4 ppb	15:07:50
1	Na 589.592 Radial†	3988.6	4998.3	1365.6 ug/L		1365.6 ppb	15:07:30
1	Sr 421.552†	27952.1	28014.2	162.57 ug/L		162.57 ppb	15:07:30
1	Sc 361.383	956439.1	956439.1	99.263 %			15:08:48
1	Y 371.029	858369.0	858369.0	100.63 %			15:08:48
1	Ag 328.068†	23258.7	23078.9	103.03 ug/L		103.03 ppb	15:08:48
1	As 188.979†	204.8	238.4	111.89 ug/L		111.89 ppb	15:09:08
1	B 249.677†	4434.8	4900.8	96.192 ug/L		96.192 ppb	15:08:48
1	Ba 233.527†	75685.3	76266.5	570.55 ug/L		570.55 ppb	15:08:48
1	Be 313.107†	289963.6	297160.9	102.93 ug/L		102.93 ppb	15:08:48
1	Cd 226.502†	9351.1	9626.0	97.811 ug/L		97.811 ppb	15:09:08
1	Co 228.616†	5346.5	5452.4	107.82 ug/L		107.82 ppb	15:09:08
1	Cr 267.716†	11900.4	11919.0	122.95 ug/L		122.95 ppb	15:08:48
1	Cu 324.752†	51354.3	42690.0	116.43 ug/L		116.43 ppb	15:08:48
1	Mn 257.610†	770664.1	775893.7	832.96 ug/L		832.96 ppb	15:08:48
1	Mo 202.031†	1373.8	1358.2	90.759 ug/L		90.759 ppb	15:09:08
1	Ni 231.604†	4962.3	4904.0	116.37 ug/L		116.37 ppb	15:09:08
1	P 214.914†	847.6	618.8	292.39 ug/L		292.39 ppb	15:09:08
1	Pb 220.353†	964.6	1029.7	129.61 ug/L		129.61 ppb	15:09:08
1	S 181.975 Axial†	925.3	887.1	1112.6 ug/L		1112.6 ppb	15:09:08
1	Sb 206.836†	216.2	184.7	56.519 ug/L		56.519 ppb	15:09:08
1	Se 196.026†	-2.7	17.8	122.19 ug/L		122.19 ppb	15:09:08
1	Si 251.611†	338522.5	340577.6	9574.1 ug/L		9574.1 ppb	15:08:48
1	Sn 189.927†	550.6	554.7	96.646 ug/L		96.646 ppb	15:09:08
1	Ti 334.940†	1010368.9	1018915.5	1454.2 ug/L		1454.2 ppb	15:08:48
1	Tl 190.801†	246.6	286.1	102.20 ug/L		102.20 ppb	15:09:08
1	U 409.014†	1152.2	2695.3	60.014 ug/L		60.014 ppb	15:08:48
1	V 292.402†	25084.8	26686.1	152.66 ug/L		152.66 ppb	15:08:48
1	Zn 213.857†	18956.5	18407.2	158.01 ug/L		158.01 ppb	15:08:48
1	SiO2†	337844.7	339905.4	20559 ug/L		20559 ppb	15:10:05
2	Sc Radial	5598.1	5598.1	99.6 %			15:07:55
2	Y RADIAL	6220.1	6220.1	102.6 %			15:07:55
2	Al 396.153Radial†	68917.8	69197.7	48324 ug/L		48324 ppb	15:07:55
2	Ca 317.933Radial†	3603.1	3599.6	5415.4 ug/L		5415.4 ppb	15:08:15
2	Fe 238.204 Radial†	3915.1	3921.5	33054 ug/L		33054 ppb	15:07:55
2	K 766.490 Radial†	34396.8	32144.5	5356.8 ug/L		5356.8 ppb	15:07:55
2	Mg 279.077 IEC†	194.3	193.6	6239.5 ug/L		6239.5 ppb	15:08:15
2	Na 589.592 Radial†	3973.6	4986.0	1362.2 ug/L		1362.2 ppb	15:07:55
2	Sr 421.552†	28089.7	28171.6	163.48 ug/L		163.48 ppb	15:07:55
2	Sc 361.383	965229.9	965229.9	100.18 %			15:09:14
2	Y 371.029	865069.3	865069.3	101.42 %			15:09:14
2	Ag 328.068†	23448.3	23054.8	102.96 ug/L		102.96 ppb	15:09:14
2	As 188.979†	195.6	227.3	107.66 ug/L		107.66 ppb	15:09:34
2	B 249.677†	4492.5	4917.8	96.536 ug/L		96.536 ppb	15:09:14
2	Ba 233.527†	76512.9	76398.2	571.53 ug/L		571.53 ppb	15:09:14
2	Be 313.107†	292877.6	297409.4	103.02 ug/L		103.02 ppb	15:09:14
2	Cd 226.502†	9450.9	9639.8	97.951 ug/L		97.951 ppb	15:09:34
2	Co 228.616†	5386.5	5443.2	107.62 ug/L		107.62 ppb	15:09:34
2	Cr 267.716†	11941.3	11850.7	122.25 ug/L		122.25 ppb	15:09:14
2	Cu 324.752†	51929.5	42792.9	116.71 ug/L		116.71 ppb	15:09:14
2	Mn 257.610†	779436.2	777579.6	834.77 ug/L		834.77 ppb	15:09:14
2	Mo 202.031†	1370.9	1342.7	89.756 ug/L		89.756 ppb	15:09:34
2	Ni 231.604†	5014.9	4911.1	116.54 ug/L		116.54 ppb	15:09:34

2	P 214.914†	859.9	623.3	294.76 ug/L	294.76 ppb	15:09:34
2	Pb 220.353†	973.0	1029.2	129.61 ug/L	129.61 ppb	15:09:34
2	S 181.975 Axial†	939.8	893.1	1120.1 ug/L	1120.1 ppb	15:09:34
2	Sb 206.836†	221.3	187.8	57.457 ug/L	57.457 ppb	15:09:34
2	Se 196.026†	0.5	21.0	124.17 ug/L	124.17 ppb	15:09:34
2	Si 251.611†	342121.7	341064.6	9587.8 ug/L	9587.8 ppb	15:09:14
2	Sn 189.927†	555.3	554.3	96.572 ug/L	96.572 ppb	15:09:34
2	Ti 334.940†	1021762.1	1021018.6	1457.2 ug/L	1457.2 ppb	15:09:14
2	Tl 190.801†	238.3	275.5	99.018 ug/L	99.018 ppb	15:09:34
2	U 409.014†	1240.8	2773.2	61.860 ug/L	61.860 ppb	15:09:14
2	V 292.402†	25481.5	26851.9	153.62 ug/L	153.62 ppb	15:09:14
2	Zn 213.857†	19193.3	18469.6	158.56 ug/L	158.56 ppb	15:09:14
2	SiO2†	340384.9	339341.5	20525 ug/L	20525 ppb	15:10:11
3	Sc Radial	5667.3	5667.3	101 %		15:08:21
3	Y RADIAL	6300.3	6300.3	103.9 %		15:08:21
3	Al 396.153Radial†	69564.7	68995.2	48182 ug/L	48182 ppb	15:08:21
3	Ca 317.933Radial†	3639.4	3591.6	5403.3 ug/L	5403.3 ppb	15:08:41
3	Fe 238.204 Radial†	3957.8	3915.8	33007 ug/L	33007 ppb	15:08:21
3	K 766.490 Radial†	34533.4	31858.6	5309.2 ug/L	5309.2 ppb	15:08:21
3	Mg 279.077 IEC†	196.4	193.2	6229.1 ug/L	6229.1 ppb	15:08:41
3	Na 589.592 Radial†	3964.1	4927.9	1346.4 ug/L	1346.4 ppb	15:08:21
3	Sr 421.552†	28329.8	28065.7	162.87 ug/L	162.87 ppb	15:08:21
3	Sc 361.383	955813.4	955813.4	99.198 %		15:09:40
3	Y 371.029	857919.6	857919.6	100.58 %		15:09:40
3	Ag 328.068†	23258.7	23094.2	103.10 ug/L	103.10 ppb	15:09:40
3	As 188.979†	210.3	244.0	114.08 ug/L	114.08 ppb	15:10:00
3	B 249.677†	4431.6	4900.5	96.184 ug/L	96.184 ppb	15:09:40
3	Ba 233.527†	75875.0	76507.7	572.35 ug/L	572.35 ppb	15:09:40
3	Be 313.107†	290569.6	297963.0	103.20 ug/L	103.20 ppb	15:09:40
3	Cd 226.502†	9394.8	9676.3	98.339 ug/L	98.339 ppb	15:10:00
3	Co 228.616†	5353.3	5462.7	108.03 ug/L	108.03 ppb	15:10:00
3	Cr 267.716†	11902.0	11928.5	123.05 ug/L	123.05 ppb	15:09:40
3	Cu 324.752†	51353.0	42722.5	116.52 ug/L	116.52 ppb	15:09:40
3	Mn 257.610†	771514.6	777259.4	834.42 ug/L	834.42 ppb	15:09:40
3	Mo 202.031†	1364.6	1349.9	90.216 ug/L	90.216 ppb	15:10:00
3	Ni 231.604†	4986.9	4932.1	117.04 ug/L	117.04 ppb	15:10:00
3	P 214.914†	830.2	601.8	283.36 ug/L	283.36 ppb	15:10:00
3	Pb 220.353†	949.2	1014.8	127.87 ug/L	127.87 ppb	15:10:00
3	S 181.975 Axial†	925.2	887.6	1113.2 ug/L	1113.2 ppb	15:10:00
3	Sb 206.836†	215.4	184.0	56.310 ug/L	56.310 ppb	15:10:00
3	Se 196.026†	-3.8	16.6	121.59 ug/L	121.59 ppb	15:10:00
3	Si 251.611†	338737.4	341017.6	9586.5 ug/L	9586.5 ppb	15:09:40
3	Sn 189.927†	550.6	555.1	96.704 ug/L	96.704 ppb	15:10:00
3	Ti 334.940†	1010368.4	1019581.4	1455.1 ug/L	1455.1 ppb	15:09:40
3	Tl 190.801†	231.4	270.9	97.591 ug/L	97.591 ppb	15:10:00
3	U 409.014†	1185.9	2730.0	60.838 ug/L	60.838 ppb	15:09:40
3	V 292.402†	25281.4	26900.8	153.92 ug/L	153.92 ppb	15:09:40
3	Zn 213.857†	18990.4	18453.9	158.42 ug/L	158.42 ppb	15:09:40
3	SiO2†	339242.1	341537.0	20658 ug/L	20658 ppb	15:10:16

Mean Data: 1202011796|940124|5

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	959160.8	99.545 %		0.5465			0.55%
Sc Radial	5622.4	100 %		0.7			0.69%
Y 371.029	860452.6	100.88 %		0.469			0.47%
Y RADIAL	6242.0	103.0 %		0.84			0.82%
Ag 328.068†	23076.0	103.03 ug/L		0.072	103.03 ppb	0.072	0.07%
Al 396.153Radial†	68994.1	48182 ug/L		142.6	48182 ppb	142.6	0.30%
As 188.979†	236.6	111.21 ug/L		3.262	111.21 ppb	3.262	2.93%
B 249.677†	4906.4	96.304 ug/L		0.2008	96.304 ppb	0.2008	0.21%
Ba 233.527†	76390.8	571.48 ug/L		0.903	571.48 ppb	0.903	0.16%
Be 313.107†	297511.1	103.05 ug/L		0.138	103.05 ppb	0.138	0.13%
Ca 317.933Radial†	3604.6	5422.9 ug/L		24.16	5422.9 ppb	24.16	0.45%
Cd 226.502†	9647.4	98.033 ug/L		0.2736	98.033 ppb	0.2736	0.28%
Co 228.616†	5452.8	107.82 ug/L		0.201	107.82 ppb	0.201	0.19%
Cr 267.716†	11899.4	122.75 ug/L		0.434	122.75 ppb	0.434	0.35%
Cu 324.752†	42735.1	116.55 ug/L		0.142	116.55 ppb	0.142	0.12%
Fe 238.204 Radial†	3917.5	33021 ug/L		29.4	33021 ppb	29.4	0.09%
K 766.490 Radial†	31973.3	5328.3 ug/L		25.19	5328.3 ppb	25.19	0.47%

Mg 279.077 IEC†	192.8	6215.3 ug/L	33.29	6215.3 ppb	33.29	0.54%
Mn 257.610†	776910.9	834.05 ug/L	0.958	834.05 ppb	0.958	0.11%
Mo 202.031†	1350.3	90.243 ug/L	0.5020	90.243 ppb	0.5020	0.56%
Na 589.592 Radial†	4970.7	1358.1 ug/L	10.27	1358.1 ppb	10.27	0.76%
Ni 231.604†	4915.8	116.65 ug/L	0.347	116.65 ppb	0.347	0.30%
P 214.914†	614.7	290.17 ug/L	6.011	290.17 ppb	6.011	2.07%
Pb 220.353†	1024.6	129.03 ug/L	1.003	129.03 ppb	1.003	0.78%
S 181.975 Axial†	889.3	1115.3 ug/L	4.17	1115.3 ppb	4.17	0.37%
Sb 206.836†	185.5	56.762 ug/L	0.6111	56.762 ppb	0.6111	1.08%
Se 196.026†	18.5	122.65 ug/L	1.350	122.65 ppb	1.350	1.10%
Si 251.611†	340886.6	9582.8 ug/L	7.56	9582.8 ppb	7.56	0.08%
Sn 189.927†	554.7	96.641 ug/L	0.0661	96.641 ppb	0.0661	0.07%
Sr 421.552†	28083.9	162.97 ug/L	0.466	162.97 ppb	0.466	0.29%
Ti 334.940†	1019838.5	1455.5 ug/L	1.53	1455.5 ppb	1.53	0.11%
Tl 190.801†	277.5	99.602 ug/L	2.3584	99.602 ppb	2.3584	2.37%
U 409.014†	2732.8	60.904 ug/L	0.9249	60.904 ppb	0.9249	1.52%
V 292.402†	26813.0	153.40 ug/L	0.658	153.40 ppb	0.658	0.43%
Zn 213.857†	18443.6	158.33 ug/L	0.282	158.33 ppb	0.282	0.18%
Sio2†	340261.3	20581 ug/L	69.0	20581 ppb	69.0	0.34%

Sequence No.: 5
 Sample ID: 1202011795|940124|25
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 42
 Date Collected: 1/27/2010 15:12:27
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202011795|940124|25

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5469.8	5469.8	97.3 %		15:14:20
1	Y RADIAL	5896.9	5896.9	97.27 %		15:14:20
1	Al 396.153Radial†	9409.4	9665.8	6750.7 ug/L	6750.7 ppb	15:14:20
1	Ca 317.933Radial†	655.2	655.0	985.48 ug/L	985.48 ppb	15:14:40
1	Fe 238.204 Radial†	809.9	822.5	6932.6 ug/L	6932.6 ppb	15:14:40
1	K 766.490 Radial†	6947.0	4745.3	790.63 ug/L	790.63 ppb	15:14:20
1	Mg 279.077 IEC†	32.4	31.8	1022.7 ug/L	1022.7 ppb	15:14:40
1	Na 589.592 Radial†	-782.7	191.7	52.377 ug/L	52.377 ppb	15:14:20
1	Sr 421.552†	2266.5	2295.5	13.317 ug/L	13.317 ppb	15:14:20
1	Sc 361.383	907740.2	907740.2	94.209 %		15:15:37
1	Y 371.029	799892.9	799892.9	93.778 %		15:15:37
1	Ag 328.068†	-172.1	-535.1	0.1652 ug/L	0.1652 ppb	15:15:37
1	As 188.979†	-37.8	-8.1	0.9003 ug/L	0.9003 ppb	15:15:57
1	B 249.677†	-307.2	107.0	1.0780 ug/L	1.0780 ppb	15:15:37
1	Ba 233.527†	17921.0	19041.9	142.36 ug/L	142.36 ppb	15:15:37
1	Be 313.107†	-5274.9	-554.9	0.4382 ug/L	0.4382 ppb	15:15:37
1	Cd 226.502†	-138.4	58.6	-0.0973 ug/L	-0.0973 ppb	15:15:57
1	Co 228.616†	255.8	337.6	6.2552 ug/L	6.2552 ppb	15:15:57
1	Cr 267.716†	546.3	510.2	5.3840 ug/L	5.3840 ppb	15:15:57
1	Cu 324.752†	9900.1	1463.0	4.2998 ug/L	4.2998 ppb	15:15:37
1	Mn 257.610†	499244.2	529441.1	566.97 ug/L	566.97 ppb	15:15:37
1	Mo 202.031†	8.8	-16.5	-0.5179 ug/L	-0.5179 ppb	15:15:57
1	Ni 231.604†	306.1	229.9	5.4540 ug/L	5.4540 ppb	15:15:57
1	P 214.914†	315.6	100.0	48.430 ug/L	48.430 ppb	15:15:57
1	Pb 220.353†	-11.1	46.2	6.2782 ug/L	6.2782 ppb	15:15:57
1	S 181.975 Axial†	67.9	27.1	32.948 ug/L	32.948 ppb	15:15:57
1	Sb 206.836†	35.2	4.2	0.3944 ug/L	0.3944 ppb	15:15:57
1	Se 196.026†	-63.0	-46.3	-2.0515 ug/L	-2.0515 ppb	15:15:57
1	Si 251.611†	65547.0	69117.9	1943.2 ug/L	1943.2 ppb	15:15:37
1	Sn 189.927†	-13.0	-13.8	-2.1065 ug/L	-2.1065 ppb	15:15:57
1	Ti 334.940†	180532.1	192674.2	275.00 ug/L	275.00 ppb	15:15:37
1	Tl 190.801†	-55.6	-21.4	-1.5731 ug/L	-1.5731 ppb	15:15:57
1	U 409.014†	-1551.8	-112.7	-3.4800 ug/L	-3.4800 ppb	15:15:37
1	V 292.402†	1063.4	2543.8	13.717 ug/L	13.717 ppb	15:15:37
1	Zn 213.857†	2014.8	1448.6	12.045 ug/L	12.045 ppb	15:15:57
1	SiO2†	65454.9	69030.8	4175.9 ug/L	4175.9 ppb	15:16:53
2	Sc Radial	5484.7	5484.7	97.6 %		15:14:45
2	Y RADIAL	5926.3	5926.3	97.75 %		15:14:45
2	Al 396.153Radial†	9283.9	9511.0	6642.6 ug/L	6642.6 ppb	15:14:45
2	Ca 317.933Radial†	660.0	658.2	990.24 ug/L	990.24 ppb	15:15:05
2	Fe 238.204 Radial†	804.5	814.7	6867.1 ug/L	6867.1 ppb	15:15:05
2	K 766.490 Radial†	6892.9	4670.4	778.15 ug/L	778.15 ppb	15:14:45
2	Mg 279.077 IEC†	30.5	29.7	955.99 ug/L	955.99 ppb	15:15:05
2	Na 589.592 Radial†	-792.5	183.8	50.229 ug/L	50.229 ppb	15:14:45
2	Sr 421.552†	2241.3	2263.3	13.130 ug/L	13.130 ppb	15:14:45
2	Sc 361.383	933828.8	933828.8	96.916 %		15:16:02
2	Y 371.029	819854.3	819854.3	96.118 %		15:16:02
2	Ag 328.068†	-96.2	-451.7	0.4760 ug/L	0.4760 ppb	15:16:02
2	As 188.979†	-32.2	-1.2	3.4441 ug/L	3.4441 ppb	15:16:22
2	B 249.677†	-379.1	42.0	-0.2609 ug/L	-0.2609 ppb	15:16:02
2	Ba 233.527†	17930.2	18520.0	138.46 ug/L	138.46 ppb	15:16:02
2	Be 313.107†	-5271.2	-394.6	0.4727 ug/L	0.4727 ppb	15:16:02
2	Cd 226.502†	-143.5	57.4	-0.1040 ug/L	-0.1040 ppb	15:16:22
2	Co 228.616†	237.9	311.6	5.7457 ug/L	5.7457 ppb	15:16:22
2	Cr 267.716†	558.2	506.2	5.3424 ug/L	5.3424 ppb	15:16:22
2	Cu 324.752†	9913.6	1183.3	3.5469 ug/L	3.5469 ppb	15:16:02
2	Mn 257.610†	498979.9	514363.5	550.84 ug/L	550.84 ppb	15:16:02
2	Mo 202.031†	22.2	-2.8	0.3602 ug/L	0.3602 ppb	15:16:22
2	Ni 231.604†	310.7	225.5	5.3493 ug/L	5.3493 ppb	15:16:22

2	P 214.914†	325.4	100.7	49.022 ug/L	49.022 ppb	15:16:22
2	Pb 220.353†	-5.8	51.9	6.9440 ug/L	6.9440 ppb	15:16:22
2	S 181.975 Axial†	62.1	19.0	22.828 ug/L	22.828 ppb	15:16:22
2	Sb 206.836†	41.0	9.2	2.0562 ug/L	2.0562 ppb	15:16:22
2	Se 196.026†	-55.6	-36.9	2.8996 ug/L	2.8996 ppb	15:16:22
2	Si 251.611†	65435.3	67058.8	1885.3 ug/L	1885.3 ppb	15:16:02
2	Sn 189.927†	0.2	0.2	0.2952 ug/L	0.2952 ppb	15:16:22
2	Ti 334.940†	179966.5	186737.0	266.53 ug/L	266.53 ppb	15:16:02
2	Tl 190.801†	-62.7	-27.0	-3.4316 ug/L	-3.4316 ppb	15:16:22
2	U 409.014†	-1753.0	-274.3	-7.3128 ug/L	-7.3128 ppb	15:16:02
2	V 292.402†	975.8	2421.9	13.019 ug/L	13.019 ppb	15:16:02
2	Zn 213.857†	2004.7	1378.5	11.435 ug/L	11.435 ppb	15:16:22
2	SiO2†	65820.3	67466.8	4081.3 ug/L	4081.3 ppb	15:16:58
3	Sc Radial	5516.3	5516.3	98.1 %		15:15:10
3	Y RADIAL	5981.8	5981.8	98.67 %		15:15:10
3	Al 396.153Radial†	9349.1	9522.9	6650.9 ug/L	6650.9 ppb	15:15:10
3	Ca 317.933Radial†	650.1	644.2	969.11 ug/L	969.11 ppb	15:15:30
3	Fe 238.204 Radial†	799.9	805.3	6787.8 ug/L	6787.8 ppb	15:15:30
3	K 766.490 Radial†	6904.3	4641.6	773.35 ug/L	773.35 ppb	15:15:10
3	Mg 279.077 IEC†	32.9	32.0	1029.3 ug/L	1029.3 ppb	15:15:30
3	Na 589.592 Radial†	-839.7	140.4	38.360 ug/L	38.360 ppb	15:15:10
3	Sr 421.552†	2272.8	2282.2	13.240 ug/L	13.240 ppb	15:15:10
3	Sc 361.383	924283.3	924283.3	95.926 %		15:16:28
3	Y 371.029	812518.2	812518.2	95.258 %		15:16:28
3	Ag 328.068†	-165.8	-525.3	0.1553 ug/L	0.1553 ppb	15:16:28
3	As 188.979†	-35.8	-5.3	1.9157 ug/L	1.9157 ppb	15:16:48
3	B 249.677†	-378.6	38.4	-0.3219 ug/L	-0.3219 ppb	15:16:28
3	Ba 233.527†	18012.0	18796.3	140.52 ug/L	140.52 ppb	15:16:28
3	Be 313.107†	-5354.3	-537.5	0.4357 ug/L	0.4357 ppb	15:16:28
3	Cd 226.502†	-142.3	57.2	-0.0977 ug/L	-0.0977 ppb	15:16:48
3	Co 228.616†	242.4	318.9	5.8840 ug/L	5.8840 ppb	15:16:48
3	Cr 267.716†	553.2	506.9	5.3473 ug/L	5.3473 ppb	15:16:48
3	Cu 324.752†	9929.9	1305.9	3.8707 ug/L	3.8707 ppb	15:16:28
3	Mn 257.610†	501220.4	522016.4	559.02 ug/L	559.02 ppb	15:16:28
3	Mo 202.031†	16.9	-8.1	0.0114 ug/L	0.0114 ppb	15:16:48
3	Ni 231.604†	317.3	235.7	5.5916 ug/L	5.5916 ppb	15:16:48
3	P 214.914†	312.1	90.3	43.462 ug/L	43.462 ppb	15:16:48
3	Pb 220.353†	-21.6	35.4	4.9923 ug/L	4.9923 ppb	15:16:48
3	S 181.975 Axial†	61.8	19.3	23.208 ug/L	23.208 ppb	15:16:48
3	Sb 206.836†	37.8	6.3	1.0499 ug/L	1.0499 ppb	15:16:48
3	Se 196.026†	-58.6	-40.6	0.5917 ug/L	0.5917 ppb	15:16:48
3	Si 251.611†	66340.6	68699.8	1931.5 ug/L	1931.5 ppb	15:16:28
3	Sn 189.927†	-16.1	-16.7	-2.6152 ug/L	-2.6152 ppb	15:16:48
3	Ti 334.940†	181361.1	190108.6	271.34 ug/L	271.34 ppb	15:16:28
3	Tl 190.801†	-44.7	-9.0	2.1414 ug/L	2.1414 ppb	15:16:48
3	U 409.014†	-1625.2	-159.7	-4.5799 ug/L	-4.5799 ppb	15:16:28
3	V 292.402†	960.0	2415.8	12.991 ug/L	12.991 ppb	15:16:28
3	Zn 213.857†	2010.3	1405.6	11.680 ug/L	11.680 ppb	15:16:48
3	SiO2†	65375.6	67704.6	4095.7 ug/L	4095.7 ppb	15:17:03

Mean Data: 1202011795|940124|25

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	921950.8	95.684	%	1.3699			1.43%
Sc Radial	5490.3	97.7	%	0.42			0.43%
Y 371.029	810755.1	95.052	%	1.1837			1.25%
Y RADIAL	5935.0	97.90	%	0.711			0.73%
Ag 328.068†	-504.1	0.2655	ug/L	0.18236	0.2655 ppb	0.18236	68.69%
Al 396.153Radial†	9566.6	6681.4	ug/L	60.18	6681.4 ppb	60.18	0.90%
As 188.979†	-4.9	2.0867	ug/L	1.28047	2.0867 ppb	1.28047	61.36%
B 249.677†	62.5	0.1651	ug/L	0.79124	0.1651 ppb	0.79124	479.37%
Ba 233.527†	18786.0	140.45	ug/L	1.951	140.45 ppb	1.951	1.39%
Be 313.107†	-495.7	0.4489	ug/L	0.02067	0.4489 ppb	0.02067	4.60%
Ca 317.933Radial†	652.5	981.61	ug/L	11.083	981.61 ppb	11.083	1.13%
Cd 226.502†	57.7	-0.0997	ug/L	0.00380	-0.0997 ppb	0.00380	3.81%
Co 228.616†	322.7	5.9616	ug/L	0.26346	5.9616 ppb	0.26346	4.42%
Cr 267.716†	507.8	5.3579	ug/L	0.02271	5.3579 ppb	0.02271	0.42%
Cu 324.752†	1317.4	3.9058	ug/L	0.37768	3.9058 ppb	0.37768	9.67%
Fe 238.204 Radial†	814.2	6862.5	ug/L	72.51	6862.5 ppb	72.51	1.06%
K 766.490 Radial†	4685.8	780.71	ug/L	8.917	780.71 ppb	8.917	1.14%

Mg 279.077 IEC†	31.2	1002.7 ug/L	40.56	1002.7 ppb	40.56	4.05%
Mn 257.610†	521940.3	558.94 ug/L	8.066	558.94 ppb	8.066	1.44%
Mo 202.031†	-9.1	-0.0488 ug/L	0.44215	-0.0488 ppb	0.44215	906.55%
Na 589.592 Radial†	172.0	46.988 ug/L	7.5496	46.988 ppb	7.5496	16.07%
Ni 231.604†	230.3	5.4650 ug/L	0.12151	5.4650 ppb	0.12151	2.22%
P 214.914†	97.0	46.971 ug/L	3.0534	46.971 ppb	3.0534	6.50%
Pb 220.353†	44.5	6.0715 ug/L	0.99211	6.0715 ppb	0.99211	16.34%
S 181.975 Axial†	21.8	26.328 ug/L	5.7361	26.328 ppb	5.7361	21.79%
Sb 206.836†	6.6	1.1668 ug/L	0.83704	1.1668 ppb	0.83704	71.74%
Se 196.026†	-41.3	0.4799 ug/L	2.47741	0.4799 ppb	2.47741	516.21%
Si 251.611†	68292.2	1920.0 ug/L	30.60	1920.0 ppb	30.60	1.59%
Sn 189.927†	-10.1	-1.4755 ug/L	1.55443	-1.4755 ppb	1.55443	105.35%
Sr 421.552†	2280.4	13.229 ug/L	0.0939	13.229 ppb	0.0939	0.71%
Ti 334.940†	189839.9	270.96 ug/L	4.245	270.96 ppb	4.245	1.57%
Tl 190.801†	-19.1	-0.9544 ug/L	2.83754	-0.9544 ppb	2.83754	297.30%
U 409.014†	-182.2	-5.1242 ug/L	1.97352	-5.1242 ppb	1.97352	38.51%
V 292.402†	2460.5	13.242 ug/L	0.4109	13.242 ppb	0.4109	3.10%
Zn 213.857†	1410.9	11.720 ug/L	0.3068	11.720 ppb	0.3068	2.62%
SiO2†	68067.4	4117.6 ug/L	50.99	4117.6 ppb	50.99	1.24%

Sequence No.: 6

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 1/27/2010 15:19:14

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	5395.1	5395.1	96.0 %		15:21:06
1	Y RADIAL	5801.1	5801.1	95.69 %		15:21:06
1	Al 396.153Radial†	7100.0	7393.6	5138.7 ug/L	5138.7 ppb	15:21:06
1	Ca 317.933Radial†	3315.3	3436.0	5169.2 ug/L	5169.2 ppb	15:21:26
1	Fe 238.204 Radial†	611.9	627.8	5306.7 ug/L	5306.7 ppb	15:21:26
1	K 766.490 Radial†	32134.8	31087.4	5176.7 ug/L	5176.7 ppb	15:21:06
1	Mg 279.077 IEC†	161.2	166.4	5393.7 ug/L	5393.7 ppb	15:21:26
1	Na 589.592 Radial†	36269.3	38785.2	10597 ug/L	10597 ppb	15:21:06
1	Sr 421.552†	85053.2	88583.6	514.14 ug/L	514.14 ppb	15:21:06
1	Sc 361.383	940570.3	940570.3	97.616 %		15:22:24
1	Y 371.029	824543.9	824543.9	96.668 %		15:22:24
1	Ag 328.068†	128848.7	131642.9	527.17 ug/L	527.17 ppb	15:22:29
1	As 188.979†	1274.9	1338.1	519.62 ug/L	519.62 ppb	15:22:49
1	B 249.677†	23921.3	24938.6	516.01 ug/L	516.01 ppb	15:22:29
1	Ba 233.527†	68513.2	70205.7	525.27 ug/L	525.27 ppb	15:22:29
1	Be 313.107†	1496721.6	1538318.7	516.91 ug/L	516.91 ppb	15:22:24
1	Cd 226.502†	48552.2	49943.4	524.60 ug/L	524.60 ppb	15:22:29
1	Co 228.616†	25095.5	25774.5	524.39 ug/L	524.39 ppb	15:22:29
1	Cr 267.716†	50013.0	51164.7	524.82 ug/L	524.82 ppb	15:22:29
1	Cu 324.752†	198880.1	194691.4	523.17 ug/L	523.17 ppb	15:22:29
1	Mn 257.610†	472125.7	483163.2	517.13 ug/L	517.13 ppb	15:22:24
1	Mo 202.031†	7786.2	7950.6	516.36 ug/L	516.36 ppb	15:22:49
1	Ni 231.604†	21642.6	22076.0	523.83 ug/L	523.83 ppb	15:22:29
1	P 214.914†	4960.2	4846.2	2473.5 ug/L	2473.5 ppb	15:22:49
1	Pb 220.353†	4193.5	4353.8	518.58 ug/L	518.58 ppb	15:22:49
1	S 181.975 Axial†	833.5	808.8	1021.6 ug/L	1021.6 ppb	15:22:49
1	Sb 206.836†	1613.2	1619.5	527.07 ug/L	527.07 ppb	15:22:49
1	Se 196.026†	896.8	939.2	534.53 ug/L	534.53 ppb	15:22:49
1	Si 251.611†	91999.9	93788.3	2630.5 ug/L	2630.5 ppb	15:22:29
1	Sn 189.927†	2917.0	2988.3	514.09 ug/L	514.09 ppb	15:22:49
1	Ti 334.940†	351821.5	361458.2	515.64 ug/L	515.64 ppb	15:22:24
1	Tl 190.801†	1603.7	1680.5	514.23 ug/L	514.23 ppb	15:22:49
1	U 409.014†	20080.0	22104.9	523.51 ug/L	523.51 ppb	15:22:29
1	V 292.402†	84986.2	88476.8	529.30 ug/L	529.30 ppb	15:22:29
1	Zn 213.857†	58653.3	59395.7	518.53 ug/L	518.53 ppb	15:22:29
1	SiO2†	89155.4	90884.9	5483.8 ug/L	5483.8 ppb	15:23:57
2	Sc Radial	5483.0	5483.0	97.5 %		15:21:31
2	Y RADIAL	5907.4	5907.4	97.44 %		15:21:31
2	Al 396.153Radial†	7012.6	7185.5	4993.5 ug/L	4993.5 ppb	15:21:31
2	Ca 317.933Radial†	3341.4	3407.4	5126.2 ug/L	5126.2 ppb	15:21:51
2	Fe 238.204 Radial†	627.1	633.2	5352.1 ug/L	5352.1 ppb	15:21:51
2	K 766.490 Radial†	31788.9	30196.2	5028.2 ug/L	5028.2 ppb	15:21:31
2	Mg 279.077 IEC†	162.6	165.1	5351.9 ug/L	5351.9 ppb	15:21:51
2	Na 589.592 Radial†	35906.8	37807.8	10330 ug/L	10330 ppb	15:21:31
2	Sr 421.552†	84358.3	86450.9	501.76 ug/L	501.76 ppb	15:21:31
2	Sc 361.383	944340.5	944340.5	98.007 %		15:22:55
2	Y 371.029	826091.2	826091.2	96.850 %		15:22:55
2	Ag 328.068†	127630.7	129873.2	520.12 ug/L	520.12 ppb	15:23:00
2	As 188.979†	1274.8	1332.7	517.56 ug/L	517.56 ppb	15:23:20
2	B 249.677†	23645.7	24559.6	508.14 ug/L	508.14 ppb	15:23:00
2	Ba 233.527†	67908.5	69308.5	518.56 ug/L	518.56 ppb	15:23:00
2	Be 313.107†	1497704.2	1533199.7	515.19 ug/L	515.19 ppb	15:22:55
2	Cd 226.502†	48258.1	49444.8	519.35 ug/L	519.35 ppb	15:23:00
2	Co 228.616†	24938.3	25511.5	519.04 ug/L	519.04 ppb	15:23:00
2	Cr 267.716†	49438.8	50374.2	516.72 ug/L	516.72 ppb	15:23:00
2	Cu 324.752†	196370.5	191317.4	514.11 ug/L	514.11 ppb	15:23:00
2	Mn 257.610†	473449.6	482583.0	516.52 ug/L	516.52 ppb	15:22:55
2	Mo 202.031†	7763.0	7895.1	512.76 ug/L	512.76 ppb	15:23:20
2	Ni 231.604†	21516.4	21858.8	518.68 ug/L	518.68 ppb	15:23:00

2	P 214.914†	4943.5	4808.9	2455.4 ug/L	2455.4 ppb	15:23:20
2	Pb 220.353†	4165.7	4308.4	513.14 ug/L	513.14 ppb	15:23:20
2	S 181.975 Axial†	842.0	814.0	1028.3 ug/L	1028.3 ppb	15:23:20
2	Sb 206.836†	1614.5	1614.2	525.25 ug/L	525.25 ppb	15:23:20
2	Se 196.026†	891.3	930.0	529.58 ug/L	529.58 ppb	15:23:20
2	Si 251.611†	91144.6	92539.3	2595.4 ug/L	2595.4 ppb	15:23:00
2	Sn 189.927†	2911.3	2970.5	511.03 ug/L	511.03 ppb	15:23:20
2	Ti 334.940†	352582.7	360795.9	514.70 ug/L	514.70 ppb	15:22:55
2	Tl 190.801†	1611.7	1682.1	514.73 ug/L	514.73 ppb	15:23:20
2	U 409.014†	19680.7	21615.4	511.89 ug/L	511.89 ppb	15:23:00
2	V 292.402†	84027.7	87151.2	521.39 ug/L	521.39 ppb	15:23:00
2	Zn 213.857†	58143.6	58635.7	511.88 ug/L	511.88 ppb	15:23:00
2	SiO2†	90607.1	92001.6	5551.5 ug/L	5551.5 ppb	15:24:02
3	Sc Radial	5429.7	5429.7	96.6 %		15:21:56
3	Y RADIAL	5875.8	5875.8	96.92 %		15:21:56
3	Al 396.153Radial†	7124.5	7371.8	5123.5 ug/L	5123.5 ppb	15:21:56
3	Ca 317.933Radial†	3295.7	3393.6	5105.5 ug/L	5105.5 ppb	15:22:16
3	Fe 238.204 Radial†	609.5	621.2	5251.0 ug/L	5251.0 ppb	15:22:16
3	K 766.490 Radial†	32104.3	30842.3	5135.8 ug/L	5135.8 ppb	15:21:56
3	Mg 279.077 IEC†	160.2	164.3	5325.4 ug/L	5325.4 ppb	15:22:16
3	Na 589.592 Radial†	36319.0	38595.7	10545 ug/L	10545 ppb	15:21:56
3	Sr 421.552†	85573.9	88557.6	513.99 ug/L	513.99 ppb	15:21:56
3	Sc 361.383	935968.2	935968.2	97.138 %		15:23:26
3	Y 371.029	820176.7	820176.7	96.156 %		15:23:26
3	Ag 328.068†	126985.3	130373.7	522.08 ug/L	522.08 ppb	15:23:31
3	As 188.979†	1272.3	1341.8	521.03 ug/L	521.03 ppb	15:23:51
3	B 249.677†	23553.4	24680.3	510.67 ug/L	510.67 ppb	15:23:31
3	Ba 233.527†	67393.7	69398.3	519.23 ug/L	519.23 ppb	15:23:31
3	Be 313.107†	1486726.7	1535568.2	515.98 ug/L	515.98 ppb	15:23:26
3	Cd 226.502†	47897.1	49513.6	520.09 ug/L	520.09 ppb	15:23:31
3	Co 228.616†	24710.3	25504.4	518.90 ug/L	518.90 ppb	15:23:31
3	Cr 267.716†	49249.5	50630.6	519.34 ug/L	519.34 ppb	15:23:31
3	Cu 324.752†	195300.0	192007.7	515.96 ug/L	515.96 ppb	15:23:31
3	Mn 257.610†	468780.1	482097.2	515.99 ug/L	515.99 ppb	15:23:26
3	Mo 202.031†	7745.7	7948.1	516.20 ug/L	516.20 ppb	15:23:51
3	Ni 231.604†	21417.1	21953.0	520.91 ug/L	520.91 ppb	15:23:31
3	P 214.914†	4930.6	4840.7	2472.0 ug/L	2472.0 ppb	15:23:51
3	Pb 220.353†	4183.4	4364.6	519.87 ug/L	519.87 ppb	15:23:51
3	S 181.975 Axial†	825.1	804.4	1016.1 ug/L	1016.1 ppb	15:23:51
3	Sb 206.836†	1615.2	1629.7	530.26 ug/L	530.26 ppb	15:23:51
3	Se 196.026†	904.8	952.0	541.33 ug/L	541.33 ppb	15:23:51
3	Si 251.611†	90471.9	92678.7	2599.3 ug/L	2599.3 ppb	15:23:31
3	Sn 189.927†	2906.2	2991.8	514.69 ug/L	514.69 ppb	15:23:51
3	Ti 334.940†	348686.6	360002.9	513.57 ug/L	513.57 ppb	15:23:26
3	Tl 190.801†	1606.9	1691.9	517.69 ug/L	517.69 ppb	15:23:51
3	U 409.014†	19807.4	21925.5	519.26 ug/L	519.26 ppb	15:23:31
3	V 292.402†	83610.6	87488.7	523.46 ug/L	523.46 ppb	15:23:31
3	Zn 213.857†	57783.4	58795.6	513.28 ug/L	513.28 ppb	15:23:31
3	SiO2†	90478.0	92695.6	5593.4 ug/L	5593.4 ppb	15:24:07

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	940293.0	97.587 %	0.4352			0.45%
Sc Radial	5435.9	96.7 %	0.79			0.81%
Y 371.029	823603.9	96.558 %	0.3596			0.37%
Y RADIAL	5861.4	96.68 %	0.900			0.93%
Ag 328.068†	130629.9	523.13 ug/L	3.638	523.13 ppb	3.638	0.70%
QC value within limits for Ag 328.068 Recovery = 104.63%						
Al 396.153Radial†	7317.0	5085.3 ug/L	79.79	5085.3 ppb	79.79	1.57%
QC value within limits for Al 396.153Radial Recovery = 101.71%						
As 188.979†	1337.5	519.41 ug/L	1.744	519.41 ppb	1.744	0.34%
QC value within limits for As 188.979 Recovery = 103.88%						
B 249.677†	24726.1	511.61 ug/L	4.018	511.61 ppb	4.018	0.79%
QC value within limits for B 249.677 Recovery = 102.32%						
Ba 233.527†	69637.5	521.02 ug/L	3.697	521.02 ppb	3.697	0.71%
QC value within limits for Ba 233.527 Recovery = 104.20%						
Be 313.107†	1535695.6	516.02 ug/L	0.860	516.02 ppb	0.860	0.17%
QC value within limits for Be 313.107 Recovery = 103.20%						
Ca 317.933Radial†	3412.3	5133.6 ug/L	32.47	5133.6 ppb	32.47	0.63%

QC value within limits for Ca 317.933Radial Recovery = 102.67%							
Cd	226.502†	49634.0	521.35 ug/L	2.842	521.35 ppb	2.842	0.55%
QC value within limits for Cd 226.502 Recovery = 104.27%							
Co	228.616†	25596.8	520.78 ug/L	3.132	520.78 ppb	3.132	0.60%
QC value within limits for Co 228.616 Recovery = 104.16%							
Cr	267.716†	50723.2	520.29 ug/L	4.135	520.29 ppb	4.135	0.79%
QC value within limits for Cr 267.716 Recovery = 104.06%							
Cu	324.752†	192672.2	517.75 ug/L	4.787	517.75 ppb	4.787	0.92%
QC value within limits for Cu 324.752 Recovery = 103.55%							
Fe	238.204 Radial†	627.4	5303.2 ug/L	50.61	5303.2 ppb	50.61	0.95%
QC value within limits for Fe 238.204 Radial Recovery = 106.06%							
K	766.490 Radial†	30708.7	5113.6 ug/L	76.70	5113.6 ppb	76.70	1.50%
QC value within limits for K 766.490 Radial Recovery = 102.27%							
Mg	279.077 IEC†	165.3	5357.0 ug/L	34.40	5357.0 ppb	34.40	0.64%
QC value within limits for Mg 279.077 IEC Recovery = 107.14%							
Mn	257.610†	482614.5	516.55 ug/L	0.572	516.55 ppb	0.572	0.11%
QC value within limits for Mn 257.610 Recovery = 103.31%							
Mo	202.031†	7931.3	515.11 ug/L	2.031	515.11 ppb	2.031	0.39%
QC value within limits for Mo 202.031 Recovery = 103.02%							
Na	589.592 Radial†	38396.2	10490 ug/L	141.6	10490 ppb	141.6	1.35%
QC value within limits for Na 589.592 Radial Recovery = 104.90%							
Ni	231.604†	21962.6	521.14 ug/L	2.585	521.14 ppb	2.585	0.50%
QC value within limits for Ni 231.604 Recovery = 104.23%							
P	214.914†	4832.0	2467.0 ug/L	10.07	2467.0 ppb	10.07	0.41%
QC value within limits for P 214.914 Recovery = 98.68%							
Pb	220.353†	4342.3	517.20 ug/L	3.568	517.20 ppb	3.568	0.69%
QC value within limits for Pb 220.353 Recovery = 103.44%							
S	181.975 Axial†	809.1	1022.0 ug/L	6.12	1022.0 ppb	6.12	0.60%
QC value within limits for S 181.975 Axial Recovery = 102.20%							
Sb	206.836†	1621.1	527.53 ug/L	2.533	527.53 ppb	2.533	0.48%
QC value within limits for Sb 206.836 Recovery = 105.51%							
Se	196.026†	940.4	535.15 ug/L	5.900	535.15 ppb	5.900	1.10%
QC value within limits for Se 196.026 Recovery = 107.03%							
Si	251.611†	93002.1	2608.4 ug/L	19.23	2608.4 ppb	19.23	0.74%
QC value within limits for Si 251.611 Recovery = 104.34%							
Sn	189.927†	2983.5	513.27 ug/L	1.964	513.27 ppb	1.964	0.38%
QC value within limits for Sn 189.927 Recovery = 102.65%							
Sr	421.552†	87864.0	509.97 ug/L	7.104	509.97 ppb	7.104	1.39%
QC value within limits for Sr 421.552 Recovery = 101.99%							
Ti	334.940†	360752.3	514.64 ug/L	1.039	514.64 ppb	1.039	0.20%
QC value within limits for Ti 334.940 Recovery = 102.93%							
Tl	190.801†	1684.8	515.55 ug/L	1.870	515.55 ppb	1.870	0.36%
QC value within limits for Tl 190.801 Recovery = 103.11%							
U	409.014†	21881.9	518.22 ug/L	5.880	518.22 ppb	5.880	1.13%
QC value within limits for U 409.014 Recovery = 103.64%							
V	292.402†	87705.6	524.72 ug/L	4.098	524.72 ppb	4.098	0.78%
QC value within limits for V 292.402 Recovery = 104.94%							
Zn	213.857†	58942.3	514.57 ug/L	3.507	514.57 ppb	3.507	0.68%
QC value within limits for Zn 213.857 Recovery = 102.91%							
SiO2†		91860.7	5542.9 ug/L	55.27	5542.9 ppb	55.27	1.00%
QC value within limits for SiO2 Recovery = 103.65%							
All analyte(s) passed QC.							

Sequence No.: 7
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 1/27/2010 15:26:18
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5398.8	5398.8	96.0 %		15:28:11
1	Y RADIAL	5844.7	5844.7	96.41 %		15:28:11
1	Al 396.153Radial†	8.5	4.9	3.4289 ug/L	3.4289 ppb	15:28:31
1	Ca 317.933Radial†	22.0	4.7	7.0552 ug/L	7.0552 ppb	15:28:31
1	Fe 238.204 Radial†	9.2	-0.2	-1.4514 ug/L	-1.4514 ppb	15:28:31
1	K 766.490 Radial†	2381.7	85.9	14.326 ug/L	14.326 ppb	15:28:11
1	Mg 279.077 IEC†	1.0	-0.4	-14.397 ug/L	-14.397 ppb	15:28:31
1	Na 589.592 Radial†	-1013.5	-59.2	-16.182 ug/L	-16.182 ppb	15:28:11
1	Sr 421.552†	32.9	0.5	0.0029 ug/L	0.0029 ppb	15:28:11
1	Sc 361.383	897523.3	897523.3	93.148 %		15:29:27
1	Y 371.029	822474.2	822474.2	96.426 %		15:29:27
1	Ag 328.068†	339.7	12.3	0.0433 ug/L	0.0433 ppb	15:29:27
1	As 188.979†	-34.6	-5.1	-1.9597 ug/L	-1.9597 ppb	15:29:47
1	B 249.677†	-239.0	176.5	3.6703 ug/L	3.6703 ppb	15:29:47
1	Ba 233.527†	-14.9	3.3	0.0231 ug/L	0.0231 ppb	15:29:47
1	Be 313.107†	-4847.9	-160.2	-0.0538 ug/L	-0.0538 ppb	15:29:27
1	Cd 226.502†	-195.3	-4.2	-0.0428 ug/L	-0.0428 ppb	15:29:47
1	Co 228.616†	-76.1	-15.6	-0.3170 ug/L	-0.3170 ppb	15:29:47
1	Cr 267.716†	86.5	23.1	0.2346 ug/L	0.2346 ppb	15:29:47
1	Cu 324.752†	8950.6	563.3	1.5120 ug/L	1.5120 ppb	15:29:27
1	Mn 257.610†	515.8	61.0	0.0657 ug/L	0.0657 ppb	15:29:47
1	Mo 202.031†	28.1	4.4	0.2856 ug/L	0.2856 ppb	15:29:47
1	Ni 231.604†	112.7	25.9	0.6156 ug/L	0.6156 ppb	15:29:47
1	P 214.914†	232.4	14.5	7.3928 ug/L	7.3928 ppb	15:29:47
1	Pb 220.353†	-45.6	8.9	1.0629 ug/L	1.0629 ppb	15:29:47
1	S 181.975 Axial†	47.0	5.5	6.9012 ug/L	6.9012 ppb	15:29:47
1	Sb 206.836†	32.5	1.8	0.5820 ug/L	0.5820 ppb	15:29:47
1	Se 196.026†	-18.7	0.5	0.2471 ug/L	0.2471 ppb	15:29:47
1	Si 251.611†	522.1	102.1	2.8663 ug/L	2.8663 ppb	15:29:47
1	Sn 189.927†	6.6	7.1	1.2213 ug/L	1.2213 ppb	15:29:47
1	Ti 334.940†	-993.1	-21.7	-0.0303 ug/L	-0.0303 ppb	15:29:27
1	Tl 190.801†	-38.9	-4.1	-1.2532 ug/L	-1.2532 ppb	15:29:47
1	U 409.014†	-1307.2	131.1	3.1161 ug/L	3.1161 ppb	15:29:27
1	V 292.402†	-1409.9	-98.5	-0.5718 ug/L	-0.5718 ppb	15:29:27
1	Zn 213.857†	741.1	105.6	0.9239 ug/L	0.9239 ppb	15:29:47
1	SiO2†	531.0	122.3	7.3886 ug/L	7.3886 ppb	15:30:43
2	Sc Radial	5445.1	5445.1	96.9 %		15:28:36
2	Y RADIAL	5920.9	5920.9	97.66 %		15:28:36
2	Al 396.153Radial†	14.3	10.9	7.6158 ug/L	7.6158 ppb	15:28:56
2	Ca 317.933Radial†	20.6	3.0	4.5805 ug/L	4.5805 ppb	15:28:56
2	Fe 238.204 Radial†	9.4	-0.0	-0.1215 ug/L	-0.1215 ppb	15:28:56
2	K 766.490 Radial†	2434.7	119.4	19.920 ug/L	19.920 ppb	15:28:36
2	Mg 279.077 IEC†	1.5	-0.0	-0.0456 ug/L	-0.0456 ppb	15:28:56
2	Na 589.592 Radial†	-1019.6	-56.5	-15.446 ug/L	-15.446 ppb	15:28:36
2	Sr 421.552†	26.7	-6.1	-0.0356 ug/L	-0.0356 ppb	15:28:36
2	Sc 361.383	897319.4	897319.4	93.127 %		15:29:53
2	Y 371.029	822555.8	822555.8	96.435 %		15:29:53
2	Ag 328.068†	366.2	40.8	0.1539 ug/L	0.1539 ppb	15:29:53
2	As 188.979†	-29.6	0.2	0.0817 ug/L	0.0817 ppb	15:30:13
2	B 249.677†	-264.2	149.4	3.1062 ug/L	3.1062 ppb	15:30:13
2	Ba 233.527†	9.0	29.0	0.2144 ug/L	0.2144 ppb	15:30:13
2	Be 313.107†	-5036.6	-364.0	-0.1221 ug/L	-0.1221 ppb	15:29:53
2	Cd 226.502†	-189.0	2.5	0.0281 ug/L	0.0281 ppb	15:30:13
2	Co 228.616†	-76.3	-15.8	-0.3218 ug/L	-0.3218 ppb	15:30:13
2	Cr 267.716†	102.6	40.4	0.4103 ug/L	0.4103 ppb	15:30:13
2	Cu 324.752†	8841.7	448.6	1.2018 ug/L	1.2018 ppb	15:29:53
2	Mn 257.610†	515.7	61.1	0.0654 ug/L	0.0654 ppb	15:30:13
2	Mo 202.031†	20.4	-3.9	-0.2538 ug/L	-0.2538 ppb	15:30:13
2	Ni 231.604†	98.5	10.7	0.2540 ug/L	0.2540 ppb	15:30:13

2	P 214.914†	233.6	15.7	8.1175 ug/L	8.1175 ppb	15:30:13
2	Pb 220.353†	-61.2	-7.8	-0.9256 ug/L	-0.9256 ppb	15:30:13
2	S 181.975 Axial†	50.2	8.8	11.178 ug/L	11.178 ppb	15:30:13
2	Sb 206.836†	36.2	5.8	1.8071 ug/L	1.8071 ppb	15:30:13
2	Se 196.026†	-25.4	-6.7	-3.6900 ug/L	-3.6900 ppb	15:30:13
2	Si 251.611†	535.1	116.2	3.2694 ug/L	3.2694 ppb	15:30:13
2	Sn 189.927†	-3.0	-3.3	-0.5591 ug/L	-0.5591 ppb	15:30:13
2	Ti 334.940†	-994.7	-23.6	-0.0361 ug/L	-0.0361 ppb	15:29:53
2	Tl 190.801†	-32.9	2.3	0.7151 ug/L	0.7151 ppb	15:30:13
2	U 409.014†	-1172.0	276.0	6.5585 ug/L	6.5585 ppb	15:29:53
2	V 292.402†	-1434.4	-125.2	-0.7304 ug/L	-0.7304 ppb	15:29:53
2	Zn 213.857†	745.2	110.1	0.9668 ug/L	0.9668 ppb	15:30:13
2	SiO2†	540.5	132.6	8.0303 ug/L	8.0303 ppb	15:30:48
3	Sc Radial	5398.5	5398.5	96.0 %		15:29:01
3	Y RADIAL	5861.3	5861.3	96.68 %		15:29:01
3	Al 396.153Radial†	11.0	7.6	5.2738 ug/L	5.2738 ppb	15:29:21
3	Ca 317.933Radial†	22.4	5.0	7.5678 ug/L	7.5678 ppb	15:29:21
3	Fe 238.204 Radial†	10.0	0.7	5.5290 ug/L	5.5290 ppb	15:29:21
3	K 766.490 Radial†	2429.3	135.6	22.613 ug/L	22.613 ppb	15:29:01
3	Mg 279.077 IEC†	5.3	3.9	127.96 ug/L	127.96 ppb	15:29:21
3	Na 589.592 Radial†	-1058.3	-105.9	-28.946 ug/L	-28.946 ppb	15:29:01
3	Sr 421.552†	1.2	-32.4	-0.1882 ug/L	-0.1882 ppb	15:29:01
3	Sc 361.383	898662.3	898662.3	93.267 %		15:30:18
3	Y 371.029	825623.8	825623.8	96.795 %		15:30:18
3	Ag 328.068†	345.1	17.6	0.0641 ug/L	0.0641 ppb	15:30:18
3	As 188.979†	-31.2	-1.4	-0.5434 ug/L	-0.5434 ppb	15:30:38
3	B 249.677†	-254.4	160.3	3.3311 ug/L	3.3311 ppb	15:30:38
3	Ba 233.527†	-2.4	16.6	0.1227 ug/L	0.1227 ppb	15:30:38
3	Be 313.107†	-4879.7	-187.7	-0.0629 ug/L	-0.0629 ppb	15:30:18
3	Cd 226.502†	-207.1	-16.5	-0.1722 ug/L	-0.1722 ppb	15:30:38
3	Co 228.616†	-65.8	-4.4	-0.0897 ug/L	-0.0897 ppb	15:30:38
3	Cr 267.716†	83.0	19.2	0.1937 ug/L	0.1937 ppb	15:30:38
3	Cu 324.752†	8886.2	482.1	1.2926 ug/L	1.2926 ppb	15:30:18
3	Mn 257.610†	506.9	50.9	0.0497 ug/L	0.0497 ppb	15:30:38
3	Mo 202.031†	24.8	0.8	0.0526 ug/L	0.0526 ppb	15:30:38
3	Ni 231.604†	121.2	34.9	0.8276 ug/L	0.8276 ppb	15:30:38
3	P 214.914†	235.2	17.1	8.8545 ug/L	8.8545 ppb	15:30:38
3	Pb 220.353†	-55.4	-1.5	-0.1766 ug/L	-0.1766 ppb	15:30:38
3	S 181.975 Axial†	41.6	-0.5	-0.5772 ug/L	-0.5772 ppb	15:30:38
3	Sb 206.836†	30.5	-0.4	-0.1149 ug/L	-0.1149 ppb	15:30:38
3	Se 196.026†	-24.1	-5.3	-2.9063 ug/L	-2.9063 ppb	15:30:38
3	Si 251.611†	516.3	95.1	2.6737 ug/L	2.6737 ppb	15:30:38
3	Sn 189.927†	2.9	3.1	0.5368 ug/L	0.5368 ppb	15:30:38
3	Ti 334.940†	-977.2	-3.2	-0.0166 ug/L	-0.0166 ppb	15:30:18
3	Tl 190.801†	-39.7	-4.9	-1.5018 ug/L	-1.5018 ppb	15:30:38
3	U 409.014†	-1205.6	241.9	5.7466 ug/L	5.7466 ppb	15:30:18
3	V 292.402†	-1432.4	-120.8	-0.6996 ug/L	-0.6996 ppb	15:30:18
3	Zn 213.857†	731.2	93.9	0.8198 ug/L	0.8198 ppb	15:30:38
3	SiO2†	511.4	100.6	6.0837 ug/L	6.0837 ppb	15:30:53

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	897835.0	93.181 %		0.0751			0.08%
Sc Radial	5414.1	96.3 %		0.48			0.50%
Y 371.029	823551.2	96.552 %		0.2105			0.22%
Y RADIAL	5875.7	96.92 %		0.661			0.68%
Ag 328.068†	23.5	0.0871 ug/L		0.05875	0.0871 ppb	0.05875	67.46%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	7.8	5.4395 ug/L		2.09836	5.4395 ppb	2.09836	38.58%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-2.1	-0.8071 ug/L		1.04597	-0.8071 ppb	1.04597	129.59%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	162.1	3.3692 ug/L		0.28394	3.3692 ppb	0.28394	8.43%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	16.3	0.1201 ug/L		0.09572	0.1201 ppb	0.09572	79.72%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-237.3	-0.0796 ug/L		0.03709	-0.0796 ppb	0.03709	46.58%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	4.3	6.4012 ug/L		1.59741	6.4012 ppb	1.59741	24.95%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-6.0	-0.0623 ug/L	0.10156	-0.0623 ppb	0.10156	163.02%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-11.9	-0.2429 ug/L	0.13263	-0.2429 ppb	0.13263	54.61%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	27.6	0.2795 ug/L	0.11504	0.2795 ppb	0.11504	41.16%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	498.0	1.3355 ug/L	0.15949	1.3355 ppb	0.15949	11.94%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.2	1.3187 ug/L	3.70635	1.3187 ppb	3.70635	281.06%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	113.6	18.953 ug/L	4.2274	18.953 ppb	4.2274	22.30%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.2	37.840 ug/L	78.3772	37.840 ppb	78.3772	207.13%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	57.7	0.0603 ug/L	0.00914	0.0603 ppb	0.00914	15.17%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	0.4	0.0281 ug/L	0.27055	0.0281 ppb	0.27055	961.41%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-73.9	-20.191 ug/L	7.5904	-20.191 ppb	7.5904	37.59%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	23.8	0.5658 ug/L	0.29003	0.5658 ppb	0.29003	51.26%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	15.8	8.1216 ug/L	0.73086	8.1216 ppb	0.73086	9.00%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-0.1	-0.0131 ug/L	1.00429	-0.0131 ppb	1.00429	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	4.6	5.8340 ug/L	5.94975	5.8340 ppb	5.94975	101.98%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	2.4	0.7580 ug/L	0.97302	0.7580 ppb	0.97302	128.36%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-3.9	-2.1164 ug/L	2.08400	-2.1164 ppb	2.08400	98.47%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	104.5	2.9365 ug/L	0.30401	2.9365 ppb	0.30401	10.35%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	2.3	0.3997 ug/L	0.89807	0.3997 ppb	0.89807	224.70%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-12.7	-0.0737 ug/L	0.10108	-0.0737 ppb	0.10108	137.24%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-16.2	-0.0277 ug/L	0.00999	-0.0277 ppb	0.00999	36.10%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-2.2	-0.6800 ug/L	1.21451	-0.6800 ppb	1.21451	178.61%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	216.4	5.1404 ug/L	1.79947	5.1404 ppb	1.79947	35.01%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-114.8	-0.6673 ug/L	0.08413	-0.6673 ppb	0.08413	12.61%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	103.2	0.9035 ug/L	0.07561	0.9035 ppb	0.07561	8.37%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	118.5	7.1675 ug/L	0.99192	7.1675 ppb	0.99192	13.84%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

ICPMS#3 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Friday, January 15, 2010 13:28:48

Sample Description:

Method File: c:\elandata\Method\daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.5467

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		292.0		292.003		9.849		3.4
Mg	24.0		3347.0		3346.992		113.085		3.4
Co	58.9		11556.9		11556.876		320.233		2.8
Rh	102.9		36153.9		36153.893		303.753		0.8
In	114.9		51903.7		51903.722		337.935		0.7
Pb	208.0		33531.7		33531.718		613.062		1.8
[> Ba	137.9		42557.6		42557.564		558.316		1.3
[Ba++	69.0		795.3		0.019		0.001		4.3
[> Ce	139.9		56782.6		56782.631		450.802		0.8
[CeO	155.9		1372.8		0.024		0.001		2.5
Bkgd	220.0		1.6		1.600		0.652		40.7

Current Optimization File Data

Current Value	Description
1.10	Nebulizer Gas Flow
5.00	Lens Voltage
1450.00	ICP RF Power
-1812.00	Analog Stage Voltage
950.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-7.00	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	13	6.0	307.7
Co	59	13	6.5	15285.8
In	115	13	7.0	72172.9

Sample ID: Sample

Report Date/Time: Friday, January 15, 2010 13:30:07

Page 1

ICPMS#3 Instrument Tuning Report

File Name: 100115.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.1	585	2070	0.602
Be	9.0	9.0	2070	2080	0.604
Mg	24.0	24.0	5706	2130	0.531
Mg	25.0	25.0	5922	2040	0.589
Mg	26.0	26.0	6226	2150	0.605
Co	58.9	58.9	14203	2140	0.583
Rh	102.9	102.9	24911	2180	0.631
In	114.9	114.9	27835	2180	0.661
Ce	139.9	139.9	33924	2220	0.632
Pb	206.0	206.0	49992	2280	0.672
Pb	207.0	207.0	50296	2300	0.708
Pb	208.0	207.9	50462	2310	0.672
U	238.1	238.1	57845	2350	0.677

ICPMS#3 - Summary Report

Sample ID: Blank

Sample Date/Time: Saturday, January 16, 2010 00:21:24

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\Blank.077

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	ug/L		3	
|>	Sc	45	ug/L		98248	
[	Ni	60	ug/L		16	
[>	Ge	74	ug/L		59441	
|	As	75	ug/L		233	
|	Se	77	ug/L		1420	
|	Se	82	ug/L		-3	
[	Kr	83	ug/L		19	
[>	Lu	175	ug/L		70088	
|	Tl	205	ug/L		143	
[	U	238	ug/L		137	

Sample ID: Blank

Report Date/Time: Saturday, January 16, 2010 00:22:08

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear 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				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Saturday, January 16, 2010 00:24:06

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\Standard 1.078

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	10.000 ug/L	9.240	89	0.001
[>	Sc	45	ug/L		98752	98751.599
[	Ni	60	10.000 ug/L	5.935	1741	0.017
[>	Ge	74	ug/L		60415	60415.428
[	As	75	10.000 ug/L	1.018	1981	0.029
[	Se	77	ug/L		1541	0.002
[	Se	82	10.000 ug/L	9.344	148	0.003
[	Kr	83	ug/L		12	-0.000
[>	Lu	175	ug/L		70438	70437.964
[	Tl	205	10.000 ug/L	2.067	31718	0.448
[	U	238	10.000 ug/L	0.480	41083	0.581

Sample ID: Standard 1

Report Date/Time: Saturday, January 16, 2010 00:24:47

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: Standard 1

Report Date/Time: Saturday, January 16, 2010 00:24:47

Page 2

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				
[	U		238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Saturday, January 16, 2010 00:26:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\Standard 2.079

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	99.836 ug/L	4.838	740	0.007
|>	Sc	45	ug/L		98613	98613.224
[	Ni	60	99.985 ug/L	2.620	17003	0.172
[>	Ge	74	ug/L		61168	61167.964
|	As	75	100.052 ug/L	2.343	18857	0.304
|	Se	77	ug/L		2732	0.021
|	Se	82	100.096 ug/L	2.636	1691	0.028
[	Kr	83	ug/L		21	0.000
[>	Lu	175	ug/L		73403	73402.848
|	Tl	205	99.954 ug/L	2.489	314691	4.286
[	U	238	99.957 ug/L	2.086	409073	5.572

Sample ID: Standard 2

Report Date/Time: Saturday, January 16, 2010 00:27:27

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear 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				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Saturday, January 16, 2010 00:29:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\QC Std 1.080

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	51.819	ug/L	7.466	402	0.004
[>	Sc 45		ug/L		102755	102754.963
[	Ni 60	50.856	ug/L	1.503	9021	0.088
[>	Ge 74		ug/L		61881	61880.684
|	As 75	47.647	ug/L	5.208	9214	0.145
|	Se 77		ug/L		2294	0.013
|	Se 82	46.877	ug/L	2.304	799	0.013
[	Kr 83		ug/L		21	0.000
[>	Lu 175		ug/L		72856	72856.057
|	Tl 205	49.351	ug/L	1.764	154291	2.116
[	U 238	54.653	ug/L	1.053	222105	3.046

Sample ID: QC Std 1

Report Date/Time: Saturday, January 16, 2010 00:30:08

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9	103.639			
[>	Sc	45		104.6		
[	Ni	60	101.711			
[>	Ge	74		104.1		
[	As	75	95.295			
[	Se	77				
[	Se	82	93.754			
[	Kr	83				
[>	Lu	175		103.9		
[	Tl	205	98.702			
[	U	238	109.306			

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Saturday, January 16, 2010 00:32:09

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\QC Std 2.081

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	-0.232	ug/L	65.203	2	-0.000
>	Sc 45		ug/L		100613	100613.110
[	Ni 60	-0.016	ug/L	82.145	13	-0.000
>	Ge 74		ug/L		60980	60979.817
|	As 75	1.139	ug/L	82.694	451	0.003
|	Se 77		ug/L		1631	0.003
|	Se 82	0.800	ug/L	15.154	10	0.000
[	Kr 83		ug/L		10	-0.000
>	Lu 175		ug/L		71614	71614.107
|	Tl 205	0.221	ug/L	2.106	826	0.009
[	U 238	0.018	ug/L	18.251	212	0.001

Sample ID: QC Std 2

Report Date/Time: Saturday, January 16, 2010 00:32:53

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear 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				102.4
[	Ni	60				
|>	Ge	74				102.6
[	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				
|>	Lu	175				102.2
|	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Saturday, January 16, 2010 00:34:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\QC Std 3.082

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.750	ug/L	33.089	9	0.000
>	Sc 45		ug/L		100165	100164.660
[	Ni 60	2.141	ug/L	4.381	385	0.004
>	Ge 74		ug/L		61507	61507.469
|	As 75	6.605	ug/L	14.614	1479	0.020
|	Se 77		ug/L		1730	0.004
|	Se 82	5.572	ug/L	8.335	91	0.002
[	Kr 83		ug/L		15	-0.000
>	Lu 175		ug/L		71071	71071.096
|	Tl 205	1.141	ug/L	3.600	3620	0.049
[	U 238	0.213	ug/L	2.901	982	0.012

Sample ID: QC Std 3

Report Date/Time: Saturday, January 16, 2010 00:35:34

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Diff	Dup. Rel.	% Diff
[	Be	9		149.950								
[>	Sc	45				102.0						
[	Ni	60		107.058								
[>	Ge	74				103.5						
[	As	75		132.098								
[	Se	77										
[	Se	82		111.445								
[	Kr	83										
[>	Lu	175				101.4						
[	Tl	205		114.089								
[	U	238		106.379								

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Be	9	9CRDL is out of limits
QC Std 3	As	75	75CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Saturday, January 16, 2010 00:37:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\QC Std 4.083

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	-0.112	ug/L	419.761	2	-0.000
>	Sc 45		ug/L		90508	90508.056
[	Ni 60	2.738	ug/L	5.664	441	0.005
>	Ge 74		ug/L		53418	53417.568
|	As 75	0.193	ug/L	684.505	242	0.001
|	Se 77		ug/L		1522	0.005
|	Se 82	-0.620	ug/L	30.049	-12	-0.000
[	Kr 83		ug/L		34	0.000
>	Lu 175		ug/L		64849	64849.183
|	Tl 205	0.036	ug/L	32.236	231	0.002
[	U 238	-0.028	ug/L	1.730	26	-0.002

Sample ID: QC Std 4

Report Date/Time: Saturday, January 16, 2010 00:38:16

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear 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			92.1		
[	Ni	60	101.417				
[>	Ge	74			89.9		
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175			92.5		
[	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Saturday, January 16, 2010 00:40:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\QC Std 5.084

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	19.369 ug/L	4.426	132	0.001
[>	Sc	45	ug/L		89196	89196.489
[	Ni	60	21.845 ug/L	0.624	3372	0.038
[>	Ge	74	ug/L		53057	53056.918
[	As	75	20.152 ug/L	7.850	3462	0.061
[	Se	77	ug/L		1694	0.008
[	Se	82	19.612 ug/L	8.546	285	0.005
[	Kr	83	ug/L		43	0.000
[>	Lu	175	ug/L		65000	65000.205
[	Tl	205	18.948 ug/L	3.142	52927	0.812
[	U	238	21.976 ug/L	0.990	79754	1.225

Sample ID: QC Std 5

Report Date/Time: Saturday, January 16, 2010 00:40:58

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Ti	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9	96.847				
[>	Sc	45		90.8			
[	Ni	60	96.234				
[>	Ge	74		89.3			
[	As	75	100.759				
[	Se	77					
[	Se	82	98.059				
[	Kr	83					
[>	Lu	175		92.7			
[	Tl	205	94.739				
[	U	238	109.878				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, January 16, 2010 00:43:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\QC Std 6.085

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	52.117 ug/L	2.219	389	0.004
[>	Sc	45	ug/L		98774	98773.648
[	Ni	60	49.528 ug/L	0.801	8446	0.085
[>	Ge	74	ug/L		60936	60935.964
|	As	75	49.763 ug/L	0.870	9465	0.151
|	Se	77	ug/L		2273	0.013
|	Se	82	48.138 ug/L	4.171	808	0.013
[	Kr	83	ug/L		18	-0.000
[>	Lu	175	ug/L		72751	72750.852
|	Tl	205	51.104 ug/L	0.753	159561	2.191
[	U	238	51.669 ug/L	2.245	209674	2.880

Sample ID: QC Std 6

Report Date/Time: Saturday, January 16, 2010 00:43:48

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9	104.234			
[>	Sc	45		100.5		
[	Ni	60	99.056			
[>	Ge	74		102.5		
[	As	75	99.526			
[	Se	77				
[	Se	82	96.277			
[	Kr	83				
[>	Lu	175		103.8		
[	Tl	205	102.208			
[	U	238	103.337			

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, January 16, 2010 00:45:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\QC Std 7.086

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	-0.095 ug/L	78.574	3	-0.000
>	Sc	45	ug/L		99355	99355.341
[	Ni	60	0.005 ug/L	189.308	17	0.000
>	Ge	74	ug/L		59919	59919.050
|	As	75	1.293 ug/L	102.780	467	0.004
|	Se	77	ug/L		1927	0.008
|	Se	82	0.295 ug/L	237.916	1	0.000
[	Kr	83	ug/L		14	-0.000
>	Lu	175	ug/L		71292	71292.200
|	Tl	205	0.239 ug/L	6.225	876	0.010
[	U	238	0.023 ug/L	29.349	229	0.001

Sample ID: QC Std 7

Report Date/Time: Saturday, January 16, 2010 00:46:33

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
[>	Sc	45		101.1		
[	Ni	60				
[>	Ge	74		100.8		
[	As	75				
[	Se	77				
[	Se	82				
[	Kr	83				
[>	Lu	175		101.7		
[	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, January 16, 2010 01:08:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\QC Std 6.094

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	57.598	ug/L	4.323	427	0.004
> Sc	45		ug/L		98353	98353.064
Ni	60	49.848	ug/L	2.750	8463	0.086
> Ge	74		ug/L		60183	60183.106
As	75	51.020	ug/L	4.192	9578	0.155
Se	77		ug/L		1946	0.008
Se	82	49.598	ug/L	1.113	823	0.014
Kr	83		ug/L		13	-0.000
> Lu	175		ug/L		73708	73708.458
Tl	205	50.947	ug/L	1.592	161139	2.184
U	238	52.079	ug/L	1.408	214085	2.903

Sample ID: QC Std 6

Report Date/Time: Saturday, January 16, 2010 01:08:47

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9	115.195				
|>	Sc	45		100.1			
[	Ni	60	99.697				
[>	Ge	74		101.2			
|	As	75	102.040				
|	Se	77					
|	Se	82	99.196				
[	Kr	83					
[>	Lu	175		105.2			
|	Tl	205	101.895				
[	U	238	104.158				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be		9CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, January 16, 2010 01:10:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\QC Std 7.095

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	-0.139	ug/L	203.286	2	-0.000
[>	Sc 45		ug/L		98738	98738.108
[	Ni 60	0.002	ug/L	700.848	16	0.000
[>	Ge 74		ug/L		59927	59927.378
|	As 75	1.058	ug/L	44.627	428	0.003
|	Se 77		ug/L		1516	0.001
|	Se 82	0.509	ug/L	84.287	5	0.000
[	Kr 83		ug/L		16	-0.000
[>	Lu 175		ug/L		72285	72284.842
|	Tl 205	0.241	ug/L	3.306	893	0.010
[	U 238	0.018	ug/L	8.993	213	0.001

Sample ID: QC Std 7

Report Date/Time: Saturday, January 16, 2010 01:11:32

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear 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		100.5		
[	Ni	60				
>	Ge	74		100.8		
[	As	75				
[	Se	77				
[	Se	82				
[	Kr	83				
>	Lu	175		103.1		
[	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, January 16, 2010 01:24:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\QC Std 6.100

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	56.949	ug/L	2.714	416	0.004
|>	Sc 45		ug/L		96891	96891.111
[	Ni 60	49.928	ug/L	2.445	8351	0.086
|>	Ge 74		ug/L		59975	59975.245
|	As 75	49.049	ug/L	0.615	9186	0.149
|	Se 77		ug/L		1808	0.006
|	Se 82	47.527	ug/L	3.433	786	0.013
[	Kr 83		ug/L		19	0.000
|>	Lu 175		ug/L		73164	73163.948
|	Tl 205	51.380	ug/L	1.206	161335	2.203
[	U 238	52.232	ug/L	2.669	213157	2.911

Sample ID: QC Std 6

Report Date/Time: Saturday, January 16, 2010 01:25:27

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Diff	Dup. Rel.	% Diff
[	Be		9	113.899								
[>	Sc		45					98.6				
[	Ni		60	99.857								
[>	Ge		74					100.9				
[	As		75	98.098								
[	Se		77									
[	Se		82	95.055								
[	Kr		83									
[>	Lu		175					104.4				
[	Tl		205	102.760								
[	U		238	104.464								

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Be	9CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, January 16, 2010 01:27:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\QC Std 7.101

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.050	ug/L	415.507	4	0.000
[>	Sc 45		ug/L		97102	97102.252
[	Ni 60	0.003	ug/L	675.090	16	0.000
[>	Ge 74		ug/L		59295	59295.402
|	As 75	1.094	ug/L	37.795	430	0.003
|	Se 77		ug/L		1305	-0.002
|	Se 82	0.409	ug/L	22.133	3	0.000
[	Kr 83		ug/L		11	-0.000
[>	Lu 175		ug/L		71086	71086.497
|	Tl 205	0.199	ug/L	7.343	750	0.009
[	U 238	0.019	ug/L	29.209	213	0.001

Sample ID: QC Std 7

Report Date/Time: Saturday, January 16, 2010 01:28:12

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: QC Std 7

Report Date/Time: Saturday, January 16, 2010 01:28:12

Page 2

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
[>	Sc	45			98.8		
[	Ni	60					
[>	Ge	74			99.8		
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175			101.4		
[	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, January 16, 2010 01:49:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\QC Std 6.109

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	55.692	ug/L	10.609	410	0.004
[>	Sc 45		ug/L		97628	97627.800
[	Ni 60	49.454	ug/L	2.326	8334	0.085
[>	Ge 74		ug/L		59374	59374.410
[	As 75	50.711	ug/L	2.024	9393	0.154
[	Se 77		ug/L		1938	0.009
[	Se 82	50.056	ug/L	4.807	819	0.014
[	Kr 83		ug/L		17	-0.000
[>	Lu 175		ug/L		73084	73083.546
[	Tl 205	51.368	ug/L	1.559	161120	2.202
[	U 238	52.030	ug/L	3.448	212063	2.900

Sample ID: QC Std 6

Report Date/Time: Saturday, January 16, 2010 01:50:33

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Diff	Dup. Rel.	% Diff
[	Be	9	111.384								
[>	Sc	45					99.4				
[	Ni	60	98.909								
[>	Ge	74					99.9				
[	As	75	101.421								
[	Se	77									
[	Se	82	100.112								
[	Kr	83									
[>	Lu	175					104.3				
[	Tl	205	102.737								
[	U	238	104.059								

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Be	9CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, January 16, 2010 01:52:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\QC Std 7.110

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.094 ug/L	288.165	4	0.000
[>	Sc	45	ug/L		97533	97533.466
[	Ni	60	-0.003 ug/L	198.815	15	-0.000
[>	Ge	74	ug/L		59698	59698.076
|	As	75	1.020 ug/L	104.891	420	0.003
|	Se	77	ug/L		1401	-0.000
|	Se	82	0.326 ug/L	74.886	2	0.000
[	Kr	83	ug/L		16	-0.000
[>	Lu	175	ug/L		70516	70515.993
|	Tl	205	0.277 ug/L	3.772	983	0.012
[	U	238	0.024 ug/L	20.482	232	0.001

Sample ID: QC Std 7

Report Date/Time: Saturday, January 16, 2010 01:53:19

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
[>	Sc	45		99.3		
[	Ni	60				
[>	Ge	74		100.4		
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				
[>	Lu	175		100.6		
|	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, January 16, 2010 02:09:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\QC Std 6.116

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	58.730	ug/L	6.853	429	0.004
[>	Sc 45		ug/L		96806	96806.217
[	Ni 60	50.009	ug/L	1.441	8357	0.086
[>	Ge 74		ug/L		59774	59774.392
|	As 75	49.678	ug/L	2.098	9270	0.151
|	Se 77		ug/L		1907	0.008
|	Se 82	47.879	ug/L	3.237	789	0.013
[	Kr 83		ug/L		16	-0.000
[>	Lu 175		ug/L		72564	72563.920
|	Ti 205	51.255	ug/L	1.794	159608	2.198
[	U 238	51.423	ug/L	0.937	208152	2.866

Sample ID: QC Std 6

Report Date/Time: Saturday, January 16, 2010 02:10:08

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9	117.461			
>	Sc	45		98.5		
[	Ni	60	100.018			
>	Ge	74		100.6		
|	As	75	99.356			
|	Se	77				
|	Se	82	95.757			
[	Kr	83				
>	Lu	175		103.5		
|	Tl	205	102.510			
[	U	238	102.845			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Be	9CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, January 16, 2010 02:12:09

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\QC Std 7.117

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.002	ug/L	11697.942	3	0.000
>	Sc 45		ug/L		97929	97928.820
[	Ni 60	0.030	ug/L	83.778	21	0.000
>	Ge 74		ug/L		59207	59207.379
|	As 75	0.431	ug/L	137.792	311	0.001
|	Se 77		ug/L		1371	-0.001
|	Se 82	0.102	ug/L	273.908	-2	0.000
[	Kr 83		ug/L		18	-0.000
>	Lu 175		ug/L		71265	71265.406
|	Tl 205	0.199	ug/L	4.361	753	0.009
[	U 238	0.019	ug/L	0.706	213	0.001

Sample ID: QC Std 7

Report Date/Time: Saturday, January 16, 2010 02:12:53

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
[>	Sc	45			99.7		
[	Ni	60					
[>	Ge	74			99.6		
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175			101.7		
[	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202011760

Sample Date/Time: Saturday, January 16, 2010 02:14:53

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\1202011760.118

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.097 ug/L	249.116	4	0.000
[>	Sc	45	ug/L		97396	97396.210
[	Ni	60	0.040 ug/L	56.482	22	0.000
[>	Ge	74	ug/L		57969	57968.962
|	As	75	0.385 ug/L	99.855	296	0.001
|	Se	77	ug/L		810	-0.010
|	Se	82	-0.318 ug/L	194.863	-9	-0.000
[	Kr	83	ug/L		20	0.000
[>	Lu	175	ug/L		71470	71470.395
|	Tl	205	0.073 ug/L	12.591	369	0.003
[	U	238	-0.026 ug/L	4.898	35	-0.001

Sample ID: 1202011760

Report Date/Time: Saturday, January 16, 2010 02:15:35

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
[>	Sc	45		99.1		
[	Ni	60				
[>	Ge	74		97.5		
[	As	75				
[	Se	77				
[	Se	82				
[	Kr	83				
[>	Lu	175		102.0		
[	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202011761

Sample Date/Time: Saturday, January 16, 2010 02:17:35

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 940107|40|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\1202011761.119

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	26.728 ug/L	3.332	196	0.002
[>	Sc	45	ug/L		96350	96349.821
[	Ni	60	38.535 ug/L	0.727	6414	0.066
[>	Ge	74	ug/L		58819	58819.126
|	As	75	30.270 ug/L	0.907	5649	0.092
|	Se	77	ug/L		2226	0.014
|	Se	82	81.082 ug/L	0.523	1317	0.022
[	Kr	83	ug/L		17	-0.000
[>	Lu	175	ug/L		70891	70890.532
|	Tl	205	35.427 ug/L	2.263	107797	1.519
[	U	238	0.518 ug/L	0.233	2184	0.029

Sample ID: 1202011761

Report Date/Time: Saturday, January 16, 2010 02:18:17

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
[>	Sc	45			98.1		
[	Ni	60					
[>	Ge	74			99.0		
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175			101.1		
[	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, January 16, 2010 02:31:15

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\QC Std 6.124

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	59.988	ug/L	9.450	438	0.004
|>	Sc 45		ug/L		96853	96852.925
[	Ni 60	49.315	ug/L	3.106	8243	0.085
|>	Ge 74		ug/L		59423	59423.266
|	As 75	49.814	ug/L	1.708	9240	0.152
|	Se 77		ug/L		1788	0.006
|	Se 82	48.631	ug/L	3.292	796	0.013
[	Kr 83		ug/L		16	-0.000
|>	Lu 175		ug/L		72645	72645.348
|	Tl 205	50.578	ug/L	0.938	157674	2.169
[	U 238	51.142	ug/L	0.910	207205	2.851

Sample ID: QC Std 6

Report Date/Time: Saturday, January 16, 2010 02:32:01

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Diff	Dup. Rel.	% Diff
[	Be		9	119.977								
[>	Sc		45					98.6				
[	Ni		60	98.629								
[>	Ge		74					100.0				
[	As		75	99.628								
[	Se		77									
[	Se		82	97.262								
[	Kr		83									
[>	Lu		175					103.6				
[	Tl		205	101.157								
[	U		238	102.284								

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be		9CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, January 16, 2010 02:34:03

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\QC Std 7.125

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.540	ug/L	82.592	7	0.000
[>	Sc 45		ug/L		98861	98861.244
[	Ni 60	0.019	ug/L	167.795	19	0.000
[>	Ge 74		ug/L		59814	59813.895
|	As 75	1.094	ug/L	116.506	433	0.003
|	Se 77		ug/L		1327	-0.002
|	Se 82	0.486	ug/L	91.267	5	0.000
[	Kr 83		ug/L		14	-0.000
[>	Lu 175		ug/L		71316	71315.972
|	Tl 205	0.208	ug/L	10.375	782	0.009
[	U 238	0.025	ug/L	26.065	240	0.001

Sample ID: QC Std 7

Report Date/Time: Saturday, January 16, 2010 02:34:46

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Ti	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
|>	Sc	45		100.6		
|	Ni	60				
[>	Ge	74		100.6		
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
[>	Lu	175		101.8		
|	Tl	205				
|	U	238				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 7	Be	9CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 244128006

Sample Date/Time: Saturday, January 16, 2010 02:36:48

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\244128006.126

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	5.126 ug/L	6.089	41	0.000
|>	Sc	45	ug/L		98960	98960.274
[	Ni	60	39.274 ug/L	3.627	6711	0.068
[>	Ge	74	ug/L		54538	54538.457
|	As	75	7.754 ug/L	4.181	1501	0.024
|	Se	77	ug/L		750	-0.010
|	Se	82	-0.630 ug/L	80.284	-13	-0.000
[	Kr	83	ug/L		42	0.000
[>	Lu	175	ug/L		70515	70514.975
|	Tl	205	1.111 ug/L	3.667	3503	0.048
[	U	238	15.053 ug/L	2.576	59303	0.839

Sample ID: 244128006

Report Date/Time: Saturday, January 16, 2010 02:37:32

Page 1

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear 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		100.7		
[	Ni	60				
|>	Ge	74		91.8		
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				
|>	Lu	175		100.6		
|	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202011762

Sample Date/Time: Saturday, January 16, 2010 02:39:31

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\mlsc.mth

Dataset File: C:\elandata\Dataset\100115\1202011762.127

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	5.501 ug/L	25.325	43	0.000
|>	Sc	45	ug/L		97445	97445.246
[	Ni	60	34.782 ug/L	5.980	5853	0.060
[>	Ge	74	ug/L		54018	54018.483
|	As	75	8.825 ug/L	7.537	1662	0.027
|	Se	77	ug/L		675	-0.011
|	Se	82	-0.809 ug/L	86.784	-15	-0.000
[	Kr	83	ug/L		39	0.000
[>	Lu	175	ug/L		70022	70021.908
|	Tl	205	1.042 ug/L	5.758	3270	0.045
[	U	238	15.957 ug/L	2.123	62406	0.889

Sample ID: 1202011762

Report Date/Time: Saturday, January 16, 2010 02:40:14

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
[>	Sc	45		99.2		
[	Ni	60				
[>	Ge	74		90.9		
[	As	75				
[	Se	77				
[	Se	82				
[	Kr	83				
[>	Lu	175		99.9		
[	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202011763

Sample Date/Time: Saturday, January 16, 2010 02:42:14

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\1202011763.128

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	31.249	ug/L	4.765	236	0.002
|>	Sc 45		ug/L		99676	99675.722
[	Ni 60	59.094	ug/L	1.799	10163	0.102
|>	Ge 74		ug/L		55659	55659.117
|	As 75	44.874	ug/L	2.827	7817	0.137
|	Se 77		ug/L		807	-0.009
|	Se 82	6.374	ug/L	3.732	95	0.002
[	Kr 83		ug/L		51	0.001
|>	Lu 175		ug/L		71073	71072.889
|	Tl 205	49.671	ug/L	2.587	151422	2.130
[	U 238	45.841	ug/L	1.341	181683	2.555

Sample ID: 1202011763

Report Date/Time: Saturday, January 16, 2010 02:42:56

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: 1202011763

Report Date/Time: Saturday, January 16, 2010 02:42:56

Page 2

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
[>	Sc	45		101.5		
[	Ni	60				
[>	Ge	74		93.6		
[	As	75				
[	Se	77				
[	Se	82				
[	Kr	83				
[>	Lu	175		101.4		
[	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202011771

Sample Date/Time: Saturday, January 16, 2010 02:44:57

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\1202011771.129

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	33.295	ug/L	3.976	252	0.002
|> Sc	45		ug/L		99593	99592.972
[Ni	60	63.456	ug/L	1.639	10905	0.109
|> Ge	74		ug/L		55150	55150.171
| As	75	46.209	ug/L	1.905	7968	0.141
| Se	77		ug/L		811	-0.009
| Se	82	5.948	ug/L	10.674	87	0.002
[Kr	83		ug/L		60	0.001
|> Lu	175		ug/L		70602	70602.124
| Tl	205	50.563	ug/L	2.517	153169	2.168
[U	238	45.235	ug/L	1.800	178122	2.521

Sample ID: 1202011771

Report Date/Time: Saturday, January 16, 2010 02:45:40

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
[>	Sc	45		101.4		
[	Ni	60				
[>	Ge	74		92.8		
[	As	75				
[	Se	77				
[	Se	82				
[	Kr	83				
[>	Lu	175		100.7		
[	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202011764

Sample Date/Time: Saturday, January 16, 2010 02:47:40

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 940107|10|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\1202011764.130

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	1.047	ug/L	40.752	11	0.000
|>	Sc 45		ug/L		95185	95185.037
[	Ni 60	8.617	ug/L	6.300	1428	0.015
[>	Ge 74		ug/L		57447	57446.857
|	As 75	1.776	ug/L	26.523	537	0.005
|	Se 77		ug/L		881	-0.009
|	Se 82	-0.387	ug/L	81.027	-10	-0.000
[	Kr 83		ug/L		22	0.000
[>	Lu 175		ug/L		71308	71307.583
|	Tl 205	0.354	ug/L	4.202	1227	0.015
[	U 238	2.961	ug/L	3.348	11906	0.165

Sample ID: 1202011764

Report Date/Time: Saturday, January 16, 2010 02:48:23

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear 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			96.9		
[	Ni	60					
[>	Ge	74			96.6		
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175			101.7		
[	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 244128007

Sample Date/Time: Saturday, January 16, 2010 02:50:24

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\244128007.131

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	7.573 ug/L	15.637	59	0.001
|>	Sc	45	ug/L		97739	97738.544
[	Ni	60	40.525 ug/L	1.791	6840	0.070
[>	Ge	74	ug/L		54014	54014.486
|	As	75	9.974 ug/L	10.644	1850	0.030
|	Se	77	ug/L		746	-0.010
|	Se	82	-1.462 ug/L	60.984	-25	-0.000
[	Kr	83	ug/L		63	0.001
[>	Lu	175	ug/L		68599	68599.396
|	Tl	205	1.110 ug/L	3.535	3405	0.048
[	U	238	4.949 ug/L	2.013	19057	0.276

Sample ID: 244128007

Report Date/Time: Saturday, January 16, 2010 02:51:08

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
[>	Sc	45			99.5		
[	Ni	60					
[>	Ge	74			90.9		
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175			97.9		
[	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 244128008

Sample Date/Time: Saturday, January 16, 2010 02:53:09

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\244128008.132

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	5.410 ug/L	25.964	43	0.000
|>	Sc	45	ug/L		98461	98461.191
[	Ni	60	38.767 ug/L	2.764	6592	0.067
[>	Ge	74	ug/L		54131	54130.904
|	As	75	9.025 ug/L	10.302	1699	0.027
|	Se	77	ug/L		745	-0.010
|	Se	82	0.148 ug/L	525.996	-1	0.000
[	Kr	83	ug/L		39	0.000
[>	Lu	175	ug/L		69459	69458.810
|	Tl	205	1.058 ug/L	0.430	3293	0.045
[	U	238	6.105 ug/L	1.119	23771	0.340

Sample ID: 244128008

Report Date/Time: Saturday, January 16, 2010 02:53:53

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear 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		100.2			
[	Ni	60					
[>	Ge	74		91.1			
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175		99.1			
[	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 244128009

Sample Date/Time: Saturday, January 16, 2010 02:55:54

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107[2]prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\244128009.133

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	5.239 ug/L	36.403	41	0.000
[>	Sc	45	ug/L		96915	96914.932
[	Ni	60	34.438 ug/L	2.753	5766	0.059
[>	Ge	74	ug/L		54648	54647.906
|	As	75	9.285 ug/L	5.653	1758	0.028
|	Se	77	ug/L		703	-0.011
|	Se	82	-0.402 ug/L	170.070	-9	-0.000
[	Kr	83	ug/L		44	0.000
[>	Lu	175	ug/L		70370	70370.292
|	Tl	205	0.958 ug/L	3.789	3033	0.041
[	U	238	9.460 ug/L	2.165	37236	0.527

Sample ID: 244128009

Report Date/Time: Saturday, January 16, 2010 02:56:39

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
[>	Sc	45			98.6		
[	Ni	60					
[>	Ge	74			91.9		
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175			100.4		
[	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 244128010

Sample Date/Time: Saturday, January 16, 2010 02:58:39

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\244128010.134

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	6.933 ug/L	14.953	55	0.001
[>	Sc	45	ug/L		99556	99556.048
[	Ni	60	37.894 ug/L	1.593	6516	0.065
[>	Ge	74	ug/L		54308	54308.264
|	As	75	9.522 ug/L	6.499	1787	0.029
|	Se	77	ug/L		732	-0.010
|	Se	82	-0.681 ug/L	40.301	-13	-0.000
[	Kr	83	ug/L		55	0.001
[>	Lu	175	ug/L		70372	70371.610
|	Tl	205	1.044 ug/L	3.249	3292	0.045
[	U	238	5.168 ug/L	0.856	20410	0.288

Sample ID: 244128010

Report Date/Time: Saturday, January 16, 2010 02:59:21

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
|>	Sc	45		101.3		
[	Ni	60				
|>	Ge	74		91.4		
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				
|>	Lu	175		100.4		
|	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, January 16, 2010 03:01:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\QC Std 6.135

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	53.982 ug/L	2.453	392	0.004
>	Sc	45	ug/L		96301	96301.498
[	Ni	60	49.380 ug/L	1.988	8208	0.085
>	Ge	74	ug/L		59277	59276.675
|	As	75	50.414 ug/L	0.906	9326	0.153
|	Se	77	ug/L		1703	0.005
|	Se	82	49.490 ug/L	2.209	809	0.014
|	Kr	83	ug/L		19	0.000
>	Lu	175	ug/L		72094	72093.842
|	Tl	205	50.163 ug/L	1.350	155201	2.151
[	U	238	51.521 ug/L	1.704	207182	2.872

Sample ID: QC Std 6

Report Date/Time: Saturday, January 16, 2010 03:02:11

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Diff	Dup. Rel.	% Diff
[	Be	9		107.965								
[>	Sc	45						98.0				
[	Ni	60		98.760								
[>	Ge	74						99.7				
[	As	75		100.828								
[	Se	77										
[	Se	82		98.979								
[	Kr	83										
[>	Lu	175						102.9				
[	Tl	205		100.326								
[	U	238		103.042								

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, January 16, 2010 03:04:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\QC Std 7.136

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	0.284	ug/L	184.883	5	0.000
[> Sc	45		ug/L		97114	97114.300
[Ni	60	-0.005	ug/L	289.718	15	-0.000
[> Ge	74		ug/L		58852	58851.578
[As	75	0.850	ug/L	125.649	384	0.003
[Se	77		ug/L		1290	-0.002
[Se	82	0.492	ug/L	51.456	5	0.000
[Kr	83		ug/L		15	-0.000
[> Lu	175		ug/L		70732	70731.717
[Tl	205	0.211	ug/L	2.671	783	0.009
[U	238	0.022	ug/L	6.572	225	0.001

Sample ID: QC Std 7

Report Date/Time: Saturday, January 16, 2010 03:04:56

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
[>	Sc	45		98.8		
[	Ni	60				
[>	Ge	74		99.0		
[	As	75				
[	Se	77				
[	Se	82				
[	Kr	83				
[>	Lu	175		100.9		
[	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 244128011

Sample Date/Time: Saturday, January 16, 2010 03:06:57

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\244128011.137

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	5.319 ug/L	5.091	42	0.000
[>	Sc	45	ug/L		97197	97196.856
[	Ni	60	35.495 ug/L	2.172	5960	0.061
[>	Ge	74	ug/L		54814	54813.510
|	As	75	11.260 ug/L	4.096	2093	0.034
|	Se	77	ug/L		710	-0.011
|	Se	82	-0.235 ug/L	256.494	-7	-0.000
[	Kr	83	ug/L		46	0.001
[>	Lu	175	ug/L		69598	69597.836
|	Tl	205	1.099 ug/L	1.428	3421	0.047
[	U	238	7.814 ug/L	1.425	30450	0.436

Sample ID: 244128011

Report Date/Time: Saturday, January 16, 2010 03:07:40

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
[>	Sc	45			98.9		
[	Ni	60					
[>	Ge	74			92.2		
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175			99.3		
[	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 244128012

Sample Date/Time: Saturday, January 16, 2010 03:09:40

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\244128012.138

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	6.430 ug/L	21.957	51	0.000
[>	Sc	45	ug/L		99930	99930.404
[	Ni	60	46.835 ug/L	1.349	8079	0.081
[>	Ge	74	ug/L		54777	54777.036
|	As	75	12.650 ug/L	7.472	2323	0.038
|	Se	77	ug/L		818	-0.009
|	Se	82	-1.496 ug/L	5.745	-26	-0.000
[	Kr	83	ug/L		67	0.001
[>	Lu	175	ug/L		68573	68572.556
|	Tl	205	1.176 ug/L	5.384	3597	0.050
[	U	238	5.705 ug/L	2.136	21940	0.318

Sample ID: 244128012

Report Date/Time: Saturday, January 16, 2010 03:10:23

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
[>	Sc	45			101.7		
[	Ni	60					
[>	Ge	74			92.2		
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175			97.8		
[	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 244128013

Sample Date/Time: Saturday, January 16, 2010 03:12:24

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\244128013.139

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	5.999 ug/L	35.305	48	0.000
[>	Sc	45	ug/L		99046	99046.211
[	Ni	60	40.657 ug/L	1.612	6953	0.070
[>	Ge	74	ug/L		55798	55798.056
[	As	75	9.506 ug/L	1.498	1833	0.029
[	Se	77	ug/L		798	-0.010
[	Se	82	-0.469 ug/L	80.843	-10	-0.000
[	Kr	83	ug/L		47	0.001
[>	Lu	175	ug/L		70020	70019.577
[	Tl	205	0.998 ug/L	3.519	3138	0.043
[	U	238	32.961 ug/L	1.124	128783	1.837

Sample ID: 244128013

Report Date/Time: Saturday, January 16, 2010 03:13:08

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear 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		100.8		
[	Ni	60				
|>	Ge	74		93.9		
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				
|>	Lu	175		99.9		
|	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 244128014

Sample Date/Time: Saturday, January 16, 2010 03:15:09

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\244128014.140

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	5.589	ug/L	25.682	44	0.000
[>	Sc 45		ug/L		98194	98193.664
[	Ni 60	34.204	ug/L	2.816	5802	0.059
[>	Ge 74		ug/L		55533	55533.319
[	As 75	7.999	ug/L	12.922	1567	0.024
[	Se 77		ug/L		703	-0.011
[	Se 82	-0.245	ug/L	26.691	-7	-0.000
[	Kr 83		ug/L		43	0.000
[>	Lu 175		ug/L		71142	71141.779
[	Tl 205	0.906	ug/L	1.889	2909	0.039
[	U 238	19.521	ug/L	2.145	77541	1.088

Sample ID: 244128014

Report Date/Time: Saturday, January 16, 2010 03:15:53

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
[>	Sc	45			99.9		
[	Ni	60					
[>	Ge	74			93.4		
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175			101.5		
[	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 244128015

Sample Date/Time: Saturday, January 16, 2010 03:17:54

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\244128015.141

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	5.599 ug/L	4.330	45	0.000
[>	Sc	45	ug/L		98615	98614.903
[	Ni	60	33.861 ug/L	2.431	5768	0.058
[>	Ge	74	ug/L		54909	54909.228
|	As	75	9.458 ug/L	0.963	1796	0.029
|	Se	77	ug/L		688	-0.011
|	Se	82	-0.407 ug/L	107.100	-9	-0.000
[	Kr	83	ug/L		43	0.000
[>	Lu	175	ug/L		69268	69268.218
|	Tl	205	1.110 ug/L	1.736	3438	0.048
[	U	238	2.985 ug/L	1.963	11661	0.166

Sample ID: 244128015

Report Date/Time: Saturday, January 16, 2010 03:18:38

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear 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		100.4		
[	Ni	60				
|>	Ge	74		92.4		
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				
|>	Lu	175		98.8		
|	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 244128016

Sample Date/Time: Saturday, January 16, 2010 03:20:40

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\244128016.142

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	5.481 ug/L	7.159	44	0.000
>	Sc	45	ug/L		98303	98303.108
[	Ni	60	38.714 ug/L	1.906	6572	0.067
>	Ge	74	ug/L		54997	54997.219
|	As	75	10.085 ug/L	2.193	1904	0.031
|	Se	77	ug/L		664	-0.012
|	Se	82	-0.052 ug/L	965.793	-4	-0.000
[	Kr	83	ug/L		46	0.001
>	Lu	175	ug/L		70551	70551.182
|	Tl	205	1.057 ug/L	2.048	3340	0.045
[	U	238	6.992 ug/L	1.231	27631	0.390

Sample ID: 244128016

Report Date/Time: Saturday, January 16, 2010 03:21:24

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear 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		92.5		
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				
|>	Lu	175		100.7		
|	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 244128017

Sample Date/Time: Saturday, January 16, 2010 03:23:25

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\244128017.143

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	6.074 ug/L	8.941	48	0.000
[>	Sc	45	ug/L		97582	97582.487
[	Ni	60	35.031 ug/L	1.371	5906	0.060
[>	Ge	74	ug/L		54479	54479.241
|	As	75	9.596 ug/L	8.401	1803	0.029
|	Se	77	ug/L		733	-0.010
|	Se	82	-1.403 ug/L	49.515	-24	-0.000
[	Kr	83	ug/L		53	0.001
[>	Lu	175	ug/L		69420	69420.327
|	Tl	205	1.128 ug/L	1.689	3499	0.048
[	U	238	3.509 ug/L	1.224	13714	0.196

Sample ID: 244128017

Report Date/Time: Saturday, January 16, 2010 03:24:08

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
[>	Sc	45		99.3		
[	Ni	60				
[>	Ge	74		91.7		
[	As	75				
[	Se	77				
[	Se	82				
[	Kr	83				
[>	Lu	175		99.0		
[	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 244128018

Sample Date/Time: Saturday, January 16, 2010 03:26:09

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\244128018.144

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	6.079 ug/L	24.921	48	0.000
[>	Sc	45	ug/L		98870	98870.276
[	Ni	60	34.110 ug/L	0.775	5827	0.059
[>	Ge	74	ug/L		54808	54807.512
|	As	75	10.144 ug/L	9.443	1906	0.031
|	Se	77	ug/L		688	-0.011
|	Se	82	-0.474 ug/L	15.756	-10	-0.000
[	Kr	83	ug/L		46	0.001
[>	Lu	175	ug/L		69650	69650.410
|	Tl	205	0.997 ug/L	5.232	3118	0.043
[	U	238	8.985 ug/L	2.617	35020	0.501

Sample ID: 244128018

Report Date/Time: Saturday, January 16, 2010 03:26:52

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear 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			100.6		
[	Ni	60					
[>	Ge	74			92.2		
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175			99.4		
[	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 244128019

Sample Date/Time: Saturday, January 16, 2010 03:28:53

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\244128019.145

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	7.220 ug/L	18.680	57	0.001
[>	Sc	45	ug/L		99518	99517.573
[	Ni	60	36.104 ug/L	2.954	6205	0.062
[>	Ge	74	ug/L		54522	54521.722
[	As	75	8.301 ug/L	11.153	1591	0.025
[	Se	77	ug/L		711	-0.011
[	Se	82	-0.878 ug/L	27.754	-16	-0.000
[	Kr	83	ug/L		51	0.001
[>	Lu	175	ug/L		70007	70006.822
[	Tl	205	1.026 ug/L	1.913	3223	0.044
[	U	238	3.496 ug/L	0.611	13777	0.195

Sample ID: 244128019

Report Date/Time: Saturday, January 16, 2010 03:29:36

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
[>	Sc	45		101.3		
[	Ni	60				
[>	Ge	74		91.7		
[	As	75				
[	Se	77				
[	Se	82				
[	Kr	83				
[>	Lu	175		99.9		
[	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 244128020

Sample Date/Time: Saturday, January 16, 2010 03:31:38

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\244128020.146

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	6.907 ug/L	13.410	54	0.001
>	Sc	45	ug/L		98511	98511.177
[	Ni	60	33.164 ug/L	1.401	5645	0.057
>	Ge	74	ug/L		54563	54562.565
|	As	75	8.909 ug/L	3.232	1694	0.027
|	Se	77	ug/L		720	-0.011
|	Se	82	-0.185 ug/L	162.087	-6	-0.000
[	Kr	83	ug/L		34	0.000
>	Lu	175	ug/L		70269	70269.160
|	Tl	205	1.039 ug/L	3.988	3272	0.045
[	U	238	3.264 ug/L	2.930	12916	0.182

Sample ID: 244128020

Report Date/Time: Saturday, January 16, 2010 03:32:22

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear 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		100.3		
[	Ni	60				
|>	Ge	74		91.8		
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				
|>	Lu	175		100.3		
|	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, January 16, 2010 03:34:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\QC Std 6.147

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	58.124	ug/L	3.983	423	0.004
[>	Sc 45		ug/L		96402	96401.805
[	Ni 60	50.087	ug/L	1.228	8336	0.086
[>	Ge 74		ug/L		59297	59297.420
|	As 75	50.676	ug/L	1.574	9377	0.154
|	Se 77		ug/L		1793	0.006
|	Se 82	48.711	ug/L	1.708	796	0.013
[	Kr 83		ug/L		17	-0.000
[>	Lu 175		ug/L		71476	71476.435
|	Tl 205	50.407	ug/L	1.545	154629	2.161
[	U 238	51.043	ug/L	1.042	203485	2.845

Sample ID: QC Std 6

Report Date/Time: Saturday, January 16, 2010 03:35:11

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Diff	Dup.	Rel. % Diff
[	Be	9		116.248								
|>	Sc	45					98.1					
[	Ni	60		100.174								
[>	Ge	74					99.8					
|	As	75		101.353								
|	Se	77										
|	Se	82		97.421								
[	Kr	83										
[>	Lu	175					102.0					
|	Tl	205		100.813								
[	U	238		102.085								

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be		9CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, January 16, 2010 03:37:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100115\QC Std 7.148

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.414	ug/L	115.896	6	0.000
[>	Sc 45		ug/L		97564	97563.660
[	Ni 60	0.038	ug/L	15.711	22	0.000
[>	Ge 74		ug/L		59143	59143.102
|	As 75	1.049	ug/L	39.825	421	0.003
|	Se 77		ug/L		1316	-0.002
|	Se 82	0.428	ug/L	21.492	4	0.000
[	Kr 83		ug/L		14	-0.000
[>	Lu 175		ug/L		70068	70067.786
|	Tl 205	0.197	ug/L	6.376	735	0.008
[	U 238	0.022	ug/L	23.287	222	0.001

Sample ID: QC Std 7

Report Date/Time: Saturday, January 16, 2010 03:37:57

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	0.9999
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: QC Std 7

Report Date/Time: Saturday, January 16, 2010 03:37:57

Page 2

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
[>	Sc	45			99.3		
[	Ni	60					
[>	Ge	74			99.5		
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175			100.0		
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Daily Performance Report

Sample ID: Sample

Sample Date/Time: Monday, January 25, 2010 10:15:21

Sample Description:

Method File: c:\elandata\Method\daily2.mth

Dataset File: c:\elandata\Dataset\090811\Sample.365

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	279.6	279.603	7.232	2.6
Mg	24.0	6551.7	6551.703	224.316	3.4
Co	58.9	19524.1	19524.133	162.594	0.8
Rh	102.9	43393.0	43393.008	419.775	1.0
In	114.9	59564.7	59564.726	455.300	0.8
Pb	208.0	24383.4	24383.392	43.598	0.2
[> Ba	137.9	49039.4	49039.405	331.258	0.7
[Ba++	69.0	663.8	0.014	0.000	2.5
[> Ce	139.9	58114.6	58114.574	541.645	0.9
[CeO	155.9	1381.1	0.024	0.000	1.8
Bkgd	220.0	2.7	2.700	0.908	33.6

Current Optimization File Data

Current Value	Description
0.86	Nebulizer Gas Flow
9.00	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	8.3	526.7
Co	59	17	9.8	17606.2
In	115	17	11.3	44925.9

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	605	2060	0.712
Be	9.0	9.1	2032	2045	0.713
Mg	24.0	24.0	5651	2075	0.629
Mg	25.0	25.0	5961	2080	0.752
Mg	26.0	26.1	6122	2085	0.671
Co	58.9	58.9	14167	2140	0.679
Rh	102.9	102.8	24853	2230	0.691
In	114.9	114.9	27767	2255	0.695
Ce	139.9	139.8	33839	2310	0.669
Pb	206.0	206.0	49932	2500	0.664
Pb	207.0	207.0	50113	2380	0.688
Pb	208.0	208.0	50436	2570	0.658
U	238.1	238.1	57690	2510	0.703

ICPMS#4 - Summary Report

Sample ID: Blank

Sample Date/Time: Monday, January 25, 2010 10:48:06

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\Blank.001

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		70562	
[	U	238	ug/L		7	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Simple Linear	
U	238Simple Linear	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175				
[	U	238				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Monday, January 25, 2010 10:48:19

Page 1

ICPMS#4 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Monday, January 25, 2010 10:50:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\Standard 1.002

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		71229	71228.552
[	U 238	10.000	ug/L	0.948	60117	0.844

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175					
[	U 238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Monday, January 25, 2010 10:52:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\Standard 2.003

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		71370	71369.580
[	U 238	99.975	ug/L	2.548	587354	8.231

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175					
[	U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Monday, January 25, 2010 10:54:36

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 1.004

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		70364	70363.907
[	U 238	52.666	ug/L	1.699	305082	4.336

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175		99.7			
[	U 238	105.331				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Monday, January 25, 2010 10:54:47

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Monday, January 25, 2010 10:56:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 2.005

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		67652	67651.830
[	U 238	0.019	ug/L	7.663	115	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175		95.9			
[	U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Monday, January 25, 2010 10:59:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 3.006

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		70012	70012.214
[	U 238	0.228	ug/L	1.188	1323	0.019

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175		99.2			
[	U 238	114.119				

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: Monday, January 25, 2010 11:01:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 4.007

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		66109	66108.971
[	U 238	0.003	ug/L	24.116	25	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175		93.7			
[	U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Monday, January 25, 2010 11:03:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 5.008

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		64803	64802.658
[	U 238	20.513	ug/L	1.294	109445	1.689

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175		91.8			
[	U 238	102.565				

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: Monday, January 25, 2010 11:05:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 6.009

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		66608	66607.627
[	U 238	50.864	ug/L	0.662	278958	4.188

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175		94.4			
[	U 238	101.727				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Monday, January 25, 2010 11:05:47

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, January 25, 2010 11:07:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 7.010

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		66809	66808.564
[	U 238	0.017	ug/L	18.292	99	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175		94.7			
[	U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Monday, January 25, 2010 11:08:01

Page 1

ICPMS#4 - Summary Report

Sample ID: 1202011693

Sample Date/Time: Monday, January 25, 2010 11:10:01

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 940077|2|skj

Method File: c:\elandata\Method\w only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\1202011693.011

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		68614	68614.069
[	U 238	0.069	ug/L	2.375	396	0.006

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175		97.2			
[	U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202011694

Sample Date/Time: Monday, January 25, 2010 11:12:12

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 940077[40]skj

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\1202011694.012

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		68991	68990.570
[	U 238	0.534	ug/L	0.835	3040	0.044

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175		97.8			
[	U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 244128001

Sample Date/Time: Monday, January 25, 2010 11:14:23

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940077[2]skj

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\244128001.013

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		69892	69891.922
[	U 238	4.556	ug/L	1.203	26227	0.375

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175		99.1			
[	U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128001

Report Date/Time: Monday, January 25, 2010 11:14:35

Page 1

ICPMS#4 - Summary Report

Sample ID: 244128002

Sample Date/Time: Monday, January 25, 2010 11:16:36

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940077|2|skj

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\244128002.014

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		69056	69056.223
[	U 238	7.165	ug/L	1.377	40739	0.590

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175		97.9			
[	U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128002

Report Date/Time: Monday, January 25, 2010 11:16:48

Page 1

ICPMS#4 - Summary Report

Sample ID: 244128003

Sample Date/Time: Monday, January 25, 2010 11:18:49

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940077[2]skj

Method File: c:\elandata\Method\lu only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\244128003.015

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		67614	67613.672
[	U	238	ug/L	1.533	230851	3.415

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		95.8		
[	U	238				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128003

Report Date/Time: Monday, January 25, 2010 11:19:01

Page 1

ICPMS#4 - Summary Report

Sample ID: 244128004

Sample Date/Time: Monday, January 25, 2010 11:21:02

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940077[2]skj

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\244128004.016

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		68142	68141.840
[U	238	8.494	ug/L	1.193	47655	0.699

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu	175			96.6		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128004

Report Date/Time: Monday, January 25, 2010 11:21:15

Page 1

ICPMS#4 - Summary Report

Sample ID: 244128005

Sample Date/Time: Monday, January 25, 2010 11:23:16

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940077[2]skj

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\244128005.017

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		68010	68009.922
[	U	238	9.773 ug/L	0.687	54733	0.805

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		96.4		
[	U	238				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128005

Report Date/Time: Monday, January 25, 2010 11:23:29

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, January 25, 2010 11:25:29

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 6.018

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		65297	65296.542
[	U 238	49.814	ug/L	2.164	267815	4.101

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175		92.5			
[	U 238	99.628				

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 7

Sample Date/Time: Monday, January 25, 2010 11:27:43

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 7.019

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		63567	63567.105
[	U 238	0.014	ug/L	10.045	79	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175		90.1			
[	U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202011695

Sample Date/Time: Monday, January 25, 2010 11:32:07

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 940077|2|skj

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\1202011695.021

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		66824	66824.274
[	U 238	22.499	ug/L	0.976	123800	1.852

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175			94.7		
[	U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011695

Report Date/Time: Monday, January 25, 2010 11:32:19

Page 1

ICPMS#4 - Summary Report

Sample ID: 1202011696

Sample Date/Time: Monday, January 25, 2010 11:34:19

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 940077|2|skj

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\1202011696.022

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu 175		ug/L		67182	67181.631
L	U 238	57.076	ug/L	0.304	315712	4.699

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu 175			95.2		
L	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: 1202011698

Sample Date/Time: Monday, January 25, 2010 11:36:32

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 940077|2|skj

Method File: c:\elandata\Method\lu only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\1202011698.023

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		66383	66382.539
[	U 238	44.933	ug/L	1.402	245588	3.699

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175		94.1			
[	U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011698

Report Date/Time: Monday, January 25, 2010 11:36:45

Page 1

ICPMS#4 - Summary Report

Sample ID: 1202011697

Sample Date/Time: Monday, January 25, 2010 11:38:46

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 940077|10|skj

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\1202011697.024

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		63492	63492.417
[	U 238	3.766	ug/L	1.407	19694	0.310

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175		90.0			
[	U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011697

Report Date/Time: Monday, January 25, 2010 11:38:58

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, January 25, 2010 11:40:59

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 6.025

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		63507	63507.227
[	U 238	49.378	ug/L	0.462	258205	4.065

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175		90.0			
[	U 238	98.757				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Monday, January 25, 2010 11:41:10

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, January 25, 2010 11:43:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only no lrs.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 7.026

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		63466	63466.300
[	U 238	0.018	ug/L	6.189	98	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175			89.9		
[	U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Monday, January 25, 2010 11:43:25

Page 1

ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Tuesday, January 19, 2010 13:23:15

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default2\Sample.1712

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	2101.0	2100.955	60.430	2.9
Mg	24.0	32124.3	32124.286	529.371	1.6
Co	58.9	71722.0	71722.005	704.635	1.0
Rh	102.9	135750.5	135750.541	345.800	0.3
In	114.9	183626.7	183626.677	1434.560	0.8
Pb	208.0	189160.8	189160.797	1607.030	0.8
[> Ba	137.9	172804.6	172804.555	2380.667	1.4
[Ba++	69.0	2589.3	0.015	0.000	2.2
[> Ce	139.9	212183.3	212183.319	2515.737	1.2
[CeO	155.9	4358.7	0.021	0.000	1.5
Bkgd	220.0	24.4	24.400	2.408	9.9

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
8.75	Lens Voltage
1450.00	ICP RF Power
-1718.75	Analog Stage Voltage
1200.00	Pulse Stage Voltage
275.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	9.0	3839.5
Co	59	21	9.5	70049.3
In	115	21	11.5	177022.4

ICPMS #5 Instrument Tuning Report

File Name: 100119.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	588	2050	0.631
Be	9.0	9.0	2056	2070	0.619
Mg	24.0	24.0	5691	2070	0.603
Mg	25.0	25.0	5943	2070	0.600
Mg	26.0	26.0	6177	2070	0.640
Co	58.9	58.9	14184	2105	0.610
Rh	102.9	102.9	24882	2165	0.604
In	114.9	114.9	27796	2185	0.597
Ce	139.9	139.9	33868	2200	0.621
Pb	206.0	206.0	49948	2270	0.661
Pb	207.0	207.0	50159	2235	0.633
Pb	208.0	208.0	50451	2260	0.687
U	238.1	238.1	57732	2275	0.703

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Tuesday, January 19, 2010 17:57:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\Blank.085

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9		ug/L			17
Sc	45		ug/L		1368780	
Ge	74		ug/L		400237	
As	75		ug/L		-56	
Se	77		ug/L		8013	
Se	82		ug/L		-19	
Kr	83		ug/L		139	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Simple Linear	
Sc	45	Simple Linear	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
Sc	45					
Ge	74					
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Tuesday, January 19, 2010 17:58:15

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Tuesday, January 19, 2010 18:01:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\Standard 1.086

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	10.000	ug/L	4.983	3418	0.002
Sc	45		ug/L		1385638	1385637.630
Ge	74		ug/L		399580	399579.708
As	75	10.000	ug/L	6.710	10675	0.027
Se	77		ug/L		11379	0.008
Se	82	10.000	ug/L	4.323	995	0.003
Kr	83		ug/L		138	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear 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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate	Rel. % Difference
Be	9						
Sc	45						
Ge	74						
As	75						
Se	77						
Se	82						
Kr	83						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Tuesday, January 19, 2010 18:02:05

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Tuesday, January 19, 2010 18:05:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\Standard 2.087

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	100.015	ug/L	1.184	33100	0.025
Sc	45		ug/L		1326698	1326698.061
Ge	74		ug/L		390141	390140.647
As	75	100.072	ug/L	0.846	112998	0.290
Se	77		ug/L		15406	0.019
Se	82	100.041	ug/L	1.367	10308	0.026
Kr	83		ug/L		146	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45					
Ge	74					
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Tuesday, January 19, 2010 18:05:56

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Tuesday, January 19, 2010 18:09:19

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\QC Std 1.088

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.477	ug/L	2.012	17249	0.013
Sc	45		ug/L		1342906	1342905.547
Ge	74		ug/L		389145	389145.219
As	75	47.048	ug/L	1.699	52963	0.136
Se	77		ug/L		12216	0.011
Se	82	49.653	ug/L	0.994	5095	0.013
Kr	83		ug/L		128	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9	102.954				
Sc	45		98.1			
Ge	74		97.2			
As	75	94.097				
Se	77					
Se	82	99.305				
Kr	83					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Tuesday, January 19, 2010 18:09:47

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Tuesday, January 19, 2010 18:13:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\QC Std 2.089

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.013	ug/L	264.310	21	0.000
[>	Sc	45		ug/L		1347013	1347012.921
[>	Ge	74		ug/L		394022	394021.700
|	As	75	-0.110	ug/L	81.151	-180	-0.000
|	Se	77		ug/L		7017	-0.002
|	Se	82	-0.024	ug/L	734.842	-21	-0.000
[	Kr	83		ug/L		139	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
[>	Sc	45		98.4				
[>	Ge	74		98.4				
|	As	75						
|	Se	77						
|	Se	82						
[	Kr	83						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Tuesday, January 19, 2010 18:13:43

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Tuesday, January 19, 2010 18:17:06

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\QC Std 3.090

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.601	ug/L	7.725	221	0.000
[>	Sc 45		ug/L		1361682	1361682.245
[>	Ge 74		ug/L		393622	393622.001
|	As 75	5.802	ug/L	8.541	6553	0.017
|	Se 77		ug/L		10804	0.007
|	Se 82	5.422	ug/L	8.780	546	0.001
[	Kr 83		ug/L		131	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear 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	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be 9	120.238				
[>	Sc 45		99.5			
[>	Ge 74		98.3			
|	As 75	116.031				
|	Se 77					
|	Se 82	108.433				
[	Kr 83					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 3

Report Date/Time: Tuesday, January 19, 2010 18:17:35

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Tuesday, January 19, 2010 18:20:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\QC Std 4.091

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.086	ug/L	24.531	41	0.000
Sc	45		ug/L		1221664	1221663.603
Ge	74		ug/L		356232	356232.381
As	75	-0.030	ug/L	2223.326	-74	-0.000
Se	77		ug/L		7795	0.002
Se	82	-0.892	ug/L	24.477	-100	-0.000
Kr	83		ug/L		270	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear 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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
Sc	45		89.3				
Ge	74		89.0				
As	75						
Se	77						
Se	82						
Kr	83						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 4

Report Date/Time: Tuesday, January 19, 2010 18:21:27

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Tuesday, January 19, 2010 18:24:51

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\QC Std 5.092

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	20.489	ug/L	1.738	6274	0.005
Sc	45		ug/L		1225360	1225360.226
Ge	74		ug/L		353891	353891.262
As	75	19.771	ug/L	1.623	20211	0.057
Se	77		ug/L		10475	0.010
Se	82	18.614	ug/L	2.750	1727	0.005
Kr	83		ug/L		278	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	102.445					
Sc	45		89.5				
Ge	74		88.4				
As	75	98.853					
Se	77						
Se	82	93.070					
Kr	83						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Tuesday, January 19, 2010 18:25:20

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, January 19, 2010 18:28:43

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\QC Std 6.093

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	52.444	ug/L	2.474	17148	0.013
Sc	45		ug/L		1310226	1310226.401
Ge	74		ug/L		383712	383712.075
As	75	46.326	ug/L	1.005	51427	0.134
Se	77		ug/L		11488	0.010
Se	82	49.202	ug/L	0.550	4978	0.013
Kr	83		ug/L		127	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9	104.887				
Sc	45		95.7			
Ge	74		95.9			
As	75	92.652				
Se	77					
Se	82	98.403				
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Tuesday, January 19, 2010 18:29:12

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, January 19, 2010 18:32:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\QC Std 7.094

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.019	ug/L	58.980	22	0.000
Sc	45		ug/L		1295752	1295752.421
Ge	74		ug/L		385185	385184.596
As	75	0.163	ug/L	144.491	128	0.000
Se	77		ug/L		6437	-0.003
Se	82	0.046	ug/L	249.236	-13	0.000
Kr	83		ug/L		131	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		94.7			
Ge	74		96.2			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Tuesday, January 19, 2010 18:33:07

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 10

Sample Date/Time: Tuesday, January 19, 2010 18:36:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\QC Std 10.095

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1037.949	ug/L	1.853	315261	0.259
> Sc	45		ug/L		1218259	1218259.448
> Ge	74		ug/L		352020	352020.269
As	75	858.971	ug/L	2.321	875490	2.487
Se	77		ug/L		39669	0.093
Se	82	466.328	ug/L	1.079	43419	0.123
Kr	83		ug/L		186	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9	103.795				
> Sc	45		89.0			
> Ge	74		88.0			
As	75	85.897				
Se	77					
Se	82	93.266				
Kr	83					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	As	75	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

Sample ID: QC Std 10

Report Date/Time: Tuesday, January 19, 2010 18:36:58

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 11

Sample Date/Time: Tuesday, January 19, 2010 18:40:21

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\QC Std 11.096

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	52.595	ug/L	1.776	16956	0.013
Sc	45		ug/L		1291821	1291820.676
Ge	74		ug/L		374328	374328.371
As	75	47.213	ug/L	0.787	51127	0.137
Se	77		ug/L		10898	0.009
Se	82	49.946	ug/L	2.235	4930	0.013
Kr	83		ug/L		125	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	105.189					
Sc	45		94.4				
Ge	74		93.5				
As	75	94.426					
Se	77						
Se	82	99.892					
Kr	83						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 11

Report Date/Time: Tuesday, January 19, 2010 18:40:49

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 12

Sample Date/Time: Tuesday, January 19, 2010 18:44:14

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\QC Std 12.097

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.011	ug/L	96.976	19	0.000
Sc	45		ug/L		1290337	1290336.985
Ge	74		ug/L		384743	384742.659
As	75	0.404	ug/L	33.358	397	0.001
Se	77		ug/L		6018	-0.004
Se	82	-0.003	ug/L	2121.901	-18	-0.000
Kr	83		ug/L		132	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
Sc	45		94.3				
Ge	74		96.1				
As	75						
Se	77						
Se	82						
Kr	83						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 12

Report Date/Time: Tuesday, January 19, 2010 18:44:45

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202011760

Sample Date/Time: Tuesday, January 19, 2010 18:48:08

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 940107[2]prb

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\1202011760.098

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.013	ug/L	103.388	21	0.000
Sc	45		ug/L		1333874	1333873.804
Ge	74		ug/L		382556	382555.712
As	75	0.145	ug/L	220.005	106	0.000
Se	77		ug/L		5836	-0.005
Se	82	0.083	ug/L	25.117	-9	0.000
Kr	83		ug/L		117	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		97.4			
Ge	74		95.6			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011760

Report Date/Time: Tuesday, January 19, 2010 18:48:36

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202011761

Sample Date/Time: Tuesday, January 19, 2010 18:51:59

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 940107140|prb

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\1202011761.099

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	24.679	ug/L	0.925	8145	0.006
> Sc	45		ug/L		1321160	1321159.940
> Ge	74		ug/L		385364	385364.362
As	75	31.408	ug/L	2.476	34994	0.091
Se	77		ug/L		14370	0.017
Se	82	87.452	ug/L	1.780	8899	0.023
Kr	83		ug/L		141	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
> Sc	45		96.5			
> Ge	74		96.3			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011761

Report Date/Time: Tuesday, January 19, 2010 18:52:28

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, January 19, 2010 19:03:36

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\QC Std 6.102

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	53.757	ug/L	1.302	17668	0.013
[>	Sc	45		ug/L		1316994	1316993.550
[>	Ge	74		ug/L		385622	385621.553
|	As	75	47.493	ug/L	2.729	52978	0.138
|	Se	77		ug/L		11357	0.009
|	Se	82	50.243	ug/L	0.267	5109	0.013
[	Kr	83		ug/L		138	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9	107.514					
[>	Sc	45		96.2				
[>	Ge	74		96.3				
|	As	75	94.986					
|	Se	77						
|	Se	82	100.486					
[	Kr	83						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Tuesday, January 19, 2010 19:04:05

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, January 19, 2010 19:07:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\QC Std 7.103

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.017	ug/L	36.286	21	0.000
Sc	45		ug/L		1301410	1301409.589
Ge	74		ug/L		389127	389127.488
As	75	0.284	ug/L	102.024	266	0.001
Se	77		ug/L		6210	-0.004
Se	82	0.096	ug/L	64.488	-8	0.000
Kr	83		ug/L		130	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
Sc	45		95.1				
Ge	74		97.2				
As	75						
Se	77						
Se	82						
Kr	83						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Tuesday, January 19, 2010 19:08:00

Page 1

ICPMS#5 - Summary Report

Sample ID: 244128006

Sample Date/Time: Tuesday, January 19, 2010 19:19:11

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\244128006.106

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	5.129	ug/L	4.327	1743	0.001
Sc	45		ug/L		1350234	1350234.039
Ge	74		ug/L		365596	365595.708
As	75	9.119	ug/L	3.668	9603	0.026
Se	77		ug/L		4754	-0.007
Se	82	-0.872	ug/L	11.856	-101	-0.000
Kr	83		ug/L		342	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		98.6			
Ge	74		91.3			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128006

Report Date/Time: Tuesday, January 19, 2010 19:19:40

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202011762

Sample Date/Time: Tuesday, January 19, 2010 19:23:03

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\1202011762.107

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	5.348	ug/L	4.117	1808	0.001
Sc	45		ug/L		1343850	1343849.933
Ge	74		ug/L		362309	362309.098
As	75	9.537	ug/L	5.950	9955	0.028
Se	77		ug/L		4516	-0.008
Se	82	-1.028	ug/L	23.685	-115	-0.000
Kr	83		ug/L		341	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		98.2			
Ge	74		90.5			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011762

Report Date/Time: Tuesday, January 19, 2010 19:23:32

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202011763

Sample Date/Time: Tuesday, January 19, 2010 19:26:55

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\1202011763.108

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	32.560	ug/L	2.315	10924	0.008
Sc	45		ug/L		1343787	1343787.295
Ge	74		ug/L		363498	363497.785
As	75	48.592	ug/L	1.793	51096	0.141
Se	77		ug/L		5234	-0.006
Se	82	7.198	ug/L	12.420	675	0.002
Kr	83		ug/L		371	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		98.2			
Ge	74		90.8			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011763

Report Date/Time: Tuesday, January 19, 2010 19:27:24

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, January 19, 2010 19:30:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\QC Std 6.109

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	53.730	ug/L	2.268	17682	0.013
[>	Sc	45		ug/L		1318799	1318798.543
[>	Ge	74		ug/L		378995	378994.669
|	As	75	47.735	ug/L	1.285	52340	0.138
|	Se	77		ug/L		11277	0.010
|	Se	82	50.018	ug/L	2.426	4999	0.013
[	Kr	83		ug/L		134	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9	107.460					
[>	Sc	45		96.3				
[>	Ge	74		94.7				
|	As	75	95.471					
|	Se	77						
|	Se	82	100.036					
[	Kr	83						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Tuesday, January 19, 2010 19:31:15

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, January 19, 2010 19:34:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\QC Std 7.110

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.022	ug/L	97.080	23	0.000
> Sc	45		ug/L		1306292	1306292.226
> Ge	74		ug/L		388288	388287.822
As	75	-0.129	ug/L	114.398	-199	-0.000
Se	77		ug/L		5787	-0.005
Se	82	-0.067	ug/L	142.182	-25	-0.000
Kr	83		ug/L		128	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		95.4			
> Ge	74		97.0			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Tuesday, January 19, 2010 19:35:11

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202011771

Sample Date/Time: Tuesday, January 19, 2010 19:38:35

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\1202011771.111

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	34.124	ug/L	0.750	11457	0.009
Sc	45		ug/L		1344685	1344684.643
Ge	74		ug/L		361924	361924.279
As	75	48.799	ug/L	0.339	51092	0.141
Se	77		ug/L		5247	-0.006
Se	82	6.829	ug/L	7.316	637	0.002
Kr	83		ug/L		403	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		98.2			
Ge	74		90.4			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011771

Report Date/Time: Tuesday, January 19, 2010 19:39:04

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202011764

Sample Date/Time: Tuesday, January 19, 2010 19:42:28

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 940107|10|prb

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\1202011764.112

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1.101	ug/L	5.031	367	0.000
Sc	45		ug/L		1282286	1282285.826
Ge	74		ug/L		374481	374481.231
As	75	1.832	ug/L	18.761	1937	0.005
Se	77		ug/L		6023	-0.004
Se	82	-0.204	ug/L	126.738	-37	-0.000
Kr	83		ug/L		168	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
Sc	45		93.7				
Ge	74		93.6				
As	75						
Se	77						
Se	82						
Kr	83						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011764

Report Date/Time: Tuesday, January 19, 2010 19:42:58

Page 1

ICPMS#5 - Summary Report

Sample ID: 244128007

Sample Date/Time: Tuesday, January 19, 2010 19:46:22

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107[2]prb

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\244128007.113

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	7.071	ug/L	1.969	2373	0.002
Sc	45		ug/L		1336811	1336810.685
Ge	74		ug/L		363029	363029.020
As	75	10.699	ug/L	2.977	11199	0.031
Se	77		ug/L		4715	-0.007
Se	82	-1.889	ug/L	10.471	-198	-0.000
Kr	83		ug/L		446	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear 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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		97.7			
Ge	74		90.7			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128007

Report Date/Time: Tuesday, January 19, 2010 19:46:52

Page 1

ICPMS#5 - Summary Report

Sample ID: 244128008

Sample Date/Time: Tuesday, January 19, 2010 19:50:17

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107[2]prb

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\244128008.114

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	5.961	ug/L	1.813	2032	0.001
[>	Sc	45		ug/L		1356394	1356393.670
[>	Ge	74		ug/L		364691	364691.104
|	As	75	10.325	ug/L	1.045	10853	0.030
|	Se	77		ug/L		4758	-0.007
|	Se	82	-1.396	ug/L	55.612	-151	-0.000
[	Kr	83		ug/L		382	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9				
[>	Sc	45		99.1		
[>	Ge	74		91.1		
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128008

Report Date/Time: Tuesday, January 19, 2010 19:50:47

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, January 19, 2010 19:54:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\QC Std 6.115

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	53.641	ug/L	3.008	17608	0.013
Sc	45		ug/L		1315638	1315638.443
Ge	74		ug/L		378814	378813.727
As	75	47.001	ug/L	1.024	51503	0.136
Se	77		ug/L		11046	0.009
Se	82	49.225	ug/L	1.633	4917	0.013
Kr	83		ug/L		117	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	107.281					
Sc	45		96.1				
Ge	74		94.6				
As	75	94.001					
Se	77						
Se	82	98.449					
Kr	83						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Tuesday, January 19, 2010 19:54:38

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, January 19, 2010 19:58:03

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\QC Std 7.116

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.009	ug/L	208.661	19	0.000
> Sc	45		ug/L		1291785	1291785.343
> Ge	74		ug/L		380716	380716.457
| As	75	0.324	ug/L	93.151	303	0.001
| Se	77		ug/L		5956	-0.004
| Se	82	0.091	ug/L	123.254	-8	0.000
| Kr	83		ug/L		123	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear 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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
> Sc	45		94.4				
> Ge	74		95.1				
| As	75						
| Se	77						
| Se	82						
| Kr	83						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Tuesday, January 19, 2010 19:58:33

Page 1

ICPMS#5 - Summary Report

Sample ID: 244128009

Sample Date/Time: Tuesday, January 19, 2010 20:01:57

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107[2]prb

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\244128009.117

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	5.460	ug/L	2.245	1831	0.001
Sc	45		ug/L		1333210	1333209.918
Ge	74		ug/L		361477	361476.735
As	75	10.509	ug/L	3.371	10950	0.030
Se	77		ug/L		4674	-0.007
Se	82	-0.554	ug/L	55.582	-70	-0.000
Kr	83		ug/L		316	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		97.4			
Ge	74		90.3			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128009

Report Date/Time: Tuesday, January 19, 2010 20:02:26

Page 1

ICPMS#5 - Summary Report

Sample ID: 244128010

Sample Date/Time: Tuesday, January 19, 2010 20:05:49

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107[2]prb

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\244128010.118

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	7.369	ug/L	2.249	2454	0.002
[>	Sc	45		ug/L		1326373	1326373.215
[>	Ge	74		ug/L		353839	353838.877
|	As	75	10.533	ug/L	3.520	10743	0.031
|	Se	77		ug/L		4627	-0.007
|	Se	82	-1.713	ug/L	22.885	-177	-0.000
[	Kr	83		ug/L		425	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
[	Be	9				
[>	Sc	45		96.9		
[>	Ge	74		88.4		
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128010

Report Date/Time: Tuesday, January 19, 2010 20:06:18

Page 1

ICPMS#5 - Summary Report

Sample ID: 244128011

Sample Date/Time: Tuesday, January 19, 2010 20:09:42

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\244128011.119

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	5.731	ug/L	0.992	1908	0.001
Sc	45		ug/L		1324357	1324357.185
Ge	74		ug/L		355323	355323.118
As	75	12.232	ug/L	3.771	12538	0.035
Se	77		ug/L		4554	-0.007
Se	82	-0.555	ug/L	79.248	-68	-0.000
Kr	83		ug/L		351	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		96.8			
Ge	74		88.8			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128011

Report Date/Time: Tuesday, January 19, 2010 20:10:12

Page 1

ICPMS#5 - Summary Report

Sample ID: 244128012

Sample Date/Time: Tuesday, January 19, 2010 20:13:36

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\244128012.120

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	8.021	ug/L	2.741	2714	0.002
[>	Sc	45		ug/L		1348775	1348774.786
[>	Ge	74		ug/L		358002	358002.096
|	As	75	14.147	ug/L	1.704	14617	0.041
|	Se	77		ug/L		4964	-0.006
|	Se	82	-2.362	ug/L	7.600	-240	-0.001
|	Kr	83		ug/L		498	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9				
[>	Sc	45		98.5		
[>	Ge	74		89.4		
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128012

Report Date/Time: Tuesday, January 19, 2010 20:14:05

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, January 19, 2010 20:17:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\QC Std 6.121

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	54.075	ug/L	1.563	17617	0.013
[>	Sc	45		ug/L		1305569	1305569.151
[>	Ge	74		ug/L		378928	378927.735
|	As	75	46.773	ug/L	1.758	51265	0.135
|	Se	77		ug/L		11330	0.010
|	Se	82	49.446	ug/L	1.447	4940	0.013
[	Kr	83		ug/L		131	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9	108.150					
[>	Sc	45		95.4				
[>	Ge	74		94.7				
|	As	75	93.545					
|	Se	77						
|	Se	82	98.892					
[	Kr	83						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Tuesday, January 19, 2010 20:17:57

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, January 19, 2010 20:21:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\QC Std 7.122

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.002	ug/L	325.038	17	0.000
Sc	45		ug/L		1303432	1303431.886
Ge	74		ug/L		380271	380270.691
As	75	0.301	ug/L	15.870	278	0.001
Se	77		ug/L		6041	-0.004
Se	82	0.086	ug/L	199.527	-9	0.000
Kr	83		ug/L		133	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		95.2			
Ge	74		95.0			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Tuesday, January 19, 2010 20:21:52

Page 1

ICPMS#5 - Summary Report

Sample ID: 244128013

Sample Date/Time: Tuesday, January 19, 2010 20:25:17

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\244128013.123

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	5.377	ug/L	3.127	1811	0.001
Sc	45		ug/L		1338828	1338828.121
Ge	74		ug/L		364150	364150.201
As	75	10.695	ug/L	2.644	11225	0.031
Se	77		ug/L		4844	-0.007
Se	82	-0.644	ug/L	14.432	-79	-0.000
Kr	83		ug/L		332	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
Sc	45		97.8				
Ge	74		91.0				
As	75						
Se	77						
Se	82						
Kr	83						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 244128014

Sample Date/Time: Tuesday, January 19, 2010 20:29:11

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\244128014.124

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	5.145	ug/L	2.149	1698	0.001
Sc	45		ug/L		1311276	1311275.838
Ge	74		ug/L		355475	355475.180
As	75	9.190	ug/L	3.853	9407	0.027
Se	77		ug/L		4528	-0.007
Se	82	-0.612	ug/L	27.699	-74	-0.000
Kr	83		ug/L		308	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		95.8			
Ge	74		88.8			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 244128015

Sample Date/Time: Tuesday, January 19, 2010 20:33:07

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\244128015.125

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	5.223	ug/L	2.971	1730	0.001
Sc	45		ug/L		1316140	1316139.618
Ge	74		ug/L		358198	358198.006
As	75	10.240	ug/L	2.269	10572	0.030
Se	77		ug/L		4351	-0.008
Se	82	-0.951	ug/L	9.927	-107	-0.000
Kr	83		ug/L		318	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		96.2			
Ge	74		89.5			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128015

Report Date/Time: Tuesday, January 19, 2010 20:33:37

Page 1

ICPMS#5 - Summary Report

Sample ID: 244128016

Sample Date/Time: Tuesday, January 19, 2010 20:37:01

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\244128016.126

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	5.504	ug/L	1.045	1816	0.001
[>	Sc	45		ug/L		1311521	1311520.798
[>	Ge	74		ug/L		354584	354583.590
|	As	75	10.916	ug/L	2.779	11157	0.032
|	Se	77		ug/L		4401	-0.008
|	Se	82	-0.502	ug/L	30.258	-64	-0.000
[	Kr	83		ug/L		305	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9				
[>	Sc	45		95.8		
[>	Ge	74		88.6		
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128016

Report Date/Time: Tuesday, January 19, 2010 20:37:30

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, January 19, 2010 20:40:53

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\QC Std 6.127

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	54.324	ug/L	1.782	17543	0.014
Sc	45		ug/L		1294052	1294052.384
Ge	74		ug/L		371890	371890.174
As	75	46.819	ug/L	2.073	50372	0.136
Se	77		ug/L		10394	0.008
Se	82	49.643	ug/L	0.977	4868	0.013
Kr	83		ug/L		140	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	108.647					
Sc	45		94.5				
Ge	74		92.9				
As	75	93.637					
Se	77						
Se	82	99.287					
Kr	83						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Tuesday, January 19, 2010 20:41:21

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, January 19, 2010 20:44:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\QC Std 7.128

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.004	ug/L	318.685	14	-0.000
Sc	45		ug/L		1282146	1282146.091
Ge	74		ug/L		374666	374665.877
As	75	-0.136	ug/L	119.551	-200	-0.000
Se	77		ug/L		5303	-0.006
Se	82	-0.108	ug/L	313.750	-28	-0.000
Kr	83		ug/L		133	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
Sc	45		93.7				
Ge	74		93.6				
As	75						
Se	77						
Se	82						
Kr	83						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Tuesday, January 19, 2010 20:45:17

Page 1

ICPMS#5 - Summary Report

Sample ID: 244128017

Sample Date/Time: Tuesday, January 19, 2010 20:48:41

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\244128017.129

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	7.002	ug/L	1.106	2297	0.002
Sc	45		ug/L		1306365	1306364.502
Ge	74		ug/L		353671	353670.544
As	75	11.207	ug/L	2.815	11431	0.032
Se	77		ug/L		4698	-0.007
Se	82	-1.250	ug/L	20.888	-133	-0.000
Kr	83		ug/L		369	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
Sc	45		95.4			
Ge	74		88.4			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128017

Report Date/Time: Tuesday, January 19, 2010 20:49:10

Page 1

ICPMS#5 - Summary Report

Sample ID: 244128018

Sample Date/Time: Tuesday, January 19, 2010 20:52:34

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\244128018.130

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	6.648	ug/L	2.223	2200	0.002
[>	Sc	45		ug/L		1317334	1317333.508
[>	Ge	74		ug/L		354518	354518.252
|	As	75	11.974	ug/L	0.653	12244	0.035
|	Se	77		ug/L		4393	-0.008
|	Se	82	-1.564	ug/L	10.433	-163	-0.000
[	Kr	83		ug/L		378	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45		96.2			
[>	Ge	74		88.6			
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128018

Report Date/Time: Tuesday, January 19, 2010 20:53:04

Page 1

ICPMS#5 - Summary Report

Sample ID: 244128019

Sample Date/Time: Tuesday, January 19, 2010 20:56:28

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\244128019.131

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	6.921	ug/L	4.258	2303	0.002
Sc	45		ug/L		1325068	1325068.091
Ge	74		ug/L		352001	352001.073
As	75	10.369	ug/L	2.531	10520	0.030
Se	77		ug/L		4637	-0.007
Se	82	-1.191	ug/L	3.785	-127	-0.000
Kr	83		ug/L		378	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		96.8			
Ge	74		87.9			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128019

Report Date/Time: Tuesday, January 19, 2010 20:56:58

Page 1

ICPMS#5 - Summary Report

Sample ID: 244128020

Sample Date/Time: Tuesday, January 19, 2010 21:00:23

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940107|2|prb

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\244128020.132

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	6.409	ug/L	5.576	2130	0.002
[>	Sc	45		ug/L		1323278	1323277.784
[>	Ge	74		ug/L		353375	353375.206
|	As	75	10.106	ug/L	4.290	10289	0.029
|	Se	77		ug/L		4685	-0.007
|	Se	82	-1.174	ug/L	34.433	-126	-0.000
[	Kr	83		ug/L		345	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45		96.7			
[>	Ge	74		88.3			
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128020

Report Date/Time: Tuesday, January 19, 2010 21:00:53

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, January 19, 2010 21:04:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\QC Std 6.133

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	54.023	ug/L	2.272	17493	0.013
[>	Sc	45		ug/L		1297599	1297598.589
[>	Ge	74		ug/L		370341	370341.116
|	As	75	46.914	ug/L	0.698	50260	0.136
|	Se	77		ug/L		10623	0.009
|	Se	82	48.516	ug/L	0.675	4737	0.013
[	Kr	83		ug/L		119	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9	108.046					
[>	Sc	45		94.8				
[>	Ge	74		92.5				
|	As	75	93.828					
|	Se	77						
|	Se	82	97.032					
[	Kr	83						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Tuesday, January 19, 2010 21:04:45

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, January 19, 2010 21:08:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and as.mth

Dataset File: c:\elandata\Dataset\100119\QC Std 7.134

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.005	ug/L	326.074	17	0.000
Sc	45		ug/L		1284624	1284623.638
Ge	74		ug/L		373745	373745.073
As	75	0.121	ug/L	344.751	80	0.000
Se	77		ug/L		5404	-0.006
Se	82	-0.026	ug/L	475.170	-20	-0.000
Kr	83		ug/L		129	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		93.9			
Ge	74		93.4			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Tuesday, January 19, 2010 21:08:40

Page 1

ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Saturday, January 23, 2010 09:47:41

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default2\Sample.1726

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	3019.5	3019.519	118.386	3.9
Mg	24.0	46976.5	46976.533	881.611	1.9
Co	58.9	99695.9	99695.870	452.453	0.5
Rh	102.9	180107.1	180107.059	881.464	0.5
In	114.9	235202.5	235202.452	1409.922	0.6
Pb	208.0	250806.0	250806.016	2317.916	0.9
[> Ba	137.9	242063.3	242063.345	1307.503	0.5
[Ba++	69.0	4349.2	0.018	0.000	0.5
[> Ce	139.9	295506.5	295506.539	1742.009	0.6
[CeO	155.9	6366.3	0.022	0.000	1.3
Bkgd	220.0	14.3	14.300	1.754	12.3

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
8.75	Lens Voltage
1450.00	ICP RF Power
-1718.75	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	19	10.0	5916.9
Co	59	19	11.3	94445.5
In	115	19	13.0	231451.9

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	589	2050	0.636
Be	9.0	9.0	2042	2070	0.636
Mg	24.0	24.0	5691	2070	0.650
Mg	25.0	25.0	5931	2070	0.634
Mg	26.0	26.0	6168	2070	0.635
Co	58.9	58.9	14184	2105	0.632
Rh	102.9	102.9	24876	2165	0.611
In	114.9	114.9	27790	2185	0.618
Ce	139.9	139.9	33874	2200	0.628
Pb	206.0	206.0	49948	2270	0.683
Pb	207.0	207.0	50171	2235	0.675
Pb	208.0	208.0	50451	2260	0.723
U	238.1	238.1	57729	2275	0.749

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Saturday, January 23, 2010 10:21:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0123.mth

Dataset File: c:\elandata\Dataset\100122\Blank.252

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9		ug/L		14	
[>	Sc	45		ug/L		1197609	
[	Ni	60		ug/L		188	
[>	Ge	74		ug/L		460458	
|	As	75		ug/L		643	
|	Se	77		ug/L		7325	
|	Se	82		ug/L		-21	
[	Kr	83		ug/L		138	
[>	Lu	175		ug/L		488658	
|	Tl	205		ug/L		1023	
[	U	238		ug/L		111	

Sample ID: Blank

Report Date/Time: Saturday, January 23, 2010 10:21:53

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	
U	238Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
|>	Sc	45					
L	Ni	60					
[>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
L	Kr	83					
[>	Lu	175					
|	Tl	205					
L	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Saturday, January 23, 2010 10:24:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani 0123.mth

Dataset File: c:\elandata\Dataset\100122\Standard 1.253

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	10.000	ug/L	2.630	3566	0.003
[>	Sc	45		ug/L		1171133	1171132.501
[	Ni	60	10.000	ug/L	0.955	17019	0.014
[>	Ge	74		ug/L		445195	445194.681
|	As	75	10.000	ug/L	0.204	13191	0.028
|	Se	77		ug/L		8716	0.004
|	Se	82	10.000	ug/L	0.953	1137	0.003
[	Kr	83		ug/L		112	-0.000
[>	Lu	175		ug/L		488025	488024.698
|	Tl	205	10.000	ug/L	1.100	239150	0.488
[	U	238	10.000	ug/L	0.777	474390	0.972

Sample ID: Standard 1

Report Date/Time: Saturday, January 23, 2010 10:25:30

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9				
|>	Sc	45				
[	Ni	60				
[>	Ge	74				
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				
[>	Lu	175				
|	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Saturday, January 23, 2010 10:28:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0123.mth

Dataset File: c:\elandata\Dataset\100122\Standard 2.254

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	100.037	ug/L	4.619	35362	0.032
[>	Sc	45		ug/L		1121858	1121858.067
[	Ni	60	99.974	ug/L	1.064	157328	0.140
[>	Ge	74		ug/L		428711	428710.606
|	As	75	100.041	ug/L	1.194	126850	0.294
|	Se	77		ug/L		16356	0.022
|	Se	82	100.009	ug/L	0.279	11216	0.026
[	Kr	83		ug/L		138	0.000
[>	Lu	175		ug/L		468965	468965.486
|	Tl	205	99.837	ug/L	0.154	1964767	4.187
[	U	238	99.834	ug/L	0.225	3903647	8.324

Sample ID: Standard 2

Report Date/Time: Saturday, January 23, 2010 10:29:08

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

Sample ID: Standard 2

Report Date/Time: Saturday, January 23, 2010 10:29:08

Page 2

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
|>	Sc	45					
[	Ni	60					
[>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175					
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Saturday, January 23, 2010 10:32:06

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\VanI 0123.mth

Dataset File: c:\elandata\Dataset\100122\QC Std 1.255

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	50.899	ug/L	4.824	18253	0.016
[>	Sc	45		ug/L		1137642	1137642.368
[	Ni	60	52.626	ug/L	0.590	84072	0.074
[>	Ge	74		ug/L		433270	433270.102
|	As	75	49.367	ug/L	0.709	63564	0.145
|	Se	77		ug/L		12141	0.012
|	Se	82	51.353	ug/L	1.572	5810	0.013
[	Kr	83		ug/L		127	-0.000
[>	Lu	175		ug/L		469578	469577.805
|	Tl	205	53.528	ug/L	0.588	1055280	2.245
[	U	238	53.580	ug/L	2.126	2097558	4.467

Sample ID: QC Std 1

Report Date/Time: Saturday, January 23, 2010 10:32:47

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	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
[	Be	9	101.798				
|>	Sc	45		95.0			
|	Ni	60	105.253				
[>	Ge	74		94.1			
|	As	75	98.733				
|	Se	77					
|	Se	82	102.707				
|	Kr	83					
[>	Lu	175		96.1			
|	Tl	205	107.056				
|	U	238	107.160				

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: Saturday, January 23, 2010 10:35:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0123.mth

Dataset File: c:\elandata\Dataset\100122\QC Std 2.256

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.006	ug/L	60.210	16	0.000
[>	Sc	45		ug/L		1165410	1165409.567
[	Ni	60	-0.012	ug/L	81.624	164	-0.000
[>	Ge	74		ug/L		441943	441942.825
|	As	75	-0.242	ug/L	111.893	305	-0.001
|	Se	77		ug/L		7129	0.000
|	Se	82	-0.105	ug/L	34.924	-32	-0.000
[	Kr	83		ug/L		133	0.000
[>	Lu	175		ug/L		480139	480139.259
|	Tl	205	0.171	ug/L	7.065	4445	0.007
[	U	238	0.003	ug/L	21.339	229	0.000

Sample ID: QC Std 2

Report Date/Time: Saturday, January 23, 2010 10:36:30

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45		97.3			
[	Ni	60					
[>	Ge	74		96.0			
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175		98.3			
[	Tl	205					
[	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: Saturday, January 23, 2010 10:39:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0123.mth

Dataset File: c:\elandata\Dataset\100122\QC Std 3.257

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.497	ug/L	0.868	196	0.000
[>	Sc	45		ug/L		1164038	1164037.634
[	Ni	60	2.090	ug/L	3.125	3591	0.003
[>	Ge	74		ug/L		444354	444354.407
|	As	75	5.381	ug/L	5.273	7660	0.016
|	Se	77		ug/L		7626	0.001
|	Se	82	5.104	ug/L	5.896	575	0.001
[	Kr	83		ug/L		133	0.000
[>	Lu	175		ug/L		481126	481126.455
|	Tl	205	1.251	ug/L	2.052	26257	0.052
[	U	238	0.263	ug/L	2.876	10664	0.022

Sample ID: QC Std 3

Report Date/Time: Saturday, January 23, 2010 10:40:09

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	99.472				
|>	Sc	45		97.2			
|	Ni	60	104.495				
[>	Ge	74		96.5			
|	As	75	107.623				
|	Se	77					
|	Se	82	102.075				
|	Kr	83					
[>	Lu	175		98.5			
|	Tl	205	125.144				
|	U	238	131.597				

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: Saturday, January 23, 2010 10:43:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0123.mth

Dataset File: c:\elandata\Dataset\100122\QC Std 4.258

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.078	ug/L	37.853	38	0.000
[>	Sc	45		ug/L		1048703	1048702.767
[	Ni	60	3.147	ug/L	2.202	4790	0.004
[>	Ge	74		ug/L		397634	397633.726
|	As	75	0.021	ug/L	3360.044	577	0.000
|	Se	77		ug/L		9247	0.007
|	Se	82	-1.054	ug/L	20.725	-128	-0.000
[	Kr	83		ug/L		307	0.000
[>	Lu	175		ug/L		433630	433629.574
|	Tl	205	0.040	ug/L	0.889	1632	0.002
[	U	238	0.005	ug/L	4.009	289	0.000

Sample ID: QC Std 4

Report Date/Time: Saturday, January 23, 2010 10:43:49

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45			87.6		
[	Ni	60	116.543				
[>	Ge	74			86.4		
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175			88.7		
|	Tl	205					
[	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: Saturday, January 23, 2010 10:46:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0123.mth

Dataset File: c:\elandata\Dataset\100122\QC Std 5.259

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	21.495	ug/L	4.165	7079	0.007
[>	Sc	45		ug/L		1043914	1043913.529
[	Ni	60	22.389	ug/L	2.293	32907	0.031
[>	Ge	74		ug/L		398290	398290.333
|	As	75	19.961	ug/L	0.704	23961	0.059
|	Se	77		ug/L		10805	0.011
|	Se	82	19.598	ug/L	3.833	2028	0.005
[	Kr	83		ug/L		294	0.000
[>	Lu	175		ug/L		428969	428968.563
|	Tl	205	21.082	ug/L	2.385	380271	0.884
[	U	238	24.185	ug/L	1.212	865002	2.016

Sample ID: QC Std 5

Report Date/Time: Saturday, January 23, 2010 10:47:29

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	107.474				
[>	Sc	45		87.2			
[	Ni	60	98.629				
[>	Ge	74		86.5			
[	As	75	99.806				
[	Se	77					
[	Se	82	97.992				
[	Kr	83					
[>	Lu	175		87.8			
[	Tl	205	105.410				
[	U	238	120.925				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	U	238	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, January 23, 2010 10:50:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0123.mth

Dataset File: c:\elandata\Dataset\100122\QC Std 6.260

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	53.388	ug/L	2.528	18956	0.017
[> Sc	45		ug/L		1126196	1126195.989
[Ni	60	51.736	ug/L	0.919	81820	0.072
[> Ge	74		ug/L		429618	429617.559
| As	75	48.605	ug/L	0.818	62066	0.143
| Se	77		ug/L		11584	0.011
| Se	82	49.608	ug/L	4.487	5563	0.013
[Kr	83		ug/L		135	0.000
[> Lu	175		ug/L		457214	457214.460
| Tl	205	52.529	ug/L	1.495	1008255	2.203
[U	238	52.465	ug/L	1.424	1999977	4.374

Sample ID: QC Std 6

Report Date/Time: Saturday, January 23, 2010 10:51:10

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dilution	Duplicate Rel. % Difference
[	Be	9	106.776				
|>	Sc	45		94.0			
[	Ni	60	103.473				
[>	Ge	74		93.3			
|	As	75	97.211				
|	Se	77					
|	Se	82	99.217				
[	Kr	83					
[>	Lu	175		93.6			
|	Tl	205	105.058				
[	U	238	104.931				

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: Saturday, January 23, 2010 10:54:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0123.mth

Dataset File: c:\elandata\Dataset\100122\QC Std 7.261

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	-0.001	ug/L	291.727	14	-0.000
[>	Sc	45		ug/L		1181610	1181610.334
[	Ni	60	-0.003	ug/L	182.915	180	-0.000
[>	Ge	74		ug/L		446948	446947.760
|	As	75	-0.165	ug/L	253.043	406	-0.000
|	Se	77		ug/L		6959	-0.000
|	Se	82	0.075	ug/L	194.575	-11	0.000
[	Kr	83		ug/L		123	-0.000
[>	Lu	175		ug/L		464919	464919.372
|	Tl	205	0.187	ug/L	8.044	4609	0.008
[	U	238	0.005	ug/L	18.768	284	0.000

Sample ID: QC Std 7

Report Date/Time: Saturday, January 23, 2010 10:54:53

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45			98.7		
[	Ni	60					
>	Ge	74			97.1		
[	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
>	Lu	175			95.1		
|	Tl	205					
[	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: 1202011693

Sample Date/Time: Saturday, January 23, 2010 10:57:53

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 940077|2|ba|

Method File: c:\elandata\Method\ani 0123.mth

Dataset File: c:\elandata\Dataset\100122\1202011693.262

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.005	ug/L	188.418	16	0.000
|>	Sc	45		ug/L		1156908	1156907.781
[	Ni	60	0.161	ug/L	3.031	442	0.000
|>	Ge	74		ug/L		433626	433626.225
|	As	75	-0.265	ug/L	75.931	269	-0.001
|	Se	77		ug/L		5672	-0.003
|	Se	82	0.179	ug/L	73.775	1	0.000
[	Kr	83		ug/L		113	-0.000
|>	Lu	175		ug/L		469583	469583.424
|	Tl	205	0.089	ug/L	5.938	2742	0.004
[	U	238	0.063	ug/L	2.630	2569	0.005

Sample ID: 1202011693

Report Date/Time: Saturday, January 23, 2010 10:58:36

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45			96.6		
[	Ni	60					
[>	Ge	74			94.2		
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175			96.1		
[	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202011694

Sample Date/Time: Saturday, January 23, 2010 11:01:36

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 940077|40|ba|

Method File: c:\elandata\Method\lanl 0123.mth

Dataset File: c:\elandata\Dataset\100122\1202011694.263

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	19.934	ug/L	1.580	7376	0.006
[>	Sc	45		ug/L		1172343	1172342.589
[	Ni	60	34.480	ug/L	0.841	56825	0.048
[>	Ge	74		ug/L		443541	443541.241
|	As	75	26.659	ug/L	1.419	35432	0.078
|	Se	77		ug/L		13569	0.015
|	Se	82	72.573	ug/L	1.568	8416	0.019
[	Kr	83		ug/L		131	-0.000
[>	Lu	175		ug/L		471668	471667.742
|	Tl	205	33.693	ug/L	0.899	667616	1.413
[	U	238	0.593	ug/L	3.094	23423	0.049

Sample ID: 1202011694

Report Date/Time: Saturday, January 23, 2010 11:02:20

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45		97.9			
[	Ni	60					
[>	Ge	74		96.3			
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175		96.5			
[	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 244128001

Sample Date/Time: Saturday, January 23, 2010 11:05:20

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940077|2|baj

Method File: c:\elandata\Method\lanl 0123.mth

Dataset File: c:\elandata\Dataset\100122\244128001.264

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	6.452	ug/L	3.534	2464	0.002
|>	Sc	45		ug/L		1205127	1205126.676
[	Ni	60	41.837	ug/L	1.458	70835	0.059
|>	Ge	74		ug/L		402919	402918.991
|	As	75	9.960	ug/L	1.333	12374	0.029
|	Se	77		ug/L		4678	-0.004
|	Se	82	-2.004	ug/L	12.463	-230	-0.001
[	Kr	83		ug/L		463	0.001
|>	Lu	175		ug/L		463413	463413.260
|	Tl	205	1.508	ug/L	1.491	30274	0.063
[	U	238	5.626	ug/L	2.090	217457	0.469

Sample ID: 244128001

Report Date/Time: Saturday, January 23, 2010 11:06:04

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
|>	Sc	45		100.6			
|	Ni	60					
[>	Ge	74		87.5			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
[>	Lu	175		94.8			
|	Tl	205					
|	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: 244128002

Sample Date/Time: Saturday, January 23, 2010 11:09:03

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940077|2|ba|

Method File: c:\elandata\Method\lanl 0123.mth

Dataset File: c:\elandata\Dataset\100122\244128002.265

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.948	ug/L	3.762	1118	0.001
|>	Sc	45		ug/L		1188836	1188836.036
[	Ni	60	26.531	ug/L	1.304	44382	0.037
|>	Ge	74		ug/L		407208	407207.672
|	As	75	5.588	ug/L	1.570	7267	0.016
|	Se	77		ug/L		4651	-0.004
|	Se	82	-0.099	ug/L	42.305	-29	-0.000
[	Kr	83		ug/L		273	0.000
|>	Lu	175		ug/L		471251	471251.059
|	Tl	205	0.824	ug/L	2.402	17268	0.035
[	U	238	8.575	ug/L	0.260	337040	0.715

Sample ID: 244128002

Report Date/Time: Saturday, January 23, 2010 11:09:45

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45			99.3		
[	Ni	60					
[>	Ge	74			88.4		
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175			96.4		
[	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 244128003

Sample Date/Time: Saturday, January 23, 2010 11:12:45

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940077|2|baj

Method File: c:\elandata\Method\lanl 0123.mth

Dataset File: c:\elandata\Dataset\100122\244128003.266

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	4.516	ug/L	6.539	1873	0.001
|>	Sc	45		ug/L		1167409	1167408.677
[	Ni	60	31.621	ug/L	2.152	51900	0.044
|>	Ge	74		ug/L		393453	393453.421
|	As	75	7.965	ug/L	4.796	9773	0.023
|	Se	77		ug/L		4383	-0.005
|	Se	82	-0.234	ug/L	170.568	-42	-0.000
[	Kr	83		ug/L		296	0.000
|>	Lu	175		ug/L		456976	456975.814
|	Tl	205	0.972	ug/L	3.195	19575	0.041
[	U	238	42.908	ug/L	1.888	1634687	3.577

Sample ID: 244128003

Report Date/Time: Saturday, January 23, 2010 11:13:27

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
> Sc	45		97.5			
Ni	60					
> Ge	74		85.4			
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175		93.5			
Tl	205					
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: 244128004

Sample Date/Time: Saturday, January 23, 2010 11:16:27

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940077[2]ba]

Method File: c:\elandata\Method\lanl 0123.mth

Dataset File: c:\elandata\Dataset\100122\244128004.267

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	5.780	ug/L	5.018	2145	0.002
|>	Sc	45		ug/L		1171182	1171182.025
[	Ni	60	35.452	ug/L	2.420	58341	0.050
[>	Ge	74		ug/L		396199	396198.964
|	As	75	10.538	ug/L	2.394	12844	0.031
|	Se	77		ug/L		4114	-0.006
|	Se	82	-1.110	ug/L	1.554	-133	-0.000
[	Kr	83		ug/L		373	0.001
[>	Lu	175		ug/L		449851	449851.097
|	Tl	205	1.143	ug/L	4.591	22508	0.048
[	U	238	10.304	ug/L	1.924	386619	0.859

Sample ID: 244128004

Report Date/Time: Saturday, January 23, 2010 11:17:10

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45		97.8			
[	Ni	60					
[>	Ge	74		86.0			
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175		92.1			
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 244128005

Sample Date/Time: Saturday, January 23, 2010 11:20:10

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940077|2|ba|

Method File: c:\elandata\Method\lanl 0123.mth

Dataset File: c:\elandata\Dataset\100122\244128005.268

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	5.123	ug/L	3.652	1919	0.002
|>	Sc	45		ug/L		1181059	1181059.103
[	Ni	60	34.700	ug/L	0.669	57606	0.049
[>	Ge	74		ug/L		396847	396847.334
|	As	75	10.028	ug/L	1.118	12270	0.030
|	Se	77		ug/L		4190	-0.005
|	Se	82	-0.864	ug/L	72.009	-108	-0.000
[	Kr	83		ug/L		344	0.001
[>	Lu	175		ug/L		455472	455471.750
|	Tl	205	1.056	ug/L	2.295	21135	0.044
[	U	238	11.714	ug/L	2.214	444904	0.977

Sample ID: 244128005

Report Date/Time: Saturday, January 23, 2010 11:20:53

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45		98.6			
[	Ni	60					
[>	Ge	74		86.2			
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175		93.2			
|	Tl	205					
[	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: Saturday, January 23, 2010 11:23:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0123.mth

Dataset File: c:\elandata\Dataset\100122\QC Std 8.269

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	56.813	ug/L	2.242	19867	0.018
[>	Sc	45		ug/L		1109315	1109315.251
[	Ni	60	50.972	ug/L	1.180	79407	0.071
[>	Ge	74		ug/L		418730	418730.497
|	As	75	48.352	ug/L	0.465	60185	0.142
|	Se	77		ug/L		10893	0.010
|	Se	82	50.321	ug/L	2.738	5501	0.013
[	Kr	83		ug/L		125	-0.000
[>	Lu	175		ug/L		446009	446008.963
|	Tl	205	52.123	ug/L	1.284	975831	2.186
[	U	238	52.414	ug/L	0.840	1948972	4.370

Sample ID: QC Std 8

Report Date/Time: Saturday, January 23, 2010 11:24:34

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	113.625				
[>	Sc	45		92.6			
[	Ni	60	101.945				
[>	Ge	74		90.9			
[	As	75	96.704				
[	Se	77					
[	Se	82	100.643				
[	Kr	83					
[>	Lu	175		91.3			
[	Tl	205	104.245				
[	U	238	104.829				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Be		9CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Saturday, January 23, 2010 11:27:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani 0123.mth

Dataset File: c:\elandata\Dataset\100122\QC Std 9.270

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.009	ug/L	212.819	17	0.000
|>	Sc	45		ug/L		1145898	1145898.161
[	Ni	60	-0.005	ug/L	165.089	171	-0.000
[>	Ge	74		ug/L		426383	426382.734
|	As	75	-0.184	ug/L	120.039	367	-0.001
|	Se	77		ug/L		6378	-0.001
|	Se	82	0.181	ug/L	61.816	1	0.000
[	Kr	83		ug/L		128	0.000
[>	Lu	175		ug/L		451485	451484.891
|	Tl	205	0.115	ug/L	5.911	3122	0.005
[	U	238	0.002	ug/L	9.947	194	0.000

Sample ID: QC Std 9

Report Date/Time: Saturday, January 23, 2010 11:28:17

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45		95.7			
[	Ni	60					
[>	Ge	74		92.6			
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175		92.4			
[	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202011695

Sample Date/Time: Saturday, January 23, 2010 11:35:01

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 940077[2]ba]

Method File: c:\elandata\Method\lanl 0123.mth

Dataset File: c:\elandata\Dataset\100122\1202011695.272

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.688	ug/L	3.590	940	0.001
|>	Sc	45		ug/L		1094728	1094728.415
[	Ni	60	14.033	ug/L	2.071	21698	0.020
|>	Ge	74		ug/L		372303	372303.387
|	As	75	7.616	ug/L	1.681	8866	0.022
|	Se	77		ug/L		3880	-0.005
|	Se	82	0.393	ug/L	29.730	22	0.000
[	Kr	83		ug/L		200	0.000
|>	Lu	175		ug/L		428179	428178.606
|	Tl	205	0.420	ug/L	1.077	8434	0.018
[	U	238	25.597	ug/L	1.095	913804	2.134

Sample ID: 1202011695

Report Date/Time: Saturday, January 23, 2010 11:35:45

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
|>	Sc	45			91.4		
[	Ni	60					
|>	Ge	74			80.9		
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
|>	Lu	175			87.6		
|	Tl	205					
[	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: 1202011696

Sample Date/Time: Saturday, January 23, 2010 11:38:46

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 940077|2|baj

Method File: c:\elandata\Method\lanl 0123.mth

Dataset File: c:\elandata\Dataset\100122\1202011696.273

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	32.219	ug/L	2.795	11213	0.010
|> Sc	45		ug/L		1103637	1103636.996
[Ni	60	42.731	ug/L	1.328	66262	0.060
|> Ge	74		ug/L		372363	372363.231
| As	75	48.816	ug/L	0.475	54032	0.144
| Se	77		ug/L		4625	-0.003
| Se	82	9.881	ug/L	3.715	947	0.003
[Kr	83		ug/L		232	0.000
|> Lu	175		ug/L		432219	432218.677
| Tl	205	52.393	ug/L	0.471	950686	2.198
[U	238	56.328	ug/L	0.884	2029860	4.696

Sample ID: 1202011696

Report Date/Time: Saturday, January 23, 2010 11:39:30

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45			92.2		
[	Ni	60					
[>	Ge	74			80.9		
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175			88.5		
[	Tl	205					
[	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: 1202011698

Sample Date/Time: Saturday, January 23, 2010 11:42:29

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 940077[2]ba]

Method File: c:\elandata\Method\lanl 0123.mth

Dataset File: c:\elandata\Dataset\100122\1202011698.274

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	31.148	ug/L	1.707	10633	0.010
|>	Sc	45		ug/L		1082409	1082408.989
[	Ni	60	38.000	ug/L	0.221	57804	0.053
|>	Ge	74		ug/L		371671	371671.058
|	As	75	45.013	ug/L	2.322	49753	0.133
|	Se	77		ug/L		4453	-0.004
|	Se	82	9.145	ug/L	3.391	874	0.002
[	Kr	83		ug/L		198	0.000
|>	Lu	175		ug/L		430058	430058.465
|	Tl	205	49.399	ug/L	1.143	891970	2.072
[	U	238	46.621	ug/L	1.655	1671399	3.887

Sample ID: 1202011698

Report Date/Time: Saturday, January 23, 2010 11:43:11

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dilution	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45		90.4			
[	Ni	60					
[>	Ge	74		80.7			
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175		88.0			
|	Tl	205					
[	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: 1202011697

Sample Date/Time: Saturday, January 23, 2010 11:46:11

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 940077|10|baj

Method File: c:\elandata\Method\lanl 0123.mth

Dataset File: c:\elandata\Dataset\100122\1202011697.275

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.542	ug/L	9.233	188	0.000
|>	Sc	45		ug/L		1026639	1026639.077
[	Ni	60	2.993	ug/L	2.607	4467	0.004
|>	Ge	74		ug/L		374370	374369.862
|	As	75	1.494	ug/L	15.507	2169	0.004
|	Se	77		ug/L		4773	-0.003
|	Se	82	0.117	ug/L	107.204	-5	0.000
[	Kr	83		ug/L		132	0.000
|>	Lu	175		ug/L		415203	415203.413
|	Tl	205	0.166	ug/L	1.246	3761	0.007
[	U	238	4.273	ug/L	1.909	148035	0.356

Sample ID: 1202011697

Report Date/Time: Saturday, January 23, 2010 11:46:54

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
|>	Sc	45		85.7			
|	Ni	60					
[>	Ge	74		81.3			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
[>	Lu	175		85.0			
|	Tl	205					
|	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: Saturday, January 23, 2010 12:01:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani 0123.mth

Dataset File: c:\elandata\Dataset\100122\QC Std 8.279

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	62.088	ug/L	4.125	19762	0.020
|>	Sc	45		ug/L		1010175	1010174.984
[	Ni	60	49.966	ug/L	1.609	70895	0.070
[>	Ge	74		ug/L		374881	374881.074
|	As	75	48.381	ug/L	1.263	53917	0.142
|	Se	77		ug/L		9195	0.009
|	Se	82	50.092	ug/L	1.750	4904	0.013
[	Kr	83		ug/L		120	0.000
[>	Lu	175		ug/L		406117	406117.142
|	Tl	205	51.665	ug/L	1.761	880954	2.167
[	U	238	52.162	ug/L	2.298	1766313	4.349

Sample ID: QC Std 8

Report Date/Time: Saturday, January 23, 2010 12:01:46

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	124.176				
[>	Sc	45		84.3			
[	Ni	60	99.932				
[>	Ge	74		81.4			
[	As	75	96.762				
[	Se	77					
[	Se	82	100.185				
[	Kr	83					
[>	Lu	175		83.1			
[	Tl	205	103.330				
[	U	238	104.325				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Be		9CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Saturday, January 23, 2010 12:04:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0123.mth

Dataset File: c:\elandata\Dataset\100122\QC Std 9.280

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.008	ug/L	100.302	15	0.000
|>	Sc	45		ug/L		1017488	1017488.489
[	Ni	60	-0.012	ug/L	69.014	143	-0.000
|>	Ge	74		ug/L		379548	379548.344
|	As	75	-0.314	ug/L	106.181	185	-0.001
|	Se	77		ug/L		5113	-0.002
|	Se	82	0.077	ug/L	266.680	-9	0.000
[	Kr	83		ug/L		110	-0.000
|>	Lu	175		ug/L		411699	411698.864
|	Tl	205	0.104	ug/L	6.543	2665	0.004
[	U	238	0.003	ug/L	18.702	182	0.000

Sample ID: QC Std 9

Report Date/Time: Saturday, January 23, 2010 12:05:29

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45		85.0			
[	Ni	60					
[>	Ge	74		82.4			
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175		84.3			
[	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Saturday, January 23, 2010 18:48:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\tl only.mth

Dataset File: c:\elandata\Dataset\100122\Blank.392

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		360013	
[	Tl	205		ug/L		811	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	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

Sample ID: Blank

Report Date/Time: Saturday, January 23, 2010 18:48:53

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Saturday, January 23, 2010 18:53:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\tl only.mth

Dataset File: c:\elandata\Dataset\100122\Standard 1.393

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		349784	349783.753
[	Tl	205	10.000	ug/L	1.266	157298	0.447

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 % Recovery	Dilution %	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

Sample ID: Standard 1

Report Date/Time: Saturday, January 23, 2010 18:53:20

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Saturday, January 23, 2010 18:57:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\tl only.mth

Dataset File: c:\elandata\Dataset\100122\Standard 2.394

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		367953	367952.749
[	TI	205	99.874 ug/L	1.872	1460154	3.968

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	0.9999

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175				
[	TI	205				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Saturday, January 23, 2010 19:02:05

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l only.mth

Dataset File: c:\elandata\Dataset\100122\QC Std 1.395

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		373193	373193.132
[	Tl	205	51.721	ug/L	2.819	767227	2.055

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175			103.7			
[	Tl	205	103.443					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Saturday, January 23, 2010 19:02:14

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Saturday, January 23, 2010 19:06:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l only.mth

Dataset File: c:\elandata\Dataset\100122\QC Std 2.396

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		384601	384600.813
[	Tl	205	0.090	ug/L	4.232	2240	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		106.8			
[	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

Sample ID: QC Std 2

Report Date/Time: Saturday, January 23, 2010 19:06:46

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Saturday, January 23, 2010 19:11:05

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\tl only.mth

Dataset File: c:\elandata\Dataset\100122\QC Std 3.397

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		376683	376682.863
[	Tl	205	1.184	ug/L	0.585	18571	0.047

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			104.6		
[	Tl	205	118.413				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 3

Report Date/Time: Saturday, January 23, 2010 19:11:15

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Saturday, January 23, 2010 19:15:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l only.mth

Dataset File: c:\elandata\Dataset\100122\QC Std 4.398

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		385474	385473.740
[	Tl	205	0.021	ug/L	9.548	1189	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		107.1			
[	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

Sample ID: QC Std 4

Report Date/Time: Saturday, January 23, 2010 19:15:44

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Saturday, January 23, 2010 19:20:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\dl only.mth

Dataset File: c:\elandata\Dataset\100122\QC Std 5.399

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		384445	384444.976
[	Tl	205	19.756	ug/L	1.802	302567	0.785

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		106.8			
[	Tl	205	98.782				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Saturday, January 23, 2010 19:20:13

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, January 23, 2010 19:24:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\tl only.mth

Dataset File: c:\elandata\Dataset\100122\QC Std 6.400

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		388253	388253.418
[	Tl	205	50.778	ug/L	1.383	784062	2.018

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			107.8			
[	Tl	205	101.557					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Saturday, January 23, 2010 19:24:43

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, January 23, 2010 19:29:03

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l only.mth

Dataset File: c:\elandata\Dataset\100122\QC Std 7.401

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		403795	403795.089
[	Tl	205	0.100	ug/L	4.506	2521	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		112.2			
[	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

Sample ID: QC Std 7

Report Date/Time: Saturday, January 23, 2010 19:29:15

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202011693

Sample Date/Time: Saturday, January 23, 2010 19:33:35

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 940077|2|ba|

Method File: c:\elandata\Method\tl only.mth

Dataset File: c:\elandata\Dataset\100122\1202011693.402

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		387285	387284.647
[	Tl 205	0.056	ug/L	8.220	1731	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu 175		107.6			
[	Tl 205					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011693

Report Date/Time: Saturday, January 23, 2010 19:33:47

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202011694

Sample Date/Time: Saturday, January 23, 2010 19:38:07

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 940077|40|baj

Method File: c:\elandata\Method\tl only.mth

Dataset File: c:\elandata\Dataset\100122\1202011694.403

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		403237	403236.697
[	Tl	205	30.790	ug/L	2.018	494030	1.223

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		112.0			
[	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 244128001

Sample Date/Time: Saturday, January 23, 2010 19:42:40

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940077|2|baj

Method File: c:\elandata\Method\l only.mth

Dataset File: c:\elandata\Dataset\100122\244128001.404

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		385657	385657.177
[	Tl	205	1.329	ug/L	0.446	21235	0.053

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		107.1			
[	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

Sample ID: 244128001

Report Date/Time: Saturday, January 23, 2010 19:42:53

Page 1

ICPMS#5 - Summary Report

Sample ID: 244128002

Sample Date/Time: Saturday, January 23, 2010 19:47:12

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940077|2|baj

Method File: c:\elandata\Method\tl only.mth

Dataset File: c:\elandata\Dataset\100122\244128002.405

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		385702	385702.282
[	Tl	205	0.718	ug/L	2.805	11868	0.029

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175		107.1			
[	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: 244128003

Sample Date/Time: Saturday, January 23, 2010 19:51:43

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940077|2|baj

Method File: c:\elandata\Method\tl only.mth

Dataset File: c:\elandata\Dataset\100122\244128003.406

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		364272	364272.306
[	Tl	205	0.877	ug/L	2.297	13512	0.035

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	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

Sample ID: 244128003

Report Date/Time: Saturday, January 23, 2010 19:51:54

Page 1

ICPMS#5 - Summary Report

Sample ID: 244128004

Sample Date/Time: Saturday, January 23, 2010 19:56:14

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940077[2]ba]

Method File: c:\elandata\Method\l only.mth

Dataset File: c:\elandata\Dataset\100122\244128004.407

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		365810	365810.069
[	Tl	205	1.018	ug/L	2.721	15611	0.040

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		101.6			
[	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128004

Report Date/Time: Saturday, January 23, 2010 19:56:26

Page 1

ICPMS#5 - Summary Report

Sample ID: 244128005

Sample Date/Time: Saturday, January 23, 2010 20:00:46

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940077|2|ba|

Method File: c:\elandata\Method\tl only.mth

Dataset File: c:\elandata\Dataset\100122\244128005.408

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		369300	369300.491
[TI	205	0.967	ug/L	0.960	15023	0.038

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Lu	175		102.6			
[TI	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128005

Report Date/Time: Saturday, January 23, 2010 20:00:58

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Saturday, January 23, 2010 20:05:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\tl only.mth

Dataset File: c:\elandata\Dataset\100122\QC Std 8.409

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		359389	359388.709
[	TI	205	49.515	ug/L	1.257	707690	1.967

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175		99.8			
[	TI	205	99.030				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Saturday, January 23, 2010 20:05:28

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Saturday, January 23, 2010 20:09:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: c:\elandata\Dataset\100122\QC Std 9.410

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		366549	366548.819
[	Tl	205	0.069	ug/L	4.607	1833	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recov	Dilution	% Dil	Duplicate	Rel. % Difference
[>	Lu	175					101.8					
[	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

Sample ID: QC Std 9

Report Date/Time: Saturday, January 23, 2010 20:10:00

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202011695

Sample Date/Time: Saturday, January 23, 2010 20:18:53

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 940077|2|baj

Method File: c:\elandata\Method\l only.mth

Dataset File: c:\elandata\Dataset\100122\1202011695.412

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		349519	349519.320
[	TI	205	0.376	ug/L	2.178	6004	0.015

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175		97.1			
[	TI	205					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011695

Report Date/Time: Saturday, January 23, 2010 20:19:06

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202011696

Sample Date/Time: Saturday, January 23, 2010 20:23:27

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 940077|2|ba|

Method File: c:\elandata\Method\ti only.mth

Dataset File: c:\elandata\Dataset\100122\1202011696.413

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		357916	357915.697
[	TI	205	49.244	ug/L	2.423	700667	1.957

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		99.4			
[	TI	205					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011696

Report Date/Time: Saturday, January 23, 2010 20:23:40

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202011698

Sample Date/Time: Saturday, January 23, 2010 20:27:59

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 940077|2|baj

Method File: c:\elandata\Method\l only.mth

Dataset File: c:\elandata\Dataset\100122\1202011698.414

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		355415	355414.709
[	Tl	205	47.235	ug/L	2.274	667502	1.877

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			98.7		
[	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011698

Report Date/Time: Saturday, January 23, 2010 20:28:11

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202011697

Sample Date/Time: Saturday, January 23, 2010 20:32:30

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 940077|10|baj

Method File: c:\elandata\Method\l only.mth

Dataset File: c:\elandata\Dataset\100122\1202011697.415

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		348467	348466.630
[	Tl 205	0.115	ug/L	3.686	2382	0.005

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu 175		96.8			
[	Tl 205					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011697

Report Date/Time: Saturday, January 23, 2010 20:32:42

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Saturday, January 23, 2010 20:50:39

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\tl only.mth

Dataset File: c:\elandata\Dataset\100122\QC Std 8.419

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		337891	337890.748
[	TI	205	49.595	ug/L	1.975	666315	1.971

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			93.9		
[	TI	205	99.190				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Saturday, January 23, 2010 20:50:50

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Saturday, January 23, 2010 20:55:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\dl only.mth

Dataset File: c:\elandata\Dataset\100122\QC Std 9.420

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		348942	348942.457
[	Tl	205	0.061	ug/L	4.811	1634	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	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

Sample ID: QC Std 9

Report Date/Time: Saturday, January 23, 2010 20:55:22

Page 1

ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Sunday, January 24, 2010 12:32:20

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default2\Sample.1744

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	2517.0	2517.022	73.747	2.9
Mg	24.0	37608.2	37608.248	590.113	1.6
Co	58.9	75402.3	75402.282	688.003	0.9
Rh	102.9	139404.7	139404.691	734.179	0.5
In	114.9	194564.7	194564.664	1769.852	0.9
Pb	208.0	211131.0	211131.027	1912.120	0.9
[> Ba	137.9	183368.7	183368.743	2127.934	1.2
[Ba++	69.0	2810.4	0.015	0.000	0.7
[> Ce	139.9	223045.8	223045.814	1616.742	0.7
[CeO	155.9	4848.4	0.022	0.000	2.2
Bkgd	220.0	15.8	15.800	2.168	13.7

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
8.75	Lens Voltage
1450.00	ICP RF Power
-1718.75	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	19	8.8	4557.4
Co	59	19	10.0	76159.8
In	115	19	11.3	194713.0

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	590	2050	0.622
Be	9.0	9.0	2062	2070	0.601
Mg	24.0	24.0	5691	2070	0.592
Mg	25.0	24.9	5931	2070	0.623
Mg	26.0	26.0	6160	2070	0.612
Co	58.9	58.9	14185	2105	0.595
Rh	102.9	102.9	24882	2165	0.603
In	114.9	114.9	27796	2185	0.590
Ce	139.9	139.9	33868	2200	0.613
Pb	206.0	206.0	49948	2270	0.636
Pb	207.0	207.0	50171	2235	0.668
Pb	208.0	208.0	50439	2260	0.696
U	238.1	238.0	57726	2260	0.743

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Sunday, January 24, 2010 12:38:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100124\Blank.001

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9		ug/L		15	
Sc	45		ug/L		1026669	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Simple Linear	
Sc	45	Simple Linear	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Sunday, January 24, 2010 12:38:44

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Sunday, January 24, 2010 12:40:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100124\Standard 1.002

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	10.000	ug/L	1.341	4087	0.004
Sc	45		ug/L		1005529	1005528.740

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type: Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Sunday, January 24, 2010 12:40:21

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Sunday, January 24, 2010 12:41:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100124\Standard 2.003

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	99.985	ug/L	1.573	40592	0.040
Sc	45		ug/L		1016853	1016853.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Sunday, January 24, 2010 12:41:58

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Sunday, January 24, 2010 12:43:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100124\QC Std 1.004

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	51.092	ug/L	0.546	21048	0.020
Sc	45		ug/L		1031341	1031341.270	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recov	Dilution	% Di	Duplicate	Rel. % Difference
[	Be	9		102.185								
Sc	45				100.5							

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Sunday, January 24, 2010 12:43:36

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Sunday, January 24, 2010 12:45:06

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100124\QC Std 2.005

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.000	ug/L	3471.227	15	-0.000
Sc	45		ug/L		1032798	1032797.617

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		100.6			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Sunday, January 24, 2010 12:46:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100124\QC Std 3.006

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.553	ug/L	4.929	240	0.000
Sc	45		ug/L		1019178	1019177.643

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
Be	9	110.547					
Sc	45		99.3				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Sunday, January 24, 2010 12:48:24

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100124\QC Std 4.007

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.057	ug/L	35.191	37	0.000
Sc	45		ug/L		978602	978602.061

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
Sc	45		95.3				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 4

Report Date/Time: Sunday, January 24, 2010 12:48:35

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Sunday, January 24, 2010 12:50:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100124\QC Std 5.008

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	19.607	ug/L	2.726	7506	0.008
Sc	45		ug/L		957503	957502.512

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Be	9	98.036				
Sc	45		93.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Sunday, January 24, 2010 12:50:14

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, January 24, 2010 12:51:43

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100124\QC Std 6.009

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	50.936	ug/L	1.048	20597	0.020
>	Sc	45		ug/L		1012449	1012448.598

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Diff	Duplicate	Rel. % Difference
[	Be	9		101.872								
>	Sc	45				98.6						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, January 24, 2010 12:53:24

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100124\QC Std 7.010

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.001	ug/L	1843.232	16	0.000
>	Sc	45		ug/L		1033056	1033055.827

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		100.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Sunday, January 24, 2010 12:53:36

Page 1

ICPMS#5 - Summary Report

Sample ID: 244128001

Sample Date/Time: Sunday, January 24, 2010 12:58:23

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940077|2|baj

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100124\244128001.013

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	6.401	ug/L	2.161	2770	0.003
Sc	45		ug/L		1077682	1077682.283

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		105.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128001

Report Date/Time: Sunday, January 24, 2010 12:58:34

Page 1

ICPMS#5 - Summary Report

Sample ID: 244128002

Sample Date/Time: Sunday, January 24, 2010 13:00:03

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940077|2|baj

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100124\244128002.014

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	2.996	ug/L	3.572	1257	0.001
Sc	45		ug/L		1038896	1038895.766

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
Sc	45		101.2			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 244128003

Sample Date/Time: Sunday, January 24, 2010 13:01:43

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940077|2|ba|

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100124\244128003.015

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	4.293	ug/L	1.679	1820	0.002
Sc	45		ug/L		1053073	1053073.121

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		102.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128003

Report Date/Time: Sunday, January 24, 2010 13:01:55

Page 1

ICPMS#5 - Summary Report

Sample ID: 244128004

Sample Date/Time: Sunday, January 24, 2010 13:03:25

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940077|2|ba|

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100124\244128004.016

Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	5.300		ug/L	3.002	2268	0.002
>	Sc	45			ug/L		1064659	1064659.406

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Dil	Duplicate	Rel. % Difference
[	Be	9										
>	Sc	45				103.7						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out Of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128004

Report Date/Time: Sunday, January 24, 2010 13:03:36

Page 1

ICPMS#5 - Summary Report

Sample ID: 244128005

Sample Date/Time: Sunday, January 24, 2010 13:05:06

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940077|2|baj

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100124\244128005.017

Concentration Results

Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	5.464		ug/L	6.890	2207	0.002
Sc	45			ug/L		1007777	1007777.021

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
Be	9					
Sc	45		98.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244128005

Report Date/Time: Sunday, January 24, 2010 13:05:18

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, January 24, 2010 13:06:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100124\QC Std 8.018

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	53.054	ug/L	0.756	20920	0.021
Sc	45		ug/L		987172	987171.712

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9	106.108				
Sc	45		96.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Sunday, January 24, 2010 13:06:58

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, January 24, 2010 13:08:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100124\QC Std 9.019

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.006	ug/L	171.423	17	0.000
Sc	45		ug/L		982603	982602.893

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		95.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Sunday, January 24, 2010 13:08:40

Page 1

ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Monday, January 25, 2010 10:06:01

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default2\Sample.1750

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		3797.9		3797.905		55.830		1.5
Mg	24.0		41866.7		41866.664		413.504		1.0
Co	58.9		89574.0		89573.957		663.666		0.7
Rh	102.9		166042.0		166041.981		567.518		0.3
In	114.9		222043.5		222043.538		1016.649		0.5
Pb	208.0		242059.8		242059.850		2131.441		0.9
[> Ba	137.9		227089.5		227089.518		838.861		0.4
[Ba++	69.0		4144.4		0.018		0.000		1.2
[> Ce	139.9		278563.8		278563.808		2005.002		0.7
[CeO	155.9		6175.5		0.022		0.000		1.6
Bkgd	220.0		15.5		15.500		1.225		7.9

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
8.75	Lens Voltage
1450.00	ICP RF Power
-1718.75	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	23	10.3	4722.4
Co	59	23	11.0	89272.7
In	115	23	12.3	230319.1

ICPMS #5 Instrument Tuning Report

File Name: 100125.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	590	2050	0.661
Be	9.0	9.1	2059	2070	0.641
Mg	24.0	24.0	5689	2070	0.614
Mg	25.0	25.0	5941	2070	0.625
Mg	26.0	26.0	6164	2070	0.651
Co	58.9	58.9	14182	2105	0.614
Rh	102.9	102.9	24875	2165	0.614
In	114.9	114.9	27789	2185	0.615
Ce	139.9	139.9	33873	2200	0.633
Pb	206.0	206.0	49948	2270	0.673
Pb	207.0	207.0	50159	2235	0.664
Pb	208.0	208.0	50451	2260	0.722
U	238.1	238.1	57726	2275	0.736

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Monday, January 25, 2010 10:16:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100125\Blank.001

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9		ug/L		12	
Sc	45		ug/L		826937	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Simple Linear	
Sc	45	Simple Linear	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Monday, January 25, 2010 10:16:37

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Monday, January 25, 2010 10:18:05

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100125\Standard 1.002

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	10.000	ug/L	3.810	4696	0.006
Sc	45		ug/L		821375	821374.902

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Monday, January 25, 2010 10:19:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100125\Standard 2.003

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	100.030	ug/L	1.829	47288	0.059
Sc	45		ug/L		803340	803340.107

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Monday, January 25, 2010 10:19:51

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Monday, January 25, 2010 10:21:19

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 1.004

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	50.696	ug/L	2.593	24321	0.030
Sc	45		ug/L		815169	815168.691

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
Be	9	101.391				
Sc	45		98.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Monday, January 25, 2010 10:22:59

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 2.005

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	-0.003	ug/L	373.323	11	-0.000
>	Sc	45		ug/L		847573	847573.389

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference	
[	Be	9						
> <td></td> <td>Sc</td> <td>45</td> <td></td> <td>102.5</td> <td></td> <td></td> <td></td> <td></td>		Sc	45		102.5				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Monday, January 25, 2010 10:24:39

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 3.006

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.555	ug/L	3.386	284	0.000
Sc	45		ug/L		832183	832182.928

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9	110.927				
Sc	45		100.6			

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 3

Report Date/Time: Monday, January 25, 2010 10:24:49

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Monday, January 25, 2010 10:26:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 4.007

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.064	ug/L	19.083	40	0.000
Sc	45		ug/L		769643	769642.868

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		93.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 4

Report Date/Time: Monday, January 25, 2010 10:26:28

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Monday, January 25, 2010 10:27:57

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 5.008

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	18.715	ug/L	2.541	8355	0.011
Sc	45		ug/L		757796	757796.288

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Be	9	93.575				
Sc	45		91.6			

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
------------------	---------	----------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, January 25, 2010 10:29:36

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 6.009

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.661	ug/L	1.208	24541	0.030
Sc	45		ug/L		807059	807059.498

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9	103.322				
Sc	45		97.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, January 25, 2010 10:31:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 7.010

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.002	ug/L	380.429	13	0.000
Sc	45		ug/L		835144	835143.797

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Be	9					
Sc	45		101.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Monday, January 25, 2010 10:31:29

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202011693

Sample Date/Time: Monday, January 25, 2010 10:32:58

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 940077|2|ba|

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100125\1202011693.011

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.018	ug/L	20.964	20	0.000
Sc	45		ug/L		801813	801813.160

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
Sc	45		97.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202011694

Sample Date/Time: Monday, January 25, 2010 10:34:36

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 940077|40|baj

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100125\1202011694.012

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	21.475	ug/L	0.632	10534	0.013
Sc	45		ug/L		832729	832728.832

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		100.7			

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011694

Report Date/Time: Monday, January 25, 2010 10:34:47

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202011695

Sample Date/Time: Monday, January 25, 2010 10:37:55

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 940077|2|ba|

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100125\1202011695.014

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	2.345	ug/L	4.103	1139	0.001
Sc	45		ug/L		816892	816892.197

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		98.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202011696

Sample Date/Time: Monday, January 25, 2010 10:39:35

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 940077|2|baj

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100125\1202011696.015

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	28.183	ug/L	1.911	13911	0.017
Sc	45		ug/L		838237	838237.008

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
Be	9					
Sc	45		101.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202011698

Sample Date/Time: Monday, January 25, 2010 10:41:16

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 940077[2]ba]

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100125\1202011698.016

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	26.494	ug/L	3.688	12720	0.016
Sc	45		ug/L		815490	815489.751

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Be	9					
Sc	45		98.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202011697

Sample Date/Time: Monday, January 25, 2010 10:42:57

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 940077|10|bej

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100125\1202011697.017

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.542	ug/L	4.918	252	0.000
Sc	45		ug/L		756972	756972.271

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
Be	9					
Sc	45		91.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, January 25, 2010 10:44:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 6.018

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean	
[	Be	9	53.108	ug/L	2.164	23778	0.031
>	Sc	45		ug/L		760838	760837.715

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	106.215				
>	Sc	45		92.0			

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, January 25, 2010 10:46:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 7.019

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.012	ug/L	44.434	17	0.000
Sc	45		ug/L		782376	782375.717

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		94.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Monday, January 25, 2010 10:46:30

Page 1

=====
Analysis BegunLogged In Analyst: Administrator
Spectrometer Model: FIMS-100, S/N B050-9550Technique: AA FIMS-MHS
Autosampler Model: S10

Sample Information File: C:\data-AA\Administrator\Sample Information\012210S1.sif

Batch ID:

Results Data Set: 102210S1

Results Library: C:\data-AA\Administrator\Results\Results.mdb

=====
Method Loaded

Method Name: SOIL

Method Last Saved: 1/4/2010 13:53:20

Method Description: 7471A, ILM04 ANALYST JXL

Sequence No.: 1

Autosampler Location: 1

Sample ID: Calib Blank

Date Collected: 1/22/2010 07:50:13

Analyst:

Data Type: Original

Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0001	0.0008	0.0001	07:51:03	Yes
2		[0.00]	0.0001	0.0008	0.0001	07:51:33	Yes
Mean:		[0.00]	0.0001				
SD:		0.00	0.0000				
%RSD:		0.00	2.24				

Auto-zero performed.

Sequence No.: 2

Autosampler Location: 2

Sample ID: S0.2

Date Collected: 1/22/2010 07:51:52

Analyst:

Data Type: Original

Replicate Data: S0.2

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0024	0.0102	0.0025	07:52:42	Yes
2		[0.2]	0.0024	0.0100	0.0025	07:53:12	Yes
Mean:		[0.2]	0.0024				
SD:		0.0	0.0000				
%RSD:		0.0	0.02				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01177 Intercept: 0.00000

Sequence No.: 3

Autosampler Location: 3

Sample ID: S0.5

Date Collected: 1/22/2010 07:53:31

Analyst:

Data Type: Original

Replicate Data: S0.5

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0059	0.0243	0.0061	07:54:23	Yes
2		[0.5]	0.0059	0.0245	0.0061	07:54:52	Yes
Mean:		[0.5]	0.0059				
SD:		0.0	0.0000				
%RSD:		0.0	0.22				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999998 Slope: 0.01183 Intercept: -0.00000

Sequence No.: 4

Autosampler Location: 4

Sample ID: S2.0

Date Collected: 1/22/2010 07:55:12

Analyst:

Data Type: Original

Replicate Data: S2.0

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[2.0]	0.0238	0.0968	0.0240	07:56:04	Yes
2		[2.0]	0.0239	0.0965	0.0241	07:56:34	Yes
Mean:		[2.0]	0.0239				
SD:		0.0	0.0001				
%RSD:		0.0	0.28				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999997 Slope: 0.01195 Intercept: -0.00003

=====

Sequence No.: 5

Sample ID: S5.0

Analyst:

Autosampler Location: 5

Date Collected: 1/22/2010 07:56:53

Data Type: Original

Replicate Data: S5.0

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[5.0]	0.0589	0.2368	0.0590	07:57:46	Yes
2		[5.0]	0.0583	0.2359	0.0584	07:58:15	Yes
Mean:		[5.0]	0.0586				
SD:		0.0	0.0004				
%RSD:		0.0	0.75				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999967 Slope: 0.01172 Intercept: 0.00009

=====

Sequence No.: 6

Sample ID: S10.0

Analyst:

Autosampler Location: 6

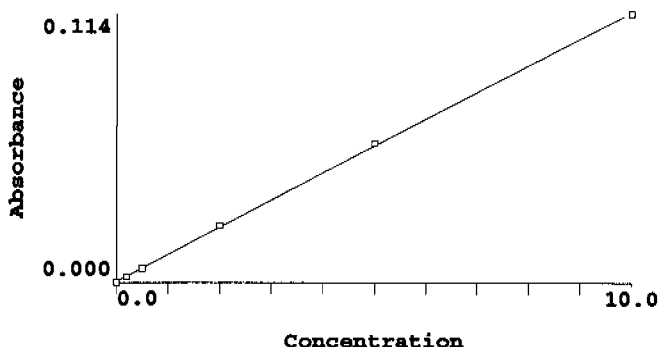
Date Collected: 1/22/2010 07:58:36

Data Type: Original

Replicate Data: S10.0

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[10.0]	0.1147	0.4623	0.1149	07:59:26	Yes
2		[10.0]	0.1139	0.4592	0.1140	07:59:56	Yes
Mean:		[10.0]	0.1143				
SD:		0.0	0.0006				
%RSD:		0.0	0.54				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999907 Slope: 0.01145 Intercept: 0.00040

-----
Calibration data for Hg 253.7

Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	-0.035	0.00	2.2
S0.2	0.0024	0.2	0.170	0.00	0.0
S0.5	0.0059	0.5	0.481	0.00	0.2
S2.0	0.0239	2.0	2.051	0.00	0.3

S5.0 0.0586 5.0 5.082 0.00 0.8
S10.0 0.1143 10.0 9.950 0.00 0.5
Correlation Coef.: 0.999907 Slope: 0.01145 Intercept: 0.00040

Sequence No.: 7

Sample ID: ICV

Analyst:

Autosampler Location: 9

Date Collected: 1/22/2010 08:00:15

Data Type: Original

Replicate Data: ICV

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.093	5.093	0.0587	0.2375	0.0589	08:01:06	Yes
2	5.071	5.071	0.0585	0.2343	0.0586	08:01:36	Yes
Mean:	5.082	5.082	0.0586				
SD:	0.015	0.015	0.0002				
%RSD:	0.302	0.302	0.30				

QC value within limits for Hg 253.7 Recovery = 101.65%
All analyte(s) passed QC.

Sequence No.: 8

Sample ID: ICB

Analyst:

Autosampler Location: 10

Date Collected: 1/22/2010 08:01:55

Data Type: Original

Replicate Data: ICB

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.032	-0.032	0.0000	0.0005	0.0002	08:02:47	Yes
2	-0.032	-0.032	0.0000	0.0005	0.0002	08:03:17	Yes
Mean:	-0.032	-0.032	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.887	0.887	9.18				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9

Sample ID: CRDL

Analyst:

Autosampler Location: 11

Date Collected: 1/22/2010 08:03:37

Data Type: Original

Replicate Data: CRDL

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.176	0.176	0.0024	0.0102	0.0026	08:04:28	Yes
2	0.173	0.173	0.0024	0.0102	0.0025	08:04:58	Yes
Mean:	0.174	0.174	0.0024				
SD:	0.002	0.002	0.0000				
%RSD:	0.947	0.947	0.79				

QC value within limits for Hg 253.7 Recovery = 87.23%
All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 1/22/2010 08:05:18

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.106	5.106	0.0588	0.2380	0.0590	08:06:09	Yes
2	5.102	5.102	0.0588	0.2378	0.0590	08:06:39	Yes
Mean:	5.104	5.104	0.0588				
SD:	0.003	0.003	0.0000				
%RSD:	0.053	0.053	0.05				

QC value within limits for Hg 253.7 Recovery = 102.07%
All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB
Analyst:

Autosampler Location: 8
Date Collected: 1/22/2010 08:06:58
Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.031	-0.031	0.0000	0.0005	0.0002	08:07:49	Yes
2	-0.026	-0.026	0.0001	0.0014	0.0003	08:08:19	Yes
Mean:	-0.028	-0.028	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	12.88	12.88	52.96				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12
Sample ID: 1202016531|942011|1
Analyst: JXL

Autosampler Location: 12
Date Collected: 1/22/2010 08:08:38
Data Type: Original

Replicate Data: 1202016531|942011|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.038	-0.038	-0.0000	0.0000	0.0001	08:09:30	Yes
2	-0.039	-0.039	-0.0000	0.0003	0.0001	08:09:59	Yes
Mean:	-0.039	-0.039	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	1.849	1.849	21.66				

Sequence No.: 13
Sample ID: 1202016532|942011|1
Analyst: JXL

Autosampler Location: 13
Date Collected: 1/22/2010 08:10:20
Data Type: Original

Replicate Data: 1202016532|942011|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.071	2.071	0.0241	0.0972	0.0243	08:11:12	Yes
2	2.062	2.062	0.0240	0.0975	0.0242	08:11:42	Yes
Mean:	2.067	2.067	0.0241				
SD:	0.006	0.006	0.0001				
%RSD:	0.288	0.288	0.28				

Sequence No.: 14
Sample ID: 244102001|942011|1
Analyst: JXL

Autosampler Location: 14
Date Collected: 1/22/2010 08:12:02
Data Type: Original

Replicate Data: 244102001|942011|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.115	0.115	0.0017	0.0071	0.0019	08:12:52	Yes
2	0.114	0.114	0.0017	0.0067	0.0019	08:13:22	Yes
Mean:	0.114	0.114	0.0017				
SD:	0.000	0.000	0.0000				
%RSD:	0.410	0.410	0.31				

Sequence No.: 15
Sample ID: 1202016533|942011|1
Analyst: JXL

Autosampler Location: 15
Date Collected: 1/22/2010 08:13:41
Data Type: Original

Replicate Data: 1202016533|942011|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
------	------------	---------	---------	------	------	------	------

Replicate Data: 244102003|942011|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.250	0.250	0.0033	0.0132	0.0034	08:22:48	Yes
2	0.255	0.255	0.0033	0.0133	0.0035	08:23:18	Yes
Mean:	0.252	0.252	0.0033				
SD:	0.004	0.004	0.0000				
%RSD:	1.509	1.509	1.32				

Sequence No.: 21

Autosampler Location: 21

Sample ID: 244108001|942011|1

Date Collected: 1/22/2010 08:23:38

Analyst: JXL

Data Type: Original

Replicate Data: 244108001|942011|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.179	0.179	0.0025	0.0101	0.0026	08:24:29	Yes
2	0.178	0.178	0.0024	0.0100	0.0026	08:24:59	Yes
Mean:	0.179	0.179	0.0024				
SD:	0.000	0.000	0.0000				
%RSD:	0.200	0.200	0.17				

Sequence No.: 22

Autosampler Location: 7

Sample ID: CCV

Date Collected: 1/22/2010 08:25:18

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.121	5.121	0.0590	0.2382	0.0592	08:26:08	Yes
2	5.082	5.082	0.0586	0.2364	0.0587	08:26:38	Yes
Mean:	5.102	5.102	0.0588				
SD:	0.028	0.028	0.0003				
%RSD:	0.545	0.545	0.54				

QC value within limits for Hg 253.7 Recovery = 102.03%
All analyte(s) passed QC.

Sequence No.: 23

Autosampler Location: 8

Sample ID: CCB

Date Collected: 1/22/2010 08:26:57

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.033	-0.033	0.0000	0.0003	0.0002	08:27:48	Yes
2	-0.030	-0.030	0.0001	0.0004	0.0002	08:28:18	Yes
Mean:	-0.031	-0.031	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	6.341	6.341	49.96				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 24

Autosampler Location: 22

Sample ID: 244108002|942011|1

Date Collected: 1/22/2010 08:28:37

Analyst: JXL

Data Type: Original

Replicate Data: 244108002|942011|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.249	0.249	0.0032	0.0132	0.0034	08:29:29	Yes
2	0.244	0.244	0.0032	0.0126	0.0033	08:29:58	Yes

Mean: 0.246 0.246 0.0032
SD: 0.003 0.003 0.0000
%RSD: 1.270 1.270 1.11

Sequence No.: 25

Autosampler Location: 23

Sample ID: 244108003|942011|1

Date Collected: 1/22/2010 08:30:18

Analyst: JXL

Data Type: Original

Replicate Data: 244108003|942011|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.269	0.269	0.0035	0.0143	0.0036	08:31:09	Yes
2	0.274	0.274	0.0035	0.0148	0.0037	08:31:39	Yes
Mean:	0.272	0.272	0.0035				
SD:	0.003	0.003	0.0000				
%RSD:	1.130	1.130	1.00				

Sequence No.: 26

Autosampler Location: 24

Sample ID: 1202019637|943262|1

Date Collected: 1/22/2010 08:31:59

Analyst: JXL

Data Type: Original

Replicate Data: 1202019637|943262|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.029	-0.029	0.0001	0.0003	0.0002	08:32:51	Yes
2	-0.037	-0.037	-0.0000	-0.0005	0.0001	08:33:21	Yes
Mean:	-0.033	-0.033	0.0000				
SD:	0.006	0.006	0.0001				
%RSD:	17.32	17.32	207.79				

Sequence No.: 27

Autosampler Location: 25

Sample ID: 1202019638|943262|10

Date Collected: 1/22/2010 08:33:41

Analyst: JXL

Data Type: Original

Replicate Data: 1202019638|943262|10

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	3.628	3.628	0.0419	0.1702	0.0421	08:34:33	Yes
2	3.637	3.637	0.0420	0.1695	0.0422	08:35:02	Yes
Mean:	3.633	3.633	0.0420				
SD:	0.007	0.007	0.0001				
%RSD:	0.184	0.184	0.18				

Sequence No.: 28

Autosampler Location: 26

Sample ID: 244128001|943262|1

Date Collected: 1/22/2010 08:35:23

Analyst: JXL

Data Type: Original

Replicate Data: 244128001|943262|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.284	0.284	0.0037	0.0150	0.0038	08:36:13	Yes
2	0.278	0.278	0.0036	0.0144	0.0037	08:36:43	Yes
Mean:	0.281	0.281	0.0036				
SD:	0.004	0.004	0.0001				
%RSD:	1.555	1.555	1.38				

Sequence No.: 29

Autosampler Location: 27

Sample ID: 1202019639|943262|1

Date Collected: 1/22/2010 08:37:02

Analyst: JXL

Data Type: Original

Replicate Data: 1202019639|943262|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.263	0.263	0.0034	0.0139	0.0036	08:37:53	Yes
2	0.264	0.264	0.0034	0.0142	0.0036	08:38:23	Yes
Mean:	0.263	0.263	0.0034				
SD:	0.001	0.001	0.0000				
%RSD:	0.287	0.287	0.25				

Sequence No.: 30

Sample ID: 1202019640|943262|1

Analyst: JXL

Autosampler Location: 28

Date Collected: 1/22/2010 08:38:42

Data Type: Original

Replicate Data: 1202019640|943262|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.327	2.327	0.0270	0.1105	0.0272	08:39:33	Yes
2	2.330	2.330	0.0271	0.1098	0.0272	08:40:03	Yes
Mean:	2.329	2.329	0.0271				
SD:	0.002	0.002	0.0000				
%RSD:	0.078	0.078	0.08				

Sequence No.: 31

Sample ID: 1202019647|943262|1

Analyst: JXL

Autosampler Location: 29

Date Collected: 1/22/2010 08:40:22

Data Type: Original

Replicate Data: 1202019647|943262|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.334	2.334	0.0271	0.1104	0.0273	08:41:12	Yes
2	2.339	2.339	0.0272	0.1105	0.0273	08:41:42	Yes
Mean:	2.337	2.337	0.0272				
SD:	0.003	0.003	0.0000				
%RSD:	0.141	0.141	0.14				

Sequence No.: 32

Sample ID: 1202019646|943262|5

Analyst: JXL

Autosampler Location: 30

Date Collected: 1/22/2010 08:42:01

Data Type: Original

Replicate Data: 1202019646|943262|5

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.034	0.034	0.0008	0.0037	0.0009	08:42:52	Yes
2	0.024	0.024	0.0007	0.0023	0.0008	08:43:22	Yes
Mean:	0.029	0.029	0.0007				
SD:	0.007	0.007	0.0001				
%RSD:	24.23	24.23	10.97				

Sequence No.: 33

Sample ID: 244128002|943262|1

Analyst: JXL

Autosampler Location: 31

Date Collected: 1/22/2010 08:43:41

Data Type: Original

Replicate Data: 244128002|943262|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.170	0.170	0.0023	0.0093	0.0025	08:44:32	Yes
2	0.163	0.163	0.0023	0.0096	0.0024	08:45:02	Yes
Mean:	0.166	0.166	0.0023				
SD:	0.005	0.005	0.0001				
%RSD:	3.088	3.088	2.55				

Sequence No.: 34

Sample ID: CCV

Autosampler Location: 7

Date Collected: 1/22/2010 08:45:21

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.001	5.001	0.0577	0.2372	0.0578	08:46:12	Yes
2	5.024	5.024	0.0579	0.2370	0.0581	08:46:42	Yes
Mean:	5.013	5.013	0.0578				
SD:	0.016	0.016	0.0002				
%RSD:	0.325	0.325	0.32				

QC value within limits for Hg 253.7 Recovery = 100.26%
All analyte(s) passed QC.

=====

Sequence No.: 35

Autosampler Location: 8

Sample ID: CCB

Date Collected: 1/22/2010 08:47:01

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.026	-0.026	0.0001	0.0012	0.0003	08:47:52	Yes
2	-0.029	-0.029	0.0001	-0.0001	0.0002	08:48:21	Yes
Mean:	-0.027	-0.027	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	5.943	5.943	20.68				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

=====

Sequence No.: 36

Autosampler Location: 32

Sample ID: 244128003|943262|1

Date Collected: 1/22/2010 08:48:41

Analyst: JXL

Data Type: Original

Replicate Data: 244128003|943262|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.250	0.250	0.0033	0.0139	0.0034	08:49:32	Yes
2	0.248	0.248	0.0032	0.0131	0.0034	08:50:02	Yes
Mean:	0.249	0.249	0.0033				
SD:	0.002	0.002	0.0000				
%RSD:	0.656	0.656	0.57				

=====

Sequence No.: 37

Autosampler Location: 33

Sample ID: 244128004|943262|1

Date Collected: 1/22/2010 08:50:21

Analyst: JXL

Data Type: Original

Replicate Data: 244128004|943262|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.241	0.241	0.0032	0.0127	0.0033	08:51:13	Yes
2	0.229	0.229	0.0030	0.0118	0.0032	08:51:42	Yes
Mean:	0.235	0.235	0.0031				
SD:	0.009	0.009	0.0001				
%RSD:	3.630	3.630	3.16				

=====

Sequence No.: 38

Autosampler Location: 34

Sample ID: 244128005|943262|1

Date Collected: 1/22/2010 08:52:02

Analyst: JXL

Data Type: Original

Replicate Data: 244128005|943262|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.291	0.291	0.0037	0.0161	0.0039	08:52:53	Yes

2	0.279	0.279	0.0036	0.0151	0.0037	08:53:23	Yes
Mean:	0.285	0.285	0.0037				
SD:	0.008	0.008	0.0001				
%RSD:	2.944	2.944	2.62				

Sequence No.: 39

Autosampler Location: 35

Sample ID: 244128006|943262|1

Date Collected: 1/22/2010 08:53:43

Analyst: JXL

Data Type: Original

Replicate Data: 244128006|943262|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.261	0.261	0.0034	0.0146	0.0035	08:54:34	Yes
2	0.250	0.250	0.0033	0.0132	0.0034	08:55:04	Yes
Mean:	0.256	0.256	0.0033				
SD:	0.008	0.008	0.0001				
%RSD:	3.015	3.015	2.65				

Sequence No.: 40

Autosampler Location: 36

Sample ID: 244128007|943262|1

Date Collected: 1/22/2010 08:55:24

Analyst: JXL

Data Type: Original

Replicate Data: 244128007|943262|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.306	0.306	0.0039	0.0169	0.0041	08:56:15	Yes
2	0.316	0.316	0.0040	0.0172	0.0042	08:56:45	Yes
Mean:	0.311	0.311	0.0040				
SD:	0.007	0.007	0.0001				
%RSD:	2.241	2.241	2.01				

Sequence No.: 41

Autosampler Location: 37

Sample ID: 244128008|943262|1

Date Collected: 1/22/2010 08:57:05

Analyst: JXL

Data Type: Original

Replicate Data: 244128008|943262|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.337	0.337	0.0043	0.0186	0.0044	08:57:56	Yes
2	0.324	0.324	0.0041	0.0171	0.0043	08:58:26	Yes
Mean:	0.331	0.331	0.0042				
SD:	0.009	0.009	0.0001				
%RSD:	2.741	2.741	2.48				

Sequence No.: 42

Autosampler Location: 38

Sample ID: 244128009|943262|1

Date Collected: 1/22/2010 08:58:47

Analyst: JXL

Data Type: Original

Replicate Data: 244128009|943262|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.214	0.214	0.0029	0.0113	0.0030	08:59:37	Yes
2	0.218	0.218	0.0029	0.0116	0.0031	09:00:07	Yes
Mean:	0.216	0.216	0.0029				
SD:	0.003	0.003	0.0000				
%RSD:	1.540	1.540	1.32				

Sequence No.: 43

Autosampler Location: 39

Sample ID: 244128010|943262|1

Date Collected: 1/22/2010 09:00:27

Analyst: JXL

Data Type: Original

Replicate Data: 244128010|943262|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.366	0.366	0.0046	0.0184	0.0047	09:01:17	Yes
2	0.359	0.359	0.0045	0.0184	0.0047	09:01:47	Yes
Mean:	0.362	0.362	0.0046				
SD:	0.005	0.005	0.0001				
%RSD:	1.389	1.389	1.27				

Sequence No.: 44

Autosampler Location: 40

Sample ID: 244128011|943262|1

Date Collected: 1/22/2010 09:02:07

Analyst: JXL

Data Type: Original

Replicate Data: 244128011|943262|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.271	0.271	0.0035	0.0147	0.0037	09:02:58	Yes
2	0.263	0.263	0.0034	0.0148	0.0036	09:03:28	Yes
Mean:	0.267	0.267	0.0035				
SD:	0.006	0.006	0.0001				
%RSD:	2.179	2.179	1.92				

Sequence No.: 45

Autosampler Location: 41

Sample ID: 244128012|943262|1

Date Collected: 1/22/2010 09:03:47

Analyst: JXL

Data Type: Original

Replicate Data: 244128012|943262|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.429	0.429	0.0053	0.0226	0.0055	09:04:39	Yes
2	0.427	0.427	0.0053	0.0222	0.0054	09:05:08	Yes
Mean:	0.428	0.428	0.0053				
SD:	0.001	0.001	0.0000				
%RSD:	0.325	0.325	0.30				

Sequence No.: 46

Autosampler Location: 7

Sample ID: CCV

Date Collected: 1/22/2010 09:05:28

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.968	4.968	0.0573	0.2369	0.0574	09:06:18	Yes
2	5.001	5.001	0.0576	0.2374	0.0578	09:06:48	Yes
Mean:	4.984	4.984	0.0575				
SD:	0.023	0.023	0.0003				
%RSD:	0.467	0.467	0.46				

QC value within limits for Hg 253.7 Recovery = 99.68%

All analyte(s) passed QC.

Sequence No.: 47

Autosampler Location: 8

Sample ID: CCB

Date Collected: 1/22/2010 09:07:07

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.015	-0.015	0.0002	0.0025	0.0004	09:07:57	Yes
2	-0.026	-0.026	0.0001	0.0003	0.0003	09:08:27	Yes
Mean:	-0.020	-0.020	0.0002				
SD:	0.008	0.008	0.0001				
%RSD:	38.38	38.38	52.58				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 48

Sample ID: 244128013|943262|1

Analyst: JXL

Autosampler Location: 42

Date Collected: 1/22/2010 09:08:47

Data Type: Original

Replicate Data: 244128013|943262|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.222	0.222	0.0029	0.0126	0.0031	09:09:37	Yes
2	0.218	0.218	0.0029	0.0118	0.0031	09:10:07	Yes
Mean:	0.220	0.220	0.0029				
SD:	0.003	0.003	0.0000				
%RSD:	1.182	1.182	1.02				

Sequence No.: 49

Sample ID: 244128014|943262|1

Analyst: JXL

Autosampler Location: 43

Date Collected: 1/22/2010 09:10:27

Data Type: Original

Replicate Data: 244128014|943262|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.252	0.252	0.0033	0.0147	0.0034	09:11:17	Yes
2	0.242	0.242	0.0032	0.0134	0.0033	09:11:47	Yes
Mean:	0.247	0.247	0.0032				
SD:	0.007	0.007	0.0001				
%RSD:	2.936	2.936	2.57				

Sequence No.: 50

Sample ID: 244128015|943262|1

Analyst: JXL

Autosampler Location: 44

Date Collected: 1/22/2010 09:12:07

Data Type: Original

Replicate Data: 244128015|943262|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.264	0.264	0.0034	0.0158	0.0036	09:12:58	Yes
2	0.247	0.247	0.0032	0.0143	0.0034	09:13:28	Yes
Mean:	0.255	0.255	0.0033				
SD:	0.012	0.012	0.0001				
%RSD:	4.726	4.726	4.15				

Sequence No.: 51

Sample ID: 244128016|943262|1

Analyst: JXL

Autosampler Location: 45

Date Collected: 1/22/2010 09:13:47

Data Type: Original

Replicate Data: 244128016|943262|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.234	0.234	0.0031	0.0128	0.0032	09:14:38	Yes
2	0.234	0.234	0.0031	0.0133	0.0032	09:15:08	Yes
Mean:	0.234	0.234	0.0031				
SD:	0.000	0.000	0.0000				
%RSD:	0.133	0.133	0.12				

Sequence No.: 52

Sample ID: 244128017|943262|1

Analyst: JXL

Autosampler Location: 46

Date Collected: 1/22/2010 09:15:27

Data Type: Original

Replicate Data: 244128017|943262|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored

1	0.386	0.386	0.0048	0.0205	0.0050	09:16:19	Yes
2	0.387	0.387	0.0048	0.0200	0.0050	09:16:49	Yes
Mean:	0.386	0.386	0.0048				
SD:	0.001	0.001	0.0000				
%RSD:	0.174	0.174	0.16				

Sequence No.: 53

Autosampler Location: 47

Sample ID: 244128018|943262|1

Date Collected: 1/22/2010 09:17:08

Analyst: JXL

Data Type: Original

Replicate Data: 244128018|943262|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.225	0.225	0.0030	0.0127	0.0031	09:18:00	Yes
2	0.224	0.224	0.0030	0.0132	0.0031	09:18:30	Yes
Mean:	0.225	0.225	0.0030				
SD:	0.001	0.001	0.0000				
%RSD:	0.381	0.381	0.33				

Sequence No.: 54

Autosampler Location: 48

Sample ID: 244128019|943262|1

Date Collected: 1/22/2010 09:18:50

Analyst: JXL

Data Type: Original

Replicate Data: 244128019|943262|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.349	0.349	0.0044	0.0181	0.0045	09:19:42	Yes
2	0.350	0.350	0.0044	0.0177	0.0046	09:20:12	Yes
Mean:	0.350	0.350	0.0044				
SD:	0.000	0.000	0.0000				
%RSD:	0.129	0.129	0.12				

Sequence No.: 55

Autosampler Location: 49

Sample ID: 244128020|943262|1

Date Collected: 1/22/2010 09:20:32

Analyst: JXL

Data Type: Original

Replicate Data: 244128020|943262|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.317	0.317	0.0040	0.0170	0.0042	09:21:24	Yes
2	0.325	0.325	0.0041	0.0178	0.0043	09:21:54	Yes
Mean:	0.321	0.321	0.0041				
SD:	0.006	0.006	0.0001				
%RSD:	1.720	1.720	1.55				

Sequence No.: 56

Autosampler Location: 50

Sample ID: 1202021161|943905|1

Date Collected: 1/22/2010 09:22:14

Analyst: JXL

Data Type: Original

Replicate Data: 1202021161|943905|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.031	-0.031	0.0000	0.0005	0.0002	09:23:05	Yes
2	-0.034	-0.034	0.0000	-0.0001	0.0002	09:23:35	Yes
Mean:	-0.033	-0.033	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	5.492	5.492	65.15				

Sequence No.: 57

Autosampler Location: 51

Sample ID: 1202021162|943905|1

Date Collected: 1/22/2010 09:23:55

Analyst: JXL

Data Type: Original

Replicate Data: 1202021162|943905|1

Repl	SampleConc	StndConc	Blncorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.051	2.051	0.0239	0.1001	0.0240	09:24:45	Yes
2	2.056	2.056	0.0239	0.1003	0.0241	09:25:15	Yes
Mean:	2.053	2.053	0.0239				
SD:	0.003	0.003	0.0000				
%RSD:	0.163	0.163	0.16				

Sequence No.: 58

Autosampler Location: 7

Sample ID: CCV

Date Collected: 1/22/2010 09:25:35

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	Blncorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.017	5.017	0.0578	0.2414	0.0580	09:26:26	Yes
2	5.002	5.002	0.0577	0.2412	0.0578	09:26:55	Yes
Mean:	5.009	5.009	0.0577				
SD:	0.011	0.011	0.0001				
%RSD:	0.224	0.224	0.22				

QC value within limits for Hg 253.7 Recovery = 100.19%
All analyte(s) passed QC.

Sequence No.: 59

Autosampler Location: 8

Sample ID: CCB

Date Collected: 1/22/2010 09:27:14

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StndConc	Blncorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.027	-0.027	0.0001	0.0003	0.0002	09:28:05	Yes
2	-0.033	-0.033	0.0000	0.0002	0.0002	09:28:35	Yes
Mean:	-0.030	-0.030	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	13.75	13.75	85.82				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 60

Autosampler Location: 52

Sample ID: 245117001|943905|1

Date Collected: 1/22/2010 09:28:55

Analyst: JXL

Data Type: Original

Replicate Data: 245117001|943905|1

Repl	SampleConc	StndConc	Blncorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.017	-0.017	0.0002	0.0014	0.0004	09:29:46	Yes
2	-0.018	-0.018	0.0002	0.0016	0.0003	09:30:16	Yes
Mean:	-0.017	-0.017	0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	4.055	4.055	3.89				

Sequence No.: 61

Autosampler Location: 53

Sample ID: 1202021163|943905|1

Date Collected: 1/22/2010 09:30:36

Analyst: JXL

Data Type: Original

Replicate Data: 1202021163|943905|1

Repl	SampleConc	StndConc	Blncorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.038	0.038	0.0008	0.0039	0.0010	09:31:26	Yes
2	0.039	0.039	0.0008	0.0040	0.0010	09:31:56	Yes
Mean:	0.038	0.038	0.0008				

Miscellaneous

Prep LogBook

Analyst: FGA

Batch: 940076

Lab SOP: GL-MA-E-009 REV# 19

Verified by:

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202011694	U1062540-MS	.502	g
MS	1202011696	U1091015-A	.5	mL
MS	1202011696	U1091015-B	.5	mL
MSD	1202011698	U1091015-A	.5	mL
MSD	1202011698	U1091015-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202011693		SW846 3050B	11-JAN-2010 13:00	0.536 g	50 mL	93.28358	SOIL
LCS	1202011694		SW846 3050B	11-JAN-2010 13:00	0.502 g	50 mL	99.60159	SOIL
SAMPLE	244128001		SW846 3050B	11-JAN-2010 13:00	0.524 g	50 mL	95.41985	SOIL
SAMPLE	244128002		SW846 3050B	11-JAN-2010 13:00	0.52 g	50 mL	96.15385	SOIL
SAMPLE	244128003		SW846 3050B	11-JAN-2010 13:00	0.539 g	50 mL	92.76438	SOIL
SAMPLE	244128004		SW846 3050B	11-JAN-2010 13:00	0.524 g	50 mL	95.41985	SOIL
SAMPLE	244128005		SW846 3050B	11-JAN-2010 13:00	0.52 g	50 mL	96.15385	SOIL
SAMPLE	244207001		SW846 3050B	11-JAN-2010 13:00	0.529 g	50 mL	94.51796	SOIL
DUP	1202011695	244207001	SW846 3050B	11-JAN-2010 13:00	0.517 g	50 mL	96.7118	SOIL
MS	1202011696	244207001	SW846 3050B	11-JAN-2010 13:00	0.513 g	50 mL	97.46589	SOIL
MSD	1202011698	244207001	SW846 3050B	11-JAN-2010 13:00	0.562 g	50 mL	88.96797	SOIL
SDILT	1202011697	244207001	SW846 3050B	11-JAN-2010 13:00	0.529 g	50 mL	94.51796	SOIL
SAMPLE	244207002		SW846 3050B	11-JAN-2010 13:00	0.5 g	50 mL	100	SOIL
SAMPLE	244207003		SW846 3050B	11-JAN-2010 13:00	0.537 g	50 mL	93.10987	SOIL
SAMPLE	244207004		SW846 3050B	11-JAN-2010 13:00	0.507 g	50 mL	98.61933	SOIL
SAMPLE	244207005		SW846 3050B	11-JAN-2010 13:00	0.547 g	50 mL	91.40768	SOIL
SAMPLE	244207006		SW846 3050B	11-JAN-2010 13:00	0.501 g	50 mL	99.8004	SOIL
SAMPLE	244214001		SW846 3050B	11-JAN-2010 13:00	0.505 g	50 mL	99.0099	SOIL
SAMPLE	244214002		SW846 3050B	11-JAN-2010 13:00	0.531 g	50 mL	94.16196	SOIL
SAMPLE	244214003		SW846 3050B	11-JAN-2010 13:00	0.537 g	50 mL	93.10987	SOIL
SAMPLE	244214004		SW846 3050B	11-JAN-2010 13:00	0.532 g	50 mL	93.98496	SOIL
SAMPLE	244214005		SW846 3050B	11-JAN-2010 13:00	0.541 g	50 mL	92.42144	SOIL
SAMPLE	244214006		SW846 3050B	11-JAN-2010 13:00	0.526 g	50 mL	95.05703	SOIL

Reagent/Solvent Lot ID	Amount	Description
1203655-02	1.5 mL	Hydrogen Peroxide 30%
1252836	5 mL	Nitric Acid CONC.

Comments: Brown,medium soil.

Prep Data Logbook Version 1:1

GEL Laboratories LLC

Page#

Prep LogBook

Analyst: BXA1
Batch: 940101
Lab SOP: GL-MA-E-009 REV# 19

Verified by: _____

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202011761	UI062540-MS	.522	g
MS	1202011763	UI091015-A	.5	mL
MS	1202011763	UI091015-B	.5	mL
MSD	1202011771	UI091015-A	.5	mL
MSD	1202011771	UI091015-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202011760		SW846 3050B	11-JAN-2010 16:49	0.524 g	50 mL	95.41985	SOIL
LCS	1202011761		SW846 3050B	11-JAN-2010 16:49	0.522 g	50 mL	95.78544	SOIL
SAMPLE	244125001		SW846 3050B	11-JAN-2010 16:49	0.504 g	50 mL	99.20635	SOIL
SAMPLE	244125002		SW846 3050B	11-JAN-2010 16:49	0.505 g	50 mL	99.00999	SOIL
SAMPLE	244125003		SW846 3050B	11-JAN-2010 16:49	0.514 g	50 mL	97.27626	SOIL
SAMPLE	244125004		SW846 3050B	11-JAN-2010 16:49	0.525 g	50 mL	95.2381	SOIL
SAMPLE	244128006		SW846 3050B	11-JAN-2010 16:49	0.508 g	50 mL	98.4252	SOIL
DUP	1202011762	244128006	SW846 3050B	11-JAN-2010 16:49	0.514 g	50 mL	97.27626	SOIL
MS	1202011763	244128006	SW846 3050B	11-JAN-2010 16:49	0.506 g	50 mL	98.81423	SOIL
MSD	1202011771	244128006	SW846 3050B	11-JAN-2010 16:49	0.522 g	50 mL	95.78544	SOIL
SDILT	1202011764	244128006	SW846 3050B	11-JAN-2010 16:49	0.508 g	50 mL	98.4252	SOIL
SAMPLE	244128007		SW846 3050B	11-JAN-2010 16:49	0.508 g	50 mL	98.4252	SOIL
SAMPLE	244128008		SW846 3050B	11-JAN-2010 16:49	0.502 g	50 mL	99.60159	SOIL
SAMPLE	244128009		SW846 3050B	11-JAN-2010 16:49	0.514 g	50 mL	97.27626	SOIL
SAMPLE	244128010		SW846 3050B	11-JAN-2010 16:49	0.502 g	50 mL	99.60159	SOIL
SAMPLE	244128011		SW846 3050B	11-JAN-2010 16:49	0.522 g	50 mL	95.78544	SOIL
SAMPLE	244128012		SW846 3050B	11-JAN-2010 16:49	0.525 g	50 mL	95.2381	SOIL
SAMPLE	244128013		SW846 3050B	11-JAN-2010 16:49	0.519 g	50 mL	96.33911	SOIL
SAMPLE	244128014		SW846 3050B	11-JAN-2010 16:49	0.52 g	50 mL	96.15385	SOIL
SAMPLE	244128015		SW846 3050B	11-JAN-2010 16:49	0.51 g	50 mL	98.03922	SOIL
SAMPLE	244128016		SW846 3050B	11-JAN-2010 16:49	0.515 g	50 mL	97.08738	SOIL
SAMPLE	244128017		SW846 3050B	11-JAN-2010 16:49	0.519 g	50 mL	96.33911	SOIL
SAMPLE	244128018		SW846 3050B	11-JAN-2010 16:49	0.505 g	50 mL	99.00999	SOIL
SAMPLE	244128019		SW846 3050B	11-JAN-2010 16:49	0.516 g	50 mL	96.89922	SOIL
SAMPLE	244128020		SW846 3050B	11-JAN-2010 16:49	0.517 g	50 mL	96.7118	SOIL

Comments: sample#244128006 is a brown powder like soil with rocky material.

Reagent/Solvent Lot ID
1203655-02

Amount
1.5 mL

Description
Hydrogen Peroxide 30%

Prep Data Logbook Version 1:1

GEL Laboratories LLC

Page#

Prep LogBook

1252836 5 mL Nitric Acid CONC.

Prep LogBook

Analyst: AXG2
 Batch: 940120
 Lab SOP: GL-MA-E-009 REV# 19

Verified by: _____

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202011792	U1062540-1	.508	g
MS	1202011794	U1091216-01	.25	mL
MS	1202011794	U1091216-06	.25	mL
MSD	1202011796	U1091216-01	.25	mL
MSD	1202011796	U1091216-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202011791		SW846 3050B	12-JAN-2010 08:00	0.515 g	50 mL	97.08738	SOIL
LCS	1202011792		SW846 3050B	12-JAN-2010 08:00	0.508 g	50 mL	98.4252	SOIL
SAMPLE	244128001		SW846 3050B	12-JAN-2010 08:00	0.506 g	50 mL	98.81423	SOIL
DUP	1202011793	244128001	SW846 3050B	12-JAN-2010 08:00	0.503 g	50 mL	99.40358	SOIL
MS	1202011794	244128001	SW846 3050B	12-JAN-2010 08:00	0.505 g	50 mL	99.0099	SOIL
MSD	1202011796	244128001	SW846 3050B	12-JAN-2010 08:00	0.509 g	50 mL	98.23183	SOIL
SDILT	1202011795	244128001	SW846 3050B	12-JAN-2010 08:00	0.506 g	50 mL	98.81423	SOIL
SAMPLE	244128002		SW846 3050B	12-JAN-2010 08:00	0.512 g	50 mL	97.65625	SOIL
SAMPLE	244128003		SW846 3050B	12-JAN-2010 08:00	0.5 g	50 mL	100	SOIL
SAMPLE	244128004		SW846 3050B	12-JAN-2010 08:00	0.505 g	50 mL	99.0099	SOIL
SAMPLE	244128005		SW846 3050B	12-JAN-2010 08:00	0.504 g	50 mL	99.20635	SOIL
SAMPLE	244128006		SW846 3050B	12-JAN-2010 08:00	0.505 g	50 mL	99.0099	SOIL
SAMPLE	244128007		SW846 3050B	12-JAN-2010 08:00	0.502 g	50 mL	99.60159	SOIL
SAMPLE	244128008		SW846 3050B	12-JAN-2010 08:00	0.501 g	50 mL	99.8004	SOIL
SAMPLE	244128009		SW846 3050B	12-JAN-2010 08:00	0.506 g	50 mL	98.81423	SOIL
SAMPLE	244128010		SW846 3050B	12-JAN-2010 08:00	0.506 g	50 mL	98.81423	SOIL
SAMPLE	244128011		SW846 3050B	12-JAN-2010 08:00	0.507 g	50 mL	98.61933	SOIL
SAMPLE	244128012		SW846 3050B	12-JAN-2010 08:00	0.506 g	50 mL	98.81423	SOIL
SAMPLE	244128013		SW846 3050B	12-JAN-2010 08:00	0.51 g	50 mL	98.03922	SOIL
SAMPLE	244128014		SW846 3050B	12-JAN-2010 08:00	0.518 g	50 mL	96.5251	SOIL
SAMPLE	244128015		SW846 3050B	12-JAN-2010 08:00	0.504 g	50 mL	99.20635	SOIL
SAMPLE	244128016		SW846 3050B	12-JAN-2010 08:00	0.515 g	50 mL	97.08738	SOIL
SAMPLE	244128017		SW846 3050B	12-JAN-2010 08:00	0.5 g	50 mL	100	SOIL
SAMPLE	244128018		SW846 3050B	12-JAN-2010 08:00	0.523 g	50 mL	95.60229	SOIL
SAMPLE	244128019		SW846 3050B	12-JAN-2010 08:00	0.511 g	50 mL	97.84736	SOIL
SAMPLE	244128020		SW846 3050B	12-JAN-2010 08:00	0.5 g	50 mL	100	SOIL

Reagent/Solvent Lot ID Amount Description

Prep Data Logbook Version 1:1

GEL Laboratories LLC

Page#

Prep LogBook

1252838	10 mL	HYDROCHLORIC ACID	Comments: Sample 244128001 consist of brown, soil with rocks.
1252836	1.25 mL	Nitric Acid CONC.	

Prep LogBook

Analyst: TXB3
Batch: 943258
Lab SOP: GL-MA-E-010 REV# 23

Verified by: _____

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202019637		SW846 7471A Prep	21-JAN-2010 14:30	0.526 g	30 mL	57.03422		g
LCS	1202019638		SW846 7471A Prep	21-JAN-2010 14:30	0.2 g	30 mL	150		SOIL
SAMPLE	244128001		SW846 7471A Prep	21-JAN-2010 14:30	0.535 g	30 mL	56.07477		SOIL
DUP	1202019639	244128001	SW846 7471A Prep	21-JAN-2010 14:30	0.512 g	30 mL	58.59375		SOIL
MS	1202019640	244128001	SW846 7471A Prep	21-JAN-2010 14:30	0.503 g	30 mL	59.64215		SOIL
MSD	1202019647	244128001	SW846 7471A Prep	21-JAN-2010 14:30	0.502 g	30 mL	59.76096		SOIL
SDIL-T	1202019646	244128001	SW846 7471A Prep	21-JAN-2010 14:30	0.535 g	30 mL	56.07477		SOIL
SAMPLE	244128002		SW846 7471A Prep	21-JAN-2010 14:30	0.524 g	30 mL	57.25191		SOIL
SAMPLE	244128003		SW846 7471A Prep	21-JAN-2010 14:30	0.524 g	30 mL	57.25191		SOIL
SAMPLE	244128004		SW846 7471A Prep	21-JAN-2010 14:30	0.511 g	30 mL	58.70841		SOIL
SAMPLE	244128005		SW846 7471A Prep	21-JAN-2010 14:30	0.596 g	30 mL	50.33557		SOIL
SAMPLE	244128006		SW846 7471A Prep	21-JAN-2010 14:30	0.537 g	30 mL	55.86592		SOIL
SAMPLE	244128007		SW846 7471A Prep	21-JAN-2010 14:30	0.523 g	30 mL	57.36138		SOIL
SAMPLE	244128008		SW846 7471A Prep	21-JAN-2010 14:30	0.556 g	30 mL	53.95683		SOIL
SAMPLE	244128009		SW846 7471A Prep	21-JAN-2010 14:30	0.564 g	30 mL	53.19149		SOIL
SAMPLE	244128010		SW846 7471A Prep	21-JAN-2010 14:30	0.519 g	30 mL	57.80347		SOIL
SAMPLE	244128011		SW846 7471A Prep	21-JAN-2010 14:30	0.579 g	30 mL	51.81347		SOIL
SAMPLE	244128012		SW846 7471A Prep	21-JAN-2010 14:30	0.584 g	30 mL	51.36986		SOIL
SAMPLE	244128013		SW846 7471A Prep	21-JAN-2010 14:30	0.542 g	30 mL	55.35055		SOIL
SAMPLE	244128014		SW846 7471A Prep	21-JAN-2010 14:30	0.571 g	30 mL	52.5394		SOIL
SAMPLE	244128015		SW846 7471A Prep	21-JAN-2010 14:30	0.529 g	30 mL	56.71078		SOIL
SAMPLE	244128016		SW846 7471A Prep	21-JAN-2010 14:30	0.566 g	30 mL	53.00353		SOIL
SAMPLE	244128017		SW846 7471A Prep	21-JAN-2010 14:30	0.553 g	30 mL	54.24955		SOIL
SAMPLE	244128018		SW846 7471A Prep	21-JAN-2010 14:30	0.534 g	30 mL	56.17978		SOIL
SAMPLE	244128019		SW846 7471A Prep	21-JAN-2010 14:30	0.546 g	30 mL	54.94505		SOIL
SAMPLE	244128020		SW846 7471A Prep	21-JAN-2010 14:30	0.526 g	30 mL	57.03422		SOIL

Comments: Sample 244128001 is a dry rocky brown soil.
Digestion Start Date: 21-JAN-10 14:30
Digestion End Date: 21-JAN-10 15:00

GEL Laboratories LLC

Page#

Prep Data Logbook Version 1.1

Prep LogBook

1255532-C		
WHG100121-07	2 mL	Hg reducing agent
WHG100121-08	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG100121-11	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG100121-09	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG100121-10	300 uL	Mercury Working 1st Source CAL S 2.0
WHG100121-12	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
		Mercury Working 2nd Source S 5.0/ICV

DATA EXCEPTION REPORT

Mo. Day Yr. 20-JAN-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: ICP/MS	Test / Method: SW846 3050B/6020	Matrix Type: Solid	Client Code: LANL
Batch ID: 940107	Sample Numbers: See Below		
Potentially affected work order(s) (SDG): 244125(10-1130), 244128(10-1132)			
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 1202011763MS 2. Failed Recovery for MSD/PSD: QC 1202011771MSD		The matrix spike and matrix spike duplicate recovery failed outside of the control limits for Se due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.	

Originator's Name:

Paul Boyd

20-JAN-10

Data Validator/Group Leader:

Elizabeth Janssen

21-JAN-10

DATA EXCEPTION REPORT

Mo.Day Yr. 25-JAN-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: ICP/MS	Test / Method: SW846 3050B/6020	Matrix Type: Solid	Client Code: LANL
Batch ID: 940077	Sample Numbers: See Below		

Potentially affected work order(s)(SDG): 244128(10-1132),244207(10-1159),244214(10-1154-1)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed RPD for DUP

Specification and Requirements Exception Description:	DER Disposition:
<p>1. Failed Recovery for MS/PS:</p> <p>QC 1202011696MS</p> <p>2. Failed RPD for DUP:</p> <p>QC 1202011695DUP</p> <p>3. Failed RPD for MS/MSD, or PS/PSD:</p> <p>QC 1202011698MSD</p>	<p>The matrix spike recovery failed outside of the control limits for U due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.</p> <p>The sample and sample duplicate % RPD failed outside the control limits for U 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.</p> <p>The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for Ni and U 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.</p>

Originator's Name:

Elizabeth Janssen 27-JAN-10

Data Validator/Group Leader:

Samantha Jacobs 28-JAN-10

DATA EXCEPTION REPORT

Mo. Day Yr. 28-JAN-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: ICP	Test / Method: SW846 3050B/6010B	Matrix Type: Solid	Client Code: LANL
Batch ID: 940124	Sample Numbers: See Below		

Potentially affected work order(s)(SDG): 244128(10-1132)

Application Issues:

Failed Recovery for MS/PS
Failed RPD for DUP
Failed Recovery for LCS/LCSD
Failed Recovery for MSD/PSD

Specification and Requirements Exception Description:	DER Disposition:
<p>1. Failed Recovery for MS/PS: QC 1202011794MS</p> <p>2. Failed RPD for DUP: QC 1202011793DUP</p> <p>3. Failed Recovery for LCS/LCSD: QC 1202011792LCS</p> <p>4. Failed Recovery for MSD/PSD: QC 1202011796MSD</p>	<p>1. The matrix spike recovery failed outside of the control limits for antimony, cobalt 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.</p> <p>2. The sample and sample duplicate % RPD failed outside the control limits for barium, cobalt, lead, sodium 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.</p> <p>3. Silver and/or antimony did not meet the recovery acceptance criteria for the LCS. Per the DOE-AL statement of work, page forty, silver and antimony are exempt from the re-digestion requirement for LCS failures.</p> <p>4. The matrix spike duplicate recovery failed outside of the control limits for antimony 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.</p>

Originator's Name:

Helen Camello 02-FEB-10

Data Validator/Group Leader:

Louise Smith 02-FEB-10

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI031809A **Opened:** 18-MAR-09 **Catalog Number :** 540
Name: METALSOILSRM **Received:** 18-MAR-09 **Lot Number :** D061-540
Type: Source Material **Expires:** 10-OCT-10
Employee: Jamie Johnson
Supplier: ERA
Description: Metals LCS Soil SRM
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

Standard Logbook

Serial ID: UI062540-I **Opened:** 12-JUN-09 **Amount :** 80 g
Name: ICP SOIL SRM **Received:** 12-JUN-09 **Lot Number :** D062-540
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICP/Hg
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

Serial ID: UI062540-MS **Opened:** 12-JUN-09 **Lot Number :** D062-540
Name: ICPMS SOIL SRM **Received:** 12-JUN-09
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICPMS
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	67.4 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.6 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Lithium	10.6 mg/kg
Magnesium	4000 mg/kg	Manganese	558 mg/kg
Mercury	8.46 mg/kg	Molybdenum	48.6 mg/kg
Nickel	134 mg/kg	Phosphorous	755 mg/kg
Potassium	4300 mg/kg	Selenium	286 mg/kg
Silver	30.1 mg/kg	Sodium	1020 mg/kg

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Strontium	227 mg/kg	Thallium	121 mg/kg
Thorium	9.84 mg/kg	Tin	104 mg/kg
Titanium	462 mg/kg	Uranium	2.13 mg/kg
Uranium-235	.0153 mg/kg	Uranium-238	2.11 mg/kg
Vanadium	92.4 mg/kg	Zinc	594 mg/kg
Zirconium	10.6 mg/kg		

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L +/- 0.5% IN 5% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: O2SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 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: O2si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI091015-B **Opened:** 15-OCT-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 15-OCT-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H2O/tr HF
Supplier: ENVIRONMENTAL EXPRESS
Description: SILICON 1000mg/L H2O/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091212-11 **Opened:** 12-DEC-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 12-DEC-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 12-DEC-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: O2SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091212-60 **Opened:** 12-DEC-09 **Amount :** .5 mL
Name: ICPMS High Range Standard **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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091212-61 **Opened:** 12-DEC-09 **Amount :** .5 mL
Name: ICPMS High Range Standard **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: UI091216-01 **Opened:** 16-DEC-09 **Lot Number :** 1018095
Name: METALSPIKE-1 **Received:** 16-DEC-09
Type: Source Material **Expires:** 16-DEC-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: UI091216-06 **Opened:** 16-DEC-09 **Lot Number :** 1018096
Name: METALSPIKE-2 **Received:** 16-DEC-09
Type: Source Material **Expires:** 16-DEC-10
Employee: Francena Armstrong
Supplier: OS2I

Standard Logbook

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: 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		

Standard Logbook

Serial ID: UI091217-08 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 17-DEC-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018211
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI091217-12 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 17-DEC-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018212
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI091217-13 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 17-DEC-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Standard Logbook

Serial ID: UI100114-40 **Opened:** 14-JAN-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 14-JAN-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 14-JAN-11 **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: UI100114-41 **Opened:** 14-JAN-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 14-JAN-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 14-JAN-11 **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: UI100114-48 **Opened:** 22-JAN-10 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 18-JAN-10 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 22-JAN-11 **Lot Number :** 1018466
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Iron	200000 UG/L	Magnesium	500000 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: IHG100121-01 **Opened:** 21-JAN-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 21-JAN-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 22-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: IHG100121-02 **Opened:** 21-JAN-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 21-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Intermediate **Expires:** 22-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: WHG100121-07 **Opened:** 21-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALSO.2CRA **Received:** 21-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 28-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.
IHG100121-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG100121-08 **Opened:** 21-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALSO.5 **Received:** 21-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 28-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.
IHG100121-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG100121-09 **Opened:** 21-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 21-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 28-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.
IHG100121-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG100121-10 **Opened:** 21-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 21-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 28-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.
IHG100121-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100121-11 **Opened:** 21-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 21-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 28-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.
IHG100121-01	Mercury	200 ug/L	1.5 mL	30 mL	10 ug/L

Serial ID: WHG100121-12 **Opened:** 21-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 21-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 28-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.
IHG100121-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100121-14 **Opened:** 21-JAN-10 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 21-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 28-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: WI100126-42 **Opened:** 26-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 27-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1259494
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.
WI100126-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100126-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100126-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100126-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100126-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100126-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100126-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100126-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100126-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100126-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100126-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100126-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100126-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100126-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100126-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100126-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100126-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100126-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100126-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100126-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100126-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100126-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100126-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100126-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100126-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100126-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100126-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100126-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100126-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100126-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100126-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100126-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100126-43 **Opened:** 26-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 27-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1259494
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: WI100126-44 **Opened:** 26-JAN-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 27-JAN-10 **Solvent :** 3%HCL and 1 %HNO3-1259494
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.	Allquot	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: WI100126-45 **Opened:** 26-JAN-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 27-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1259494
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: WI100126-46 **Opened:** 26-JAN-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 27-JAN-10 **Solvent :** 3%HCL AND 1%HNO3-1259494
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.	Allquot	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: WI100126-47 **Opened:** 26-JAN-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 27-JAN-10 **Solvent :** 3%HCL & 1%HNO3-1259494
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: WI100127-42 **Opened:** 27-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 28-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1259494
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.
WI100127-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100127-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100127-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100127-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100127-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100127-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100127-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100127-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100127-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100127-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100127-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100127-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100127-43 **Opened:** 27-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 28-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1259494
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.	Allquot	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: WI100127-44 **Opened:** 27-JAN-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 28-JAN-10 **Solvent :** 3%HCL and 1 %HNO3-1259494
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	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: WI100127-45 **Opened:** 27-JAN-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 28-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1259494
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: WI100127-46 **Opened:** 27-JAN-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 28-JAN-10 **Solvent :** 3%HCL AND 1%HNO3-1259494
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: WI100127-47 **Opened:** 27-JAN-10 **Balance Id:** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id:** 1099667
Type: Working **Expires:** 28-JAN-10 **Solvent:** 3%HCL & 1%HNO3-1259494
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: WMS100114-04B **Opened:** 14-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 14-JAN-10 **Balance Id :** 40245216
Type: Working **Expires:** 15-JAN-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl- 1238829
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Serial ID: WMS100115-04 **Opened:** 15-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 15-JAN-10 **Balance Id :** 4025216
Type: Working **Expires:** 16-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
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100115-04A **Opened:** 15-JAN-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 15-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 16-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.
WMS100114-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100114-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100114-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100114-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100115-05 **Opened:** 15-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 15-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 16-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
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100115-06 **Opened:** 15-JAN-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 15-JAN-10 **Pipet Id :** 3820544
Type: Working **Expires:** 16-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
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100115-07 **Opened:** 15-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 15-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 16-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: WMS100115-08 **Opened:** 15-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 15-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 16-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
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L

Serial ID: WMS100119-04 **Opened:** 19-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 19-JAN-10 **Balance Id :** 4025216
Type: Working **Expires:** 20-JAN-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1256053
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100119-04A **Opened:** 19-JAN-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 19-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 20-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100119-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100119-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100119-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100119-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100119-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
WMS100119-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100119-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100119-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100119-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100119-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100119-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100119-05 **Opened:** 19-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 19-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 20-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Alliquot	Final Vol.	Final Conc.
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: WMS100119-06 **Opened:** 19-JAN-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 19-JAN-10 **Pipet Id :** 3820544
Type: Working **Expires:** 20-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Alliquot	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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100119-07 **Opened:** 19-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 19-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 20-JAN-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1256053
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: WMS100119-08 **Opened:** 19-JAN-10 **Balance Id :** 40245216
Name: ICPMS IC SAB **Received:** 19-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 20-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS IC SAB
Comments: None

Standard Logbook

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

Serial ID: WMS100119-70 **Opened:** 19-JAN-10 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 19-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 20-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1253206
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI091212-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091212-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS100123-04 **Opened:** 23-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 23-JAN-10 **Balance Id :** 4025216
Type: Working **Expires:** 24-JAN-10 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl-1256053
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100123-04A **Opened:** 23-JAN-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 23-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 24-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100123-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100123-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100123-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100123-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100123-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100123-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
WMS100123-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100123-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100123-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100123-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100123-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100123-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100123-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100123-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100123-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100123-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100123-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100123-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100123-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100123-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100123-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100123-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100123-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100123-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100123-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100123-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100123-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100123-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100123-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100123-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100123-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100123-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100123-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100123-05 **Opened:** 23-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 23-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 24-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100123-06 **Opened:** 23-JAN-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 23-JAN-10 **Pipet Id :** 3820544
Type: Working **Expires:** 24-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100123-07 **Opened:** 23-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICESA **Received:** 23-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 24-JAN-10 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl - 1256053
Supplier: GEL
Description: ICPMS ICESA
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: WMS100123-08 **Opened:** 23-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 23-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 24-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
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: WMS100124-04 **Opened:** 24-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 24-JAN-10 **Balance Id :** 4025216
Type: Working **Expires:** 25-JAN-10 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl-1256053
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Serial ID: WMS100124-04A **Opened:** 24-JAN-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 24-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 25-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100124-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100124-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100124-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100124-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100124-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100124-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100124-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100124-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100124-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100124-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100124-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100124-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100124-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100124-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100124-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100124-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100124-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100124-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100124-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100124-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100124-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100124-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100124-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100124-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100124-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100124-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100124-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100124-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100124-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100124-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100124-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100124-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100124-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Serial ID: WMS100124-05 **Opened:** 24-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 24-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 25-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Serial ID: WMS100124-06 **Opened:** 24-JAN-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 24-JAN-10 **Pipet Id :** 3820544
Type: Working **Expires:** 25-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Serial ID: WMS100124-07 **Opened:** 24-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 24-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 25-JAN-10 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl - 1256053
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: WMS100124-08 **Opened:** 24-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 24-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 25-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L

Serial ID: WMS100125-04 **Opened:** 25-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 25-JAN-10 **Balance Id :** 4025216
Type: Working **Expires:** 26-JAN-10 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl-1259290
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100125-04A **Opened:** 25-JAN-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 25-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 26-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100125-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100125-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100125-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100125-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100125-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100125-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100125-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100125-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100125-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100125-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100125-05 **Opened:** 25-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 25-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 26-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100125-06 **Opened:** 25-JAN-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 25-JAN-10 **Pipet Id :** 3820544
Type: Working **Expires:** 26-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
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
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100125-07 **Opened:** 25-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 25-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 26-JAN-10 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl - 1259290
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: WMS100125-08 **Opened:** 25-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 25-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 26-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Standard Logbook

Serial ID: 1203655-02 Opened: 15-OCT-09 Lot Number : ZU74081198 mL
Name: B-H2O2 Received: 15-OCT-09
Type: Reagent/Solvent Expires: 15-OCT-10
Employee: Francena Armstrong
Supplier: EM SCIENCE
Description: Hydrogen Peroxide 30%
Comments: None

Serial ID: 1228372-A Opened: 12-NOV-09 Lot Number : 49215936
Name: B-NH2OH.HCl-MER Received: 12-NOV-09
Type: Reagent/Solvent Expires: 12-NOV-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxylamine Hydrochloride
Comments: None

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

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

Standard Logbook

Serial ID: 1252836 Opened: 08-JAN-10 Lot Number : H20053 L
 Name: I-HNO3 Received: 08-JAN-10
 Type: Reagent/Solvent Expires: 08-JAN-11
 Employee: Francena Armstrong
 Supplier: BAKER
 Description: Nitric Acid CONC.
 Comments: None

Serial ID: 1252838 Opened: 08-JAN-10 Lot Number : H41032
 Name: I-HCL Received: 08-JAN-10 Preservative_Id : 5 none
 Type: Reagent/Solvent Expires: 08-JAN-11
 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.	Allquot	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: 125532-C Opened: 15-JAN-10 Balance Id : BAL-002
 Name: B-NaCl.NH2OH.HCl-MER Received: 15-JAN-10
 Type: Reagent/Solvent Expires: 15-JUL-10
 Employee: Tara Griffin
 Supplier: GEL
 Description: Hg reducing agent
 Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
1228372-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 125535-C Opened: 15-JAN-10 Balance Id : BAL-002
 Name: B-KMnO4-MER Received: 15-JAN-10
 Type: Reagent/Solvent Expires: 15-JUL-10
 Employee: Tara Griffin
 Supplier: GEL

Standard Logbook

Description: 5% KMnO4 solution

Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1256053 Opened: 18-JAN-10 Solvent : Type I Water

Name: B-2%HNO3/1%HCl-ICPMS Received: 18-JAN-10

Type: Reagent/Solvent Expires: 25-JAN-10

Employee: Paul Boyd

Supplier: GEL

Description: 2%HNO3/1%HCl Solution (Type I Water)

Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
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: 1257474-1 Opened: 20-JAN-10 Instrument Id : MERCURY

Name: B-HNO3-MER Received: 20-JAN-10 Lot Number : H20053

Type: Reagent/Solvent Expires: 20-JAN-11

Employee: Tara Griffin

Supplier: Mallinckrodt Chemicals

Description: NITRIC ACID

Comments: None

Serial ID: 1259290 Opened: 25-JAN-10 Solvent : Type I Water

Name: B-2%HNO3/1%HCl-ICPMS Received: 25-JAN-10

Type: Reagent/Solvent Expires: 01-FEB-10

Employee: Elizabeth Janssen

Supplier: GEL

Description: 2%HNO3/1%HCl Solution (Type I Water)

Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
1252836	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1252838	I-HCL	36.5-38.0	90 mL	9 l	N/A

Serial ID: 1259494 Opened: 25-JAN-10 Amount : 20 L

Name: B-ICP-RINSE SOLN Received: 28-DEC-10 Lot Number : H04040+G34050

Type: Reagent/Solvent Expires: 31-JAN-10 Solvent : 3%HCL+1%HNO3

Employee: Helen Camello

Supplier: GEL

Description: 3%HCL+1%HNO3 RINSE SOLN.

Comments: None

Standard Logbook

Metals Analysis

Case Narrative

**Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1132-1**

Sample Analysis

Sample ID	Client ID
244129001	RE12-10-7659
244129002	RE12-10-7661
244129003	RE12-10-7660
1202011708	Method Blank (MB) ICP
1202011709	Laboratory Control Sample (LCS)
1202011712	244145001(RE12-10-7662L) Serial Dilution (SD)
1202011710	244145001(RE12-10-7662D) Sample Duplicate (DUP)
1202011711	244145001(RE12-10-7662S) Matrix Spike (MS)
1202011703	Method Blank (MB) ICP-MS
1202011704	Laboratory Control Sample (LCS)
1202011707	244240001(CALA-10-9162L) Serial Dilution (SD)
1202011705	244240001(CALA-10-9162D) Sample Duplicate (DUP)
1202011706	244240001(CALA-10-9162S) Matrix Spike (MS)
1202014292	Method Blank (MB) CVAA
1202014293	Laboratory Control Sample (LCS)
1202014296	244418001(RE16-10-1431L) Serial Dilution (SD)
1202014294	244418001(RE16-10-1431D) Sample Duplicate (DUP)
1202014295	244418001(RE16-10-1431S) Matrix Spike (MS)

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

Method/Analysis Information

Analytical Batch:	940084, 940082 and 941142
Prep Batch :	940083, 940079 and 941141
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-006 REV# 9, GL-MA-E-014 REV# 21 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3005/6010B, SW846 3005/6020 and SW846 7470A

Prep Method : SW846 3005A and SW846 7470A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements

All CRDL standard(s) met the referenced advisory control limits.

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: 244145001 (RE12-10-7662)-ICP, 244240001 (CALA-10-9162)-ICP-MS and 244418001 (RE16-10-1431)-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 DeA. Emore Date: 2.1.10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244129001

BASIS: As Received

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7659

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: WATER

%SOLIDS: 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	01/18/10 17:09	011810-1	940084
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	SKJ	01/14/10 00:38	100113-2	940082
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	01/18/10 17:09	011810-1	940084
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:09	011810-1	940084
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	01/21/10 16:25	100121-5	940082
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	SKJ	01/14/10 00:38	100113-2	940082
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	01/18/10 17:09	011810-1	940084
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:09	011810-1	940084
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:09	011810-1	940084
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	01/18/10 17:09	011810-1	940084
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	01/18/10 17:09	011810-1	940084
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	SKJ	01/14/10 00:38	100113-2	940082
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	01/18/10 17:09	011810-1	940084
7439-96-5	Manganese	1.15	ug/L	J	1	5	5	1	MS	SKJ	01/14/10 00:38	100113-2	940082
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	01/15/10 11:46	011510W1-6	941142
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	01/18/10 17:09	011810-1	940084
7440-09-7	Potassium	132	ug/L	J	50	150	150	1	P	HSC	01/18/10 17:09	011810-1	940084
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	01/18/10 17:09	011810-1	940084
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:09	011810-1	940084
7440-23-5	Sodium	128	ug/L	J	100	300	300	1	P	HSC	01/18/10 17:09	011810-1	940084
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	SKJ	01/14/10 22:43	100114-3	940082
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	SKJ	01/14/10 00:38	100113-2	940082
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:09	011810-1	940084
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	01/18/10 17:09	011810-1	940084

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940082	940079	SW846 3005A	50	mL	50	mL	01/11/10	FGA
940084	940083	SW846 3005A	50	mL	50	mL	01/11/10	FGA
941142	941141	SW846 7470A Prep	20	mL	20	mL	01/14/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244129002

BASIS: As Received

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7661

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: WATER

%SOLIDS: 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	01/18/10 17:16	011810-1	940084
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	SKJ	01/14/10 00:44	100113-2	940082
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	01/18/10 17:16	011810-1	940084
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:16	011810-1	940084
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	01/21/10 16:26	100121-5	940082
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	SKJ	01/14/10 00:44	100113-2	940082
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	01/18/10 17:16	011810-1	940084
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:16	011810-1	940084
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:16	011810-1	940084
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	01/18/10 17:16	011810-1	940084
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	01/18/10 17:16	011810-1	940084
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	SKJ	01/14/10 00:44	100113-2	940082
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	01/18/10 17:16	011810-1	940084
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	SKJ	01/14/10 00:44	100113-2	940082
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	01/15/10 11:48	011510W1-6	941142
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	01/18/10 17:16	011810-1	940084
7440-09-7	Potassium	132	ug/L	J	50	150	150	1	P	HSC	01/18/10 17:16	011810-1	940084
7782-49-2	Selenium	8.23	ug/L	J	5	30	30	1	P	HSC	01/18/10 17:16	011810-1	940084
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:16	011810-1	940084
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	01/18/10 17:16	011810-1	940084
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	SKJ	01/14/10 22:47	100114-3	940082
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	SKJ	01/14/10 00:44	100113-2	940082
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:16	011810-1	940084
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	01/18/10 17:16	011810-1	940084

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940082	940079	SW846 3005A	50	mL	50	mL	01/11/10	FGA
940084	940083	SW846 3005A	50	mL	50	mL	01/11/10	FGA
941142	941141	SW846 7470A Prep	20	mL	20	mL	01/14/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1132-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244129003

BASIS: As Received

DATE COLLECTED 05-JAN-10

CLIENT ID: RE12-10-7660

LEVEL: Low

DATE RECEIVED 08-JAN-10

MATRIX: WATER

%SOLIDS: 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	01/18/10 17:23	011810-1	940084
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	SKJ	01/14/10 00:51	100113-2	940082
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	01/18/10 17:23	011810-1	940084
7440-39-3	Barium	1.14	ug/L	J	1	5	5	1	P	HSC	01/18/10 17:23	011810-1	940084
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	01/21/10 16:28	100121-5	940082
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	SKJ	01/14/10 00:51	100113-2	940082
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	01/18/10 17:23	011810-1	940084
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:23	011810-1	940084
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:23	011810-1	940084
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	01/18/10 17:23	011810-1	940084
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	01/18/10 17:23	011810-1	940084
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	SKJ	01/14/10 00:51	100113-2	940082
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	01/18/10 17:23	011810-1	940084
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	SKJ	01/14/10 00:51	100113-2	940082
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	01/15/10 11:50	011510W1-6	941142
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	01/18/10 17:23	011810-1	940084
7440-09-7	Potassium	136	ug/L	J	50	150	150	1	P	HSC	01/18/10 17:23	011810-1	940084
7782-49-2	Selenium	7.56	ug/L	J	5	30	30	1	P	HSC	01/18/10 17:23	011810-1	940084
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:23	011810-1	940084
7440-23-5	Sodium	112	ug/L	J	100	300	300	1	P	HSC	01/18/10 17:23	011810-1	940084
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	SKJ	01/14/10 22:52	100114-3	940082
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	SKJ	01/14/10 00:51	100113-2	940082
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 17:23	011810-1	940084
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	01/18/10 17:23	011810-1	940084

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940082	940079	SW846 3005A	50	mL	50	mL	01/11/10	FGA
940084	940083	SW846 3005A	50	mL	50	mL	01/11/10	FGA
941142	941141	SW846 7470A Prep	20	mL	20	mL	01/14/10	TXB3

Quality Control Summary

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1132-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Antimony	51	ug/L	50	ug/L	101.9	90.0 - 110.0	MS	13-JAN-10 19:40	100113-2
	Cadmium	51.3	ug/L	50	ug/L	102.6	90.0 - 110.0	MS	13-JAN-10 19:40	100113-2
	Lead	51.7	ug/L	50	ug/L	103.4	90.0 - 110.0	MS	13-JAN-10 19:40	100113-2
	Manganese	51.4	ug/L	50	ug/L	102.8	90.0 - 110.0	MS	13-JAN-10 19:40	100113-2
	Uranium	52.9	ug/L	50	ug/L	105.9	90.0 - 110.0	MS	13-JAN-10 19:40	100113-2
	Thallium	48.6	ug/L	50	ug/L	97.2	90.0 - 110.0	MS	14-JAN-10 22:07	100114-3
	Mercury	5.09	ug/L	5	ug/L	101.8	90.0 - 110.0	AV	15-JAN-10 09:29	011510W1-6
	Aluminum	5140	ug/L	5000	ug/L	102.7	90.0 - 110.0	P	18-JAN-10 15:26	011810-1
	Arsenic	489	ug/L	500	ug/L	97.9	90.0 - 110.0	P	18-JAN-10 15:26	011810-1
	Barium	521	ug/L	500	ug/L	104.2	90.0 - 110.0	P	18-JAN-10 15:26	011810-1
	Calcium	5050	ug/L	5000	ug/L	101	90.0 - 110.0	P	18-JAN-10 15:26	011810-1
	Chromium	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	18-JAN-10 15:26	011810-1
	Cobalt	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	18-JAN-10 15:26	011810-1
	Copper	519	ug/L	500	ug/L	103.7	90.0 - 110.0	P	18-JAN-10 15:26	011810-1
	Iron	5090	ug/L	5000	ug/L	101.7	90.0 - 110.0	P	18-JAN-10 15:26	011810-1
	Magnesium	5320	ug/L	5000	ug/L	106.5	90.0 - 110.0	P	18-JAN-10 15:26	011810-1
	Nickel	509	ug/L	500	ug/L	101.9	90.0 - 110.0	P	18-JAN-10 15:26	011810-1
	Potassium	2530	ug/L	2500	ug/L	101.4	90.0 - 110.0	P	18-JAN-10 15:26	011810-1
	Selenium	2630	ug/L	2500	ug/L	105.1	90.0 - 110.0	P	18-JAN-10 15:26	011810-1
	Silver	265	ug/L	250	ug/L	106.2	90.0 - 110.0	P	18-JAN-10 15:26	011810-1
	Sodium	2450	ug/L	2500	ug/L	98	90.0 - 110.0	P	18-JAN-10 15:26	011810-1
	Vanadium	525	ug/L	500	ug/L	104.9	90.0 - 110.0	P	18-JAN-10 15:26	011810-1
	Zinc	517	ug/L	500	ug/L	103.5	90.0 - 110.0	P	18-JAN-10 15:26	011810-1
	Beryllium	51.5	ug/L	50	ug/L	103	90.0 - 110.0	MS	21-JAN-10 16:10	100121-5
CCV01										
	Antimony	49.8	ug/L	50	ug/L	99.7	90.0 - 110.0	MS	13-JAN-10 20:11	100113-2
	Cadmium	50.2	ug/L	50	ug/L	100.4	90.0 - 110.0	MS	13-JAN-10 20:11	100113-2
	Lead	50.7	ug/L	50	ug/L	101.5	90.0 - 110.0	MS	13-JAN-10 20:11	100113-2
	Manganese	51.9	ug/L	50	ug/L	103.8	90.0 - 110.0	MS	13-JAN-10 20:11	100113-2
	Uranium	52.3	ug/L	50	ug/L	104.6	90.0 - 110.0	MS	13-JAN-10 20:11	100113-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1132-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Thallium	47.9	ug/L	50	ug/L	95.7	90.0 – 110.0	MS	14-JAN-10 22:27	100114-3
	Mercury	5.07	ug/L	5	ug/L	101.3	80.0 – 120.0	AV	15-JAN-10 09:35	011510W1-6
	Aluminum	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	18-JAN-10 16:12	011810-1
	Arsenic	521	ug/L	500	ug/L	104.2	90.0 – 110.0	P	18-JAN-10 16:12	011810-1
	Barium	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	18-JAN-10 16:12	011810-1
	Calcium	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	18-JAN-10 16:12	011810-1
	Chromium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	18-JAN-10 16:12	011810-1
	Cobalt	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	18-JAN-10 16:12	011810-1
	Copper	490	ug/L	500	ug/L	98	90.0 – 110.0	P	18-JAN-10 16:12	011810-1
	Iron	5020	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	18-JAN-10 16:12	011810-1
	Magnesium	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	18-JAN-10 16:12	011810-1
	Nickel	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	18-JAN-10 16:12	011810-1
	Potassium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	18-JAN-10 16:12	011810-1
	Selenium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	18-JAN-10 16:12	011810-1
	Silver	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	18-JAN-10 16:12	011810-1
	Sodium	9760	ug/L	10000	ug/L	97.7	90.0 – 110.0	P	18-JAN-10 16:12	011810-1
	Vanadium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	18-JAN-10 16:12	011810-1
	Zinc	490	ug/L	500	ug/L	98	90.0 – 110.0	P	18-JAN-10 16:12	011810-1
	Beryllium	51.2	ug/L	50	ug/L	102.4	90.0 – 110.0	MS	21-JAN-10 16:18	100121-5
CCV02	Antimony	53.4	ug/L	50	ug/L	106.8	90.0 – 110.0	MS	13-JAN-10 20:29	100113-2
	Cadmium	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	13-JAN-10 20:29	100113-2
	Lead	52	ug/L	50	ug/L	103.9	90.0 – 110.0	MS	13-JAN-10 20:29	100113-2
	Manganese	51.9	ug/L	50	ug/L	103.9	90.0 – 110.0	MS	13-JAN-10 20:29	100113-2
	Uranium	53.9	ug/L	50	ug/L	107.8	90.0 – 110.0	MS	13-JAN-10 20:29	100113-2
	Thallium	46.9	ug/L	50	ug/L	93.8	90.0 – 110.0	MS	14-JAN-10 23:00	100114-3
	Mercury	5.25	ug/L	5	ug/L	105	80.0 – 120.0	AV	15-JAN-10 09:58	011510W1-6
	Aluminum	5080	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	18-JAN-10 16:41	011810-1
	Arsenic	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	18-JAN-10 16:41	011810-1
	Barium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	18-JAN-10 16:41	011810-1

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1132-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV03	Calcium	5010	ug/L	5000	ug/L	100.2	90.0 - 110.0	P	18-JAN-10 16:41	011810-1
	Chromium	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	18-JAN-10 16:41	011810-1
	Cobalt	496	ug/L	500	ug/L	99.3	90.0 - 110.0	P	18-JAN-10 16:41	011810-1
	Copper	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	18-JAN-10 16:41	011810-1
	Iron	5030	ug/L	5000	ug/L	100.7	90.0 - 110.0	P	18-JAN-10 16:41	011810-1
	Magnesium	5180	ug/L	5000	ug/L	103.6	90.0 - 110.0	P	18-JAN-10 16:41	011810-1
	Nickel	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	18-JAN-10 16:41	011810-1
	Potassium	5040	ug/L	5000	ug/L	100.8	90.0 - 110.0	P	18-JAN-10 16:41	011810-1
	Selenium	512	ug/L	500	ug/L	102.3	90.0 - 110.0	P	18-JAN-10 16:41	011810-1
	Silver	498	ug/L	500	ug/L	99.5	90.0 - 110.0	P	18-JAN-10 16:41	011810-1
	Sodium	9860	ug/L	10000	ug/L	98.6	90.0 - 110.0	P	18-JAN-10 16:41	011810-1
	Vanadium	501	ug/L	500	ug/L	100.3	90.0 - 110.0	P	18-JAN-10 16:41	011810-1
	Zinc	491	ug/L	500	ug/L	98.3	90.0 - 110.0	P	18-JAN-10 16:41	011810-1
	Beryllium	51.4	ug/L	50	ug/L	102.8	90.0 - 110.0	MS	21-JAN-10 16:35	100121-5
	Antimony	49.9	ug/L	50	ug/L	99.8	90.0 - 110.0	MS	13-JAN-10 21:13	100113-2
CCV03	Cadmium	50.8	ug/L	50	ug/L	101.6	90.0 - 110.0	MS	13-JAN-10 21:13	100113-2
	Lead	51.1	ug/L	50	ug/L	102.2	90.0 - 110.0	MS	13-JAN-10 21:13	100113-2
	Manganese	51.8	ug/L	50	ug/L	103.7	90.0 - 110.0	MS	13-JAN-10 21:13	100113-2
	Uranium	52.8	ug/L	50	ug/L	105.7	90.0 - 110.0	MS	13-JAN-10 21:13	100113-2
	Thallium	46.2	ug/L	50	ug/L	92.4	90.0 - 110.0	MS	14-JAN-10 23:29	100114-3
	Mercury	5.27	ug/L	5	ug/L	105.3	80.0 - 120.0	AV	15-JAN-10 10:21	011510W1-6
	Aluminum	5030	ug/L	5000	ug/L	100.5	90.0 - 110.0	P	18-JAN-10 17:59	011810-1
	Arsenic	505	ug/L	500	ug/L	101	90.0 - 110.0	P	18-JAN-10 17:59	011810-1
	Barium	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	18-JAN-10 17:59	011810-1
	Calcium	4970	ug/L	5000	ug/L	99.3	90.0 - 110.0	P	18-JAN-10 17:59	011810-1
	Chromium	504	ug/L	500	ug/L	100.7	90.0 - 110.0	P	18-JAN-10 17:59	011810-1
	Cobalt	503	ug/L	500	ug/L	100.5	90.0 - 110.0	P	18-JAN-10 17:59	011810-1
	Copper	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	18-JAN-10 17:59	011810-1
	Iron	5010	ug/L	5000	ug/L	100.1	90.0 - 110.0	P	18-JAN-10 17:59	011810-1

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1132-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV04	Magnesium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	18-JAN-10 17:59	011810-1
	Nickel	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	18-JAN-10 17:59	011810-1
	Potassium	4960	ug/L	5000	ug/L	99.1	90.0 – 110.0	P	18-JAN-10 17:59	011810-1
	Selenium	519	ug/L	500	ug/L	103.9	90.0 – 110.0	P	18-JAN-10 17:59	011810-1
	Silver	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	18-JAN-10 17:59	011810-1
	Sodium	10000	ug/L	10000	ug/L	100.1	90.0 – 110.0	P	18-JAN-10 17:59	011810-1
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	18-JAN-10 17:59	011810-1
	Zinc	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	18-JAN-10 17:59	011810-1
	Beryllium	51.3	ug/L	50	ug/L	102.6	90.0 – 110.0	MS	21-JAN-10 16:53	100121-5
	Antimony	49.1	ug/L	50	ug/L	98.2	90.0 – 110.0	MS	13-JAN-10 22:03	100113-2
CCV04	Cadmium	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	13-JAN-10 22:03	100113-2
	Lead	50.2	ug/L	50	ug/L	100.3	90.0 – 110.0	MS	13-JAN-10 22:03	100113-2
	Manganese	50.9	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	13-JAN-10 22:03	100113-2
	Uranium	51.8	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	13-JAN-10 22:03	100113-2
	Thallium	47.3	ug/L	50	ug/L	94.6	90.0 – 110.0	MS	14-JAN-10 23:57	100114-3
	Mercury	5.25	ug/L	5	ug/L	105.1	80.0 – 120.0	AV	15-JAN-10 10:44	011510W1-6
	Aluminum	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	18-JAN-10 19:08	011810-1
	Arsenic	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	18-JAN-10 19:08	011810-1
	Barium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	18-JAN-10 19:08	011810-1
	Calcium	5080	ug/L	5000	ug/L	101.6	90.0 – 110.0	P	18-JAN-10 19:08	011810-1
	Chromium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	18-JAN-10 19:08	011810-1
	Cobalt	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	18-JAN-10 19:08	011810-1
	Copper	505	ug/L	500	ug/L	101	90.0 – 110.0	P	18-JAN-10 19:08	011810-1
	Iron	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	18-JAN-10 19:08	011810-1
	Magnesium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	18-JAN-10 19:08	011810-1
	Nickel	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	18-JAN-10 19:08	011810-1
	Potassium	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	18-JAN-10 19:08	011810-1
	Selenium	527	ug/L	500	ug/L	105.3	90.0 – 110.0	P	18-JAN-10 19:08	011810-1
	Silver	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	18-JAN-10 19:08	011810-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1132-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV05	Sodium	9580	ug/L	10000	ug/L	95.8	90.0 – 110.0	P	18-JAN-10 19:08	011810-1
	Vanadium	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	18-JAN-10 19:08	011810-1
	Zinc	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	18-JAN-10 19:08	011810-1
	Beryllium	54	ug/L	50	ug/L	107.9	90.0 – 110.0	MS	21-JAN-10 17:10	100121-5
	Antimony	48.9	ug/L	50	ug/L	97.8	90.0 – 110.0	MS	13-JAN-10 22:58	100113-2
	Cadmium	49	ug/L	50	ug/L	98.1	90.0 – 110.0	MS	13-JAN-10 22:58	100113-2
	Lead	50.5	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	13-JAN-10 22:58	100113-2
	Manganese	50.9	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	13-JAN-10 22:58	100113-2
	Uranium	52.5	ug/L	50	ug/L	105	90.0 – 110.0	MS	13-JAN-10 22:58	100113-2
	Thallium	47.7	ug/L	50	ug/L	95.5	90.0 – 110.0	MS	15-JAN-10 00:22	100114-3
	Mercury	5.16	ug/L	5	ug/L	103.2	80.0 – 120.0	AV	15-JAN-10 11:07	011510W1-6
	Antimony	48.8	ug/L	50	ug/L	97.7	90.0 – 110.0	MS	13-JAN-10 23:36	100113-2
	Cadmium	49.6	ug/L	50	ug/L	99.2	90.0 – 110.0	MS	13-JAN-10 23:36	100113-2
	Lead	50.4	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	13-JAN-10 23:36	100113-2
CCV06	Manganese	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	13-JAN-10 23:36	100113-2
	Uranium	51.4	ug/L	50	ug/L	102.8	90.0 – 110.0	MS	13-JAN-10 23:36	100113-2
	Thallium	48.1	ug/L	50	ug/L	96.3	90.0 – 110.0	MS	15-JAN-10 00:51	100114-3
	Mercury	5.19	ug/L	5	ug/L	103.9	80.0 – 120.0	AV	15-JAN-10 11:30	011510W1-6
	Antimony	48.9	ug/L	50	ug/L	97.8	90.0 – 110.0	MS	14-JAN-10 00:13	100113-2
	Cadmium	49.6	ug/L	50	ug/L	99.1	90.0 – 110.0	MS	14-JAN-10 00:13	100113-2
	Lead	50.4	ug/L	50	ug/L	100.7	90.0 – 110.0	MS	14-JAN-10 00:13	100113-2
CCV07	Manganese	51.4	ug/L	50	ug/L	102.8	90.0 – 110.0	MS	14-JAN-10 00:13	100113-2
	Uranium	52.2	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	14-JAN-10 00:13	100113-2
	Mercury	5.24	ug/L	5	ug/L	104.8	80.0 – 120.0	AV	15-JAN-10 11:54	011510W1-6
	Antimony	49.2	ug/L	50	ug/L	98.3	90.0 – 110.0	MS	14-JAN-10 01:03	100113-2
CCV08	Cadmium	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	14-JAN-10 01:03	100113-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1132-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV09	Lead	50.5	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	14-JAN-10 01:03	100113-2
	Manganese	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	14-JAN-10 01:03	100113-2
	Uranium	51.7	ug/L	50	ug/L	103.3	90.0 – 110.0	MS	14-JAN-10 01:03	100113-2
	Mercury	5.11	ug/L	5	ug/L	102.1	80.0 – 120.0	AV	15-JAN-10 12:17	011510W1-6
	Antimony	48.3	ug/L	50	ug/L	96.6	90.0 – 110.0	MS	14-JAN-10 01:53	100113-2
	Cadmium	49.8	ug/L	50	ug/L	99.5	90.0 – 110.0	MS	14-JAN-10 01:53	100113-2
	Lead	50.4	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	14-JAN-10 01:53	100113-2
	Manganese	50.2	ug/L	50	ug/L	100.5	90.0 – 110.0	MS	14-JAN-10 01:53	100113-2
	Uranium	51.7	ug/L	50	ug/L	103.4	90.0 – 110.0	MS	14-JAN-10 01:53	100113-2
CCV10	Antimony	47.7	ug/L	50	ug/L	95.5	90.0 – 110.0	MS	14-JAN-10 02:43	100113-2
	Cadmium	49.7	ug/L	50	ug/L	99.3	90.0 – 110.0	MS	14-JAN-10 02:43	100113-2
	Lead	50.7	ug/L	50	ug/L	101.5	90.0 – 110.0	MS	14-JAN-10 02:43	100113-2
	Manganese	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	14-JAN-10 02:43	100113-2
	Uranium	51.9	ug/L	50	ug/L	103.8	90.0 – 110.0	MS	14-JAN-10 02:43	100113-2
CCV11	Antimony	47.9	ug/L	50	ug/L	95.9	90.0 – 110.0	MS	14-JAN-10 03:39	100113-2
	Cadmium	49.2	ug/L	50	ug/L	98.4	90.0 – 110.0	MS	14-JAN-10 03:39	100113-2
	Lead	50.4	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	14-JAN-10 03:39	100113-2
	Manganese	50.1	ug/L	50	ug/L	100.3	90.0 – 110.0	MS	14-JAN-10 03:39	100113-2
	Uranium	52.4	ug/L	50	ug/L	104.8	90.0 – 110.0	MS	14-JAN-10 03:39	100113-2

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1132-1

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CRDL01										
	Lead	2.21	ug/L	2	ug/L	110.5	70.0 – 130.0	MS	13-JAN-10 19:52	100113-2
	Manganese	5.72	ug/L	5	ug/L	114.3	70.0 – 130.0	MS	13-JAN-10 19:52	100113-2
	Antimony	3.4	ug/L	3	ug/L	113.3	70.0 – 130.0	MS	13-JAN-10 19:52	100113-2
	Cadmium	1.11	ug/L	1	ug/L	110.7	70.0 – 130.0	MS	13-JAN-10 19:52	100113-2
	Uranium	.206	ug/L	.2	ug/L	103	70.0 – 130.0	MS	13-JAN-10 19:52	100113-2
	Thallium	1.04	ug/L	1	ug/L	103.7	70.0 – 130.0	MS	14-JAN-10 22:15	100114-3
	Mercury	.197	ug/L	.2	ug/L	98.5	70.0 – 130.0	AV	15-JAN-10 09:33	011510W1-6
	Beryllium	.513	ug/L	.5	ug/L	102.6	70.0 – 130.0	MS	21-JAN-10 16:13	100121-5
PQL01										
	Aluminum	194	ug/L	200	ug/L	97.3	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Iron	77.2	ug/L	100	ug/L	77.2	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Magnesium	336	ug/L	300	ug/L	111.9	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Nickel	5.63	ug/L	5	ug/L	112.6	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Potassium	186	ug/L	150	ug/L	123.7	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Silver	5.2	ug/L	5	ug/L	104	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Sodium	276	ug/L	300	ug/L	91.9	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Arsenic	28.1	ug/L	30	ug/L	93.6	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Barium	5.31	ug/L	5	ug/L	106.2	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Chromium	5.34	ug/L	5	ug/L	106.9	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Cobalt	5.11	ug/L	5	ug/L	102.2	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Copper	11.1	ug/L	10	ug/L	111.3	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Vanadium	4.76	ug/L	5	ug/L	95.2	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Zinc	11.3	ug/L	10	ug/L	112.7	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Calcium	210	ug/L	200	ug/L	105.1	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Selenium	32.6	ug/L	30	ug/L	108.6	70.0 – 130.0	P	18-JAN-10 15:40	011810-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1132-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
ICB01										
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	13-JAN-10 19:46	100113-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	13-JAN-10 19:46	100113-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	13-JAN-10 19:46	100113-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	13-JAN-10 19:46	100113-2
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	13-JAN-10 19:46	100113-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	14-JAN-10 22:11	100114-3
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	15-JAN-10 09:31	011510W1-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	18-JAN-10 15:33	011810-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	18-JAN-10 15:33	011810-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 15:33	011810-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	18-JAN-10 15:33	011810-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 15:33	011810-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 15:33	011810-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	18-JAN-10 15:33	011810-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	18-JAN-10 15:33	011810-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	18-JAN-10 15:33	011810-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	18-JAN-10 15:33	011810-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	18-JAN-10 15:33	011810-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	18-JAN-10 15:33	011810-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 15:33	011810-1
	Sodium	100	+/-300	U	100	300	LIQ	P	18-JAN-10 15:33	011810-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 15:33	011810-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	18-JAN-10 15:33	011810-1
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	21-JAN-10 16:11	100121-5
CCB01										
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	13-JAN-10 20:17	100113-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	13-JAN-10 20:17	100113-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	13-JAN-10 20:17	100113-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	13-JAN-10 20:17	100113-2
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	13-JAN-10 20:17	100113-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	14-JAN-10 22:31	100114-3

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1132-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	15-JAN-10 09:37	011510W1-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	18-JAN-10 16:19	011810-1
	Arsenic	10.51	+/-30	J	5.0	30.0	LIQ	P	18-JAN-10 16:19	011810-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 16:19	011810-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	18-JAN-10 16:19	011810-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 16:19	011810-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 16:19	011810-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	18-JAN-10 16:19	011810-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	18-JAN-10 16:19	011810-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	18-JAN-10 16:19	011810-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	18-JAN-10 16:19	011810-1
	Potassium	80.32	+/-150	J	50.0	150	LIQ	P	18-JAN-10 16:19	011810-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	18-JAN-10 16:19	011810-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 16:19	011810-1
	Sodium	100	+/-300	U	100	300	LIQ	P	18-JAN-10 16:19	011810-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 16:19	011810-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	18-JAN-10 16:19	011810-1
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	21-JAN-10 16:19	100121-5
CCB02	Antimony	1.56	+/-3	J	1.0	3.0	LIQ	MS	13-JAN-10 20:36	100113-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	13-JAN-10 20:36	100113-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	13-JAN-10 20:36	100113-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	13-JAN-10 20:36	100113-2
	Uranium	0.057	+/-2	J	0.05	0.2	LIQ	MS	13-JAN-10 20:36	100113-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	14-JAN-10 23:04	100114-3
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	15-JAN-10 10:00	011510W1-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	18-JAN-10 16:49	011810-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	18-JAN-10 16:49	011810-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 16:49	011810-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	18-JAN-10 16:49	011810-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 16:49	011810-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1132-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 16:49	011810-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	18-JAN-10 16:49	011810-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	18-JAN-10 16:49	011810-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	18-JAN-10 16:49	011810-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	18-JAN-10 16:49	011810-1
	Potassium	59.3	+/-150	J	50.0	150	LIQ	P	18-JAN-10 16:49	011810-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	18-JAN-10 16:49	011810-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 16:49	011810-1
	Sodium	100	+/-300	U	100	300	LIQ	P	18-JAN-10 16:49	011810-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 16:49	011810-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	18-JAN-10 16:49	011810-1
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	21-JAN-10 16:36	100121-5
CCB03	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	13-JAN-10 21:19	100113-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	13-JAN-10 21:19	100113-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	13-JAN-10 21:19	100113-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	13-JAN-10 21:19	100113-2
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	13-JAN-10 21:19	100113-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	14-JAN-10 23:33	100114-3
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	15-JAN-10 10:23	011510W1-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	18-JAN-10 18:06	011810-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	18-JAN-10 18:06	011810-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 18:06	011810-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	18-JAN-10 18:06	011810-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 18:06	011810-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 18:06	011810-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	18-JAN-10 18:06	011810-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	18-JAN-10 18:06	011810-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	18-JAN-10 18:06	011810-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	18-JAN-10 18:06	011810-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	18-JAN-10 18:06	011810-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1132-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ug/L</u>	<u>Acceptance</u>	<u>Conc Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run</u>
CCB04	Selenium	5.36	+/-30	J	5.0	30.0	LIQ	P	18-JAN-10 18:06	011810-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 18:06	011810-1
	Sodium	100	+/-300	U	100	300	LIQ	P	18-JAN-10 18:06	011810-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 18:06	011810-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	18-JAN-10 18:06	011810-1
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	21-JAN-10 16:55	100121-5
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	13-JAN-10 22:09	100113-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	13-JAN-10 22:09	100113-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	13-JAN-10 22:09	100113-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	13-JAN-10 22:09	100113-2
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	13-JAN-10 22:09	100113-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	15-JAN-10 00:02	100114-3
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	15-JAN-10 10:46	011510W1-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	18-JAN-10 19:15	011810-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	18-JAN-10 19:15	011810-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 19:15	011810-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	18-JAN-10 19:15	011810-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 19:15	011810-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 19:15	011810-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	18-JAN-10 19:15	011810-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	18-JAN-10 19:15	011810-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	18-JAN-10 19:15	011810-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	18-JAN-10 19:15	011810-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	18-JAN-10 19:15	011810-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	18-JAN-10 19:15	011810-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 19:15	011810-1
	Sodium	100	+/-300	U	100	300	LIQ	P	18-JAN-10 19:15	011810-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	18-JAN-10 19:15	011810-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	18-JAN-10 19:15	011810-1
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	21-JAN-10 17:11	100121-5

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1132-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB05	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	13-JAN-10 23:05	100113-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	13-JAN-10 23:05	100113-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	13-JAN-10 23:05	100113-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	13-JAN-10 23:05	100113-2
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	13-JAN-10 23:05	100113-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	15-JAN-10 00:26	100114-3
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	15-JAN-10 11:09	011510W1-6
CCB06	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	13-JAN-10 23:42	100113-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	13-JAN-10 23:42	100113-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	13-JAN-10 23:42	100113-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	13-JAN-10 23:42	100113-2
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	13-JAN-10 23:42	100113-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	15-JAN-10 00:55	100114-3
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	15-JAN-10 11:32	011510W1-6
CCB07	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	14-JAN-10 00:19	100113-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	14-JAN-10 00:19	100113-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	14-JAN-10 00:19	100113-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	14-JAN-10 00:19	100113-2
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	14-JAN-10 00:19	100113-2
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	15-JAN-10 11:55	011510W1-6
CCB08	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	14-JAN-10 01:09	100113-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	14-JAN-10 01:09	100113-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	14-JAN-10 01:09	100113-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	14-JAN-10 01:09	100113-2
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	14-JAN-10 01:09	100113-2
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	15-JAN-10 12:19	011510W1-6
CCB09	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	14-JAN-10 01:59	100113-2

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1132-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ng/L</u>	<u>Acceptance</u>	<u>Conc Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run</u>
CCB10	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	14-JAN-10 01:59	100113-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	14-JAN-10 01:59	100113-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	14-JAN-10 01:59	100113-2
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	14-JAN-10 01:59	100113-2
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	14-JAN-10 02:49	100113-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	14-JAN-10 02:49	100113-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	14-JAN-10 02:49	100113-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	14-JAN-10 02:49	100113-2
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	14-JAN-10 02:49	100113-2
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	14-JAN-10 03:46	100113-2
CCB11	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	14-JAN-10 03:46	100113-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	14-JAN-10 03:46	100113-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	14-JAN-10 03:46	100113-2
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	14-JAN-10 03:46	100113-2
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	14-JAN-10 03:46	100113-2

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-1132-1
Contract: LANL01004
Matrix: WATER

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Acceptance Window</u>	<u>Conc Qual</u>	<u>M</u>	<u>MDL</u>	<u>RDL</u>
1202011703	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
	Uranium	0.05	ug/L	+/-0.2	U	MS	0.05	0.2
	Thallium	0.3	ug/L	+/-1	U	MS	0.3	1
	Manganese	1	ug/L	+/-5	U	MS	1	5
1202011708	Nickel	1.5	ug/L	+/-5	U	P	1.5	5
	Aluminum	68	ug/L	+/-200	U	P	68	200
	Magnesium	85	ug/L	+/-300	U	P	85	300
	Iron	30	ug/L	+/-100	U	P	30	100
	Copper	3	ug/L	+/-10	U	P	3	10
	Cobalt	1	ug/L	+/-5	U	P	1	5
	Chromium	1	ug/L	+/-5	U	P	1	5
	Calcium	50	ug/L	+/-200	U	P	50	200
	Barium	1	ug/L	+/-5	U	P	1	5
	Arsenic	5	ug/L	+/-30	U	P	5	30
	Potassium	50	ug/L	+/-150	U	P	50	150
	Selenium	5	ug/L	+/-30	U	P	5	30
	Silver	1	ug/L	+/-5	U	P	1	5
	Sodium	100	ug/L	+/-300	U	P	100	300
	Vanadium	1	ug/L	+/-5	U	P	1	5
	Zinc	3.3	ug/L	+/-10	U	P	3.3	10
1202014292	Mercury	0.066	ug/L	+/-0.2	U	AV	0.066	0.2

METALS
-4-
Interference Check Sample

SDG No: 10-1132-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Aluminum	521000	ug/L	500000	ug/L	104	80.0 – 120.0	18-JAN-10 15:47	011810-1
	Arsenic	10.4	ug/L					18-JAN-10 15:47	011810-1
	Barium	0.39	ug/L					18-JAN-10 15:47	011810-1
	Calcium	480000	ug/L	500000	ug/L	95.9	80.0 – 120.0	18-JAN-10 15:47	011810-1
	Chromium	1.66	ug/L					18-JAN-10 15:47	011810-1
	Cobalt	-1.59	ug/L					18-JAN-10 15:47	011810-1
	Copper	1.87	ug/L					18-JAN-10 15:47	011810-1
	Iron	186000	ug/L	200000	ug/L	93	80.0 – 120.0	18-JAN-10 15:47	011810-1
	Magnesium	486000	ug/L	500000	ug/L	97.2	80.0 – 120.0	18-JAN-10 15:47	011810-1
	Nickel	4.18	ug/L					18-JAN-10 15:47	011810-1
	Potassium	-203.0	ug/L					18-JAN-10 15:47	011810-1
	Selenium	23.2	ug/L					18-JAN-10 15:47	011810-1
	Silver	0.48	ug/L					18-JAN-10 15:47	011810-1
	Sodium	10.5	ug/L					18-JAN-10 15:47	011810-1
	Vanadium	-2.26	ug/L					18-JAN-10 15:47	011810-1
	Zinc	8.99	ug/L					18-JAN-10 15:47	011810-1
ICSAB01									
	Aluminum	533000	ug/L	500000	ug/L	107	80.0 – 120.0	18-JAN-10 15:53	011810-1
	Arsenic	519	ug/L	500	ug/L	104	80.0 – 120.0	18-JAN-10 15:53	011810-1
	Barium	496	ug/L	500	ug/L	99.1	80.0 – 120.0	18-JAN-10 15:53	011810-1
	Calcium	486000	ug/L	500000	ug/L	97.2	80.0 – 120.0	18-JAN-10 15:53	011810-1
	Chromium	488	ug/L	500	ug/L	97.6	80.0 – 120.0	18-JAN-10 15:53	011810-1
	Cobalt	439	ug/L	500	ug/L	87.8	80.0 – 120.0	18-JAN-10 15:53	011810-1
	Copper	555	ug/L	500	ug/L	111	80.0 – 120.0	18-JAN-10 15:53	011810-1
	Iron	186000	ug/L	200000	ug/L	92.8	80.0 – 120.0	18-JAN-10 15:53	011810-1
	Magnesium	488000	ug/L	500000	ug/L	97.5	80.0 – 120.0	18-JAN-10 15:53	011810-1
	Nickel	447	ug/L	500	ug/L	89.4	80.0 – 120.0	18-JAN-10 15:53	011810-1
	Potassium	5300	ug/L	5000	ug/L	106	80.0 – 120.0	18-JAN-10 15:53	011810-1
	Selenium	2540	ug/L	2500	ug/L	102	80.0 – 120.0	18-JAN-10 15:53	011810-1

METALS

-4-

Interference Check Sample

SDG No: 10-1132-1

Contract: LANL01004

Lab Code: GEL

ICS:

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Silver	273	ug/L	250	ug/L	109	80.0 – 120.0	18-JAN-10 15:53	011810-1
	Sodium	5310	ug/L	5000	ug/L	106	80.0 – 120.0	18-JAN-10 15:53	011810-1
	Vanadium	512	ug/L	500	ug/L	102	80.0 – 120.0	18-JAN-10 15:53	011810-1
	Zinc	502	ug/L	500	ug/L	100	80.0 – 120.0	18-JAN-10 15:53	011810-1

METALS
-4-
Interference Check Sample

SDG No: 10-1132-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS4

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Antimony	0.191	ug/L					13-JAN-10 19:58	100113-2
	Cadmium	0.52	ug/L					13-JAN-10 19:58	100113-2
	Lead	0.172	ug/L					13-JAN-10 19:58	100113-2
	Manganese	5.63	ug/L					13-JAN-10 19:58	100113-2
	Uranium	-0.025	ug/L					13-JAN-10 19:58	100113-2
ICSAB01									
	Antimony	22.7	ug/L	20.1	ug/L	113	80.0 – 120.0	13-JAN-10 20:05	100113-2
	Cadmium	20.2	ug/L	20.4	ug/L	99.1	80.0 – 120.0	13-JAN-10 20:05	100113-2
	Lead	19.0	ug/L	20.5	ug/L	92.6	80.0 – 120.0	13-JAN-10 20:05	100113-2
	Manganese	25.6	ug/L	25.8	ug/L	99	80.0 – 120.0	13-JAN-10 20:05	100113-2
	Uranium	20.3	ug/L	20	ug/L	101	80.0 – 120.0	13-JAN-10 20:05	100113-2

METALS
-4-
Interference Check Sample

SDG No: 10-1132-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS4

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (% R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Thallium	-0.034	ug/L					14-JAN-10 22:19	100114-3
ICSAB01	Thallium	17.5	ug/L	20	ug/L	87.3	80.0 - 120.0	14-JAN-10 22:23	100114-3

METALS
-4-
Interference Check Sample

SDG No: 10-1132-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Beryllium	0.051	ug/L					21-JAN-10 16:14	100121-5
ICSAB01	Beryllium	19.6	ug/L	20	ug/L	97.9	80.0 - 120.0	21-JAN-10 16:16	100121-5

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1132-1 Client ID CALA-10-9162S

Contract: ESHL01000 Level: Low

Matrix: GROUND WATER % Solids:

Sample ID: 244240001 Spike ID: 1202011706

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75-125	214		0.5	U	200	107		MS
Beryllium	ug/L	75-125	55.2		0.134	J	50	110		MS
Cadmium	ug/L	75-125	10.3		0.11	U	10	103		MS
Lead	ug/L	75-125	39.1		0.5	U	40	97.7		MS
Manganese	ug/L	75-125	45.2		1	U	50	89.2		MS
Thallium	ug/L	75-125	83.2		0.3	U	100	83.1		MS
Uranium	ug/L	75-125	51.5		0.605		50	102		MS

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1132-1 Client ID RE12-10-7662S

Contract: LANL01004 Level: Low

Matrix: WATER % Solids:

Sample ID: 244145001 Spike ID: 1202011711

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75-125	5440		235		5000	104		P
Arsenic	ug/L	75-125	508		5	U	500	102		P
Barium	ug/L	75-125	513		2.99	J	500	102		P
Calcium	ug/L	75-125	5050		63.1	J	5000	99.8		P
Chromium	ug/L	75-125	502		1.48	J	500	100		P
Cobalt	ug/L	75-125	487		1	U	500	97.4		P
Copper	ug/L	75-125	513		3	U	500	102		P
Iron	ug/L	75-125	5200		122		5000	102		P
Magnesium	ug/L	75-125	5130		85	U	5000	101		P
Nickel	ug/L	75-125	500		1.5	U	500	99.8		P
Potassium	ug/L	75-125	5150		148	J	5000	100		P
Selenium	ug/L	75-125	504		5	U	500	101		P
Silver	ug/L	75-125	493		1	U	500	98.6		P
Sodium	ug/L	75-125	5120		175	J	5000	99		P
Vanadium	ug/L	75-125	510		1	U	500	102		P
Zinc	ug/L	75-125	490		3.3	U	500	97.4		P

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1132-1 Client ID RE16-10-1431S

Contract: LANL01004 Level: Low

Matrix: WATER % Solids:

Sample ID: 244418001 Spike ID: 1202014295

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Mercury	ug/L	75-125	2.06		0.066	U	2	100		AV

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1132-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: CALA-10-9162D

Sample ID: 244240001

Duplicate ID: 1202011705

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		0.5 U		0.5 U				MS
Beryllium	ug/L	+/- .5	0.134 J		0.11 J		19.7		MS
Cadmium	ug/L		0.11 U		0.11 U				MS
Lead	ug/L		0.5 U		0.5 U				MS
Manganese	ug/L		1 U		1 U				MS
Thallium	ug/L		0.3 U		0.3 U				MS
Uranium	ug/L	+/- .2	0.605		0.621		2.61		MS

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-1132-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE12-10-7662D

Sample ID: 244145001

Duplicate ID: 1202011710

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L	+/-200	235		251		6.5		P
Arsenic	ug/L		5 U		5 U				P
Barium	ug/L	+/-5	2.99 J		3.23 J		7.87		P
Calcium	ug/L	+/-200	63.1 J		54 J		15.6		P
Chromium	ug/L	+/-5	1.48 J		1.26 J		16.1		P
Cobalt	ug/L		1 U		1 U				P
Copper	ug/L		3 U		3 U				P
Iron	ug/L	+/-100	122		133		8.51		P
Magnesium	ug/L		85 U		85 U				P
Nickel	ug/L		1.5 U		1.5 U				P
Potassium	ug/L	+/-150	148 J		122 J		19.4		P
Selenium	ug/L		5 U		5 U				P
Silver	ug/L		1 U		1 U				P
Sodium	ug/L	+/-300	175 J		170 J		3.35		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.: 10-1132-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE16-10-1431D

Sample ID: 244418001

Duplicate ID: 1202014294

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. 10-1132-1

Contract: LANL01004

Aqueous LCS Source:O2si

Solid LCS Source:

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202011704								
	Antimony	ug/L	50	51.8		104	80-120	MS
	Beryllium	ug/L	50	55.1		110	80-120	MS
	Cadmium	ug/L	50	49		98	80-120	MS
	Lead	ug/L	50	49.8		99.7	80-120	MS
	Manganese	ug/L	50	49.3		98.7	80-120	MS
	Thallium	ug/L	50	44.2		88.5	80-120	MS
	Uranium	ug/L	50	50.7		101	80-120	MS

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1132-1

Contract: LANL01004

Aqueous LCS Source:OS2I

Solid LCS Source:

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202011709								
	Aluminum	ug/L	5000	4990		99.9	80-120	P
	Arsenic	ug/L	500	494		98.9	80-120	P
	Barium	ug/L	500	499		99.7	80-120	P
	Calcium	ug/L	5000	4980		99.7	80-120	P
	Chromium	ug/L	500	489		97.7	80-120	P
	Cobalt	ug/L	500	476		95.2	80-120	P
	Copper	ug/L	500	495		99	80-120	P
	Iron	ug/L	5000	5060		101	80-120	P
	Magnesium	ug/L	5000	5110		102	80-120	P
	Nickel	ug/L	500	487		97.4	80-120	P
	Potassium	ug/L	5000	4940		98.7	80-120	P
	Silver	ug/L	500	486		97.3	80-120	P
	Sodium	ug/L	5000	5110		102	80-120	P
	Vanadium	ug/L	500	497		99.5	80-120	P
	Zinc	ug/L	500	482		96.3	80-120	P
	Selenium	ug/L	500	503		101	80-120	P

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1132-1

Contract: LANL01004

Aqueous LCS Source:GEL

Solid LCS Source:

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202014293	Mercury	ug/L	2	2.1		105	80-120	AV

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1132-1

Client ID CALA-10-9162L

Contract: LANL01004

Matrix: LIQUID

Level: Low

Sample ID: 244240001

Serial Dilution ID: 1202011707

<u>Analyte</u>	<u>Initial Value ug/L</u>	<u>C</u>	<u>Serial Value ug/L</u>	<u>C</u>	<u>% Difference</u>	<u>Qual</u>	<u>Acceptance Limit</u>	<u>M</u>
Antimony	.5	U	2.5	U				MS
Beryllium	.134	J	.5	U	100			MS
Cadmium	.11	U	.55	U				MS
Lead	.5	U	2.5	U				MS
Manganese	1	U	5	U				MS
Thallium	.3	U	5.65					MS
Uranium	.605		.585	J	3.31			MS

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1132-1

Client ID: RE12-10-7662L

Contract: LANL01004

Matrix: LIQUID

Level: Low

Sample ID: 244145001

Serial Dilution ID: 1202011712

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	235		340	U	100			P
Arsenic	5	U	25	U				P
Barium	2.99	J	5	U	100			P
Calcium	63.1	J	250	U	100			P
Chromium	1.48	J	5	U	100			P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	122		157	J	28.3			P
Magnesium	85	U	425	U				P
Nickel	1.5	U	7.5	U				P
Potassium	148	J	250	U	100			P
Selenium	5	U	26.3	J				P
Silver	1	U	5	U				P
Sodium	175	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. 10-1132-1 Client ID RE16-10-1431L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 244418001 Serial Dilution ID: 1202014296

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: 10-1132-1

Method Type: P

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number	940083						
1202011708	MB for batch 940083	MB	W	11-JAN-10	50mL	50mL	
1202011709	LCS for batch 940083	LCS	W	11-JAN-10	50mL	50mL	
1202011711	RE12-10-7662S	MS	W	11-JAN-10	50mL	50mL	
1202011710	RE12-10-7662D	DUP	W	11-JAN-10	50mL	50mL	
244129001	RE12-10-7659	SAMPLE	W	11-JAN-10	50mL	50mL	
244129002	RE12-10-7661	SAMPLE	W	11-JAN-10	50mL	50mL	
244129003	RE12-10-7660	SAMPLE	W	11-JAN-10	50mL	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1132-1

Method Type: MS

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number	940079						
1202011703	MB for batch 940079	MB	G	11-JAN-10	50mL	50mL	
1202011704	LCS for batch 940079	LCS	G	11-JAN-10	50mL	50mL	
1202011706	CALA-10-9162S	MS	G	11-JAN-10	50mL	50mL	
1202011705	CALA-10-9162D	DUP	G	11-JAN-10	50mL	50mL	
244129001	RE12-10-7659	SAMPLE	W	11-JAN-10	50mL	50mL	
244129002	RE12-10-7661	SAMPLE	W	11-JAN-10	50mL	50mL	
244129003	RE12-10-7660	SAMPLE	W	11-JAN-10	50mL	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1132-1

Method Type: AV

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number	941141						
1202014292	MB for batch 941141	MB	W	14-JAN-10	20mL	20mL	
1202014293	LCS for batch 941141	LCS	W	14-JAN-10	20mL	20mL	
1202014295	RE16-10-1431S	MS	W	14-JAN-10	20mL	20mL	
1202014294	RE16-10-1431D	DUP	W	14-JAN-10	20mL	20mL	
244129001	RE12-10-7659	SAMPLE	W	14-JAN-10	20mL	20mL	
244129002	RE12-10-7661	SAMPLE	W	14-JAN-10	20mL	20mL	
244129003	RE12-10-7660	SAMPLE	W	14-JAN-10	20mL	20mL	

SW846

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 21-JAN-10

End Date: 21-JAN-10

Client Sdg: 10-1132-1

Method: MS

Data File: 100121-5

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	16:05					X																			
S10	1	16:06					X																			
S100	1	16:08					X																			
ICV01	1	16:10					X																			
ICB01	1	16:11					X																			
CRDL01	1	16:13					X																			
ICSA01	1	16:14					X																			
ICSAB01	1	16:16					X																			
CCV01	1	16:18					X																			
CCB01	1	16:19					X																			
1202011703	1	16:21					X																			
1202011704	1	16:23					X																			
244129001	1	16:25					X																			
244129002	1	16:26					X																			
244129003	1	16:28					X																			
ZZZZZZ	1	16:30																								
ZZZZZZ	1	16:31																								
ZZZZZZ	1	16:33																								
CCV02	1	16:35					X																			
CCB02	1	16:36					X																			
ZZZZZZ	1	16:41																								
ZZZZZZ	1	16:43																								
ZZZZZZ	1	16:45																								
ZZZZZZ	1	16:46																								
ZZZZZZ	1	16:48																								
ZZZZZZ	1	16:50																								
ZZZZZZ	1	16:52																								
CCV03	1	16:53					X																			
CCB03	1	16:55					X																			
ZZZZZZ	1	17:03																								
1202011705	1	17:04					X																			
1202011706	1	17:06					X																			
1202011707	5	17:08					X																			
CCV04	1	17:10					X																			
CCB04	1	17:11					X																			

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 18-JAN-10

End Date: 18-JAN-10

Client Sdg: 10-1132-1

Method P

Data File: 011810-1

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	14:53	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S0.1	1	15:00			X	X				X	X	X						X	X	X	X				X	X
S0.5	1	15:06	X		X	X			X	X	X	X			X			X	X	X	X				X	X
SCAL	1	15:13	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S10	1	15:20	X						X				X		X							X				
ICV01	1	15:26	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICB01	1	15:33	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
PQL01	1	15:40	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSA01	1	15:47	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSAB01	1	15:53	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR01	1	15:59	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR02	1	16:05	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV01	1	16:12	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB01	1	16:19	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR03	1	16:35	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV02	1	16:41	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB02	1	16:49	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202011708	1	16:56	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202011709	1	17:03	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
244129001	1	17:09	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
244129002	1	17:16	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
244129003	1	17:23	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	17:30																								
ZZZZZZ	1	17:37																								
ZZZZZZ	1	17:45																								
1202011710	1	17:52	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV03	1	17:59	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB03	1	18:06	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202011711	1	18:12	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202011712	5	18:19	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	18:26																								
ZZZZZZ	1	18:33																								
ZZZZZZ	1	18:40																								
ZZZZZZ	1	18:47																								
ZZZZZZ	1	18:54																								
ZZZZZZ	1	19:01																								
CCV04	1	19:08	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB04	1	19:15	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: 15-JAN-10

End Date: 15-JAN-10

Client Sdg: 10-1132-1

Method AV

Data File: 011510W1-6

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	09:18															X									
S0.2	1	09:19															X									
S0.5	1	09:21															X									
S2.0	1	09:23															X									
S5.0	1	09:25															X									
S10.0	1	09:27															X									
ICV01	1	09:29															X									
ICB01	1	09:31															X									
CRDL01	1	09:33															X									
CCV01	1	09:35															X									
CCB01	1	09:37															X									
ZZZZZZ	1	09:39																								
ZZZZZZ	1	09:41																								
ZZZZZZ	1	09:43																								
ZZZZZZ	1	09:44																								
ZZZZZZ	1	09:46																								
ZZZZZZ	1	09:48																								
ZZZZZZ	1	09:50																								
ZZZZZZ	1	09:52																								
ZZZZZZ	1	09:54																								
ZZZZZZ	1	09:56																								
CCV02	1	09:58															X									
CCB02	1	10:00															X									
ZZZZZZ	1	10:02																								
ZZZZZZ	1	10:04																								
ZZZZZZ	5	10:06																								
ZZZZZZ	1	10:08																								
ZZZZZZ	1	10:09																								
ZZZZZZ	1	10:11																								
ZZZZZZ	1	10:13																								
ZZZZZZ	1	10:15																								
ZZZZZZ	5	10:17																								
ZZZZZZ	1	10:19																								
CCV03	1	10:21															X									
CCB03	1	10:23															X									
ZZZZZZ	1	10:25																								
ZZZZZZ	1	10:27																								
ZZZZZZ	1	10:29																								
ZZZZZZ	1	10:31																								
ZZZZZZ	1	10:33																								

SW846

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
ZZZZZZ	1	11:52																								
CCV07	1	11:54															X									
CCB07	1	11:55															X									
1202014294	1	11:57															X									
1202014295	1	11:59															X									
1202014296	5	12:01															X									
ZZZZZZ	1	12:03																								
ZZZZZZ	1	12:05																								
ZZZZZZ	1	12:07																								
ZZZZZZ	1	12:09																								
ZZZZZZ	1	12:11																								
ZZZZZZ	1	12:13																								
ZZZZZZ	5	12:15																								
CCV08	1	12:17															X									
CCB08	1	12:19															X									

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS4

Start Date: 13-JAN-10

End Date: 14-JAN-10

Client Sdg: 10-1132-1

Method MS

Data File: 100113-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	19:21		X				X						X	X									X		
S10	1	19:28		X				X						X	X									X		
S100	1	19:34		X				X						X	X									X		
ICV01	1	19:40		X				X						X	X									X		
ICB01	1	19:46		X				X						X	X									X		
CRDL01	1	19:52		X				X						X	X									X		
ICSA01	1	19:58		X				X						X	X									X		
ICSAB01	1	20:05		X				X						X	X									X		
CCV01	1	20:11		X				X						X	X									X		
CCB01	1	20:17		X				X						X	X									X		
LR01	1	20:23		X				X						X	X									X		
CCV02	1	20:29		X				X						X	X									X		
CCB02	1	20:36		X				X						X	X									X		
ZZZZZZ	2	20:42																								
ZZZZZZ	40	20:48																								
ZZZZZZ	2	20:54																								
ZZZZZZ	2	21:00																								
ZZZZZZ	2	21:07																								
CCV03	1	21:13		X				X						X	X									X		
CCB03	1	21:19		X				X						X	X									X		
ZZZZZZ	2	21:25																								
ZZZZZZ	10	21:31																								
ZZZZZZ	2	21:38																								
ZZZZZZ	2	21:44																								
ZZZZZZ	2	21:50																								
ZZZZZZ	2	21:56																								
CCV04	1	22:03		X				X						X	X									X		
CCB04	1	22:09		X				X						X	X									X		
ZZZZZZ	2	22:15																								
ZZZZZZ	2	22:21																								
ZZZZZZ	2	22:27																								
ZZZZZZ	2	22:34																								
ZZZZZZ	2	22:40																								
ZZZZZZ	2	22:46																								
ZZZZZZ	2	22:52																								
CCV05	1	22:58		X				X						X	X									X		
CCB05	1	23:05		X				X						X	X									X		
ZZZZZZ	2	23:11																								
ZZZZZZ	2	23:17																								
ZZZZZZ	2	23:23																								

Samp No.	D/F	Run Time
ZZZZZL	2	23:30
CCV06	1	23:36
CCB06	1	23:42
ZZZZZL	2	23:48
ZZZZZL	2	23:55
ZZZZZL	2	00:01
ZZZZZL	2	00:07
CCV07	1	00:13
CCB07	1	00:19
I202011703	1	00:26
I202011704	1	00:32
244I29001	1	00:38
244I29002	1	00:44
244I29003	1	00:51
ZZZZZL	1	00:57
CCV08	1	01:03
CCB08	1	01:09
ZZZZZL	1	01:16
ZZZZZL	1	01:22
ZZZZZL	1	01:28
ZZZZZL	1	01:34
ZZZZZL	1	01:41
ZZZZZL	1	01:47
CCV09	1	01:53
CCB09	1	01:59
ZZZZZL	1	02:06
ZZZZZL	1	02:12
ZZZZZL	1	02:18
ZZZZZL	1	02:24
ZZZZZL	1	02:31
ZZZZZL	1	02:37
CCV10	1	02:43
CCB10	1	02:49
ZZZZZL	1	02:56
ZZZZZL	1	03:02
ZZZZZL	1	03:08
I202011705	1	03:14
I202011706	1	03:21
I202011707	5	03:27
ZZZZZL	1	03:33

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
CCV11	1	03:39		X				X						X		X								X		
CCB11	1	03:46		X				X						X		X								X		

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS4

Start Date: 14-JAN-10

End Date: 15-JAN-10

Client Sdg: 10-1132-1

Method MS

Data File: 100114-3

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	21:54																					X			
S10	1	21:59																					X			
S100	1	22:03																					X			
ICV01	1	22:07																					X			
ICB01	1	22:11																					X			
CRDL01	1	22:15																					X			
ICSA01	1	22:19																					X			
ICSAB01	1	22:23																					X			
CCV01	1	22:27																					X			
CCB01	1	22:31																					X			
1202011703	1	22:35																					X			
1202011704	1	22:39																					X			
244129001	1	22:43																					X			
244129002	1	22:47																					X			
244129003	1	22:52																					X			
ZZZZZZ	1	22:56																								
CCV02	1	23:00																					X			
CCB02	1	23:04																					X			
ZZZZZZ	1	23:08																								
ZZZZZZ	1	23:12																								
ZZZZZZ	1	23:16																								
ZZZZZZ	1	23:20																								
ZZZZZZ	1	23:25																								
CCV03	1	23:29																					X			
CCB03	1	23:33																					X			
ZZZZZZ	1	23:37																								
ZZZZZZ	1	23:41																								
ZZZZZZ	1	23:45																								
ZZZZZZ	1	23:49																								
ZZZZZZ	1	23:53																								
CCV04	1	23:57																					X			
CCB04	1	00:02																					X			
ZZZZZZ	1	00:06																								
ZZZZZZ	1	00:10																								
ZZZZZZ	1	00:14																								
ZZZZZZ	1	00:18																								
CCV05	1	00:22																					X			
CCB05	1	00:26																					X			
ZZZZZZ	1	00:30																								
1202011705	1	00:35																					X			

[illegible]

Mar 21.10

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1132-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP/MS	Analyte	Wavelength (nm)	MDL	RDL
			ug/L	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. 10-1132-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u> <u>ug/L</u>	<u>RDL</u> <u>ug/L</u>
MERCURY				
LIQUID	Mercury		0.066	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1132-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
LIQUID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.0	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	50.0	200
	Chromium	267.716	1.0	5
	Cobalt	228.616	1.0	5
	Copper	324.752	3.0	10
	Iron	238.204	30.0	100
	Lead	220.353	3.3	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	50.0	150
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	100	300
	Thallium	190.801	5.0	20
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1132-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-NOV-09

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Aluminum	Antimony	Arsenic	Barium	Beryllium
Parmname	Wavelength					
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02697	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.48147	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.21356	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05186	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.18741	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1132-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-NOV-09

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1132-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-NOV-09

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	48.4946
Antimony	206.836	-0.02515	0.00000	0.00000	0.00000	-20.5057
Arsenic	188.979	-0.23424	0.00000	0.00000	0.00000	2.41902
Barium	233.527	-0.03042	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.16240	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.10329	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01944	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01444	0.00000	0.00000	0.00000	-2.33100
Copper	324.752	-0.05293	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09554	0.00000	0.00000	0.00000	-2.48774
Magnesium	279.077	1.04597	0.00000	0.00000	0.00000	-10.4683
Manganese	257.61	-0.09877	0.00000	0.04089	0.00000	0.00000
Molybdenum	202.031	-0.07763	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80543	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.39429	1.18725
Selenium	196.026	-3.27508	0.00000	0.00000	0.00000	-3.07287
Silica	251.611	0.00000	0.00000	0.00000	0.00000	27.2377
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	12.3082
Silver	328.068	-0.32385	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-4.77918	0.00000
Tin	189.927	-0.01682	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.08168	0.00000	0.00000
Uranium	409.014	0.11400	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.14564	0.00000	-0.01931	0.00000	-14.1293
Zinc	213.857	0.09701	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1132-1**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-NOV-09**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1132-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-NOV-09

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Silver	Strontium	Sulfur	Thallium	Tin
Parmname	Wavelength					
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-15.4932
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	-9.37529
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1132-1**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-NOV-09**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	3.30431	0.00000	-2.81282	0.00000
Arsenic	188.979	-8.66313	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.20293	0.00000
Beryllium	313.107	-2.27027	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	-0.19473	0.00000	0.00000
Chromium	267.716	0.00000	0.39645	-1.41250	0.00000
Cobalt	228.616	2.09497	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.55360	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
Silica	251.611	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.81635	-4.04400	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	-8.29801	0.00000	1.88584	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.43915	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.05947	-1.91382	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
-12-
Linear Ranges

SDG NO. 10-1132-1

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS5

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
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. 10-1132-1

Contract: LANL01004

Lab Code: GEL

Instrument ID OPTIMA3

<u>Analyte</u>	<u>Integration Time (sec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
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. 10-1132-1

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS4

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
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
Nickel	1000	1000	ug/L	01-NOV-09
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

Raw Data

=====
Analysis Begun

Start Time: 1/18/2010 14:53:34

Plasma On Time: 1/18/2010 05:48:39

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\011810.sif

Batch ID:

Results Data Set: 011810

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

Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 1/18/2010 14:51:13

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: 1/18/2010 14:53:36

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	5291.6	5291.6	99.3 %	14:55:28
1	Y RADIAL	5630.8	5630.8	99.75 %	14:55:28
1	Al 396.153Radial†	-0.5	-0.5	[0.00] ug/L	14:55:28

1	Ca 317.933Radial†	21.6	21.8	[0.00]	ug/L	14:55:48
1	Fe 238.204 Radial†	12.8	12.9	[0.00]	ug/L	14:55:48
1	K 766.490 Radial†	2680.8	2698.8	[0.00]	ug/L	14:55:28
1	Mg 279.077 IEC†	2.7	2.7	[0.00]	ug/L	14:55:48
1	Na 589.592 Radial†	-1116.6	-1124.0	[0.00]	ug/L	14:55:28
1	Sr 421.552†	19.1	19.3	[0.00]	ug/L	14:55:28
1	Sc 361.383	947840.7	947840.7	100.39	%	14:56:45
1	Y 371.029	800018.1	800018.1	100.33	%	14:56:45
1	Ag 328.068†	374.1	372.6	[0.00]	ug/L	14:56:50
1	As 188.979†	-22.3	-22.2	[0.00]	ug/L	14:57:10
1	B 249.677†	-539.2	-537.1	[0.00]	ug/L	14:57:10
1	Ba 233.527†	20.4	20.3	[0.00]	ug/L	14:57:10
1	Be 313.107†	-4556.9	-4539.2	[0.00]	ug/L	14:56:50
1	Cd 226.502†	-212.0	-211.1	[0.00]	ug/L	14:57:10
1	Co 228.616†	-88.3	-88.0	[0.00]	ug/L	14:57:10
1	Cr 267.716†	69.8	69.5	[0.00]	ug/L	14:57:10
1	Cu 324.752†	6196.6	6172.4	[0.00]	ug/L	14:56:50
1	Mn 257.610†	446.8	445.1	[0.00]	ug/L	14:57:10
1	Mo 202.031†	16.1	16.0	[0.00]	ug/L	14:57:10
1	Ni 231.604†	100.4	100.0	[0.00]	ug/L	14:57:10
1	P 214.914†	237.9	237.0	[0.00]	ug/L	14:57:10
1	Pb 220.353†	-40.8	-40.6	[0.00]	ug/L	14:57:10
1	S 181.975 Axial†	41.0	40.9	[0.00]	ug/L	14:57:10
1	Sb 206.836†	38.3	38.2	[0.00]	ug/L	14:57:10
1	Se 196.026†	-27.9	-27.8	[0.00]	ug/L	14:57:10
1	Si 251.611†	494.4	492.5	[0.00]	ug/L	14:57:10
1	Sn 189.927†	7.0	6.9	[0.00]	ug/L	14:57:10
1	Ti 334.940†	-1405.3	-1399.8	[0.00]	ug/L	14:56:50
1	Tl 190.801†	-35.9	-35.7	[0.00]	ug/L	14:57:10
1	U 409.014†	-1779.5	-1772.6	[0.00]	ug/L	14:56:45
1	V 292.402†	-1439.5	-1433.9	[0.00]	ug/L	14:56:50
1	Zn 213.857†	701.2	698.5	[0.00]	ug/L	14:57:10
1	SiO2†	538.8	536.7	[0.00]	ug/L	14:58:16
2	Sc Radial	5360.6	5360.6	101	%	14:55:53
2	Y RADIAL	5650.4	5650.4	100.1	%	14:55:53
2	Al 396.153Radial†	-0.7	-0.7	[0.00]	ug/L	14:55:53
2	Ca 317.933Radial†	17.2	17.1	[0.00]	ug/L	14:56:13
2	Fe 238.204 Radial†	12.4	12.4	[0.00]	ug/L	14:56:13
2	K 766.490 Radial†	2752.5	2735.3	[0.00]	ug/L	14:55:53
2	Mg 279.077 IEC†	2.3	2.3	[0.00]	ug/L	14:56:13
2	Na 589.592 Radial†	-1068.9	-1062.3	[0.00]	ug/L	14:55:53
2	Sr 421.552†	8.4	8.4	[0.00]	ug/L	14:55:53
2	Sc 361.383	940339.5	940339.5	99.596	%	14:57:15
2	Y 371.029	793747.5	793747.5	99.546	%	14:57:15
2	Ag 328.068†	483.8	485.8	[0.00]	ug/L	14:57:20
2	As 188.979†	-17.0	-17.0	[0.00]	ug/L	14:57:40
2	B 249.677†	-541.7	-543.9	[0.00]	ug/L	14:57:40
2	Ba 233.527†	24.4	24.5	[0.00]	ug/L	14:57:40
2	Be 313.107†	-4515.2	-4533.5	[0.00]	ug/L	14:57:20
2	Cd 226.502†	-214.0	-214.8	[0.00]	ug/L	14:57:40
2	Co 228.616†	-72.7	-73.0	[0.00]	ug/L	14:57:40
2	Cr 267.716†	82.4	82.7	[0.00]	ug/L	14:57:40
2	Cu 324.752†	6145.8	6170.7	[0.00]	ug/L	14:57:20
2	Mn 257.610†	452.5	454.4	[0.00]	ug/L	14:57:40
2	Mo 202.031†	20.5	20.6	[0.00]	ug/L	14:57:40
2	Ni 231.604†	103.2	103.6	[0.00]	ug/L	14:57:40
2	P 214.914†	230.2	231.1	[0.00]	ug/L	14:57:40
2	Pb 220.353†	-71.4	-71.7	[0.00]	ug/L	14:57:40
2	S 181.975 Axial†	43.5	43.7	[0.00]	ug/L	14:57:40
2	Sb 206.836†	43.7	43.9	[0.00]	ug/L	14:57:40
2	Se 196.026†	-41.1	-41.3	[0.00]	ug/L	14:57:40
2	Si 251.611†	501.1	503.2	[0.00]	ug/L	14:57:40
2	Sn 189.927†	9.1	9.2	[0.00]	ug/L	14:57:40
2	Ti 334.940†	-1389.0	-1394.7	[0.00]	ug/L	14:57:20
2	Tl 190.801†	-36.3	-36.5	[0.00]	ug/L	14:57:40
2	U 409.014†	-1484.4	-1490.5	[0.00]	ug/L	14:57:15
2	V 292.402†	-1468.3	-1474.3	[0.00]	ug/L	14:57:20
2	Zn 213.857†	705.9	708.8	[0.00]	ug/L	14:57:40
2	SiO2†	515.5	517.6	[0.00]	ug/L	14:58:21
3	Sc Radial	5329.2	5329.2	100	%	14:56:18
3	Y RADIAL	5653.5	5653.5	100.2	%	14:56:18

3	Al 396.153Radial†	15.2	15.2	[0.00]	ug/L	14:56:18
3	Ca 317.933Radial†	22.9	22.9	[0.00]	ug/L	14:56:38
3	Fe 238.204 Radial†	13.2	13.2	[0.00]	ug/L	14:56:38
3	K 766.490 Radial†	2593.2	2592.2	[0.00]	ug/L	14:56:18
3	Mg 279.077 IEC†	2.9	2.9	[0.00]	ug/L	14:56:38
3	Na 589.592 Radial†	-1110.2	-1109.8	[0.00]	ug/L	14:56:18
3	Sr 421.552†	7.3	7.3	[0.00]	ug/L	14:56:18
3	Sc 361.383	944268.1	944268.1	100.01	%	14:57:45
3	Y 371.029	798344.2	798344.2	100.12	%	14:57:45
3	Ag 328.068†	375.2	375.2	[0.00]	ug/L	14:57:50
3	As 188.979†	-19.5	-19.5	[0.00]	ug/L	14:58:11
3	B 249.677†	-501.5	-501.5	[0.00]	ug/L	14:58:11
3	Ba 233.527†	14.3	14.3	[0.00]	ug/L	14:58:11
3	Be 313.107†	-4520.1	-4519.6	[0.00]	ug/L	14:57:50
3	Cd 226.502†	-224.7	-224.6	[0.00]	ug/L	14:58:11
3	Co 228.616†	-59.2	-59.2	[0.00]	ug/L	14:58:11
3	Cr 267.716†	88.0	88.0	[0.00]	ug/L	14:58:11
3	Cu 324.752†	6157.1	6156.3	[0.00]	ug/L	14:57:50
3	Mn 257.610†	467.4	467.3	[0.00]	ug/L	14:58:11
3	Mo 202.031†	19.8	19.8	[0.00]	ug/L	14:58:11
3	Ni 231.604†	98.0	98.0	[0.00]	ug/L	14:58:11
3	P 214.914†	235.6	235.6	[0.00]	ug/L	14:58:11
3	Pb 220.353†	-48.9	-48.9	[0.00]	ug/L	14:58:11
3	S 181.975 Axial†	39.9	39.9	[0.00]	ug/L	14:58:11
3	Sb 206.836†	34.1	34.0	[0.00]	ug/L	14:58:11
3	Se 196.026†	-29.7	-29.7	[0.00]	ug/L	14:58:11
3	Si 251.611†	495.8	495.8	[0.00]	ug/L	14:58:11
3	Sn 189.927†	6.3	6.3	[0.00]	ug/L	14:58:11
3	Ti 334.940†	-1372.1	-1371.9	[0.00]	ug/L	14:57:50
3	Tl 190.801†	-44.0	-44.0	[0.00]	ug/L	14:58:11
3	U 409.014†	-1671.9	-1671.7	[0.00]	ug/L	14:57:45
3	V 292.402†	-1524.6	-1524.5	[0.00]	ug/L	14:57:50
3	Zn 213.857†	715.9	715.8	[0.00]	ug/L	14:58:11
3	SiO2†	520.7	520.6	[0.00]	ug/L	14:58:26

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	944149.5	3752.01	0.40%	100.00 %
Sc Radial	5327.1	34.50	0.65%	100 %
Y 371.029	797369.9	3246.87	0.41%	100.00 %
Y RADIAL	5644.9	12.30	0.22%	100.0 %
Ag 328.068†	411.2	64.62	15.72%	[0.00] ug/L
Al 396.153Radial†	4.6	9.11	196.25%	[0.00] ug/L
As 188.979†	-19.6	2.57	13.11%	[0.00] ug/L
B 249.677†	-527.5	22.80	4.32%	[0.00] ug/L
Ba 233.527†	19.7	5.15	26.12%	[0.00] ug/L
Be 313.107†	-4530.8	10.09	0.22%	[0.00] ug/L
Ca 317.933Radial†	20.6	3.10	15.06%	[0.00] ug/L
Cd 226.502†	-216.9	6.97	3.22%	[0.00] ug/L
Co 228.616†	-73.4	14.39	19.61%	[0.00] ug/L
Cr 267.716†	80.1	9.51	11.88%	[0.00] ug/L
Cu 324.752†	6166.5	8.88	0.14%	[0.00] ug/L
Fe 238.204 Radial†	12.8	0.42	3.31%	[0.00] ug/L
K 766.490 Radial†	2675.5	74.35	2.78%	[0.00] ug/L
Mg 279.077 IEC†	2.6	0.35	13.26%	[0.00] ug/L
Mn 257.610†	455.6	11.18	2.45%	[0.00] ug/L
Mo 202.031†	18.8	2.43	12.94%	[0.00] ug/L
Na 589.592 Radial†	-1098.7	32.35	2.94%	[0.00] ug/L
Ni 231.604†	100.5	2.83	2.82%	[0.00] ug/L
P 214.914†	234.6	3.05	1.30%	[0.00] ug/L
Pb 220.353†	-53.7	16.08	29.93%	[0.00] ug/L
S 181.975 Axial†	41.5	1.97	4.76%	[0.00] ug/L
Sb 206.836†	38.7	4.95	12.79%	[0.00] ug/L
Se 196.026†	-32.9	7.30	22.18%	[0.00] ug/L
Si 251.611†	497.1	5.49	1.10%	[0.00] ug/L
Sn 189.927†	7.5	1.49	19.96%	[0.00] ug/L
Sr 421.552†	11.7	6.62	56.73%	[0.00] ug/L
Ti 334.940†	-1388.8	14.87	1.07%	[0.00] ug/L
Tl 190.801†	-38.7	4.56	11.76%	[0.00] ug/L

U 409.014†	-1644.9	142.95	8.69%	[0.00]	ug/L
V 292.402†	-1477.5	45.35	3.07%	[0.00]	ug/L
Zn 213.857†	707.7	8.69	1.23%	[0.00]	ug/L
SiO2†	525.0	10.25	1.95%	[0.00]	ug/L

Sequence No.: 2
 Sample ID: S0.1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 1/18/2010 15:00:36
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	5352.1	5352.1	100 %	15:02:34
1	Y RADIAL	5652.6	5652.6	100.1 %	15:02:34
1	K 766.490 Radial†	7336.7	4627.1	[1000] ug/L	15:02:29
1	Sr 421.552†	15971.2	15885.0	[100] ug/L	15:02:34
1	Sc 361.383	934037.5	934037.5	98.929 %	15:03:01
1	Y 371.029	792820.6	792820.6	99.429 %	15:03:01
1	Ag 328.068†	22820.5	22656.3	[100] ug/L	15:03:01
1	As 188.979†	216.2	238.2	[100] ug/L	15:03:21
1	B 249.677†	3797.0	4365.7	[100] ug/L	15:03:01
1	Ba 233.527†	13554.4	13681.4	[100] ug/L	15:03:01
1	Be 313.107†	272866.3	280351.1	[100] ug/L	15:03:01
1	Cd 226.502†	9054.0	9368.9	[100] ug/L	15:03:01
1	Co 228.616†	4891.9	5018.3	[100] ug/L	15:03:21
1	Cr 267.716†	9031.1	9048.8	[100] ug/L	15:03:01
1	Cu 324.752†	39878.3	34143.6	[100] ug/L	15:03:01
1	Mn 257.610†	95153.8	95728.3	[100] ug/L	15:03:01
1	Mo 202.031†	1490.8	1488.1	[100] ug/L	15:03:21
1	Ni 231.604†	4123.2	4067.3	[100] ug/L	15:03:21
1	P 214.914†	1073.4	850.5	[500] ug/L	15:03:21
1	Pb 220.353†	794.5	856.9	[100] ug/L	15:03:21
1	S 181.975 Axial†	189.3	149.8	[200] ug/L	15:03:21
1	Sb 206.836†	328.6	293.5	[100] ug/L	15:03:21
1	Se 196.026†	128.2	162.5	[100] ug/L	15:03:21
1	Si 251.611†	16541.2	16223.1	[500] ug/L	15:03:01
1	Sn 189.927†	582.5	581.4	[100] ug/L	15:03:21
1	Ti 334.940†	63539.8	65616.5	[100] ug/L	15:03:01
1	Tl 190.801†	298.7	340.6	[100] ug/L	15:03:21
1	U 409.014†	1707.8	3371.2	[100] ug/L	15:03:01
1	V 292.402†	13240.0	14860.9	[100] ug/L	15:03:01
1	Zn 213.857†	11707.7	11126.8	[100] ug/L	15:03:01
1	SiO2†	16457.1	16110.3	[1069.5] ug/L	15:04:17
2	Sc Radial	6012.0	6012.0	113 %	15:02:44
2	Y RADIAL	6337.1	6337.1	112.3 %	15:02:44
2	K 766.490 Radial†	7413.9	3893.9	[1000] ug/L	15:02:39
2	Sr 421.552†	15384.3	13620.1	[100] ug/L	15:02:44
2	Sc 361.383	901893.7	901893.7	95.524 %	15:03:26
2	Y 371.029	762893.3	762893.3	95.676 %	15:03:26
2	Ag 328.068†	22613.3	23261.6	[100] ug/L	15:03:26
2	As 188.979†	214.3	243.9	[100] ug/L	15:03:46
2	B 249.677†	3851.3	4559.2	[100] ug/L	15:03:26
2	Ba 233.527†	13511.4	14124.8	[100] ug/L	15:03:26
2	Be 313.107†	271285.0	288526.1	[100] ug/L	15:03:26
2	Cd 226.502†	8977.3	9614.7	[100] ug/L	15:03:26
2	Co 228.616†	4892.6	5195.3	[100] ug/L	15:03:46
2	Cr 267.716†	9067.3	9412.1	[100] ug/L	15:03:26
2	Cu 324.752†	39488.4	35172.0	[100] ug/L	15:03:26
2	Mn 257.610†	94839.9	98827.8	[100] ug/L	15:03:26
2	Mo 202.031†	1488.9	1539.9	[100] ug/L	15:03:46
2	Ni 231.604†	4115.4	4207.7	[100] ug/L	15:03:46
2	P 214.914†	1063.7	878.9	[500] ug/L	15:03:46
2	Pb 220.353†	785.6	876.1	[100] ug/L	15:03:46
2	S 181.975 Axial†	184.1	151.2	[200] ug/L	15:03:46
2	Sb 206.836†	319.9	296.2	[100] ug/L	15:03:46
2	Se 196.026†	131.3	170.4	[100] ug/L	15:03:46
2	Si 251.611†	16400.2	16671.5	[500] ug/L	15:03:26
2	Sn 189.927†	593.1	613.4	[100] ug/L	15:03:46
2	Ti 334.940†	63429.7	67790.3	[100] ug/L	15:03:26
2	Tl 190.801†	309.0	362.2	[100] ug/L	15:03:46
2	U 409.014†	1611.9	3332.3	[100] ug/L	15:03:26

2	V 292.402†	13296.8	15397.3	[100] ug/L	15:03:26
2	Zn 213.857†	11615.4	11451.9	[100] ug/L	15:03:26
2	SiO2†	16405.7	16649.4	[1069.5] ug/L	15:04:22
3	Sc Radial	5573.4	5573.4	105 %	15:02:54
3	Y RADIAL	5898.4	5898.4	104.5 %	15:02:54
3	K 766.490 Radial†	7225.0	4230.3	[1000] ug/L	15:02:49
3	Sr 421.552†	15272.4	14586.0	[100] ug/L	15:02:54
3	Sc 361.383	900641.8	900641.8	95.392 %	15:03:52
3	Y 371.029	762930.1	762930.1	95.681 %	15:03:52
3	Ag 328.068†	22447.5	23120.6	[100] ug/L	15:03:52
3	As 188.979†	213.3	243.2	[100] ug/L	15:04:12
3	B 249.677†	3787.2	4497.7	[100] ug/L	15:03:52
3	Ba 233.527†	13436.3	14065.7	[100] ug/L	15:03:52
3	Be 313.107†	269883.0	287451.1	[100] ug/L	15:03:52
3	Cd 226.502†	8936.1	9584.6	[100] ug/L	15:03:52
3	Co 228.616†	4884.7	5194.1	[100] ug/L	15:04:12
3	Cr 267.716†	8973.8	9327.3	[100] ug/L	15:03:52
3	Cu 324.752†	39244.4	34973.7	[100] ug/L	15:03:52
3	Mn 257.610†	94303.5	98403.4	[100] ug/L	15:03:52
3	Mo 202.031†	1490.8	1544.0	[100] ug/L	15:04:12
3	Ni 231.604†	4095.6	4192.9	[100] ug/L	15:04:12
3	P 214.914†	1058.8	875.4	[500] ug/L	15:04:12
3	Pb 220.353†	788.0	879.9	[100] ug/L	15:04:12
3	S 181.975 Axial†	187.0	154.5	[200] ug/L	15:04:12
3	Sb 206.836†	328.3	305.4	[100] ug/L	15:04:12
3	Se 196.026†	123.2	162.0	[100] ug/L	15:04:12
3	Si 251.611†	16349.3	16641.9	[500] ug/L	15:03:52
3	Sn 189.927†	586.2	607.0	[100] ug/L	15:04:12
3	Ti 334.940†	62946.7	67376.3	[100] ug/L	15:03:52
3	Tl 190.801†	304.2	357.6	[100] ug/L	15:04:12
3	U 409.014†	1656.5	3381.4	[100] ug/L	15:03:52
3	V 292.402†	13196.4	15311.4	[100] ug/L	15:03:52
3	Zn 213.857†	11553.3	11403.7	[100] ug/L	15:03:52
3	SiO2†	16766.0	17051.0	[1069.5] ug/L	15:04:27

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units	Calib
Sc 361.383	912191.0	18929.97	2.08%	96.615 %	
Sc Radial	5645.8	335.87	5.95%	106 %	
Y 371.029	772881.3	17267.92	2.23%	96.929 %	
Y RADIAL	5962.7	346.75	5.82%	105.6 %	
Ag 328.068†	23012.8	316.68	1.38%	[100] ug/L	
As 188.979†	241.8	3.13	1.29%	[100] ug/L	
B 249.677†	4474.2	98.91	2.21%	[100] ug/L	
Ba 233.527†	13957.3	240.74	1.72%	[100] ug/L	
Be 313.107†	285442.8	4442.12	1.56%	[100] ug/L	
Cd 226.502†	9522.7	134.10	1.41%	[100] ug/L	
Co 228.616†	5135.9	101.83	1.98%	[100] ug/L	
Cr 267.716†	9262.7	190.05	2.05%	[100] ug/L	
Cu 324.752†	34763.1	545.60	1.57%	[100] ug/L	
K 766.490 Radial†	4250.4	367.00	8.63%	[1000] ug/L	
Mn 257.610†	97653.2	1680.43	1.72%	[100] ug/L	
Mo 202.031†	1524.0	31.14	2.04%	[100] ug/L	
Ni 231.604†	4156.0	77.14	1.86%	[100] ug/L	
P 214.914†	868.3	15.49	1.78%	[500] ug/L	
Pb 220.353†	871.0	12.32	1.41%	[100] ug/L	
S 181.975 Axial†	151.8	2.40	1.58%	[200] ug/L	
Sb 206.836†	298.4	6.24	2.09%	[100] ug/L	
Se 196.026†	165.0	4.70	2.85%	[100] ug/L	
Si 251.611†	16512.2	250.75	1.52%	[500] ug/L	
Sn 189.927†	600.6	16.93	2.82%	[100] ug/L	
Sr 421.552†	14697.0	1136.56	7.73%	[100] ug/L	
Ti 334.940†	66927.7	1154.25	1.72%	[100] ug/L	
Tl 190.801†	353.5	11.36	3.21%	[100] ug/L	
U 409.014†	3361.6	25.92	0.77%	[100] ug/L	
V 292.402†	15189.9	288.12	1.90%	[100] ug/L	
Zn 213.857†	11327.5	175.45	1.55%	[100] ug/L	
SiO2†	16603.5	472.02	2.84%	[1069.5] ug/L	

Sequence No.: 3

Sample ID: S0.5

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 1/18/2010 15:06:38

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Analysis Time
1	Sc Radial	4897.6	4897.6	91.9	%	15:08:30
1	Y RADIAL	5113.6	5113.6	90.59	%	15:08:30
1	Al 396.153Radial†	6215.8	6756.2	[5000]	ug/L	15:08:30
1	Ca 317.933Radial†	3016.9	3260.9	[5000]	ug/L	15:08:50
1	K 766.490 Radial†	26023.3	25629.9	[5000]	ug/L	15:08:30
1	Mg 279.077 IEC†	158.5	169.7	[5000]	ug/L	15:08:50
1	Sr 421.552†	78224.9	85073.0	[500]	ug/L	15:08:30
1	Sc 361.383	921445.8	921445.8	97.595	%	15:09:48
1	Y 371.029	769103.7	769103.7	96.455	%	15:09:48
1	Ag 328.068†	112214.3	114568.0	[500]	ug/L	15:09:53
1	As 188.979†	1182.3	1231.0	[500]	ug/L	15:10:13
1	B 249.677†	22161.4	23234.9	[500]	ug/L	15:09:53
1	Ba 233.527†	67422.6	69064.2	[500]	ug/L	15:09:53
1	Be 313.107†	1370143.7	1408433.7	[500]	ug/L	15:09:48
1	Cd 226.502†	46019.4	47370.1	[500]	ug/L	15:09:53
1	Co 228.616†	25260.4	25956.2	[500]	ug/L	15:09:53
1	Cr 267.716†	45065.9	46096.2	[500]	ug/L	15:09:53
1	Cu 324.752†	174646.4	172783.1	[500]	ug/L	15:09:53
1	Mn 257.610†	460376.0	471263.7	[500]	ug/L	15:09:48
1	Mo 202.031†	7258.5	7418.5	[500]	ug/L	15:10:13
1	Ni 231.604†	20579.5	20986.0	[500]	ug/L	15:09:53
1	P 214.914†	4458.4	4333.7	[2500]	ug/L	15:10:13
1	Pb 220.353†	4088.0	4242.5	[500]	ug/L	15:10:13
1	S 181.975 Axial†	768.8	746.2	[1000]	ug/L	15:10:13
1	Sb 206.836†	1500.9	1499.1	[500]	ug/L	15:10:13
1	Se 196.026†	771.4	823.3	[500]	ug/L	15:10:13
1	Si 251.611†	82356.6	83888.7	[2500]	ug/L	15:09:53
1	Sn 189.927†	2907.1	2971.3	[500]	ug/L	15:10:13
1	Ti 334.940†	318097.8	327324.2	[500]	ug/L	15:09:53
1	Tl 190.801†	1665.2	1745.0	[500]	ug/L	15:10:13
1	U 409.014†	15698.3	17730.0	[500]	ug/L	15:09:53
1	V 292.402†	73374.7	76660.2	[500]	ug/L	15:09:53
1	Zn 213.857†	55576.2	56237.8	[500]	ug/L	15:09:53
1	SiO2†	82176.0	83675.8	[5347.5]	ug/L	15:11:20
2	Sc Radial	5239.9	5239.9	98.4	%	15:08:55
2	Y RADIAL	5495.5	5495.5	97.35	%	15:08:55
2	Al 396.153Radial†	6053.8	6150.0	[5000]	ug/L	15:08:55
2	Ca 317.933Radial†	2989.6	3018.8	[5000]	ug/L	15:09:15
2	K 766.490 Radial†	25304.5	23050.5	[5000]	ug/L	15:08:55
2	Mg 279.077 IEC†	154.9	154.9	[5000]	ug/L	15:09:15
2	Sr 421.552†	76392.2	77653.0	[500]	ug/L	15:08:55
2	Sc 361.383	938507.3	938507.3	99.402	%	15:10:19
2	Y 371.029	781177.4	781177.4	97.969	%	15:10:19
2	Ag 328.068†	110878.7	111134.1	[500]	ug/L	15:10:24
2	As 188.979†	1191.2	1217.9	[500]	ug/L	15:10:44
2	B 249.677†	21773.7	22432.1	[500]	ug/L	15:10:24
2	Ba 233.527†	66954.3	67337.1	[500]	ug/L	15:10:24
2	Be 313.107†	1395347.8	1408267.2	[500]	ug/L	15:10:19
2	Cd 226.502†	45685.6	46177.1	[500]	ug/L	15:10:24
2	Co 228.616†	25029.4	25253.3	[500]	ug/L	15:10:24
2	Cr 267.716†	44686.9	44875.5	[500]	ug/L	15:10:24
2	Cu 324.752†	172046.6	166914.4	[500]	ug/L	15:10:24
2	Mn 257.610†	469738.0	472106.4	[500]	ug/L	15:10:19
2	Mo 202.031†	7300.4	7325.5	[500]	ug/L	15:10:44
2	Ni 231.604†	20367.3	20389.2	[500]	ug/L	15:10:24
2	P 214.914†	4495.2	4287.7	[2500]	ug/L	15:10:44
2	Pb 220.353†	4128.1	4206.6	[500]	ug/L	15:10:44
2	S 181.975 Axial†	777.2	740.3	[1000]	ug/L	15:10:44
2	Sb 206.836†	1526.8	1497.3	[500]	ug/L	15:10:44

2	Se 196.026†	777.3	814.9	[500]	ug/L	15:10:44
2	Si 251.611†	81413.1	81405.4	[2500]	ug/L	15:10:24
2	Sn 189.927†	2916.9	2927.0	[500]	ug/L	15:10:44
2	Ti 334.940†	314908.4	318190.4	[500]	ug/L	15:10:24
2	Tl 190.801†	1672.7	1721.5	[500]	ug/L	15:10:44
2	U 409.014†	15357.8	17095.1	[500]	ug/L	15:10:24
2	V 292.402†	72575.6	74489.5	[500]	ug/L	15:10:24
2	Zn 213.857†	55017.6	54640.6	[500]	ug/L	15:10:24
2	SiO2†	81899.9	81867.3	[5347.5]	ug/L	15:11:25
3	Sc Radial	5224.7	5224.7	98.1	%	15:09:20
3	Y RADIAL	5518.7	5518.7	97.76	%	15:09:20
3	Al 396.153Radial†	6084.9	6199.7	[5000]	ug/L	15:09:20
3	Ca 317.933Radial†	3009.0	3047.4	[5000]	ug/L	15:09:40
3	K 766.490 Radial†	25464.5	23288.5	[5000]	ug/L	15:09:20
3	Mg 279.077 IEC†	159.9	160.4	[5000]	ug/L	15:09:40
3	Sr 421.552†	76366.7	77852.8	[500]	ug/L	15:09:20
3	Sc 361.383	939116.4	939116.4	99.467	%	15:10:49
3	Y 371.029	782036.6	782036.6	98.077	%	15:10:49
3	Ag 328.068†	110940.5	111123.9	[500]	ug/L	15:10:55
3	As 188.979†	1193.5	1219.5	[500]	ug/L	15:11:15
3	B 249.677†	21855.3	22500.0	[500]	ug/L	15:10:55
3	Ba 233.527†	66973.7	67313.0	[500]	ug/L	15:10:55
3	Be 313.107†	1393055.1	1405051.8	[500]	ug/L	15:10:49
3	Cd 226.502†	45678.8	46140.5	[500]	ug/L	15:10:55
3	Co 228.616†	25056.7	25264.4	[500]	ug/L	15:10:55
3	Cr 267.716†	44784.0	44943.9	[500]	ug/L	15:10:55
3	Cu 324.752†	172318.5	167075.6	[500]	ug/L	15:10:55
3	Mn 257.610†	468905.1	470962.6	[500]	ug/L	15:10:49
3	Mo 202.031†	7337.2	7357.8	[500]	ug/L	15:11:15
3	Ni 231.604†	20448.0	20457.1	[500]	ug/L	15:10:55
3	P 214.914†	4486.1	4275.6	[2500]	ug/L	15:11:15
3	Pb 220.353†	4144.2	4220.1	[500]	ug/L	15:11:15
3	S 181.975 Axial†	775.9	738.6	[1000]	ug/L	15:11:15
3	Sb 206.836†	1532.0	1501.5	[500]	ug/L	15:11:15
3	Se 196.026†	782.4	819.5	[500]	ug/L	15:11:15
3	Si 251.611†	81489.9	81429.5	[2500]	ug/L	15:10:55
3	Sn 189.927†	2945.8	2954.1	[500]	ug/L	15:11:15
3	Ti 334.940†	315201.1	318279.2	[500]	ug/L	15:10:55
3	Tl 190.801†	1673.1	1720.8	[500]	ug/L	15:11:15
3	U 409.014†	15352.5	17079.7	[500]	ug/L	15:10:55
3	V 292.402†	72583.5	74450.1	[500]	ug/L	15:10:55
3	Zn 213.857†	55103.3	54690.9	[500]	ug/L	15:10:55
3	SiO2†	80861.9	80770.3	[5347.5]	ug/L	15:11:30

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	933023.1	10030.94	1.08%	98.822	%
Sc Radial	5120.7	193.34	3.78%	96.1	%
Y 371.029	777439.2	7231.55	0.93%	97.500	%
Y RADIAL	5375.9	227.49	4.23%	95.24	%
Ag 328.068†	112275.3	1985.52	1.77%	[500]	ug/L
Al 396.153Radial†	6368.6	336.57	5.28%	[5000]	ug/L
As 188.979†	1222.8	7.14	0.58%	[500]	ug/L
B 249.677†	22722.3	445.23	1.96%	[500]	ug/L
Ba 233.527†	67904.7	1004.16	1.48%	[500]	ug/L
Be 313.107†	1407250.9	1906.30	0.14%	[500]	ug/L
Ca 317.933Radial†	3109.0	132.30	4.26%	[5000]	ug/L
Cd 226.502†	46562.6	699.61	1.50%	[500]	ug/L
Co 228.616†	25491.3	402.66	1.58%	[500]	ug/L
Cr 267.716†	45305.2	685.88	1.51%	[500]	ug/L
Cu 324.752†	168924.4	3342.75	1.98%	[500]	ug/L
K 766.490 Radial†	23989.6	1425.48	5.94%	[5000]	ug/L
Mg 279.077 IEC†	161.7	7.49	4.63%	[5000]	ug/L
Mn 257.610†	471444.3	592.91	0.13%	[500]	ug/L
Mo 202.031†	7367.3	47.22	0.64%	[500]	ug/L
Ni 231.604†	20610.8	326.76	1.59%	[500]	ug/L
P 214.914†	4299.0	30.68	0.71%	[2500]	ug/L
Pb 220.353†	4223.1	18.09	0.43%	[500]	ug/L
S 181.975 Axial†	741.7	4.01	0.54%	[1000]	ug/L

Sb 206.836†	1499.3	2.11	0.14%	[500]	ug/L
Se 196.026†	819.2	4.25	0.52%	[500]	ug/L
Si 251.611†	82241.2	1426.82	1.73%	[2500]	ug/L
Sn 189.927†	2950.8	22.32	0.76%	[500]	ug/L
Sr 421.552†	80192.9	4227.44	5.27%	[500]	ug/L
Ti 334.940†	321264.6	5247.96	1.63%	[500]	ug/L
Tl 190.801†	1729.1	13.75	0.80%	[500]	ug/L
U 409.014†	17301.6	371.09	2.14%	[500]	ug/L
V 292.402†	75199.9	1264.79	1.68%	[500]	ug/L
Zn 213.857†	55189.8	907.97	1.65%	[500]	ug/L
SiO2†	82104.4	1467.19	1.79%	[5347.5]	ug/L

Sequence No.: 4
 Sample ID: SCAL
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 1/18/2010 15:13:41
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	5203.5	5203.5	97.7 %	15:15:54
1	Y RADIAL	5437.9	5437.9	96.33 %	15:15:54
1	Al 396.153Radial†	12260.0	12546.6	[10000] ug/L	15:15:34
1	Ca 317.933Radial†	5887.2	6006.4	[10000] ug/L	15:15:54
1	Fe 238.204 Radial†	1119.5	1133.3	[10000] ug/L	15:15:54
1	K 766.490 Radial†	48507.6	46984.5	[10000] ug/L	15:15:34
1	Mg 279.077 IEC†	304.1	308.6	[10000] ug/L	15:15:54
1	Na 589.592 Radial†	33827.4	35729.6	[10000] ug/L	15:15:34
1	Sr 421.552†	151541.0	155129.1	[1000] ug/L	15:15:34
1	Sc 361.383	915911.5	915911.5	97.009 %	15:16:52
1	Y 371.029	752773.7	752773.7	94.407 %	15:16:58
1	Ag 328.068†	223040.1	229505.3	[1000] ug/L	15:16:58
1	As 188.979†	2397.2	2490.7	[1000] ug/L	15:17:18
1	B 249.677†	44617.5	46520.6	[1000] ug/L	15:16:58
1	Ba 233.527†	133603.5	137702.8	[1000] ug/L	15:16:58
1	Be 313.107†	2747722.2	2836966.3	[1000] ug/L	15:16:52
1	Cd 226.502†	91242.6	94272.5	[1000] ug/L	15:16:58
1	Co 228.616†	50004.7	51619.8	[1000] ug/L	15:16:58
1	Cr 267.716†	89425.8	92102.8	[1000] ug/L	15:16:58
1	Cu 324.752†	342136.6	346518.3	[1000] ug/L	15:16:58
1	Mn 257.610†	919855.2	947759.1	[1000] ug/L	15:16:52
1	Mo 202.031†	14592.5	15023.6	[1000] ug/L	15:17:18
1	Ni 231.604†	40609.4	41760.9	[1000] ug/L	15:16:58
1	P 214.914†	8756.2	8791.5	[5000] ug/L	15:17:18
1	Pb 220.353†	8289.7	8599.1	[1000] ug/L	15:17:18
1	S 181.975 Axial†	1511.3	1516.3	[2000] ug/L	15:17:18
1	Sb 206.836†	3014.8	3069.0	[1000] ug/L	15:17:18
1	Se 196.026†	1560.8	1641.8	[1000] ug/L	15:17:18
1	Si 251.611†	162012.1	166509.9	[5000] ug/L	15:16:58
1	Sn 189.927†	5865.2	6038.5	[1000] ug/L	15:17:18
1	Ti 334.940†	645744.6	667041.9	[1000] ug/L	15:16:52
1	Tl 190.801†	3356.1	3498.3	[1000] ug/L	15:17:18
1	U 409.014†	33076.3	35741.0	[1000] ug/L	15:16:58
1	V 292.402†	147427.3	153450.1	[1000] ug/L	15:16:58
1	Zn 213.857†	109147.6	111805.0	[1000] ug/L	15:16:58
1	SiO2†	160304.4	164721.7	[10695] ug/L	15:18:28
2	Sc Radial	5196.1	5196.1	97.5 %	15:16:19
2	Y RADIAL	5436.1	5436.1	96.30 %	15:16:19
2	Al 396.153Radial†	12203.4	12506.4	[10000] ug/L	15:15:59
2	Ca 317.933Radial†	5940.0	6069.2	[10000] ug/L	15:16:19
2	Fe 238.204 Radial†	1131.7	1147.4	[10000] ug/L	15:16:19
2	K 766.490 Radial†	48419.1	46964.3	[10000] ug/L	15:15:59
2	Mg 279.077 IEC†	304.9	310.0	[10000] ug/L	15:16:19
2	Na 589.592 Radial†	33608.1	35554.0	[10000] ug/L	15:15:59
2	Sr 421.552†	151120.2	154918.1	[1000] ug/L	15:15:59
2	Sc 361.383	917548.4	917548.4	97.183 %	15:17:25
2	Y 371.029	754089.6	754089.6	94.572 %	15:17:30
2	Ag 328.068†	222902.8	228953.9	[1000] ug/L	15:17:30
2	As 188.979†	2382.5	2471.2	[1000] ug/L	15:17:50
2	B 249.677†	44597.9	46418.4	[1000] ug/L	15:17:30
2	Ba 233.527†	133521.0	137372.3	[1000] ug/L	15:17:30
2	Be 313.107†	2746906.3	2831073.8	[1000] ug/L	15:17:25
2	Cd 226.502†	91284.3	94147.7	[1000] ug/L	15:17:30
2	Co 228.616†	49980.7	51503.1	[1000] ug/L	15:17:30
2	Cr 267.716†	89400.8	91912.6	[1000] ug/L	15:17:30
2	Cu 324.752†	341807.0	345550.0	[1000] ug/L	15:17:30
2	Mn 257.610†	921393.0	947650.0	[1000] ug/L	15:17:25
2	Mo 202.031†	14630.7	15036.0	[1000] ug/L	15:17:50
2	Ni 231.604†	40564.6	41640.0	[1000] ug/L	15:17:30

2	P 214.914†	8762.4	8781.8	[5000]	ug/L	15:17:50
2	Pb 220.353†	8278.6	8572.4	[1000]	ug/L	15:17:50
2	S 181.975 Axial†	1489.9	1491.6	[2000]	ug/L	15:17:50
2	Sb 206.836†	3016.2	3065.0	[1000]	ug/L	15:17:50
2	Se 196.026†	1558.4	1636.5	[1000]	ug/L	15:17:50
2	Si 251.611†	161767.0	165959.7	[5000]	ug/L	15:17:30
2	Sn 189.927†	5866.1	6028.7	[1000]	ug/L	15:17:50
2	Ti 334.940†	646653.2	666789.4	[1000]	ug/L	15:17:25
2	Tl 190.801†	3331.1	3466.5	[1000]	ug/L	15:17:50
2	U 409.014†	33006.9	35608.8	[1000]	ug/L	15:17:30
2	V 292.402†	147162.8	152906.8	[1000]	ug/L	15:17:30
2	Zn 213.857†	109063.2	111517.4	[1000]	ug/L	15:17:30
2	SiO2†	161529.1	165687.1	[10695]	ug/L	15:18:33
3	Sc Radial	5114.0	5114.0	96.0	%	15:16:44
3	Y RADIAL	5353.1	5353.1	94.83	%	15:16:44
3	Al 396.153Radial†	12161.8	12664.1	[10000]	ug/L	15:16:24
3	Ca 317.933Radial†	5914.1	6140.0	[10000]	ug/L	15:16:44
3	Fe 238.204 Radial†	1128.3	1162.5	[10000]	ug/L	15:16:44
3	K 766.490 Radial†	48173.5	47505.9	[10000]	ug/L	15:16:24
3	Mg 279.077 IEC†	302.3	312.3	[10000]	ug/L	15:16:44
3	Na 589.592 Radial†	33131.0	35610.6	[10000]	ug/L	15:16:24
3	Sr 421.552†	149653.2	155879.3	[1000]	ug/L	15:16:24
3	Sc 361.383	928982.8	928982.8	98.394	%	15:17:57
3	Y 371.029	757016.4	757016.4	94.939	%	15:18:02
3	Ag 328.068†	222792.7	226018.9	[1000]	ug/L	15:18:02
3	As 188.979†	2366.9	2425.1	[1000]	ug/L	15:18:22
3	B 249.677†	44601.8	45857.5	[1000]	ug/L	15:18:02
3	Ba 233.527†	133745.5	135909.4	[1000]	ug/L	15:18:02
3	Be 313.107†	2767693.9	2817410.1	[1000]	ug/L	15:17:57
3	Cd 226.502†	91246.0	92952.5	[1000]	ug/L	15:18:02
3	Co 228.616†	49924.6	50813.1	[1000]	ug/L	15:18:02
3	Cr 267.716†	89343.3	90721.8	[1000]	ug/L	15:18:02
3	Cu 324.752†	341697.6	341109.7	[1000]	ug/L	15:18:02
3	Mn 257.610†	924944.5	939589.6	[1000]	ug/L	15:17:57
3	Mo 202.031†	14499.7	14717.6	[1000]	ug/L	15:18:22
3	Ni 231.604†	40543.8	41105.2	[1000]	ug/L	15:18:02
3	P 214.914†	8663.6	8570.5	[5000]	ug/L	15:18:22
3	Pb 220.353†	8202.3	8389.9	[1000]	ug/L	15:18:22
3	S 181.975 Axial†	1490.7	1473.5	[2000]	ug/L	15:18:22
3	Sb 206.836†	2996.3	3006.5	[1000]	ug/L	15:18:22
3	Se 196.026†	1549.4	1607.6	[1000]	ug/L	15:18:22
3	Si 251.611†	161822.4	163967.2	[5000]	ug/L	15:18:02
3	Sn 189.927†	5821.4	5908.9	[1000]	ug/L	15:18:22
3	Ti 334.940†	650180.8	662184.4	[1000]	ug/L	15:17:57
3	Tl 190.801†	3321.7	3414.7	[1000]	ug/L	15:18:22
3	U 409.014†	32989.1	35172.6	[1000]	ug/L	15:18:02
3	V 292.402†	147366.2	151249.6	[1000]	ug/L	15:18:02
3	Zn 213.857†	108985.8	110057.5	[1000]	ug/L	15:18:02
3	SiO2†	159063.0	161134.9	[10695]	ug/L	15:18:38

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	920814.3	7121.39	0.77%	97.528 %
Sc Radial	5171.2	49.71	0.96%	97.1 %
Y 371.029	754626.6	2171.73	0.29%	94.639 %
Y RADIAL	5409.0	48.43	0.90%	95.82 %
Ag 328.068†	228159.4	1874.12	0.82%	[1000] ug/L
Al 396.153Radial†	12572.4	81.92	0.65%	[10000] ug/L
As 188.979†	2462.3	33.66	1.37%	[1000] ug/L
B 249.677†	46265.5	357.03	0.77%	[1000] ug/L
Ba 233.527†	136994.8	954.45	0.70%	[1000] ug/L
Be 313.107†	2828483.4	10032.13	0.35%	[1000] ug/L
Ca 317.933Radial†	6071.9	66.84	1.10%	[10000] ug/L
Cd 226.502†	93790.9	728.74	0.78%	[1000] ug/L
Co 228.616†	51312.0	436.00	0.85%	[1000] ug/L
Cr 267.716†	91579.1	748.46	0.82%	[1000] ug/L
Cu 324.752†	344392.7	2884.10	0.84%	[1000] ug/L
Fe 238.204 Radial†	1147.7	14.62	1.27%	[10000] ug/L
K 766.490 Radial†	47151.6	307.07	0.65%	[10000] ug/L

Mg 279.077 IEC†	310.3	1.83	0.59%	[10000]	ug/L
Mn 257.610†	944999.6	4685.48	0.50%	[1000]	ug/L
Mo 202.031†	14925.8	180.35	1.21%	[1000]	ug/L
Na 589.592 Radial†	35631.4	89.65	0.25%	[10000]	ug/L
Ni 231.604†	41502.1	348.94	0.84%	[1000]	ug/L
P 214.914†	8714.6	124.90	1.43%	[5000]	ug/L
Pb 220.353†	8520.5	113.82	1.34%	[1000]	ug/L
S 181.975 Axial†	1493.8	21.50	1.44%	[2000]	ug/L
Sb 206.836†	3046.8	34.98	1.15%	[1000]	ug/L
Se 196.026†	1628.6	18.42	1.13%	[1000]	ug/L
Si 251.611†	165478.9	1337.78	0.81%	[5000]	ug/L
Sn 189.927†	5992.1	72.16	1.20%	[1000]	ug/L
Sr 421.552†	155308.8	505.14	0.33%	[1000]	ug/L
Ti 334.940†	665338.6	2734.49	0.41%	[1000]	ug/L
Tl 190.801†	3459.8	42.20	1.22%	[1000]	ug/L
U 409.014†	35507.5	297.42	0.84%	[1000]	ug/L
V 292.402†	152535.5	1146.26	0.75%	[1000]	ug/L
Zn 213.857†	111126.6	937.02	0.84%	[1000]	ug/L
SiO2†	163847.9	2398.58	1.46%	[10695]	ug/L

Sequence No.: 5
 Sample ID: S10
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 1/18/2010 15:20:50
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Analysis Time
1	Sc Radial	4977.4	4977.4	93.4 %		15:23:03
1	Y RADIAL	5215.1	5215.1	92.39 %		15:23:03
1	Al 396.153Radial†	61029.2	65313.1	[50000] ug/L		15:22:43
1	Ca 317.933Radial†	29605.9	31665.7	[50000] ug/L		15:22:43
1	Fe 238.204 Radial†	2257.5	2403.3	[20000] ug/L		15:23:03
1	Mg 279.077 IEC†	1473.0	1573.9	[50000] ug/L		15:23:03
1	Na 589.592 Radial†	72561.4	78759.1	[20000] ug/L		15:22:43
1	Sc 361.383	913900.3	913900.3	96.796 %		15:24:00
1	Y 371.029	757864.2	757864.2	95.045 %		15:24:00
2	Sc Radial	5142.3	5142.3	96.5 %		15:23:28
2	Y RADIAL	5369.3	5369.3	95.12 %		15:23:28
2	Al 396.153Radial†	59026.7	61143.3	[50000] ug/L		15:23:08
2	Ca 317.933Radial†	28645.8	29654.6	[50000] ug/L		15:23:08
2	Fe 238.204 Radial†	2221.4	2288.4	[20000] ug/L		15:23:28
2	Mg 279.077 IEC†	1444.3	1493.6	[50000] ug/L		15:23:28
2	Na 589.592 Radial†	70130.7	73749.7	[20000] ug/L		15:23:08
2	Sc 361.383	893619.0	893619.0	94.648 %		15:24:06
2	Y 371.029	740788.0	740788.0	92.904 %		15:24:06
3	Sc Radial	5234.6	5234.6	98.3 %		15:23:53
3	Y RADIAL	5479.3	5479.3	97.07 %		15:23:53
3	Al 396.153Radial†	59859.0	60912.8	[50000] ug/L		15:23:33
3	Ca 317.933Radial†	28882.6	29372.7	[50000] ug/L		15:23:33
3	Fe 238.204 Radial†	2245.4	2272.3	[20000] ug/L		15:23:53
3	Mg 279.077 IEC†	1455.9	1479.0	[50000] ug/L		15:23:53
3	Na 589.592 Radial†	70828.6	73179.6	[20000] ug/L		15:23:33
3	Sc 361.383	878817.6	878817.6	93.080 %		15:24:12
3	Y 371.029	728256.4	728256.4	91.332 %		15:24:12

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units	Calib. Units
Sc 361.383	895445.6	17612.56	1.97%	94.842 %	
Sc Radial	5118.1	130.31	2.55%	96.1 %	
Y 371.029	742302.9	14861.93	2.00%	93.094 %	
Y RADIAL	5354.6	132.72	2.48%	94.86 %	
Al 396.153Radial†	62456.4	2476.68	3.97%	[50000] ug/L	
Ca 317.933Radial†	30231.0	1250.45	4.14%	[50000] ug/L	
Fe 238.204 Radial†	2321.4	71.44	3.08%	[20000] ug/L	
Mg 279.077 IEC†	1515.5	51.08	3.37%	[50000] ug/L	
Na 589.592 Radial†	75229.5	3070.00	4.08%	[20000] ug/L	

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	227.5	0.00000	0.999979	
Al 396.153Radial	3	Lin Thru 0	0.0	1.250	0.00000	0.999997	
As 188.979	3	Lin Thru 0	0.0	2.459	0.00000	0.999995	
B 249.677	3	Lin Thru 0	0.0	46.09	0.00000	0.999971	
Ba 233.527	3	Lin Thru 0	0.0	136.8	0.00000	0.999992	
Be 313.107	3	Lin Thru 0	0.0	2826	0.00000	0.999998	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6049	0.00000	0.999996	
Cd 226.502	3	Lin Thru 0	0.0	93.67	0.00000	0.999995	
Co 228.616	3	Lin Thru 0	0.0	51.25	0.00000	0.999997	
Cr 267.716	3	Lin Thru 0	0.0	91.40	0.00000	0.999990	
Cu 324.752	3	Lin Thru 0	0.0	343.1	0.00000	0.999970	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1158	0.00000	0.999990	
K 766.490 Radial	3	Lin Thru 0	0.0	4.728	0.00000	0.999935	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0304	0.00000	0.999969
Mn 257.610	3	Lin Thru 0	0.0	944.8	0.00000	0.999995
Mo 202.031	3	Lin Thru 0	0.0	14.89	0.00000	0.999985
Na 589.592 Radia	2	Lin Thru 0	0.0	3.722	0.00000	0.999773
Ni 231.604	3	Lin Thru 0	0.0	41.45	0.00000	0.999996
P 214.914	3	Lin Thru 0	0.0	1.738	0.00000	0.999986
Pb 220.353	3	Lin Thru 0	0.0	8.507	0.00000	0.999992
S 181.975 Axial	3	Lin Thru 0	0.0	0.7460	0.00000	0.999995
Sb 206.836	3	Lin Thru 0	0.0	3.037	0.00000	0.999979
Se 196.026	3	Lin Thru 0	0.0	1.631	0.00000	0.999997
Si 251.611	3	Lin Thru 0	0.0	33.06	0.00000	0.999997
Sn 189.927	3	Lin Thru 0	0.0	5.974	0.00000	0.999982
Sr 421.552	3	Lin Thru 0	0.0	156.3	0.00000	0.999902
Ti 334.940	3	Lin Thru 0	0.0	660.8	0.00000	0.999905
Tl 190.801	3	Lin Thru 0	0.0	3.460	0.00000	0.999998
U 409.014	3	Lin Thru 0	0.0	35.31	0.00000	0.999939
V 292.402	3	Lin Thru 0	0.0	152.1	0.00000	0.999984
Zn 213.857	3	Lin Thru 0	0.0	111.0	0.00000	0.999995
SiO2	3	Lin Thru 0	0.0	15.33	0.00000	0.999999

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 1/18/2010 15:26:23

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5273.4	5273.4	99.0 %		15:28:16
1	Y RADIAL	5548.6	5548.6	98.29 %		15:28:16
1	Al 396.153Radial†	6382.7	6443.2	5129.2 ug/L	5129.2 ppb	15:28:16
1	Ca 317.933Radial†	3041.5	3051.9	5045.5 ug/L	5045.5 ppb	15:28:36
1	Fe 238.204 Radial†	594.0	587.2	5085.9 ug/L	5085.9 ppb	15:28:36
1	K 766.490 Radial†	14413.5	11885.0	2510.3 ug/L	2510.3 ppb	15:28:16
1	Mg 279.077 IEC†	161.6	160.7	5292.6 ug/L	5292.6 ppb	15:28:36
1	Na 589.592 Radial†	8000.6	9180.8	2466.8 ug/L	2466.8 ppb	15:28:16
1	Sr 421.552†	82507.4	83337.1	533.32 ug/L	533.32 ppb	15:28:16
1	Sc 361.383	925766.2	925766.2	98.053 %		15:29:33
1	Y 371.029	774647.2	774647.2	97.150 %		15:29:33
1	Ag 328.068†	59232.1	59997.1	267.03 ug/L	267.03 ppb	15:29:33
1	As 188.979†	1157.4	1199.9	492.32 ug/L	492.32 ppb	15:29:53
1	B 249.677†	23360.2	24351.6	526.05 ug/L	526.05 ppb	15:29:33
1	Ba 233.527†	70187.8	71561.8	524.49 ug/L	524.49 ppb	15:29:33
1	Be 313.107†	735963.0	755108.1	268.37 ug/L	268.37 ppb	15:29:33
1	Cd 226.502†	46780.8	47926.6	511.55 ug/L	511.55 ppb	15:29:33
1	Co 228.616†	25853.0	26439.8	516.10 ug/L	516.10 ppb	15:29:53
1	Cr 267.716†	44913.3	45725.1	500.93 ug/L	500.93 ppb	15:29:33
1	Cu 324.752†	181638.6	179079.0	521.90 ug/L	521.90 ppb	15:29:33
1	Mn 257.610†	490866.9	500158.6	529.65 ug/L	529.65 ppb	15:29:33
1	Mo 202.031†	8069.9	8211.3	551.91 ug/L	551.91 ppb	15:29:53
1	Ni 231.604†	20966.8	21282.6	513.18 ug/L	513.18 ppb	15:29:53
1	P 214.914†	4657.7	4515.6	2496.5 ug/L	2496.5 ppb	15:29:53
1	Pb 220.353†	4260.3	4398.7	518.83 ug/L	518.83 ppb	15:29:53
1	S 181.975 Axial†	1909.4	1905.8	2553.8 ug/L	2553.8 ppb	15:29:53
1	Sb 206.836†	1558.2	1550.5	530.61 ug/L	530.61 ppb	15:29:53
1	Se 196.026†	4177.7	4293.6	2653.2 ug/L	2653.2 ppb	15:29:53
1	Si 251.611†	160487.1	163176.8	4929.6 ug/L	4929.6 ppb	15:29:33
1	Sn 189.927†	3234.5	3291.2	551.75 ug/L	551.75 ppb	15:29:53
1	Ti 334.940†	329066.9	336990.1	509.78 ug/L	509.78 ppb	15:29:33
1	Tl 190.801†	1832.8	1907.9	554.93 ug/L	554.93 ppb	15:29:53
1	U 409.014†	15908.0	17868.8	504.32 ug/L	504.32 ppb	15:29:33
1	V 292.402†	76108.2	79097.1	527.41 ug/L	527.41 ppb	15:29:33
1	Zn 213.857†	57878.8	58320.5	520.96 ug/L	520.96 ppb	15:29:33
1	SiO2†	159888.9	162538.9	10589 ug/L	10589 ppb	15:30:51
2	Sc Radial	5368.1	5368.1	101 %		15:28:41
2	Y RADIAL	5601.2	5601.2	99.23 %		15:28:41
2	Al 396.153Radial†	6452.4	6398.6	5093.6 ug/L	5093.6 ppb	15:28:41
2	Ca 317.933Radial†	3079.4	3035.3	5018.1 ug/L	5018.1 ppb	15:29:01
2	Fe 238.204 Radial†	601.2	583.8	5056.1 ug/L	5056.1 ppb	15:29:01
2	K 766.490 Radial†	14744.1	11956.3	2525.4 ug/L	2525.4 ppb	15:28:41
2	Mg 279.077 IEC†	163.5	159.6	5259.0 ug/L	5259.0 ppb	15:29:01
2	Na 589.592 Radial†	8036.2	9073.6	2438.0 ug/L	2438.0 ppb	15:28:41
2	Sr 421.552†	83466.0	82818.1	530.00 ug/L	530.00 ppb	15:28:41
2	Sc 361.383	927820.1	927820.1	98.270 %		15:29:59
2	Y 371.029	776573.8	776573.8	97.392 %		15:29:59
2	Ag 328.068†	58813.1	59437.0	264.55 ug/L	264.55 ppb	15:29:59
2	As 188.979†	1149.3	1189.1	487.86 ug/L	487.86 ppb	15:30:19
2	B 249.677†	23218.5	24154.6	521.79 ug/L	521.79 ppb	15:29:59
2	Ba 233.527†	69686.3	70893.0	519.59 ug/L	519.59 ppb	15:29:59
2	Be 313.107†	731392.3	748795.4	266.12 ug/L	266.12 ppb	15:29:59
2	Cd 226.502†	46414.9	47448.7	506.45 ug/L	506.45 ppb	15:29:59
2	Co 228.616†	25750.9	26277.5	512.94 ug/L	512.94 ppb	15:30:19
2	Cr 267.716†	44621.0	45326.2	496.56 ug/L	496.56 ppb	15:29:59
2	Cu 324.752†	180292.6	177299.2	516.72 ug/L	516.72 ppb	15:29:59
2	Mn 257.610†	488043.1	496176.9	525.43 ug/L	525.43 ppb	15:29:59
2	Mo 202.031†	8031.6	8154.2	548.07 ug/L	548.07 ppb	15:30:19
2	Ni 231.604†	20890.7	21157.8	510.17 ug/L	510.17 ppb	15:30:19

2	P 214.914†	4623.4	4470.2	2471.4 ug/L	2471.4 ppb	15:30:19
2	Pb 220.353†	4249.0	4377.6	516.34 ug/L	516.34 ppb	15:30:19
2	S 181.975 Axial†	1892.2	1884.0	2524.6 ug/L	2524.6 ppb	15:30:19
2	Sb 206.836†	1556.5	1545.1	528.71 ug/L	528.71 ppb	15:30:19
2	Se 196.026†	4144.6	4250.5	2626.6 ug/L	2626.6 ppb	15:30:19
2	Si 251.611†	159329.8	161636.8	4883.1 ug/L	4883.1 ppb	15:29:59
2	Sn 189.927†	3216.2	3265.3	547.41 ug/L	547.41 ppb	15:30:19
2	Ti 334.940†	326995.2	334139.0	505.47 ug/L	505.47 ppb	15:29:59
2	Tl 190.801†	1806.1	1876.6	545.84 ug/L	545.84 ppb	15:30:19
2	U 409.014†	15832.7	17756.3	501.14 ug/L	501.14 ppb	15:29:59
2	V 292.402†	75657.2	78466.2	523.21 ug/L	523.21 ppb	15:29:59
2	Zn 213.857†	57395.9	57698.4	515.39 ug/L	515.39 ppb	15:29:59
2	SiO2†	160245.5	162540.8	10589 ug/L	10589 ppb	15:30:56
3	Sc Radial	5233.8	5233.8	98.2 %		15:29:06
3	Y RADIAL	5532.6	5532.6	98.01 %		15:29:06
3	Al 396.153Radial†	6399.5	6509.0	5182.2 ug/L	5182.2 ppb	15:29:06
3	Ca 317.933Radial†	3043.7	3077.4	5087.5 ug/L	5087.5 ppb	15:29:26
3	Fe 238.204 Radial†	592.8	590.5	5114.1 ug/L	5114.1 ppb	15:29:26
3	K 766.490 Radial†	14565.2	12149.5	2566.2 ug/L	2566.2 ppb	15:29:06
3	Mg 279.077 IEC†	164.2	164.4	5417.2 ug/L	5417.2 ppb	15:29:26
3	Na 589.592 Radial†	7848.5	9087.1	2441.6 ug/L	2441.6 ppb	15:29:06
3	Sr 421.552†	81897.6	83346.4	533.38 ug/L	533.38 ppb	15:29:06
3	Sc 361.383	935528.1	935528.1	99.087 %		15:30:25
3	Y 371.029	783277.1	783277.1	98.233 %		15:30:25
3	Ag 328.068†	59296.8	59432.1	264.55 ug/L	264.55 ppb	15:30:25
3	As 188.979†	1157.9	1188.2	487.52 ug/L	487.52 ppb	15:30:45
3	B 249.677†	23536.1	24280.6	524.53 ug/L	524.53 ppb	15:30:25
3	Ba 233.527†	70206.7	70834.0	519.16 ug/L	519.16 ppb	15:30:25
3	Be 313.107†	738606.1	749943.5	266.53 ug/L	266.53 ppb	15:30:25
3	Cd 226.502†	46816.6	47464.9	506.62 ug/L	506.62 ppb	15:30:25
3	Co 228.616†	25654.5	25964.3	506.81 ug/L	506.81 ppb	15:30:45
3	Cr 267.716†	44989.8	45324.3	496.54 ug/L	496.54 ppb	15:30:25
3	Cu 324.752†	181955.7	177466.0	517.21 ug/L	517.21 ppb	15:30:25
3	Mn 257.610†	491821.6	495898.3	525.14 ug/L	525.14 ppb	15:30:25
3	Mo 202.031†	8030.3	8085.5	543.46 ug/L	543.46 ppb	15:30:45
3	Ni 231.604†	20838.4	20929.9	504.68 ug/L	504.68 ppb	15:30:45
3	P 214.914†	4601.1	4409.0	2436.0 ug/L	2436.0 ppb	15:30:45
3	Pb 220.353†	4232.8	4325.6	510.23 ug/L	510.23 ppb	15:30:45
3	S 181.975 Axial†	1888.7	1864.6	2498.6 ug/L	2498.6 ppb	15:30:45
3	Sb 206.836†	1551.7	1527.3	522.63 ug/L	522.63 ppb	15:30:45
3	Se 196.026†	4144.2	4215.3	2605.3 ug/L	2605.3 ppb	15:30:45
3	Si 251.611†	160580.8	161563.5	4880.9 ug/L	4880.9 ppb	15:30:25
3	Sn 189.927†	3208.6	3230.6	541.62 ug/L	541.62 ppb	15:30:45
3	Ti 334.940†	329807.0	334235.1	505.61 ug/L	505.61 ppb	15:30:25
3	Tl 190.801†	1809.1	1864.5	542.37 ug/L	542.37 ppb	15:30:45
3	U 409.014†	15896.8	17688.2	499.21 ug/L	499.21 ppb	15:30:25
3	V 292.402†	76306.2	78486.9	523.27 ug/L	523.27 ppb	15:30:25
3	Zn 213.857†	57930.9	57757.0	515.94 ug/L	515.94 ppb	15:30:25
3	SiO2†	161668.6	162633.5	10595 ug/L	10595 ppb	15:31:02

Mean Data: ICV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	929704.8	98.470 %		0.5451			0.55%
Sc Radial	5291.7	99.3 %		1.29			1.30%
Y 371.029	778166.1	97.592 %		0.5681			0.58%
Y RADIAL	5560.8	98.51 %		0.636			0.65%
Ag 328.068†	59622.0	265.38 ug/L		1.436	265.38 ppb	1.436	0.54%
QC value within limits for Ag 328.068 Recovery = 106.15%							
Al 396.153Radial†	6450.3	5135.0 ug/L		44.59	5135.0 ppb	44.59	0.87%
QC value within limits for Al 396.153Radial Recovery = 102.70%							
As 188.979†	1192.4	489.23 ug/L		2.679	489.23 ppb	2.679	0.55%
QC value within limits for As 188.979 Recovery = 97.85%							
B 249.677†	24262.3	524.12 ug/L		2.159	524.12 ppb	2.159	0.41%
QC value within limits for B 249.677 Recovery = 104.82%							
Ba 233.527†	71096.3	521.08 ug/L		2.961	521.08 ppb	2.961	0.57%
QC value within limits for Ba 233.527 Recovery = 104.22%							
Be 313.107†	751282.3	267.01 ug/L		1.195	267.01 ppb	1.195	0.45%
QC value within limits for Be 313.107 Recovery = 106.80%							
Ca 317.933Radial†	3054.9	5050.4 ug/L		34.98	5050.4 ppb	34.98	0.69%

QC value within limits for Ca 317.933Radial Recovery = 101.01%							
Cd	226.502†	47613.4	508.21 ug/L	2.899	508.21 ppb	2.899	0.57%
QC value within limits for Cd 226.502 Recovery = 101.64%							
Co	228.616†	26227.2	511.95 ug/L	4.722	511.95 ppb	4.722	0.92%
QC value within limits for Co 228.616 Recovery = 102.39%							
Cr	267.716†	45458.6	498.01 ug/L	2.528	498.01 ppb	2.528	0.51%
QC value within limits for Cr 267.716 Recovery = 99.60%							
Cu	324.752†	177948.1	518.61 ug/L	2.864	518.61 ppb	2.864	0.55%
QC value within limits for Cu 324.752 Recovery = 103.72%							
Fe	238.204 Radial†	587.2	5085.4 ug/L	29.04	5085.4 ppb	29.04	0.57%
QC value within limits for Fe 238.204 Radial Recovery = 101.71%							
K	766.490 Radial†	11996.9	2534.0 ug/L	28.95	2534.0 ppb	28.95	1.14%
QC value within limits for K 766.490 Radial Recovery = 101.36%							
Mg	279.077 IEC†	161.6	5323.0 ug/L	83.36	5323.0 ppb	83.36	1.57%
QC value within limits for Mg 279.077 IEC Recovery = 106.46%							
Mn	257.610†	497411.3	526.74 ug/L	2.524	526.74 ppb	2.524	0.48%
QC value within limits for Mn 257.610 Recovery = 105.35%							
Mo	202.031†	8150.3	547.81 ug/L	4.231	547.81 ppb	4.231	0.77%
QC value within limits for Mo 202.031 Recovery = 109.56%							
Na	589.592 Radial†	9113.9	2448.8 ug/L	15.69	2448.8 ppb	15.69	0.64%
QC value within limits for Na 589.592 Radial Recovery = 97.95%							
Ni	231.604†	21123.4	509.34 ug/L	4.313	509.34 ppb	4.313	0.85%
QC value within limits for Ni 231.604 Recovery = 101.87%							
P	214.914†	4464.9	2467.9 ug/L	30.40	2467.9 ppb	30.40	1.23%
QC value within limits for P 214.914 Recovery = 98.72%							
Pb	220.353†	4367.3	515.14 ug/L	4.424	515.14 ppb	4.424	0.86%
QC value within limits for Pb 220.353 Recovery = 103.03%							
S	181.975 Axial†	1884.8	2525.6 ug/L	27.61	2525.6 ppb	27.61	1.09%
QC value within limits for S 181.975 Axial Recovery = 101.03%							
Sb	206.836†	1541.0	527.32 ug/L	4.166	527.32 ppb	4.166	0.79%
QC value within limits for Sb 206.836 Recovery = 105.46%							
Se	196.026†	4253.1	2628.4 ug/L	24.01	2628.4 ppb	24.01	0.91%
QC value within limits for Se 196.026 Recovery = 105.13%							
Si	251.611†	162125.7	4897.9 ug/L	27.52	4897.9 ppb	27.52	0.56%
QC value within limits for Si 251.611 Recovery = 97.96%							
Sn	189.927†	3262.4	546.93 ug/L	5.083	546.93 ppb	5.083	0.93%
QC value within limits for Sn 189.927 Recovery = 109.39%							
Sr	421.552†	83167.2	532.23 ug/L	1.935	532.23 ppb	1.935	0.36%
QC value within limits for Sr 421.552 Recovery = 106.45%							
Ti	334.940†	335121.4	506.95 ug/L	2.450	506.95 ppb	2.450	0.48%
QC value within limits for Ti 334.940 Recovery = 101.39%							
Tl	190.801†	1883.0	547.71 ug/L	6.483	547.71 ppb	6.483	1.18%
QC value within limits for Tl 190.801 Recovery = 109.54%							
U	409.014†	17771.1	501.55 ug/L	2.579	501.55 ppb	2.579	0.51%
QC value within limits for U 409.014 Recovery = 100.31%							
V	292.402†	78683.4	524.63 ug/L	2.406	524.63 ppb	2.406	0.46%
QC value within limits for V 292.402 Recovery = 104.93%							
Zn	213.857†	57925.3	517.43 ug/L	3.071	517.43 ppb	3.071	0.59%
QC value within limits for Zn 213.857 Recovery = 103.49%							
SiO2†		162571.1	10591 ug/L	3.6	10591 ppb	3.6	0.03%
QC value within limits for SiO2 Recovery = 99.03%							
All analyte(s) passed QC.							

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 1/18/2010 15:33:13

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5268.2	5268.2	98.9 %		15:35:06
1	Y RADIAL	5531.2	5531.2	97.99 %		15:35:06
1	Al 396.153Radial†	3.6	-1.0	-0.7898 ug/L	-0.7898 ppb	15:35:06
1	Ca 317.933Radial†	17.0	-3.4	-5.6878 ug/L	-5.6878 ppb	15:35:26
1	Fe 238.204 Radial†	12.4	-0.3	-2.8052 ug/L	-2.8052 ppb	15:35:26
1	K 766.490 Radial†	2859.4	215.9	45.672 ug/L	45.672 ppb	15:35:06
1	Mg 279.077 IEC†	0.8	-1.8	-60.894 ug/L	-60.894 ppb	15:35:26
1	Na 589.592 Radial†	-1111.4	-25.1	-6.7447 ug/L	-6.7447 ppb	15:35:06
1	Sr 421.552†	45.7	34.5	0.2211 ug/L	0.2211 ppb	15:35:06
1	Sc 361.383	946083.8	946083.8	100.20 %		15:36:22
1	Y 371.029	799390.4	799390.4	100.25 %		15:36:22
1	Ag 328.068†	415.7	3.7	0.0208 ug/L	0.0208 ppb	15:36:27
1	As 188.979†	-23.6	-4.0	-1.6335 ug/L	-1.6335 ppb	15:36:47
1	B 249.677†	-280.7	247.4	5.3680 ug/L	5.3680 ppb	15:36:47
1	Ba 233.527†	-1.7	-21.4	-0.1573 ug/L	-0.1573 ppb	15:36:47
1	Be 313.107†	-4369.7	170.0	0.0600 ug/L	0.0600 ppb	15:36:27
1	Cd 226.502†	-218.0	-0.7	-0.0082 ug/L	-0.0082 ppb	15:36:47
1	Co 228.616†	-65.8	7.7	0.1511 ug/L	0.1511 ppb	15:36:47
1	Cr 267.716†	82.4	2.1	0.0263 ug/L	0.0263 ppb	15:36:47
1	Cu 324.752†	6043.1	-135.7	-0.3914 ug/L	-0.3914 ppb	15:36:27
1	Mn 257.610†	541.7	85.0	0.0922 ug/L	0.0922 ppb	15:36:47
1	Mo 202.031†	19.2	0.3	0.0231 ug/L	0.0231 ppb	15:36:47
1	Ni 231.604†	109.0	8.3	0.1993 ug/L	0.1993 ppb	15:36:47
1	P 214.914†	229.3	-5.7	-3.2049 ug/L	-3.2049 ppb	15:36:47
1	Pb 220.353†	-62.7	-8.8	-1.0354 ug/L	-1.0354 ppb	15:36:47
1	S 181.975 Axial†	43.2	1.6	2.1770 ug/L	2.1770 ppb	15:36:47
1	Sb 206.836†	48.9	10.1	3.3476 ug/L	3.3476 ppb	15:36:47
1	Se 196.026†	-24.2	8.7	5.3491 ug/L	5.3491 ppb	15:36:47
1	Si 251.611†	545.5	47.2	1.4283 ug/L	1.4283 ppb	15:36:47
1	Sn 189.927†	16.1	8.6	1.4368 ug/L	1.4368 ppb	15:36:47
1	Ti 334.940†	-1440.8	-49.0	-0.0665 ug/L	-0.0665 ppb	15:36:27
1	Tl 190.801†	-46.8	-8.0	-2.3012 ug/L	-2.3012 ppb	15:36:47
1	U 409.014†	-1926.7	-277.9	-7.8691 ug/L	-7.8691 ppb	15:36:22
1	V 292.402†	-1513.2	-32.5	-0.2294 ug/L	-0.2294 ppb	15:36:27
1	Zn 213.857†	772.2	62.9	0.5666 ug/L	0.5666 ppb	15:36:47
1	SiO2†	560.0	33.9	2.2097 ug/L	2.2097 ppb	15:37:53
2	Sc Radial	5312.7	5312.7	99.7 %		15:35:31
2	Y RADIAL	5676.5	5676.5	100.6 %		15:35:31
2	Al 396.153Radial†	-12.2	-16.8	-13.512 ug/L	-13.512 ppb	15:35:31
2	Ca 317.933Radial†	20.7	0.1	0.2024 ug/L	0.2024 ppb	15:35:51
2	Fe 238.204 Radial†	10.8	-2.0	-17.498 ug/L	-17.498 ppb	15:35:51
2	K 766.490 Radial†	2657.8	-10.4	-2.1995 ug/L	-2.1995 ppb	15:35:31
2	Mg 279.077 IEC†	2.1	-0.5	-17.814 ug/L	-17.814 ppb	15:35:51
2	Na 589.592 Radial†	-1103.0	-7.3	-1.9597 ug/L	-1.9597 ppb	15:35:31
2	Sr 421.552†	53.6	42.1	0.2695 ug/L	0.2695 ppb	15:35:31
2	Sc 361.383	943725.8	943725.8	99.955 %		15:36:53
2	Y 371.029	797207.0	797207.0	99.980 %		15:36:53
2	Ag 328.068†	385.6	-25.5	-0.1138 ug/L	-0.1138 ppb	15:36:58
2	As 188.979†	-26.2	-6.6	-2.6838 ug/L	-2.6838 ppb	15:37:18
2	B 249.677†	-264.6	262.8	5.7048 ug/L	5.7048 ppb	15:37:18
2	Ba 233.527†	8.0	-11.7	-0.0858 ug/L	-0.0858 ppb	15:37:18
2	Be 313.107†	-4483.2	45.5	0.0160 ug/L	0.0160 ppb	15:36:58
2	Cd 226.502†	-205.6	11.2	0.1201 ug/L	0.1201 ppb	15:37:18
2	Co 228.616†	-70.2	3.2	0.0642 ug/L	0.0642 ppb	15:37:18
2	Cr 267.716†	84.5	4.5	0.0502 ug/L	0.0502 ppb	15:37:18
2	Cu 324.752†	6249.1	85.4	0.2507 ug/L	0.2507 ppb	15:36:58
2	Mn 257.610†	497.7	42.3	0.0438 ug/L	0.0438 ppb	15:37:18
2	Mo 202.031†	31.4	12.6	0.8473 ug/L	0.8473 ppb	15:37:18
2	Ni 231.604†	98.5	-2.0	-0.0484 ug/L	-0.0484 ppb	15:37:18

2	P 214.914†	229.2	-5.3	-3.0594 ug/L	-3.0594 ppb	15:37:18
2	Pb 220.353†	-63.0	-9.3	-1.0903 ug/L	-1.0903 ppb	15:37:18
2	S 181.975 Axial†	46.1	4.6	6.1909 ug/L	6.1909 ppb	15:37:18
2	Sb 206.836†	42.8	4.1	1.3578 ug/L	1.3578 ppb	15:37:18
2	Se 196.026†	-27.2	5.7	3.4572 ug/L	3.4572 ppb	15:37:18
2	Si 251.611†	521.2	24.3	0.7250 ug/L	0.7250 ppb	15:37:18
2	Sn 189.927†	8.1	0.6	0.0952 ug/L	0.0952 ppb	15:37:18
2	Ti 334.940†	-1424.9	-36.8	-0.0521 ug/L	-0.0521 ppb	15:36:58
2	Tl 190.801†	-46.7	-8.0	-2.3042 ug/L	-2.3042 ppb	15:37:18
2	U 409.014†	-1808.3	-164.2	-4.6489 ug/L	-4.6489 ppb	15:36:53
2	V 292.402†	-1475.4	1.5	0.0154 ug/L	0.0154 ppb	15:36:58
2	Zn 213.857†	755.3	47.9	0.4335 ug/L	0.4335 ppb	15:37:18
2	SiO2†	558.5	33.8	2.1792 ug/L	2.1792 ppb	15:37:58
3	Sc Radial	5231.2	5231.2	98.2 %		15:35:56
3	Y RADIAL	5567.1	5567.1	98.62 %		15:35:56
3	Al 396.153Radial†	-3.9	-8.6	-6.9319 ug/L	-6.9319 ppb	15:35:56
3	Ca 317.933Radial†	20.1	-0.1	-0.1493 ug/L	-0.1493 ppb	15:36:16
3	Fe 238.204 Radial†	11.9	-0.7	-6.3736 ug/L	-6.3736 ppb	15:36:16
3	K 766.490 Radial†	2731.2	105.8	22.382 ug/L	22.382 ppb	15:35:56
3	Mg 279.077 IEC†	4.2	1.6	53.570 ug/L	53.570 ppb	15:36:16
3	Na 589.592 Radial†	-1139.2	-61.4	-16.489 ug/L	-16.489 ppb	15:35:56
3	Sr 421.552†	22.4	11.1	0.0713 ug/L	0.0713 ppb	15:35:56
3	Sc 361.383	942022.1	942022.1	99.775 %		15:37:23
3	Y 371.029	796292.5	796292.5	99.865 %		15:37:23
3	Ag 328.068†	389.2	-21.1	-0.0939 ug/L	-0.0939 ppb	15:37:28
3	As 188.979†	-23.5	-4.0	-1.6300 ug/L	-1.6300 ppb	15:37:48
3	B 249.677†	-285.8	241.0	5.2301 ug/L	5.2301 ppb	15:37:48
3	Ba 233.527†	0.5	-19.2	-0.1417 ug/L	-0.1417 ppb	15:37:48
3	Be 313.107†	-4339.0	182.0	0.0643 ug/L	0.0643 ppb	15:37:28
3	Cd 226.502†	-212.0	4.3	0.0464 ug/L	0.0464 ppb	15:37:48
3	Co 228.616†	-65.9	7.4	0.1451 ug/L	0.1451 ppb	15:37:48
3	Cr 267.716†	83.9	4.0	0.0445 ug/L	0.0445 ppb	15:37:48
3	Cu 324.752†	6024.2	-128.6	-0.3734 ug/L	-0.3734 ppb	15:37:28
3	Mn 257.610†	491.2	36.8	0.0361 ug/L	0.0361 ppb	15:37:48
3	Mo 202.031†	26.9	8.2	0.5474 ug/L	0.5474 ppb	15:37:48
3	Ni 231.604†	108.6	8.3	0.1999 ug/L	0.1999 ppb	15:37:48
3	P 214.914†	226.5	-7.6	-4.2861 ug/L	-4.2861 ppb	15:37:48
3	Pb 220.353†	-58.7	-5.1	-0.6030 ug/L	-0.6030 ppb	15:37:48
3	S 181.975 Axial†	49.0	7.6	10.199 ug/L	10.199 ppb	15:37:48
3	Sb 206.836†	52.4	13.8	4.5459 ug/L	4.5459 ppb	15:37:48
3	Se 196.026†	-33.0	-0.2	-0.1439 ug/L	-0.1439 ppb	15:37:48
3	Si 251.611†	545.4	49.5	1.4894 ug/L	1.4894 ppb	15:37:48
3	Sn 189.927†	6.4	-1.1	-0.1812 ug/L	-0.1812 ppb	15:37:48
3	Ti 334.940†	-1401.8	-16.2	-0.0274 ug/L	-0.0274 ppb	15:37:28
3	Tl 190.801†	-41.8	-3.1	-0.9015 ug/L	-0.9015 ppb	15:37:48
3	U 409.014†	-1759.8	-118.8	-3.3637 ug/L	-3.3637 ppb	15:37:23
3	V 292.402†	-1539.9	-65.9	-0.4298 ug/L	-0.4298 ppb	15:37:28
3	Zn 213.857†	747.7	41.7	0.3754 ug/L	0.3754 ppb	15:37:48
3	SiO2†	518.5	-5.3	-0.3626 ug/L	-0.3626 ppb	15:38:03

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	943943.9	99.978 %		0.2160			0.22%
Sc Radial	5270.7	98.9 %		0.77			0.77%
Y 371.029	797630.0	100.03 %		0.200			0.20%
Y RADIAL	5591.6	99.06 %		1.341			1.35%
Ag 328.068†	-14.3	-0.0623 ug/L		0.07265	-0.0623 ppb	0.07265	116.61%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-8.8	-7.0778 ug/L		6.36231	-7.0778 ppb	6.36231	89.89%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-4.9	-1.9824 ug/L		0.60741	-1.9824 ppb	0.60741	30.64%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	250.4	5.4343 ug/L		0.24421	5.4343 ppb	0.24421	4.49%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-17.4	-0.1283 ug/L		0.03763	-0.1283 ppb	0.03763	29.34%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	132.5	0.0468 ug/L		0.02674	0.0468 ppb	0.02674	57.19%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-1.1	-1.8783 ug/L		3.30388	-1.8783 ppb	3.30388	175.90%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	4.9	0.0528 ug/L	0.06443	0.0528 ppb	0.06443	122.06%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	6.1	0.1201 ug/L	0.04853	0.1201 ppb	0.04853	40.41%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	3.5	0.0403 ug/L	0.01251	0.0403 ppb	0.01251	31.01%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-59.6	-0.1714 ug/L	0.36560	-0.1714 ppb	0.36560	213.33%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-1.0	-8.8924 ug/L	7.66363	-8.8924 ppb	7.66363	86.18%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	103.8	21.952 ug/L	23.9386	21.952 ppb	23.9386	109.05%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.3	-8.3795 ug/L	57.81203	-8.3795 ppb	57.81203	689.92%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	54.7	0.0574 ug/L	0.03041	0.0574 ppb	0.03041	53.02%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	7.0	0.4726 ug/L	0.41716	0.4726 ppb	0.41716	88.27%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-31.3	-8.3979 ug/L	7.40447	-8.3979 ppb	7.40447	88.17%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	4.9	0.1170 ug/L	0.14318	0.1170 ppb	0.14318	122.43%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-6.2	-3.5168 ug/L	0.67018	-3.5168 ppb	0.67018	19.06%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-7.7	-0.9096 ug/L	0.26691	-0.9096 ppb	0.26691	29.34%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	4.6	6.1891 ug/L	4.01117	6.1891 ppb	4.01117	64.81%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	9.3	3.0838 ug/L	1.61036	3.0838 ppb	1.61036	52.22%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	4.8	2.8875 ug/L	2.79045	2.8875 ppb	2.79045	96.64%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	40.3	1.2142 ug/L	0.42479	1.2142 ppb	0.42479	34.98%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	2.7	0.4503 ug/L	0.86544	0.4503 ppb	0.86544	192.20%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	29.3	0.1873 ug/L	0.10333	0.1873 ppb	0.10333	55.17%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-34.0	-0.0487 ug/L	0.01976	-0.0487 ppb	0.01976	40.58%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-6.4	-1.8356 ug/L	0.80900	-1.8356 ppb	0.80900	44.07%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-187.0	-5.2939 ug/L	2.32090	-5.2939 ppb	2.32090	43.84%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-32.3	-0.2146 ug/L	0.22295	-0.2146 ppb	0.22295	103.89%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	50.9	0.4585 ug/L	0.09804	0.4585 ppb	0.09804	21.38%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	20.8	1.3421 ug/L	1.47640	1.3421 ppb	1.47640	110.00%
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: 1/18/2010 15:40:14

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5244.5	5244.5	98.4 %		15:42:07
1	Y RADIAL	5557.7	5557.7	98.46 %		15:42:07
1	Al 396.153Radial†	238.3	237.4	189.41 ug/L	189.41 ppb	15:42:07
1	Ca 317.933Radial†	141.4	123.1	203.43 ug/L	203.43 ppb	15:42:27
1	Fe 238.204 Radial†	21.2	8.7	75.118 ug/L	75.118 ppb	15:42:27
1	K 766.490 Radial†	3451.4	830.3	175.42 ug/L	175.42 ppb	15:42:07
1	Mg 279.077 IEC†	11.8	9.3	307.56 ug/L	307.56 ppb	15:42:27
1	Na 589.592 Radial†	-70.6	1027.0	275.94 ug/L	275.94 ppb	15:42:07
1	Sr 421.552†	777.6	778.1	4.9786 ug/L	4.9786 ppb	15:42:07
1	Sc 361.383	907910.7	907910.7	96.162 %		15:43:24
1	Y 371.029	771466.5	771466.5	96.751 %		15:43:24
1	Ag 328.068†	1454.9	1101.8	4.8467 ug/L	4.8467 ppb	15:43:24
1	As 188.979†	46.1	67.5	27.483 ug/L	27.483 ppb	15:43:44
1	B 249.677†	1872.5	2474.8	53.667 ug/L	53.667 ppb	15:43:24
1	Ba 233.527†	729.1	738.5	5.4115 ug/L	5.4115 ppb	15:43:44
1	Be 313.107†	9811.7	14734.1	5.2254 ug/L	5.2254 ppb	15:43:24
1	Cd 226.502†	249.4	476.2	5.0884 ug/L	5.0884 ppb	15:43:44
1	Co 228.616†	186.8	267.7	5.2391 ug/L	5.2391 ppb	15:43:44
1	Cr 267.716†	555.6	497.7	5.4357 ug/L	5.4357 ppb	15:43:44
1	Cu 324.752†	9670.5	3890.0	11.316 ug/L	11.316 ppb	15:43:24
1	Mn 257.610†	10389.6	10348.7	10.948 ug/L	10.948 ppb	15:43:24
1	Mo 202.031†	184.8	173.3	11.650 ug/L	11.650 ppb	15:43:44
1	Ni 231.604†	324.1	236.5	5.7022 ug/L	5.7022 ppb	15:43:44
1	P 214.914†	498.4	283.7	161.05 ug/L	161.05 ppb	15:43:44
1	Pb 220.353†	35.6	90.8	10.728 ug/L	10.728 ppb	15:43:44
1	S 181.975 Axial†	118.2	81.4	109.05 ug/L	109.05 ppb	15:43:44
1	Sb 206.836†	68.2	32.3	11.009 ug/L	11.009 ppb	15:43:44
1	Se 196.026†	24.3	58.2	36.006 ug/L	36.006 ppb	15:43:44
1	Si 251.611†	3864.0	3521.1	106.38 ug/L	106.38 ppb	15:43:24
1	Sn 189.927†	63.7	58.8	9.8667 ug/L	9.8667 ppb	15:43:44
1	Ti 334.940†	1884.1	3348.1	5.0468 ug/L	5.0468 ppb	15:43:24
1	Tl 190.801†	26.1	65.9	19.104 ug/L	19.104 ppb	15:43:44
1	U 409.014†	-55.1	1587.7	44.939 ug/L	44.939 ppb	15:43:24
1	V 292.402†	-768.3	678.5	4.6991 ug/L	4.6991 ppb	15:43:24
1	Zn 213.857†	1887.1	1254.7	11.245 ug/L	11.245 ppb	15:43:44
1	SiO2†	3870.5	3500.0	228.02 ug/L	228.02 ppb	15:44:40
2	Sc Radial	5211.6	5211.6	97.8 %		15:42:32
2	Y RADIAL	5538.7	5538.7	98.12 %		15:42:32
2	Al 396.153Radial†	247.9	248.8	198.53 ug/L	198.53 ppb	15:42:32
2	Ca 317.933Radial†	145.1	127.8	211.20 ug/L	211.20 ppb	15:42:52
2	Fe 238.204 Radial†	23.0	10.7	92.825 ug/L	92.825 ppb	15:42:52
2	K 766.490 Radial†	3576.2	980.0	207.09 ug/L	207.09 ppb	15:42:32
2	Mg 279.077 IEC†	13.0	10.6	350.07 ug/L	350.07 ppb	15:42:52
2	Na 589.592 Radial†	-92.1	1004.6	269.92 ug/L	269.92 ppb	15:42:32
2	Sr 421.552†	810.0	816.3	5.2226 ug/L	5.2226 ppb	15:42:32
2	Sc 361.383	905858.9	905858.9	95.944 %		15:43:50
2	Y 371.029	770210.7	770210.7	96.594 %		15:43:50
2	Ag 328.068†	1577.1	1232.6	5.4261 ug/L	5.4261 ppb	15:43:50
2	As 188.979†	51.4	73.1	29.773 ug/L	29.773 ppb	15:44:10
2	B 249.677†	1878.3	2485.2	53.892 ug/L	53.892 ppb	15:43:50
2	Ba 233.527†	687.1	696.5	5.1052 ug/L	5.1052 ppb	15:44:10
2	Be 313.107†	9835.5	14782.0	5.2427 ug/L	5.2427 ppb	15:43:50
2	Cd 226.502†	241.2	468.3	5.0021 ug/L	5.0021 ppb	15:44:10
2	Co 228.616†	174.9	255.7	5.0037 ug/L	5.0037 ppb	15:44:10
2	Cr 267.716†	552.4	495.7	5.4128 ug/L	5.4128 ppb	15:44:10
2	Cu 324.752†	9529.4	3765.7	10.953 ug/L	10.953 ppb	15:43:50
2	Mn 257.610†	10403.8	10388.0	10.989 ug/L	10.989 ppb	15:43:50
2	Mo 202.031†	174.7	163.3	10.978 ug/L	10.978 ppb	15:44:10
2	Ni 231.604†	311.1	223.7	5.3945 ug/L	5.3945 ppb	15:44:10

2	P 214.914†	483.7	269.6	153.01 ug/L	153.01 ppb	15:44:10
2	Pb 220.353†	23.8	78.6	9.2964 ug/L	9.2964 ppb	15:44:10
2	S 181.975 Axial†	119.4	82.9	111.15 ug/L	111.15 ppb	15:44:10
2	Sb 206.836†	63.9	27.9	9.5700 ug/L	9.5700 ppb	15:44:10
2	Se 196.026†	15.7	49.2	30.569 ug/L	30.569 ppb	15:44:10
2	Si 251.611†	3773.8	3436.2	103.82 ug/L	103.82 ppb	15:43:50
2	Sn 189.927†	68.4	63.9	10.723 ug/L	10.723 ppb	15:44:10
2	Ti 334.940†	1964.6	3436.5	5.1770 ug/L	5.1770 ppb	15:43:50
2	Tl 190.801†	30.2	70.3	20.374 ug/L	20.374 ppb	15:44:10
2	U 409.014†	35.3	1681.7	47.599 ug/L	47.599 ppb	15:43:50
2	V 292.402†	-732.2	714.4	4.9289 ug/L	4.9289 ppb	15:43:50
2	Zn 213.857†	1889.5	1261.7	11.309 ug/L	11.309 ppb	15:44:10
2	SiO2†	3874.6	3513.5	228.91 ug/L	228.91 ppb	15:44:46
3	Sc Radial	5248.0	5248.0	98.5 %		15:42:58
3	Y RADIAL	5620.5	5620.5	99.57 %		15:42:58
3	Al 396.153Radial†	245.9	245.0	195.54 ug/L	195.54 ppb	15:42:58
3	Ca 317.933Radial†	149.1	130.7	216.08 ug/L	216.08 ppb	15:43:18
3	Fe 238.204 Radial†	19.9	7.3	63.568 ug/L	63.568 ppb	15:43:18
3	K 766.490 Radial†	3447.6	824.1	174.11 ug/L	174.11 ppb	15:42:58
3	Mg 279.077 IEC†	13.1	10.6	349.57 ug/L	349.57 ppb	15:43:18
3	Na 589.592 Radial†	-51.8	1046.1	281.08 ug/L	281.08 ppb	15:42:58
3	Sr 421.552†	817.3	818.0	5.2335 ug/L	5.2335 ppb	15:42:58
3	Sc 361.383	909756.0	909756.0	96.357 %		15:44:15
3	Y 371.029	774285.2	774285.2	97.105 %		15:44:15
3	Ag 328.068†	1565.4	1213.4	5.3336 ug/L	5.3336 ppb	15:44:15
3	As 188.979†	45.0	66.3	26.981 ug/L	26.981 ppb	15:44:35
3	B 249.677†	1831.3	2428.1	52.656 ug/L	52.656 ppb	15:44:15
3	Ba 233.527†	730.9	738.8	5.4129 ug/L	5.4129 ppb	15:44:35
3	Be 313.107†	9886.9	14791.4	5.2461 ug/L	5.2461 ppb	15:44:15
3	Cd 226.502†	276.5	503.8	5.3846 ug/L	5.3846 ppb	15:44:35
3	Co 228.616†	179.9	260.1	5.0887 ug/L	5.0887 ppb	15:44:35
3	Cr 267.716†	534.5	474.7	5.1836 ug/L	5.1836 ppb	15:44:35
3	Cu 324.752†	9628.9	3826.5	11.131 ug/L	11.131 ppb	15:44:15
3	Mn 257.610†	10547.6	10490.8	11.095 ug/L	11.095 ppb	15:44:15
3	Mo 202.031†	168.7	156.3	10.506 ug/L	10.506 ppb	15:44:35
3	Ni 231.604†	328.6	240.5	5.7988 ug/L	5.7988 ppb	15:44:35
3	P 214.914†	479.1	262.7	149.00 ug/L	149.00 ppb	15:44:35
3	Pb 220.353†	28.0	82.8	9.7896 ug/L	9.7896 ppb	15:44:35
3	S 181.975 Axial†	120.6	83.7	112.12 ug/L	112.12 ppb	15:44:35
3	Sb 206.836†	66.3	30.1	10.271 ug/L	10.271 ppb	15:44:35
3	Se 196.026†	16.8	50.4	31.170 ug/L	31.170 ppb	15:44:35
3	Si 251.611†	3852.8	3501.3	105.79 ug/L	105.79 ppb	15:44:15
3	Sn 189.927†	62.1	57.0	9.5701 ug/L	9.5701 ppb	15:44:35
3	Ti 334.940†	1988.5	3452.5	5.2033 ug/L	5.2033 ppb	15:44:15
3	Tl 190.801†	27.8	67.6	19.600 ug/L	19.600 ppb	15:44:35
3	U 409.014†	-62.9	1579.7	44.715 ug/L	44.715 ppb	15:44:15
3	V 292.402†	-775.0	673.2	4.6499 ug/L	4.6499 ppb	15:44:15
3	Zn 213.857†	1891.5	1255.4	11.252 ug/L	11.252 ppb	15:44:35
3	SiO2†	3851.8	3472.4	226.25 ug/L	226.25 ppb	15:44:51

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	907841.8	96.154 %		0.2065			0.21%
Sc Radial	5234.7	98.3 %		0.38			0.38%
Y 371.029	771987.5	96.817 %		0.2617			0.27%
Y RADIAL	5572.3	98.71 %		0.759			0.77%
Ag 328.068†	1182.6	5.2021 ug/L		0.31123	5.2021 ppb	0.31123	5.98%
QC value within limits for Ag 328.068 Recovery = 104.04%							
Al 396.153Radial†	243.7	194.49 ug/L		4.651	194.49 ppb	4.651	2.39%
QC value within limits for Al 396.153Radial Recovery = 97.25%							
As 188.979†	68.9	28.079 ug/L		1.4879	28.079 ppb	1.4879	5.30%
QC value within limits for As 188.979 Recovery = 93.60%							
B 249.677†	2462.7	53.405 ug/L		0.6581	53.405 ppb	0.6581	1.23%
QC value within limits for B 249.677 Recovery = 106.81%							
Ba 233.527†	724.6	5.3099 ug/L		0.17727	5.3099 ppb	0.17727	3.34%
QC value within limits for Ba 233.527 Recovery = 106.20%							
Be 313.107†	14769.2	5.2381 ug/L		0.01106	5.2381 ppb	0.01106	0.21%
QC value within limits for Be 313.107 Recovery = 104.76%							
Ca 317.933Radial†	127.2	210.24 ug/L		6.381	210.24 ppb	6.381	3.03%

QC value within limits for Ca 317.933 Radial Recovery = 105.12%							
Cd	226.502†	482.8	5.1584 ug/L	0.20065	5.1584 ppb	0.20065	3.89%
QC value within limits for Cd 226.502 Recovery = 103.17%							
Co	228.616†	261.2	5.1105 ug/L	0.11921	5.1105 ppb	0.11921	2.33%
QC value within limits for Co 228.616 Recovery = 102.21%							
Cr	267.716†	489.4	5.3440 ug/L	0.13940	5.3440 ppb	0.13940	2.61%
QC value within limits for Cr 267.716 Recovery = 106.88%							
Cu	324.752†	3827.4	11.133 ug/L	0.1815	11.133 ppb	0.1815	1.63%
QC value within limits for Cu 324.752 Recovery = 111.33%							
Fe	238.204 Radial†	8.9	77.170 ug/L	14.7363	77.170 ppb	14.7363	19.10%
QC value within limits for Fe 238.204 Radial Recovery = 77.17%							
K	766.490 Radial†	878.1	185.54 ug/L	18.673	185.54 ppb	18.673	10.06%
QC value within limits for K 766.490 Radial Recovery = 123.69%							
Mg	279.077 IEC†	10.2	335.73 ug/L	24.399	335.73 ppb	24.399	7.27%
QC value within limits for Mg 279.077 IEC Recovery = 111.91%							
Mn	257.610†	10409.2	11.011 ug/L	0.0761	11.011 ppb	0.0761	0.69%
QC value within limits for Mn 257.610 Recovery = 110.11%							
Mo	202.031†	164.3	11.045 ug/L	0.5746	11.045 ppb	0.5746	5.20%
QC value within limits for Mo 202.031 Recovery = 110.45%							
Na	589.592 Radial†	1025.9	275.65 ug/L	5.589	275.65 ppb	5.589	2.03%
QC value within limits for Na 589.592 Radial Recovery = 91.88%							
Ni	231.604†	233.5	5.6318 ug/L	0.21115	5.6318 ppb	0.21115	3.75%
QC value within limits for Ni 231.604 Recovery = 112.64%							
P	214.914†	272.0	154.36 ug/L	6.135	154.36 ppb	6.135	3.97%
QC value within limits for P 214.914 Recovery = 102.90%							
Pb	220.353†	84.0	9.9379 ug/L	0.72709	9.9379 ppb	0.72709	7.32%
QC value within limits for Pb 220.353 Recovery = 99.38%							
S	181.975 Axial†	82.7	110.77 ug/L	1.570	110.77 ppb	1.570	1.42%
QC value within limits for S 181.975 Axial Recovery = 110.77%							
Sb	206.836†	30.1	10.283 ug/L	0.7194	10.283 ppb	0.7194	7.00%
QC value within limits for Sb 206.836 Recovery = 102.83%							
Se	196.026†	52.6	32.582 ug/L	2.9808	32.582 ppb	2.9808	9.15%
QC value within limits for Se 196.026 Recovery = 108.61%							
Si	251.611†	3486.2	105.33 ug/L	1.342	105.33 ppb	1.342	1.27%
QC value within limits for Si 251.611 Recovery = 105.33%							
Sn	189.927†	59.9	10.053 ug/L	0.5985	10.053 ppb	0.5985	5.95%
QC value within limits for Sn 189.927 Recovery = 100.53%							
Sr	421.552†	804.1	5.1449 ug/L	0.14413	5.1449 ppb	0.14413	2.80%
QC value within limits for Sr 421.552 Recovery = 102.90%							
Ti	334.940†	3412.3	5.1424 ug/L	0.08379	5.1424 ppb	0.08379	1.63%
QC value within limits for Ti 334.940 Recovery = 102.85%							
Tl	190.801†	67.9	19.693 ug/L	0.6398	19.693 ppb	0.6398	3.25%
QC value within limits for Tl 190.801 Recovery = 98.46%							
U	409.014†	1616.3	45.751 ug/L	1.6047	45.751 ppb	1.6047	3.51%
QC value within limits for U 409.014 Recovery = 91.50%							
V	292.402†	688.7	4.7593 ug/L	0.14891	4.7593 ppb	0.14891	3.13%
QC value within limits for V 292.402 Recovery = 95.19%							
Zn	213.857†	1257.3	11.269 ug/L	0.0351	11.269 ppb	0.0351	0.31%
QC value within limits for Zn 213.857 Recovery = 112.69%							
SiO2†		3495.3	227.73 ug/L	1.356	227.73 ppb	1.356	0.60%
QC value within limits for SiO2 Recovery = 106.91%							
All analyte(s) passed QC.							

Sequence No.: 9

Sample ID: ICSA

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 13

Date Collected: 1/18/2010 15:47:01

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4727.6	4727.6	88.7 %		15:49:00
1	Y RADIAL	4981.3	4981.3	88.24 %		15:49:00
1	Al 396.153Radial†	576197.2	649260.7	519550 ug/L	519550 ppb	15:48:55
1	Ca 317.933Radial†	257415.6	290038.1	479500 ug/L	479500 ppb	15:48:55
1	Fe 238.204 Radial†	19178.3	21597.5	186490 ug/L	186490 ppb	15:49:00
1	K 766.490 Radial†	2274.2	-112.8	-184.24 ug/L	-184.24 ppb	15:48:55
1	Mg 279.077 IEC†	13114.1	14774.5	486510 ug/L	486510 ppb	15:49:00
1	Na 589.592 Radial†	-949.8	28.4	7.6281 ug/L	7.6281 ppb	15:49:00
1	Sr 421.552†	538.5	595.1	0.2282 ug/L	0.2282 ppb	15:49:00
1	Sc 361.383	800596.7	800596.7	84.796 %		15:49:27
1	Y 371.029	662121.5	662121.5	83.038 %		15:49:27
1	Ag 328.068†	-9981.8	-12182.9	0.3590 ug/L	0.3590 ppb	15:49:27
1	As 188.979†	-77.1	-71.3	14.504 ug/L	14.504 ppb	15:49:47
1	B 249.677†	274.0	850.6	-11.833 ug/L	-11.833 ppb	15:49:27
1	Ba 233.527†	-570.1	-692.0	0.6484 ug/L	0.6484 ppb	15:49:47
1	Be 313.107†	-4304.5	-545.6	-0.2506 ug/L	-0.2506 ppb	15:49:27
1	Cd 226.502†	1282.0	1728.7	-0.8004 ug/L	-0.8004 ppb	15:49:47
1	Co 228.616†	-13.4	57.6	-1.5612 ug/L	-1.5612 ppb	15:49:47
1	Cr 267.716†	-119.0	-220.4	1.2253 ug/L	1.2253 ppb	15:49:47
1	Cu 324.752†	2829.5	-2829.6	1.6121 ug/L	1.6121 ppb	15:49:27
1	Mn 257.610†	-388.1	-913.2	-2.4472 ug/L	-2.4472 ppb	15:49:27
1	Mo 202.031†	-217.5	-275.3	1.6939 ug/L	1.6939 ppb	15:49:47
1	Ni 231.604†	253.9	198.9	4.7987 ug/L	4.7987 ppb	15:49:47
1	P 214.914†	167.4	-37.1	-41.081 ug/L	-41.081 ppb	15:49:47
1	Pb 220.353†	-822.8	-916.6	-5.5605 ug/L	-5.5605 ppb	15:49:47
1	S 181.975 Axial†	75.0	47.0	-34.424 ug/L	-34.424 ppb	15:49:47
1	Sb 206.836†	73.4	47.9	5.0494 ug/L	5.0494 ppb	15:49:47
1	Se 196.026†	-1003.4	-1150.4	24.727 ug/L	24.727 ppb	15:49:47
1	Si 251.611†	500.3	92.8	3.0352 ug/L	3.0352 ppb	15:49:47
1	Sn 189.927†	-369.3	-443.0	1.8564 ug/L	1.8564 ppb	15:49:47
1	Ti 334.940†	-15366.6	-16733.1	-0.7696 ug/L	-0.7696 ppb	15:49:27
1	Tl 190.801†	-69.9	-43.7	-12.879 ug/L	-12.879 ppb	15:49:47
1	U 409.014†	-736.2	776.7	0.7393 ug/L	0.7393 ppb	15:49:27
1	V 292.402†	701.5	2304.8	-2.8004 ug/L	-2.8004 ppb	15:49:47
1	Zn 213.857†	3115.9	2966.9	8.6202 ug/L	8.6202 ppb	15:49:47
1	SiO2†	578.6	157.4	10.769 ug/L	10.769 ppb	15:50:44
2	Sc Radial	4817.5	4817.5	90.4 %		15:49:10
2	Y RADIAL	5066.1	5066.1	89.75 %		15:49:10
2	Al 396.153Radial†	584735.7	646586.7	517410 ug/L	517410 ppb	15:49:05
2	Ca 317.933Radial†	260779.8	288345.5	476700 ug/L	476700 ppb	15:49:05
2	Fe 238.204 Radial†	19503.9	21554.3	186120 ug/L	186120 ppb	15:49:10
2	K 766.490 Radial†	2204.4	-237.8	-209.75 ug/L	-209.75 ppb	15:49:05
2	Mg 279.077 IEC†	13372.3	14784.2	486830 ug/L	486830 ppb	15:49:10
2	Na 589.592 Radial†	-924.9	76.0	20.407 ug/L	20.407 ppb	15:49:10
2	Sr 421.552†	564.0	612.0	0.3572 ug/L	0.3572 ppb	15:49:10
2	Sc 361.383	797376.9	797376.9	84.455 %		15:49:53
2	Y 371.029	659611.3	659611.3	82.723 %		15:49:53
2	Ag 328.068†	-9884.4	-12115.0	0.5774 ug/L	0.5774 ppb	15:49:53
2	As 188.979†	-86.1	-82.3	9.9401 ug/L	9.9401 ppb	15:50:13
2	B 249.677†	380.2	977.7	-9.0155 ug/L	-9.0155 ppb	15:49:53
2	Ba 233.527†	-593.0	-721.8	0.4207 ug/L	0.4207 ppb	15:50:13
2	Be 313.107†	-4216.3	-461.6	-0.2206 ug/L	-0.2206 ppb	15:49:53
2	Cd 226.502†	1272.9	1724.1	-0.8116 ug/L	-0.8116 ppb	15:50:13
2	Co 228.616†	-18.6	51.3	-1.6789 ug/L	-1.6789 ppb	15:50:13
2	Cr 267.716†	-42.3	-130.2	2.2062 ug/L	2.2062 ppb	15:50:13
2	Cu 324.752†	2873.9	-2763.6	1.7842 ug/L	1.7842 ppb	15:49:53
2	Mn 257.610†	-439.5	-976.0	-2.5636 ug/L	-2.5636 ppb	15:49:53
2	Mo 202.031†	-216.6	-275.3	1.6326 ug/L	1.6326 ppb	15:50:13
2	Ni 231.604†	229.7	171.4	4.1357 ug/L	4.1357 ppb	15:50:13

2	P 214.914†	161.4	-43.5	-44.990 ug/L	-44.990 ppb	15:50:13
2	Pb 220.353†	-808.5	-903.6	-4.5096 ug/L	-4.5096 ppb	15:50:13
2	S 181.975 Axial†	63.9	34.1	-51.198 ug/L	-51.198 ppb	15:50:13
2	Sb 206.836†	58.4	30.4	-0.6353 ug/L	-0.6353 ppb	15:50:13
2	Se 196.026†	-986.6	-1135.3	32.357 ug/L	32.357 ppb	15:50:13
2	Si 251.611†	496.1	90.3	2.9598 ug/L	2.9598 ppb	15:50:13
2	Sn 189.927†	-361.5	-435.5	2.6732 ug/L	2.6732 ppb	15:50:13
2	Ti 334.940†	-15240.2	-16656.7	-1.0564 ug/L	-1.0564 ppb	15:49:53
2	Tl 190.801†	-95.5	-74.3	-21.729 ug/L	-21.729 ppb	15:50:13
2	U 409.014†	-702.2	813.5	1.8210 ug/L	1.8210 ppb	15:49:53
2	V 292.402†	819.7	2448.1	-1.7962 ug/L	-1.7962 ppb	15:50:13
2	Zn 213.857†	3144.1	3015.2	9.0950 ug/L	9.0950 ppb	15:50:13
2	SiO2†	401.2	-49.9	-2.7522 ug/L	-2.7522 ppb	15:50:49
3	Sc Radial	4749.8	4749.8	89.2 %		15:49:20
3	Y RADIAL	4999.7	4999.7	88.57 %		15:49:20
3	Al 396.153Radial†	585388.9	656541.1	525370 ug/L	525370 ppb	15:49:15
3	Ca 317.933Radial†	260407.0	292040.1	482800 ug/L	482800 ppb	15:49:15
3	Fe 238.204 Radial†	19149.1	21463.9	185340 ug/L	185340 ppb	15:49:20
3	K 766.490 Radial†	2155.4	-258.0	-216.06 ug/L	-216.06 ppb	15:49:15
3	Mg 279.077 IEC†	13134.8	14728.7	485000 ug/L	485000 ppb	15:49:20
3	Na 589.592 Radial†	-967.8	13.3	3.5620 ug/L	3.5620 ppb	15:49:20
3	Sr 421.552†	557.2	613.3	0.3200 ug/L	0.3200 ppb	15:49:20
3	Sc 361.383	792968.8	792968.8	83.988 %		15:50:18
3	Y 371.029	655879.2	655879.2	82.255 %		15:50:18
3	Ag 328.068†	-9780.3	-12056.2	0.5020 ug/L	0.5020 ppb	15:50:18
3	As 188.979†	-91.6	-89.4	6.8660 ug/L	6.8660 ppb	15:50:38
3	B 249.677†	322.4	911.4	-10.327 ug/L	-10.327 ppb	15:50:18
3	Ba 233.527†	-623.7	-762.3	0.1002 ug/L	0.1002 ppb	15:50:38
3	Be 313.107†	-4217.1	-490.4	-0.2306 ug/L	-0.2306 ppb	15:50:18
3	Cd 226.502†	1272.7	1732.2	-0.6460 ug/L	-0.6460 ppb	15:50:38
3	Co 228.616†	-13.0	57.9	-1.5383 ug/L	-1.5383 ppb	15:50:38
3	Cr 267.716†	-90.8	-188.2	1.5575 ug/L	1.5575 ppb	15:50:38
3	Cu 324.752†	2993.8	-2601.9	2.2165 ug/L	2.2165 ppb	15:50:18
3	Mn 257.610†	-229.9	-729.3	-2.3048 ug/L	-2.3048 ppb	15:50:18
3	Mo 202.031†	-211.4	-270.4	1.9697 ug/L	1.9697 ppb	15:50:38
3	Ni 231.604†	210.4	150.0	3.6191 ug/L	3.6191 ppb	15:50:38
3	P 214.914†	198.4	1.6	-16.556 ug/L	-16.556 ppb	15:50:38
3	Pb 220.353†	-807.1	-907.2	-3.0377 ug/L	-3.0377 ppb	15:50:38
3	S 181.975 Axial†	59.0	28.8	-59.915 ug/L	-59.915 ppb	15:50:38
3	Sb 206.836†	70.6	45.4	4.0117 ug/L	4.0117 ppb	15:50:38
3	Se 196.026†	-1006.2	-1165.1	12.446 ug/L	12.446 ppb	15:50:38
3	Si 251.611†	484.9	80.2	2.6503 ug/L	2.6503 ppb	15:50:38
3	Sn 189.927†	-374.3	-453.1	0.6427 ug/L	0.6427 ppb	15:50:38
3	Ti 334.940†	-15111.2	-16603.4	-0.0051 ug/L	-0.0051 ppb	15:50:18
3	Tl 190.801†	-87.2	-65.1	-19.052 ug/L	-19.052 ppb	15:50:38
3	U 409.014†	-820.9	667.5	-2.2216 ug/L	-2.2216 ppb	15:50:18
3	V 292.402†	755.8	2377.4	-2.1858 ug/L	-2.1858 ppb	15:50:38
3	Zn 213.857†	3134.6	3024.5	9.2575 ug/L	9.2575 ppb	15:50:38
3	SiO2†	548.0	127.5	8.8149 ug/L	8.8149 ppb	15:50:54

Mean Data: ICSEA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	796980.8	84.413 %	0.4056			0.48%
Sc Radial	4765.0	89.4 %	0.88			0.98%
Y 371.029	659204.0	82.672 %	0.3939			0.48%
Y RADIAL	5015.7	88.85 %	0.790			0.89%
Ag 328.068†	-12118.0	0.4795 ug/L	0.11095	0.4795 ppb	0.11095	23.14%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	650796.2	520770 ug/L	4122.5	520770 ppb	4122.5	0.79%
QC value within limits for Al 396.153Radial Recovery = 104.15%						
As 188.979†	-81.0	10.437 ug/L	3.8432	10.437 ppb	3.8432	36.82%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	913.2	-10.392 ug/L	1.4097	-10.392 ppb	1.4097	13.57%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-725.4	0.3898 ug/L	0.27538	0.3898 ppb	0.27538	70.65%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-499.2	-0.2339 ug/L	0.01526	-0.2339 ppb	0.01526	6.53%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	290141.3	479670 ug/L	3057.5	479670 ppb	3057.5	0.64%

QC value within limits for Ca 317.933 Radial Recovery = 95.93%							
Cd	226.502†	1728.3	-0.7527 ug/L	0.09253	-0.7527 ppb	0.09253	12.29%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	55.6	-1.5928 ug/L	0.07544	-1.5928 ppb	0.07544	4.74%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	-179.6	1.6630 ug/L	0.49889	1.6630 ppb	0.49889	30.00%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-2731.7	1.8710 ug/L	0.31140	1.8710 ppb	0.31140	16.64%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	21538.6	185980 ug/L	588.5	185980 ppb	588.5	0.32%
QC value within limits for Fe 238.204 Radial Recovery = 92.99%							
K	766.490 Radial†	-202.9	-203.35 ug/L	16.847	-203.35 ppb	16.847	8.28%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	14762.5	486110 ug/L	976.1	486110 ppb	976.1	0.20%
QC value within limits for Mg 279.077 IEC Recovery = 97.22%							
Mn	257.610†	-872.8	-2.4385 ug/L	0.12963	-2.4385 ppb	0.12963	5.32%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	-273.7	1.7654 ug/L	0.17952	1.7654 ppb	0.17952	10.17%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	39.2	10.533 ug/L	8.7903	10.533 ppb	8.7903	83.46%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	173.5	4.1845 ug/L	0.59128	4.1845 ppb	0.59128	14.13%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-26.3	-34.209 ug/L	15.4126	-34.209 ppb	15.4126	45.05%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-909.1	-4.3693 ug/L	1.26726	-4.3693 ppb	1.26726	29.00%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	36.6	-48.512 ug/L	12.9562	-48.512 ppb	12.9562	26.71%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	41.2	2.8086 ug/L	3.02728	2.8086 ppb	3.02728	107.79%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-1150.3	23.177 ug/L	10.0453	23.177 ppb	10.0453	43.34%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	87.8	2.8818 ug/L	0.20395	2.8818 ppb	0.20395	7.08%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	-443.9	1.7241 ug/L	1.02172	1.7241 ppb	1.02172	59.26%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	606.8	0.3018 ug/L	0.06638	0.3018 ppb	0.06638	21.99%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	-16664.4	-0.6104 ug/L	0.54342	-0.6104 ppb	0.54342	89.03%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	-61.0	-17.887 ug/L	4.5383	-17.887 ppb	4.5383	25.37%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	752.6	0.1129 ug/L	2.09284	0.1129 ppb	2.09284	>999.9%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	2376.8	-2.2608 ug/L	0.50627	-2.2608 ppb	0.50627	22.39%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	3002.2	8.9909 ug/L	0.33117	8.9909 ppb	0.33117	3.68%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		78.3	5.6107 ug/L	7.30816	5.6107 ppb	7.30816	130.25%
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: 1/18/2010 15:53:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4705.2	4705.2	88.3 %		15:55:02
1	Y RADIAL	4971.8	4971.8	88.08 %		15:55:02
1	Al 396.153Radial†	592151.3	670414.7	536450 ug/L	536450 ppb	15:54:57
1	Ca 317.933Radial†	261434.3	295969.0	489300 ug/L	489300 ppb	15:54:57
1	Fe 238.204 Radial†	19033.9	21536.8	185980 ug/L	185980 ppb	15:55:02
1	K 766.490 Radial†	25269.6	25934.1	5318.8 ug/L	5318.8 ppb	15:54:57
1	Mg 279.077 IEC†	13158.0	14894.5	490470 ug/L	490470 ppb	15:55:02
1	Na 589.592 Radial†	16522.6	19805.2	5321.4 ug/L	5321.4 ppb	15:55:02
1	Sr 421.552†	71894.8	81385.9	517.22 ug/L	517.22 ppb	15:54:57
1	Sc 361.383	806665.4	806665.4	85.438 %		15:55:30
1	Y 371.029	665247.9	665247.9	83.430 %		15:55:30
1	Ag 328.068†	42575.7	49420.9	272.53 ug/L	272.53 ppb	15:55:30
1	As 188.979†	967.0	1151.4	514.93 ug/L	514.93 ppb	15:55:50
1	B 249.677†	20711.1	24768.4	505.92 ug/L	505.92 ppb	15:55:30
1	Ba 233.527†	57165.2	66888.5	495.83 ug/L	495.83 ppb	15:55:30
1	Be 313.107†	590960.9	696212.2	247.47 ug/L	247.47 ppb	15:55:30
1	Cd 226.502†	38196.7	44923.6	460.77 ug/L	460.77 ppb	15:55:50
1	Co 228.616†	19409.3	22790.7	442.15 ug/L	442.15 ppb	15:55:50
1	Cr 267.716†	37967.4	44358.3	489.49 ug/L	489.49 ppb	15:55:30
1	Cu 324.752†	165143.1	187122.8	554.91 ug/L	554.91 ppb	15:55:30
1	Mn 257.610†	390718.4	456854.9	481.84 ug/L	481.84 ppb	15:55:30
1	Mo 202.031†	6053.6	7066.6	494.84 ug/L	494.84 ppb	15:55:50
1	Ni 231.604†	15994.6	18620.1	448.98 ug/L	448.98 ppb	15:55:50
1	P 214.914†	3939.3	4376.1	2397.1 ug/L	2397.1 ppb	15:55:50
1	Pb 220.353†	2570.7	3062.6	466.94 ug/L	466.94 ppb	15:55:50
1	S 181.975 Axial†	1751.5	2008.5	2591.9 ug/L	2591.9 ppb	15:55:50
1	Sb 206.836†	1429.5	1634.4	544.87 ug/L	544.87 ppb	15:55:50
1	Se 196.026†	2524.3	2987.5	2564.2 ug/L	2564.2 ppb	15:55:50
1	Si 251.611†	148409.8	173206.9	5234.0 ug/L	5234.0 ppb	15:55:30
1	Sn 189.927†	2145.4	2503.6	496.56 ug/L	496.56 ppb	15:55:50
1	Ti 334.940†	273152.2	321095.7	511.03 ug/L	511.03 ppb	15:55:30
1	Tl 190.801†	1290.5	1549.2	451.16 ug/L	451.16 ppb	15:55:50
1	U 409.014†	14367.6	18461.3	500.50 ug/L	500.50 ppb	15:55:30
1	V 292.402†	66579.3	79404.3	511.43 ug/L	511.43 ppb	15:55:30
1	Zn 213.857†	50339.1	58210.9	502.80 ug/L	502.80 ppb	15:55:30
1	SiO2†	147631.0	172267.5	11226 ug/L	11226 ppb	15:56:48
2	Sc Radial	4726.9	4726.9	88.7 %		15:55:12
2	Y RADIAL	4981.9	4981.9	88.26 %		15:55:12
2	Al 396.153Radial†	594627.1	670130.0	536220 ug/L	536220 ppb	15:55:07
2	Ca 317.933Radial†	262797.3	296147.5	489600 ug/L	489600 ppb	15:55:07
2	Fe 238.204 Radial†	19096.3	21508.3	185740 ug/L	185740 ppb	15:55:12
2	K 766.490 Radial†	25422.0	25974.6	5327.3 ug/L	5327.3 ppb	15:55:07
2	Mg 279.077 IEC†	13114.3	14777.0	486590 ug/L	486590 ppb	15:55:12
2	Na 589.592 Radial†	16556.0	19757.0	5308.4 ug/L	5308.4 ppb	15:55:12
2	Sr 421.552†	72103.2	81247.4	516.33 ug/L	516.33 ppb	15:55:07
2	Sc 361.383	804935.2	804935.2	85.255 %		15:55:56
2	Y 371.029	664552.5	664552.5	83.343 %		15:55:56
2	Ag 328.068†	42689.3	49661.3	273.51 ug/L	273.51 ppb	15:55:56
2	As 188.979†	992.8	1184.1	528.17 ug/L	528.17 ppb	15:56:16
2	B 249.677†	20668.7	24770.9	506.02 ug/L	506.02 ppb	15:55:56
2	Ba 233.527†	57075.3	66926.9	496.11 ug/L	496.11 ppb	15:55:56
2	Be 313.107†	590379.7	697017.1	247.75 ug/L	247.75 ppb	15:55:56
2	Cd 226.502†	37911.5	44685.2	458.25 ug/L	458.25 ppb	15:56:16
2	Co 228.616†	19230.9	22630.3	439.02 ug/L	439.02 ppb	15:56:16
2	Cr 267.716†	37735.7	44182.0	487.56 ug/L	487.56 ppb	15:55:56
2	Cu 324.752†	164335.6	186591.2	553.35 ug/L	553.35 ppb	15:55:56
2	Mn 257.610†	389345.1	456227.1	481.31 ug/L	481.31 ppb	15:55:56
2	Mo 202.031†	6022.8	7045.6	493.41 ug/L	493.41 ppb	15:56:16
2	Ni 231.604†	15914.2	18566.1	447.68 ug/L	447.68 ppb	15:56:16

2	P 214.914†	3881.6	4318.4	2364.3 ug/L	2364.3 ppb	15:56:16
2	Pb 220.353†	2532.4	3024.2	462.40 ug/L	462.40 ppb	15:56:16
2	S 181.975 Axial†	1725.5	1982.4	2556.9 ug/L	2556.9 ppb	15:56:16
2	Sb 206.836†	1414.5	1620.4	540.17 ug/L	540.17 ppb	15:56:16
2	Se 196.026†	2488.1	2951.3	2541.1 ug/L	2541.1 ppb	15:56:16
2	Si 251.611†	147787.3	172850.1	5223.2 ug/L	5223.2 ppb	15:55:56
2	Sn 189.927†	2117.5	2476.2	492.01 ug/L	492.01 ppb	15:56:16
2	Ti 334.940†	272521.4	321043.0	511.31 ug/L	511.31 ppb	15:55:56
2	Tl 190.801†	1274.2	1533.4	446.57 ug/L	446.57 ppb	15:56:16
2	U 409.014†	14294.0	18411.1	499.11 ug/L	499.11 ppb	15:55:56
2	V 292.402†	66561.7	79551.2	512.34 ug/L	512.34 ppb	15:55:56
2	Zn 213.857†	50243.8	58225.8	502.97 ug/L	502.97 ppb	15:55:56
2	SiO2†	146763.8	171621.7	11183 ug/L	11183 ppb	15:56:53
3	Sc Radial	4748.9	4748.9	89.1 %		15:55:23
3	Y RADIAL	4984.3	4984.3	88.30 %		15:55:23
3	Al 396.153Radial†	585757.7	657082.3	525780 ug/L	525780 ppb	15:55:18
3	Ca 317.933Radial†	258216.2	289639.2	478840 ug/L	478840 ppb	15:55:18
3	Fe 238.204 Radial†	19119.9	21435.3	185100 ug/L	185100 ppb	15:55:23
3	K 766.490 Radial†	25163.2	25551.9	5241.5 ug/L	5241.5 ppb	15:55:18
3	Mg 279.077 IEC†	13146.6	14744.8	485540 ug/L	485540 ppb	15:55:23
3	Na 589.592 Radial†	16584.7	19703.0	5293.9 ug/L	5293.9 ppb	15:55:23
3	Sr 421.552†	70911.3	79534.7	505.45 ug/L	505.45 ppb	15:55:18
3	Sc 361.383	817213.7	817213.7	86.556 %		15:56:22
3	Y 371.029	674497.8	674497.8	84.590 %		15:56:22
3	Ag 328.068†	43159.5	49452.2	272.53 ug/L	272.53 ppb	15:56:22
3	As 188.979†	977.1	1148.4	513.52 ug/L	513.52 ppb	15:56:42
3	B 249.677†	21041.5	24837.4	507.57 ug/L	507.57 ppb	15:56:22
3	Ba 233.527†	57805.2	66764.3	494.90 ug/L	494.90 ppb	15:56:22
3	Be 313.107†	599531.5	697186.0	247.81 ug/L	247.81 ppb	15:56:22
3	Cd 226.502†	38199.1	44349.3	454.73 ug/L	454.73 ppb	15:56:42
3	Co 228.616†	19359.9	22440.5	435.32 ug/L	435.32 ppb	15:56:42
3	Cr 267.716†	38270.9	44135.3	487.03 ug/L	487.03 ppb	15:56:22
3	Cu 324.752†	167426.6	187266.1	555.28 ug/L	555.28 ppb	15:56:22
3	Mn 257.610†	394686.1	455536.0	480.56 ug/L	480.56 ppb	15:56:22
3	Mo 202.031†	6099.1	7027.7	492.03 ug/L	492.03 ppb	15:56:42
3	Ni 231.604†	16022.2	18410.3	443.93 ug/L	443.93 ppb	15:56:42
3	P 214.914†	3954.0	4333.6	2370.6 ug/L	2370.6 ppb	15:56:42
3	Pb 220.353†	2563.2	3015.1	458.96 ug/L	458.96 ppb	15:56:42
3	S 181.975 Axial†	1759.0	1990.7	2570.0 ug/L	2570.0 ppb	15:56:42
3	Sb 206.836†	1415.9	1597.2	532.73 ug/L	532.73 ppb	15:56:42
3	Se 196.026†	2509.7	2932.5	2525.9 ug/L	2525.9 ppb	15:56:42
3	Si 251.611†	150079.0	172893.3	5224.6 ug/L	5224.6 ppb	15:56:22
3	Sn 189.927†	2141.0	2466.1	488.66 ug/L	488.66 ppb	15:56:42
3	Ti 334.940†	276243.4	320540.4	509.19 ug/L	509.19 ppb	15:56:22
3	Tl 190.801†	1292.2	1531.6	446.08 ug/L	446.08 ppb	15:56:42
3	U 409.014†	14511.3	18410.2	499.16 ug/L	499.16 ppb	15:56:22
3	V 292.402†	67433.5	79385.3	511.30 ug/L	511.30 ppb	15:56:22
3	Zn 213.857†	50826.9	58014.1	501.15 ug/L	501.15 ppb	15:56:22
3	SiO2†	148613.5	171172.2	11154 ug/L	11154 ppb	15:56:58

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	809604.8	85.750 %	0.7039			0.82%
Sc Radial	4727.0	88.7 %	0.41			0.46%
Y 371.029	668099.4	83.788 %	0.6963			0.83%
Y RADIAL	4979.4	88.21 %	0.118			0.13%
Ag 328.068†	49511.4	272.86 ug/L	0.566	272.86 ppb	0.566	0.21%
QC value within limits for Ag 328.068 Recovery = 109.14%						
Al 396.153Radial†	665875.7	532820 ug/L	6094.8	532820 ppb	6094.8	1.14%
QC value within limits for Al 396.153Radial Recovery = 106.56%						
As 188.979†	1161.3	518.87 ug/L	8.083	518.87 ppb	8.083	1.56%
QC value within limits for As 188.979 Recovery = 103.77%						
B 249.677†	24792.3	506.50 ug/L	0.929	506.50 ppb	0.929	0.18%
QC value within limits for B 249.677 Recovery = 101.30%						
Ba 233.527†	66859.9	495.61 ug/L	0.634	495.61 ppb	0.634	0.13%
QC value within limits for Ba 233.527 Recovery = 99.12%						
Be 313.107†	696805.1	247.68 ug/L	0.183	247.68 ppb	0.183	0.07%
QC value within limits for Be 313.107 Recovery = 99.07%						
Ca 317.933Radial†	293918.6	485910 ug/L	6128.6	485910 ppb	6128.6	1.26%

QC value within limits for Ca 317.933 Radial Recovery = 97.18%							
Cd	226.502†	44652.7	457.92 ug/L	3.036	457.92 ppb	3.036	0.66%
QC value within limits for Cd 226.502 Recovery = 91.58%							
Co	228.616†	22620.5	438.83 ug/L	3.417	438.83 ppb	3.417	0.78%
QC value within limits for Co 228.616 Recovery = 87.77%							
Cr	267.716†	44225.2	488.03 ug/L	1.294	488.03 ppb	1.294	0.27%
QC value within limits for Cr 267.716 Recovery = 97.61%							
Cu	324.752†	186993.4	554.51 ug/L	1.026	554.51 ppb	1.026	0.19%
QC value within limits for Cu 324.752 Recovery = 110.90%							
Fe	238.204 Radial†	21493.5	185610 ug/L	452.3	185610 ppb	452.3	0.24%
QC value within limits for Fe 238.204 Radial Recovery = 92.80%							
K	766.490 Radial†	25820.2	5295.9 ug/L	47.28	5295.9 ppb	47.28	0.89%
QC value within limits for K 766.490 Radial Recovery = 105.92%							
Mg	279.077 IEC†	14805.4	487530 ug/L	2596.0	487530 ppb	2596.0	0.53%
QC value within limits for Mg 279.077 IEC Recovery = 97.51%							
Mn	257.610†	456206.0	481.23 ug/L	0.644	481.23 ppb	0.644	0.13%
QC value within limits for Mn 257.610 Recovery = 96.25%							
Mo	202.031†	7046.7	493.43 ug/L	1.402	493.43 ppb	1.402	0.28%
QC value within limits for Mo 202.031 Recovery = 98.69%							
Na	589.592 Radial†	19755.1	5307.9 ug/L	13.74	5307.9 ppb	13.74	0.26%
QC value within limits for Na 589.592 Radial Recovery = 106.16%							
Ni	231.604†	18532.2	446.86 ug/L	2.626	446.86 ppb	2.626	0.59%
QC value within limits for Ni 231.604 Recovery = 89.37%							
P	214.914†	4342.7	2377.3 ug/L	17.41	2377.3 ppb	17.41	0.73%
QC value within limits for P 214.914 Recovery = 95.09%							
Pb	220.353†	3034.0	462.77 ug/L	4.003	462.77 ppb	4.003	0.87%
QC value within limits for Pb 220.353 Recovery = 92.55%							
S	181.975 Axial†	1993.9	2573.0 ug/L	17.67	2573.0 ppb	17.67	0.69%
QC value within limits for S 181.975 Axial Recovery = 102.92%							
Sb	206.836†	1617.3	539.26 ug/L	6.124	539.26 ppb	6.124	1.14%
QC value within limits for Sb 206.836 Recovery = 107.85%							
Se	196.026†	2957.1	2543.7 ug/L	19.30	2543.7 ppb	19.30	0.76%
QC value within limits for Se 196.026 Recovery = 101.75%							
Si	251.611†	172983.4	5227.3 ug/L	5.88	5227.3 ppb	5.88	0.11%
QC value within limits for Si 251.611 Recovery = 104.55%							
Sn	189.927†	2482.0	492.41 ug/L	3.961	492.41 ppb	3.961	0.80%
QC value within limits for Sn 189.927 Recovery = 98.48%							
Sr	421.552†	80722.7	513.00 ug/L	6.554	513.00 ppb	6.554	1.28%
QC value within limits for Sr 421.552 Recovery = 102.60%							
Ti	334.940†	320893.1	510.51 ug/L	1.151	510.51 ppb	1.151	0.23%
QC value within limits for Ti 334.940 Recovery = 102.10%							
Tl	190.801†	1538.1	447.94 ug/L	2.800	447.94 ppb	2.800	0.63%
QC value within limits for Tl 190.801 Recovery = 89.59%							
U	409.014†	18427.5	499.59 ug/L	0.788	499.59 ppb	0.788	0.16%
QC value within limits for U 409.014 Recovery = 99.92%							
V	292.402†	79446.9	511.69 ug/L	0.564	511.69 ppb	0.564	0.11%
QC value within limits for V 292.402 Recovery = 102.34%							
Zn	213.857†	58150.3	502.31 ug/L	1.009	502.31 ppb	1.009	0.20%
QC value within limits for Zn 213.857 Recovery = 100.46%							
SiO2†	171687.2	11188 ug/L	35.9	11188 ppb	35.9	0.32%	
QC value within limits for SiO2 Recovery = 104.61%							
All analyte(s) passed QC.							

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

Autosampler Location: 15
 Date Collected: 1/18/2010 15:59:09
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4756.8	4756.8	89.3 %		16:01:07
1	Y RADIAL	5040.9	5040.9	89.30 %		16:01:07
1	Al 396.153Radial†	572987.9	641677.1	513480 ug/L	513480 ppb	16:01:02
1	Ca 317.933Radial†	255283.6	285868.2	472600 ug/L	472600 ppb	16:01:02
1	Fe 238.204 Radial†	45414.7	50846.5	439050 ug/L	439050 ppb	16:01:07
1	K 766.490 Radial†	3222.0	932.8	-162.11 ug/L	-162.11 ppb	16:01:02
1	Mg 279.077 IEC†	13078.0	14643.2	481920 ug/L	481920 ppb	16:01:07
1	Na 589.592 Radial†	1714723.5	1921395.3	516250 ug/L	516250 ppb	16:01:02
1	Sr 421.552†	801.0	885.4	2.1378 ug/L	2.1378 ppb	16:01:07
1	Sc 361.383	790510.0	790510.0	83.727 %		16:01:35
1	Y 371.029	655606.8	655606.8	82.221 %		16:01:35
1	Ag 328.068†	-23251.3	-28181.5	-0.0383 ug/L	-0.0383 ppb	16:01:35
1	As 188.979†	-187.5	-204.3	19.620 ug/L	19.620 ppb	16:01:55
1	B 249.677†	1216.7	1980.7	-28.343 ug/L	-28.343 ppb	16:01:35
1	Ba 233.527†	-1631.7	-1968.5	-0.9754 ug/L	-0.9754 ppb	16:01:55
1	Be 313.107†	-10973.1	-8575.0	-3.0924 ug/L	-3.0924 ppb	16:01:35
1	Cd 226.502†	3330.9	4195.2	2.3045 ug/L	2.3045 ppb	16:01:55
1	Co 228.616†	177.2	285.1	-0.8213 ug/L	-0.8213 ppb	16:01:55
1	Cr 267.716†	46.1	-25.0	2.4646 ug/L	2.4646 ppb	16:01:55
1	Cu 324.752†	32.1	-6128.1	-2.7651 ug/L	-2.7651 ppb	16:01:35
1	Mn 257.610†	-25167.8	-30514.8	-8.6559 ug/L	-8.6559 ppb	16:01:35
1	Mo 202.031†	-463.4	-572.3	1.2718 ug/L	1.2718 ppb	16:01:55
1	Ni 231.604†	322.2	284.3	6.8565 ug/L	6.8565 ppb	16:01:55
1	P 214.914†	579.5	457.6	40.470 ug/L	40.470 ppb	16:01:55
1	Pb 220.353†	-598.9	-661.6	-1.1823 ug/L	-1.1823 ppb	16:01:55
1	S 181.975 Axial†	82.3	56.7	-20.161 ug/L	-20.161 ppb	16:01:55
1	Sb 206.836†	49.7	20.6	2.1559 ug/L	2.1559 ppb	16:01:55
1	Se 196.026†	-2369.2	-2796.7	-96.606 ug/L	-96.606 ppb	16:01:55
1	Si 251.611†	-484.0	-1075.2	-32.053 ug/L	-32.053 ppb	16:01:55
1	Sn 189.927†	-385.1	-467.4	0.9664 ug/L	0.9664 ppb	16:01:55
1	Ti 334.940†	-15304.5	-16890.2	-8.0304 ug/L	-8.0304 ppb	16:01:35
1	Tl 190.801†	-88.3	-66.7	-19.709 ug/L	-19.709 ppb	16:01:55
1	U 409.014†	433593.8	519509.8	14662 ug/L	14662 ppb	16:01:35
1	V 292.402†	2116.8	4005.7	-0.6545 ug/L	-0.6545 ppb	16:01:35
1	Zn 213.857†	5912.3	6353.7	14.633 ug/L	14.633 ppb	16:01:55
1	SiO2†	-599.5	-1241.0	-79.913 ug/L	-79.913 ppb	16:02:52
2	Sc Radial	4672.9	4672.9	87.7 %		16:01:17
2	Y RADIAL	4951.1	4951.1	87.71 %		16:01:17
2	Al 396.153Radial†	568507.7	648099.9	518620 ug/L	518620 ppb	16:01:12
2	Ca 317.933Radial†	254153.9	289717.4	478970 ug/L	478970 ppb	16:01:12
2	Fe 238.204 Radial†	44512.4	50731.7	438060 ug/L	438060 ppb	16:01:17
2	K 766.490 Radial†	3133.5	896.8	-174.37 ug/L	-174.37 ppb	16:01:12
2	Mg 279.077 IEC†	12827.1	14620.4	481170 ug/L	481170 ppb	16:01:17
2	Na 589.592 Radial†	1705558.7	1945452.6	522720 ug/L	522720 ppb	16:01:12
2	Sr 421.552†	792.9	892.2	2.1338 ug/L	2.1338 ppb	16:01:17
2	Sc 361.383	794055.6	794055.6	84.103 %		16:02:01
2	Y 371.029	658213.4	658213.4	82.548 %		16:02:01
2	Ag 328.068†	-23491.8	-28343.5	-1.1570 ug/L	-1.1570 ppb	16:02:01
2	As 188.979†	-183.6	-198.7	21.676 ug/L	21.676 ppb	16:02:21
2	B 249.677†	1228.3	1988.0	-28.024 ug/L	-28.024 ppb	16:02:01
2	Ba 233.527†	-1721.1	-2066.1	-1.7214 ug/L	-1.7214 ppb	16:02:21
2	Be 313.107†	-10874.0	-8398.7	-3.0299 ug/L	-3.0299 ppb	16:02:01
2	Cd 226.502†	3292.2	4131.3	1.7239 ug/L	1.7239 ppb	16:02:21
2	Co 228.616†	205.1	317.2	-0.1857 ug/L	-0.1857 ppb	16:02:21
2	Cr 267.716†	91.8	29.1	3.0382 ug/L	3.0382 ppb	16:02:21
2	Cu 324.752†	-42.9	-6217.5	-3.0748 ug/L	-3.0748 ppb	16:02:01
2	Mn 257.610†	-25352.9	-30600.7	-8.8139 ug/L	-8.8139 ppb	16:02:01
2	Mo 202.031†	-493.5	-605.6	-0.9636 ug/L	-0.9636 ppb	16:02:21
2	Ni 231.604†	306.4	263.8	6.3601 ug/L	6.3601 ppb	16:02:21

2	P 214.914†	577.7	452.3	39.499 ug/L	39.499 ppb	16:02:21
2	Pb 220.353†	-605.1	-665.7	-0.3612 ug/L	-0.3612 ppb	16:02:21
2	S 181.975 Axial†	76.9	49.9	-30.289 ug/L	-30.289 ppb	16:02:21
2	Sb 206.836†	61.7	34.6	6.4720 ug/L	6.4720 ppb	16:02:21
2	Se 196.026†	-2344.5	-2754.7	-73.605 ug/L	-73.605 ppb	16:02:21
2	Si 251.611†	-524.0	-1120.2	-33.389 ug/L	-33.389 ppb	16:02:21
2	Sn 189.927†	-413.0	-498.6	-3.3012 ug/L	-3.3012 ppb	16:02:21
2	Ti 334.940†	-15332.7	-16842.1	-7.0404 ug/L	-7.0404 ppb	16:02:01
2	Tl 190.801†	-118.7	-102.4	-30.045 ug/L	-30.045 ppb	16:02:21
2	U 409.014†	435369.6	519308.9	14656 ug/L	14656 ppb	16:02:01
2	V 292.402†	2005.8	3862.4	-1.5095 ug/L	-1.5095 ppb	16:02:01
2	Zn 213.857†	5902.9	6311.0	14.348 ug/L	14.348 ppb	16:02:21
2	SiO2†	-467.6	-1080.9	-69.412 ug/L	-69.412 ppb	16:02:57
3	Sc Radial	4711.0	4711.0	88.4 %		16:01:28
3	Y RADIAL	5009.9	5009.9	88.75 %		16:01:28
3	Al 396.153Radial†	575872.6	651188.7	521090 ug/L	521090 ppb	16:01:23
3	Ca 317.933Radial†	256865.0	290440.8	480160 ug/L	480160 ppb	16:01:23
3	Fe 238.204 Radial†	44918.5	50780.8	438490 ug/L	438490 ppb	16:01:28
3	K 766.490 Radial†	3243.9	992.8	-154.95 ug/L	-154.95 ppb	16:01:23
3	Mg 279.077 IEC†	12895.0	14578.9	479800 ug/L	479800 ppb	16:01:28
3	Na 589.592 Radial†	1723370.2	1949875.4	523910 ug/L	523910 ppb	16:01:23
3	Sr 421.552†	797.1	889.7	2.1087 ug/L	2.1087 ppb	16:01:28
3	Sc 361.383	794794.1	794794.1	84.181 %		16:02:26
3	Y 371.029	657387.7	657387.7	82.445 %		16:02:26
3	Ag 328.068†	-23739.5	-28611.7	-2.2412 ug/L	-2.2412 ppb	16:02:26
3	As 188.979†	-184.6	-199.7	21.368 ug/L	21.368 ppb	16:02:46
3	B 249.677†	1355.0	2137.2	-24.854 ug/L	-24.854 ppb	16:02:26
3	Ba 233.527†	-1686.4	-2023.0	-1.3886 ug/L	-1.3886 ppb	16:02:46
3	Be 313.107†	-11034.2	-8577.0	-3.0935 ug/L	-3.0935 ppb	16:02:26
3	Cd 226.502†	3277.8	4110.7	1.4675 ug/L	1.4675 ppb	16:02:46
3	Co 228.616†	172.3	278.0	-0.9502 ug/L	-0.9502 ppb	16:02:46
3	Cr 267.716†	67.0	-0.5	2.7084 ug/L	2.7084 ppb	16:02:46
3	Cu 324.752†	6.8	-6158.4	-2.9036 ug/L	-2.9036 ppb	16:02:26
3	Mn 257.610†	-25363.8	-30585.6	-8.7003 ug/L	-8.7003 ppb	16:02:26
3	Mo 202.031†	-462.8	-568.6	1.5659 ug/L	1.5659 ppb	16:02:46
3	Ni 231.604†	291.3	245.5	5.9209 ug/L	5.9209 ppb	16:02:46
3	P 214.914†	572.2	445.2	35.701 ug/L	35.701 ppb	16:02:46
3	Pb 220.353†	-615.9	-677.8	-1.2725 ug/L	-1.2725 ppb	16:02:46
3	S 181.975 Axial†	107.7	86.4	18.190 ug/L	18.190 ppb	16:02:46
3	Sb 206.836†	64.7	38.1	7.6831 ug/L	7.6831 ppb	16:02:46
3	Se 196.026†	-2331.7	-2736.9	-60.856 ug/L	-60.856 ppb	16:02:46
3	Si 251.611†	-461.9	-1045.8	-31.168 ug/L	-31.168 ppb	16:02:46
3	Sn 189.927†	-393.7	-475.2	0.7997 ug/L	0.7997 ppb	16:02:46
3	Ti 334.940†	-15471.3	-16989.8	-7.0103 ug/L	-7.0103 ppb	16:02:26
3	Tl 190.801†	-109.4	-91.2	-26.800 ug/L	-26.800 ppb	16:02:46
3	U 409.014†	437023.1	520792.1	14698 ug/L	14698 ppb	16:02:26
3	V 292.402†	2276.5	4181.8	0.6182 ug/L	0.6182 ppb	16:02:26
3	Zn 213.857†	5873.7	6269.8	13.938 ug/L	13.938 ppb	16:02:46
3	SiO2†	-525.3	-1149.0	-73.920 ug/L	-73.920 ppb	16:03:02

Mean Data: LRL

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	793119.9	84.004 %		0.2426			0.29%
Sc Radial	4713.6	88.5 %		0.79			0.89%
Y 371.029	657069.3	82.405 %		0.1671			0.20%
Y RADIAL	5000.6	88.59 %		0.807			0.91%
Ag 328.068†	-28378.9	-1.1455 ug/L		1.10152	-1.1455 ppb	1.10152	96.16%
Al 396.153Radial†	646988.5	517730 ug/L		3882.8	517730 ppb	3882.8	0.75%
QC value within limits for Al 396.153Radial Recovery = 103.55%							
As 188.979†	-200.9	20.888 ug/L		1.1093	20.888 ppb	1.1093	5.31%
B 249.677†	2035.3	-27.074 ug/L		1.9286	-27.074 ppb	1.9286	7.12%
Ba 233.527†	-2019.2	-1.3618 ug/L		0.37374	-1.3618 ppb	0.37374	27.44%
Be 313.107†	-8516.9	-3.0719 ug/L		0.03642	-3.0719 ppb	0.03642	1.19%
Ca 317.933Radial†	288675.5	477240 ug/L		4063.5	477240 ppb	4063.5	0.85%
QC value within limits for Ca 317.933Radial Recovery = 95.45%							
Cd 226.502†	4145.7	1.8320 ug/L		0.42885	1.8320 ppb	0.42885	23.41%
Co 228.616†	293.4	-0.6524 ug/L		0.40927	-0.6524 ppb	0.40927	62.73%
Cr 267.716†	1.2	2.7371 ug/L		0.28790	2.7371 ppb	0.28790	10.52%
Cu 324.752†	-6168.0	-2.9145 ug/L		0.15512	-2.9145 ppb	0.15512	5.32%

Fe 238.204 Radial†	50786.3	438530 ug/L	497.1	438530 ppb	497.1	0.11%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 87.71%						
K 766.490 Radial†	940.8	-163.81 ug/L	9.825	-163.81 ppb	9.825	6.00%
Mg 279.077 IEC†	14614.2	480960 ug/L	1073.5	480960 ppb	1073.5	0.22%
QC value within limits for Mg 279.077 IEC Recovery = 96.19%						
Mn 257.610†	-30567.1	-8.7234 ug/L	0.08148	-8.7234 ppb	0.08148	0.93%
Mo 202.031†	-582.2	0.6247 ug/L	1.38337	0.6247 ppb	1.38337	221.45%
Na 589.592 Radial†	1938907.8	520960 ug/L	4118.1	520960 ppb	4118.1	0.79%
QC value within limits for Na 589.592 Radial Recovery = 104.19%						
Ni 231.604†	264.5	6.3792 ug/L	0.46810	6.3792 ppb	0.46810	7.34%
P 214.914†	451.7	38.557 ug/L	2.5202	38.557 ppb	2.5202	6.54%
Pb 220.353†	-668.4	-0.9387 ug/L	0.50213	-0.9387 ppb	0.50213	53.49%
S 181.975 Axial†	64.4	-10.753 ug/L	25.5725	-10.753 ppb	25.5725	237.81%
Sb 206.836†	31.1	5.4370 ug/L	2.90532	5.4370 ppb	2.90532	53.44%
Se 196.026†	-2762.8	-77.022 ug/L	18.1181	-77.022 ppb	18.1181	23.52%
Si 251.611†	-1080.4	-32.203 ug/L	1.1181	-32.203 ppb	1.1181	3.47%
Sn 189.927†	-480.4	-0.5117 ug/L	2.41722	-0.5117 ppb	2.41722	472.40%
Sr 421.552†	889.1	2.1268 ug/L	0.01579	2.1268 ppb	0.01579	0.74%
Ti 334.940†	-16907.3	-7.3604 ug/L	0.58050	-7.3604 ppb	0.58050	7.89%
Tl 190.801†	-86.8	-25.518 ug/L	5.2856	-25.518 ppb	5.2856	20.71%
U 409.014†	519870.3	14672 ug/L	22.8	14672 ppb	22.8	0.16%
QC value within limits for U 409.014 Recovery = 97.81%						
V 292.402†	4016.7	-0.5153 ug/L	1.07063	-0.5153 ppb	1.07063	207.78%
Zn 213.857†	6311.5	14.306 ug/L	0.3495	14.306 ppb	0.3495	2.44%
SiO2†	-1157.0	-74.415 ug/L	5.2679	-74.415 ppb	5.2679	7.08%

QC Failed. Continue with analysis.

Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 16

Date Collected: 1/18/2010 16:05:12

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5110.9	5110.9	95.9 %		16:07:10
1	Y RADIAL	5382.9	5382.9	95.36 %		16:07:10
1	Al 396.153Radial†	562.8	582.0	-7.0301 ug/L	-7.0301 ppb	16:07:10
1	Ca 317.933Radial†	31.9	12.6	20.894 ug/L	20.894 ppb	16:07:30
1	Fe 238.204 Radial†	-19.2	-32.8	-1.0188 ug/L	-1.0188 ppb	16:07:30
1	K 766.490 Radial†	1353026.3	1407594.3	297710 ug/L	297710 ppb	16:07:05
1	Mg 279.077 IEC†	-4.9	-7.8	-154.08 ug/L	-154.08 ppb	16:07:30
1	Na 589.592 Radial†	-300.7	785.2	210.98 ug/L	210.98 ppb	16:07:10
1	Sr 421.552†	1509869.6	1573737.1	10072 ug/L	10072 ppb	16:07:05
1	Sc 361.383	889855.8	889855.8	94.249 %		16:08:47
1	Y 371.029	735798.1	735798.1	92.278 %		16:08:47
1	Ag 328.068†	-7309.0	-8166.1	4.8971 ug/L	4.8971 ppb	16:08:52
1	As 188.979†	23142.8	24574.4	10056 ug/L	10056 ppb	16:08:52
1	B 249.677†	218196.8	232037.4	5007.5 ug/L	5007.5 ppb	16:08:47
1	Ba 233.527†	1855524.3	1968717.6	14416 ug/L	14416 ppb	16:08:47
1	Be 313.107†	7696451.3	8170573.5	2913.6 ug/L	2913.6 ppb	16:08:40
1	Cd 226.502†	857470.5	910005.1	9721.3 ug/L	9721.3 ppb	16:08:47
1	Co 228.616†	455487.4	483351.9	9430.1 ug/L	9430.1 ppb	16:08:52
1	Cr 267.716†	2091894.6	2219449.4	24298 ug/L	24298 ppb	16:08:47
1	Cu 324.752†	6518833.3	6910407.1	20140 ug/L	20140 ppb	16:08:40
1	Mn 257.610†	8454642.1	8970038.3	9493.8 ug/L	9493.8 ppb	16:08:40
1	Mo 202.031†	136823.0	145152.4	9748.1 ug/L	9748.1 ppb	16:08:52
1	Ni 231.604†	384055.6	407387.8	9823.5 ug/L	9823.5 ppb	16:08:47
1	P 214.914†	29536.8	31104.4	13992 ug/L	13992 ppb	16:08:52
1	Pb 220.353†	195773.5	207772.2	24436 ug/L	24436 ppb	16:08:52
1	S 181.975 Axial†	35854.1	38000.1	50940 ug/L	50940 ppb	16:08:52
1	Sb 206.836†	29725.9	31500.9	10739 ug/L	10739 ppb	16:08:52
1	Se 196.026†	15386.3	16358.0	10060 ug/L	10060 ppb	16:08:52
1	Si 251.611†	1488381.9	1578696.9	47639 ug/L	47639 ppb	16:08:47
1	Sn 189.927†	58573.0	62139.3	10401 ug/L	10401 ppb	16:08:52
1	Ti 334.940†	6106783.5	6480771.7	9798.0 ug/L	9798.0 ppb	16:08:40
1	Tl 190.801†	31326.8	33276.9	9683.7 ug/L	9683.7 ppb	16:08:52
1	U 409.014†	-610.3	997.4	-26.067 ug/L	-26.067 ppb	16:08:52
1	V 292.402†	1448998.5	1538885.3	10236 ug/L	10236 ppb	16:08:47
1	Zn 213.857†	1486472.5	1576460.5	14113 ug/L	14113 ppb	16:08:47
1	SiO2†	1518000.3	1610094.6	104770 ug/L	104770 ppb	16:09:38
2	Sc Radial	5134.7	5134.7	96.4 %		16:07:40
2	Y RADIAL	5385.6	5385.6	95.41 %		16:07:40
2	Al 396.153Radial†	566.9	583.5	-9.3425 ug/L	-9.3425 ppb	16:07:40
2	Ca 317.933Radial†	31.7	12.3	20.305 ug/L	20.305 ppb	16:08:00
2	Fe 238.204 Radial†	-21.8	-35.4	-21.249 ug/L	-21.249 ppb	16:08:00
2	K 766.490 Radial†	1340940.1	1388528.3	293670 ug/L	293670 ppb	16:07:35
2	Mg 279.077 IEC†	-3.1	-5.9	-90.607 ug/L	-90.607 ppb	16:08:00
2	Na 589.592 Radial†	-368.9	716.0	192.38 ug/L	192.38 ppb	16:07:40
2	Sr 421.552†	1495996.2	1552060.3	9933.2 ug/L	9933.2 ppb	16:07:35
2	Sc 361.383	889419.7	889419.7	94.203 %		16:09:07
2	Y 371.029	735106.5	735106.5	92.191 %		16:09:07
2	Ag 328.068†	-7399.7	-8266.2	4.4157 ug/L	4.4157 ppb	16:09:12
2	As 188.979†	23418.1	24878.7	10180 ug/L	10180 ppb	16:09:12
2	B 249.677†	218248.9	232206.2	5010.9 ug/L	5010.9 ppb	16:09:07
2	Ba 233.527†	1858146.4	1972466.4	14443 ug/L	14443 ppb	16:09:07
2	Be 313.107†	7709968.9	8188927.1	2920.1 ug/L	2920.1 ppb	16:09:00
2	Cd 226.502†	858799.4	911861.8	9741.1 ug/L	9741.1 ppb	16:09:07
2	Co 228.616†	459538.0	487888.7	9518.8 ug/L	9518.8 ppb	16:09:12
2	Cr 267.716†	2090379.1	2218929.0	24293 ug/L	24293 ppb	16:09:07
2	Cu 324.752†	6513466.7	6908101.7	20133 ug/L	20133 ppb	16:09:00
2	Mn 257.610†	8470498.1	8991268.5	9516.2 ug/L	9516.2 ppb	16:09:00
2	Mo 202.031†	137786.4	146246.2	9821.5 ug/L	9821.5 ppb	16:09:12
2	Ni 231.604†	384425.1	407979.9	9837.7 ug/L	9837.7 ppb	16:09:07

2	P 214.914†	29916.3	31522.6	14234 ug/L	14234 ppb	16:09:12
2	Pb 220.353†	197485.0	209690.8	24662 ug/L	24662 ppb	16:09:12
2	S 181.975 Axial†	36408.6	38607.5	51754 ug/L	51754 ppb	16:09:12
2	Sb 206.836†	30000.5	31807.8	10842 ug/L	10842 ppb	16:09:12
2	Se 196.026†	15494.3	16480.7	10135 ug/L	10135 ppb	16:09:12
2	Si 251.611†	1487786.5	1578839.2	47642 ug/L	47642 ppb	16:09:07
2	Sn 189.927†	58997.8	62620.7	10482 ug/L	10482 ppb	16:09:12
2	Ti 334.940†	6114288.9	6491916.0	9814.9 ug/L	9814.9 ppb	16:09:00
2	Tl 190.801†	31592.9	33575.7	9770.0 ug/L	9770.0 ppb	16:09:12
2	U 409.014†	-813.2	781.7	-32.161 ug/L	-32.161 ppb	16:09:12
2	V 292.402†	1446907.6	1537419.6	10227 ug/L	10227 ppb	16:09:07
2	Zn 213.857†	1486940.4	1577730.5	14124 ug/L	14124 ppb	16:09:07
2	SiO2†	1492983.5	1584328.2	103090 ug/L	103090 ppb	16:09:44
3	Sc Radial	5105.9	5105.9	95.8 %		16:08:11
3	Y RADIAL	5336.7	5336.7	94.54 %		16:08:11
3	Al 396.153Radial†	542.6	561.4	-23.106 ug/L	-23.106 ppb	16:08:11
3	Ca 317.933Radial†	29.7	10.4	17.241 ug/L	17.241 ppb	16:08:31
3	Fe 238.204 Radial†	-18.5	-32.1	5.0996 ug/L	5.0996 ppb	16:08:31
3	K 766.490 Radial†	1338427.9	1393738.7	294780 ug/L	294780 ppb	16:08:06
3	Mg 279.077 IEC†	-4.8	-7.7	-150.48 ug/L	-150.48 ppb	16:08:31
3	Na 589.592 Radial†	-430.6	649.5	174.50 ug/L	174.50 ppb	16:08:11
3	Sr 421.552†	1498290.3	1563190.8	10004 ug/L	10004 ppb	16:08:06
3	Sc 361.383	895638.8	895638.8	94.862 %		16:09:27
3	Y 371.029	739459.8	739459.8	92.737 %		16:09:27
3	Ag 328.068†	-7461.9	-8277.2	4.3067 ug/L	4.3067 ppb	16:09:32
3	As 188.979†	23345.4	24629.4	10080 ug/L	10080 ppb	16:09:32
3	B 249.677†	219616.4	232039.1	5007.5 ug/L	5007.5 ppb	16:09:27
3	Ba 233.527†	1869575.3	1970817.9	14431 ug/L	14431 ppb	16:09:27
3	Be 313.107†	7872612.6	8303549.5	2961.0 ug/L	2961.0 ppb	16:09:20
3	Cd 226.502†	864811.2	911869.0	9741.2 ug/L	9741.2 ppb	16:09:27
3	Co 228.616†	458802.1	483725.7	9437.1 ug/L	9437.1 ppb	16:09:32
3	Cr 267.716†	2103252.1	2217090.9	24273 ug/L	24273 ppb	16:09:27
3	Cu 324.752†	6681676.6	7037411.2	20510 ug/L	20510 ppb	16:09:20
3	Mn 257.610†	8644631.9	9112397.4	9644.5 ug/L	9644.5 ppb	16:09:20
3	Mo 202.031†	137606.3	145040.7	9740.6 ug/L	9740.6 ppb	16:09:32
3	Ni 231.604†	387362.0	408242.2	9844.1 ug/L	9844.1 ppb	16:09:27
3	P 214.914†	29833.4	31214.7	13982 ug/L	13982 ppb	16:09:32
3	Pb 220.353†	197351.1	208094.0	24473 ug/L	24473 ppb	16:09:32
3	S 181.975 Axial†	36254.3	38176.4	51176 ug/L	51176 ppb	16:09:32
3	Sb 206.836†	29978.1	31563.1	10758 ug/L	10758 ppb	16:09:32
3	Se 196.026†	15469.2	16340.0	10049 ug/L	10049 ppb	16:09:32
3	Si 251.611†	1496625.5	1577190.4	47593 ug/L	47593 ppb	16:09:27
3	Sn 189.927†	59035.8	62225.8	10416 ug/L	10416 ppb	16:09:32
3	Ti 334.940†	6248585.4	6588417.7	9960.9 ug/L	9960.9 ppb	16:09:20
3	Tl 190.801†	31566.2	33314.7	9696.7 ug/L	9696.7 ppb	16:09:32
3	U 409.014†	-387.2	1236.8	-19.232 ug/L	-19.232 ppb	16:09:32
3	V 292.402†	1454906.5	1535186.5	10211 ug/L	10211 ppb	16:09:27
3	Zn 213.857†	1496414.8	1576757.8	14115 ug/L	14115 ppb	16:09:27
3	SiO2†	1492134.7	1572428.5	102320 ug/L	102320 ppb	16:09:50

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	891638.1	94.438 %	0.3677			0.39%
Sc Radial	5117.2	96.1 %	0.29			0.30%
Y 371.029	736788.1	92.402 %	0.2934			0.32%
Y RADIAL	5368.4	95.10 %	0.487			0.51%
Ag 328.068†	-8236.5	4.5399 ug/L	0.31417	4.5399 ppb	0.31417	6.92%
Al 396.153Radial†	575.6	-13.159 ug/L	8.6909	-13.159 ppb	8.6909	66.04%
As 188.979†	24694.2	10106 ug/L	65.6	10106 ppb	65.6	0.65%
QC value within limits for As 188.979 Recovery = 101.06%						
B 249.677†	232094.2	5008.6 ug/L	1.97	5008.6 ppb	1.97	0.04%
QC value within limits for B 249.677 Recovery = 100.17%						
Ba 233.527†	1970667.3	14430 ug/L	13.7	14430 ppb	13.7	0.10%
QC value within limits for Ba 233.527 Recovery = 96.20%						
Be 313.107†	8221016.7	2931.6 ug/L	25.70	2931.6 ppb	25.70	0.88%
QC value within limits for Be 313.107 Recovery = 97.72%						
Ca 317.933Radial†	11.8	19.480 ug/L	1.9611	19.480 ppb	1.9611	10.07%
Cd 226.502†	911245.3	9734.5 ug/L	11.47	9734.5 ppb	11.47	0.12%
QC value within limits for Cd 226.502 Recovery = 97.35%						

Co 228.616†	484988.8	9462.0 ug/L	49.31	9462.0 ppb	49.31	0.52%
QC value within limits for Co 228.616 Recovery = 94.62%						
Cr 267.716†	2218489.8	24288 ug/L	13.6	24288 ppb	13.6	0.06%
QC value within limits for Cr 267.716 Recovery = 97.15%						
Cu 324.752†	6951973.3	20261 ug/L	215.7	20261 ppb	215.7	1.06%
QC value within limits for Cu 324.752 Recovery = 101.31%						
Fe 238.204 Radial†	-33.4	-5.7226 ug/L	13.78957	-5.7226 ppb	13.78957	240.97%
K 766.490 Radial†	1396620.4	295380 ug/L	2084.3	295380 ppb	2084.3	0.71%
QC value within limits for K 766.490 Radial Recovery = 98.46%						
Mg 279.077 IEC†	-7.1	-131.72 ug/L	35.651	-131.72 ppb	35.651	27.07%
Mn 257.610†	9024568.1	9551.5 ug/L	81.29	9551.5 ppb	81.29	0.85%
QC value within limits for Mn 257.610 Recovery = 95.51%						
Mo 202.031†	145479.8	9770.1 ug/L	44.73	9770.1 ppb	44.73	0.46%
QC value within limits for Mo 202.031 Recovery = 97.70%						
Na 589.592 Radial†	716.9	192.62 ug/L	18.242	192.62 ppb	18.242	9.47%
Ni 231.604†	407870.0	9835.1 ug/L	10.55	9835.1 ppb	10.55	0.11%
QC value within limits for Ni 231.604 Recovery = 98.35%						
P 214.914†	31280.6	14069 ug/L	143.1	14069 ppb	143.1	1.02%
QC value within limits for P 214.914 Recovery = 93.80%						
Pb 220.353†	208519.0	24524 ug/L	120.9	24524 ppb	120.9	0.49%
QC value within limits for Pb 220.353 Recovery = 98.09%						
S 181.975 Axial†	38261.4	51290 ug/L	418.9	51290 ppb	418.9	0.82%
QC value within limits for S 181.975 Axial Recovery = 102.58%						
Sb 206.836†	31623.9	10780 ug/L	55.0	10780 ppb	55.0	0.51%
QC value within limits for Sb 206.836 Recovery = 107.80%						
Se 196.026†	16392.9	10082 ug/L	47.0	10082 ppb	47.0	0.47%
QC value within limits for Se 196.026 Recovery = 100.82%						
Si 251.611†	1578242.2	47625 ug/L	27.3	47625 ppb	27.3	0.06%
QC value within limits for Si 251.611 Recovery = 95.25%						
Sn 189.927†	62328.6	10433 ug/L	43.0	10433 ppb	43.0	0.41%
QC value within limits for Sn 189.927 Recovery = 104.33%						
Sr 421.552†	1562996.1	10003 ug/L	69.4	10003 ppb	69.4	0.69%
QC value within limits for Sr 421.552 Recovery = 100.03%						
Ti 334.940†	6520368.4	9858.0 ug/L	89.58	9858.0 ppb	89.58	0.91%
QC value within limits for Ti 334.940 Recovery = 98.58%						
Tl 190.801†	33389.1	9716.8 ug/L	46.49	9716.8 ppb	46.49	0.48%
QC value within limits for Tl 190.801 Recovery = 97.17%						
U 409.014†	1005.3	-25.820 ug/L	6.4685	-25.820 ppb	6.4685	25.05%
V 292.402†	1537163.8	10225 ug/L	12.5	10225 ppb	12.5	0.12%
QC value within limits for V 292.402 Recovery = 102.25%						
Zn 213.857†	1576982.9	14118 ug/L	6.1	14118 ppb	6.1	0.04%
QC value within limits for Zn 213.857 Recovery = 94.12%						
SiO2†	1588950.4	103390 ug/L	1256.2	103390 ppb	1256.2	1.21%
QC value within limits for SiO2 Recovery = 96.63%						
All analyte(s) passed QC.						

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 1/18/2010 16:12:00

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	5362.7	5362.7	101 %		16:13:52
1	Y RADIAL	5609.6	5609.6	99.38 %		16:13:52
1	Al 396.153Radial†	6268.3	6222.0	4955.2 ug/L	4955.2 ppb	16:13:52
1	Ca 317.933Radial†	2992.9	2952.5	4881.1 ug/L	4881.1 ppb	16:14:12
1	Fe 238.204 Radial†	583.6	567.0	4910.3 ug/L	4910.3 ppb	16:14:12
1	K 766.490 Radial†	26930.5	24076.4	5086.2 ug/L	5086.2 ppb	16:13:52
1	Mg 279.077 IEC†	158.0	154.3	5082.9 ug/L	5082.9 ppb	16:14:12
1	Na 589.592 Radial†	35229.1	36094.0	9698.0 ug/L	9698.0 ppb	16:13:52
1	Sr 421.552†	77575.4	77049.1	493.08 ug/L	493.08 ppb	16:13:52
1	Sc 361.383	934450.0	934450.0	98.973 %		16:15:09
1	Y 371.029	779522.9	779522.9	97.762 %		16:15:09
1	Ag 328.068†	111570.2	112317.0	496.91 ug/L	496.91 ppb	16:15:14
1	As 188.979†	1240.0	1272.4	521.69 ug/L	521.69 ppb	16:15:34
1	B 249.677†	23121.5	23889.0	516.10 ug/L	516.10 ppb	16:15:14
1	Ba 233.527†	66942.8	67617.9	495.59 ug/L	495.59 ppb	16:15:14
1	Be 313.107†	1385660.5	1404574.2	498.14 ug/L	498.14 ppb	16:15:09
1	Cd 226.502†	45449.8	46138.4	492.47 ug/L	492.47 ppb	16:15:14
1	Co 228.616†	24937.2	25269.5	493.16 ug/L	493.16 ppb	16:15:14
1	Cr 267.716†	44762.7	45147.2	494.58 ug/L	494.58 ppb	16:15:14
1	Cu 324.752†	173450.1	169084.0	492.77 ug/L	492.77 ppb	16:15:14
1	Mn 257.610†	466960.7	471352.1	499.15 ug/L	499.15 ppb	16:15:09
1	Mo 202.031†	7231.5	7287.8	489.87 ug/L	489.87 ppb	16:15:34
1	Ni 231.604†	20342.8	20453.5	493.19 ug/L	493.19 ppb	16:15:14
1	P 214.914†	4400.1	4211.2	2326.7 ug/L	2326.7 ppb	16:15:34
1	Pb 220.353†	4092.7	4189.0	494.02 ug/L	494.02 ppb	16:15:34
1	S 181.975 Axial†	755.4	721.7	966.51 ug/L	966.51 ppb	16:15:34
1	Sb 206.836†	1506.1	1483.1	506.14 ug/L	506.14 ppb	16:15:34
1	Se 196.026†	757.7	798.5	509.07 ug/L	509.07 ppb	16:15:34
1	Si 251.611†	81859.5	82212.0	2481.1 ug/L	2481.1 ppb	16:15:14
1	Sn 189.927†	2887.1	2909.6	487.85 ug/L	487.85 ppb	16:15:34
1	Ti 334.940†	316299.8	320971.7	485.55 ug/L	485.55 ppb	16:15:14
1	Tl 190.801†	1648.3	1704.1	495.84 ug/L	495.84 ppb	16:15:34
1	U 409.014†	15482.3	17288.0	487.90 ug/L	487.90 ppb	16:15:14
1	V 292.402†	72890.3	75124.4	500.43 ug/L	500.43 ppb	16:15:14
1	Zn 213.857†	55213.4	55078.8	491.94 ug/L	491.94 ppb	16:15:14
1	SiO2†	81757.1	82080.8	5341.5 ug/L	5341.5 ppb	16:16:42
2	Sc Radial	5203.2	5203.2	97.7 %		16:14:17
2	Y RADIAL	5479.6	5479.6	97.07 %		16:14:17
2	Al 396.153Radial†	6152.9	6294.9	5013.4 ug/L	5013.4 ppb	16:14:17
2	Ca 317.933Radial†	2994.0	3044.7	5033.6 ug/L	5033.6 ppb	16:14:37
2	Fe 238.204 Radial†	583.9	584.9	5065.8 ug/L	5065.8 ppb	16:14:37
2	K 766.490 Radial†	26559.1	24516.4	5179.2 ug/L	5179.2 ppb	16:14:17
2	Mg 279.077 IEC†	157.6	158.8	5229.6 ug/L	5229.6 ppb	16:14:37
2	Na 589.592 Radial†	34388.5	36306.6	9755.1 ug/L	9755.1 ppb	16:14:17
2	Sr 421.552†	76138.1	77940.6	498.78 ug/L	498.78 ppb	16:14:17
2	Sc 361.383	934061.4	934061.4	98.932 %		16:15:40
2	Y 371.029	780599.5	780599.5	97.897 %		16:15:40
2	Ag 328.068†	111490.8	112283.8	496.82 ug/L	496.82 ppb	16:15:45
2	As 188.979†	1233.6	1266.5	519.32 ug/L	519.32 ppb	16:16:05
2	B 249.677†	23017.1	23793.2	513.99 ug/L	513.99 ppb	16:15:45
2	Ba 233.527†	67141.6	67847.1	497.28 ug/L	497.28 ppb	16:15:45
2	Be 313.107†	1387049.6	1406560.8	498.84 ug/L	498.84 ppb	16:15:40
2	Cd 226.502†	45678.9	46389.1	495.13 ug/L	495.13 ppb	16:15:45
2	Co 228.616†	25006.7	25350.1	494.74 ug/L	494.74 ppb	16:15:45
2	Cr 267.716†	45062.2	45468.8	498.10 ug/L	498.10 ppb	16:15:45
2	Cu 324.752†	173281.2	168986.2	492.49 ug/L	492.49 ppb	16:15:45
2	Mn 257.610†	466365.5	470946.8	498.73 ug/L	498.73 ppb	16:15:40
2	Mo 202.031†	7274.6	7334.4	493.02 ug/L	493.02 ppb	16:16:05
2	Ni 231.604†	20435.5	20555.7	495.65 ug/L	495.65 ppb	16:15:45

2	P 214.914†	4427.6	4240.8	2343.7 ug/L	2343.7 ppb	16:16:05
2	Pb 220.353†	4120.9	4219.2	497.58 ug/L	497.58 ppb	16:16:05
2	S 181.975 Axial†	765.6	732.3	980.77 ug/L	980.77 ppb	16:16:05
2	Sb 206.836†	1525.7	1503.5	513.01 ug/L	513.01 ppb	16:16:05
2	Se 196.026†	756.0	797.0	508.77 ug/L	508.77 ppb	16:16:05
2	Si 251.611†	81965.4	82353.5	2485.3 ug/L	2485.3 ppb	16:15:45
2	Sn 189.927†	2916.5	2940.5	493.05 ug/L	493.05 ppb	16:16:05
2	Ti 334.940†	316607.5	321415.7	486.22 ug/L	486.22 ppb	16:15:45
2	Tl 190.801†	1660.4	1717.1	499.57 ug/L	499.57 ppb	16:16:05
2	U 409.014†	15584.8	17398.0	490.99 ug/L	490.99 ppb	16:15:45
2	V 292.402†	73186.4	75454.3	502.63 ug/L	502.63 ppb	16:15:45
2	Zn 213.857†	55260.5	55149.6	492.55 ug/L	492.55 ppb	16:15:45
2	SiO2†	81608.3	81964.7	5333.8 ug/L	5333.8 ppb	16:16:47
3	Sc Radial	5192.9	5192.9	97.5 %		16:14:42
3	Y RADIAL	5515.8	5515.8	97.71 %		16:14:42
3	Al 396.153Radial†	6152.9	6307.3	5023.4 ug/L	5023.4 ppb	16:14:42
3	Ca 317.933Radial†	3014.1	3071.4	5077.7 ug/L	5077.7 ppb	16:15:02
3	Fe 238.204 Radial†	583.5	585.8	5072.8 ug/L	5072.8 ppb	16:15:02
3	K 766.490 Radial†	26562.8	24573.8	5191.3 ug/L	5191.3 ppb	16:14:42
3	Mg 279.077 IEC†	157.4	158.8	5230.9 ug/L	5230.9 ppb	16:15:02
3	Na 589.592 Radial†	34634.1	36627.9	9841.4 ug/L	9841.4 ppb	16:14:42
3	Sr 421.552†	76309.9	78270.3	500.89 ug/L	500.89 ppb	16:14:42
3	Sc 361.383	943115.9	943115.9	99.891 %		16:16:11
3	Y 371.029	786420.2	786420.2	98.627 %		16:16:11
3	Ag 328.068†	110828.0	110538.3	489.11 ug/L	489.11 ppb	16:16:16
3	As 188.979†	1251.6	1272.6	521.75 ug/L	521.75 ppb	16:16:36
3	B 249.677†	22964.0	23516.6	508.01 ug/L	508.01 ppb	16:16:16
3	Ba 233.527†	66863.0	66916.6	490.45 ug/L	490.45 ppb	16:16:16
3	Be 313.107†	1400595.6	1406661.4	498.86 ug/L	498.86 ppb	16:16:11
3	Cd 226.502†	45425.1	45691.8	487.68 ug/L	487.68 ppb	16:16:16
3	Co 228.616†	24990.6	25091.4	489.70 ug/L	489.70 ppb	16:16:16
3	Cr 267.716†	44753.5	44722.4	489.92 ug/L	489.92 ppb	16:16:16
3	Cu 324.752†	172115.6	166137.8	484.19 ug/L	484.19 ppb	16:16:16
3	Mn 257.610†	472402.4	472464.6	500.34 ug/L	500.34 ppb	16:16:11
3	Mo 202.031†	7321.0	7310.2	491.39 ug/L	491.39 ppb	16:16:36
3	Ni 231.604†	20316.2	20238.0	487.99 ug/L	487.99 ppb	16:16:16
3	P 214.914†	4468.4	4238.8	2344.2 ug/L	2344.2 ppb	16:16:36
3	Pb 220.353†	4150.3	4208.6	496.34 ug/L	496.34 ppb	16:16:36
3	S 181.975 Axial†	785.6	745.0	997.71 ug/L	997.71 ppb	16:16:36
3	Sb 206.836†	1554.8	1517.8	517.70 ug/L	517.70 ppb	16:16:36
3	Se 196.026†	768.3	802.0	511.85 ug/L	511.85 ppb	16:16:36
3	Si 251.611†	81587.8	81180.1	2449.8 ug/L	2449.8 ppb	16:16:16
3	Sn 189.927†	2950.8	2946.5	494.07 ug/L	494.07 ppb	16:16:36
3	Ti 334.940†	314978.5	316712.5	479.12 ug/L	479.12 ppb	16:16:16
3	Tl 190.801†	1659.2	1699.8	494.55 ug/L	494.55 ppb	16:16:36
3	U 409.014†	15586.1	17248.1	486.76 ug/L	486.76 ppb	16:16:16
3	V 292.402†	72491.6	74048.6	493.37 ug/L	493.37 ppb	16:16:16
3	Zn 213.857†	54968.2	54320.8	485.14 ug/L	485.14 ppb	16:16:16
3	SiO2†	81461.3	81025.6	5272.6 ug/L	5272.6 ppb	16:16:52

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	937209.1	99.265 %	0.5422			0.55%
Sc Radial	5252.9	98.6 %	1.79			1.81%
Y 371.029	782180.9	98.095 %	0.4654			0.47%
Y RADIAL	5535.0	98.05 %	1.188			1.21%
Ag 328.068†	111713.0	494.28 ug/L	4.476	494.28 ppb	4.476	0.91%
QC value within limits for Ag 328.068 Recovery = 98.86%						
Al 396.153Radial†	6274.7	4997.3 ug/L	36.80	4997.3 ppb	36.80	0.74%
QC value within limits for Al 396.153Radial Recovery = 99.95%						
As 188.979†	1270.5	520.92 ug/L	1.383	520.92 ppb	1.383	0.27%
QC value within limits for As 188.979 Recovery = 104.18%						
B 249.677†	23732.9	512.70 ug/L	4.200	512.70 ppb	4.200	0.82%
QC value within limits for B 249.677 Recovery = 102.54%						
Ba 233.527†	67460.5	494.44 ug/L	3.554	494.44 ppb	3.554	0.72%
QC value within limits for Ba 233.527 Recovery = 98.89%						
Be 313.107†	1405932.1	498.61 ug/L	0.412	498.61 ppb	0.412	0.08%
QC value within limits for Be 313.107 Recovery = 99.72%						
Ca 317.933Radial†	3022.9	4997.4 ug/L	103.16	4997.4 ppb	103.16	2.06%

QC value within limits for Ca 317.933 Radial Recovery = 99.95%							
Cd	226.502†	46073.1	491.76 ug/L	3.776	491.76 ppb	3.776	0.77%
QC value within limits for Cd 226.502 Recovery = 98.35%							
Co	228.616†	25237.0	492.53 ug/L	2.577	492.53 ppb	2.577	0.52%
QC value within limits for Co 228.616 Recovery = 98.51%							
Cr	267.716†	45112.8	494.20 ug/L	4.102	494.20 ppb	4.102	0.83%
QC value within limits for Cr 267.716 Recovery = 98.84%							
Cu	324.752†	168069.3	489.82 ug/L	4.874	489.82 ppb	4.874	1.00%
QC value within limits for Cu 324.752 Recovery = 97.96%							
Fe	238.204 Radial†	579.2	5016.3 ug/L	91.83	5016.3 ppb	91.83	1.83%
QC value within limits for Fe 238.204 Radial Recovery = 100.33%							
K	766.490 Radial†	24388.9	5152.2 ug/L	57.50	5152.2 ppb	57.50	1.12%
QC value within limits for K 766.490 Radial Recovery = 103.04%							
Mg	279.077 IEC†	157.3	5181.1 ug/L	85.07	5181.1 ppb	85.07	1.64%
QC value within limits for Mg 279.077 IEC Recovery = 103.62%							
Mn	257.610†	471587.8	499.41 ug/L	0.834	499.41 ppb	0.834	0.17%
QC value within limits for Mn 257.610 Recovery = 99.88%							
Mo	202.031†	7310.8	491.43 ug/L	1.572	491.43 ppb	1.572	0.32%
QC value within limits for Mo 202.031 Recovery = 98.29%							
Na	589.592 Radial†	36342.8	9764.8 ug/L	72.22	9764.8 ppb	72.22	0.74%
QC value within limits for Na 589.592 Radial Recovery = 97.65%							
Ni	231.604†	20415.7	492.28 ug/L	3.911	492.28 ppb	3.911	0.79%
QC value within limits for Ni 231.604 Recovery = 98.46%							
P	214.914†	4230.3	2338.2 ug/L	9.97	2338.2 ppb	9.97	0.43%
QC value within limits for P 214.914 Recovery = 93.53%							
Pb	220.353†	4205.6	495.98 ug/L	1.807	495.98 ppb	1.807	0.36%
QC value within limits for Pb 220.353 Recovery = 99.20%							
S	181.975 Axial†	733.0	981.66 ug/L	15.622	981.66 ppb	15.622	1.59%
QC value within limits for S 181.975 Axial Recovery = 98.17%							
Sb	206.836†	1501.4	512.29 ug/L	5.817	512.29 ppb	5.817	1.14%
QC value within limits for Sb 206.836 Recovery = 102.46%							
Se	196.026†	799.2	509.90 ug/L	1.698	509.90 ppb	1.698	0.33%
QC value within limits for Se 196.026 Recovery = 101.98%							
Si	251.611†	81915.2	2472.1 ug/L	19.37	2472.1 ppb	19.37	0.78%
QC value within limits for Si 251.611 Recovery = 98.88%							
Sn	189.927†	2932.2	491.66 ug/L	3.334	491.66 ppb	3.334	0.68%
QC value within limits for Sn 189.927 Recovery = 98.33%							
Sr	421.552†	77753.3	497.58 ug/L	4.043	497.58 ppb	4.043	0.81%
QC value within limits for Sr 421.552 Recovery = 99.52%							
Ti	334.940†	319700.0	483.63 ug/L	3.922	483.63 ppb	3.922	0.81%
QC value within limits for Ti 334.940 Recovery = 96.73%							
Tl	190.801†	1707.0	496.66 ug/L	2.609	496.66 ppb	2.609	0.53%
QC value within limits for Tl 190.801 Recovery = 99.33%							
U	409.014†	17311.4	488.55 ug/L	2.189	488.55 ppb	2.189	0.45%
QC value within limits for U 409.014 Recovery = 97.71%							
V	292.402†	74875.8	498.81 ug/L	4.840	498.81 ppb	4.840	0.97%
QC value within limits for V 292.402 Recovery = 99.76%							
Zn	213.857†	54849.8	489.88 ug/L	4.113	489.88 ppb	4.113	0.84%
QC value within limits for Zn 213.857 Recovery = 97.98%							
SiO2†		81690.4	5316.0 ug/L	37.75	5316.0 ppb	37.75	0.71%
QC value within limits for SiO2 Recovery = 99.41%							
All analyte(s) passed QC.							

Sequence No.: 14

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 1/18/2010 16:19:02

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5507.1	5507.1	103 %			16:20:54
1	Y RADIAL	5809.0	5809.0	102.9 %			16:20:54
1	Al 396.153Radial†	8.1	3.2	2.5454 ug/L		2.5454 ppb	16:20:54
1	Ca 317.933Radial†	23.7	2.3	3.7889 ug/L		3.7889 ppb	16:21:14
1	Fe 238.204 Radial†	12.8	-0.5	-4.2301 ug/L		-4.2301 ppb	16:21:14
1	K 766.490 Radial†	3073.0	297.1	62.833 ug/L		62.833 ppb	16:20:54
1	Mg 279.077 IEC†	4.3	1.5	50.982 ug/L		50.982 ppb	16:21:14
1	Na 589.592 Radial†	-1031.3	101.1	27.154 ug/L		27.154 ppb	16:20:54
1	Sr 421.552†	52.5	39.1	0.2501 ug/L		0.2501 ppb	16:20:54
1	Sc 361.383	912082.7	912082.7	96.604 %			16:22:11
1	Y 371.029	775579.3	775579.3	97.267 %			16:22:11
1	Ag 328.068†	369.6	-28.6	-0.1253 ug/L		-0.1253 ppb	16:22:11
1	As 188.979†	12.9	32.9	13.385 ug/L		13.385 ppb	16:22:31
1	B 249.677†	248.2	784.4	17.020 ug/L		17.020 ppb	16:22:11
1	Ba 233.527†	15.8	-3.4	-0.0243 ug/L		-0.0243 ppb	16:22:31
1	Be 313.107†	-4359.5	18.0	0.0062 ug/L		0.0062 ppb	16:22:11
1	Cd 226.502†	-194.5	15.5	0.1654 ug/L		0.1654 ppb	16:22:31
1	Co 228.616†	-73.9	-3.1	-0.0603 ug/L		-0.0603 ppb	16:22:31
1	Cr 267.716†	100.4	23.9	0.2623 ug/L		0.2623 ppb	16:22:31
1	Cu 324.752†	6119.5	168.2	0.4906 ug/L		0.4906 ppb	16:22:11
1	Mn 257.610†	510.7	73.0	0.0748 ug/L		0.0748 ppb	16:22:31
1	Mo 202.031†	24.3	6.4	0.4287 ug/L		0.4287 ppb	16:22:31
1	Ni 231.604†	98.7	1.7	0.0404 ug/L		0.0404 ppb	16:22:31
1	P 214.914†	221.9	-4.9	-2.9048 ug/L		-2.9048 ppb	16:22:31
1	Pb 220.353†	-36.8	15.6	1.8407 ug/L		1.8407 ppb	16:22:31
1	S 181.975 Axial†	40.9	0.9	1.1436 ug/L		1.1436 ppb	16:22:31
1	Sb 206.836†	58.7	22.1	7.2821 ug/L		7.2821 ppb	16:22:31
1	Se 196.026†	-30.0	1.8	1.0949 ug/L		1.0949 ppb	16:22:31
1	Si 251.611†	621.1	145.8	4.4061 ug/L		4.4061 ppb	16:22:31
1	Sn 189.927†	7.3	0.1	0.0120 ug/L		0.0120 ppb	16:22:31
1	Ti 334.940†	-1385.1	-45.0	-0.0713 ug/L		-0.0713 ppb	16:22:11
1	Tl 190.801†	-33.9	3.7	1.0552 ug/L		1.0552 ppb	16:22:31
1	U 409.014†	-1628.6	-40.9	-1.1581 ug/L		-1.1581 ppb	16:22:11
1	V 292.402†	-1389.9	38.8	0.2606 ug/L		0.2606 ppb	16:22:11
1	Zn 213.857†	841.7	163.6	1.4732 ug/L		1.4732 ppb	16:22:31
1	SiO2†	637.2	134.6	8.7725 ug/L		8.7725 ppb	16:23:27
2	Sc Radial	5418.2	5418.2	102 %			16:21:19
2	Y RADIAL	5734.6	5734.6	101.6 %			16:21:19
2	Al 396.153Radial†	-19.9	-24.2	-19.432 ug/L		-19.432 ppb	16:21:19
2	Ca 317.933Radial†	18.9	-2.0	-3.3361 ug/L		-3.3361 ppb	16:21:40
2	Fe 238.204 Radial†	10.6	-2.4	-20.582 ug/L		-20.582 ppb	16:21:40
2	K 766.490 Radial†	3132.1	404.0	85.437 ug/L		85.437 ppb	16:21:19
2	Mg 279.077 IEC†	0.9	-1.8	-59.558 ug/L		-59.558 ppb	16:21:40
2	Na 589.592 Radial†	-1034.1	82.0	22.019 ug/L		22.019 ppb	16:21:19
2	Sr 421.552†	30.5	18.3	0.1171 ug/L		0.1171 ppb	16:21:19
2	Sc 361.383	910086.4	910086.4	96.392 %			16:22:37
2	Y 371.029	774851.2	774851.2	97.176 %			16:22:37
2	Ag 328.068†	436.4	41.6	0.1786 ug/L		0.1786 ppb	16:22:37
2	As 188.979†	-0.4	19.1	7.7806 ug/L		7.7806 ppb	16:22:57
2	B 249.677†	209.2	744.6	16.157 ug/L		16.157 ppb	16:22:37
2	Ba 233.527†	16.2	-2.9	-0.0233 ug/L		-0.0233 ppb	16:22:57
2	Be 313.107†	-4353.7	14.1	0.0052 ug/L		0.0052 ppb	16:22:37
2	Cd 226.502†	-191.9	17.8	0.1913 ug/L		0.1913 ppb	16:22:57
2	Co 228.616†	-64.2	6.8	0.1346 ug/L		0.1346 ppb	16:22:57
2	Cr 267.716†	98.5	22.2	0.2436 ug/L		0.2436 ppb	16:22:57
2	Cu 324.752†	6068.6	129.3	0.3788 ug/L		0.3788 ppb	16:22:37
2	Mn 257.610†	487.4	50.1	0.0534 ug/L		0.0534 ppb	16:22:57
2	Mo 202.031†	34.4	16.9	1.1357 ug/L		1.1357 ppb	16:22:57
2	Ni 231.604†	94.1	-2.9	-0.0695 ug/L		-0.0695 ppb	16:22:57

2	P 214.914†	216.4	-10.1	-5.8498 ug/L	-5.8498 ppb	16:22:57
2	Pb 220.353†	-30.6	22.0	2.5895 ug/L	2.5895 ppb	16:22:57
2	S 181.975 Axial†	43.9	4.1	5.4676 ug/L	5.4676 ppb	16:22:57
2	Sb 206.836†	40.1	2.9	1.0125 ug/L	1.0125 ppb	16:22:57
2	Se 196.026†	-24.9	7.1	4.2901 ug/L	4.2901 ppb	16:22:57
2	Si 251.611†	645.0	172.0	5.1907 ug/L	5.1907 ppb	16:22:57
2	Sn 189.927†	20.3	13.6	2.2769 ug/L	2.2769 ppb	16:22:57
2	Ti 334.940†	-1280.1	60.7	0.0988 ug/L	0.0988 ppb	16:22:37
2	Tl 190.801†	-42.6	-5.5	-1.5740 ug/L	-1.5740 ppb	16:22:57
2	U 409.014†	-1781.6	-203.4	-5.7577 ug/L	-5.7577 ppb	16:22:37
2	V 292.402†	-1505.9	-84.8	-0.5505 ug/L	-0.5505 ppb	16:22:37
2	Zn 213.857†	822.1	145.2	1.3103 ug/L	1.3103 ppb	16:22:57
2	SiO2†	603.3	100.9	6.5514 ug/L	6.5514 ppb	16:23:32
3	Sc Radial	5318.7	5318.7	99.8 %		16:21:45
3	Y RADIAL	5653.8	5653.8	100.2 %		16:21:45
3	Al 396.153Radial†	36.0	31.4	25.088 ug/L	25.088 ppb	16:21:45
3	Ca 317.933Radial†	24.1	3.5	5.8151 ug/L	5.8151 ppb	16:22:05
3	Fe 238.204 Radial†	11.9	-0.9	-7.5326 ug/L	-7.5326 ppb	16:22:05
3	K 766.490 Radial†	3108.8	438.2	92.680 ug/L	92.680 ppb	16:21:45
3	Mg 279.077 IEC†	1.4	-1.3	-41.668 ug/L	-41.668 ppb	16:22:05
3	Na 589.592 Radial†	-1002.9	94.2	25.322 ug/L	25.322 ppb	16:21:45
3	Sr 421.552†	26.8	15.2	0.0971 ug/L	0.0971 ppb	16:21:45
3	Sc 361.383	916804.3	916804.3	97.104 %		16:23:02
3	Y 371.029	779823.1	779823.1	97.799 %		16:23:02
3	Ag 328.068†	392.0	-7.5	-0.0276 ug/L	-0.0276 ppb	16:23:02
3	As 188.979†	5.8	25.5	10.377 ug/L	10.377 ppb	16:23:22
3	B 249.677†	139.3	671.0	14.560 ug/L	14.560 ppb	16:23:02
3	Ba 233.527†	11.8	-7.5	-0.0540 ug/L	-0.0540 ppb	16:23:22
3	Be 313.107†	-4426.6	-27.9	-0.0098 ug/L	-0.0098 ppb	16:23:02
3	Cd 226.502†	-194.1	17.0	0.1808 ug/L	0.1808 ppb	16:23:22
3	Co 228.616†	-80.0	-9.0	-0.1739 ug/L	-0.1739 ppb	16:23:22
3	Cr 267.716†	89.7	12.3	0.1378 ug/L	0.1378 ppb	16:23:22
3	Cu 324.752†	6138.9	155.6	0.4570 ug/L	0.4570 ppb	16:23:02
3	Mn 257.610†	492.2	51.3	0.0552 ug/L	0.0552 ppb	16:23:22
3	Mo 202.031†	26.5	8.5	0.5686 ug/L	0.5686 ppb	16:23:22
3	Ni 231.604†	113.5	16.3	0.3940 ug/L	0.3940 ppb	16:23:22
3	P 214.914†	218.4	-9.7	-5.6133 ug/L	-5.6133 ppb	16:23:22
3	Pb 220.353†	-42.8	9.6	1.1401 ug/L	1.1401 ppb	16:23:22
3	S 181.975 Axial†	39.6	-0.8	-1.0493 ug/L	-1.0493 ppb	16:23:22
3	Sb 206.836†	57.0	20.0	6.6132 ug/L	6.6132 ppb	16:23:22
3	Se 196.026†	-30.1	1.9	1.1466 ug/L	1.1466 ppb	16:23:22
3	Si 251.611†	613.7	134.9	4.0736 ug/L	4.0736 ppb	16:23:22
3	Sn 189.927†	17.3	10.3	1.7306 ug/L	1.7306 ppb	16:23:22
3	Ti 334.940†	-1317.6	31.9	0.0556 ug/L	0.0556 ppb	16:23:02
3	Tl 190.801†	-39.3	-1.8	-0.5129 ug/L	-0.5129 ppb	16:23:22
3	U 409.014†	-1846.1	-256.2	-7.2558 ug/L	-7.2558 ppb	16:23:02
3	V 292.402†	-1364.0	72.9	0.4735 ug/L	0.4735 ppb	16:23:02
3	Zn 213.857†	813.1	129.6	1.1656 ug/L	1.1656 ppb	16:23:22
3	SiO2†	619.8	113.3	7.3738 ug/L	7.3738 ppb	16:23:37

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	912991.2	96.700 %		0.3654			0.38%
Sc Radial	5414.7	102 %		1.8			1.74%
Y 371.029	776751.2	97.414 %		0.3367			0.35%
Y RADIAL	5732.5	101.6 %		1.38			1.35%
Ag 328.068†	1.8	0.0086 ug/L		0.15512	0.0086 ppb	0.15512	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	3.5	2.7339 ug/L		22.26068	2.7339 ppb	22.26068	814.23%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	25.9	10.514 ug/L		2.8048	10.514 ppb	2.8048	26.68%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	733.3	15.912 ug/L		1.2482	15.912 ppb	1.2482	7.84%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-4.6	-0.0339 ug/L		0.01747	-0.0339 ppb	0.01747	51.55%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	1.4	0.0005 ug/L		0.00895	0.0005 ppb	0.00895	>999.9%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	1.3	2.0893 ug/L		4.80654	2.0893 ppb	4.80654	230.06%

QC value within limits for Ca 317.933 Radial	Recovery = Not calculated		
Cd 226.502†	16.8 0.1792 ug/L	0.01299 0.1792 ppb	0.01299 7.25%
QC value within limits for Cd 226.502	Recovery = Not calculated		
Co 228.616†	-1.8 -0.0332 ug/L	0.15605 -0.0332 ppb	0.15605 470.14%
QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	19.4 0.2145 ug/L	0.06713 0.2145 ppb	0.06713 31.29%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	151.0 0.4421 ug/L	0.05737 0.4421 ppb	0.05737 12.97%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	-1.2 -10.782 ug/L	8.6465 -10.782 ppb	8.6465 80.20%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	379.8 80.317 ug/L	15.5687 80.317 ppb	15.5687 19.38%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-0.5 -16.748 ug/L	59.3338 -16.748 ppb	59.3338 354.27%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	58.1 0.0612 ug/L	0.01186 0.0612 ppb	0.01186 19.39%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	10.6 0.7110 ug/L	0.37442 0.7110 ppb	0.37442 52.66%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	92.4 24.832 ug/L	2.6024 24.832 ppb	2.6024 10.48%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	5.0 0.1216 ug/L	0.24220 0.1216 ppb	0.24220 199.16%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-8.2 -4.7893 ug/L	1.63633 -4.7893 ppb	1.63633 34.17%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	15.8 1.8568 ug/L	0.72482 1.8568 ppb	0.72482 39.04%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	1.4 1.8540 ug/L	3.31601 1.8540 ppb	3.31601 178.86%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	15.0 4.9693 ug/L	3.44298 4.9693 ppb	3.44298 69.29%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	3.6 2.1772 ug/L	1.83001 2.1772 ppb	1.83001 84.05%
QC value within limits for Se 196.026	Recovery = Not calculated		
Si 251.611†	150.9 4.5568 ug/L	0.57364 4.5568 ppb	0.57364 12.59%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	8.0 1.3398 ug/L	1.18191 1.3398 ppb	1.18191 88.21%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	24.2 0.1548 ug/L	0.08317 0.1548 ppb	0.08317 53.72%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	15.9 0.0277 ug/L	0.08839 0.0277 ppb	0.08839 319.33%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-1.2 -0.3439 ug/L	1.32275 -0.3439 ppb	1.32275 384.64%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	-166.8 -4.7239 ug/L	3.17756 -4.7239 ppb	3.17756 67.27%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	9.0 0.0612 ug/L	0.54038 0.0612 ppb	0.54038 883.05%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	146.1 1.3164 ug/L	0.15384 1.3164 ppb	0.15384 11.69%
QC value within limits for Zn 213.857	Recovery = Not calculated		
SiO2†	116.3 7.5659 ug/L	1.12295 7.5659 ppb	1.12295 14.84%
QC value within limits for SiO2	Recovery = Not calculated		

All analyte(s) passed QC.

=====

Analysis Begun

Start Time: 1/18/2010 16:35:07

Plasma On Time: 1/18/2010 05:48:39

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\011810.sif

Batch ID:

Results Data Set: 011810

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

=====

Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 1/18/2010 14:51:13

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: 37

Sample ID: LR1

Date Collected: 1/18/2010 16:35:08

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	5122.9	5122.9	96.2 %		16:37:02
1	Y RADIAL	5439.5	5439.5	96.36 %		16:37:02
1	Al 396.153Radial†	-34.6	-40.6	-31.292 ug/L	-31.292 ppb	16:37:02

1	Ca 317.933Radial†	17.0	-2.9	-4.7917 ug/L	-4.7917 ppb	16:37:22
1	Fe 238.204 Radial†	42186.9	43856.2	378690 ug/L	378690 ppb	16:37:02
1	K 766.490 Radial†	2646.4	76.4	16.213 ug/L	16.213 ppb	16:37:02
1	Mg 279.077 IEC†	13.5	11.4	-21.336 ug/L	-21.336 ppb	16:37:22
1	Na 589.592 Radial†	-1050.9	5.9	1.5722 ug/L	1.5722 ppb	16:37:02
1	Sr 421.552†	46.1	36.2	0.2319 ug/L	0.2319 ppb	16:37:02
1	Sc 361.383	907304.0	907304.0	96.097 %		16:38:19
1	Y 371.029	763029.0	763029.0	95.693 %		16:38:19
1	Ag 328.068†	-26340.2	-27821.1	0.4998 ug/L	0.4998 ppb	16:38:19
1	As 188.979†	-215.0	-204.2	5.7236 ug/L	5.7236 ppb	16:38:39
1	B 249.677†	1884.8	2488.9	-7.5131 ug/L	-7.5131 ppb	16:38:19
1	Ba 233.527†	-1916.0	-2013.5	-3.0795 ug/L	-3.0795 ppb	16:38:19
1	Be 313.107†	-4256.2	101.8	0.0359 ug/L	0.0359 ppb	16:38:19
1	Cd 226.502†	3196.3	3542.9	-1.2793 ug/L	-1.2793 ppb	16:38:19
1	Co 228.616†	195.9	277.2	-0.1222 ug/L	-0.1222 ppb	16:38:39
1	Cr 267.716†	-536.6	-638.4	0.4285 ug/L	0.4285 ppb	16:38:19
1	Cu 324.752†	-1802.1	-8041.8	-3.4250 ug/L	-3.4250 ppb	16:38:19
1	Mn 257.610†	-38583.6	-40606.1	-5.5903 ug/L	-5.5903 ppb	16:38:19
1	Mo 202.031†	-342.1	-374.8	4.2262 ug/L	4.2262 ppb	16:38:19
1	Ni 231.604†	230.8	139.6	3.3660 ug/L	3.3660 ppb	16:38:39
1	P 214.914†	749.3	545.2	13.205 ug/L	13.205 ppb	16:38:39
1	Pb 220.353†	212.3	274.7	-3.9479 ug/L	-3.9479 ppb	16:38:39
1	S 181.975 Axial†	67.5	28.8	38.548 ug/L	38.548 ppb	16:38:39
1	Sb 206.836†	25.2	-12.4	4.9802 ug/L	4.9802 ppb	16:38:39
1	Se 196.026†	-2070.2	-2121.3	32.306 ug/L	32.306 ppb	16:38:39
1	Si 251.611†	-707.4	-1233.3	-36.999 ug/L	-36.999 ppb	16:38:19
1	Sn 189.927†	-24.7	-33.2	0.8094 ug/L	0.8094 ppb	16:38:39
1	Ti 334.940†	-1379.0	-46.2	-0.1240 ug/L	-0.1240 ppb	16:38:19
1	Tl 190.801†	-44.9	-7.9	-2.6270 ug/L	-2.6270 ppb	16:38:39
1	U 409.014†	381.4	2041.8	14.664 ug/L	14.664 ppb	16:38:19
1	V 292.402†	6530.6	8273.4	-0.9969 ug/L	-0.9969 ppb	16:38:19
1	Zn 213.857†	4603.6	4082.9	0.0596 ug/L	0.0596 ppb	16:38:39
1	SiO2†	-729.4	-1284.0	-83.080 ug/L	-83.080 ppb	16:39:37
2	Sc Radial	5164.1	5164.1	96.9 %		16:37:27
2	Y RADIAL	5465.9	5465.9	96.83 %		16:37:27
2	Al 396.153Radial†	-13.7	-18.8	-13.814 ug/L	-13.814 ppb	16:37:27
2	Ca 317.933Radial†	14.2	-5.9	-9.7790 ug/L	-9.7790 ppb	16:37:47
2	Fe 238.204 Radial†	42604.2	43936.7	379390 ug/L	379390 ppb	16:37:27
2	K 766.490 Radial†	2652.0	60.2	12.791 ug/L	12.791 ppb	16:37:27
2	Mg 279.077 IEC†	13.2	10.9	-37.061 ug/L	-37.061 ppb	16:37:47
2	Na 589.592 Radial†	-1041.6	24.2	6.4889 ug/L	6.4889 ppb	16:37:27
2	Sr 421.552†	120.5	112.6	0.7210 ug/L	0.7210 ppb	16:37:27
2	Sc 361.383	911687.3	911687.3	96.562 %		16:38:45
2	Y 371.029	766314.8	766314.8	96.105 %		16:38:45
2	Ag 328.068†	-26507.8	-27862.8	0.5413 ug/L	0.5413 ppb	16:38:45
2	As 188.979†	-214.4	-202.5	6.5678 ug/L	6.5678 ppb	16:39:05
2	B 249.677†	1754.5	2344.4	-10.760 ug/L	-10.760 ppb	16:38:45
2	Ba 233.527†	-2029.0	-2121.0	-3.8426 ug/L	-3.8426 ppb	16:38:45
2	Be 313.107†	-4303.5	74.0	0.0259 ug/L	0.0259 ppb	16:38:45
2	Cd 226.502†	3239.2	3571.4	-1.0469 ug/L	-1.0469 ppb	16:38:45
2	Co 228.616†	186.0	266.1	-0.3505 ug/L	-0.3505 ppb	16:39:05
2	Cr 267.716†	-652.4	-755.7	-0.8417 ug/L	-0.8417 ppb	16:38:45
2	Cu 324.752†	-1816.1	-8047.2	-3.4056 ug/L	-3.4056 ppb	16:38:45
2	Mn 257.610†	-38931.5	-40773.4	-5.6980 ug/L	-5.6980 ppb	16:38:45
2	Mo 202.031†	-345.6	-376.7	4.1521 ug/L	4.1521 ppb	16:38:45
2	Ni 231.604†	219.6	126.9	3.0592 ug/L	3.0592 ppb	16:39:05
2	P 214.914†	730.2	521.6	-0.9016 ug/L	-0.9016 ppb	16:39:05
2	Pb 220.353†	200.0	260.9	-5.6332 ug/L	-5.6332 ppb	16:39:05
2	S 181.975 Axial†	56.6	17.1	22.970 ug/L	22.970 ppb	16:39:05
2	Sb 206.836†	26.8	-10.9	5.4854 ug/L	5.4854 ppb	16:39:05
2	Se 196.026†	-2048.1	-2088.1	55.144 ug/L	55.144 ppb	16:39:05
2	Si 251.611†	-681.9	-1203.4	-36.093 ug/L	-36.093 ppb	16:38:45
2	Sn 189.927†	-30.8	-39.4	-0.2157 ug/L	-0.2157 ppb	16:39:05
2	Ti 334.940†	-1418.1	-79.8	-0.1752 ug/L	-0.1752 ppb	16:38:45
2	Tl 190.801†	-44.7	-7.6	-2.5245 ug/L	-2.5245 ppb	16:39:05
2	U 409.014†	484.3	2146.4	17.550 ug/L	17.550 ppb	16:38:45
2	V 292.402†	6635.2	8349.0	-0.5969 ug/L	-0.5969 ppb	16:38:45
2	Zn 213.857†	4626.5	4083.6	0.0003 ug/L	0.0003 ppb	16:39:05
2	SiO2†	-724.1	-1274.9	-82.483 ug/L	-82.483 ppb	16:39:42
3	Sc Radial	5197.0	5197.0	97.6 %		16:37:52
3	Y RADIAL	5501.9	5501.9	97.47 %		16:37:52

3	Al 396.153Radial†	-28.5	-33.9	-25.910 ug/L	-25.910 ppb	16:37:52
3	Ca 317.933Radial†	12.5	-7.7	-12.778 ug/L	-12.778 ppb	16:38:12
3	Fe 238.204 Radial†	42777.5	43835.8	378520 ug/L	378520 ppb	16:37:52
3	K 766.490 Radial†	2663.6	54.8	11.650 ug/L	11.650 ppb	16:37:52
3	Mg 279.077 IEC†	11.7	9.3	-88.740 ug/L	-88.740 ppb	16:38:12
3	Na 589.592 Radial†	-1072.6	-0.8	-0.2159 ug/L	-0.2159 ppb	16:37:52
3	Sr 421.552†	63.5	53.4	0.3419 ug/L	0.3419 ppb	16:37:52
3	Sc 361.383	907797.9	907797.9	96.150 %		16:39:11
3	Y 371.029	763262.0	763262.0	95.722 %		16:39:11
3	Ag 328.068†	-26489.9	-27961.8	-0.1699 ug/L	-0.1699 ppb	16:39:11
3	As 188.979†	-215.8	-204.9	5.4020 ug/L	5.4020 ppb	16:39:31
3	B 249.677†	1873.7	2476.2	-7.7592 ug/L	-7.7592 ppb	16:39:11
3	Ba 233.527†	-1985.8	-2085.1	-3.6058 ug/L	-3.6058 ppb	16:39:11
3	Be 313.107†	-4287.1	72.0	0.0252 ug/L	0.0252 ppb	16:39:11
3	Cd 226.502†	3249.9	3596.9	-0.6855 ug/L	-0.6855 ppb	16:39:11
3	Co 228.616†	182.2	262.9	-0.3992 ug/L	-0.3992 ppb	16:39:31
3	Cr 267.716†	-620.0	-724.9	-0.5184 ug/L	-0.5184 ppb	16:39:11
3	Cu 324.752†	-1811.1	-8050.1	-3.4568 ug/L	-3.4568 ppb	16:39:11
3	Mn 257.610†	-38735.3	-40742.0	-5.7487 ug/L	-5.7487 ppb	16:39:11
3	Mo 202.031†	-338.5	-370.9	4.4769 ug/L	4.4769 ppb	16:39:11
3	Ni 231.604†	223.3	131.7	3.1754 ug/L	3.1754 ppb	16:39:31
3	P 214.914†	728.3	522.9	0.5389 ug/L	0.5389 ppb	16:39:31
3	Pb 220.353†	221.8	284.4	-2.7842 ug/L	-2.7842 ppb	16:39:31
3	S 181.975 Axial†	54.1	14.8	19.790 ug/L	19.790 ppb	16:39:31
3	Sb 206.836†	18.4	-19.6	2.6373 ug/L	2.6373 ppb	16:39:31
3	Se 196.026†	-2043.6	-2092.6	49.317 ug/L	49.317 ppb	16:39:31
3	Si 251.611†	-688.8	-1213.5	-36.406 ug/L	-36.406 ppb	16:39:11
3	Sn 189.927†	-26.3	-34.9	0.5306 ug/L	0.5306 ppb	16:39:31
3	Ti 334.940†	-1401.3	-68.6	-0.1520 ug/L	-0.1520 ppb	16:39:11
3	Tl 190.801†	-49.0	-12.2	-3.8532 ug/L	-3.8532 ppb	16:39:31
3	U 409.014†	290.0	1946.5	11.988 ug/L	11.988 ppb	16:39:11
3	V 292.402†	6657.7	8401.8	-0.1292 ug/L	-0.1292 ppb	16:39:11
3	Zn 213.857†	4613.6	4090.7	0.1479 ug/L	0.1479 ppb	16:39:31
3	SiO2†	-648.9	-1199.9	-77.598 ug/L	-77.598 ppb	16:39:47

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	908929.7	96.270	%	0.2543				0.26%
Sc Radial	5161.3	96.9	%	0.70				0.72%
Y 371.029	764201.9	95.840	%	0.2299				0.24%
Y RADIAL	5469.1	96.89	%	0.555				0.57%
Ag 328.068†	-27881.9	0.2904	ug/L	0.39919	0.2904	ppb	0.39919	137.47%
Al 396.153Radial†	-31.1	-23.672	ug/L	8.9515	-23.672	ppb	8.9515	37.81%
As 188.979†	-203.8	5.8978	ug/L	0.60213	5.8978	ppb	0.60213	10.21%
B 249.677†	2436.5	-8.6773	ug/L	1.80748	-8.6773	ppb	1.80748	20.83%
Ba 233.527†	-2073.2	-3.5093	ug/L	0.39060	-3.5093	ppb	0.39060	11.13%
Be 313.107†	82.6	0.0290	ug/L	0.00595	0.0290	ppb	0.00595	20.51%
Ca 317.933Radial†	-5.5	-9.1164	ug/L	4.03439	-9.1164	ppb	4.03439	44.25%
Cd 226.502†	3570.4	-1.0039	ug/L	0.29923	-1.0039	ppb	0.29923	29.81%
Co 228.616†	268.7	-0.2906	ug/L	0.14788	-0.2906	ppb	0.14788	50.89%
Cr 267.716†	-706.3	-0.3105	ug/L	0.66013	-0.3105	ppb	0.66013	212.61%
Cu 324.752†	-8046.4	-3.4291	ug/L	0.02586	-3.4291	ppb	0.02586	0.75%
Fe 238.204 Radial†	43876.3	378870	ug/L	460.7	378870	ppb	460.7	0.12%
K 766.490 Radial†	63.8	13.551	ug/L	2.3746	13.551	ppb	2.3746	17.52%
Mg 279.077 IEC†	10.5	-49.045	ug/L	35.2643	-49.045	ppb	35.2643	71.90%
Mn 257.610†	-40707.1	-5.6790	ug/L	0.08092	-5.6790	ppb	0.08092	1.42%
Mo 202.031†	-374.1	4.2851	ug/L	0.17024	4.2851	ppb	0.17024	3.97%
Na 589.592 Radial†	9.7	2.6151	ug/L	3.47194	2.6151	ppb	3.47194	132.77%
Ni 231.604†	132.8	3.2002	ug/L	0.15492	3.2002	ppb	0.15492	4.84%
P 214.914†	529.9	4.2807	ug/L	7.76192	4.2807	ppb	7.76192	181.33%
Pb 220.353†	273.3	-4.1218	ug/L	1.43240	-4.1218	ppb	1.43240	34.75%
S 181.975 Axial†	20.2	27.103	ug/L	10.0386	27.103	ppb	10.0386	37.04%
Sb 206.836†	-14.3	4.3677	ug/L	1.51965	4.3677	ppb	1.51965	34.79%
Se 196.026†	-2100.7	45.589	ug/L	11.8668	45.589	ppb	11.8668	26.03%
Si 251.611†	-1216.7	-36.499	ug/L	0.4601	-36.499	ppb	0.4601	1.26%
Sn 189.927†	-35.8	0.3748	ug/L	0.53006	0.3748	ppb	0.53006	141.44%
Sr 421.552†	67.4	0.4316	ug/L	0.25658	0.4316	ppb	0.25658	59.45%
Ti 334.940†	-64.9	-0.1504	ug/L	0.02561	-0.1504	ppb	0.02561	17.03%
Tl 190.801†	-9.2	-3.0016	ug/L	0.73932	-3.0016	ppb	0.73932	24.63%

U 409.014†	2044.9	14.734 ug/L	2.7819	14.734 ppb	2.7819	18.88%
V 292.402†	8341.4	-0.5743 ug/L	0.43429	-0.5743 ppb	0.43429	75.61%
Zn 213.857†	4085.7	0.0693 ug/L	0.07429	0.0693 ppb	0.07429	107.25%
SiO2†	-1252.9	-81.054 ug/L	3.0073	-81.054 ppb	3.0073	3.71%

Sequence No.: 2
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 1/18/2010 16:41:58
 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	5300.0	5300.0	99.5 %		16:43:50
1	Y RADIAL	5602.3	5602.3	99.24 %		16:43:50
1	Al 396.153Radial†	6436.2	6464.5	5149.2 ug/L	5149.2 ppb	16:43:50
1	Ca 317.933Radial†	2999.9	2994.7	4950.8 ug/L	4950.8 ppb	16:44:10
1	Fe 238.204 Radial†	586.5	576.7	4994.2 ug/L	4994.2 ppb	16:44:10
1	K 766.490 Radial†	26453.6	23913.4	5051.6 ug/L	5051.6 ppb	16:43:50
1	Mg 279.077 IEC†	154.9	153.0	5041.3 ug/L	5041.3 ppb	16:44:10
1	Na 589.592 Radial†	35862.9	37144.9	9980.3 ug/L	9980.3 ppb	16:43:50
1	Sr 421.552†	79770.0	80166.1	513.03 ug/L	513.03 ppb	16:43:50
1	Sc 361.383	938545.0	938545.0	99.406 %		16:45:07
1	Y 371.029	782678.3	782678.3	98.157 %		16:45:07
1	Ag 328.068†	112347.0	112606.7	498.20 ug/L	498.20 ppb	16:45:13
1	As 188.979†	1175.6	1202.2	493.24 ug/L	493.24 ppb	16:45:33
1	B 249.677†	21952.5	22611.1	488.36 ug/L	488.36 ppb	16:45:13
1	Ba 233.527†	67417.2	67800.1	496.93 ug/L	496.93 ppb	16:45:13
1	Be 313.107†	1388015.1	1400834.4	496.84 ug/L	496.84 ppb	16:45:07
1	Cd 226.502†	45786.4	46276.7	493.94 ug/L	493.94 ppb	16:45:13
1	Co 228.616†	25164.8	25388.4	495.46 ug/L	495.46 ppb	16:45:13
1	Cr 267.716†	45259.8	45450.0	497.89 ug/L	497.89 ppb	16:45:13
1	Cu 324.752†	174572.5	169448.5	493.83 ug/L	493.83 ppb	16:45:13
1	Mn 257.610†	468182.7	470522.8	498.28 ug/L	498.28 ppb	16:45:07
1	Mo 202.031†	7256.7	7281.2	489.44 ug/L	489.44 ppb	16:45:33
1	Ni 231.604†	20598.3	20620.7	497.22 ug/L	497.22 ppb	16:45:13
1	P 214.914†	4422.4	4214.2	2328.2 ug/L	2328.2 ppb	16:45:33
1	Pb 220.353†	4074.4	4152.5	489.77 ug/L	489.77 ppb	16:45:33
1	S 181.975 Axial†	768.4	731.5	979.60 ug/L	979.60 ppb	16:45:33
1	Sb 206.836†	1482.3	1452.4	495.99 ug/L	495.99 ppb	16:45:33
1	Se 196.026†	758.5	795.9	507.82 ug/L	507.82 ppb	16:45:33
1	Si 251.611†	82288.3	82282.6	2483.2 ug/L	2483.2 ppb	16:45:13
1	Sn 189.927†	2899.6	2909.4	487.83 ug/L	487.83 ppb	16:45:33
1	Ti 334.940†	325292.2	328623.4	497.13 ug/L	497.13 ppb	16:45:07
1	Tl 190.801†	1655.0	1703.6	495.77 ug/L	495.77 ppb	16:45:33
1	U 409.014†	15807.2	17546.5	495.20 ug/L	495.20 ppb	16:45:13
1	V 292.402†	73319.1	75234.5	501.14 ug/L	501.14 ppb	16:45:13
1	Zn 213.857†	55374.6	54997.5	491.17 ug/L	491.17 ppb	16:45:13
1	SiO2†	82014.0	81978.8	5334.9 ug/L	5334.9 ppb	16:46:40
2	Sc Radial	5288.6	5288.6	99.3 %		16:44:15
2	Y RADIAL	5554.4	5554.4	98.40 %		16:44:15
2	Al 396.153Radial†	6325.9	6367.3	5071.1 ug/L	5071.1 ppb	16:44:15
2	Ca 317.933Radial†	3005.4	3006.7	4970.7 ug/L	4970.7 ppb	16:44:35
2	Fe 238.204 Radial†	586.4	577.9	5004.6 ug/L	5004.6 ppb	16:44:35
2	K 766.490 Radial†	26305.6	23821.8	5032.3 ug/L	5032.3 ppb	16:44:15
2	Mg 279.077 IEC†	158.7	157.2	5178.0 ug/L	5178.0 ppb	16:44:35
2	Na 589.592 Radial†	35104.0	36458.5	9795.9 ug/L	9795.9 ppb	16:44:15
2	Sr 421.552†	78157.0	78714.8	503.74 ug/L	503.74 ppb	16:44:15
2	Sc 361.383	929711.6	929711.6	98.471 %		16:45:38
2	Y 371.029	775433.3	775433.3	97.249 %		16:45:38
2	Ag 328.068†	111774.5	113099.1	500.39 ug/L	500.39 ppb	16:45:44
2	As 188.979†	1197.6	1235.8	506.91 ug/L	506.91 ppb	16:46:04
2	B 249.677†	21893.9	22761.4	491.60 ug/L	491.60 ppb	16:45:44
2	Ba 233.527†	67222.6	68246.8	500.20 ug/L	500.20 ppb	16:45:44
2	Be 313.107†	1375315.4	1401204.0	496.97 ug/L	496.97 ppb	16:45:38
2	Cd 226.502†	45757.7	46685.1	498.30 ug/L	498.30 ppb	16:45:44
2	Co 228.616†	25161.3	25625.4	500.10 ug/L	500.10 ppb	16:45:44
2	Cr 267.716†	45065.2	45685.0	500.46 ug/L	500.46 ppb	16:45:44
2	Cu 324.752†	173467.6	169995.0	495.43 ug/L	495.43 ppb	16:45:44
2	Mn 257.610†	464724.7	471486.0	499.30 ug/L	499.30 ppb	16:45:38
2	Mo 202.031†	7315.2	7410.0	498.09 ug/L	498.09 ppb	16:46:04
2	Ni 231.604†	20563.0	20781.8	501.11 ug/L	501.11 ppb	16:45:44

2	P 214.914†	4457.4	4292.0	2372.7 ug/L	2372.7 ppb	16:46:04
2	Pb 220.353†	4116.0	4233.7	499.32 ug/L	499.32 ppb	16:46:04
2	S 181.975 Axial†	762.4	732.7	981.29 ug/L	981.29 ppb	16:46:04
2	Sb 206.836†	1501.9	1486.5	507.59 ug/L	507.59 ppb	16:46:04
2	Se 196.026†	770.9	815.8	520.09 ug/L	520.09 ppb	16:46:04
2	Si 251.611†	81884.1	82658.6	2494.5 ug/L	2494.5 ppb	16:45:44
2	Sn 189.927†	2932.0	2970.1	497.99 ug/L	497.99 ppb	16:46:04
2	Ti 334.940†	322543.9	328941.6	497.60 ug/L	497.60 ppb	16:45:38
2	Tl 190.801†	1656.8	1721.2	500.84 ug/L	500.84 ppb	16:46:04
2	U 409.014†	15713.8	17602.7	496.79 ug/L	496.79 ppb	16:45:44
2	V 292.402†	73177.3	75791.2	504.92 ug/L	504.92 ppb	16:45:44
2	Zn 213.857†	55293.6	55444.6	495.17 ug/L	495.17 ppb	16:45:44
2	SiO2†	83143.6	83909.8	5460.6 ug/L	5460.6 ppb	16:46:45
3	Sc Radial	5186.9	5186.9	97.4 %		16:44:40
3	Y RADIAL	5485.0	5485.0	97.17 %		16:44:40
3	Al 396.153Radial†	6129.9	6290.9	5010.4 ug/L	5010.4 ppb	16:44:40
3	Ca 317.933Radial†	3026.6	3087.8	5104.9 ug/L	5104.9 ppb	16:45:00
3	Fe 238.204 Radial†	586.3	589.4	5104.0 ug/L	5104.0 ppb	16:45:00
3	K 766.490 Radial†	25815.0	23837.5	5035.6 ug/L	5035.6 ppb	16:44:40
3	Mg 279.077 IEC†	159.7	161.4	5316.0 ug/L	5316.0 ppb	16:45:00
3	Na 589.592 Radial†	34447.3	36477.4	9801.0 ug/L	9801.0 ppb	16:44:40
3	Sr 421.552†	76689.5	78751.4	503.97 ug/L	503.97 ppb	16:44:40
3	Sc 361.383	943486.6	943486.6	99.930 %		16:46:10
3	Y 371.029	785245.9	785245.9	98.480 %		16:46:10
3	Ag 328.068†	111961.3	111628.7	493.93 ug/L	493.93 ppb	16:46:15
3	As 188.979†	1176.2	1196.6	491.04 ug/L	491.04 ppb	16:46:35
3	B 249.677†	21970.7	22513.7	486.23 ug/L	486.23 ppb	16:46:15
3	Ba 233.527†	67374.3	67402.0	494.01 ug/L	494.01 ppb	16:46:15
3	Be 313.107†	1398013.9	1403526.9	497.80 ug/L	497.80 ppb	16:46:10
3	Cd 226.502†	45711.9	45960.9	490.55 ug/L	490.55 ppb	16:46:15
3	Co 228.616†	25192.2	25283.3	493.40 ug/L	493.40 ppb	16:46:15
3	Cr 267.716†	45024.7	44976.2	492.71 ug/L	492.71 ppb	16:46:15
3	Cu 324.752†	173824.8	167780.5	488.98 ug/L	488.98 ppb	16:46:15
3	Mn 257.610†	472641.7	472518.2	500.39 ug/L	500.39 ppb	16:46:10
3	Mo 202.031†	7276.7	7263.0	488.23 ug/L	488.23 ppb	16:46:35
3	Ni 231.604†	20490.6	20404.5	492.01 ug/L	492.01 ppb	16:46:15
3	P 214.914†	4425.1	4193.6	2317.2 ug/L	2317.2 ppb	16:46:35
3	Pb 220.353†	4105.5	4162.1	490.86 ug/L	490.86 ppb	16:46:35
3	S 181.975 Axial†	765.7	724.8	970.62 ug/L	970.62 ppb	16:46:35
3	Sb 206.836†	1491.7	1454.1	496.49 ug/L	496.49 ppb	16:46:35
3	Se 196.026†	760.7	794.1	507.09 ug/L	507.09 ppb	16:46:35
3	Si 251.611†	82035.9	81596.4	2462.4 ug/L	2462.4 ppb	16:46:15
3	Sn 189.927†	2909.9	2904.5	487.03 ug/L	487.03 ppb	16:46:35
3	Ti 334.940†	328299.1	329918.6	499.09 ug/L	499.09 ppb	16:46:10
3	Tl 190.801†	1639.0	1678.9	488.66 ug/L	488.66 ppb	16:46:35
3	U 409.014†	15720.9	17376.9	490.40 ug/L	490.40 ppb	16:46:15
3	V 292.402†	73275.1	74804.1	498.27 ug/L	498.27 ppb	16:46:15
3	Zn 213.857†	55270.2	54601.3	487.63 ug/L	487.63 ppb	16:46:15
3	SiO2†	82380.5	81913.4	5330.6 ug/L	5330.6 ppb	16:46:51

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	937247.7	99.269 %		0.7391			0.74%
Sc Radial	5258.5	98.7 %		1.17			1.18%
Y 371.029	781119.2	97.962 %		0.6382			0.65%
Y RADIAL	5547.2	98.27 %		1.045			1.06%
Ag 328.068†	112444.9	497.51 ug/L		3.284	497.51 ppb	3.284	0.66%
QC value within limits for Ag 328.068 Recovery = 99.50%							
Al 396.153Radial†	6374.3	5076.9 ug/L		69.59	5076.9 ppb	69.59	1.37%
QC value within limits for Al 396.153Radial Recovery = 101.54%							
As 188.979†	1211.5	497.06 ug/L		8.595	497.06 ppb	8.595	1.73%
QC value within limits for As 188.979 Recovery = 99.41%							
B 249.677†	22628.7	488.73 ug/L		2.705	488.73 ppb	2.705	0.55%
QC value within limits for B 249.677 Recovery = 97.75%							
Ba 233.527†	67816.3	497.05 ug/L		3.096	497.05 ppb	3.096	0.62%
QC value within limits for Ba 233.527 Recovery = 99.41%							
Be 313.107†	1401855.1	497.20 ug/L		0.519	497.20 ppb	0.519	0.10%
QC value within limits for Be 313.107 Recovery = 99.44%							
Ca 317.933Radial†	3029.7	5008.8 ug/L		83.78	5008.8 ppb	83.78	1.67%

QC value within limits for Ca 317.933 Radial Recovery = 100.18%							
Cd 226.502†	46307.6	494.26 ug/L	3.885	494.26 ppb	3.885	0.79%	
QC value within limits for Cd 226.502 Recovery = 98.85%							
Co 228.616†	25432.4	496.32 ug/L	3.433	496.32 ppb	3.433	0.69%	
QC value within limits for Co 228.616 Recovery = 99.26%							
Cr 267.716†	45370.4	497.02 ug/L	3.952	497.02 ppb	3.952	0.80%	
QC value within limits for Cr 267.716 Recovery = 99.40%							
Cu 324.752†	169074.6	492.75 ug/L	3.357	492.75 ppb	3.357	0.68%	
QC value within limits for Cu 324.752 Recovery = 98.55%							
Fe 238.204 Radial†	581.3	5034.3 ug/L	60.59	5034.3 ppb	60.59	1.20%	
QC value within limits for Fe 238.204 Radial Recovery = 100.69%							
K 766.490 Radial†	23857.6	5039.8 ug/L	10.33	5039.8 ppb	10.33	0.20%	
QC value within limits for K 766.490 Radial Recovery = 100.80%							
Mg 279.077 IEC†	157.2	5178.4 ug/L	137.36	5178.4 ppb	137.36	2.65%	
QC value within limits for Mg 279.077 IEC Recovery = 103.57%							
Mn 257.610†	471509.0	499.32 ug/L	1.056	499.32 ppb	1.056	0.21%	
QC value within limits for Mn 257.610 Recovery = 99.86%							
Mo 202.031†	7318.1	491.92 ug/L	5.377	491.92 ppb	5.377	1.09%	
QC value within limits for Mo 202.031 Recovery = 98.38%							
Na 589.592 Radial†	36693.6	9859.1 ug/L	105.05	9859.1 ppb	105.05	1.07%	
QC value within limits for Na 589.592 Radial Recovery = 98.59%							
Ni 231.604†	20602.3	496.78 ug/L	4.567	496.78 ppb	4.567	0.92%	
QC value within limits for Ni 231.604 Recovery = 99.36%							
P 214.914†	4233.3	2339.3 ug/L	29.40	2339.3 ppb	29.40	1.26%	
QC value within limits for P 214.914 Recovery = 93.57%							
Pb 220.353†	4182.8	493.32 ug/L	5.227	493.32 ppb	5.227	1.06%	
QC value within limits for Pb 220.353 Recovery = 98.66%							
S 181.975 Axial†	729.7	977.17 ug/L	5.738	977.17 ppb	5.738	0.59%	
QC value within limits for S 181.975 Axial Recovery = 97.72%							
Sb 206.836†	1464.3	500.02 ug/L	6.553	500.02 ppb	6.553	1.31%	
QC value within limits for Sb 206.836 Recovery = 100.00%							
Se 196.026†	801.9	511.67 ug/L	7.302	511.67 ppb	7.302	1.43%	
QC value within limits for Se 196.026 Recovery = 102.33%							
Si 251.611†	82179.2	2480.0 ug/L	16.24	2480.0 ppb	16.24	0.65%	
QC value within limits for Si 251.611 Recovery = 99.20%							
Sn 189.927†	2928.0	490.95 ug/L	6.109	490.95 ppb	6.109	1.24%	
QC value within limits for Sn 189.927 Recovery = 98.19%							
Sr 421.552†	79210.7	506.91 ug/L	5.296	506.91 ppb	5.296	1.04%	
QC value within limits for Sr 421.552 Recovery = 101.38%							
Ti 334.940†	329161.2	497.94 ug/L	1.024	497.94 ppb	1.024	0.21%	
QC value within limits for Ti 334.940 Recovery = 99.59%							
Tl 190.801†	1701.2	495.09 ug/L	6.118	495.09 ppb	6.118	1.24%	
QC value within limits for Tl 190.801 Recovery = 99.02%							
U 409.014†	17508.7	494.13 ug/L	3.327	494.13 ppb	3.327	0.67%	
QC value within limits for U 409.014 Recovery = 98.83%							
V 292.402†	75276.6	501.44 ug/L	3.336	501.44 ppb	3.336	0.67%	
QC value within limits for V 292.402 Recovery = 100.29%							
Zn 213.857†	55014.5	491.33 ug/L	3.772	491.33 ppb	3.772	0.77%	
QC value within limits for Zn 213.857 Recovery = 98.27%							
SiO2†	82600.7	5375.4 ug/L	73.85	5375.4 ppb	73.85	1.37%	
QC value within limits for SiO2 Recovery = 100.52%							
All analyte(s) passed QC.							

Sequence No.: 3

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 1/18/2010 16:49:00

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5342.7	5342.7	100 %		16:50:53
1	Y RADIAL	5652.3	5652.3	100.1 %		16:50:53
1	Al 396.153Radial†	-3.8	-8.4	-6.6859 ug/L	-6.6859 ppb	16:50:53
1	Ca 317.933Radial†	15.2	-5.5	-9.0610 ug/L	-9.0610 ppb	16:51:13
1	Fe 238.204 Radial†	12.1	-0.8	-6.8261 ug/L	-6.8261 ppb	16:51:13
1	K 766.490 Radial†	2958.0	274.0	57.949 ug/L	57.949 ppb	16:50:53
1	Mg 279.077 IEC†	2.9	0.2	7.1117 ug/L	7.1117 ppb	16:51:13
1	Na 589.592 Radial†	-1098.9	3.0	0.8156 ug/L	0.8156 ppb	16:50:53
1	Sr 421.552†	13.2	1.5	0.0099 ug/L	0.0099 ppb	16:50:53
1	Sc 361.383	935368.3	935368.3	99.070 %		16:52:10
1	Y 371.029	791575.3	791575.3	99.273 %		16:52:10
1	Ag 328.068†	437.0	29.9	0.1299 ug/L	0.1299 ppb	16:52:15
1	As 188.979†	-15.0	4.4	1.7892 ug/L	1.7892 ppb	16:52:35
1	B 249.677†	-245.9	279.3	6.0611 ug/L	6.0611 ppb	16:52:35
1	Ba 233.527†	15.0	-4.5	-0.0357 ug/L	-0.0357 ppb	16:52:35
1	Be 313.107†	-4456.1	32.8	0.0119 ug/L	0.0119 ppb	16:52:15
1	Cd 226.502†	-203.6	11.4	0.1210 ug/L	0.1210 ppb	16:52:35
1	Co 228.616†	-70.0	2.7	0.0520 ug/L	0.0520 ppb	16:52:35
1	Cr 267.716†	79.3	-0.1	0.0000 ug/L	0.0000 ppb	16:52:35
1	Cu 324.752†	6126.0	17.0	0.0526 ug/L	0.0526 ppb	16:52:15
1	Mn 257.610†	459.3	8.0	0.0075 ug/L	0.0075 ppb	16:52:35
1	Mo 202.031†	11.5	-7.2	-0.4841 ug/L	-0.4841 ppb	16:52:35
1	Ni 231.604†	112.7	13.2	0.3187 ug/L	0.3187 ppb	16:52:35
1	P 214.914†	237.2	4.9	2.8057 ug/L	2.8057 ppb	16:52:35
1	Pb 220.353†	-46.8	6.5	0.7608 ug/L	0.7608 ppb	16:52:35
1	S 181.975 Axial†	36.9	-4.3	-5.7534 ug/L	-5.7534 ppb	16:52:35
1	Sb 206.836†	37.1	-1.3	-0.4414 ug/L	-0.4414 ppb	16:52:35
1	Se 196.026†	-22.5	10.1	6.1975 ug/L	6.1975 ppb	16:52:35
1	Si 251.611†	565.3	73.4	2.2270 ug/L	2.2270 ppb	16:52:35
1	Sn 189.927†	3.7	-3.8	-0.6360 ug/L	-0.6360 ppb	16:52:35
1	Ti 334.940†	-1303.0	73.6	0.1122 ug/L	0.1122 ppb	16:52:15
1	Tl 190.801†	-47.1	-8.8	-2.5322 ug/L	-2.5322 ppb	16:52:35
1	U 409.014†	-1839.5	-211.8	-5.9975 ug/L	-5.9975 ppb	16:52:10
1	V 292.402†	-1633.0	-170.8	-1.1402 ug/L	-1.1402 ppb	16:52:15
1	Zn 213.857†	754.9	54.3	0.4876 ug/L	0.4876 ppb	16:52:35
1	SiO2†	552.9	33.1	2.1717 ug/L	2.1717 ppb	16:53:41
2	Sc Radial	5421.2	5421.2	102 %		16:51:18
2	Y RADIAL	5726.5	5726.5	101.4 %		16:51:18
2	Al 396.153Radial†	-14.8	-19.2	-15.383 ug/L	-15.383 ppb	16:51:18
2	Ca 317.933Radial†	22.4	1.4	2.3395 ug/L	2.3395 ppb	16:51:38
2	Fe 238.204 Radial†	13.3	0.2	2.0763 ug/L	2.0763 ppb	16:51:38
2	K 766.490 Radial†	2863.5	138.4	29.258 ug/L	29.258 ppb	16:51:18
2	Mg 279.077 IEC†	0.7	-1.9	-63.481 ug/L	-63.481 ppb	16:51:38
2	Na 589.592 Radial†	-1082.6	34.9	9.3677 ug/L	9.3677 ppb	16:51:18
2	Sr 421.552†	-9.2	-20.7	-0.1322 ug/L	-0.1322 ppb	16:51:18
2	Sc 361.383	935114.9	935114.9	99.043 %		16:52:40
2	Y 371.029	791275.6	791275.6	99.236 %		16:52:40
2	Ag 328.068†	465.9	59.2	0.2666 ug/L	0.2666 ppb	16:52:45
2	As 188.979†	-21.4	-2.1	-0.8443 ug/L	-0.8443 ppb	16:53:05
2	B 249.677†	-276.9	247.9	5.3782 ug/L	5.3782 ppb	16:53:05
2	Ba 233.527†	14.9	-4.6	-0.0328 ug/L	-0.0328 ppb	16:53:05
2	Be 313.107†	-4403.3	84.9	0.0299 ug/L	0.0299 ppb	16:52:45
2	Cd 226.502†	-198.6	16.4	0.1740 ug/L	0.1740 ppb	16:53:05
2	Co 228.616†	-73.4	-0.7	-0.0115 ug/L	-0.0115 ppb	16:53:05
2	Cr 267.716†	116.6	37.6	0.4144 ug/L	0.4144 ppb	16:53:05
2	Cu 324.752†	6105.1	-2.4	-0.0039 ug/L	-0.0039 ppb	16:52:45
2	Mn 257.610†	462.7	11.6	0.0150 ug/L	0.0150 ppb	16:53:05
2	Mo 202.031†	29.4	10.8	0.7287 ug/L	0.7287 ppb	16:53:05
2	Ni 231.604†	118.6	19.3	0.4646 ug/L	0.4646 ppb	16:53:05

2	P 214.914†	230.5	-1.8	-1.0269 ug/L	-1.0269 ppb	16:53:05
2	Pb 220.353†	-43.0	10.3	1.2076 ug/L	1.2076 ppb	16:53:05
2	S 181.975 Axial†	44.9	3.8	5.0644 ug/L	5.0644 ppb	16:53:05
2	Sb 206.836†	38.7	0.4	0.1618 ug/L	0.1618 ppb	16:53:05
2	Se 196.026†	-32.3	0.2	0.1562 ug/L	0.1562 ppb	16:53:05
2	Si 251.611†	534.7	42.7	1.2841 ug/L	1.2841 ppb	16:53:05
2	Sn 189.927†	16.7	9.4	1.5665 ug/L	1.5665 ppb	16:53:05
2	Ti 334.940†	-1408.9	-33.8	-0.0434 ug/L	-0.0434 ppb	16:52:45
2	Tl 190.801†	-43.3	-5.0	-1.4373 ug/L	-1.4373 ppb	16:53:05
2	U 409.014†	-1815.3	-187.9	-5.3221 ug/L	-5.3221 ppb	16:52:40
2	V 292.402†	-1410.3	53.6	0.3511 ug/L	0.3511 ppb	16:52:45
2	Zn 213.857†	740.9	40.4	0.3606 ug/L	0.3606 ppb	16:53:05
2	SiO2†	544.0	24.3	1.5625 ug/L	1.5625 ppb	16:53:46
3	Sc Radial	4830.8	4830.8	90.7 %		16:51:43
3	Y RADIAL	5133.1	5133.1	90.93 %		16:51:43
3	Al 396.153Radial†	-7.2	-12.6	-10.134 ug/L	-10.134 ppb	16:51:43
3	Ca 317.933Radial†	17.9	-0.8	-1.3884 ug/L	-1.3884 ppb	16:52:03
3	Fe 238.204 Radial†	12.9	1.4	11.986 ug/L	11.986 ppb	16:52:03
3	K 766.490 Radial†	2815.0	428.7	90.700 ug/L	90.700 ppb	16:51:43
3	Mg 279.077 IEC†	3.1	0.7	24.233 ug/L	24.233 ppb	16:52:03
3	Na 589.592 Radial†	-1129.1	-146.4	-39.333 ug/L	-39.333 ppb	16:51:43
3	Sr 421.552†	34.0	25.8	0.1652 ug/L	0.1652 ppb	16:51:43
3	Sc 361.383	944661.7	944661.7	100.05 %		16:53:10
3	Y 371.029	799337.2	799337.2	100.25 %		16:53:10
3	Ag 328.068†	378.2	-33.2	-0.1377 ug/L	-0.1377 ppb	16:53:15
3	As 188.979†	-30.6	-11.0	-4.4633 ug/L	-4.4633 ppb	16:53:35
3	B 249.677†	-309.7	218.0	4.7270 ug/L	4.7270 ppb	16:53:35
3	Ba 233.527†	22.3	2.6	0.0195 ug/L	0.0195 ppb	16:53:35
3	Be 313.107†	-4467.5	65.7	0.0236 ug/L	0.0236 ppb	16:53:15
3	Cd 226.502†	-209.7	7.2	0.0752 ug/L	0.0752 ppb	16:53:35
3	Co 228.616†	-55.7	17.7	0.3458 ug/L	0.3458 ppb	16:53:35
3	Cr 267.716†	111.5	31.4	0.3457 ug/L	0.3457 ppb	16:53:35
3	Cu 324.752†	6163.1	-6.7	-0.0162 ug/L	-0.0162 ppb	16:53:15
3	Mn 257.610†	453.9	-1.9	-0.0018 ug/L	-0.0018 ppb	16:53:35
3	Mo 202.031†	26.9	8.1	0.5452 ug/L	0.5452 ppb	16:53:35
3	Ni 231.604†	112.1	11.5	0.2765 ug/L	0.2765 ppb	16:53:35
3	P 214.914†	217.3	-17.3	-9.9796 ug/L	-9.9796 ppb	16:53:35
3	Pb 220.353†	-46.3	7.5	0.8814 ug/L	0.8814 ppb	16:53:35
3	S 181.975 Axial†	42.1	0.6	0.7487 ug/L	0.7487 ppb	16:53:35
3	Sb 206.836†	49.5	10.8	3.5517 ug/L	3.5517 ppb	16:53:35
3	Se 196.026†	-32.4	0.5	0.3457 ug/L	0.3457 ppb	16:53:35
3	Si 251.611†	546.5	49.1	1.4777 ug/L	1.4777 ppb	16:53:35
3	Sn 189.927†	6.9	-0.5	-0.0909 ug/L	-0.0909 ppb	16:53:35
3	Ti 334.940†	-1272.8	116.7	0.1764 ug/L	0.1764 ppb	16:53:15
3	Tl 190.801†	-35.9	2.9	0.8248 ug/L	0.8248 ppb	16:53:35
3	U 409.014†	-1812.1	-166.2	-4.7089 ug/L	-4.7089 ppb	16:53:10
3	V 292.402†	-1457.9	20.5	0.1317 ug/L	0.1317 ppb	16:53:15
3	Zn 213.857†	748.7	40.7	0.3634 ug/L	0.3634 ppb	16:53:35
3	SiO2†	574.3	49.0	3.1834 ug/L	3.1834 ppb	16:53:51

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	938381.6	99.389 %		0.5762			0.58%
Sc Radial	5198.2	97.6 %		6.02			6.17%
Y 371.029	794062.7	99.585 %		0.5732			0.58%
Y RADIAL	5504.0	97.50 %		5.728			5.87%
Ag 328.068†	18.6	0.0863 ug/L		0.20568	0.0863 ppb	0.20568	238.41%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-13.4	-10.734 ug/L		4.3796	-10.734 ppb	4.3796	40.80%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-2.9	-1.1728 ug/L		3.13913	-1.1728 ppb	3.13913	267.66%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	248.4	5.3887 ug/L		0.66711	5.3887 ppb	0.66711	12.38%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-2.2	-0.0163 ug/L		0.03110	-0.0163 ppb	0.03110	190.31%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	61.1	0.0218 ug/L		0.00917	0.0218 ppb	0.00917	42.05%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-1.6	-2.7033 ug/L		5.81286	-2.7033 ppb	5.81286	215.03%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	11.7	0.1234 ug/L	0.04944	0.1234 ppb	0.04944	40.06%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	6.6	0.1288 ug/L	0.19061	0.1288 ppb	0.19061	148.04%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	23.0	0.2534 ug/L	0.22207	0.2534 ppb	0.22207	87.64%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	2.7	0.0108 ug/L	0.03668	0.0108 ppb	0.03668	338.59%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.3	2.4122 ug/L	9.41075	2.4122 ppb	9.41075	390.13%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	280.4	59.302 ug/L	30.7436	59.302 ppb	30.7436	51.84%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.3	-10.712 ug/L	46.4940	-10.712 ppb	46.4940	434.03%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	5.9	0.0069 ug/L	0.00845	0.0069 ppb	0.00845	122.40%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	3.9	0.2633 ug/L	0.65372	0.2633 ppb	0.65372	248.32%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-36.2	-9.7166 ug/L	26.00275	-9.7166 ppb	26.00275	267.61%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	14.6	0.3533 ug/L	0.09868	0.3533 ppb	0.09868	27.93%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-4.7	-2.7336 ug/L	6.56127	-2.7336 ppb	6.56127	240.02%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	8.1	0.9499 ug/L	0.23114	0.9499 ppb	0.23114	24.33%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	0.0	0.0199 ug/L	5.44558	0.0199 ppb	5.44558	>999.9%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	3.3	1.0907 ug/L	2.15249	1.0907 ppb	2.15249	197.35%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	3.6	2.2331 ug/L	3.43453	2.2331 ppb	3.43453	153.80%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	55.1	1.6629 ug/L	0.49800	1.6629 ppb	0.49800	29.95%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	1.7	0.2798 ug/L	1.14709	0.2798 ppb	1.14709	409.92%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	2.2	0.0143 ug/L	0.14874	0.0143 ppb	0.14874	>999.9%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	52.2	0.0817 ug/L	0.11302	0.0817 ppb	0.11302	138.30%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-3.6	-1.0482 ug/L	1.71197	-1.0482 ppb	1.71197	163.32%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-188.6	-5.3428 ug/L	0.64456	-5.3428 ppb	0.64456	12.06%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-32.2	-0.2191 ug/L	0.80521	-0.2191 ppb	0.80521	367.49%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	45.1	0.4038 ug/L	0.07253	0.4038 ppb	0.07253	17.96%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	35.5	2.3059 ug/L	0.81872	2.3059 ppb	0.81872	35.51%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 4
 Sample ID: 1202011708|940084|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 38
 Date Collected: 1/18/2010 16:56:01
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202011708|940084|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5435.7	5435.7	102 %		16:57:54
1	Y RADIAL	5732.5	5732.5	101.6 %		16:57:54
1	Al 396.153Radial†	-2.8	-7.4	-5.9229 ug/L	-5.9229 ppb	16:57:54
1	Ca 317.933Radial†	27.1	6.0	9.8442 ug/L	9.8442 ppb	16:58:14
1	Fe 238.204 Radial†	12.5	-0.6	-5.2981 ug/L	-5.2981 ppb	16:58:14
1	K 766.490 Radial†	2905.3	171.9	36.344 ug/L	36.344 ppb	16:57:54
1	Mg 279.077 IEC†	2.4	-0.3	-10.036 ug/L	-10.036 ppb	16:58:14
1	Na 589.592 Radial†	-1081.4	38.9	10.457 ug/L	10.457 ppb	16:57:54
1	Sr 421.552†	53.1	40.4	0.2583 ug/L	0.2583 ppb	16:57:54
1	Sc 361.383	957684.1	957684.1	101.43 %		16:59:10
1	Y 371.029	808668.9	808668.9	101.42 %		16:59:10
1	Ag 328.068†	438.5	21.1	0.0982 ug/L	0.0982 ppb	16:59:15
1	As 188.979†	-18.8	1.1	0.4462 ug/L	0.4462 ppb	16:59:35
1	B 249.677†	-365.4	167.3	3.6292 ug/L	3.6292 ppb	16:59:35
1	Ba 233.527†	17.3	-2.7	-0.0190 ug/L	-0.0190 ppb	16:59:35
1	Be 313.107†	-4339.0	253.1	0.0902 ug/L	0.0902 ppb	16:59:15
1	Cd 226.502†	-206.0	13.8	0.1462 ug/L	0.1462 ppb	16:59:35
1	Co 228.616†	-64.2	10.1	0.1962 ug/L	0.1962 ppb	16:59:35
1	Cr 267.716†	109.3	27.7	0.3068 ug/L	0.3068 ppb	16:59:35
1	Cu 324.752†	6075.7	-176.7	-0.5110 ug/L	-0.5110 ppb	16:59:15
1	Mn 257.610†	900.4	432.1	0.4572 ug/L	0.4572 ppb	16:59:35
1	Mo 202.031†	21.5	2.4	0.1633 ug/L	0.1633 ppb	16:59:35
1	Ni 231.604†	106.8	4.7	0.1140 ug/L	0.1140 ppb	16:59:35
1	P 214.914†	243.7	5.7	3.3558 ug/L	3.3558 ppb	16:59:35
1	Pb 220.353†	-51.2	3.3	0.3877 ug/L	0.3877 ppb	16:59:35
1	S 181.975 Axial†	49.0	6.8	9.0596 ug/L	9.0596 ppb	16:59:35
1	Sb 206.836†	58.7	19.2	6.3121 ug/L	6.3121 ppb	16:59:35
1	Se 196.026†	-38.0	-4.5	-2.7975 ug/L	-2.7975 ppb	16:59:35
1	Si 251.611†	747.2	239.5	7.2429 ug/L	7.2429 ppb	16:59:35
1	Sn 189.927†	7.4	-0.2	-0.0328 ug/L	-0.0328 ppb	16:59:35
1	Ti 334.940†	-1220.8	185.3	0.2857 ug/L	0.2857 ppb	16:59:15
1	Tl 190.801†	-36.2	3.0	0.8743 ug/L	0.8743 ppb	16:59:35
1	U 409.014†	-1939.5	-267.2	-7.5663 ug/L	-7.5663 ppb	16:59:10
1	V 292.402†	-1455.2	42.9	0.2701 ug/L	0.2701 ppb	16:59:15
1	Zn 213.857†	850.2	130.5	1.1765 ug/L	1.1765 ppb	16:59:35
1	SiO2†	765.8	230.0	14.998 ug/L	14.998 ppb	17:00:41
2	Sc Radial	5463.2	5463.2	103 %		16:58:19
2	Y RADIAL	5796.0	5796.0	102.7 %		16:58:19
2	Al 396.153Radial†	10.1	5.2	4.1074 ug/L	4.1074 ppb	16:58:19
2	Ca 317.933Radial†	21.2	0.1	0.1085 ug/L	0.1085 ppb	16:58:39
2	Fe 238.204 Radial†	13.4	0.3	2.4435 ug/L	2.4435 ppb	16:58:39
2	K 766.490 Radial†	2762.5	18.2	3.8477 ug/L	3.8477 ppb	16:58:19
2	Mg 279.077 IEC†	1.9	-0.8	-26.691 ug/L	-26.691 ppb	16:58:39
2	Na 589.592 Radial†	-1110.1	16.2	4.3513 ug/L	4.3513 ppb	16:58:19
2	Sr 421.552†	10.3	-1.7	-0.0106 ug/L	-0.0106 ppb	16:58:19
2	Sc 361.383	960975.6	960975.6	101.78 %		16:59:41
2	Y 371.029	811516.3	811516.3	101.77 %		16:59:41
2	Ag 328.068†	293.2	-123.2	-0.5367 ug/L	-0.5367 ppb	16:59:46
2	As 188.979†	-13.1	6.7	2.7194 ug/L	2.7194 ppb	17:00:06
2	B 249.677†	-371.0	163.0	3.5346 ug/L	3.5346 ppb	17:00:06
2	Ba 233.527†	10.8	-9.0	-0.0648 ug/L	-0.0648 ppb	17:00:06
2	Be 313.107†	-4475.1	134.0	0.0479 ug/L	0.0479 ppb	16:59:46
2	Cd 226.502†	-199.5	20.9	0.2220 ug/L	0.2220 ppb	17:00:06
2	Co 228.616†	-61.3	13.2	0.2576 ug/L	0.2576 ppb	17:00:06
2	Cr 267.716†	103.8	21.9	0.2417 ug/L	0.2417 ppb	17:00:06
2	Cu 324.752†	6169.1	-105.4	-0.3059 ug/L	-0.3059 ppb	16:59:46
2	Mn 257.610†	880.6	409.6	0.4348 ug/L	0.4348 ppb	17:00:06
2	Mo 202.031†	25.6	6.4	0.4298 ug/L	0.4298 ppb	17:00:06
2	Ni 231.604†	82.0	-20.0	-0.4821 ug/L	-0.4821 ppb	17:00:06

2	P 214.914†	241.7	2.9	1.7340 ug/L	1.7340 ppb	17:00:06
2	Pb 220.353†	-32.0	22.4	2.6294 ug/L	2.6294 ppb	17:00:06
2	S 181.975 Axial†	37.4	-4.8	-6.4201 ug/L	-6.4201 ppb	17:00:06
2	Sb 206.836†	57.2	17.5	5.7657 ug/L	5.7657 ppb	17:00:06
2	Se 196.026†	-30.2	3.3	2.0035 ug/L	2.0035 ppb	17:00:06
2	Si 251.611†	745.0	234.8	7.0977 ug/L	7.0977 ppb	17:00:06
2	Sn 189.927†	8.0	0.4	0.0640 ug/L	0.0640 ppb	17:00:06
2	Ti 334.940†	-1259.1	151.8	0.2327 ug/L	0.2327 ppb	16:59:46
2	Tl 190.801†	-43.1	-3.6	-1.0515 ug/L	-1.0515 ppb	17:00:06
2	U 409.014†	-1752.2	-76.6	-2.1693 ug/L	-2.1693 ppb	16:59:41
2	V 292.402†	-1416.8	85.6	0.5634 ug/L	0.5634 ppb	16:59:46
2	Zn 213.857†	834.1	111.8	1.0108 ug/L	1.0108 ppb	17:00:06
2	SiO2†	765.0	226.6	14.771 ug/L	14.771 ppb	17:00:46
3	Sc Radial	5495.4	5495.4	103 %		16:58:44
3	Y RADIAL	5790.5	5790.5	102.6 %		16:58:44
3	Al 396.153Radial†	-18.1	-22.2	-17.770 ug/L	-17.770 ppb	16:58:44
3	Ca 317.933Radial†	25.6	4.2	6.9323 ug/L	6.9323 ppb	16:59:04
3	Fe 238.204 Radial†	13.7	0.4	3.5794 ug/L	3.5794 ppb	16:59:04
3	K 766.490 Radial†	2832.3	70.1	14.832 ug/L	14.832 ppb	16:58:44
3	Mg 279.077 IEC†	3.8	1.1	35.675 ug/L	35.675 ppb	16:59:04
3	Na 589.592 Radial†	-1137.0	-3.4	-0.9255 ug/L	-0.9255 ppb	16:58:44
3	Sr 421.552†	18.6	6.3	0.0405 ug/L	0.0405 ppb	16:58:44
3	Sc 361.383	953600.6	953600.6	101.00 %		17:00:11
3	Y 371.029	805208.6	805208.6	100.98 %		17:00:11
3	Ag 328.068†	384.1	-31.0	-0.1306 ug/L	-0.1306 ppb	17:00:16
3	As 188.979†	-25.5	-5.7	-2.3145 ug/L	-2.3145 ppb	17:00:36
3	B 249.677†	-348.9	182.1	3.9495 ug/L	3.9495 ppb	17:00:36
3	Ba 233.527†	13.1	-6.7	-0.0481 ug/L	-0.0481 ppb	17:00:36
3	Be 313.107†	-4492.6	82.7	0.0298 ug/L	0.0298 ppb	17:00:16
3	Cd 226.502†	-197.5	21.3	0.2269 ug/L	0.2269 ppb	17:00:36
3	Co 228.616†	-75.3	-1.2	-0.0237 ug/L	-0.0237 ppb	17:00:36
3	Cr 267.716†	111.9	30.7	0.3378 ug/L	0.3378 ppb	17:00:36
3	Cu 324.752†	6204.2	-23.8	-0.0676 ug/L	-0.0676 ppb	17:00:16
3	Mn 257.610†	888.9	424.5	0.4481 ug/L	0.4481 ppb	17:00:36
3	Mo 202.031†	21.6	2.6	0.1719 ug/L	0.1719 ppb	17:00:36
3	Ni 231.604†	105.0	3.4	0.0827 ug/L	0.0827 ppb	17:00:36
3	P 214.914†	233.2	-3.6	-2.0871 ug/L	-2.0871 ppb	17:00:36
3	Pb 220.353†	-30.2	23.9	2.8049 ug/L	2.8049 ppb	17:00:36
3	S 181.975 Axial†	52.8	10.8	14.457 ug/L	14.457 ppb	17:00:36
3	Sb 206.836†	58.9	19.6	6.4757 ug/L	6.4757 ppb	17:00:36
3	Se 196.026†	-37.8	-4.5	-2.7547 ug/L	-2.7547 ppb	17:00:36
3	Si 251.611†	742.1	237.6	7.1863 ug/L	7.1863 ppb	17:00:36
3	Sn 189.927†	8.4	0.9	0.1438 ug/L	0.1438 ppb	17:00:36
3	Ti 334.940†	-1245.5	155.6	0.2347 ug/L	0.2347 ppb	17:00:16
3	Tl 190.801†	-40.9	-1.8	-0.5127 ug/L	-0.5127 ppb	17:00:36
3	U 409.014†	-1763.7	-101.3	-2.8689 ug/L	-2.8689 ppb	17:00:11
3	V 292.402†	-1414.6	76.9	0.5026 ug/L	0.5026 ppb	17:00:16
3	Zn 213.857†	849.6	133.5	1.2016 ug/L	1.2016 ppb	17:00:36
3	SiO2†	780.6	247.9	16.165 ug/L	16.165 ppb	17:00:51

Mean Data: 1202011708|940084|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	957420.1	101.41 %		0.391			0.39%
Sc Radial	5464.8	103 %		0.6			0.55%
Y 371.029	808464.6	101.39 %		0.396			0.39%
Y RADIAL	5773.0	102.3 %		0.62			0.61%
Ag 328.068†	-44.3	-0.1897 ug/L		0.32151	-0.1897 ppb	0.32151	169.48%
Al 396.153Radial†	-8.1	-6.5285 ug/L		10.95127	-6.5285 ppb	10.95127	167.75%
As 188.979†	0.7	0.2837 ug/L		2.52089	0.2837 ppb	2.52089	888.54%
B 249.677†	170.8	3.7044 ug/L		0.21745	3.7044 ppb	0.21745	5.87%
Ba 233.527†	-6.1	-0.0440 ug/L		0.02321	-0.0440 ppb	0.02321	52.79%
Be 313.107†	156.6	0.0560 ug/L		0.03099	0.0560 ppb	0.03099	55.36%
Ca 317.933Radial†	3.4	5.6283 ug/L		4.99715	5.6283 ppb	4.99715	88.79%
Cd 226.502†	18.7	0.1984 ug/L		0.04524	0.1984 ppb	0.04524	22.80%
Co 228.616†	7.4	0.1434 ug/L		0.14794	0.1434 ppb	0.14794	103.19%
Cr 267.716†	26.8	0.2954 ug/L		0.04906	0.2954 ppb	0.04906	16.61%
Cu 324.752†	-102.0	-0.2948 ug/L		0.22190	-0.2948 ppb	0.22190	75.27%
Fe 238.204 Radial†	0.0	0.2416 ug/L		4.83101	0.2416 ppb	4.83101	>999.9%
K 766.490 Radial†	86.7	18.341 ug/L		16.5297	18.341 ppb	16.5297	90.12%

Mg 279.077 IEC†	-0.0	-0.3504 ug/L	32.29113	-0.3504 ppb	32.29113	>999.9%
Mn 257.610†	422.0	0.4467 ug/L	0.01126	0.4467 ppb	0.01126	2.52%
Mo 202.031†	3.8	0.2550 ug/L	0.15142	0.2550 ppb	0.15142	59.38%
Na 589.592 Radial†	17.2	4.6275 ug/L	5.69605	4.6275 ppb	5.69605	123.09%
Ni 231.604†	-3.9	-0.0951 ug/L	0.33552	-0.0951 ppb	0.33552	352.70%
P 214.914†	1.6	1.0009 ug/L	2.79451	1.0009 ppb	2.79451	279.19%
Pb 220.353†	16.5	1.9407 ug/L	1.34776	1.9407 ppb	1.34776	69.45%
S 181.975 Axial†	4.3	5.6988 ug/L	10.83665	5.6988 ppb	10.83665	190.16%
Sb 206.836†	18.8	6.1845 ug/L	0.37185	6.1845 ppb	0.37185	6.01%
Se 196.026†	-1.9	-1.1829 ug/L	2.75959	-1.1829 ppb	2.75959	233.29%
Si 251.611†	237.3	7.1756 ug/L	0.07318	7.1756 ppb	0.07318	1.02%
Sn 189.927†	0.3	0.0583 ug/L	0.08844	0.0583 ppb	0.08844	151.65%
Sr 421.552†	15.0	0.0961 ug/L	0.14281	0.0961 ppb	0.14281	148.68%
Ti 334.940†	164.2	0.2510 ug/L	0.03008	0.2510 ppb	0.03008	11.98%
Tl 190.801†	-0.8	-0.2300 ug/L	0.99358	-0.2300 ppb	0.99358	432.04%
U 409.014†	-148.3	-4.2015 ug/L	2.93489	-4.2015 ppb	2.93489	69.85%
V 292.402†	68.5	0.4453 ug/L	0.15480	0.4453 ppb	0.15480	34.76%
Zn 213.857†	125.3	1.1296 ug/L	0.10370	1.1296 ppb	0.10370	9.18%
SiO2†	234.8	15.311 ug/L	0.7477	15.311 ppb	0.7477	4.88%

Sequence No.: 5

Sample ID: 1202011709|940084|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 39

Date Collected: 1/18/2010 17:03:02

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202011709|940084|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5375.9	5375.9	101 %		17:04:55
1	Y RADIAL	5661.4	5661.4	100.3 %		17:04:55
1	Al 396.153Radial†	6443.6	6380.5	5082.3 ug/L	5082.3 ppb	17:04:55
1	Ca 317.933Radial†	3075.6	3027.1	5004.4 ug/L	5004.4 ppb	17:05:15
1	Fe 238.204 Radial†	602.5	584.2	5059.2 ug/L	5059.2 ppb	17:05:15
1	K 766.490 Radial†	26652.7	23735.2	5015.8 ug/L	5015.8 ppb	17:04:55
1	Mg 279.077 IEC†	162.0	157.9	5202.3 ug/L	5202.3 ppb	17:05:15
1	Na 589.592 Radial†	18468.8	19399.9	5212.5 ug/L	5212.5 ppb	17:04:55
1	Sr 421.552†	81765.9	81011.9	518.44 ug/L	518.44 ppb	17:04:55
1	Sc 361.383	949426.0	949426.0	100.56 %		17:06:14
1	Y 371.029	793411.5	793411.5	99.504 %		17:06:14
1	Ag 328.068†	110881.4	109854.0	486.11 ug/L	486.11 ppb	17:06:14
1	As 188.979†	1200.4	1213.3	497.75 ug/L	497.75 ppb	17:06:34
1	B 249.677†	21767.8	22174.3	478.91 ug/L	478.91 ppb	17:06:14
1	Ba 233.527†	68336.0	67936.5	497.92 ug/L	497.92 ppb	17:06:14
1	Be 313.107†	1397739.4	1394502.0	494.58 ug/L	494.58 ppb	17:06:14
1	Cd 226.502†	44842.8	44810.4	478.27 ug/L	478.27 ppb	17:06:34
1	Co 228.616†	24680.4	24616.7	480.40 ug/L	480.40 ppb	17:06:34
1	Cr 267.716†	44889.2	44559.7	488.15 ug/L	488.15 ppb	17:06:14
1	Cu 324.752†	177030.1	169879.8	495.10 ug/L	495.10 ppb	17:06:14
1	Mn 257.610†	473141.3	470056.2	497.79 ug/L	497.79 ppb	17:06:14
1	Mo 202.031†	7267.0	7207.8	484.51 ug/L	484.51 ppb	17:06:34
1	Ni 231.604†	20586.9	20372.0	491.23 ug/L	491.23 ppb	17:06:34
1	P 214.914†	1199.2	958.0	454.70 ug/L	454.70 ppb	17:06:34
1	Pb 220.353†	4198.2	4228.6	498.69 ug/L	498.69 ppb	17:06:34
1	S 181.975 Axial†	3725.5	3663.3	4909.8 ug/L	4909.8 ppb	17:06:34
1	Sb 206.836†	1563.2	1515.8	517.04 ug/L	517.04 ppb	17:06:34
1	Se 196.026†	767.7	796.3	508.31 ug/L	508.31 ppb	17:06:34
1	Si 251.611†	159473.5	158090.0	4776.6 ug/L	4776.6 ppb	17:06:14
1	Sn 189.927†	3031.9	3007.6	504.27 ug/L	504.27 ppb	17:06:34
1	Ti 334.940†	324849.1	324432.5	490.79 ug/L	490.79 ppb	17:06:14
1	Tl 190.801†	1679.8	1709.2	497.41 ug/L	497.41 ppb	17:06:34
1	U 409.014†	15762.9	17320.2	488.81 ug/L	488.81 ppb	17:06:14
1	V 292.402†	73525.5	74594.5	496.85 ug/L	496.85 ppb	17:06:14
1	Zn 213.857†	54882.4	53869.7	481.04 ug/L	481.04 ppb	17:06:14
1	SiO2†	162027.7	160602.3	10464 ug/L	10464 ppb	17:07:34
2	Sc Radial	5449.8	5449.8	102 %		17:05:20
2	Y RADIAL	5673.3	5673.3	100.5 %		17:05:20
2	Al 396.153Radial†	6348.8	6201.3	4939.3 ug/L	4939.3 ppb	17:05:20
2	Ca 317.933Radial†	3072.6	2982.9	4931.4 ug/L	4931.4 ppb	17:05:40
2	Fe 238.204 Radial†	608.5	581.9	5039.0 ug/L	5039.0 ppb	17:05:40
2	K 766.490 Radial†	26303.9	23036.5	4868.1 ug/L	4868.1 ppb	17:05:20
2	Mg 279.077 IEC†	161.7	155.4	5118.6 ug/L	5118.6 ppb	17:05:40
2	Na 589.592 Radial†	18170.0	18859.7	5067.4 ug/L	5067.4 ppb	17:05:20
2	Sr 421.552†	80857.4	79026.0	505.73 ug/L	505.73 ppb	17:05:20
2	Sc 361.383	961896.1	961896.1	101.88 %		17:06:41
2	Y 371.029	803079.9	803079.9	100.72 %		17:06:41
2	Ag 328.068†	112342.8	109858.9	486.13 ug/L	486.13 ppb	17:06:41
2	As 188.979†	1185.2	1182.9	485.40 ug/L	485.40 ppb	17:07:01
2	B 249.677†	22281.6	22398.1	483.80 ug/L	483.80 ppb	17:06:41
2	Ba 233.527†	69296.4	67998.2	498.37 ug/L	498.37 ppb	17:06:41
2	Be 313.107†	1416792.0	1395183.4	494.83 ug/L	494.83 ppb	17:06:41
2	Cd 226.502†	44523.5	43918.9	468.75 ug/L	468.75 ppb	17:07:01
2	Co 228.616†	24460.8	24082.9	469.97 ug/L	469.97 ppb	17:07:01
2	Cr 267.716†	45483.5	44564.3	488.20 ug/L	488.20 ppb	17:06:41
2	Cu 324.752†	179549.1	170070.0	495.65 ug/L	495.65 ppb	17:06:41
2	Mn 257.610†	479565.3	470261.9	498.01 ug/L	498.01 ppb	17:06:41
2	Mo 202.031†	7228.5	7076.3	475.68 ug/L	475.68 ppb	17:07:01
2	Ni 231.604†	20455.3	19977.4	481.72 ug/L	481.72 ppb	17:07:01

2	P 214.914†	1200.1	943.4	446.10 ug/L	446.10 ppb	17:07:01
2	Pb 220.353†	4153.7	4130.8	487.14 ug/L	487.14 ppb	17:07:01
2	S 181.975 Axial†	3697.9	3588.1	4809.1 ug/L	4809.1 ppb	17:07:01
2	Sb 206.836†	1545.2	1478.0	504.29 ug/L	504.29 ppb	17:07:01
2	Se 196.026†	753.2	772.2	493.40 ug/L	493.40 ppb	17:07:01
2	Si 251.611†	161841.0	158358.0	4784.8 ug/L	4784.8 ppb	17:06:41
2	Sn 189.927†	3024.7	2961.4	496.54 ug/L	496.54 ppb	17:07:01
2	Ti 334.940†	329233.2	324547.7	490.96 ug/L	490.96 ppb	17:06:41
2	Tl 190.801†	1669.1	1677.1	488.16 ug/L	488.16 ppb	17:07:01
2	U 409.014†	15944.1	17294.9	488.09 ug/L	488.09 ppb	17:06:41
2	V 292.402†	74668.8	74768.7	497.87 ug/L	497.87 ppb	17:06:41
2	Zn 213.857†	55631.6	53897.5	481.35 ug/L	481.35 ppb	17:06:41
2	SiO2†	160359.0	156875.5	10221 ug/L	10221 ppb	17:07:39
3	Sc Radial	5359.8	5359.8	101 %		17:05:45
3	Y RADIAL	5663.7	5663.7	100.3 %		17:05:45
3	Al 396.153Radial†	6265.4	6222.6	4956.0 ug/L	4956.0 ppb	17:05:45
3	Ca 317.933Radial†	3071.7	3032.4	5013.3 ug/L	5013.3 ppb	17:06:05
3	Fe 238.204 Radial†	603.6	587.1	5084.1 ug/L	5084.1 ppb	17:06:05
3	K 766.490 Radial†	26147.7	23313.1	4926.5 ug/L	4926.5 ppb	17:05:45
3	Mg 279.077 IEC†	155.5	151.9	5003.7 ug/L	5003.7 ppb	17:06:05
3	Na 589.592 Radial†	17829.1	18819.3	5056.5 ug/L	5056.5 ppb	17:05:45
3	Sr 421.552†	79621.6	79125.4	506.37 ug/L	506.37 ppb	17:05:45
3	Sc 361.383	949131.0	949131.0	100.53 %		17:07:08
3	Y 371.029	792210.3	792210.3	99.353 %		17:07:08
3	Ag 328.068†	111012.7	110018.8	486.85 ug/L	486.85 ppb	17:07:08
3	As 188.979†	1204.6	1217.9	499.61 ug/L	499.61 ppb	17:07:28
3	B 249.677†	21985.5	22397.6	483.76 ug/L	483.76 ppb	17:07:08
3	Ba 233.527†	68580.0	68200.4	499.85 ug/L	499.85 ppb	17:07:08
3	Be 313.107†	1397702.7	1394897.5	494.72 ug/L	494.72 ppb	17:07:08
3	Cd 226.502†	44575.0	44557.9	475.57 ug/L	475.57 ppb	17:07:28
3	Co 228.616†	24541.0	24485.6	477.84 ug/L	477.84 ppb	17:07:28
3	Cr 267.716†	44996.1	44679.9	489.46 ug/L	489.46 ppb	17:07:08
3	Cu 324.752†	176881.2	169786.3	494.83 ug/L	494.83 ppb	17:07:08
3	Mn 257.610†	474003.5	471060.1	498.86 ug/L	498.86 ppb	17:07:08
3	Mo 202.031†	7245.5	7188.7	483.23 ug/L	483.23 ppb	17:07:28
3	Ni 231.604†	20470.5	20262.6	488.59 ug/L	488.59 ppb	17:07:28
3	P 214.914†	1205.6	964.7	458.56 ug/L	458.56 ppb	17:07:28
3	Pb 220.353†	4168.2	4200.1	495.30 ug/L	495.30 ppb	17:07:28
3	S 181.975 Axial†	3704.4	3643.4	4883.2 ug/L	4883.2 ppb	17:07:28
3	Sb 206.836†	1551.4	1504.6	513.28 ug/L	513.28 ppb	17:07:28
3	Se 196.026†	767.3	796.2	508.29 ug/L	508.29 ppb	17:07:28
3	Si 251.611†	159812.9	158476.9	4788.3 ug/L	4788.3 ppb	17:07:08
3	Sn 189.927†	3019.1	2995.8	502.30 ug/L	502.30 ppb	17:07:28
3	Ti 334.940†	324941.4	324624.7	491.10 ug/L	491.10 ppb	17:07:08
3	Tl 190.801†	1674.2	1704.2	495.96 ug/L	495.96 ppb	17:07:28
3	U 409.014†	15739.0	17301.3	488.27 ug/L	488.27 ppb	17:07:08
3	V 292.402†	73584.2	74675.6	497.36 ug/L	497.36 ppb	17:07:08
3	Zn 213.857†	55045.6	54049.1	482.67 ug/L	482.67 ppb	17:07:08
3	SiO2†	159864.2	158500.1	10327 ug/L	10327 ppb	17:07:45

Mean Data: 1202011709|940084|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	953484.4	100.99 %		0.772			0.76%
Sc Radial	5395.2	101 %		0.9			0.89%
Y 371.029	796233.9	99.858 %		0.7473			0.75%
Y RADIAL	5666.1	100.4 %		0.11			0.11%
Ag 328.068†	109910.6	486.36 ug/L		0.418	486.36 ppb	0.418	0.09%
Al 396.153Radial†	6268.1	4992.5 ug/L		78.18	4992.5 ppb	78.18	1.57%
As 188.979†	1204.7	494.25 ug/L		7.723	494.25 ppb	7.723	1.56%
B 249.677†	22323.3	482.16 ug/L		2.810	482.16 ppb	2.810	0.58%
Ba 233.527†	68045.0	498.71 ug/L		1.010	498.71 ppb	1.010	0.20%
Be 313.107†	1394861.0	494.71 ug/L		0.121	494.71 ppb	0.121	0.02%
Ca 317.933Radial†	3014.1	4983.0 ug/L		44.94	4983.0 ppb	44.94	0.90%
Cd 226.502†	44429.1	474.20 ug/L		4.907	474.20 ppb	4.907	1.03%
Co 228.616†	24395.1	476.07 ug/L		5.438	476.07 ppb	5.438	1.14%
Cr 267.716†	44601.3	488.60 ug/L		0.746	488.60 ppb	0.746	0.15%
Cu 324.752†	169912.0	495.19 ug/L		0.420	495.19 ppb	0.420	0.08%
Fe 238.204 Radial†	584.4	5060.8 ug/L		22.55	5060.8 ppb	22.55	0.45%
K 766.490 Radial†	23361.6	4936.8 ug/L		74.38	4936.8 ppb	74.38	1.51%

Mg 279.077 IEC†	155.1	5108.2 ug/L	99.70	5108.2 ppb	99.70	1.95%
Mn 257.610†	470459.4	498.22 ug/L	0.567	498.22 ppb	0.567	0.11%
Mo 202.031†	7157.6	481.14 ug/L	4.773	481.14 ppb	4.773	0.99%
Na 589.592 Radial†	19026.3	5112.1 ug/L	87.09	5112.1 ppb	87.09	1.70%
Ni 231.604†	20204.0	487.18 ug/L	4.912	487.18 ppb	4.912	1.01%
P 214.914†	955.3	453.12 ug/L	6.375	453.12 ppb	6.375	1.41%
Pb 220.353†	4186.5	493.71 ug/L	5.936	493.71 ppb	5.936	1.20%
S 181.975 Axial†	3631.6	4867.3 ug/L	52.19	4867.3 ppb	52.19	1.07%
Sb 206.836†	1499.5	511.54 ug/L	6.553	511.54 ppb	6.553	1.28%
Se 196.026†	788.3	503.33 ug/L	8.601	503.33 ppb	8.601	1.71%
Si 251.611†	158308.3	4783.2 ug/L	6.02	4783.2 ppb	6.02	0.13%
Sn 189.927†	2988.3	501.04 ug/L	4.018	501.04 ppb	4.018	0.80%
Sr 421.552†	79721.1	510.18 ug/L	7.161	510.18 ppb	7.161	1.40%
Ti 334.940†	324535.0	490.95 ug/L	0.154	490.95 ppb	0.154	0.03%
Tl 190.801†	1696.8	493.84 ug/L	4.977	493.84 ppb	4.977	1.01%
U 409.014†	17305.5	488.39 ug/L	0.372	488.39 ppb	0.372	0.08%
V 292.402†	74679.6	497.36 ug/L	0.510	497.36 ppb	0.510	0.10%
Zn 213.857†	53938.8	481.69 ug/L	0.865	481.69 ppb	0.865	0.18%
SiO2†	158659.3	10338 ug/L	121.8	10338 ppb	121.8	1.18%

Sequence No.: 6

Sample ID: 244129001|940084|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 40

Date Collected: 1/18/2010 17:09:55

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 244129001|940084|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5557.2	5557.2	104 %		17:11:48
1	Y RADIAL	5859.4	5859.4	103.8 %		17:11:48
1	Al 396.153Radial†	11.4	6.2	4.9885 ug/L	4.9885 ppb	17:11:48
1	Ca 317.933Radial†	40.0	17.8	29.407 ug/L	29.407 ppb	17:12:08
1	Fe 238.204 Radial†	14.3	0.9	7.5781 ug/L	7.5781 ppb	17:12:08
1	K 766.490 Radial†	3367.4	552.6	116.81 ug/L	116.81 ppb	17:11:48
1	Mg 279.077 IEC†	3.6	0.8	26.273 ug/L	26.273 ppb	17:12:08
1	Na 589.592 Radial†	-666.6	459.7	123.50 ug/L	123.50 ppb	17:11:48
1	Sr 421.552†	54.7	40.8	0.2609 ug/L	0.2609 ppb	17:11:48
1	Sc 361.383	956149.9	956149.9	101.27 %		17:13:05
1	Y 371.029	807228.6	807228.6	101.24 %		17:13:05
1	Ag 328.068†	403.0	-13.3	-0.0545 ug/L	-0.0545 ppb	17:13:10
1	As 188.979†	-19.4	0.4	0.1879 ug/L	0.1879 ppb	17:13:30
1	B 249.677†	629.3	1148.9	24.927 ug/L	24.927 ppb	17:13:10
1	Ba 233.527†	76.3	55.7	0.4075 ug/L	0.4075 ppb	17:13:30
1	Be 313.107†	-4429.7	156.6	0.0570 ug/L	0.0570 ppb	17:13:10
1	Cd 226.502†	-212.8	6.7	0.0703 ug/L	0.0703 ppb	17:13:30
1	Co 228.616†	-76.8	-2.4	-0.0482 ug/L	-0.0482 ppb	17:13:30
1	Cr 267.716†	119.8	38.3	0.4197 ug/L	0.4197 ppb	17:13:30
1	Cu 324.752†	6522.8	274.5	0.8014 ug/L	0.8014 ppb	17:13:10
1	Mn 257.610†	1436.4	962.8	1.0187 ug/L	1.0187 ppb	17:13:30
1	Mo 202.031†	22.6	3.6	0.2396 ug/L	0.2396 ppb	17:13:30
1	Ni 231.604†	97.7	-4.0	-0.0975 ug/L	-0.0975 ppb	17:13:30
1	P 214.914†	251.2	13.5	7.6061 ug/L	7.6061 ppb	17:13:30
1	Pb 220.353†	-43.3	11.0	1.2950 ug/L	1.2950 ppb	17:13:30
1	S 181.975 Axial†	73.0	30.5	40.948 ug/L	40.948 ppb	17:13:30
1	Sb 206.836†	44.0	4.7	1.5515 ug/L	1.5515 ppb	17:13:30
1	Se 196.026†	-34.9	-1.6	-0.9263 ug/L	-0.9263 ppb	17:13:30
1	Si 251.611†	46333.1	45254.4	1369.0 ug/L	1369.0 ppb	17:13:10
1	Sn 189.927†	6.9	-0.6	-0.0996 ug/L	-0.0996 ppb	17:13:30
1	Ti 334.940†	-935.6	464.9	0.7060 ug/L	0.7060 ppb	17:13:10
1	Tl 190.801†	-41.0	-1.7	-0.4913 ug/L	-0.4913 ppb	17:13:30
1	U 409.014†	-1732.0	-65.4	-1.8532 ug/L	-1.8532 ppb	17:13:05
1	V 292.402†	-1481.8	14.4	0.0929 ug/L	0.0929 ppb	17:13:10
1	Zn 213.857†	955.3	235.6	2.1215 ug/L	2.1215 ppb	17:13:30
1	SiO2†	46594.2	45484.5	2967.3 ug/L	2967.3 ppb	17:14:36
2	Sc Radial	5493.3	5493.3	103 %		17:12:13
2	Y RADIAL	5788.0	5788.0	102.5 %		17:12:13
2	Al 396.153Radial†	7.8	2.9	2.3089 ug/L	2.3089 ppb	17:12:13
2	Ca 317.933Radial†	39.0	17.2	28.500 ug/L	28.500 ppb	17:12:33
2	Fe 238.204 Radial†	12.5	-0.7	-5.8287 ug/L	-5.8287 ppb	17:12:33
2	K 766.490 Radial†	3487.1	706.2	149.31 ug/L	149.31 ppb	17:12:13
2	Mg 279.077 IEC†	0.7	-2.0	-66.120 ug/L	-66.120 ppb	17:12:33
2	Na 589.592 Radial†	-641.2	476.9	128.12 ug/L	128.12 ppb	17:12:13
2	Sr 421.552†	45.0	31.9	0.2042 ug/L	0.2042 ppb	17:12:13
2	Sc 361.383	971834.9	971834.9	102.93 %		17:13:35
2	Y 371.029	819383.6	819383.6	102.76 %		17:13:35
2	Ag 328.068†	439.1	15.4	0.0692 ug/L	0.0692 ppb	17:13:40
2	As 188.979†	-13.2	6.7	2.7431 ug/L	2.7431 ppb	17:14:00
2	B 249.677†	563.0	1074.5	23.313 ug/L	23.313 ppb	17:13:40
2	Ba 233.527†	69.9	48.2	0.3540 ug/L	0.3540 ppb	17:14:00
2	Be 313.107†	-4407.0	249.3	0.0898 ug/L	0.0898 ppb	17:13:40
2	Cd 226.502†	-206.7	16.1	0.1719 ug/L	0.1719 ppb	17:14:00
2	Co 228.616†	-71.6	3.9	0.0759 ug/L	0.0759 ppb	17:14:00
2	Cr 267.716†	103.5	20.5	0.2256 ug/L	0.2256 ppb	17:14:00
2	Cu 324.752†	6557.3	204.1	0.5950 ug/L	0.5950 ppb	17:13:40
2	Mn 257.610†	1439.5	942.9	1.0001 ug/L	1.0001 ppb	17:14:00
2	Mo 202.031†	28.3	8.7	0.5871 ug/L	0.5871 ppb	17:14:00
2	Ni 231.604†	112.3	8.5	0.2056 ug/L	0.2056 ppb	17:14:00

2	P 214.914†	239.3	-2.1	-1.3155 ug/L	-1.3155 ppb	17:14:00
2	Pb 220.353†	-48.2	7.0	0.8212 ug/L	0.8212 ppb	17:14:00
2	S 181.975 Axial†	68.0	24.5	32.878 ug/L	32.878 ppb	17:14:00
2	Sb 206.836†	50.9	10.7	3.5291 ug/L	3.5291 ppb	17:14:00
2	Se 196.026†	-26.6	7.0	4.2886 ug/L	4.2886 ppb	17:14:00
2	Si 251.611†	46499.5	44677.7	1351.6 ug/L	1351.6 ppb	17:13:40
2	Sn 189.927†	3.6	-4.0	-0.6639 ug/L	-0.6639 ppb	17:14:00
2	Ti 334.940†	-942.7	472.9	0.7253 ug/L	0.7253 ppb	17:13:40
2	Tl 190.801†	-26.4	13.1	3.8050 ug/L	3.8050 ppb	17:14:00
2	U 409.014†	-1732.0	-37.7	-1.0684 ug/L	-1.0684 ppb	17:13:35
2	V 292.402†	-1412.8	105.0	0.6952 ug/L	0.6952 ppb	17:13:40
2	Zn 213.857†	960.0	225.0	2.0256 ug/L	2.0256 ppb	17:14:00
2	SiO2†	46217.2	44375.6	2895.0 ug/L	2895.0 ppb	17:14:41
3	Sc Radial	5504.7	5504.7	103 %		17:12:38
3	Y RADIAL	5838.0	5838.0	103.4 %		17:12:38
3	Al 396.153Radial†	9.1	4.2	3.3276 ug/L	3.3276 ppb	17:12:38
3	Ca 317.933Radial†	41.0	19.0	31.490 ug/L	31.490 ppb	17:12:58
3	Fe 238.204 Radial†	11.6	-1.6	-13.670 ug/L	-13.670 ppb	17:12:58
3	K 766.490 Radial†	3394.8	609.9	128.93 ug/L	128.93 ppb	17:12:38
3	Mg 279.077 IEC†	3.9	1.1	37.414 ug/L	37.414 ppb	17:12:58
3	Na 589.592 Radial†	-632.0	487.0	130.86 ug/L	130.86 ppb	17:12:38
3	Sr 421.552†	90.3	75.8	0.4847 ug/L	0.4847 ppb	17:12:38
3	Sc 361.383	964223.7	964223.7	102.13 %		17:14:05
3	Y 371.029	813049.0	813049.0	101.97 %		17:14:05
3	Ag 328.068†	461.8	41.0	0.1786 ug/L	0.1786 ppb	17:14:10
3	As 188.979†	-13.8	6.1	2.4878 ug/L	2.4878 ppb	17:14:30
3	B 249.677†	529.5	1046.0	22.696 ug/L	22.696 ppb	17:14:10
3	Ba 233.527†	83.7	62.3	0.4560 ug/L	0.4560 ppb	17:14:30
3	Be 313.107†	-4408.7	213.9	0.0772 ug/L	0.0772 ppb	17:14:10
3	Cd 226.502†	-230.7	-9.0	-0.0949 ug/L	-0.0949 ppb	17:14:30
3	Co 228.616†	-72.4	2.5	0.0492 ug/L	0.0492 ppb	17:14:30
3	Cr 267.716†	117.9	35.4	0.3881 ug/L	0.3881 ppb	17:14:30
3	Cu 324.752†	6495.6	193.9	0.5655 ug/L	0.5655 ppb	17:14:10
3	Mn 257.610†	1452.1	966.2	1.0198 ug/L	1.0198 ppb	17:14:30
3	Mo 202.031†	28.8	9.4	0.6338 ug/L	0.6338 ppb	17:14:30
3	Ni 231.604†	118.5	15.5	0.3731 ug/L	0.3731 ppb	17:14:30
3	P 214.914†	250.5	10.7	6.0937 ug/L	6.0937 ppb	17:14:30
3	Pb 220.353†	-30.0	24.4	2.8666 ug/L	2.8666 ppb	17:14:30
3	S 181.975 Axial†	69.4	26.4	35.433 ug/L	35.433 ppb	17:14:30
3	Sb 206.836†	60.1	20.1	6.6534 ug/L	6.6534 ppb	17:14:30
3	Se 196.026†	-26.3	7.2	4.3492 ug/L	4.3492 ppb	17:14:30
3	Si 251.611†	46504.6	45039.3	1362.5 ug/L	1362.5 ppb	17:14:10
3	Sn 189.927†	14.5	6.7	1.1287 ug/L	1.1287 ppb	17:14:30
3	Ti 334.940†	-966.1	442.8	0.6721 ug/L	0.6721 ppb	17:14:10
3	Tl 190.801†	-35.9	3.6	1.0498 ug/L	1.0498 ppb	17:14:30
3	U 409.014†	-1754.0	-72.6	-2.0549 ug/L	-2.0549 ppb	17:14:05
3	V 292.402†	-1445.4	62.2	0.4159 ug/L	0.4159 ppb	17:14:10
3	Zn 213.857†	942.7	215.4	1.9391 ug/L	1.9391 ppb	17:14:30
3	SiO2†	46211.7	44724.7	2917.8 ug/L	2917.8 ppb	17:14:46

Mean Data: 244129001|940084|1

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc. Units			Conc. Units			
Sc 361.383	964069.5	102.11 %		0.831				0.81%
Sc Radial	5518.4	104 %		0.6				0.62%
Y 371.029	813220.4	101.99 %		0.762				0.75%
Y RADIAL	5828.4	103.3 %		0.65				0.63%
Ag 328.068†	14.4	0.0644 ug/L		0.11661	0.0644 ppb	0.11661	181.07%	
Al 396.153Radial†	4.5	3.5417 ug/L		1.35255	3.5417 ppb	1.35255	38.19%	
As 188.979†	4.4	1.8063 ug/L		1.40735	1.8063 ppb	1.40735	77.91%	
B 249.677†	1089.8	23.645 ug/L		1.1519	23.645 ppb	1.1519	4.87%	
Ba 233.527†	55.4	0.4058 ug/L		0.05099	0.4058 ppb	0.05099	12.56%	
Be 313.107†	206.6	0.0747 ug/L		0.01654	0.0747 ppb	0.01654	22.15%	
Ca 317.933Radial†	18.0	29.799 ug/L		1.5331	29.799 ppb	1.5331	5.14%	
Cd 226.502†	4.6	0.0491 ug/L		0.13466	0.0491 ppb	0.13466	274.43%	
Co 228.616†	1.3	0.0256 ug/L		0.06535	0.0256 ppb	0.06535	255.03%	
Cr 267.716†	31.4	0.3445 ug/L		0.10417	0.3445 ppb	0.10417	30.24%	
Cu 324.752†	224.1	0.6540 ug/L		0.12850	0.6540 ppb	0.12850	19.65%	
Fe 238.204 Radial†	-0.5	-3.9736 ug/L		10.74505	-3.9736 ppb	10.74505	270.41%	
K 766.490 Radial†	622.9	131.68 ug/L		16.421	131.68 ppb	16.421	12.47%	

Mg 279.077 IEC†	-0.0	-0.8110 ug/L	56.83249	-0.8110 ppb	56.83249	>999.9%
Mn 257.610†	957.3	1.0129 ug/L	0.01107	1.0129 ppb	0.01107	1.09%
Mo 202.031†	7.2	0.4868 ug/L	0.21536	0.4868 ppb	0.21536	44.24%
Na 589.592 Radial†	474.5	127.50 ug/L	3.720	127.50 ppb	3.720	2.92%
Ni 231.604†	6.6	0.1604 ug/L	0.23853	0.1604 ppb	0.23853	148.71%
P 214.914†	7.4	4.1281 ug/L	4.77457	4.1281 ppb	4.77457	115.66%
Pb 220.353†	14.1	1.6609 ug/L	1.07068	1.6609 ppb	1.07068	64.46%
S 181.975 Axial†	27.2	36.419 ug/L	4.1244	36.419 ppb	4.1244	11.32%
Sb 206.836†	11.8	3.9113 ug/L	2.57235	3.9113 ppb	2.57235	65.77%
Se 196.026†	4.2	2.5705 ug/L	3.02848	2.5705 ppb	3.02848	117.82%
Si 251.611†	44990.5	1361.0 ug/L	8.82	1361.0 ppb	8.82	0.65%
Sn 189.927†	0.7	0.1217 ug/L	0.91656	0.1217 ppb	0.91656	753.10%
Sr 421.552†	49.5	0.3166 ug/L	0.14832	0.3166 ppb	0.14832	46.85%
Ti 334.940†	460.2	0.7011 ug/L	0.02694	0.7011 ppb	0.02694	3.84%
Tl 190.801†	5.0	1.4545 ug/L	2.17655	1.4545 ppb	2.17655	149.64%
U 409.014†	-58.6	-1.6588 ug/L	0.52115	-1.6588 ppb	0.52115	31.42%
V 292.402†	60.5	0.4013 ug/L	0.30142	0.4013 ppb	0.30142	75.11%
Zn 213.857†	225.3	2.0287 ug/L	0.09123	2.0287 ppb	0.09123	4.50%
SiO2†	44861.6	2926.7 ug/L	37.00	2926.7 ppb	37.00	1.26%

Sequence No.: 7

Sample ID: 244129002|940084|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 41

Date Collected: 1/18/2010 17:16:56

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 244129002|940084|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5436.0	5436.0	102 %		17:18:49
1	Y RADIAL	5763.9	5763.9	102.1 %		17:18:49
1	Al 396.153Radial†	15.6	10.6	8.4513 ug/L	8.4513 ppb	17:18:49
1	Ca 317.933Radial†	36.7	15.4	25.465 ug/L	25.465 ppb	17:19:09
1	Fe 238.204 Radial†	14.9	1.8	15.330 ug/L	15.330 ppb	17:19:09
1	K 766.490 Radial†	3402.4	658.8	139.29 ug/L	139.29 ppb	17:18:49
1	Mg 279.077 IEC†	0.9	-1.7	-57.456 ug/L	-57.456 ppb	17:19:09
1	Na 589.592 Radial†	-784.8	329.6	88.551 ug/L	88.551 ppb	17:18:49
1	Sr 421.552†	39.0	26.6	0.1697 ug/L	0.1697 ppb	17:18:49
1	Sc 361.383	965022.6	965022.6	102.21 %		17:20:05
1	Y 371.029	814776.7	814776.7	102.18 %		17:20:05
1	Ag 328.068†	393.1	-26.6	-0.1114 ug/L	-0.1114 ppb	17:20:10
1	As 188.979†	-16.2	3.8	1.5357 ug/L	1.5357 ppb	17:20:30
1	B 249.677†	416.7	935.1	20.286 ug/L	20.286 ppb	17:20:10
1	Ba 233.527†	46.7	26.0	0.1924 ug/L	0.1924 ppb	17:20:30
1	Be 313.107†	-4373.0	252.3	0.0903 ug/L	0.0903 ppb	17:20:10
1	Cd 226.502†	-212.1	9.4	0.0996 ug/L	0.0996 ppb	17:20:30
1	Co 228.616†	-66.5	8.3	0.1632 ug/L	0.1632 ppb	17:20:30
1	Cr 267.716†	110.4	27.9	0.3058 ug/L	0.3058 ppb	17:20:30
1	Cu 324.752†	6378.8	74.4	0.2158 ug/L	0.2158 ppb	17:20:10
1	Mn 257.610†	660.1	190.3	0.2053 ug/L	0.2053 ppb	17:20:30
1	Mo 202.031†	32.4	12.9	0.8707 ug/L	0.8707 ppb	17:20:30
1	Ni 231.604†	125.3	22.0	0.5318 ug/L	0.5318 ppb	17:20:30
1	P 214.914†	244.2	4.4	2.4554 ug/L	2.4554 ppb	17:20:30
1	Pb 220.353†	-52.0	2.9	0.3387 ug/L	0.3387 ppb	17:20:30
1	S 181.975 Axial†	69.6	26.6	35.637 ug/L	35.637 ppb	17:20:30
1	Sb 206.836†	54.0	14.1	4.6701 ug/L	4.6701 ppb	17:20:30
1	Se 196.026†	-26.8	6.7	4.1712 ug/L	4.1712 ppb	17:20:30
1	Si 251.611†	44898.2	43429.9	1313.8 ug/L	1313.8 ppb	17:20:10
1	Sn 189.927†	4.7	-2.9	-0.4814 ug/L	-0.4814 ppb	17:20:30
1	Ti 334.940†	-1125.9	287.3	0.4412 ug/L	0.4412 ppb	17:20:10
1	Tl 190.801†	-40.3	-0.7	-0.1945 ug/L	-0.1945 ppb	17:20:30
1	U 409.014†	-1561.5	117.2	3.3160 ug/L	3.3160 ppb	17:20:05
1	V 292.402†	-1367.9	139.2	0.9300 ug/L	0.9300 ppb	17:20:10
1	Zn 213.857†	874.1	147.5	1.3235 ug/L	1.3235 ppb	17:20:30
1	SiO2†	45586.8	44075.8	2875.4 ug/L	2875.4 ppb	17:21:36
2	Sc Radial	5565.4	5565.4	104 %		17:19:14
2	Y RADIAL	5855.7	5855.7	103.7 %		17:19:14
2	Al 396.153Radial†	-7.3	-11.6	-9.3594 ug/L	-9.3594 ppb	17:19:14
2	Ca 317.933Radial†	31.3	9.4	15.463 ug/L	15.463 ppb	17:19:34
2	Fe 238.204 Radial†	12.0	-1.4	-11.926 ug/L	-11.926 ppb	17:19:34
2	K 766.490 Radial†	3411.5	590.0	124.75 ug/L	124.75 ppb	17:19:14
2	Mg 279.077 IEC†	-0.2	-2.8	-92.321 ug/L	-92.321 ppb	17:19:34
2	Na 589.592 Radial†	-760.4	370.8	99.631 ug/L	99.631 ppb	17:19:14
2	Sr 421.552†	30.9	17.9	0.1144 ug/L	0.1144 ppb	17:19:14
2	Sc 361.383	971646.0	971646.0	102.91 %		17:20:36
2	Y 371.029	819438.9	819438.9	102.77 %		17:20:36
2	Ag 328.068†	373.7	-48.1	-0.2141 ug/L	-0.2141 ppb	17:20:41
2	As 188.979†	-23.0	-2.8	-1.1391 ug/L	-1.1391 ppb	17:21:01
2	B 249.677†	483.5	997.3	21.640 ug/L	21.640 ppb	17:20:41
2	Ba 233.527†	37.6	16.9	0.1236 ug/L	0.1236 ppb	17:21:01
2	Be 313.107†	-4513.8	144.7	0.0523 ug/L	0.0523 ppb	17:20:41
2	Cd 226.502†	-208.5	14.3	0.1540 ug/L	0.1540 ppb	17:21:01
2	Co 228.616†	-87.9	-12.0	-0.2332 ug/L	-0.2332 ppb	17:21:01
2	Cr 267.716†	107.1	24.0	0.2632 ug/L	0.2632 ppb	17:21:01
2	Cu 324.752†	6439.2	90.5	0.2632 ug/L	0.2632 ppb	17:20:41
2	Mn 257.610†	687.1	212.0	0.2270 ug/L	0.2270 ppb	17:21:01
2	Mo 202.031†	34.6	14.8	0.9937 ug/L	0.9937 ppb	17:21:01
2	Ni 231.604†	129.7	25.5	0.6162 ug/L	0.6162 ppb	17:21:01

2	P 214.914†	235.6	-5.7	-3.3034 ug/L	-3.3034 ppb	17:21:01
2	Pb 220.353†	-50.5	4.7	0.5542 ug/L	0.5542 ppb	17:21:01
2	S 181.975 Axial†	72.8	29.3	39.229 ug/L	39.229 ppb	17:21:01
2	Sb 206.836†	46.1	6.0	2.0228 ug/L	2.0228 ppb	17:21:01
2	Se 196.026†	-21.1	12.4	7.5905 ug/L	7.5905 ppb	17:21:01
2	Si 251.611†	45543.0	43757.1	1323.7 ug/L	1323.7 ppb	17:20:41
2	Sn 189.927†	12.1	4.3	0.7180 ug/L	0.7180 ppb	17:21:01
2	Ti 334.940†	-1102.6	317.4	0.4900 ug/L	0.4900 ppb	17:20:41
2	Tl 190.801†	-41.6	-1.7	-0.4769 ug/L	-0.4769 ppb	17:21:01
2	U 409.014†	-1704.1	-11.0	-0.3099 ug/L	-0.3099 ppb	17:20:36
2	V 292.402†	-1473.9	45.3	0.3109 ug/L	0.3109 ppb	17:20:41
2	Zn 213.857†	867.5	135.3	1.2157 ug/L	1.2157 ppb	17:21:01
2	SiO2†	45693.8	43875.7	2862.4 ug/L	2862.4 ppb	17:21:41
3	Sc Radial	5500.8	5500.8	103 %		17:19:39
3	Y RADIAL	5822.6	5822.6	103.1 %		17:19:39
3	Al 396.153Radial†	37.8	31.9	25.559 ug/L	25.559 ppb	17:19:39
3	Ca 317.933Radial†	36.5	14.7	24.367 ug/L	24.367 ppb	17:19:59
3	Fe 238.204 Radial†	13.5	0.2	2.0443 ug/L	2.0443 ppb	17:19:59
3	K 766.490 Radial†	3402.2	619.3	130.96 ug/L	130.96 ppb	17:19:39
3	Mg 279.077 IEC†	3.1	0.3	10.904 ug/L	10.904 ppb	17:19:59
3	Na 589.592 Radial†	-836.2	288.9	77.623 ug/L	77.623 ppb	17:19:39
3	Sr 421.552†	19.1	6.9	0.0438 ug/L	0.0438 ppb	17:19:39
3	Sc 361.383	962164.5	962164.5	101.91 %		17:21:06
3	Y 371.029	811456.3	811456.3	101.77 %		17:21:06
3	Ag 328.068†	431.4	12.1	0.0591 ug/L	0.0591 ppb	17:21:11
3	As 188.979†	-16.0	3.8	1.5682 ug/L	1.5682 ppb	17:21:31
3	B 249.677†	472.6	991.3	21.507 ug/L	21.507 ppb	17:21:11
3	Ba 233.527†	34.6	14.2	0.1047 ug/L	0.1047 ppb	17:21:31
3	Be 313.107†	-4505.7	109.4	0.0400 ug/L	0.0400 ppb	17:21:11
3	Cd 226.502†	-204.4	16.3	0.1727 ug/L	0.1727 ppb	17:21:31
3	Co 228.616†	-78.3	-3.4	-0.0688 ug/L	-0.0688 ppb	17:21:31
3	Cr 267.716†	115.5	33.3	0.3670 ug/L	0.3670 ppb	17:21:31
3	Cu 324.752†	6518.7	230.1	0.6740 ug/L	0.6740 ppb	17:21:11
3	Mn 257.610†	681.5	213.2	0.2254 ug/L	0.2254 ppb	17:21:31
3	Mo 202.031†	17.7	-1.4	-0.0938 ug/L	-0.0938 ppb	17:21:31
3	Ni 231.604†	112.5	9.9	0.2382 ug/L	0.2382 ppb	17:21:31
3	P 214.914†	227.9	-11.0	-6.4344 ug/L	-6.4344 ppb	17:21:31
3	Pb 220.353†	-39.1	15.4	1.8167 ug/L	1.8167 ppb	17:21:31
3	S 181.975 Axial†	71.1	28.2	37.816 ug/L	37.816 ppb	17:21:31
3	Sb 206.836†	46.6	7.1	2.3404 ug/L	2.3404 ppb	17:21:31
3	Se 196.026†	-12.1	21.1	12.922 ug/L	12.922 ppb	17:21:31
3	Si 251.611†	45844.8	44489.3	1345.9 ug/L	1345.9 ppb	17:21:11
3	Sn 189.927†	13.8	6.1	1.0249 ug/L	1.0249 ppb	17:21:31
3	Ti 334.940†	-1045.8	362.5	0.5534 ug/L	0.5534 ppb	17:21:11
3	Tl 190.801†	-43.7	-4.1	-1.1832 ug/L	-1.1832 ppb	17:21:31
3	U 409.014†	-1881.0	-200.9	-5.6894 ug/L	-5.6894 ppb	17:21:06
3	V 292.402†	-1471.2	33.9	0.2098 ug/L	0.2098 ppb	17:21:11
3	Zn 213.857†	862.8	139.0	1.2495 ug/L	1.2495 ppb	17:21:31
3	SiO2†	45334.7	43960.9	2867.9 ug/L	2867.9 ppb	17:21:47

Mean Data: 244129002|940084|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	966277.7	102.34 %		0.515			0.50%
Sc Radial	5500.7	103 %		1.2			1.18%
Y 371.029	815224.0	102.24 %		0.503			0.49%
Y RADIAL	5814.1	103.0 %		0.82			0.80%
Ag 328.068†	-20.9	-0.0888 ug/L		0.13800	-0.0888 ppb	0.13800	155.40%
Al 396.153Radial†	10.3	8.2170 ug/L		17.46049	8.2170 ppb	17.46049	212.49%
As 188.979†	1.6	0.6549 ug/L		1.55379	0.6549 ppb	1.55379	237.24%
B 249.677†	974.6	21.144 ug/L		0.7460	21.144 ppb	0.7460	3.53%
Ba 233.527†	19.0	0.1402 ug/L		0.04617	0.1402 ppb	0.04617	32.92%
Be 313.107†	168.8	0.0608 ug/L		0.02622	0.0608 ppb	0.02622	43.09%
Ca 317.933Radial†	13.2	21.765 ug/L		5.4854	21.765 ppb	5.4854	25.20%
Cd 226.502†	13.3	0.1421 ug/L		0.03800	0.1421 ppb	0.03800	26.74%
Co 228.616†	-2.4	-0.0463 ug/L		0.19919	-0.0463 ppb	0.19919	430.51%
Cr 267.716†	28.4	0.3120 ug/L		0.05218	0.3120 ppb	0.05218	16.72%
Cu 324.752†	131.7	0.3843 ug/L		0.25198	0.3843 ppb	0.25198	65.57%
Fe 238.204 Radial†	0.2	1.8159 ug/L		13.62947	1.8159 ppb	13.62947	750.56%
K 766.490 Radial†	622.7	131.67 ug/L		7.296	131.67 ppb	7.296	5.54%

Mg 279.077 IEC†	-1.4	-46.291 ug/L	52.5105	-46.291 ppb	52.5105	113.43%
Mn 257.610†	205.2	0.2192 ug/L	0.01212	0.2192 ppb	0.01212	5.53%
Mo 202.031†	8.8	0.5902 ug/L	0.59551	0.5902 ppb	0.59551	100.90%
Na 589.592 Radial†	329.8	88.601 ug/L	11.0041	88.601 ppb	11.0041	12.42%
Ni 231.604†	19.2	0.4621 ug/L	0.19842	0.4621 ppb	0.19842	42.94%
P 214.914†	-4.1	-2.4275 ug/L	4.50916	-2.4275 ppb	4.50916	185.76%
Pb 220.353†	7.7	0.9032 ug/L	0.79845	0.9032 ppb	0.79845	88.40%
S 181.975 Axial†	28.0	37.561 ug/L	1.8094	37.561 ppb	1.8094	4.82%
Sb 206.836†	9.1	3.0111 ug/L	1.44547	3.0111 ppb	1.44547	48.00%
Se 196.026†	13.4	8.2279 ug/L	4.41006	8.2279 ppb	4.41006	53.60%
Si 251.611†	43892.1	1327.8 ug/L	16.42	1327.8 ppb	16.42	1.24%
Sn 189.927†	2.5	0.4205 ug/L	0.79599	0.4205 ppb	0.79599	189.29%
Sr 421.552†	17.1	0.1093 ug/L	0.06311	0.1093 ppb	0.06311	57.73%
Ti 334.940†	322.4	0.4948 ug/L	0.05622	0.4948 ppb	0.05622	11.36%
Tl 190.801†	-2.2	-0.6182 ug/L	0.50926	-0.6182 ppb	0.50926	82.38%
U 409.014†	-31.6	-0.8944 ug/L	4.53103	-0.8944 ppb	4.53103	506.58%
V 292.402†	72.8	0.4836 ug/L	0.38991	0.4836 ppb	0.38991	80.63%
Zn 213.857†	140.6	1.2629 ug/L	0.05516	1.2629 ppb	0.05516	4.37%
SiO2†	43970.8	2868.6 ug/L	6.55	2868.6 ppb	6.55	0.23%

Sequence No.: 8
 Sample ID: 244129003|940084|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 42
 Date Collected: 1/18/2010 17:23:57
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 244129003|940084|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5415.4	5415.4	102 %		17:25:50
1	Y RADIAL	5708.7	5708.7	101.1 %		17:25:50
1	Al 396.153Radial†	18.9	13.9	11.099 ug/L	11.099 ppb	17:25:50
1	Ca 317.933Radial†	38.5	17.3	28.537 ug/L	28.537 ppb	17:26:10
1	Fe 238.204 Radial†	12.1	-0.9	-7.7155 ug/L	-7.7155 ppb	17:26:10
1	K 766.490 Radial†	3458.9	727.0	153.72 ug/L	153.72 ppb	17:25:50
1	Mg 279.077 IEC†	1.5	-1.2	-38.442 ug/L	-38.442 ppb	17:26:10
1	Na 589.592 Radial†	-716.1	394.3	105.93 ug/L	105.93 ppb	17:25:50
1	Sr 421.552†	46.5	34.1	0.2182 ug/L	0.2182 ppb	17:25:50
1	Sc 361.383	964363.4	964363.4	102.14 %		17:27:06
1	Y 371.029	814474.0	814474.0	102.15 %		17:27:06
1	Ag 328.068†	323.2	-94.8	-0.4175 ug/L	-0.4175 ppb	17:27:11
1	As 188.979†	-12.3	7.6	3.0841 ug/L	3.0841 ppb	17:27:31
1	B 249.677†	380.6	900.1	19.530 ug/L	19.530 ppb	17:27:11
1	Ba 233.527†	186.1	162.5	1.1888 ug/L	1.1888 ppb	17:27:31
1	Be 313.107†	-4406.2	216.9	0.0786 ug/L	0.0786 ppb	17:27:11
1	Cd 226.502†	-232.9	-11.2	-0.1182 ug/L	-0.1182 ppb	17:27:31
1	Co 228.616†	-61.3	13.4	0.2616 ug/L	0.2616 ppb	17:27:31
1	Cr 267.716†	121.0	38.4	0.4210 ug/L	0.4210 ppb	17:27:31
1	Cu 324.752†	6606.0	301.0	0.8772 ug/L	0.8772 ppb	17:27:11
1	Mn 257.610†	2726.0	2213.3	2.3433 ug/L	2.3433 ppb	17:27:11
1	Mo 202.031†	29.5	10.1	0.6749 ug/L	0.6749 ppb	17:27:31
1	Ni 231.604†	117.4	14.4	0.3465 ug/L	0.3465 ppb	17:27:31
1	P 214.914†	237.4	-2.1	-1.3815 ug/L	-1.3815 ppb	17:27:31
1	Pb 220.353†	-37.3	17.2	2.0308 ug/L	2.0308 ppb	17:27:31
1	S 181.975 Axial†	70.6	27.6	37.043 ug/L	37.043 ppb	17:27:31
1	Sb 206.836†	37.1	-2.4	-0.7781 ug/L	-0.7781 ppb	17:27:31
1	Se 196.026†	-20.7	12.6	7.7056 ug/L	7.7056 ppb	17:27:31
1	Si 251.611†	44986.9	43546.8	1317.4 ug/L	1317.4 ppb	17:27:11
1	Sn 189.927†	1.8	-5.7	-0.9549 ug/L	-0.9549 ppb	17:27:31
1	Ti 334.940†	-873.2	533.9	0.8150 ug/L	0.8150 ppb	17:27:11
1	Tl 190.801†	-34.4	5.1	1.4813 ug/L	1.4813 ppb	17:27:31
1	U 409.014†	-1698.5	-17.9	-0.5078 ug/L	-0.5078 ppb	17:27:06
1	V 292.402†	-1444.1	63.7	0.4267 ug/L	0.4267 ppb	17:27:11
1	Zn 213.857†	842.3	117.0	1.0515 ug/L	1.0515 ppb	17:27:31
1	SiO2†	45088.9	43618.9	2845.6 ug/L	2845.6 ppb	17:28:38
2	Sc Radial	5457.5	5457.5	102 %		17:26:15
2	Y RADIAL	5769.0	5769.0	102.2 %		17:26:15
2	Al 396.153Radial†	23.7	18.5	14.812 ug/L	14.812 ppb	17:26:15
2	Ca 317.933Radial†	40.2	18.6	30.788 ug/L	30.788 ppb	17:26:35
2	Fe 238.204 Radial†	13.2	0.1	0.9018 ug/L	0.9018 ppb	17:26:35
2	K 766.490 Radial†	3417.0	659.9	139.52 ug/L	139.52 ppb	17:26:15
2	Mg 279.077 IEC†	3.8	1.0	33.944 ug/L	33.944 ppb	17:26:35
2	Na 589.592 Radial†	-668.9	445.8	119.78 ug/L	119.78 ppb	17:26:15
2	Sr 421.552†	64.4	51.2	0.3274 ug/L	0.3274 ppb	17:26:15
2	Sc 361.383	958527.6	958527.6	101.52 %		17:27:37
2	Y 371.029	808061.4	808061.4	101.34 %		17:27:37
2	Ag 328.068†	386.1	-30.9	-0.1352 ug/L	-0.1352 ppb	17:27:42
2	As 188.979†	-11.4	8.3	3.4019 ug/L	3.4019 ppb	17:28:02
2	B 249.677†	431.4	952.4	20.664 ug/L	20.664 ppb	17:27:42
2	Ba 233.527†	172.3	150.0	1.0977 ug/L	1.0977 ppb	17:28:02
2	Be 313.107†	-4500.4	97.9	0.0368 ug/L	0.0368 ppb	17:27:42
2	Cd 226.502†	-212.3	7.7	0.0825 ug/L	0.0825 ppb	17:28:02
2	Co 228.616†	-83.7	-9.0	-0.1769 ug/L	-0.1769 ppb	17:28:02
2	Cr 267.716†	130.0	48.0	0.5251 ug/L	0.5251 ppb	17:28:02
2	Cu 324.752†	6563.3	298.3	0.8689 ug/L	0.8689 ppb	17:27:42
2	Mn 257.610†	2731.7	2235.1	2.3643 ug/L	2.3643 ppb	17:27:42
2	Mo 202.031†	22.3	3.2	0.2123 ug/L	0.2123 ppb	17:28:02
2	Ni 231.604†	107.4	5.2	0.1264 ug/L	0.1264 ppb	17:28:02

2	P 214.914†	241.1	3.0	1.5260 ug/L	1.5260 ppb	17:28:02
2	Pb 220.353†	-46.0	8.5	0.9975 ug/L	0.9975 ppb	17:28:02
2	S 181.975 Axial†	67.9	25.4	34.069 ug/L	34.069 ppb	17:28:02
2	Sb 206.836†	49.3	9.9	3.2567 ug/L	3.2567 ppb	17:28:02
2	Se 196.026†	-18.6	14.5	8.9195 ug/L	8.9195 ppb	17:28:02
2	Si 251.611†	44605.5	43439.3	1314.1 ug/L	1314.1 ppb	17:27:42
2	Sn 189.927†	5.1	-2.5	-0.4135 ug/L	-0.4135 ppb	17:28:02
2	Ti 334.940†	-779.0	621.5	0.9411 ug/L	0.9411 ppb	17:27:42
2	Tl 190.801†	-35.4	3.8	1.1283 ug/L	1.1283 ppb	17:28:02
2	U 409.014†	-1630.8	38.5	1.0900 ug/L	1.0900 ppb	17:27:37
2	V 292.402†	-1435.9	63.1	0.4196 ug/L	0.4196 ppb	17:27:42
2	Zn 213.857†	856.3	135.7	1.2208 ug/L	1.2208 ppb	17:28:02
2	SiO2†	44306.5	43116.9	2812.9 ug/L	2812.9 ppb	17:28:43
3	Sc Radial	5479.9	5479.9	103 %		17:26:40
3	Y RADIAL	5797.8	5797.8	102.7 %		17:26:40
3	Al 396.153Radial†	31.2	25.7	20.538 ug/L	20.538 ppb	17:26:40
3	Ca 317.933Radial†	44.5	22.6	37.434 ug/L	37.434 ppb	17:27:00
3	Fe 238.204 Radial†	14.0	0.8	6.6818 ug/L	6.6818 ppb	17:27:00
3	K 766.490 Radial†	3312.4	544.6	115.14 ug/L	115.14 ppb	17:26:40
3	Mg 279.077 IEC†	1.7	-1.0	-32.515 ug/L	-32.515 ppb	17:27:00
3	Na 589.592 Radial†	-702.6	415.7	111.69 ug/L	111.69 ppb	17:26:40
3	Sr 421.552†	12.0	-0.0	-0.0004 ug/L	-0.0004 ppb	17:26:40
3	Sc 361.383	961796.5	961796.5	101.87 %		17:28:07
3	Y 371.029	810941.8	810941.8	101.70 %		17:28:07
3	Ag 328.068†	362.9	-54.9	-0.2378 ug/L	-0.2378 ppb	17:28:12
3	As 188.979†	-18.1	1.8	0.7453 ug/L	0.7453 ppb	17:28:32
3	B 249.677†	358.4	879.3	19.077 ug/L	19.077 ppb	17:28:12
3	Ba 233.527†	177.4	154.4	1.1303 ug/L	1.1303 ppb	17:28:32
3	Be 313.107†	-4410.6	201.1	0.0732 ug/L	0.0732 ppb	17:28:12
3	Cd 226.502†	-218.2	2.6	0.0276 ug/L	0.0276 ppb	17:28:32
3	Co 228.616†	-67.7	6.9	0.1337 ug/L	0.1337 ppb	17:28:32
3	Cr 267.716†	106.0	24.0	0.2637 ug/L	0.2637 ppb	17:28:32
3	Cu 324.752†	6591.2	303.8	0.8858 ug/L	0.8858 ppb	17:28:12
3	Mn 257.610†	2708.7	2203.4	2.3341 ug/L	2.3341 ppb	17:28:12
3	Mo 202.031†	22.9	3.6	0.2453 ug/L	0.2453 ppb	17:28:32
3	Ni 231.604†	103.4	1.0	0.0237 ug/L	0.0237 ppb	17:28:32
3	P 214.914†	238.5	-0.4	-0.4113 ug/L	-0.4113 ppb	17:28:32
3	Pb 220.353†	-46.6	8.0	0.9463 ug/L	0.9463 ppb	17:28:32
3	S 181.975 Axial†	74.3	31.5	42.176 ug/L	42.176 ppb	17:28:32
3	Sb 206.836†	45.1	5.6	1.8464 ug/L	1.8464 ppb	17:28:32
3	Se 196.026†	-23.5	9.8	6.0523 ug/L	6.0523 ppb	17:28:32
3	Si 251.611†	44957.6	43635.5	1320.1 ug/L	1320.1 ppb	17:28:12
3	Sn 189.927†	12.7	5.0	0.8372 ug/L	0.8372 ppb	17:28:32
3	Ti 334.940†	-811.9	591.7	0.9030 ug/L	0.9030 ppb	17:28:12
3	Tl 190.801†	-39.3	0.2	0.0685 ug/L	0.0685 ppb	17:28:32
3	U 409.014†	-1670.8	4.8	0.1342 ug/L	0.1342 ppb	17:28:07
3	V 292.402†	-1423.4	80.2	0.5285 ug/L	0.5285 ppb	17:28:12
3	Zn 213.857†	843.5	120.3	1.0821 ug/L	1.0821 ppb	17:28:32
3	SiO2†	44848.9	43501.1	2837.9 ug/L	2837.9 ppb	17:28:48

Mean Data: 244129003|940084|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity		Units		Conc. Units		
Sc 361.383	961562.5	101.84	%	0.310			0.30%
Sc Radial	5450.9	102	%	0.6			0.60%
Y 371.029	811159.1	101.73	%	0.403			0.40%
Y RADIAL	5758.5	102.0	%	0.81			0.79%
Ag 328.068†	-60.2	-0.2635	ug/L	0.14287	-0.2635 ppb	0.14287	54.22%
Al 396.153Radial†	19.4	15.483	ug/L	4.7553	15.483 ppb	4.7553	30.71%
As 188.979†	5.9	2.4104	ug/L	1.45078	2.4104 ppb	1.45078	60.19%
B 249.677†	910.6	19.757	ug/L	0.8176	19.757 ppb	0.8176	4.14%
Ba 233.527†	155.6	1.1389	ug/L	0.04617	1.1389 ppb	0.04617	4.05%
Be 313.107†	172.0	0.0629	ug/L	0.02275	0.0629 ppb	0.02275	36.19%
Ca 317.933Radial†	19.5	32.253	ug/L	4.6259	32.253 ppb	4.6259	14.34%
Cd 226.502†	-0.3	-0.0027	ug/L	0.10370	-0.0027 ppb	0.10370	>999.9%
Co 228.616†	3.8	0.0728	ug/L	0.22553	0.0728 ppb	0.22553	309.81%
Cr 267.716†	36.8	0.4033	ug/L	0.13158	0.4033 ppb	0.13158	32.63%
Cu 324.752†	301.1	0.8773	ug/L	0.00842	0.8773 ppb	0.00842	0.96%
Fe 238.204 Radial†	-0.0	-0.0440	ug/L	7.24510	-0.0440 ppb	7.24510	>999.9%
K 766.490 Radial†	643.8	136.12	ug/L	19.515	136.12 ppb	19.515	14.34%

Mg 279.077 IEC†	-0.4	-12.338 ug/L	40.1904	-12.338 ppb	40.1904	325.75%
Mn 257.610†	2217.3	2.3472 ug/L	0.01551	2.3472 ppb	0.01551	0.66%
Mo 202.031†	5.6	0.3775 ug/L	0.25811	0.3775 ppb	0.25811	68.37%
Na 589.592 Radial†	418.6	112.47 ug/L	6.955	112.47 ppb	6.955	6.18%
Ni 231.604†	6.9	0.1655 ug/L	0.16494	0.1655 ppb	0.16494	99.64%
P 214.914†	0.1	-0.0889 ug/L	1.48032	-0.0889 ppb	1.48032	>999.9%
Pb 220.353†	11.2	1.3249 ug/L	0.61191	1.3249 ppb	0.61191	46.19%
S 181.975 Axial†	28.2	37.763 ug/L	4.1014	37.763 ppb	4.1014	10.86%
Sb 206.836†	4.4	1.4416 ug/L	2.04762	1.4416 ppb	2.04762	142.03%
Se 196.026†	12.3	7.5591 ug/L	1.43917	7.5591 ppb	1.43917	19.04%
Si 251.611†	43540.5	1317.2 ug/L	2.97	1317.2 ppb	2.97	0.23%
Sn 189.927†	-1.1	-0.1771 ug/L	0.91914	-0.1771 ppb	0.91914	519.13%
Sr 421.552†	28.4	0.1817 ug/L	0.16692	0.1817 ppb	0.16692	91.86%
Ti 334.940†	582.4	0.8863 ug/L	0.06469	0.8863 ppb	0.06469	7.30%
Tl 190.801†	3.0	0.8927 ug/L	0.73532	0.8927 ppb	0.73532	82.37%
U 409.014†	8.5	0.2388 ug/L	0.80401	0.2388 ppb	0.80401	336.74%
V 292.402†	69.0	0.4583 ug/L	0.06096	0.4583 ppb	0.06096	13.30%
Zn 213.857†	124.4	1.1181 ug/L	0.09021	1.1181 ppb	0.09021	8.07%
SiO2†	43412.3	2832.1 ug/L	17.12	2832.1 ppb	17.12	0.60%

Sequence No.: 12

Sample ID: 1202011710|940084|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 46

Date Collected: 1/18/2010 17:52:02

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202011710|940084|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	6199.1	6199.1	116 %		17:53:54
1	Y RADIAL	6571.2	6571.2	116.4 %		17:53:54
1	Al 396.153Radial†	353.1	298.8	239.15 ug/L	239.15 ppb	17:53:54
1	Ca 317.933Radial†	58.2	29.4	48.632 ug/L	48.632 ppb	17:54:14
1	Fe 238.204 Radial†	28.9	12.0	103.63 ug/L	103.63 ppb	17:54:14
1	K 766.490 Radial†	3501.5	333.6	70.461 ug/L	70.461 ppb	17:53:54
1	Mg 279.077 IEC†	2.1	-0.8	-27.265 ug/L	-27.265 ppb	17:54:14
1	Na 589.592 Radial†	-472.9	692.3	186.01 ug/L	186.01 ppb	17:53:54
1	Sr 421.552†	103.9	77.6	0.4963 ug/L	0.4963 ppb	17:53:54
1	Sc 361.383	967431.7	967431.7	102.47 %		17:55:11
1	Y 371.029	815251.2	815251.2	102.24 %		17:55:11
1	Ag 328.068†	356.1	-63.7	-0.2434 ug/L	-0.2434 ppb	17:55:16
1	As 188.979†	-28.0	-7.8	-3.0719 ug/L	-3.0719 ppb	17:55:36
1	B 249.677†	241.0	762.7	16.531 ug/L	16.531 ppb	17:55:16
1	Ba 233.527†	459.5	428.7	3.1393 ug/L	3.1393 ppb	17:55:36
1	Be 313.107†	-4420.6	216.5	0.0926 ug/L	0.0926 ppb	17:55:16
1	Cd 226.502†	-199.4	22.3	0.2277 ug/L	0.2277 ppb	17:55:36
1	Co 228.616†	-63.1	11.8	0.2143 ug/L	0.2143 ppb	17:55:36
1	Cr 267.716†	186.0	101.5	1.1134 ug/L	1.1134 ppb	17:55:36
1	Cu 324.752†	7158.1	819.4	2.3938 ug/L	2.3938 ppb	17:55:16
1	Mn 257.610†	5865.0	5268.3	5.5873 ug/L	5.5873 ppb	17:55:16
1	Mo 202.031†	11.2	-7.8	-0.5163 ug/L	-0.5163 ppb	17:55:36
1	Ni 231.604†	150.1	46.0	1.1086 ug/L	1.1086 ppb	17:55:36
1	P 214.914†	245.6	5.1	2.4558 ug/L	2.4558 ppb	17:55:36
1	Pb 220.353†	-54.9	0.2	0.0614 ug/L	0.0614 ppb	17:55:36
1	S 181.975 Axial†	77.0	33.6	44.997 ug/L	44.997 ppb	17:55:36
1	Sb 206.836†	39.7	0.1	-0.0116 ug/L	-0.0116 ppb	17:55:36
1	Se 196.026†	-33.2	0.5	0.7164 ug/L	0.7164 ppb	17:55:36
1	Si 251.611†	40849.4	39369.2	1191.0 ug/L	1191.0 ppb	17:55:16
1	Sn 189.927†	10.2	2.5	0.4279 ug/L	0.4279 ppb	17:55:36
1	Ti 334.940†	3354.7	4662.8	7.0643 ug/L	7.0643 ppb	17:55:16
1	Tl 190.801†	-40.8	-1.1	-0.2345 ug/L	-0.2345 ppb	17:55:36
1	U 409.014†	-1699.9	-14.0	-0.4120 ug/L	-0.4120 ppb	17:55:11
1	V 292.402†	-1385.5	125.4	0.7927 ug/L	0.7927 ppb	17:55:16
1	Zn 213.857†	1019.9	287.6	2.5710 ug/L	2.5710 ppb	17:55:36
1	SiO2†	40890.0	39381.0	2569.2 ug/L	2569.2 ppb	17:56:42
2	Sc Radial	5633.0	5633.0	106 %		17:54:19
2	Y RADIAL	5963.2	5963.2	105.6 %		17:54:19
2	Al 396.153Radial†	347.6	324.1	259.33 ug/L	259.33 ppb	17:54:19
2	Ca 317.933Radial†	57.9	34.2	56.477 ug/L	56.477 ppb	17:54:39
2	Fe 238.204 Radial†	34.9	20.2	174.41 ug/L	174.41 ppb	17:54:39
2	K 766.490 Radial†	3591.4	720.9	152.40 ug/L	152.40 ppb	17:54:19
2	Mg 279.077 IEC†	4.9	2.0	65.063 ug/L	65.063 ppb	17:54:39
2	Na 589.592 Radial†	-535.5	592.3	159.14 ug/L	159.14 ppb	17:54:19
2	Sr 421.552†	107.3	89.8	0.5742 ug/L	0.5742 ppb	17:54:19
2	Sc 361.383	970807.0	970807.0	102.82 %		17:55:41
2	Y 371.029	818752.3	818752.3	102.68 %		17:55:41
2	Ag 328.068†	397.0	-25.1	-0.0526 ug/L	-0.0526 ppb	17:55:46
2	As 188.979†	-25.8	-5.6	-2.1572 ug/L	-2.1572 ppb	17:56:07
2	B 249.677†	208.8	730.6	15.821 ug/L	15.821 ppb	17:55:46
2	Ba 233.527†	474.8	442.1	3.2391 ug/L	3.2391 ppb	17:56:07
2	Be 313.107†	-4496.1	158.1	0.0715 ug/L	0.0715 ppb	17:55:46
2	Cd 226.502†	-213.5	9.2	0.0808 ug/L	0.0808 ppb	17:56:07
2	Co 228.616†	-56.7	18.3	0.3399 ug/L	0.3399 ppb	17:56:07
2	Cr 267.716†	207.9	122.1	1.3402 ug/L	1.3402 ppb	17:56:07
2	Cu 324.752†	7178.9	815.3	2.3846 ug/L	2.3846 ppb	17:55:46
2	Mn 257.610†	5831.0	5215.3	5.5344 ug/L	5.5344 ppb	17:55:46
2	Mo 202.031†	14.7	-4.5	-0.2886 ug/L	-0.2886 ppb	17:56:07
2	Ni 231.604†	139.3	34.9	0.8419 ug/L	0.8419 ppb	17:56:07

2	P 214.914†	243.9	2.7	0.9824 ug/L	0.9824 ppb	17:56:07
2	Pb 220.353†	-51.2	4.0	0.5028 ug/L	0.5028 ppb	17:56:07
2	S 181.975 Axial†	69.8	26.4	35.342 ug/L	35.342 ppb	17:56:07
2	Sb 206.836†	35.4	-4.3	-1.4379 ug/L	-1.4379 ppb	17:56:07
2	Se 196.026†	-23.2	10.4	7.0104 ug/L	7.0104 ppb	17:56:07
2	Si 251.611†	40900.0	39279.7	1188.3 ug/L	1188.3 ppb	17:55:46
2	Sn 189.927†	6.1	-1.6	-0.2540 ug/L	-0.2540 ppb	17:56:07
2	Ti 334.940†	3242.1	4541.9	6.8741 ug/L	6.8741 ppb	17:55:46
2	Tl 190.801†	-34.1	5.6	1.7052 ug/L	1.7052 ppb	17:56:07
2	U 409.014†	-1645.1	45.0	1.2519 ug/L	1.2519 ppb	17:55:41
2	V 292.402†	-1404.0	112.1	0.7034 ug/L	0.7034 ppb	17:55:46
2	Zn 213.857†	1026.1	290.2	2.5892 ug/L	2.5892 ppb	17:56:07
2	SiO2†	40959.3	39309.6	2564.5 ug/L	2564.5 ppb	17:56:47
3	Sc Radial	5614.8	5614.8	105 %		17:54:45
3	Y RADIAL	5939.4	5939.4	105.2 %		17:54:45
3	Al 396.153Radial†	340.1	318.0	254.48 ug/L	254.48 ppb	17:54:45
3	Ca 317.933Radial†	58.0	34.4	56.930 ug/L	56.930 ppb	17:55:05
3	Fe 238.204 Radial†	28.2	14.0	120.57 ug/L	120.57 ppb	17:55:05
3	K 766.490 Radial†	3535.1	678.5	143.43 ug/L	143.43 ppb	17:54:45
3	Mg 279.077 IEC†	5.5	2.5	83.133 ug/L	83.133 ppb	17:55:05
3	Na 589.592 Radial†	-516.5	608.7	163.54 ug/L	163.54 ppb	17:54:45
3	Sr 421.552†	124.0	106.0	0.6777 ug/L	0.6777 ppb	17:54:45
3	Sc 361.383	955117.4	955117.4	101.16 %		17:56:12
3	Y 371.029	805147.9	805147.9	100.98 %		17:56:12
3	Ag 328.068†	492.3	75.4	0.3714 ug/L	0.3714 ppb	17:56:17
3	As 188.979†	-27.0	-7.1	-2.8090 ug/L	-2.8090 ppb	17:56:37
3	B 249.677†	154.0	679.7	14.727 ug/L	14.727 ppb	17:56:17
3	Ba 233.527†	477.9	452.7	3.3141 ug/L	3.3141 ppb	17:56:37
3	Be 313.107†	-4498.6	83.8	0.0453 ug/L	0.0453 ppb	17:56:17
3	Cd 226.502†	-199.1	20.1	0.2026 ug/L	0.2026 ppb	17:56:37
3	Co 228.616†	-61.5	12.6	0.2307 ug/L	0.2307 ppb	17:56:37
3	Cr 267.716†	202.7	120.3	1.3193 ug/L	1.3193 ppb	17:56:37
3	Cu 324.752†	7039.5	792.2	2.3151 ug/L	2.3151 ppb	17:56:17
3	Mn 257.610†	5823.8	5301.4	5.6194 ug/L	5.6194 ppb	17:56:17
3	Mo 202.031†	23.5	4.5	0.3090 ug/L	0.3090 ppb	17:56:37
3	Ni 231.604†	153.6	51.3	1.2385 ug/L	1.2385 ppb	17:56:37
3	P 214.914†	244.3	6.9	3.4946 ug/L	3.4946 ppb	17:56:37
3	Pb 220.353†	-35.5	18.7	2.2395 ug/L	2.2395 ppb	17:56:37
3	S 181.975 Axial†	81.0	38.5	51.594 ug/L	51.594 ppb	17:56:37
3	Sb 206.836†	36.9	-2.2	-0.7324 ug/L	-0.7324 ppb	17:56:37
3	Se 196.026†	-25.5	7.7	5.1668 ug/L	5.1668 ppb	17:56:37
3	Si 251.611†	40899.3	39932.5	1208.0 ug/L	1208.0 ppb	17:56:17
3	Sn 189.927†	10.3	2.7	0.4644 ug/L	0.4644 ppb	17:56:37
3	Ti 334.940†	3204.0	4556.0	6.8945 ug/L	6.8945 ppb	17:56:17
3	Tl 190.801†	-40.5	-1.3	-0.2975 ug/L	-0.2975 ppb	17:56:37
3	U 409.014†	-1659.4	4.6	0.1138 ug/L	0.1138 ppb	17:56:12
3	V 292.402†	-1436.2	57.8	0.3610 ug/L	0.3610 ppb	17:56:17
3	Zn 213.857†	1023.9	304.4	2.7201 ug/L	2.7201 ppb	17:56:37
3	SiO2†	40452.5	39463.0	2574.5 ug/L	2574.5 ppb	17:56:52

Mean Data: 1202011710|940084|1

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	964452.0	102.15 %	0.875			0.86%
Sc Radial	5815.6	109 %	6.2			5.71%
Y 371.029	813050.5	101.97 %	0.886			0.87%
Y RADIAL	6158.0	109.1 %	6.34			5.82%
Ag 328.068†	-4.4	0.0251 ug/L	0.31465	0.0251 ppb	0.31465	>999.9%
Al 396.153Radial†	313.6	250.99 ug/L	10.535	250.99 ppb	10.535	4.20%
As 188.979†	-6.8	-2.6794 ug/L	0.47091	-2.6794 ppb	0.47091	17.58%
B 249.677†	724.3	15.693 ug/L	0.9092	15.693 ppb	0.9092	5.79%
Ba 233.527†	441.2	3.2308 ug/L	0.08773	3.2308 ppb	0.08773	2.72%
Be 313.107†	152.8	0.0698 ug/L	0.02371	0.0698 ppb	0.02371	33.96%
Ca 317.933Radial†	32.7	54.013 ug/L	4.6657	54.013 ppb	4.6657	8.64%
Cd 226.502†	17.2	0.1703 ug/L	0.07858	0.1703 ppb	0.07858	46.13%
Co 228.616†	14.2	0.2616 ug/L	0.06825	0.2616 ppb	0.06825	26.09%
Cr 267.716†	114.6	1.2576 ug/L	0.12532	1.2576 ppb	0.12532	9.96%
Cu 324.752†	809.0	2.3645 ug/L	0.04299	2.3645 ppb	0.04299	1.82%
Fe 238.204 Radial†	15.4	132.87 ug/L	36.954	132.87 ppb	36.954	27.81%
K 766.490 Radial†	577.7	122.10 ug/L	44.943	122.10 ppb	44.943	36.81%

Mg 279.077 IEC†	1.2	40.310 ug/L	59.2155	40.310 ppb	59.2155	146.90%
Mn 257.610†	5261.7	5.5804 ug/L	0.04293	5.5804 ppb	0.04293	0.77%
Mo 202.031†	-2.6	-0.1653 ug/L	0.42624	-0.1653 ppb	0.42624	257.80%
Na 589.592 Radial†	631.1	169.56 ug/L	14.415	169.56 ppb	14.415	8.50%
Ni 231.604†	44.1	1.0630 ug/L	0.20221	1.0630 ppb	0.20221	19.02%
P 214.914†	4.9	2.3109 ug/L	1.26235	2.3109 ppb	1.26235	54.63%
Pb 220.353†	7.6	0.9345 ug/L	1.15145	0.9345 ppb	1.15145	123.21%
S 181.975 Axial†	32.8	43.978 ug/L	8.1736	43.978 ppb	8.1736	18.59%
Sb 206.836†	-2.1	-0.7273 ug/L	0.71318	-0.7273 ppb	0.71318	98.06%
Se 196.026†	6.2	4.2979 ug/L	3.23571	4.2979 ppb	3.23571	75.29%
Si 251.611†	39527.1	1195.8 ug/L	10.70	1195.8 ppb	10.70	0.89%
Sn 189.927†	1.2	0.2128 ug/L	0.40465	0.2128 ppb	0.40465	190.20%
Sr 421.552†	91.1	0.5827 ug/L	0.09099	0.5827 ppb	0.09099	15.61%
Ti 334.940†	4586.9	6.9443 ug/L	0.10446	6.9443 ppb	0.10446	1.50%
Tl 190.801†	1.1	0.3911 ug/L	1.13850	0.3911 ppb	1.13850	291.14%
U 409.014†	11.9	0.3179 ug/L	0.85053	0.3179 ppb	0.85053	267.57%
V 292.402†	98.5	0.6190 ug/L	0.22786	0.6190 ppb	0.22786	36.81%
Zn 213.857†	294.1	2.6268 ug/L	0.08131	2.6268 ppb	0.08131	3.10%
Sio2†	39384.5	2569.4 ug/L	5.00	2569.4 ppb	5.00	0.19%

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 1/18/2010 17:59:03

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5472.5	5472.5	103 %		18:00:55
1	Y RADIAL	5736.7	5736.7	101.6 %		18:00:55
1	Al 396.153Radial†	6495.0	6317.8	5031.7 ug/L	5031.7 ppb	18:00:55
1	Ca 317.933Radial†	3104.6	3001.5	4962.2 ug/L	4962.2 ppb	18:01:15
1	Fe 238.204 Radial†	607.6	578.6	5011.5 ug/L	5011.5 ppb	18:01:15
1	K 766.490 Radial†	26817.2	23429.6	4949.2 ug/L	4949.2 ppb	18:00:55
1	Mg 279.077 IEC†	161.2	154.3	5082.2 ug/L	5082.2 ppb	18:01:15
1	Na 589.592 Radial†	37334.6	37441.8	10060 ug/L	10060 ppb	18:00:55
1	Sr 421.552†	82135.2	79942.3	511.59 ug/L	511.59 ppb	18:00:55
1	Sc 361.383	946992.4	946992.4	100.30 %		18:02:13
1	Y 371.029	789478.9	789478.9	99.010 %		18:02:13
1	Ag 328.068†	114174.3	113420.3	501.80 ug/L	501.80 ppb	18:02:18
1	As 188.979†	1179.9	1196.0	490.66 ug/L	490.66 ppb	18:02:38
1	B 249.677†	22318.7	22779.2	491.99 ug/L	491.99 ppb	18:02:18
1	Ba 233.527†	68512.5	68287.2	500.50 ug/L	500.50 ppb	18:02:18
1	Be 313.107†	1416260.3	1416539.4	502.38 ug/L	502.38 ppb	18:02:13
1	Cd 226.502†	46565.2	46642.3	497.84 ug/L	497.84 ppb	18:02:18
1	Co 228.616†	25549.0	25545.7	498.55 ug/L	498.55 ppb	18:02:18
1	Cr 267.716†	45822.9	45605.3	499.59 ug/L	499.59 ppb	18:02:18
1	Cu 324.752†	177956.3	171255.6	499.10 ug/L	499.10 ppb	18:02:18
1	Mn 257.610†	476572.3	474686.0	502.69 ug/L	502.69 ppb	18:02:13
1	Mo 202.031†	7394.3	7353.3	494.28 ug/L	494.28 ppb	18:02:38
1	Ni 231.604†	20875.2	20712.0	499.42 ug/L	499.42 ppb	18:02:18
1	P 214.914†	4513.8	4265.7	2356.7 ug/L	2356.7 ppb	18:02:38
1	Pb 220.353†	4162.6	4203.9	495.79 ug/L	495.79 ppb	18:02:38
1	S 181.975 Axial†	773.7	729.8	977.42 ug/L	977.42 ppb	18:02:38
1	Sb 206.836†	1528.1	1484.8	506.89 ug/L	506.89 ppb	18:02:38
1	Se 196.026†	775.4	806.0	514.07 ug/L	514.07 ppb	18:02:38
1	Si 251.611†	83713.1	82964.6	2503.8 ug/L	2503.8 ppb	18:02:18
1	Sn 189.927†	2953.7	2937.3	492.50 ug/L	492.50 ppb	18:02:38
1	Ti 334.940†	323712.8	324129.7	490.33 ug/L	490.33 ppb	18:02:18
1	Tl 190.801†	1653.6	1687.4	491.02 ug/L	491.02 ppb	18:02:38
1	U 409.014†	16014.1	17610.9	497.02 ug/L	497.02 ppb	18:02:18
1	V 292.402†	74533.2	75787.0	504.85 ug/L	504.85 ppb	18:02:18
1	Zn 213.857†	56328.3	55451.6	495.24 ug/L	495.24 ppb	18:02:18
1	SiO2†	82703.9	81930.7	5331.6 ug/L	5331.6 ppb	18:03:45
2	Sc Radial	5400.3	5400.3	101 %		18:01:20
2	Y RADIAL	5694.2	5694.2	100.9 %		18:01:20
2	Al 396.153Radial†	6418.0	6326.5	5037.7 ug/L	5037.7 ppb	18:01:20
2	Ca 317.933Radial†	3068.1	3005.9	4969.4 ug/L	4969.4 ppb	18:01:40
2	Fe 238.204 Radial†	598.2	577.3	4999.8 ug/L	4999.8 ppb	18:01:40
2	K 766.490 Radial†	26559.5	23524.3	4969.3 ug/L	4969.3 ppb	18:01:20
2	Mg 279.077 IEC†	158.3	153.5	5057.1 ug/L	5057.1 ppb	18:01:40
2	Na 589.592 Radial†	36638.7	37241.2	10006 ug/L	10006 ppb	18:01:20
2	Sr 421.552†	80750.6	79645.2	509.69 ug/L	509.69 ppb	18:01:20
2	Sc 361.383	924336.4	924336.4	97.901 %		18:02:43
2	Y 371.029	771731.3	771731.3	96.785 %		18:02:43
2	Ag 328.068†	111781.7	113766.5	503.33 ug/L	503.33 ppb	18:02:49
2	As 188.979†	1215.9	1261.5	517.30 ug/L	517.30 ppb	18:03:09
2	B 249.677†	21676.0	22668.2	489.57 ug/L	489.57 ppb	18:02:49
2	Ba 233.527†	67295.2	68718.0	503.66 ug/L	503.66 ppb	18:02:49
2	Be 313.107†	1384943.8	1419160.7	503.31 ug/L	503.31 ppb	18:02:43
2	Cd 226.502†	45802.3	47000.9	501.67 ug/L	501.67 ppb	18:02:49
2	Co 228.616†	25129.1	25741.2	502.40 ug/L	502.40 ppb	18:02:49
2	Cr 267.716†	45086.5	45972.9	503.62 ug/L	503.62 ppb	18:02:49
2	Cu 324.752†	173734.8	171292.3	499.21 ug/L	499.21 ppb	18:02:49
2	Mn 257.610†	465343.7	474862.7	502.88 ug/L	502.88 ppb	18:02:43
2	Mo 202.031†	7475.6	7617.0	511.99 ug/L	511.99 ppb	18:03:09
2	Ni 231.604†	20620.4	20961.9	505.45 ug/L	505.45 ppb	18:02:49

2	P 214.914†	4546.0	4408.9	2439.3 ug/L	2439.3 ppb	18:03:09
2	Pb 220.353†	4210.1	4354.1	513.49 ug/L	513.49 ppb	18:03:09
2	S 181.975 Axial†	776.8	752.0	1007.1 ug/L	1007.1 ppb	18:03:09
2	Sb 206.836†	1535.9	1530.1	522.44 ug/L	522.44 ppb	18:03:09
2	Se 196.026†	778.7	828.3	527.77 ug/L	527.77 ppb	18:03:09
2	Si 251.611†	81840.8	83098.0	2507.6 ug/L	2507.6 ppb	18:02:49
2	Sn 189.927†	2980.9	3037.4	509.25 ug/L	509.25 ppb	18:03:09
2	Ti 334.940†	317528.7	325723.7	492.74 ug/L	492.74 ppb	18:02:49
2	Tl 190.801†	1680.0	1754.8	510.50 ug/L	510.50 ppb	18:03:09
2	U 409.014†	15721.2	17703.1	499.63 ug/L	499.63 ppb	18:02:49
2	V 292.402†	73322.1	76371.3	508.94 ug/L	508.94 ppb	18:02:49
2	Zn 213.857†	55331.1	55809.4	498.43 ug/L	498.43 ppb	18:02:49
2	SiO2†	84007.4	85283.1	5549.8 ug/L	5549.8 ppb	18:03:50
3	Sc Radial	5402.4	5402.4	101 %		18:01:45
3	Y RADIAL	5649.9	5649.9	100.1 %		18:01:45
3	Al 396.153Radial†	6385.8	6292.2	5010.9 ug/L	5010.9 ppb	18:01:45
3	Ca 317.933Radial†	3067.3	3004.0	4966.3 ug/L	4966.3 ppb	18:02:05
3	Fe 238.204 Radial†	599.6	578.4	5009.8 ug/L	5009.8 ppb	18:02:05
3	K 766.490 Radial†	26461.7	23417.6	4946.7 ug/L	4946.7 ppb	18:01:45
3	Mg 279.077 IEC†	158.9	154.0	5073.7 ug/L	5073.7 ppb	18:02:05
3	Na 589.592 Radial†	36524.7	37114.6	9972.2 ug/L	9972.2 ppb	18:01:45
3	Sr 421.552†	80413.1	79281.3	507.36 ug/L	507.36 ppb	18:01:45
3	Sc 361.383	938850.0	938850.0	99.439 %		18:03:14
3	Y 371.029	782076.2	782076.2	98.082 %		18:03:14
3	Ag 328.068†	114604.4	114840.1	508.06 ug/L	508.06 ppb	18:03:20
3	As 188.979†	1210.7	1237.1	507.45 ug/L	507.45 ppb	18:03:40
3	B 249.677†	22430.7	23084.8	498.60 ug/L	498.60 ppb	18:03:20
3	Ba 233.527†	68953.6	69323.2	508.09 ug/L	508.09 ppb	18:03:20
3	Be 313.107†	1402797.0	1415245.9	501.94 ug/L	501.94 ppb	18:03:14
3	Cd 226.502†	47072.7	47555.2	507.59 ug/L	507.59 ppb	18:03:20
3	Co 228.616†	25758.6	25977.4	506.97 ug/L	506.97 ppb	18:03:20
3	Cr 267.716†	46185.4	46366.1	507.92 ug/L	507.92 ppb	18:03:20
3	Cu 324.752†	178459.2	173300.0	505.05 ug/L	505.05 ppb	18:03:20
3	Mn 257.610†	473240.9	475456.6	503.50 ug/L	503.50 ppb	18:03:14
3	Mo 202.031†	7419.0	7442.1	500.24 ug/L	500.24 ppb	18:03:40
3	Ni 231.604†	21073.0	21091.4	508.57 ug/L	508.57 ppb	18:03:20
3	P 214.914†	4528.5	4319.5	2386.6 ug/L	2386.6 ppb	18:03:40
3	Pb 220.353†	4190.9	4268.3	503.37 ug/L	503.37 ppb	18:03:40
3	S 181.975 Axial†	783.4	746.3	999.51 ug/L	999.51 ppb	18:03:40
3	Sb 206.836†	1534.6	1504.5	513.60 ug/L	513.60 ppb	18:03:40
3	Se 196.026†	772.8	810.1	516.61 ug/L	516.61 ppb	18:03:40
3	Si 251.611†	84176.3	84154.3	2539.7 ug/L	2539.7 ppb	18:03:20
3	Sn 189.927†	2966.0	2975.2	498.85 ug/L	498.85 ppb	18:03:40
3	Ti 334.940†	325873.7	329101.9	497.85 ug/L	497.85 ppb	18:03:20
3	Tl 190.801†	1668.4	1716.5	499.46 ug/L	499.46 ppb	18:03:40
3	U 409.014†	16169.7	17905.8	505.36 ug/L	505.36 ppb	18:03:20
3	V 292.402†	74976.2	76876.9	512.10 ug/L	512.10 ppb	18:03:20
3	Zn 213.857†	56830.1	56443.2	504.11 ug/L	504.11 ppb	18:03:20
3	SiO2†	84390.7	84342.1	5488.7 ug/L	5488.7 ppb	18:03:55

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	936726.3	99.214 %	1.2155			1.23%
Sc Radial	5425.0	102 %	0.8			0.76%
Y 371.029	781095.5	97.959 %	1.1180			1.14%
Y RADIAL	5693.6	100.9 %	0.77			0.76%
Ag 328.068†	114009.0	504.40 ug/L	3.265	504.40 ppb	3.265	0.65%
QC value within limits for Ag 328.068 Recovery = 100.88%						
Al 396.153Radial†	6312.2	5026.7 ug/L	14.09	5026.7 ppb	14.09	0.28%
QC value within limits for Al 396.153Radial Recovery = 100.53%						
As 188.979†	1231.5	505.13 ug/L	13.469	505.13 ppb	13.469	2.67%
QC value within limits for As 188.979 Recovery = 101.03%						
B 249.677†	22844.0	493.39 ug/L	4.672	493.39 ppb	4.672	0.95%
QC value within limits for B 249.677 Recovery = 98.68%						
Ba 233.527†	68776.1	504.08 ug/L	3.813	504.08 ppb	3.813	0.76%
QC value within limits for Ba 233.527 Recovery = 100.82%						
Be 313.107†	1416982.0	502.55 ug/L	0.701	502.55 ppb	0.701	0.14%
QC value within limits for Be 313.107 Recovery = 100.51%						
Ca 317.933Radial†	3003.8	4966.0 ug/L	3.64	4966.0 ppb	3.64	0.07%

QC value within limits for Ca 317.933 Radial Recovery = 99.32%							
Cd 226.502†	47066.2	502.37 ug/L	4.914	502.37 ppb	4.914	0.98%	
QC value within limits for Cd 226.502 Recovery = 100.47%							
Co 228.616†	25754.8	502.64 ug/L	4.216	502.64 ppb	4.216	0.84%	
QC value within limits for Co 228.616 Recovery = 100.53%							
Cr 267.716†	45981.4	503.71 ug/L	4.166	503.71 ppb	4.166	0.83%	
QC value within limits for Cr 267.716 Recovery = 100.74%							
Cu 324.752†	171949.3	501.12 ug/L	3.407	501.12 ppb	3.407	0.68%	
QC value within limits for Cu 324.752 Recovery = 100.22%							
Fe 238.204 Radial†	578.1	5007.0 ug/L	6.32	5007.0 ppb	6.32	0.13%	
QC value within limits for Fe 238.204 Radial Recovery = 100.14%							
K 766.490 Radial†	23457.2	4955.1 ug/L	12.36	4955.1 ppb	12.36	0.25%	
QC value within limits for K 766.490 Radial Recovery = 99.10%							
Mg 279.077 IEC†	153.9	5071.0 ug/L	12.75	5071.0 ppb	12.75	0.25%	
QC value within limits for Mg 279.077 IEC Recovery = 101.42%							
Mn 257.610†	475001.8	503.02 ug/L	0.427	503.02 ppb	0.427	0.08%	
QC value within limits for Mn 257.610 Recovery = 100.60%							
Mo 202.031†	7470.8	502.17 ug/L	9.012	502.17 ppb	9.012	1.79%	
QC value within limits for Mo 202.031 Recovery = 100.43%							
Na 589.592 Radial†	37265.9	10013 ug/L	44.3	10013 ppb	44.3	0.44%	
QC value within limits for Na 589.592 Radial Recovery = 100.13%							
Ni 231.604†	20921.8	504.48 ug/L	4.651	504.48 ppb	4.651	0.92%	
QC value within limits for Ni 231.604 Recovery = 100.90%							
P 214.914†	4331.4	2394.2 ug/L	41.80	2394.2 ppb	41.80	1.75%	
QC value within limits for P 214.914 Recovery = 95.77%							
Pb 220.353†	4275.4	504.22 ug/L	8.881	504.22 ppb	8.881	1.76%	
QC value within limits for Pb 220.353 Recovery = 100.84%							
S 181.975 Axial†	742.7	994.68 ug/L	15.415	994.68 ppb	15.415	1.55%	
QC value within limits for S 181.975 Axial Recovery = 99.47%							
Sb 206.836†	1506.5	514.31 ug/L	7.798	514.31 ppb	7.798	1.52%	
QC value within limits for Sb 206.836 Recovery = 102.86%							
Se 196.026†	814.8	519.49 ug/L	7.288	519.49 ppb	7.288	1.40%	
QC value within limits for Se 196.026 Recovery = 103.90%							
Si 251.611†	83405.6	2517.0 ug/L	19.73	2517.0 ppb	19.73	0.78%	
QC value within limits for Si 251.611 Recovery = 100.68%							
Sn 189.927†	2983.3	500.20 ug/L	8.456	500.20 ppb	8.456	1.69%	
QC value within limits for Sn 189.927 Recovery = 100.04%							
Sr 421.552†	79622.9	509.55 ug/L	2.119	509.55 ppb	2.119	0.42%	
QC value within limits for Sr 421.552 Recovery = 101.91%							
Ti 334.940†	326318.4	493.64 ug/L	3.839	493.64 ppb	3.839	0.78%	
QC value within limits for Ti 334.940 Recovery = 98.73%							
Tl 190.801†	1719.6	500.33 ug/L	9.771	500.33 ppb	9.771	1.95%	
QC value within limits for Tl 190.801 Recovery = 100.07%							
U 409.014†	17740.0	500.67 ug/L	4.264	500.67 ppb	4.264	0.85%	
QC value within limits for U 409.014 Recovery = 100.13%							
V 292.402†	76345.1	508.63 ug/L	3.637	508.63 ppb	3.637	0.72%	
QC value within limits for V 292.402 Recovery = 101.73%							
Zn 213.857†	55901.4	499.26 ug/L	4.492	499.26 ppb	4.492	0.90%	
QC value within limits for Zn 213.857 Recovery = 99.85%							
Sio2†	83852.0	5456.7 ug/L	112.58	5456.7 ppb	112.58	2.06%	
QC value within limits for SiO2 Recovery = 102.04%							
All analyte(s) passed QC.							

Sequence No.: 14

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Data Collected: 1/18/2010 18:06:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5314.7	5314.7	99.8 %		18:07:57
1	Y RADIAL	5681.3	5681.3	100.6 %		18:07:57
1	Al 396.153Radial†	-20.7	-25.3	-20.301 ug/L	-20.301 ppb	18:07:57
1	Ca 317.933Radial†	15.0	-5.6	-9.2087 ug/L	-9.2087 ppb	18:08:17
1	Fe 238.204 Radial†	11.1	-1.7	-14.710 ug/L	-14.710 ppb	18:08:17
1	K 766.490 Radial†	2686.0	16.8	3.5565 ug/L	3.5565 ppb	18:07:57
1	Mg 279.077 IEC†	2.5	-0.2	-5.3752 ug/L	-5.3752 ppb	18:08:17
1	Na 589.592 Radial†	-1185.2	-89.3	-23.989 ug/L	-23.989 ppb	18:07:57
1	Sr 421.552†	19.2	7.6	0.0485 ug/L	0.0485 ppb	18:07:57
1	Sc 361.383	888078.6	888078.6	94.061 %		18:09:14
1	Y 371.029	781161.9	781161.9	97.967 %		18:09:14
1	Ag 328.068†	423.7	39.2	0.1801 ug/L	0.1801 ppb	18:09:14
1	As 188.979†	-26.7	-8.8	-3.5882 ug/L	-3.5882 ppb	18:09:34
1	B 249.677†	-398.9	103.4	2.2473 ug/L	2.2473 ppb	18:09:34
1	Ba 233.527†	7.2	-12.1	-0.0891 ug/L	-0.0891 ppb	18:09:34
1	Be 313.107†	-4334.2	-77.1	-0.0276 ug/L	-0.0276 ppb	18:09:14
1	Cd 226.502†	-205.4	-1.5	-0.0168 ug/L	-0.0168 ppb	18:09:34
1	Co 228.616†	-78.4	-9.9	-0.1924 ug/L	-0.1924 ppb	18:09:34
1	Cr 267.716†	117.5	44.8	0.4963 ug/L	0.4963 ppb	18:09:34
1	Cu 324.752†	6030.5	244.7	0.7212 ug/L	0.7212 ppb	18:09:14
1	Mn 257.610†	451.2	24.1	0.0242 ug/L	0.0242 ppb	18:09:34
1	Mo 202.031†	24.2	7.0	0.4664 ug/L	0.4664 ppb	18:09:34
1	Ni 231.604†	112.7	19.3	0.4661 ug/L	0.4661 ppb	18:09:34
1	P 214.914†	233.9	14.1	7.9683 ug/L	7.9683 ppb	18:09:34
1	Pb 220.353†	-66.6	-17.1	-2.0114 ug/L	-2.0114 ppb	18:09:34
1	S 181.975 Axial†	43.1	4.3	5.7317 ug/L	5.7317 ppb	18:09:34
1	Sb 206.836†	34.2	-2.4	-0.7507 ug/L	-0.7507 ppb	18:09:34
1	Se 196.026†	-20.6	11.0	6.7075 ug/L	6.7075 ppb	18:09:34
1	Si 251.611†	526.2	62.3	1.8779 ug/L	1.8779 ppb	18:09:34
1	Sn 189.927†	13.6	7.0	1.1631 ug/L	1.1631 ppb	18:09:34
1	Ti 334.940†	-1386.8	-85.6	-0.1236 ug/L	-0.1236 ppb	18:09:14
1	Tl 190.801†	-45.5	-9.6	-2.7853 ug/L	-2.7853 ppb	18:09:34
1	U 409.014†	-2071.0	-556.9	-15.769 ug/L	-15.769 ppb	18:09:14
1	V 292.402†	-1408.0	-19.3	-0.1488 ug/L	-0.1488 ppb	18:09:14
1	Zn 213.857†	742.4	81.6	0.7327 ug/L	0.7327 ppb	18:09:34
1	SiO2†	520.5	28.4	1.8413 ug/L	1.8413 ppb	18:10:30
2	Sc Radial	5438.6	5438.6	102 %		18:08:22
2	Y RADIAL	5755.1	5755.1	102.0 %		18:08:22
2	Al 396.153Radial†	6.3	1.5	1.1800 ug/L	1.1800 ppb	18:08:22
2	Ca 317.933Radial†	18.5	-2.4	-4.0275 ug/L	-4.0275 ppb	18:08:42
2	Fe 238.204 Radial†	12.4	-0.7	-6.1460 ug/L	-6.1460 ppb	18:08:42
2	K 766.490 Radial†	2892.1	157.3	33.283 ug/L	33.283 ppb	18:08:22
2	Mg 279.077 IEC†	-2.6	-5.1	-169.61 ug/L	-169.61 ppb	18:08:42
2	Na 589.592 Radial†	-1148.5	-26.3	-7.0590 ug/L	-7.0590 ppb	18:08:22
2	Sr 421.552†	40.4	27.9	0.1784 ug/L	0.1784 ppb	18:08:22
2	Sc 361.383	890577.0	890577.0	94.326 %		18:09:39
2	Y 371.029	784621.5	784621.5	98.401 %		18:09:39
2	Ag 328.068†	427.0	41.4	0.1892 ug/L	0.1892 ppb	18:09:39
2	As 188.979†	-25.9	-7.9	-3.2000 ug/L	-3.2000 ppb	18:09:59
2	B 249.677†	-438.7	62.4	1.3543 ug/L	1.3543 ppb	18:09:59
2	Ba 233.527†	2.8	-16.7	-0.1226 ug/L	-0.1226 ppb	18:09:59
2	Be 313.107†	-4322.4	-51.6	-0.0183 ug/L	-0.0183 ppb	18:09:39
2	Cd 226.502†	-187.9	17.7	0.1871 ug/L	0.1871 ppb	18:09:59
2	Co 228.616†	-74.5	-5.5	-0.1064 ug/L	-0.1064 ppb	18:09:59
2	Cr 267.716†	88.5	13.7	0.1547 ug/L	0.1547 ppb	18:09:59
2	Cu 324.752†	6058.6	256.6	0.7538 ug/L	0.7538 ppb	18:09:39
2	Mn 257.610†	445.8	17.0	0.0244 ug/L	0.0244 ppb	18:09:59
2	Mo 202.031†	29.0	11.9	0.7999 ug/L	0.7999 ppb	18:09:59
2	Ni 231.604†	102.0	7.6	0.1834 ug/L	0.1834 ppb	18:09:59

2	P 214.914†	223.5	2.4	1.2483 ug/L	1.2483 ppb	18:09:59
2	Pb 220.353†	-50.9	-0.2	-0.0195 ug/L	-0.0195 ppb	18:09:59
2	S 181.975 Axial†	36.1	-3.3	-4.3952 ug/L	-4.3952 ppb	18:09:59
2	Sb 206.836†	45.8	9.9	3.3032 ug/L	3.3032 ppb	18:09:59
2	Se 196.026†	-25.2	6.1	3.7509 ug/L	3.7509 ppb	18:09:59
2	Si 251.611†	549.1	85.0	2.5627 ug/L	2.5627 ppb	18:09:59
2	Sn 189.927†	17.9	11.5	1.9247 ug/L	1.9247 ppb	18:09:59
2	Ti 334.940†	-1309.6	0.5	0.0191 ug/L	0.0191 ppb	18:09:39
2	Tl 190.801†	-40.0	-3.7	-1.0573 ug/L	-1.0573 ppb	18:09:59
2	U 409.014†	-1938.5	-410.2	-11.617 ug/L	-11.617 ppb	18:09:39
2	V 292.402†	-1413.4	-20.8	-0.1503 ug/L	-0.1503 ppb	18:09:39
2	Zn 213.857†	726.6	62.6	0.5626 ug/L	0.5626 ppb	18:09:59
2	SiO2†	530.0	36.9	2.3873 ug/L	2.3873 ppb	18:10:35
3	Sc Radial	5483.7	5483.7	103 %		18:08:47
3	Y RADIAL	5831.6	5831.6	103.3 %		18:08:47
3	Al 396.153Radial†	-26.0	-29.9	-23.922 ug/L	-23.922 ppb	18:08:47
3	Ca 317.933Radial†	23.9	2.6	4.3619 ug/L	4.3619 ppb	18:09:07
3	Fe 238.204 Radial†	12.6	-0.6	-5.2637 ug/L	-5.2637 ppb	18:09:07
3	K 766.490 Radial†	2840.6	84.1	17.790 ug/L	17.790 ppb	18:08:47
3	Mg 279.077 IEC†	4.6	1.8	59.911 ug/L	59.911 ppb	18:09:07
3	Na 589.592 Radial†	-1216.2	-82.7	-22.233 ug/L	-22.233 ppb	18:08:47
3	Sr 421.552†	13.2	1.2	0.0076 ug/L	0.0076 ppb	18:08:47
3	Sc 361.383	896154.0	896154.0	94.917 %		18:10:04
3	Y 371.029	790818.6	790818.6	99.178 %		18:10:04
3	Ag 328.068†	295.6	-99.8	-0.4334 ug/L	-0.4334 ppb	18:10:04
3	As 188.979†	-23.2	-4.9	-1.9797 ug/L	-1.9797 ppb	18:10:24
3	B 249.677†	-419.3	85.7	1.8617 ug/L	1.8617 ppb	18:10:24
3	Ba 233.527†	13.0	-6.0	-0.0441 ug/L	-0.0441 ppb	18:10:24
3	Be 313.107†	-4458.1	-166.1	-0.0588 ug/L	-0.0588 ppb	18:10:04
3	Cd 226.502†	-218.4	-13.2	-0.1428 ug/L	-0.1428 ppb	18:10:24
3	Co 228.616†	-79.3	-10.1	-0.1967 ug/L	-0.1967 ppb	18:10:24
3	Cr 267.716†	85.2	9.7	0.1097 ug/L	0.1097 ppb	18:10:24
3	Cu 324.752†	6123.3	284.8	0.8346 ug/L	0.8346 ppb	18:10:04
3	Mn 257.610†	458.0	27.0	0.0256 ug/L	0.0256 ppb	18:10:24
3	Mo 202.031†	21.8	4.1	0.2780 ug/L	0.2780 ppb	18:10:24
3	Ni 231.604†	85.7	-10.3	-0.2481 ug/L	-0.2481 ppb	18:10:24
3	P 214.914†	223.5	0.9	0.3420 ug/L	0.3420 ppb	18:10:24
3	Pb 220.353†	-40.9	10.6	1.2470 ug/L	1.2470 ppb	18:10:24
3	S 181.975 Axial†	34.0	-5.7	-7.6040 ug/L	-7.6040 ppb	18:10:24
3	Sb 206.836†	41.1	4.6	1.5353 ug/L	1.5353 ppb	18:10:24
3	Se 196.026†	-22.5	9.2	5.6084 ug/L	5.6084 ppb	18:10:24
3	Si 251.611†	536.5	68.0	2.0552 ug/L	2.0552 ppb	18:10:24
3	Sn 189.927†	8.9	1.9	0.3260 ug/L	0.3260 ppb	18:10:24
3	Ti 334.940†	-1322.0	-4.0	-0.0066 ug/L	-0.0066 ppb	18:10:04
3	Tl 190.801†	-31.5	5.6	1.6118 ug/L	1.6118 ppb	18:10:24
3	U 409.014†	-1853.8	-308.2	-8.7276 ug/L	-8.7276 ppb	18:10:04
3	V 292.402†	-1401.1	1.4	-0.0019 ug/L	-0.0019 ppb	18:10:04
3	Zn 213.857†	727.0	58.2	0.5255 ug/L	0.5255 ppb	18:10:24
3	SiO2†	515.2	17.9	1.1583 ug/L	1.1583 ppb	18:10:40

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	891603.2	94.435 %		0.4379			0.46%
Sc Radial	5412.3	102 %		1.6			1.62%
Y 371.029	785534.0	98.516 %		0.6136			0.62%
Y RADIAL	5756.0	102.0 %		1.33			1.31%
Ag 328.068†	-6.4	-0.0214 ug/L		0.35684	-0.0214 ppb	0.35684	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-17.9	-14.348 ug/L		13.5686	-14.348 ppb	13.5686	94.57%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-7.2	-2.9227 ug/L		0.83935	-2.9227 ppb	0.83935	28.72%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	83.8	1.8211 ug/L		0.44786	1.8211 ppb	0.44786	24.59%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-11.6	-0.0853 ug/L		0.03936	-0.0853 ppb	0.03936	46.16%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-98.3	-0.0349 ug/L		0.02122	-0.0349 ppb	0.02122	60.84%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-1.8	-2.9581 ug/L		6.84824	-2.9581 ppb	6.84824	231.51%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	1.0	0.0092 ug/L	0.16647	0.0092 ppb	0.16647	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-8.5	-0.1652 ug/L	0.05092	-0.1652 ppb	0.05092	30.82%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	22.8	0.2536 ug/L	0.21140	0.2536 ppb	0.21140	83.37%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	262.0	0.7699 ug/L	0.05840	0.7699 ppb	0.05840	7.59%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-1.0	-8.7066 ug/L	5.21793	-8.7066 ppb	5.21793	59.93%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	86.1	18.210 ug/L	14.8679	18.210 ppb	14.8679	81.65%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-1.2	-38.359 ug/L	118.2632	-38.359 ppb	118.2632	308.31%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	22.7	0.0247 ug/L	0.00073	0.0247 ppb	0.00073	2.96%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	7.7	0.5148 ug/L	0.26432	0.5148 ppb	0.26432	51.35%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-66.1	-17.760 ug/L	9.3091	-17.760 ppb	9.3091	52.42%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	5.5	0.1338 ug/L	0.35969	0.1338 ppb	0.35969	268.80%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	5.8	3.1862 ug/L	4.16612	3.1862 ppb	4.16612	130.76%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-2.2	-0.2613 ug/L	1.64256	-0.2613 ppb	1.64256	628.58%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-1.6	-2.0891 ug/L	6.96052	-2.0891 ppb	6.96052	333.18%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	4.1	1.3626 ug/L	2.03245	1.3626 ppb	2.03245	149.16%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	8.8	5.3556 ug/L	1.49440	5.3556 ppb	1.49440	27.90%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	71.8	2.1652 ug/L	0.35542	2.1652 ppb	0.35542	16.41%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	6.8	1.1380 ug/L	0.79965	1.1380 ppb	0.79965	70.27%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	12.2	0.0781 ug/L	0.08917	0.0781 ppb	0.08917	114.11%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-29.7	-0.0370 ug/L	0.07603	-0.0370 ppb	0.07603	205.27%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-2.6	-0.7436 ug/L	2.21527	-0.7436 ppb	2.21527	297.91%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-425.1	-12.038 ug/L	3.5396	-12.038 ppb	3.5396	29.40%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-12.9	-0.1003 ug/L	0.08522	-0.1003 ppb	0.08522	84.93%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	67.5	0.6069 ug/L	0.11051	0.6069 ppb	0.11051	18.21%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	27.7	1.7957 ug/L	0.61576	1.7957 ppb	0.61576	34.29%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

Sequence No.: 15

Sample ID: 1202011711|940084|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 47

Date Collected: 1/18/2010 18:12:50

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202011711|940084|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5466.0	5466.0	103 %		18:14:43
1	Y RADIAL	5714.0	5714.0	101.2 %		18:14:43
1	Al 396.153Radial†	6953.7	6772.5	5395.5 ug/L	5395.5 ppb	18:14:43
1	Ca 317.933Radial†	3160.3	3059.5	5057.9 ug/L	5057.9 ppb	18:15:03
1	Fe 238.204 Radial†	633.5	604.5	5234.7 ug/L	5234.7 ppb	18:15:03
1	K 766.490 Radial†	27604.5	24227.8	5120.0 ug/L	5120.0 ppb	18:14:43
1	Mg 279.077 IEC†	165.2	158.4	5216.3 ug/L	5216.3 ppb	18:15:03
1	Na 589.592 Radial†	18307.4	18941.0	5089.2 ug/L	5089.2 ppb	18:14:43
1	Sr 421.552†	80967.3	78898.9	504.92 ug/L	504.92 ppb	18:14:43
1	Sc 361.383	958341.7	958341.7	101.50 %		18:16:02
1	Y 371.029	797800.5	797800.5	100.05 %		18:16:02
1	Ag 328.068†	113500.9	111408.9	493.05 ug/L	493.05 ppb	18:16:02
1	As 188.979†	1229.3	1230.7	505.02 ug/L	505.02 ppb	18:16:22
1	B 249.677†	23187.4	23371.5	504.84 ug/L	504.84 ppb	18:16:02
1	Ba 233.527†	71145.5	70072.2	513.57 ug/L	513.57 ppb	18:16:02
1	Be 313.107†	1435852.3	1419119.2	503.34 ug/L	503.34 ppb	18:16:02
1	Cd 226.502†	45502.8	45045.8	480.77 ug/L	480.77 ppb	18:16:22
1	Co 228.616†	25188.2	24888.6	485.68 ug/L	485.68 ppb	18:16:22
1	Cr 267.716†	46679.6	45908.2	502.92 ug/L	502.92 ppb	18:16:02
1	Cu 324.752†	184730.9	175828.7	512.44 ug/L	512.44 ppb	18:16:02
1	Mn 257.610†	490453.2	482734.3	511.22 ug/L	511.22 ppb	18:16:02
1	Mo 202.031†	7451.0	7321.9	492.19 ug/L	492.19 ppb	18:16:22
1	Ni 231.604†	21095.4	20682.5	498.72 ug/L	498.72 ppb	18:16:22
1	P 214.914†	1237.8	984.9	466.78 ug/L	466.78 ppb	18:16:22
1	Pb 220.353†	4290.5	4280.7	504.87 ug/L	504.87 ppb	18:16:22
1	S 181.975 Axial†	3847.7	3749.2	5024.9 ug/L	5024.9 ppb	18:16:22
1	Sb 206.836†	1590.2	1527.9	521.30 ug/L	521.30 ppb	18:16:22
1	Se 196.026†	756.8	778.5	498.04 ug/L	498.04 ppb	18:16:22
1	Si 251.611†	217606.9	213887.2	6464.5 ug/L	6464.5 ppb	18:16:02
1	Sn 189.927†	3118.5	3064.8	513.86 ug/L	513.86 ppb	18:16:22
1	Ti 334.940†	342322.5	338641.7	512.29 ug/L	512.29 ppb	18:16:02
1	Tl 190.801†	1631.2	1645.8	479.26 ug/L	479.26 ppb	18:16:22
1	U 409.014†	16380.7	17783.1	501.86 ug/L	501.86 ppb	18:16:02
1	V 292.402†	76342.3	76689.3	510.70 ug/L	510.70 ppb	18:16:02
1	Zn 213.857†	56414.1	54871.0	489.98 ug/L	489.98 ppb	18:16:02
1	SiO2†	218512.9	214751.9	13997 ug/L	13997 ppb	18:17:22
2	Sc Radial	5476.1	5476.1	103 %		18:15:08
2	Y RADIAL	5770.3	5770.3	102.2 %		18:15:08
2	Al 396.153Radial†	7065.8	6868.9	5472.4 ug/L	5472.4 ppb	18:15:08
2	Ca 317.933Radial†	3166.6	3059.9	5058.7 ug/L	5058.7 ppb	18:15:28
2	Fe 238.204 Radial†	630.1	600.2	5197.0 ug/L	5197.0 ppb	18:15:28
2	K 766.490 Radial†	27991.2	24554.2	5189.0 ug/L	5189.0 ppb	18:15:08
2	Mg 279.077 IEC†	162.7	155.6	5125.8 ug/L	5125.8 ppb	18:15:28
2	Na 589.592 Radial†	18573.9	19167.2	5150.0 ug/L	5150.0 ppb	18:15:08
2	Sr 421.552†	82173.5	79926.1	511.49 ug/L	511.49 ppb	18:15:08
2	Sc 361.383	953922.2	953922.2	101.04 %		18:16:29
2	Y 371.029	795674.5	795674.5	99.787 %		18:16:29
2	Ag 328.068†	112861.1	111293.7	492.52 ug/L	492.52 ppb	18:16:29
2	As 188.979†	1237.6	1244.5	510.62 ug/L	510.62 ppb	18:16:49
2	B 249.677†	23107.1	23397.8	505.41 ug/L	505.41 ppb	18:16:29
2	Ba 233.527†	70709.4	69965.3	512.78 ug/L	512.78 ppb	18:16:29
2	Be 313.107†	1429113.9	1419003.6	503.30 ug/L	503.30 ppb	18:16:29
2	Cd 226.502†	45690.0	45438.8	484.98 ug/L	484.98 ppb	18:16:49
2	Co 228.616†	25293.5	25107.8	489.97 ug/L	489.97 ppb	18:16:49
2	Cr 267.716†	46281.5	45727.3	500.94 ug/L	500.94 ppb	18:16:29
2	Cu 324.752†	184043.8	175991.9	512.91 ug/L	512.91 ppb	18:16:29
2	Mn 257.610†	487393.8	481945.0	510.39 ug/L	510.39 ppb	18:16:29
2	Mo 202.031†	7494.9	7399.4	497.39 ug/L	497.39 ppb	18:16:49
2	Ni 231.604†	21165.0	20847.6	502.70 ug/L	502.70 ppb	18:16:49

2	P 214.914†	1237.4	990.2	469.82 ug/L	469.82 ppb	18:16:49
2	Pb 220.353†	4296.6	4306.3	507.91 ug/L	507.91 ppb	18:16:49
2	S 181.975 Axial†	3874.8	3793.6	5084.3 ug/L	5084.3 ppb	18:16:49
2	Sb 206.836†	1601.6	1546.5	527.61 ug/L	527.61 ppb	18:16:49
2	Se 196.026†	773.6	798.5	510.23 ug/L	510.23 ppb	18:16:49
2	Si 251.611†	216267.2	213554.4	6454.3 ug/L	6454.3 ppb	18:16:29
2	Sn 189.927†	3139.0	3099.3	519.64 ug/L	519.64 ppb	18:16:49
2	Ti 334.940†	340396.6	338298.1	511.77 ug/L	511.77 ppb	18:16:29
2	Tl 190.801†	1631.8	1653.8	481.56 ug/L	481.56 ppb	18:16:49
2	U 409.014†	16460.3	17936.6	506.22 ug/L	506.22 ppb	18:16:29
2	V 292.402†	75838.0	76538.6	509.80 ug/L	509.80 ppb	18:16:29
2	Zn 213.857†	56110.9	54828.4	489.57 ug/L	489.57 ppb	18:16:29
2	SiO2†	218326.6	215565.0	14050 ug/L	14050 ppb	18:17:27
3	Sc Radial	5542.9	5542.9	104 %		18:15:33
3	Y RADIAL	5828.3	5828.3	103.2 %		18:15:33
3	Al 396.153Radial†	7136.3	6853.8	5460.6 ug/L	5460.6 ppb	18:15:33
3	Ca 317.933Radial†	3194.0	3049.1	5040.8 ug/L	5040.8 ppb	18:15:53
3	Fe 238.204 Radial†	634.0	596.5	5165.2 ug/L	5165.2 ppb	18:15:53
3	K 766.490 Radial†	28115.8	24345.8	5144.9 ug/L	5144.9 ppb	18:15:33
3	Mg 279.077 IEC†	161.8	152.8	5034.1 ug/L	5034.1 ppb	18:15:53
3	Na 589.592 Radial†	18744.5	19113.5	5135.5 ug/L	5135.5 ppb	18:15:33
3	Sr 421.552†	82754.8	79521.7	508.90 ug/L	508.90 ppb	18:15:33
3	Sc 361.383	955818.1	955818.1	101.24 %		18:16:56
3	Y 371.029	796107.2	796107.2	99.842 %		18:16:56
3	Ag 328.068†	113334.8	111540.0	493.60 ug/L	493.60 ppb	18:16:56
3	As 188.979†	1232.4	1236.9	507.54 ug/L	507.54 ppb	18:17:16
3	B 249.677†	23224.6	23468.5	506.96 ug/L	506.96 ppb	18:16:56
3	Ba 233.527†	70956.4	70070.4	513.55 ug/L	513.55 ppb	18:16:56
3	Be 313.107†	1431696.5	1418749.1	503.21 ug/L	503.21 ppb	18:16:56
3	Cd 226.502†	45343.6	45006.9	480.37 ug/L	480.37 ppb	18:17:16
3	Co 228.616†	25129.9	24896.5	485.84 ug/L	485.84 ppb	18:17:16
3	Cr 267.716†	46476.6	45829.2	502.05 ug/L	502.05 ppb	18:16:56
3	Cu 324.752†	184566.1	176146.5	513.36 ug/L	513.36 ppb	18:16:56
3	Mn 257.610†	489232.4	482804.2	511.30 ug/L	511.30 ppb	18:16:56
3	Mo 202.031†	7436.9	7327.3	492.55 ug/L	492.55 ppb	18:17:16
3	Ni 231.604†	21024.8	20667.6	498.36 ug/L	498.36 ppb	18:17:16
3	P 214.914†	1225.3	975.8	461.40 ug/L	461.40 ppb	18:17:16
3	Pb 220.353†	4244.5	4246.4	500.86 ug/L	500.86 ppb	18:17:16
3	S 181.975 Axial†	3833.5	3745.2	5019.5 ug/L	5019.5 ppb	18:17:16
3	Sb 206.836†	1595.3	1537.1	524.30 ug/L	524.30 ppb	18:17:16
3	Se 196.026†	764.3	787.8	503.54 ug/L	503.54 ppb	18:17:16
3	Si 251.611†	217135.8	213987.8	6467.5 ug/L	6467.5 ppb	18:16:56
3	Sn 189.927†	3101.0	3055.7	512.33 ug/L	512.33 ppb	18:17:16
3	Ti 334.940†	341518.4	338737.9	512.45 ug/L	512.45 ppb	18:16:56
3	Tl 190.801†	1634.9	1653.7	481.55 ug/L	481.55 ppb	18:17:16
3	U 409.014†	16212.3	17659.3	498.37 ug/L	498.37 ppb	18:16:56
3	V 292.402†	75957.5	76507.8	509.52 ug/L	509.52 ppb	18:16:56
3	Zn 213.857†	56333.1	54937.7	490.58 ug/L	490.58 ppb	18:16:56
3	SiO2†	217336.4	214158.2	13958 ug/L	13958 ppb	18:17:32

Mean Data: 1202011711|940084|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Units			Conc. Units		
Sc 361.383	956027.4	101.26 %		0.235			0.23%
Sc Radial	5495.0	103 %		0.8			0.76%
Y 371.029	796527.4	99.894 %		0.1409			0.14%
Y RADIAL	5770.8	102.2 %		1.01			0.99%
Ag 328.068†	111414.2	493.06 ug/L		0.539	493.06 ppb	0.539	0.11%
Al 396.153Radial†	6831.7	5442.9 ug/L		41.41	5442.9 ppb	41.41	0.76%
As 188.979†	1237.4	507.72 ug/L		2.803	507.72 ppb	2.803	0.55%
B 249.677†	23412.6	505.74 ug/L		1.095	505.74 ppb	1.095	0.22%
Ba 233.527†	70036.0	513.30 ug/L		0.448	513.30 ppb	0.448	0.09%
Be 313.107†	1418957.3	503.29 ug/L		0.067	503.29 ppb	0.067	0.01%
Ca 317.933Radial†	3056.1	5052.5 ug/L		10.13	5052.5 ppb	10.13	0.20%
Cd 226.502†	45163.9	482.04 ug/L		2.553	482.04 ppb	2.553	0.53%
Co 228.616†	24964.3	487.16 ug/L		2.434	487.16 ppb	2.434	0.50%
Cr 267.716†	45821.6	501.97 ug/L		0.994	501.97 ppb	0.994	0.20%
Cu 324.752†	175989.0	512.90 ug/L		0.462	512.90 ppb	0.462	0.09%
Fe 238.204 Radial†	600.4	5199.0 ug/L		34.79	5199.0 ppb	34.79	0.67%
K 766.490 Radial†	24375.9	5151.3 ug/L		34.94	5151.3 ppb	34.94	0.68%

Mg 279.077 IEC†	155.6	5125.4 ug/L	91.13	5125.4 ppb	91.13	1.78%
Mn 257.610†	482494.5	510.97 ug/L	0.505	510.97 ppb	0.505	0.10%
Mo 202.031†	7349.5	494.04 ug/L	2.904	494.04 ppb	2.904	0.59%
Na 589.592 Radial†	19073.9	5124.9 ug/L	31.75	5124.9 ppb	31.75	0.62%
Ni 231.604†	20732.5	499.93 ug/L	2.409	499.93 ppb	2.409	0.48%
P 214.914†	983.6	466.00 ug/L	4.261	466.00 ppb	4.261	0.91%
Pb 220.353†	4277.8	504.55 ug/L	3.534	504.55 ppb	3.534	0.70%
S 181.975 Axial†	3762.6	5042.9 ug/L	36.00	5042.9 ppb	36.00	0.71%
Sb 206.836†	1537.2	524.41 ug/L	3.158	524.41 ppb	3.158	0.60%
Se 196.026†	788.3	503.94 ug/L	6.105	503.94 ppb	6.105	1.21%
Si 251.611†	213809.8	6462.1 ug/L	6.90	6462.1 ppb	6.90	0.11%
Sn 189.927†	3073.3	515.28 ug/L	3.853	515.28 ppb	3.853	0.75%
Sr 421.552†	79448.9	508.44 ug/L	3.312	508.44 ppb	3.312	0.65%
Ti 334.940†	338559.2	512.17 ug/L	0.352	512.17 ppb	0.352	0.07%
Tl 190.801†	1651.1	480.79 ug/L	1.322	480.79 ppb	1.322	0.27%
U 409.014†	17793.0	502.15 ug/L	3.933	502.15 ppb	3.933	0.78%
V 292.402†	76578.6	510.01 ug/L	0.620	510.01 ppb	0.620	0.12%
Zn 213.857†	54879.0	490.04 ug/L	0.511	490.04 ppb	0.511	0.10%
SiO2†	214825.0	14001 ug/L	46.0	14001 ppb	46.0	0.33%

Sequence No.: 16

Sample ID: 1202011712|940084|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 48

Date Collected: 1/18/2010 18:19:43

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202011712|940084|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5462.9	5462.9	103 %		18:21:37
1	Y RADIAL	5776.2	5776.2	102.3 %		18:21:37
1	Al 396.153Radial†	73.4	66.9	53.492 ug/L	53.492 ppb	18:21:37
1	Ca 317.933Radial†	27.8	6.6	10.845 ug/L	10.845 ppb	18:21:57
1	Fe 238.204 Radial†	17.9	4.7	40.381 ug/L	40.381 ppb	18:21:57
1	K 766.490 Radial†	2982.9	233.3	49.344 ug/L	49.344 ppb	18:21:37
1	Mg 279.077 IEC†	-0.0	-2.7	-87.788 ug/L	-87.788 ppb	18:21:57
1	Na 589.592 Radial†	-1132.1	-5.3	-1.4289 ug/L	-1.4289 ppb	18:21:37
1	Sr 421.552†	47.8	34.9	0.2233 ug/L	0.2233 ppb	18:21:37
1	Sc 361.383	954373.7	954373.7	101.08 %		18:22:53
1	Y 371.029	805081.1	805081.1	100.97 %		18:22:53
1	Ag 328.068†	388.8	-26.6	-0.0971 ug/L	-0.0971 ppb	18:22:59
1	As 188.979†	-27.9	-8.0	-3.2545 ug/L	-3.2545 ppb	18:23:19
1	B 249.677†	-267.9	262.5	5.6880 ug/L	5.6880 ppb	18:23:19
1	Ba 233.527†	108.0	87.1	0.6385 ug/L	0.6385 ppb	18:23:19
1	Be 313.107†	-4304.8	272.1	0.0994 ug/L	0.0994 ppb	18:22:59
1	Cd 226.502†	-223.9	-4.6	-0.0549 ug/L	-0.0549 ppb	18:23:19
1	Co 228.616†	-65.1	9.0	0.1744 ug/L	0.1744 ppb	18:23:19
1	Cr 267.716†	113.7	32.4	0.3584 ug/L	0.3584 ppb	18:23:19
1	Cu 324.752†	6222.6	-10.6	-0.0245 ug/L	-0.0245 ppb	18:22:59
1	Mn 257.610†	2156.4	1677.8	1.7833 ug/L	1.7833 ppb	18:22:59
1	Mo 202.031†	33.6	14.4	0.9735 ug/L	0.9735 ppb	18:23:19
1	Ni 231.604†	110.8	9.1	0.2190 ug/L	0.2190 ppb	18:23:19
1	P 214.914†	236.2	-0.9	-0.5239 ug/L	-0.5239 ppb	18:23:19
1	Pb 220.353†	-58.5	-4.1	-0.4727 ug/L	-0.4727 ppb	18:23:19
1	S 181.975 Axial†	56.0	13.9	18.635 ug/L	18.635 ppb	18:23:19
1	Sb 206.836†	40.1	1.0	0.3426 ug/L	0.3426 ppb	18:23:19
1	Se 196.026†	-19.7	13.5	8.4015 ug/L	8.4015 ppb	18:23:19
1	Si 251.611†	7931.6	7349.5	222.32 ug/L	222.32 ppb	18:22:59
1	Sn 189.927†	6.7	-0.9	-0.1481 ug/L	-0.1481 ppb	18:23:19
1	Ti 334.940†	-470.5	923.3	1.4089 ug/L	1.4089 ppb	18:22:59
1	Tl 190.801†	-35.0	4.1	1.2130 ug/L	1.2130 ppb	18:23:19
1	U 409.014†	-1926.3	-260.7	-7.3887 ug/L	-7.3887 ppb	18:22:53
1	V 292.402†	-1462.0	31.2	0.1956 ug/L	0.1956 ppb	18:22:59
1	Zn 213.857†	816.0	99.6	0.8919 ug/L	0.8919 ppb	18:23:19
1	SiO2†	7992.9	7382.3	481.58 ug/L	481.58 ppb	18:24:25
2	Sc Radial	5469.5	5469.5	103 %		18:22:02
2	Y RADIAL	5804.9	5804.9	102.8 %		18:22:02
2	Al 396.153Radial†	69.0	62.6	50.064 ug/L	50.064 ppb	18:22:02
2	Ca 317.933Radial†	30.5	9.1	15.001 ug/L	15.001 ppb	18:22:22
2	Fe 238.204 Radial†	16.4	3.1	27.177 ug/L	27.177 ppb	18:22:22
2	K 766.490 Radial†	2917.5	166.1	35.107 ug/L	35.107 ppb	18:22:02
2	Mg 279.077 IEC†	-0.1	-2.7	-89.488 ug/L	-89.488 ppb	18:22:22
2	Na 589.592 Radial†	-1008.9	116.1	31.192 ug/L	31.192 ppb	18:22:02
2	Sr 421.552†	47.2	34.3	0.2194 ug/L	0.2194 ppb	18:22:02
2	Sc 361.383	957489.0	957489.0	101.41 %		18:23:24
2	Y 371.029	806458.6	806458.6	101.14 %		18:23:24
2	Ag 328.068†	498.1	80.0	0.3633 ug/L	0.3633 ppb	18:23:29
2	As 188.979†	-19.1	0.7	0.3173 ug/L	0.3173 ppb	18:23:49
2	B 249.677†	-250.8	280.2	6.0739 ug/L	6.0739 ppb	18:23:49
2	Ba 233.527†	75.8	55.1	0.4040 ug/L	0.4040 ppb	18:23:49
2	Be 313.107†	-4354.4	237.1	0.0871 ug/L	0.0871 ppb	18:23:29
2	Cd 226.502†	-225.3	-5.3	-0.0600 ug/L	-0.0600 ppb	18:23:49
2	Co 228.616†	-60.1	14.1	0.2725 ug/L	0.2725 ppb	18:23:49
2	Cr 267.716†	105.5	24.0	0.2640 ug/L	0.2640 ppb	18:23:49
2	Cu 324.752†	6249.1	-4.4	-0.0101 ug/L	-0.0101 ppb	18:23:29
2	Mn 257.610†	2169.9	1684.1	1.7887 ug/L	1.7887 ppb	18:23:29
2	Mo 202.031†	22.2	3.1	0.2080 ug/L	0.2080 ppb	18:23:49
2	Ni 231.604†	123.8	21.5	0.5198 ug/L	0.5198 ppb	18:23:49

2	P 214.914†	232.6	-5.2	-3.0033 ug/L	-3.0033 ppb	18:23:49
2	Pb 220.353†	-47.0	7.4	0.8771 ug/L	0.8771 ppb	18:23:49
2	S 181.975 Axial†	48.4	6.2	8.3393 ug/L	8.3393 ppb	18:23:49
2	Sb 206.836†	32.5	-6.6	-2.2073 ug/L	-2.2073 ppb	18:23:49
2	Se 196.026†	-19.8	13.3	8.2801 ug/L	8.2801 ppb	18:23:49
2	Si 251.611†	8026.3	7417.4	224.39 ug/L	224.39 ppb	18:23:29
2	Sn 189.927†	-1.0	-8.5	-1.4230 ug/L	-1.4230 ppb	18:23:49
2	Ti 334.940†	-467.0	928.3	1.4150 ug/L	1.4150 ppb	18:23:29
2	Tl 190.801†	-26.3	12.8	3.7295 ug/L	3.7295 ppb	18:23:49
2	U 409.014†	-1752.6	-83.3	-2.3616 ug/L	-2.3616 ppb	18:23:24
2	V 292.402†	-1456.8	41.1	0.2611 ug/L	0.2611 ppb	18:23:29
2	Zn 213.857†	819.7	100.6	0.9004 ug/L	0.9004 ppb	18:23:49
2	SiO2†	7910.6	7275.4	474.63 ug/L	474.63 ppb	18:24:30
3	Sc Radial	5589.1	5589.1	105 %		18:22:27
3	Y RADIAL	5905.7	5905.7	104.6 %		18:22:27
3	Al 396.153Radial†	49.2	42.3	33.808 ug/L	33.808 ppb	18:22:27
3	Ca 317.933Radial†	30.9	8.9	14.671 ug/L	14.671 ppb	18:22:47
3	Fe 238.204 Radial†	16.7	3.1	26.442 ug/L	26.442 ppb	18:22:47
3	K 766.490 Radial†	2930.7	117.9	24.922 ug/L	24.922 ppb	18:22:27
3	Mg 279.077 IEC†	3.1	0.3	10.172 ug/L	10.172 ppb	18:22:47
3	Na 589.592 Radial†	-1035.6	111.7	30.004 ug/L	30.004 ppb	18:22:27
3	Sr 421.552†	46.9	33.0	0.2113 ug/L	0.2113 ppb	18:22:27
3	Sc 361.383	954865.7	954865.7	101.14 %		18:23:54
3	Y 371.029	803535.1	803535.1	100.77 %		18:23:54
3	Ag 328.068†	348.2	-66.9	-0.2816 ug/L	-0.2816 ppb	18:23:59
3	As 188.979†	-26.1	-6.3	-2.5286 ug/L	-2.5286 ppb	18:24:19
3	B 249.677†	-265.6	264.9	5.7428 ug/L	5.7428 ppb	18:24:19
3	Ba 233.527†	97.7	76.9	0.5641 ug/L	0.5641 ppb	18:24:19
3	Be 313.107†	-4484.7	96.4	0.0373 ug/L	0.0373 ppb	18:23:59
3	Cd 226.502†	-209.7	9.6	0.0988 ug/L	0.0988 ppb	18:24:19
3	Co 228.616†	-67.4	6.8	0.1302 ug/L	0.1302 ppb	18:24:19
3	Cr 267.716†	111.3	30.0	0.3304 ug/L	0.3304 ppb	18:24:19
3	Cu 324.752†	6335.4	97.8	0.2880 ug/L	0.2880 ppb	18:23:59
3	Mn 257.610†	2207.9	1727.5	1.8306 ug/L	1.8306 ppb	18:23:59
3	Mo 202.031†	26.5	7.4	0.5004 ug/L	0.5004 ppb	18:24:19
3	Ni 231.604†	101.1	-0.5	-0.0129 ug/L	-0.0129 ppb	18:24:19
3	P 214.914†	243.5	6.2	3.5200 ug/L	3.5200 ppb	18:24:19
3	Pb 220.353†	-48.1	6.1	0.7274 ug/L	0.7274 ppb	18:24:19
3	S 181.975 Axial†	44.8	2.8	3.7154 ug/L	3.7154 ppb	18:24:19
3	Sb 206.836†	30.3	-8.8	-2.8838 ug/L	-2.8838 ppb	18:24:19
3	Se 196.026†	-34.9	-1.6	-0.8906 ug/L	-0.8906 ppb	18:24:19
3	Si 251.611†	8123.2	7534.9	227.94 ug/L	227.94 ppb	18:23:59
3	Sn 189.927†	4.9	-2.6	-0.4366 ug/L	-0.4366 ppb	18:24:19
3	Ti 334.940†	-472.2	921.9	1.3972 ug/L	1.3972 ppb	18:23:59
3	Tl 190.801†	-23.8	15.2	4.4184 ug/L	4.4184 ppb	18:24:19
3	U 409.014†	-1755.6	-91.0	-2.5805 ug/L	-2.5805 ppb	18:23:54
3	V 292.402†	-1413.1	80.3	0.5247 ug/L	0.5247 ppb	18:23:59
3	Zn 213.857†	808.1	91.4	0.8203 ug/L	0.8203 ppb	18:24:19
3	SiO2†	7999.6	7384.9	481.76 ug/L	481.76 ppb	18:24:35

Mean Data: 1202011712|940084|5

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	955576.2	101.21 %		0.177			0.18%
Sc Radial	5507.2	103 %		1.3			1.29%
Y 371.029	805024.9	100.96 %		0.183			0.18%
Y RADIAL	5828.9	103.3 %		1.20			1.17%
Ag 328.068†	-4.5	-0.0051 ug/L		0.33217	-0.0051 ppb	0.33217	>999.9%
Al 396.153Radial†	57.3	45.788 ug/L		10.5158	45.788 ppb	10.5158	22.97%
As 188.979†	-4.5	-1.8219 ug/L		1.88788	-1.8219 ppb	1.88788	103.62%
B 249.677†	269.2	5.8349 ug/L		0.20880	5.8349 ppb	0.20880	3.58%
Ba 233.527†	73.0	0.5355 ug/L		0.11982	0.5355 ppb	0.11982	22.37%
Be 313.107†	201.8	0.0746 ug/L		0.03290	0.0746 ppb	0.03290	44.10%
Ca 317.933Radial†	8.2	13.506 ug/L		2.3098	13.506 ppb	2.3098	17.10%
Cd 226.502†	-0.1	-0.0054 ug/L		0.09023	-0.0054 ppb	0.09023	>999.9%
Co 228.616†	10.0	0.1924 ug/L		0.07281	0.1924 ppb	0.07281	37.84%
Cr 267.716†	28.8	0.3176 ug/L		0.04848	0.3176 ppb	0.04848	15.26%
Cu 324.752†	27.6	0.0845 ug/L		0.17640	0.0845 ppb	0.17640	208.84%
Fe 238.204 Radial†	3.6	31.334 ug/L		7.8443	31.334 ppb	7.8443	25.03%
K 766.490 Radial†	172.4	36.457 ug/L		12.2668	36.457 ppb	12.2668	33.65%

Mg 279.077 IEC†	-1.7	-55.701 ug/L	57.0547	-55.701 ppb	57.0547	102.43%
Mn 257.610†	1696.4	1.8009 ug/L	0.02586	1.8009 ppb	0.02586	1.44%
Mo 202.031†	8.3	0.5606 ug/L	0.38628	0.5606 ppb	0.38628	68.90%
Na 589.592 Radial†	74.1	19.922 ug/L	18.5000	19.922 ppb	18.5000	92.86%
Ni 231.604†	10.0	0.2420 ug/L	0.26705	0.2420 ppb	0.26705	110.36%
P 214.914†	0.1	-0.0024 ug/L	3.29277	-0.0024 ppb	3.29277	>999.9%
Pb 220.353†	3.1	0.3773 ug/L	0.73992	0.3773 ppb	0.73992	196.11%
S 181.975 Axial†	7.6	10.230 ug/L	7.6373	10.230 ppb	7.6373	74.66%
Sb 206.836†	-4.8	-1.5828 ug/L	1.70143	-1.5828 ppb	1.70143	107.49%
Se 196.026†	8.4	5.2637 ug/L	5.33009	5.2637 ppb	5.33009	101.26%
Si 251.611†	7433.9	224.88 ug/L	2.840	224.88 ppb	2.840	1.26%
Sn 189.927†	-4.0	-0.6692 ug/L	0.66855	-0.6692 ppb	0.66855	99.90%
Sr 421.552†	34.1	0.2180 ug/L	0.00613	0.2180 ppb	0.00613	2.81%
Ti 334.940†	924.5	1.4070 ug/L	0.00905	1.4070 ppb	0.00905	0.64%
Tl 190.801†	10.7	3.1203 ug/L	1.68731	3.1203 ppb	1.68731	54.08%
U 409.014†	-145.0	-4.1103 ug/L	2.84131	-4.1103 ppb	2.84131	69.13%
V 292.402†	50.9	0.3271 ug/L	0.17419	0.3271 ppb	0.17419	53.25%
Zn 213.857†	97.2	0.8709 ug/L	0.04399	0.8709 ppb	0.04399	5.05%
SiO2†	7347.5	479.33 ug/L	4.067	479.33 ppb	4.067	0.85%

Sequence No.: 23

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 1/18/2010 19:08:39

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	5347.3	5347.3	100 %		19:10:31
1	Y RADIAL	5608.1	5608.1	99.35 %		19:10:31
1	Al 396.153Radial†	6428.0	6399.1	5096.5 ug/L	5096.5 ppb	19:10:31
1	Ca 317.933Radial†	3143.3	3110.8	5142.9 ug/L	5142.9 ppb	19:10:51
1	Fe 238.204 Radial†	603.1	588.0	5092.7 ug/L	5092.7 ppb	19:10:51
1	K 766.490 Radial†	26478.8	23703.6	5007.3 ug/L	5007.3 ppb	19:10:31
1	Mg 279.077 IEC†	164.2	161.0	5302.9 ug/L	5302.9 ppb	19:10:51
1	Na 589.592 Radial†	34608.2	35576.6	9559.0 ug/L	9559.0 ppb	19:10:31
1	Sr 421.552†	78786.7	78478.4	502.22 ug/L	502.22 ppb	19:10:31
1	Sc 361.383	946110.1	946110.1	100.21 %		19:11:48
1	Y 371.029	785674.3	785674.3	98.533 %		19:11:48
1	Ag 328.068†	114537.2	113888.7	503.88 ug/L	503.88 ppb	19:11:54
1	As 188.979†	1225.7	1242.7	509.83 ug/L	509.83 ppb	19:12:14
1	B 249.677†	22501.0	22981.8	496.36 ug/L	496.36 ppb	19:11:54
1	Ba 233.527†	69089.4	68926.5	505.18 ug/L	505.18 ppb	19:11:54
1	Be 313.107†	1425630.5	1427207.0	506.19 ug/L	506.19 ppb	19:11:48
1	Cd 226.502†	47052.8	47172.1	503.49 ug/L	503.49 ppb	19:11:54
1	Co 228.616†	25860.4	25880.2	505.06 ug/L	505.06 ppb	19:11:54
1	Cr 267.716†	45887.4	45712.3	500.77 ug/L	500.77 ppb	19:11:54
1	Cu 324.752†	179019.4	172482.0	502.68 ug/L	502.68 ppb	19:11:54
1	Mn 257.610†	482321.3	480866.2	509.23 ug/L	509.23 ppb	19:11:48
1	Mo 202.031†	7460.7	7426.5	499.20 ug/L	499.20 ppb	19:12:14
1	Ni 231.604†	21041.5	20897.3	503.89 ug/L	503.89 ppb	19:11:54
1	P 214.914†	4604.4	4360.3	2410.4 ug/L	2410.4 ppb	19:12:14
1	Pb 220.353†	4214.9	4259.9	502.39 ug/L	502.39 ppb	19:12:14
1	S 181.975 Axial†	789.8	746.7	999.97 ug/L	999.97 ppb	19:12:14
1	Sb 206.836†	1566.2	1524.3	520.01 ug/L	520.01 ppb	19:12:14
1	Se 196.026†	802.4	833.7	531.37 ug/L	531.37 ppb	19:12:14
1	Si 251.611†	84532.0	83859.7	2530.8 ug/L	2530.8 ppb	19:11:54
1	Sn 189.927†	2980.2	2966.6	497.43 ug/L	497.43 ppb	19:12:14
1	Ti 334.940†	334611.1	335306.5	507.25 ug/L	507.25 ppb	19:11:48
1	Tl 190.801†	1697.7	1732.9	504.32 ug/L	504.32 ppb	19:12:14
1	U 409.014†	16059.6	17671.3	498.72 ug/L	498.72 ppb	19:11:54
1	V 292.402†	74550.7	75873.8	505.47 ug/L	505.47 ppb	19:11:54
1	Zn 213.857†	56888.5	56062.9	500.71 ug/L	500.71 ppb	19:11:54
1	SiO2†	85505.7	84803.6	5518.9 ug/L	5518.9 ppb	19:13:22
2	Sc Radial	5402.4	5402.4	101 %		19:10:56
2	Y RADIAL	5689.1	5689.1	100.8 %		19:10:56
2	Al 396.153Radial†	6589.7	6493.3	5171.9 ug/L	5171.9 ppb	19:10:56
2	Ca 317.933Radial†	3145.1	3080.7	5093.1 ug/L	5093.1 ppb	19:11:16
2	Fe 238.204 Radial†	605.4	584.1	5059.1 ug/L	5059.1 ppb	19:11:16
2	K 766.490 Radial†	27008.6	23957.0	5060.9 ug/L	5060.9 ppb	19:10:56
2	Mg 279.077 IEC†	163.3	158.4	5218.8 ug/L	5218.8 ppb	19:11:16
2	Na 589.592 Radial†	35391.0	35996.9	9671.9 ug/L	9671.9 ppb	19:10:56
2	Sr 421.552†	80498.4	79365.8	507.90 ug/L	507.90 ppb	19:10:56
2	Sc 361.383	948478.3	948478.3	100.46 %		19:12:20
2	Y 371.029	788021.9	788021.9	98.828 %		19:12:20
2	Ag 328.068†	115645.1	114706.1	507.48 ug/L	507.48 ppb	19:12:25
2	As 188.979†	1218.6	1232.6	505.71 ug/L	505.71 ppb	19:12:45
2	B 249.677†	22730.5	23154.3	500.09 ug/L	500.09 ppb	19:12:25
2	Ba 233.527†	69498.5	69161.6	506.90 ug/L	506.90 ppb	19:12:25
2	Be 313.107†	1428038.4	1426051.6	505.78 ug/L	505.78 ppb	19:12:20
2	Cd 226.502†	47287.0	47288.0	504.73 ug/L	504.73 ppb	19:12:25
2	Co 228.616†	26099.4	26053.7	508.44 ug/L	508.44 ppb	19:12:25
2	Cr 267.716†	46292.8	46001.5	503.93 ug/L	503.93 ppb	19:12:25
2	Cu 324.752†	181035.0	174042.3	507.22 ug/L	507.22 ppb	19:12:25
2	Mn 257.610†	482232.4	479575.9	507.86 ug/L	507.86 ppb	19:12:20
2	Mo 202.031†	7453.3	7400.5	497.45 ug/L	497.45 ppb	19:12:45
2	Ni 231.604†	21172.6	20975.4	505.77 ug/L	505.77 ppb	19:12:25

2	P 214.914†	4582.1	4326.6	2390.2 ug/L	2390.2 ppb	19:12:45
2	Pb 220.353†	4170.5	4205.2	495.97 ug/L	495.97 ppb	19:12:45
2	S 181.975 Axial†	783.3	738.2	988.63 ug/L	988.63 ppb	19:12:45
2	Sb 206.836†	1561.6	1515.8	517.13 ug/L	517.13 ppb	19:12:45
2	Se 196.026†	777.3	806.7	514.70 ug/L	514.70 ppb	19:12:45
2	Si 251.611†	85260.2	84373.9	2546.4 ug/L	2546.4 ppb	19:12:25
2	Sn 189.927†	2970.1	2949.1	494.50 ug/L	494.50 ppb	19:12:45
2	Ti 334.940†	335027.5	334887.2	506.61 ug/L	506.61 ppb	19:12:20
2	Tl 190.801†	1686.5	1717.6	499.85 ug/L	499.85 ppb	19:12:45
2	U 409.014†	16256.0	17826.7	503.12 ug/L	503.12 ppb	19:12:25
2	V 292.402†	75490.7	76623.8	510.38 ug/L	510.38 ppb	19:12:25
2	Zn 213.857†	57352.9	56383.5	503.58 ug/L	503.58 ppb	19:12:25
2	SiO2†	85121.5	84208.0	5480.1 ug/L	5480.1 ppb	19:13:27
3	Sc Radial	5445.9	5445.9	102 %		19:11:21
3	Y RADIAL	5749.5	5749.5	101.9 %		19:11:21
3	Al 396.153Radial†	6574.2	6426.2	5118.0 ug/L	5118.0 ppb	19:11:21
3	Ca 317.933Radial†	3116.4	3027.9	5005.7 ug/L	5005.7 ppb	19:11:41
3	Fe 238.204 Radial†	600.1	574.2	4973.0 ug/L	4973.0 ppb	19:11:41
3	K 766.490 Radial†	26762.9	23503.8	4965.1 ug/L	4965.1 ppb	19:11:21
3	Mg 279.077 IEC†	159.3	153.2	5045.6 ug/L	5045.6 ppb	19:11:41
3	Na 589.592 Radial†	35048.7	35383.0	9506.9 ug/L	9506.9 ppb	19:11:21
3	Sr 421.552†	79712.9	77962.8	498.92 ug/L	498.92 ppb	19:11:21
3	Sc 361.383	943654.4	943654.4	99.948 %		19:12:51
3	Y 371.029	784372.7	784372.7	98.370 %		19:12:51
3	Ag 328.068†	114769.5	114418.6	506.19 ug/L	506.19 ppb	19:12:56
3	As 188.979†	1227.5	1247.8	511.83 ug/L	511.83 ppb	19:13:16
3	B 249.677†	22543.3	23082.7	498.56 ug/L	498.56 ppb	19:12:56
3	Ba 233.527†	69277.9	69294.6	507.87 ug/L	507.87 ppb	19:12:56
3	Be 313.107†	1423095.7	1428373.0	506.61 ug/L	506.61 ppb	19:12:51
3	Cd 226.502†	47166.9	47408.5	506.03 ug/L	506.03 ppb	19:12:56
3	Co 228.616†	25904.8	25991.8	507.24 ug/L	507.24 ppb	19:12:56
3	Cr 267.716†	46146.2	46090.4	504.90 ug/L	504.90 ppb	19:12:56
3	Cu 324.752†	179323.1	173250.7	504.91 ug/L	504.91 ppb	19:12:56
3	Mn 257.610†	480128.2	479924.5	508.23 ug/L	508.23 ppb	19:12:51
3	Mo 202.031†	7490.2	7475.3	502.47 ug/L	502.47 ppb	19:13:16
3	Ni 231.604†	21137.3	21047.9	507.52 ug/L	507.52 ppb	19:12:56
3	P 214.914†	4604.1	4371.9	2416.8 ug/L	2416.8 ppb	19:13:16
3	Pb 220.353†	4221.0	4277.0	504.42 ug/L	504.42 ppb	19:13:16
3	S 181.975 Axial†	784.6	743.5	995.76 ug/L	995.76 ppb	19:13:16
3	Sb 206.836†	1561.1	1523.2	519.76 ug/L	519.76 ppb	19:13:16
3	Se 196.026†	805.4	838.7	534.04 ug/L	534.04 ppb	19:13:16
3	Si 251.611†	84734.1	84281.4	2543.5 ug/L	2543.5 ppb	19:12:56
3	Sn 189.927†	2990.1	2984.2	500.36 ug/L	500.36 ppb	19:13:16
3	Ti 334.940†	333483.3	335047.0	506.85 ug/L	506.85 ppb	19:12:51
3	Tl 190.801†	1692.6	1732.3	504.11 ug/L	504.11 ppb	19:13:16
3	U 409.014†	16124.4	17777.8	501.74 ug/L	501.74 ppb	19:12:56
3	V 292.402†	74917.9	76434.7	509.22 ug/L	509.22 ppb	19:12:56
3	Zn 213.857†	56988.3	56310.5	502.92 ug/L	502.92 ppb	19:12:56
3	SiO2†	84452.3	83971.7	5464.5 ug/L	5464.5 ppb	19:13:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	946080.9	100.20 %	0.255			0.25%
Sc Radial	5398.5	101 %	0.9			0.92%
Y 371.029	786022.9	98.577 %	0.2319			0.24%
Y RADIAL	5682.2	100.7 %	1.26			1.25%
Ag 328.068†	114337.8	505.85 ug/L	1.823	505.85 ppb	1.823	0.36%
QC value within limits for Ag 328.068 Recovery = 101.17%						
Al 396.153Radial†	6439.5	5128.8 ug/L	38.87	5128.8 ppb	38.87	0.76%
QC value within limits for Al 396.153Radial Recovery = 102.58%						
As 188.979†	1241.0	509.12 ug/L	3.125	509.12 ppb	3.125	0.61%
QC value within limits for As 188.979 Recovery = 101.82%						
B 249.677†	23072.9	498.34 ug/L	1.878	498.34 ppb	1.878	0.38%
QC value within limits for B 249.677 Recovery = 99.67%						
Ba 233.527†	69127.6	506.65 ug/L	1.366	506.65 ppb	1.366	0.27%
QC value within limits for Ba 233.527 Recovery = 101.33%						
Be 313.107†	1427210.5	506.19 ug/L	0.411	506.19 ppb	0.411	0.08%
QC value within limits for Be 313.107 Recovery = 101.24%						
Ca 317.933Radial†	3073.1	5080.6 ug/L	69.43	5080.6 ppb	69.43	1.37%

QC value within limits for Ca 317.933 Radial Recovery = 101.61%							
Cd	226.502†	47289.6	504.75 ug/L	1.270	504.75 ppb	1.270	0.25%
QC value within limits for Cd 226.502 Recovery = 100.95%							
Co	228.616†	25975.2	506.91 ug/L	1.715	506.91 ppb	1.715	0.34%
QC value within limits for Co 228.616 Recovery = 101.38%							
Cr	267.716†	45934.7	503.20 ug/L	2.165	503.20 ppb	2.165	0.43%
QC value within limits for Cr 267.716 Recovery = 100.64%							
Cu	324.752†	173258.3	504.94 ug/L	2.272	504.94 ppb	2.272	0.45%
QC value within limits for Cu 324.752 Recovery = 100.99%							
Fe	238.204 Radial†	582.1	5041.6 ug/L	61.75	5041.6 ppb	61.75	1.22%
QC value within limits for Fe 238.204 Radial Recovery = 100.83%							
K	766.490 Radial†	23721.5	5011.1 ug/L	48.00	5011.1 ppb	48.00	0.96%
QC value within limits for K 766.490 Radial Recovery = 100.22%							
Mg	279.077 IBC†	157.5	5189.1 ug/L	131.21	5189.1 ppb	131.21	2.53%
QC value within limits for Mg 279.077 IBC Recovery = 103.78%							
Mn	257.610†	480122.2	508.44 ug/L	0.707	508.44 ppb	0.707	0.14%
QC value within limits for Mn 257.610 Recovery = 101.69%							
Mo	202.031†	7434.1	499.71 ug/L	2.548	499.71 ppb	2.548	0.51%
QC value within limits for Mo 202.031 Recovery = 99.94%							
Na	589.592 Radial†	35652.2	9579.3 ug/L	84.33	9579.3 ppb	84.33	0.88%
QC value within limits for Na 589.592 Radial Recovery = 95.79%							
Ni	231.604†	20973.5	505.73 ug/L	1.815	505.73 ppb	1.815	0.36%
QC value within limits for Ni 231.604 Recovery = 101.15%							
P	214.914†	4353.0	2405.8 ug/L	13.92	2405.8 ppb	13.92	0.58%
QC value within limits for P 214.914 Recovery = 96.23%							
Pb	220.353†	4247.3	500.93 ug/L	4.412	500.93 ppb	4.412	0.88%
QC value within limits for Pb 220.353 Recovery = 100.19%							
S	181.975 Axial†	742.8	994.79 ug/L	5.731	994.79 ppb	5.731	0.58%
QC value within limits for S 181.975 Axial Recovery = 99.48%							
Sb	206.836†	1521.1	518.97 ug/L	1.593	518.97 ppb	1.593	0.31%
QC value within limits for Sb 206.836 Recovery = 103.79%							
Se	196.026†	826.4	526.70 ug/L	10.481	526.70 ppb	10.481	1.99%
QC value within limits for Se 196.026 Recovery = 105.34%							
Si	251.611†	84171.7	2540.2 ug/L	8.29	2540.2 ppb	8.29	0.33%
QC value within limits for Si 251.611 Recovery = 101.61%							
Sn	189.927†	2966.6	497.43 ug/L	2.931	497.43 ppb	2.931	0.59%
QC value within limits for Sn 189.927 Recovery = 99.49%							
Sr	421.552†	78602.3	503.02 ug/L	4.542	503.02 ppb	4.542	0.90%
QC value within limits for Sr 421.552 Recovery = 100.60%							
Ti	334.940†	335080.2	506.90 ug/L	0.322	506.90 ppb	0.322	0.06%
QC value within limits for Ti 334.940 Recovery = 101.38%							
Tl	190.801†	1727.6	502.76 ug/L	2.523	502.76 ppb	2.523	0.50%
QC value within limits for Tl 190.801 Recovery = 100.55%							
U	409.014†	17758.6	501.19 ug/L	2.249	501.19 ppb	2.249	0.45%
QC value within limits for U 409.014 Recovery = 100.24%							
V	292.402†	76310.8	508.35 ug/L	2.569	508.35 ppb	2.569	0.51%
QC value within limits for V 292.402 Recovery = 101.67%							
Zn	213.857†	56252.3	502.40 ug/L	1.505	502.40 ppb	1.505	0.30%
QC value within limits for Zn 213.857 Recovery = 100.48%							
SiO2†		84327.8	5487.8 ug/L	28.00	5487.8 ppb	28.00	0.51%
QC value within limits for SiO2 Recovery = 102.62%							
All analyte(s) passed QC.							

Sequence No.: 24

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 1/18/2010 19:15:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5459.6	5459.6	102 %		19:17:33
1	Y RADIAL	5765.6	5765.6	102.1 %		19:17:33
1	Al 396.153Radial†	-21.4	-25.6	-20.484 ug/L	-20.484 ppb	19:17:33
1	Ca 317.933Radial†	20.2	-0.9	-1.4897 ug/L	-1.4897 ppb	19:17:53
1	Fe 238.204 Radial†	11.0	-2.1	-18.411 ug/L	-18.411 ppb	19:17:53
1	K 766.490 Radial†	2761.0	18.5	3.9297 ug/L	3.9297 ppb	19:17:33
1	Mg 279.077 IEC†	3.1	0.4	12.174 ug/L	12.174 ppb	19:17:53
1	Na 589.592 Radial†	-1205.4	-77.4	-20.801 ug/L	-20.801 ppb	19:17:33
1	Sr 421.552†	-6.3	-17.8	-0.1138 ug/L	-0.1138 ppb	19:17:33
1	Sc 361.383	923003.9	923003.9	97.760 %		19:18:50
1	Y 371.029	782045.9	782045.9	98.078 %		19:18:50
1	Ag 328.068†	350.5	-52.7	-0.2330 ug/L	-0.2330 ppb	19:18:50
1	As 188.979†	-28.8	-9.9	-4.0154 ug/L	-4.0154 ppb	19:19:10
1	B 249.677†	-404.6	113.6	2.4692 ug/L	2.4692 ppb	19:19:10
1	Ba 233.527†	-12.2	-32.2	-0.2362 ug/L	-0.2362 ppb	19:19:10
1	Be 313.107†	-4441.0	-12.0	-0.0045 ug/L	-0.0045 ppb	19:18:50
1	Cd 226.502†	-208.0	4.1	0.0437 ug/L	0.0437 ppb	19:19:10
1	Co 228.616†	-80.9	-9.4	-0.1812 ug/L	-0.1812 ppb	19:19:10
1	Cr 267.716†	72.1	-6.3	-0.0667 ug/L	-0.0667 ppb	19:19:10
1	Cu 324.752†	6018.2	-10.4	-0.0275 ug/L	-0.0275 ppb	19:18:50
1	Mn 257.610†	445.2	-0.2	-0.0025 ug/L	-0.0025 ppb	19:19:10
1	Mo 202.031†	25.2	7.0	0.4708 ug/L	0.4708 ppb	19:19:10
1	Ni 231.604†	88.1	-10.4	-0.2518 ug/L	-0.2518 ppb	19:19:10
1	P 214.914†	217.1	-12.5	-7.1664 ug/L	-7.1664 ppb	19:19:10
1	Pb 220.353†	-62.9	-10.6	-1.2500 ug/L	-1.2500 ppb	19:19:10
1	S 181.975 Axial†	37.1	-3.6	-4.7831 ug/L	-4.7831 ppb	19:19:10
1	Sb 206.836†	42.2	4.4	1.4532 ug/L	1.4532 ppb	19:19:10
1	Se 196.026†	-27.7	4.6	2.7263 ug/L	2.7263 ppb	19:19:10
1	Si 251.611†	513.6	28.2	0.8478 ug/L	0.8478 ppb	19:19:10
1	Sn 189.927†	3.5	-3.9	-0.6526 ug/L	-0.6526 ppb	19:19:10
1	Ti 334.940†	-1416.5	-60.1	-0.0892 ug/L	-0.0892 ppb	19:18:50
1	Tl 190.801†	-33.1	4.9	1.4103 ug/L	1.4103 ppb	19:19:10
1	U 409.014†	-1839.7	-236.9	-6.7059 ug/L	-6.7059 ppb	19:18:50
1	V 292.402†	-1477.3	-33.6	-0.2241 ug/L	-0.2241 ppb	19:18:50
1	Zn 213.857†	727.2	36.2	0.3296 ug/L	0.3296 ppb	19:19:10
1	SiO2†	526.7	13.8	0.8854 ug/L	0.8854 ppb	19:20:06
2	Sc Radial	5576.7	5576.7	105 %		19:17:58
2	Y RADIAL	5906.6	5906.6	104.6 %		19:17:58
2	Al 396.153Radial†	-5.7	-10.1	-8.0913 ug/L	-8.0913 ppb	19:17:58
2	Ca 317.933Radial†	20.7	-0.8	-1.3529 ug/L	-1.3529 ppb	19:18:18
2	Fe 238.204 Radial†	13.7	0.2	1.8775 ug/L	1.8775 ppb	19:18:18
2	K 766.490 Radial†	2746.7	-51.6	-10.920 ug/L	-10.920 ppb	19:17:58
2	Mg 279.077 IEC†	0.9	-1.8	-59.866 ug/L	-59.866 ppb	19:18:18
2	Na 589.592 Radial†	-1175.8	-24.5	-6.5916 ug/L	-6.5916 ppb	19:17:58
2	Sr 421.552†	8.2	-3.8	-0.0242 ug/L	-0.0242 ppb	19:17:58
2	Sc 361.383	923813.0	923813.0	97.846 %		19:19:15
2	Y 371.029	782385.0	782385.0	98.121 %		19:19:15
2	Ag 328.068†	312.3	-92.1	-0.3984 ug/L	-0.3984 ppb	19:19:15
2	As 188.979†	-30.5	-11.6	-4.7175 ug/L	-4.7175 ppb	19:19:35
2	B 249.677†	-410.1	108.3	2.3507 ug/L	2.3507 ppb	19:19:35
2	Ba 233.527†	14.7	-4.7	-0.0347 ug/L	-0.0347 ppb	19:19:35
2	Be 313.107†	-4543.1	-112.3	-0.0396 ug/L	-0.0396 ppb	19:19:15
2	Cd 226.502†	-210.6	1.6	0.0159 ug/L	0.0159 ppb	19:19:35
2	Co 228.616†	-81.6	-10.0	-0.1934 ug/L	-0.1934 ppb	19:19:35
2	Cr 267.716†	92.0	14.0	0.1559 ug/L	0.1559 ppb	19:19:35
2	Cu 324.752†	6204.3	174.4	0.5129 ug/L	0.5129 ppb	19:19:15
2	Mn 257.610†	476.5	31.4	0.0359 ug/L	0.0359 ppb	19:19:35
2	Mo 202.031†	28.9	10.7	0.7192 ug/L	0.7192 ppb	19:19:35
2	Ni 231.604†	102.0	3.7	0.0900 ug/L	0.0900 ppb	19:19:35

2	P 214.914†	228.3	-1.2	-0.7931 ug/L	-0.7931 ppb	19:19:35
2	Pb 220.353†	-58.2	-5.7	-0.6714 ug/L	-0.6714 ppb	19:19:35
2	S 181.975 Axial†	40.9	0.3	0.4560 ug/L	0.4560 ppb	19:19:35
2	Sb 206.836†	40.1	2.3	0.7496 ug/L	0.7496 ppb	19:19:35
2	Se 196.026†	-32.1	0.1	0.0568 ug/L	0.0568 ppb	19:19:35
2	Si 251.611†	524.2	38.6	1.1594 ug/L	1.1594 ppb	19:19:35
2	Sn 189.927†	4.6	-2.8	-0.4725 ug/L	-0.4725 ppb	19:19:35
2	Ti 334.940†	-1306.4	53.6	0.0893 ug/L	0.0893 ppb	19:19:15
2	Tl 190.801†	-38.9	-1.1	-0.3024 ug/L	-0.3024 ppb	19:19:35
2	U 409.014†	-1880.7	-277.2	-7.8507 ug/L	-7.8507 ppb	19:19:15
2	V 292.402†	-1472.0	-26.9	-0.1833 ug/L	-0.1833 ppb	19:19:15
2	Zn 213.857†	730.1	38.5	0.3455 ug/L	0.3455 ppb	19:19:35
2	SiO2†	563.6	51.1	3.3117 ug/L	3.3117 ppb	19:20:11
3	Sc Radial	5444.3	5444.3	102 %		19:18:23
3	Y RADIAL	5784.5	5784.5	102.5 %		19:18:23
3	Al 396.153Radial†	-3.0	-7.6	-6.0849 ug/L	-6.0849 ppb	19:18:23
3	Ca 317.933Radial†	17.1	-3.8	-6.3579 ug/L	-6.3579 ppb	19:18:43
3	Fe 238.204 Radial†	11.7	-1.4	-12.045 ug/L	-12.045 ppb	19:18:43
3	K 766.490 Radial†	2659.3	-73.4	-15.502 ug/L	-15.502 ppb	19:18:23
3	Mg 279.077 IEC†	-0.5	-3.2	-103.79 ug/L	-103.79 ppb	19:18:43
3	Na 589.592 Radial†	-1242.9	-117.5	-31.568 ug/L	-31.568 ppb	19:18:23
3	Sr 421.552†	16.3	4.3	0.0274 ug/L	0.0274 ppb	19:18:23
3	Sc 361.383	924487.0	924487.0	97.917 %		19:19:40
3	Y 371.029	784726.5	784726.5	98.414 %		19:19:40
3	Ag 328.068†	384.7	-18.3	-0.0804 ug/L	-0.0804 ppb	19:19:40
3	As 188.979†	-18.9	0.3	0.1081 ug/L	0.1081 ppb	19:20:00
3	B 249.677†	-433.2	85.1	1.8493 ug/L	1.8493 ppb	19:20:00
3	Ba 233.527†	26.1	7.0	0.0497 ug/L	0.0497 ppb	19:20:00
3	Be 313.107†	-4482.6	-47.2	-0.0165 ug/L	-0.0165 ppb	19:19:40
3	Cd 226.502†	-222.8	-10.7	-0.1140 ug/L	-0.1140 ppb	19:20:00
3	Co 228.616†	-76.0	-4.3	-0.0832 ug/L	-0.0832 ppb	19:20:00
3	Cr 267.716†	79.6	1.3	0.0157 ug/L	0.0157 ppb	19:20:00
3	Cu 324.752†	6011.9	-26.8	-0.0751 ug/L	-0.0751 ppb	19:19:40
3	Mn 257.610†	445.3	-0.8	0.0022 ug/L	0.0022 ppb	19:20:00
3	Mo 202.031†	16.9	-1.6	-0.1057 ug/L	-0.1057 ppb	19:20:00
3	Ni 231.604†	97.2	-1.3	-0.0307 ug/L	-0.0307 ppb	19:20:00
3	P 214.914†	237.2	7.7	4.4534 ug/L	4.4534 ppb	19:20:00
3	Pb 220.353†	-72.6	-20.4	-2.3928 ug/L	-2.3928 ppb	19:20:00
3	S 181.975 Axial†	39.4	-1.3	-1.7522 ug/L	-1.7522 ppb	19:20:00
3	Sb 206.836†	48.7	11.0	3.6134 ug/L	3.6134 ppb	19:20:00
3	Se 196.026†	-27.1	5.3	3.1814 ug/L	3.1814 ppb	19:20:00
3	Si 251.611†	520.2	34.1	1.0321 ug/L	1.0321 ppb	19:20:00
3	Sn 189.927†	2.1	-5.3	-0.8909 ug/L	-0.8909 ppb	19:20:00
3	Ti 334.940†	-1315.9	44.9	0.0784 ug/L	0.0784 ppb	19:19:40
3	Tl 190.801†	-43.6	-5.8	-1.6692 ug/L	-1.6692 ppb	19:20:00
3	U 409.014†	-1831.9	-225.9	-6.3968 ug/L	-6.3968 ppb	19:19:40
3	V 292.402†	-1500.8	-55.2	-0.3770 ug/L	-0.3770 ppb	19:19:40
3	Zn 213.857†	713.4	20.9	0.1897 ug/L	0.1897 ppb	19:20:00
3	SiO2†	527.6	13.9	0.9082 ug/L	0.9082 ppb	19:20:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	923768.0	97.841 %		0.0787			0.08%
Sc Radial	5493.5	103 %		1.4			1.32%
Y 371.029	783052.5	98.204 %		0.1831			0.19%
Y RADIAL	5818.9	103.1 %		1.36			1.32%
Ag 328.068†	-54.3	-0.2373 ug/L		0.15904	-0.2373 ppb	0.15904	67.03%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-14.4	-11.553 ug/L		7.7990	-11.553 ppb	7.7990	67.50%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-7.1	-2.8750 ug/L		2.60715	-2.8750 ppb	2.60715	90.68%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	102.4	2.2231 ug/L		0.32909	2.2231 ppb	0.32909	14.80%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-10.0	-0.0737 ug/L		0.14690	-0.0737 ppb	0.14690	199.26%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-57.2	-0.0202 ug/L		0.01784	-0.0202 ppb	0.01784	88.36%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-1.9	-3.0668 ug/L		2.85097	-3.0668 ppb	2.85097	92.96%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-1.7	-0.0181 ug/L	0.08418	-0.0181 ppb	0.08418	464.74%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-7.9	-0.1526 ug/L	0.06041	-0.1526 ppb	0.06041	39.58%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	3.0	0.0350 ug/L	0.11253	0.0350 ppb	0.11253	321.79%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	45.8	0.1368 ug/L	0.32657	0.1368 ppb	0.32657	238.78%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-1.1	-9.5263 ug/L	10.37627	-9.5263 ppb	10.37627	108.92%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-35.5	-7.4977 ug/L	10.15812	-7.4977 ppb	10.15812	135.48%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-1.5	-50.495 ug/L	58.5484	-50.495 ppb	58.5484	115.95%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	10.1	0.0118 ug/L	0.02094	0.0118 ppb	0.02094	176.90%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	5.4	0.3614 ug/L	0.42323	0.3614 ppb	0.42323	117.10%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-73.1	-19.654 ug/L	12.5279	-19.654 ppb	12.5279	63.74%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-2.7	-0.0642 ug/L	0.17336	-0.0642 ppb	0.17336	270.12%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-2.0	-1.1687 ug/L	5.81898	-1.1687 ppb	5.81898	497.90%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-12.2	-1.4381 ug/L	0.87595	-1.4381 ppb	0.87595	60.91%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-1.5	-2.0264 ug/L	2.63028	-2.0264 ppb	2.63028	129.80%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	5.9	1.9387 ug/L	1.49235	1.9387 ppb	1.49235	76.98%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	3.3	1.9882 ug/L	1.68798	1.9882 ppb	1.68798	84.90%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	33.6	1.0131 ug/L	0.15665	1.0131 ppb	0.15665	15.46%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-4.0	-0.6720 ug/L	0.20987	-0.6720 ppb	0.20987	31.23%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-5.8	-0.0369 ug/L	0.07146	-0.0369 ppb	0.07146	193.70%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	12.8	0.0262 ug/L	0.10007	0.0262 ppb	0.10007	382.51%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-0.7	-0.1871 ug/L	1.54300	-0.1871 ppb	1.54300	824.65%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-246.7	-6.9845 ug/L	0.76595	-6.9845 ppb	0.76595	10.97%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-38.6	-0.2615 ug/L	0.10211	-0.2615 ppb	0.10211	39.05%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	31.9	0.2883 ug/L	0.08574	0.2883 ppb	0.08574	29.74%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	26.2	1.7017 ug/L	1.39427	1.7017 ppb	1.39427	81.93%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

Daily Performance Report

Sample ID: Sample

Sample Date/Time: Wednesday, January 13, 2010 10:19:43

Sample Description:

Method File: c:\elandata\Method\daily2.mth

Dataset File: c:\elandata\Dataset\090811\Sample.355

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	579.6	579.612	16.411	2.8
Mg	24.0	12269.1	12269.068	210.941	1.7
Co	58.9	36537.7	36537.666	164.691	0.5
Rh	102.9	65339.3	65339.283	235.839	0.4
In	114.9	87526.9	87526.915	99.299	0.1
Pb	208.0	35694.7	35694.741	278.763	0.8
[> Ba	137.9	70762.8	70762.834	513.701	0.7
[Ba++	69.0	1332.7	0.019	0.000	1.7
[> Ce	139.9	84088.4	84088.360	491.658	0.6
[CeO	155.9	1887.7	0.022	0.000	1.5
Bkgd	220.0	7.3	7.300	1.605	22.0

Current Optimization File Data

Current Value	Description
0.84	Nebulizer Gas Flow
6.00	Lens Voltage
1000.00	ICP RF Power
-1875.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	7.0	756.0
Co	59	21	8.8	25676.4
In	115	21	9.8	66539.9

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	611	2060	0.678
Be	9.0	9.1	2060	2045	0.683
Mg	24.0	24.0	5677	2075	0.629
Mg	25.0	25.0	5939	2080	0.663
Mg	26.0	26.1	6168	2085	0.624
Co	58.9	59.0	14180	2140	0.626
Rh	102.9	102.9	24872	2230	0.631
In	114.9	114.9	27781	2255	0.680
Ce	139.9	139.9	33846	2310	0.645
Pb	206.0	206.0	49945	2500	0.703
Pb	207.0	207.0	50101	2380	0.651
Pb	208.0	208.0	50448	2570	0.648
U	238.1	238.0	57697	2510	0.705

ICPMS#4 - Summary Report

Sample ID: Blank

Sample Date/Time: Wednesday, January 13, 2010 19:21:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\Blank.128

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7		ug/L		23	
Be	9		ug/L		4	
B	11		ug/L		64	
Na	23		ug/L		45405	
Mg	24		ug/L		3334	
Al	27		ug/L		667	
P	31		ug/L		2737	
K	39		ug/L		386846	
Ca	43		ug/L		403	
> Sc	45		ug/L		171188	
Ti	47		ug/L		180	
V	51		ug/L		-6450	
Cr	52		ug/L		2248	
Cr	53		ug/L		148225	
Mn	55		ug/L		937	
Fe	57		ug/L		2678	
Co	59		ug/L		109	
Ni	60		ug/L		112	
Cu	63		ug/L		161	
Cu	65		ug/L		102	
Zn	66		ug/L		59	
Zn	67		ug/L		8406	
Zn	68		ug/L		756	
> Ge	74		ug/L		117706	
As	75		ug/L		134	
Se	77		ug/L		5957	
Se	82		ug/L		-13	
Kr	83		ug/L		48	
Sr	88		ug/L		142	
Y	89		ug/L		14	
Zr	90		ug/L		312	
Mo	98		ug/L		45	
Ag	107		ug/L		50	
Cd	111		ug/L		13	
Cd	114		ug/L		28	
> In	115		ug/L		75402	
Sn	120		ug/L		174	
Sb	121		ug/L		240	
Sb	123		ug/L		200	
Ba	135		ug/L		16	
Ba	137		ug/L		31	
Ho	165		ug/L		6	
> Lu	175		ug/L		70103	
Tl	205		ug/L		59	
Pb	208		ug/L		391	
Bi	209		ug/L		14	
Th	232		ug/L		381	
U	238		ug/L		196	

Sample ID: Blank

Report Date/Time: Wednesday, January 13, 2010 19:24:40

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Simple Linear	1.0000
Be	9Linear Thru Zero	
B	11Simple Linear	
Na	23Simple Linear	
Mg	24Simple Linear	
Al	27Simple Linear	
P	31Simple Linear	
K	39Simple Linear	
Ca	43Simple Linear	
Sc	45Linear Thru Zero	
Ti	47Simple Linear	1.0000
V	51Simple Linear	
Cr	52Simple Linear	
Cr	53Simple Linear	
Mn	55Simple Linear	
Fe	57Simple Linear	
Co	59Simple Linear	
Ni	60Linear Thru Zero	
Cu	63Simple Linear	
Cu	65Simple Linear	
Zn	66Simple Linear	
Zn	67Simple Linear	
Zn	68Simple Linear	
Ge	74Simple Linear	
As	75Simple Linear	
Se	77Simple Linear	
Se	82Simple Linear	
Kr	83Simple Linear	
Sr	88Simple Linear	
Y	89Simple Linear	
Zr	90Simple Linear	
Mo	98Simple Linear	
Ag	107Simple Linear	
Cd	111Simple Linear	
Cd	114Simple Linear	
In	115Simple Linear	
Sn	120Simple Linear	
Sb	121Simple Linear	
Sb	123Simple Linear	
Ba	135Simple Linear	
Ba	137Simple Linear	
Ho	165Simple Linear	
Lu	175Simple Linear	
Tl	205Simple Linear	
Pb	208Simple Linear	
Bi	209Simple Linear	
Th	232Simple Linear	
U	238Simple Linear	

Sample ID: Blank

Report Date/Time: Wednesday, January 13, 2010 19:24:40

Page 2

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45					
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74					
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115					
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175					
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Wednesday, January 13, 2010 19:24:40

Page 3

ICPMS#4 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Wednesday, January 13, 2010 19:28:03

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\Standard 1.129

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	10.000	ug/L	7.049	1356	0.008
Be	9	10.000	ug/L	2.973	501	0.003
B	11	20.000	ug/L	1.059	1134	0.006
Na	23	1000.000	ug/L	4.609	1283177	7.209
Mg	24	1000.000	ug/L	6.700	826966	4.799
Al	27	1000.000	ug/L	4.156	1109851	6.461
P	31	1000.000	ug/L	1.820	63415	0.353
K	39	1000.000	ug/L	3.392	2520078	12.409
Ca	43	1000.000	ug/L	2.659	4801	0.026
> Sc	45		ug/L		171774	171774.297
Ti	47	10.000	ug/L	3.785	2071	0.011
V	51	10.000	ug/L	39.074	13455	0.116
Cr	52	10.000	ug/L	1.430	21193	0.110
Cr	53		ug/L		165998	0.101
Mn	55	10.000	ug/L	1.855	30923	0.175
Fe	57	1000.000	ug/L	2.683	62742	0.350
Co	59	10.000	ug/L	3.086	22124	0.128
Ni	60	10.000	ug/L	4.356	5038	0.029
Cu	63		ug/L		10624	0.061
Cu	65	10.000	ug/L	2.015	5098	0.029
Zn	66	10.000	ug/L	1.589	2648	0.022
Zn	67		ug/L		9620	0.011
Zn	68		ug/L		2681	0.017
> Ge	74		ug/L		116432	116432.104
As	75	10.000	ug/L	3.769	3283	0.027
Se	77		ug/L		7226	0.011
Se	82	10.000	ug/L	7.640	263	0.002
Kr	83		ug/L		40	-0.000
Sr	88	10.000	ug/L	1.458	45263	0.609
Y	89		ug/L		16	0.000
Zr	90	10.000	ug/L	2.817	25195	0.336
Mo	98	10.000	ug/L	2.752	10443	0.140
Ag	107	10.000	ug/L	3.111	16902	0.228
Cd	111	10.000	ug/L	3.745	3959	0.053
Cd	114		ug/L		9387	0.126
> In	115		ug/L		74061	74060.838
Sn	120	10.000	ug/L	3.482	18056	0.242
Sb	121	10.000	ug/L	2.003	13908	0.185
Sb	123		ug/L		10573	0.140
Ba	135		ug/L		4088	0.059
Ba	137	10.000	ug/L	5.163	7031	0.102
Ho	165		ug/L		7	0.000
> Lu	175		ug/L		68808	68807.534
Tl	205	10.000	ug/L	4.172	6222	0.090
Pb	208	10.000	ug/L	3.220	44413	0.640
Bi	209		ug/L		27	0.000
Th	232	10.000	ug/L	4.756	58313	0.843
U	238	10.000	ug/L	4.467	62529	0.907

Sample ID: Standard 1

Report Date/Time: Wednesday, January 13, 2010 19:30:49

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: Standard 1

Report Date/Time: Wednesday, January 13, 2010 19:30:49

Page 2

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Li	7				
|	Be	9				
|	B	11				
|	Na	23				
|	Mg	24				
|	Al	27				
|	P	31				
|	K	39				
|	Ca	43				
>	Sc	45				
|	Ti	47				
|	V	51				
|	Cr	52				
|	Cr	53				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
|	Cu	63				
|	Cu	65				
[	Zn	66				
|	Zn	67				
|	Zn	68				
>	Ge	74				
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
[	Sr	88				
|	Y	89				
|	Zr	90				
|	Mo	98				
|	Ag	107				
|	Cd	111				
|	Cd	114				
>	In	115				
|	Sn	120				
|	Sb	121				
|	Sb	123				
[	Ba	135				
|	Ba	137				
|	Ho	165				
>	Lu	175				
|	Tl	205				
|	Pb	208				
|	Bi	209				
|	Th	232				
|	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Wednesday, January 13, 2010 19:30:49

Page 3

ICPMS#4 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Wednesday, January 13, 2010 19:34:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\Standard 2.130

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	99.918	ug/L	9.833	12561	0.072
Be	9	99.993	ug/L	5.448	5030	0.029
B	11	199.842	ug/L	3.059	10155	0.058
Na	23	9999.822	ug/L	5.160	12636158	71.963
Mg	24	10002.377	ug/L	5.599	8608989	49.166
Al	27	10007.290	ug/L	3.874	12197218	69.738
P	31	9997.380	ug/L	1.277	604833	3.442
K	39	10000.154	ug/L	2.606	22136865	124.281
Ca	43	9993.388	ug/L	1.918	42401	0.240
Sc	45		ug/L		174969	174969.476
Ti	47	100.022	ug/L	1.232	19887	0.113
V	51	99.863	ug/L	0.789	172146	1.022
Cr	52	99.933	ug/L	2.186	182904	1.033
Cr	53		ug/L		151655	0.002
Mn	55	99.966	ug/L	2.674	296231	1.688
Fe	57	9996.381	ug/L	1.691	592967	3.374
Co	59	99.952	ug/L	2.291	214061	1.223
Ni	60	99.875	ug/L	2.652	44664	0.255
Cu	63		ug/L		99514	0.568
Cu	65	99.935	ug/L	1.188	47840	0.273
Zn	66	99.956	ug/L	0.802	25306	0.213
Zn	67		ug/L		11681	0.027
Zn	68		ug/L		18577	0.150
Ge	74		ug/L		118540	118539.647
As	75	99.938	ug/L	1.161	30293	0.254
Se	77		ug/L		7091	0.009
Se	82	100.022	ug/L	3.995	2852	0.024
Kr	83		ug/L		51	0.000
Sr	88	99.975	ug/L	1.537	445915	5.942
Y	89		ug/L		47	0.000
Zr	90	99.964	ug/L	0.737	243809	3.246
Mo	98	100.001	ug/L	1.064	105592	1.407
Ag	107	99.975	ug/L	1.263	166763	2.222
Cd	111	99.987	ug/L	1.056	39521	0.527
Cd	114		ug/L		93312	1.243
In	115		ug/L		75025	75025.040
Sn	120	99.985	ug/L	0.437	178855	2.382
Sb	121	99.989	ug/L	5.582	137231	1.826
Sb	123		ug/L		105222	1.400
Ba	135		ug/L		40456	0.577
Ba	137	99.957	ug/L	1.287	68554	0.977
Ho	165		ug/L		9	0.000
Lu	175		ug/L		70151	70150.856
Tl	205	99.951	ug/L	0.717	60017	0.855
Pb	208	99.955	ug/L	0.448	430321	6.129
Bi	209		ug/L		120	0.002
Th	232	99.989	ug/L	1.304	585636	8.343
U	238	99.959	ug/L	0.351	611308	8.712

Sample ID: Standard 2

Report Date/Time: Wednesday, January 13, 2010 19:36:58

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	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	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: Standard 2

Report Date/Time: Wednesday, January 13, 2010 19:36:58

Page 2

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
Sc	45					
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
Ge	74					
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
In	115					
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
Lu	175					
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Wednesday, January 13, 2010 19:36:58

Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Wednesday, January 13, 2010 19:40:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 1.131

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	51.171	ug/L	6.713	6410	0.037
Be	9	52.727	ug/L	4.047	2638	0.015
B	11	106.665	ug/L	1.775	5417	0.031
Na	23	5161.677	ug/L	9.588	6497017	37.146
Mg	24	4866.116	ug/L	1.452	4161840	23.919
Al	27	4928.933	ug/L	3.947	5972720	34.348
P	31	4938.507	ug/L	0.330	298316	1.700
K	39	5378.222	ug/L	1.826	12011976	66.840
Ca	43	4964.010	ug/L	0.927	21135	0.119
> Sc	45		ug/L		173847	173846.647
Ti	47	50.423	ug/L	2.158	10054	0.057
V	51	46.441	ug/L	2.029	76035	0.475
Cr	52	51.523	ug/L	1.728	94819	0.532
Cr	53		ug/L		164187	0.079
Mn	55	51.421	ug/L	1.739	151898	0.868
Fe	57	4965.797	ug/L	1.376	294082	1.676
Co	59	50.105	ug/L	1.330	106701	0.613
Ni	60	52.164	ug/L	0.787	23241	0.133
Cu	63		ug/L		50483	0.289
Cu	65	50.420	ug/L	0.679	24039	0.138
Zn	66	51.376	ug/L	1.355	12998	0.109
Zn	67		ug/L		10666	0.019
Zn	68		ug/L		10134	0.079
> Ge	74		ug/L		118209	118209.302
As	75	50.142	ug/L	0.634	15225	0.128
Se	77		ug/L		7367	0.012
Se	82	50.473	ug/L	2.134	1429	0.012
Kr	83		ug/L		52	0.000
Sr	88	50.723	ug/L	0.911	226926	3.015
Y	89		ug/L		28	0.000
Zr	90	48.316	ug/L	0.702	118325	1.569
Mo	98	48.721	ug/L	1.356	51610	0.685
Ag	107	50.672	ug/L	0.833	84781	1.126
Cd	111	51.304	ug/L	1.485	20340	0.270
Cd	114		ug/L		47484	0.631
> In	115		ug/L		75227	75227.491
Sn	120	50.480	ug/L	0.276	90628	1.202
Sb	121	50.954	ug/L	2.271	70246	0.931
Sb	123		ug/L		53872	0.713
Ba	135		ug/L		20045	0.287
Ba	137	51.163	ug/L	0.516	34897	0.500
Ho	165		ug/L		7	0.000
> Lu	175		ug/L		69738	69737.857
Tl	205	48.655	ug/L	1.052	29071	0.416
Pb	208	51.700	ug/L	1.029	221431	3.170
Bi	209		ug/L		50	0.001
Th	232	51.575	ug/L	0.543	300486	4.304
U	238	52.924	ug/L	0.718	321828	4.612

Sample ID: QC Std 1

Report Date/Time: Wednesday, January 13, 2010 19:43:08

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Li	7	102.342				
|	Be	9	105.455				
|	B	11	106.665				
|	Na	23	103.234				
|	Mg	24	97.322				
|	Al	27	97.603				
|	P	31	98.770				
|	K	39	107.564				
|	Ca	43	99.280				
>	Sc	45		101.6			
|	Ti	47	100.845				
|	V	51	92.881				
|	Cr	52	103.046				
|	Cr	53					
|	Mn	55	102.842				
|	Fe	57	99.316				
|	Co	59	100.209				
|	Ni	60	104.328				
|	Cu	63					
[	Cu	65	100.839				
|	Zn	66	102.753				
|	Zn	67					
|	Zn	68					
>	Ge	74		100.4			
|	As	75	100.283				
|	Se	77					
|	Se	82	100.947				
[	Kr	83					
|	Sr	88	101.445				
|	Y	89					
|	Zr	90	96.632				
|	Mo	98	97.442				
|	Ag	107	101.345				
|	Cd	111	102.608				
|	Cd	114					
>	In	115		99.8			
|	Sn	120	100.960				
|	Sb	121	101.908				
[	Sb	123					
|	Ba	135					
|	Ba	137	102.326				
|	Ho	165					
>	Lu	175		99.5			
|	Tl	205	97.310				
|	Pb	208	103.400				
|	Bi	209					
|	Th	232	103.151				
[	U	238	105.847				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Wednesday, January 13, 2010 19:43:08

Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Wednesday, January 13, 2010 19:46:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 2.132

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	-0.010	ug/L	224.475	22	-0.000
Be	9	0.006	ug/L	831.255	4	0.000
B	11	3.787	ug/L	18.168	253	0.001
Na	23	-4.167	ug/L	240.649	40728	-0.030
Mg	24	-1.602	ug/L	74.074	2000	-0.008
Al	27	0.823	ug/L	57.183	1667	0.006
P	31	-1.523	ug/L	167.225	2672	-0.001
K	39	11.831	ug/L	12.347	415970	0.147
Ca	43	-3.840	ug/L	257.183	391	-0.000
Sc	45		ug/L		172824	172823.554
Ti	47	-0.091	ug/L	41.368	164	-0.000
V	51	-0.508	ug/L	353.580	-7390	-0.005
Cr	52	-0.133	ug/L	63.565	2032	-0.001
Cr	53		ug/L		146921	-0.016
Mn	55	-0.013	ug/L	72.312	907	-0.000
Fe	57	2.102	ug/L	59.619	2826	0.001
Co	59	0.009	ug/L	33.546	130	0.000
Ni	60	0.017	ug/L	196.861	120	0.000
Cu	63		ug/L		177	0.000
Cu	65	-0.011	ug/L	149.214	98	-0.000
Zn	66	0.050	ug/L	88.495	72	0.000
Zn	67		ug/L		8346	-0.001
Zn	68		ug/L		747	-0.000
Ge	74		ug/L		118121	118121.256
As	75	0.523	ug/L	185.514	292	0.001
Se	77		ug/L		5855	-0.001
Se	82	0.189	ug/L	277.096	-7	0.000
Kr	83		ug/L		45	-0.000
Sr	88	0.008	ug/L	27.144	178	0.000
Y	89		ug/L		15	0.000
Zr	90	0.111	ug/L	18.552	588	0.004
Mo	98	0.031	ug/L	67.341	78	0.000
Ag	107	0.024	ug/L	26.254	90	0.001
Cd	111	0.010	ug/L	41.463	17	0.000
Cd	114		ug/L		34	0.000
In	115		ug/L		76021	76020.535
Sn	120	0.198	ug/L	11.365	534	0.005
Sb	121	0.905	ug/L	11.897	1498	0.017
Sb	123		ug/L		1158	0.013
Ba	135		ug/L		17	0.000
Ba	137	-0.006	ug/L	214.373	26	-0.000
Ho	165		ug/L		7	0.000
Lu	175		ug/L		69139	69139.315
Tl	205	0.091	ug/L	26.408	112	0.001
Pb	208	-0.002	ug/L	395.828	379	-0.000
Bi	209		ug/L		18	0.000
Th	232	0.136	ug/L	27.793	1162	0.011
U	238	0.006	ug/L	49.911	228	0.001

Sample ID: QC Std 2

Report Date/Time: Wednesday, January 13, 2010 19:49:22

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
Sc	45		101.0			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
Ge	74		100.4			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
In	115		100.8			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
Lu	175		98.6			
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

Sample ID: QC Std 2

Report Date/Time: Wednesday, January 13, 2010 19:49:22

Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Wednesday, January 13, 2010 19:52:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 3.133

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	11.573	ug/L	7.915	1462	0.008
Be	9	0.561	ug/L	22.045	32	0.000
B	11	18.097	ug/L	3.493	969	0.005
Na	23	308.970	ug/L	17.542	431186	2.223
Mg	24	10.137	ug/L	22.491	12005	0.050
Al	27	31.227	ug/L	22.527	38387	0.218
P	31	53.890	ug/L	4.153	5981	0.019
K	39	313.944	ug/L	10.728	1066461	3.902
Ca	43	223.336	ug/L	1.500	1337	0.005
> Sc	45		ug/L		173145	173144.718
Ti	47	9.099	ug/L	1.017	1956	0.010
V	51	8.413	ug/L	60.352	8337	0.086
Cr	52	11.098	ug/L	0.781	22128	0.115
Cr	53		ug/L		172783	0.132
Mn	55	5.715	ug/L	1.730	17660	0.097
Fe	57	113.672	ug/L	4.062	9353	0.038
Co	59	1.104	ug/L	2.075	2449	0.014
Ni	60	2.934	ug/L	6.605	1408	0.007
Cu	63		ug/L		1582	0.008
Cu	65	1.372	ug/L	1.202	752	0.004
Zn	66	11.421	ug/L	2.942	2938	0.024
Zn	67		ug/L		10016	0.013
Zn	68		ug/L		2810	0.017
> Ge	74		ug/L		118324	118324.199
As	75	7.295	ug/L	25.091	2332	0.019
Se	77		ug/L		7444	0.012
Se	82	4.579	ug/L	12.213	118	0.001
Kr	83		ug/L		54	0.000
Sr	88	10.915	ug/L	0.822	49477	0.649
Y	89		ug/L		13	-0.000
Zr	90	2.026	ug/L	0.967	5318	0.066
Mo	98	0.510	ug/L	4.170	591	0.007
Ag	107	1.036	ug/L	1.060	1801	0.023
Cd	111	1.107	ug/L	2.484	456	0.006
Cd	114		ug/L		1032	0.013
> In	115		ug/L		76053	76052.887
Sn	120	5.404	ug/L	1.481	9967	0.129
Sb	121	3.399	ug/L	2.670	4963	0.062
Sb	123		ug/L		3858	0.048
Ba	135		ug/L		885	0.012
Ba	137	2.151	ug/L	6.200	1495	0.021
Ho	165		ug/L		4	-0.000
> Lu	175		ug/L		69679	69678.885
Tl	205	1.081	ug/L	4.529	703	0.009
Pb	208	2.210	ug/L	0.929	9833	0.136
Bi	209		ug/L		19	0.000
Th	232	1.103	ug/L	0.551	6789	0.092
U	238	0.206	ug/L	3.821	1446	0.018

Sample ID: QC Std 3

Report Date/Time: Wednesday, January 13, 2010 19:55:32

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7	115.729				
Be	9	112.280				
B	11	120.647				
Na	23	123.588				
Mg	24	67.582				
Al	27	104.091				
P	31	107.779				
K	39	104.648				
Ca	43	111.668				
> Sc	45		101.1			
Ti	47	90.987				
V	51	84.131				
Cr	52	110.979				
Cr	53					
Mn	55	114.302				
Fe	57	113.672				
Co	59	110.359				
Ni	60	146.677				
Cu	63					
Cu	65	137.165				
Zn	66	114.206				
Zn	67					
Zn	68					
> Ge	74		100.5			
As	75	145.891				
Se	77					
Se	82	91.579				
Kr	83					
Sr	88	109.147				
Y	89					
Zr	90	101.319				
Mo	98	101.966				
Ag	107	103.608				
Cd	111	110.736				
Cd	114					
> In	115		100.9			
Sn	120	108.086				
Sb	121	113.286				
Sb	123					
Ba	135					
Ba	137	107.550				
Ho	165					
> Lu	175		99.4			
Tl	205	108.123				
Pb	208	110.521				
Bi	209					
Th	232	110.255				
U	238	102.996				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 3	Mg	24CRDL is out of limits
QC Std 3	Ni	60CRDL is out of limits
QC Std 3	Cu	65CRDL is out of limits
QC Std 3	As	75CRDL is out of limits

Sample ID: QC Std 3

Report Date/Time: Wednesday, January 13, 2010 19:55:32

Page 3

QC Action

QC Action Line: Continue

Sample ID: QC Std 3

Report Date/Time: Wednesday, January 13, 2010 19:55:32

Page 4

ICPMS#4 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Wednesday, January 13, 2010 19:58:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 4.134

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.095	ug/L	52.009	34	0.000
Be	9	0.065	ug/L	56.739	7	0.000
B	11	1.617	ug/L	15.979	139	0.000
Na	23	96500.456	ug/L	3.132	115442745	694.462
Mg	24	94117.105	ug/L	2.993	76891962	462.629
Al	27	94627.539	ug/L	3.143	109573540	659.429
P	31	97458.432	ug/L	0.507	5578202	33.549
K	39	91707.879	ug/L	2.670	189814180	1139.738
Ca	43	95800.771	ug/L	0.961	382775	2.301
> Sc	45		ug/L		166189	166188.760
Ti	47	1432.877	ug/L	2.230	268345	1.614
V	51	-1.594	ug/L	291.915	-8954	-0.016
Cr	52	3.082	ug/L	2.974	7474	0.032
Cr	53		ug/L		121975	-0.132
Mn	55	5.629	ug/L	0.449	16709	0.095
Fe	57	97973.241	ug/L	0.948	5498500	33.071
Co	59	0.300	ug/L	7.694	716	0.004
Ni	60	4.539	ug/L	3.122	2032	0.012
Cu	63		ug/L		2259	0.013
Cu	65	3.161	ug/L	2.396	1534	0.009
Zn	66	4.692	ug/L	4.622	1152	0.010
Zn	67		ug/L		7074	-0.007
Zn	68		ug/L		844	0.001
> Ge	74		ug/L		109787	109787.022
As	75	1.182	ug/L	116.275	457	0.003
Se	77		ug/L		5141	-0.004
Se	82	-0.699	ug/L	78.458	-30	-0.000
Kr	83		ug/L		82	0.000
Sr	88	1.126	ug/L	0.932	4837	0.067
Y	89		ug/L		146	0.002
Zr	90	0.532	ug/L	48.615	1506	0.017
Mo	98	1905.827	ug/L	1.793	1885372	26.812
Ag	107	0.056	ug/L	21.244	134	0.001
Cd	111	0.520	ug/L	8.346	204	0.003
Cd	114		ug/L		2514	0.035
> In	115		ug/L		70330	70329.672
Sn	120	0.135	ug/L	13.143	389	0.003
Sb	121	0.191	ug/L	5.056	469	0.003
Sb	123		ug/L		360	0.002
Ba	135		ug/L		289	0.004
Ba	137	0.608	ug/L	5.927	440	0.006
Ho	165		ug/L		195	0.003
> Lu	175		ug/L		68931	68930.922
Tl	205	0.006	ug/L	221.033	62	0.000
Pb	208	0.172	ug/L	7.739	1111	0.011
Bi	209		ug/L		144	0.002
Th	232	0.077	ug/L	35.746	815	0.006
U	238	-0.025	ug/L	4.379	42	-0.002

Sample ID: QC Std 4

Report Date/Time: Wednesday, January 13, 2010 20:01:43

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Li	7				
|	Be	9				
|	B	11				
|	Na	23		96.500		
|	Mg	24		94.117		
|	Al	27		94.628		
|	P	31		97.458		
|	K	39		91.708		
|	Ca	43		95.801		
>	Sc	45		97.1		
|	Ti	47		71.644		
|	V	51				
|	Cr	52		83.285		
|	Cr	53				
|	Mn	55		97.055		
|	Fe	57		97.973		
|	Co	59		119.924		
|	Ni	60		168.099		
|	Cu	63				
|	Cu	65		109.013		
|	Zn	66		130.336		
|	Zn	67				
|	Zn	68				
>	Ge	74		93.3		
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
|	Sr	88		93.795		
|	Y	89				
|	Zr	90				
|	Mo	98		95.291		
|	Ag	107				
|	Cd	111		130.067		
|	Cd	114				
>	In	115		93.3		
|	Sn	120				
|	Sb	121		191.057		
|	Sb	123				
|	Ba	135				
|	Ba	137		90.736		
|	Ho	165				
>	Lu	175		98.3		
|	Tl	205				
|	Pb	208		85.989		
|	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

Sample ID: QC Std 4
 Report Date/Time: Wednesday, January 13, 2010 20:01:43
 Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Wednesday, January 13, 2010 20:05:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 5.135

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li 7	21.453	ug/L	9.177	2472	0.015
Be 9	21.695	ug/L	0.822	996	0.006
B 11	22.388	ug/L	2.182	1087	0.006
Na 23	100391.618	ug/L	0.799	114981589	722.465
Mg 24	103235.573	ug/L	1.709	80744936	507.450
Al 27	94613.035	ug/L	4.509	104918455	659.328
P 31	101177.319	ug/L	0.242	5543901	34.829
K 39	96292.618	ug/L	0.823	190765153	1196.717
Ca 43	98009.796	ug/L	0.528	374893	2.354
Sc 45		ug/L		159099	159098.992
Ti 47	1489.868	ug/L	0.478	267083	1.678
V 51	15.224	ug/L	17.597	18797	0.156
Cr 52	23.186	ug/L	0.475	40206	0.240
Cr 53		ug/L		147245	0.060
Mn 55	25.547	ug/L	0.821	69513	0.431
Fe 57	99629.301	ug/L	1.534	5352810	33.630
Co 59	19.572	ug/L	0.531	38209	0.240
Ni 60	23.224	ug/L	0.396	9527	0.059
Cu 63		ug/L		18921	0.118
Cu 65	21.441	ug/L	1.402	9409	0.059
Zn 66	23.500	ug/L	0.873	5411	0.050
Zn 67		ug/L		8948	0.012
Zn 68		ug/L		3939	0.030
Ge 74		ug/L		107004	107003.656
As 75	21.499	ug/L	7.027	5977	0.055
Se 77		ug/L		7267	0.017
Se 82	19.944	ug/L	6.227	504	0.005
Kr 83		ug/L		100	0.001
Sr 88	21.982	ug/L	2.307	87522	1.306
Y 89		ug/L		145	0.002
Zr 90	21.337	ug/L	1.686	46617	0.693
Mo 98	1987.453	ug/L	1.522	1870347	27.960
Ag 107	19.466	ug/L	1.358	28987	0.433
Cd 111	20.206	ug/L	3.034	7129	0.106
Cd 114		ug/L		19077	0.285
In 115		ug/L		66901	66901.214
Sn 120	20.780	ug/L	1.243	33265	0.495
Sb 121	22.717	ug/L	1.087	27965	0.415
Sb 123		ug/L		21719	0.322
Ba 135		ug/L		7475	0.110
Ba 137	19.446	ug/L	1.297	12869	0.190
Ho 165		ug/L		199	0.003
Lu 175		ug/L		67566	67565.744
Tl 205	17.580	ug/L	1.326	10214	0.150
Pb 208	18.976	ug/L	1.053	78988	1.163
Bi 209		ug/L		186	0.003
Th 232	19.827	ug/L	0.441	112148	1.654
U 238	20.249	ug/L	0.885	119424	1.765

Sample ID: QC Std 5

Report Date/Time: Wednesday, January 13, 2010 20:07:55

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	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	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Diff	Dup. Rel.	% Diff
[	Li	7		107.263								
|	Be	9		108.477								
|	B	11		111.939								
|	Na	23		100.392								
|	Mg	24		103.236								
|	Al	27		94.613								
|	P	31		101.177								
|	K	39		96.293								
|	Ca	43		98.010								
>	Sc	45						92.9				
|	Ti	47		74.493								
|	V	51		76.120								
|	Cr	52		97.831								
|	Cr	53										
|	Mn	55		99.021								
|	Fe	57		99.629								
|	Co	59		96.652								
|	Ni	60		102.309								
|	Cu	63										
|	Cu	65		93.631								
[	Zn	66		99.576								
|	Zn	67										
|	Zn	68										
>	Ge	74						90.9				
|	As	75		107.494								
|	Se	77										
|	Se	82		99.721								
|	Kr	83										
[	Sr	88		103.688								
|	Y	89										
|	Zr	90		106.685								
|	Mo	98		99.373								
|	Ag	107		97.329								
|	Cd	111		99.048								
|	Cd	114										
>	In	115						88.7				
|	Sn	120		103.900								
|	Sb	121		113.019								
|	Sb	123										
[	Ba	135										
|	Ba	137		94.077								
|	Ho	165										
>	Lu	175						96.4				
|	Tl	205		87.901								
|	Pb	208		93.940								
|	Bi	209										
|	Th	232		99.135								
|	U	238		101.244								

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Ti	47	ICSAB is out of limits
QC Std 5	V	51	ICSAB is out of limits

QC Action

Sample ID: QC Std 5
 Report Date/Time: Wednesday, January 13, 2010 20:07:55
 Page 3

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Wednesday, January 13, 2010 20:11:19

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 6.136

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	54.866	ug/L	7.376	6555	0.039
Be	9	55.065	ug/L	2.109	2628	0.016
B	11	104.388	ug/L	1.878	5057	0.030
Na	23	5369.063	ug/L	4.152	6446578	38.638
Mg	24	5263.713	ug/L	3.048	4292716	25.874
Al	27	4907.440	ug/L	4.568	5667790	34.198
P	31	5080.341	ug/L	1.115	292532	1.749
K	39	5055.241	ug/L	13.532	10796514	62.826
Ca	43	5052.050	ug/L	1.400	20507	0.121
> Sc	45		ug/L		165765	165765.275
Ti	47	51.846	ug/L	2.488	9850	0.058
V	51	51.326	ug/L	1.084	80791	0.525
Cr	52	51.299	ug/L	0.717	90037	0.530
Cr	53		ug/L		157818	0.086
Mn	55	51.877	ug/L	2.084	146140	0.876
Fe	57	5070.616	ug/L	2.524	286275	1.712
Co	59	49.990	ug/L	2.050	101505	0.612
Ni	60	53.057	ug/L	1.927	22537	0.135
Cu	63		ug/L		48664	0.293
Cu	65	50.687	ug/L	2.503	23039	0.138
Zn	66	51.467	ug/L	0.683	12521	0.110
Zn	67		ug/L		10296	0.019
Zn	68		ug/L		9482	0.077
> Ge	74		ug/L		113662	113661.530
As	75	47.835	ug/L	1.493	13972	0.122
Se	77		ug/L		7341	0.014
Se	82	51.211	ug/L	4.920	1395	0.012
Kr	83		ug/L		46	-0.000
Sr	88	50.357	ug/L	1.235	219383	2.993
Y	89		ug/L		25	0.000
Zr	90	47.401	ug/L	0.811	113045	1.539
Mo	98	48.625	ug/L	2.019	50153	0.684
Ag	107	48.476	ug/L	0.990	78989	1.077
Cd	111	50.201	ug/L	2.426	19379	0.264
Cd	114		ug/L		45422	0.620
> In	115		ug/L		73259	73258.648
Sn	120	49.701	ug/L	0.539	86896	1.184
Sb	121	49.830	ug/L	2.982	66904	0.910
Sb	123		ug/L		50703	0.689
Ba	135		ug/L		19452	0.282
Ba	137	49.336	ug/L	1.134	33283	0.482
Ho	165		ug/L		9	0.000
> Lu	175		ug/L		68967	68967.105
Tl	205	47.862	ug/L	1.037	28285	0.409
Pb	208	50.743	ug/L	0.781	214953	3.111
Bi	209		ug/L		54	0.001
Th	232	50.585	ug/L	1.016	291460	4.221
U	238	52.319	ug/L	1.284	314635	4.560

Sample ID: QC Std 6

Report Date/Time: Wednesday, January 13, 2010 20:14:07

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	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	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass QC Std	% Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Li	7	109.732				
|	Be	9	110.131				
|	B	11	104.388				
|	Na	23	107.381				
|	Mg	24	105.274				
|	Al	27	97.177				
|	P	31	101.607				
|	K	39	101.105				
|	Ca	43	101.041				
>	Sc	45		96.8			
|	Ti	47	103.691				
|	V	51	102.653				
|	Cr	52	102.598				
|	Cr	53					
|	Mn	55	103.753				
|	Fe	57	101.412				
|	Co	59	99.979				
|	Ni	60	106.113				
|	Cu	63					
|	Cu	65	101.375				
[	Zn	66	102.934				
|	Zn	67					
|	Zn	68					
>	Ge	74		96.6			
|	As	75	95.669				
|	Se	77					
|	Se	82	102.423				
[	Kr	83					
[	Sr	88	100.715				
|	Y	89					
|	Zr	90	94.802				
|	Mo	98	97.250				
|	Ag	107	96.951				
|	Cd	111	100.401				
|	Cd	114					
>	In	115		97.2			
|	Sn	120	99.402				
|	Sb	121	99.660				
[	Sb	123					
[	Ba	135					
|	Ba	137	98.672				
|	Ho	165					
>	Lu	175		98.4			
|	Tl	205	95.724				
|	Pb	208	101.487				
|	Bi	209					
|	Th	232	101.170				
[	U	238	104.637				

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
QC Std 6	Be	9CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

Sample ID: QC Std 6
 Report Date/Time: Wednesday, January 13, 2010 20:14:07
 Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Wednesday, January 13, 2010 20:17:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 7.137

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	-0.001	ug/L	3009.855	22	-0.000
Be	9	0.003	ug/L	2303.870	4	0.000
B	11	2.116	ug/L	21.891	162	0.001
Na	23	1.677	ug/L	301.324	45741	0.012
Mg	24	1.379	ug/L	185.310	4334	0.007
Al	27	1.173	ug/L	147.141	2000	0.008
P	31	-4.321	ug/L	37.306	2390	-0.001
K	39	-2.859	ug/L	347.332	366656	-0.036
Ca	43	-6.216	ug/L	321.295	363	-0.000
> Sc	45		ug/L		164835	164835.199
Ti	47	0.222	ug/L	30.869	214	0.000
V	51	-1.130	ug/L	171.155	-8104	-0.012
Cr	52	-0.227	ug/L	27.151	1778	-0.002
Cr	53		ug/L		139520	-0.019
Mn	55	-0.019	ug/L	39.100	850	-0.000
Fe	57	0.433	ug/L	534.784	2603	0.000
Co	59	0.002	ug/L	221.351	109	0.000
Ni	60	0.026	ug/L	50.971	119	0.000
Cu	63		ug/L		175	0.000
Cu	65	0.014	ug/L	132.957	104	0.000
Zn	66	0.065	ug/L	56.959	72	0.000
Zn	67		ug/L		7778	-0.003
Zn	68		ug/L		669	-0.001
> Ge	74		ug/L		113191	113191.493
As	75	0.539	ug/L	261.875	287	0.001
Se	77		ug/L		5644	-0.001
Se	82	0.410	ug/L	122.009	-1	0.000
Kr	83		ug/L		43	-0.000
Sr	88	0.005	ug/L	110.655	159	0.000
Y	89		ug/L		15	0.000
Zr	90	0.109	ug/L	34.326	559	0.004
Mo	98	0.125	ug/L	15.380	172	0.002
Ag	107	0.018	ug/L	16.680	78	0.000
Cd	111	0.011	ug/L	177.946	17	0.000
Cd	114		ug/L		32	0.000
> In	115		ug/L		73060	73059.899
Sn	120	0.120	ug/L	14.357	377	0.003
Sb	121	0.568	ug/L	16.324	988	0.010
Sb	123		ug/L		838	0.009
Ba	135		ug/L		22	0.000
Ba	137	-0.008	ug/L	26.749	25	-0.000
Ho	165		ug/L		6	0.000
> Lu	175		ug/L		68586	68585.948
Tl	205	0.163	ug/L	25.364	153	0.001
Pb	208	-0.001	ug/L	194.754	376	-0.000
Bi	209		ug/L		14	-0.000
Th	232	0.086	ug/L	28.482	865	0.007
U	238	0.004	ug/L	149.214	216	0.000

Sample ID: QC Std 7

Report Date/Time: Wednesday, January 13, 2010 20:20:21

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		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		96.2			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		96.9			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		97.8			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Wednesday, January 13, 2010 20:20:21

Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 10

Sample Date/Time: Wednesday, January 13, 2010 20:23:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 10.138

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	990.022	ug/L	8.717	114491	0.711
Be	9	1021.902	ug/L	4.581	47313	0.294
B	11	1.659	ug/L	7.668	137	0.000
Na	23	50223.155	ug/L	2.515	58259388	361.429
Mg	24	46119.180	ug/L	3.045	36519494	226.697
Al	27	48002.484	ug/L	1.840	53891561	334.514
P	31	23913.550	ug/L	1.246	1328583	8.232
K	39	47205.962	ug/L	3.507	94907090	586.672
Ca	43	48581.164	ug/L	0.626	188358	1.167
> Sc	45		ug/L		161098	161097.634
Ti	47	38.672	ug/L	2.120	7185	0.044
V	51	1011.922	ug/L	0.504	1661564	10.352
Cr	52	938.223	ug/L	0.606	1563784	9.694
Cr	53		ug/L		320848	1.126
Mn	55	978.858	ug/L	0.863	2664306	16.532
Fe	57	49331.970	ug/L	0.488	2685034	16.652
Co	59	902.216	ug/L	1.330	1778674	11.042
Ni	60	928.237	ug/L	0.741	381460	2.367
Cu	63		ug/L		836411	5.191
Cu	65	912.598	ug/L	1.091	401506	2.492
Zn	66	2399.641	ug/L	1.905	548026	5.113
Zn	67		ug/L		92716	0.794
Zn	68		ug/L		382203	3.559
> Ge	74		ug/L		107191	107191.432
As	75	934.285	ug/L	0.420	255063	2.378
Se	77		ug/L		14910	0.089
Se	82	496.179	ug/L	0.604	12841	0.120
Kr	83		ug/L		63	0.000
Sr	88	1019.753	ug/L	0.616	4130539	60.609
Y	89		ug/L		137	0.002
Zr	90	498.287	ug/L	0.534	1102842	16.178
Mo	98	982.720	ug/L	0.505	942208	13.825
Ag	107	237.712	ug/L	1.120	360129	5.284
Cd	111	983.766	ug/L	0.882	353118	5.181
Cd	114		ug/L		830994	12.194
> In	115		ug/L		68149	68148.934
Sn	120	995.174	ug/L	0.413	1615624	23.705
Sb	121	252.692	ug/L	4.009	314700	4.615
Sb	123		ug/L		240630	3.528
Ba	135		ug/L		361176	5.363
Ba	137	935.602	ug/L	1.448	615819	9.143
Ho	165		ug/L		69	0.001
> Lu	175		ug/L		67356	67355.762
Tl	205	472.600	ug/L	0.374	272255	4.041
Pb	208	4900.196	ug/L	0.641	20237009	300.451
Bi	209		ug/L		461	0.007
Th	232	2466.472	ug/L	0.844	13861962	205.806
U	238	5066.639	ug/L	2.067	29738944	441.562

Sample ID: QC Std 10

Report Date/Time: Wednesday, January 13, 2010 20:26:30

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: QC Std 10

Report Date/Time: Wednesday, January 13, 2010 20:26:30

Page 2

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Li	7	99.002			
|	Be	9	102.190			
|	B	11				
|	Na	23	100.446			
|	Mg	24	92.238			
|	Al	27	96.005			
|	P	31	95.654			
|	K	39	94.412			
|	Ca	43	97.162			
>	Sc	45		94.1		
|	Ti	47				
|	V	51	101.192			
|	Cr	52	93.822			
|	Cr	53				
|	Mn	55	97.886			
|	Fe	57	98.664			
|	Co	59	90.222			
|	Ni	60	92.824			
|	Cu	63				
|	Cu	65	91.260			
[	Zn	66	95.986			
|	Zn	67				
|	Zn	68				
>	Ge	74		91.1		
|	As	75	93.429			
|	Se	77				
|	Se	82	99.236			
|	Kr	83				
[	Sr	88	101.975			
|	Y	89				
|	Zr	90	99.657			
|	Mo	98	98.272			
|	Ag	107	95.085			
|	Cd	111	98.377			
|	Cd	114				
>	In	115		90.4		
|	Sn	120	99.517			
|	Sb	121	101.077			
|	Sb	123				
[	Ba	135				
|	Ba	137	93.560			
|	Ho	165				
>	Lu	175		96.1		
|	Tl	205	94.520			
|	Pb	208	98.004			
|	Bi	209				
|	Th	232	98.659			
|	U	238	101.333			

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 10

Report Date/Time: Wednesday, January 13, 2010 20:26:30

Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 11

Sample Date/Time: Wednesday, January 13, 2010 20:29:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 11.139

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	52.743	ug/L	8.543	6266	0.038
Be	9	52.058	ug/L	4.345	2471	0.015
B	11	103.824	ug/L	2.412	5005	0.030
Na	23	4968.942	ug/L	6.213	5939787	35.759
Mg	24	5299.030	ug/L	3.044	4297951	26.047
Al	27	5010.179	ug/L	3.317	5760108	34.914
P	31	4968.102	ug/L	1.114	284729	1.710
K	39	4688.240	ug/L	2.712	9982243	58.265
Ca	43	4881.628	ug/L	0.954	19724	0.117
> Sc	45		ug/L		164926	164926.033
Ti	47	50.116	ug/L	1.144	9481	0.056
V	51	49.967	ug/L	1.732	78074	0.511
Cr	52	51.502	ug/L	1.093	89922	0.532
Cr	53		ug/L		155769	0.079
Mn	55	51.943	ug/L	1.853	145558	0.877
Fe	57	5042.405	ug/L	2.121	283245	1.702
Co	59	50.356	ug/L	2.207	101723	0.616
Ni	60	52.655	ug/L	0.692	22254	0.134
Cu	63		ug/L		48810	0.295
Cu	65	51.766	ug/L	2.454	23406	0.141
Zn	66	53.679	ug/L	2.314	12879	0.114
Zn	67		ug/L		10360	0.021
Zn	68		ug/L		9659	0.080
> Ge	74		ug/L		112128	112128.145
As	75	47.731	ug/L	1.933	13752	0.122
Se	77		ug/L		6892	0.011
Se	82	50.555	ug/L	2.198	1358	0.012
Kr	83		ug/L		50	0.000
Sr	88	50.929	ug/L	1.295	219652	3.027
Y	89		ug/L		21	0.000
Zr	90	50.840	ug/L	4.132	119954	1.651
Mo	98	48.580	ug/L	1.606	49608	0.683
Ag	107	50.009	ug/L	0.839	80665	1.112
Cd	111	50.615	ug/L	0.676	19349	0.267
Cd	114		ug/L		46069	0.635
> In	115		ug/L		72534	72534.473
Sn	120	53.007	ug/L	2.141	91721	1.263
Sb	121	53.376	ug/L	1.032	70930	0.975
Sb	123		ug/L		54116	0.743
Ba	135		ug/L		19618	0.285
Ba	137	49.749	ug/L	2.091	33484	0.486
Ho	165		ug/L		9	0.000
> Lu	175		ug/L		68826	68825.772
Tl	205	49.868	ug/L	1.034	29405	0.426
Pb	208	51.972	ug/L	2.286	219667	3.187
Bi	209		ug/L		52	0.001
Th	232	52.361	ug/L	1.894	301025	4.369
U	238	53.910	ug/L	1.507	323513	4.698

Sample ID: QC Std 11

Report Date/Time: Wednesday, January 13, 2010 20:32:40

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
|	Li	7	105.487				
|	Be	9	104.117				
|	B	11	103.824				
|	Na	23	99.379				
|	Mg	24	105.981				
|	Al	27	99.211				
|	P	31	99.362				
|	K	39	93.765				
|	Ca	43	97.633				
>	Sc	45			96.3		
|	Ti	47	100.231				
|	V	51	99.935				
|	Cr	52	103.005				
|	Cr	53					
|	Mn	55	103.886				
|	Fe	57	100.848				
|	Co	59	100.712				
|	Ni	60	105.309				
|	Cu	63					
|	Cu	65	103.531				
|	Zn	66	107.358				
|	Zn	67					
|	Zn	68					
>	Ge	74			95.3		
|	As	75	95.461				
|	Se	77					
|	Se	82	101.110				
|	Kr	83					
|	Sr	88	101.857				
|	Y	89					
|	Zr	90	101.680				
|	Mo	98	97.159				
|	Ag	107	100.017				
|	Cd	111	101.231				
|	Cd	114					
>	In	115			96.2		
|	Sn	120	106.014				
|	Sb	121	106.752				
|	Sb	123					
|	Ba	135					
|	Ba	137	99.498				
|	Ho	165					
>	Lu	175			98.2		
|	Tl	205	99.736				
|	Pb	208	103.943				
|	Bi	209					
|	Th	232	104.722				
|	U	238	107.821				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 11

Report Date/Time: Wednesday, January 13, 2010 20:32:40

Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 12

Sample Date/Time: Wednesday, January 13, 2010 20:36:06

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 12.140

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li 7	0.123	ug/L	25.511	37	0.000
Be 9	0.010	ug/L	314.225	4	0.000
B 11	2.404	ug/L	22.693	175	0.001
Na 23	-9.325	ug/L	65.039	32705	-0.067
Mg 24	0.148	ug/L	1249.485	3334	0.001
Al 27	1.488	ug/L	92.060	2334	0.010
P 31	-5.267	ug/L	18.315	2335	-0.002
K 39	4.881	ug/L	254.105	382052	0.061
Ca 43	-6.231	ug/L	86.536	363	-0.000
> Sc 45		ug/L		164728	164728.080
Ti 47	-0.014	ug/L	554.657	170	-0.000
V 51	-0.331	ug/L	1101.839	-6804	-0.003
Cr 52	-0.273	ug/L	2.201	1697	-0.003
Cr 53		ug/L		134646	-0.048
Mn 55	-0.018	ug/L	116.210	850	-0.000
Fe 57	-1.146	ug/L	118.031	2513	-0.000
Co 59	0.015	ug/L	12.503	136	0.000
Ni 60	0.026	ug/L	142.226	118	0.000
Cu 63		ug/L		197	0.000
Cu 65	0.050	ug/L	64.001	121	0.000
Zn 66	0.218	ug/L	31.491	108	0.000
Zn 67		ug/L		7646	-0.003
Zn 68		ug/L		682	-0.000
> Ge 74		ug/L		111975	111974.604
As 75	0.475	ug/L	193.109	262	0.001
Se 77		ug/L		5312	-0.003
Se 82	0.298	ug/L	104.637	-4	0.000
Kr 83		ug/L		39	-0.000
Sr 88	0.008	ug/L	70.697	175	0.000
Y 89		ug/L		14	0.000
Zr 90	0.175	ug/L	17.773	719	0.006
Mo 98	0.127	ug/L	15.388	175	0.002
Ag 107	0.027	ug/L	5.509	92	0.001
Cd 111	0.013	ug/L	153.636	17	0.000
Cd 114		ug/L		34	0.000
> In 115		ug/L		73399	73398.852
Sn 120	0.751	ug/L	4.097	1482	0.018
Sb 121	1.559	ug/L	10.633	2321	0.028
Sb 123		ug/L		1786	0.022
Ba 135		ug/L		21	0.000
Ba 137	-0.007	ug/L	109.444	25	-0.000
Ho 165		ug/L		4	-0.000
> Lu 175		ug/L		68136	68135.508
Tl 205	0.301	ug/L	22.320	232	0.003
Pb 208	0.154	ug/L	9.649	1022	0.009
Bi 209		ug/L		13	-0.000
Th 232	0.267	ug/L	23.533	1884	0.022
U 238	0.057	ug/L	15.422	528	0.005

Sample ID: QC Std 12

Report Date/Time: Wednesday, January 13, 2010 20:38:54

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		96.2			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		95.1			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		97.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		97.2			
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

Sample ID: QC Std 12

Report Date/Time: Wednesday, January 13, 2010 20:38:54

Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Wednesday, January 13, 2010 21:13:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 6.146

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li 7	50.259	ug/L	6.938	6098	0.036
Be 9	50.858	ug/L	4.144	2466	0.015
B 11	103.784	ug/L	3.841	5107	0.030
Na 23	5298.804	ug/L	5.567	6468195	38.133
Mg 24	4948.972	ug/L	4.620	4099020	24.326
Al 27	4929.135	ug/L	2.447	5788083	34.350
P 31	5040.956	ug/L	2.093	294941	1.735
K 39	4900.087	ug/L	4.331	10639009	60.898
Ca 43	5014.151	ug/L	1.717	20682	0.120
> Sc 45		ug/L		168446	168445.524
Ti 47	50.451	ug/L	0.787	9747	0.057
V 51	47.502	ug/L	5.319	75523	0.486
Cr 52	51.099	ug/L	0.441	91148	0.528
Cr 53		ug/L		149345	0.021
Mn 55	51.831	ug/L	0.556	148373	0.875
Fe 57	5071.639	ug/L	1.137	290972	1.712
Co 59	50.753	ug/L	0.627	104729	0.621
Ni 60	53.013	ug/L	0.545	22885	0.135
Cu 63		ug/L		49541	0.293
Cu 65	51.472	ug/L	0.974	23772	0.141
Zn 66	51.417	ug/L	1.564	12586	0.110
Zn 67		ug/L		9497	0.012
Zn 68		ug/L		9508	0.077
> Ge 74		ug/L		114370	114369.843
As 75	48.682	ug/L	2.731	14308	0.124
Se 77		ug/L		7122	0.012
Se 82	50.654	ug/L	2.466	1388	0.012
Kr 83		ug/L		44	-0.000
Sr 88	50.452	ug/L	1.396	219563	2.999
Y 89		ug/L		40	0.000
Zr 90	48.477	ug/L	0.684	115478	1.574
Mo 98	48.865	ug/L	0.851	50353	0.687
Ag 107	49.052	ug/L	0.673	79837	1.090
Cd 111	50.793	ug/L	1.361	19590	0.268
Cd 114		ug/L		45623	0.623
> In 115		ug/L		73178	73178.479
Sn 120	49.716	ug/L	0.202	86828	1.184
Sb 121	49.883	ug/L	2.767	66906	0.911
Sb 123		ug/L		51044	0.695
Ba 135		ug/L		19697	0.286
Ba 137	49.847	ug/L	0.312	33588	0.487
Ho 165		ug/L		10	0.000
> Lu 175		ug/L		68892	68892.100
Tl 205	49.531	ug/L	1.285	29235	0.424
Pb 208	51.107	ug/L	0.574	216249	3.134
Bi 209		ug/L		52	0.001
Th 232	51.031	ug/L	1.746	293673	4.258
U 238	52.837	ug/L	1.040	317394	4.605

Sample ID: QC Std 6

Report Date/Time: Wednesday, January 13, 2010 21:16:05

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	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	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: QC Std 6

Report Date/Time: Wednesday, January 13, 2010 21:16:05

Page 2

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Li	7	100.518				
|	Be	9	101.716				
|	B	11	103.784				
|	Na	23	105.976				
|	Mg	24	98.979				
|	Al	27	97.607				
|	P	31	100.819				
|	K	39	98.002				
|	Ca	43	100.283				
>	Sc	45		98.4			
|	Ti	47	100.902				
|	V	51	95.004				
|	Cr	52	102.197				
|	Cr	53					
|	Mn	55	103.661				
|	Fe	57	101.433				
|	Co	59	101.506				
|	Ni	60	106.026				
|	Cu	63					
|	Cu	65	102.945				
|	Zn	66	102.834				
|	Zn	67					
|	Zn	68					
>	Ge	74		97.2			
|	As	75	97.363				
|	Se	77					
|	Se	82	101.307				
|	Kr	83					
|	Sr	88	100.904				
|	Y	89					
|	Zr	90	96.954				
|	Mo	98	97.731				
|	Ag	107	98.104				
|	Cd	111	101.585				
|	Cd	114					
>	In	115		97.1			
|	Sn	120	99.431				
|	Sb	121	99.767				
|	Sb	123					
|	Ba	135					
|	Ba	137	99.694				
|	Ho	165					
>	Lu	175		98.3			
|	Tl	205	99.063				
|	Pb	208	102.214				
|	Bi	209					
|	Th	232	102.062				
|	U	238	105.675				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Wednesday, January 13, 2010 21:16:05

Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Wednesday, January 13, 2010 21:19:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 7.147

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.027	ug/L	134.785	26	0.000
Be	9	0.001	ug/L	4848.174	4	0.000
B	11	2.637	ug/L	36.530	192	0.001
Na	23	-16.064	ug/L	32.417	25357	-0.116
Mg	24	-3.562	ug/L	19.465	333	-0.018
Al	27	2.264	ug/L	21.518	3334	0.016
P	31	-4.477	ug/L	33.791	2448	-0.002
K	39	6.913	ug/L	154.331	397465	0.086
Ca	43	-5.051	ug/L	160.810	379	-0.000
> Sc	45		ug/L		169444	169443.651
Ti	47	0.118	ug/L	93.881	200	0.000
V	51	-1.462	ug/L	57.695	-8919	-0.015
Cr	52	-0.084	ug/L	115.832	2077	-0.001
Cr	53		ug/L		138093	-0.051
Mn	55	-0.007	ug/L	63.660	906	-0.000
Fe	57	3.147	ug/L	36.142	2830	0.001
Co	59	0.013	ug/L	30.862	136	0.000
Ni	60	-0.000	ug/L	1846.482	110	-0.000
Cu	63		ug/L		182	0.000
Cu	65	-0.004	ug/L	355.585	99	-0.000
Zn	66	0.081	ug/L	48.787	78	0.000
Zn	67		ug/L		7614	-0.006
Zn	68		ug/L		659	-0.001
> Ge	74		ug/L		115671	115671.228
As	75	0.728	ug/L	179.090	345	0.002
Se	77		ug/L		5597	-0.002
Se	82	-0.307	ug/L	85.543	-21	-0.000
Kr	83		ug/L		50	0.000
Sr	88	0.009	ug/L	15.090	180	0.001
Y	89		ug/L		14	0.000
Zr	90	0.109	ug/L	18.137	573	0.004
Mo	98	0.043	ug/L	37.648	90	0.001
Ag	107	0.020	ug/L	18.163	83	0.000
Cd	111	0.022	ug/L	35.432	21	0.000
Cd	114		ug/L		35	0.000
> In	115		ug/L		74842	74841.951
Sn	120	0.198	ug/L	19.215	526	0.005
Sb	121	0.722	ug/L	21.271	1224	0.013
Sb	123		ug/L		954	0.010
Ba	135		ug/L		23	0.000
Ba	137	0.007	ug/L	43.491	35	0.000
Ho	165		ug/L		5	-0.000
> Lu	175		ug/L		68704	68704.167
Tl	205	0.183	ug/L	7.083	165	0.002
Pb	208	0.035	ug/L	7.293	531	0.002
Bi	209		ug/L		14	-0.000
Th	232	0.099	ug/L	32.862	939	0.008
U	238	0.017	ug/L	25.236	296	0.002

Sample ID: QC Std 7

Report Date/Time: Wednesday, January 13, 2010 21:22:19

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	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	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: QC Std 7

Report Date/Time: Wednesday, January 13, 2010 21:22:19

Page 2

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		99.0			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		98.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		99.3			
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

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Wednesday, January 13, 2010 21:22:19

Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Wednesday, January 13, 2010 22:03:00

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 6.154

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	48.957	ug/L	10.009	6082	0.035
Be	9	48.893	ug/L	4.110	2427	0.014
B	11	99.254	ug/L	2.102	5003	0.029
Na	23	5259.138	ug/L	2.819	6569073	37.847
Mg	24	5045.312	ug/L	14.078	4279628	24.800
Al	27	4774.996	ug/L	3.229	5737728	33.275
P	31	4997.529	ug/L	0.600	299321	1.720
K	39	4932.864	ug/L	1.734	10956990	61.305
Ca	43	4962.331	ug/L	1.530	20951	0.119
> Sc	45		ug/L		172382	172381.571
Ti	47	50.808	ug/L	0.534	10043	0.057
V	51	48.967	ug/L	1.942	79845	0.501
Cr	52	50.768	ug/L	0.557	92692	0.525
Cr	53		ug/L		152285	0.018
Mn	55	50.924	ug/L	2.660	149174	0.860
Fe	57	4974.400	ug/L	2.721	292095	1.679
Co	59	49.420	ug/L	2.344	104355	0.605
Ni	60	52.241	ug/L	1.568	23078	0.133
Cu	63		ug/L		49911	0.289
Cu	65	50.335	ug/L	0.905	23795	0.137
Zn	66	50.836	ug/L	0.865	12690	0.108
Zn	67		ug/L		9493	0.010
Zn	68		ug/L		9681	0.077
> Ge	74		ug/L		116618	116617.557
As	75	47.938	ug/L	4.291	14364	0.122
Se	77		ug/L		7411	0.013
Se	82	50.521	ug/L	3.338	1411	0.012
Kr	83		ug/L		47	-0.000
Sr	88	50.309	ug/L	1.996	222129	2.990
Y	89		ug/L		48	0.000
Zr	90	48.237	ug/L	1.819	116582	1.566
Mo	98	48.594	ug/L	2.113	50798	0.684
Ag	107	49.027	ug/L	1.210	80957	1.090
Cd	111	50.203	ug/L	0.587	19645	0.264
Cd	114		ug/L		46570	0.627
> In	115		ug/L		74252	74251.529
Sn	120	48.754	ug/L	1.672	86391	1.161
Sb	121	49.111	ug/L	4.715	66804	0.897
Sb	123		ug/L		51071	0.685
Ba	135		ug/L		19927	0.284
Ba	137	49.383	ug/L	2.615	33836	0.483
Ho	165		ug/L		9	0.000
> Lu	175		ug/L		70058	70057.744
Tl	205	49.128	ug/L	1.792	29486	0.420
Pb	208	50.167	ug/L	1.577	215867	3.076
Bi	209		ug/L		55	0.001
Th	232	50.082	ug/L	2.142	293095	4.179
U	238	51.769	ug/L	1.186	316247	4.512

Sample ID: QC Std 6

Report Date/Time: Wednesday, January 13, 2010 22:05:47

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: QC Std 6

Report Date/Time: Wednesday, January 13, 2010 22:05:47

Page 2

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Li	7	97.914				
|	Be	9	97.785				
|	B	11	99.254				
|	Na	23	105.183				
|	Mg	24	100.906				
|	Al	27	94.554				
|	P	31	99.951				
|	K	39	98.657				
|	Ca	43	99.247				
>	Sc	45		100.7			
|	Ti	47	101.617				
|	V	51	97.933				
|	Cr	52	101.535				
|	Cr	53					
|	Mn	55	101.847				
|	Fe	57	99.488				
|	Co	59	98.841				
|	Ni	60	104.482				
|	Cu	63					
|	Cu	65	100.670				
|	Zn	66	101.672				
|	Zn	67					
|	Zn	68					
>	Ge	74		99.1			
|	As	75	95.876				
|	Se	77					
|	Se	82	101.042				
|	Kr	83					
|	Sr	88	100.617				
|	Y	89					
|	Zr	90	96.474				
|	Mo	98	97.188				
|	Ag	107	98.054				
|	Cd	111	100.406				
|	Cd	114					
>	In	115		98.5			
|	Sn	120	97.507				
|	Sb	121	98.221				
|	Sb	123					
|	Ba	135					
|	Ba	137	98.765				
|	Ho	165					
>	Lu	175		99.9			
|	Tl	205	98.256				
|	Pb	208	100.334				
|	Bi	209					
|	Th	232	100.163				
|	U	238	103.538				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Wednesday, January 13, 2010 22:05:47

Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Wednesday, January 13, 2010 22:09:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 7.155

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.018	ug/L	160.034	25	0.000
Be	9	0.027	ug/L	45.484	5	0.000
B	11	2.419	ug/L	22.696	184	0.001
Na	23	-17.624	ug/L	38.470	23688	-0.127
Mg	24	-0.816	ug/L	160.634	2667	-0.004
Al	27	1.965	ug/L	86.814	3000	0.014
P	31	-3.639	ug/L	63.100	2529	-0.001
K	39	-10.763	ug/L	73.571	365289	-0.134
Ca	43	-10.333	ug/L	98.913	362	-0.000
> Sc	45		ug/L		171744	171744.400
Ti	47	0.060	ug/L	101.971	192	0.000
V	51	-0.796	ug/L	195.875	-7897	-0.008
Cr	52	0.157	ug/L	44.741	2532	0.002
Cr	53		ug/L		136400	-0.072
Mn	55	0.024	ug/L	19.317	1010	0.000
Fe	57	5.417	ug/L	10.659	3000	0.002
Co	59	0.007	ug/L	75.762	124	0.000
Ni	60	0.028	ug/L	51.470	124	0.000
Cu	63		ug/L		182	0.000
Cu	65	-0.001	ug/L	4180.240	102	-0.000
Zn	66	0.037	ug/L	127.592	68	0.000
Zn	67		ug/L		7262	-0.009
Zn	68		ug/L		633	-0.001
> Ge	74		ug/L		116829	116829.271
As	75	0.640	ug/L	298.367	324	0.002
Se	77		ug/L		5863	-0.000
Se	82	0.093	ug/L	374.560	-10	0.000
Kr	83		ug/L		43	-0.000
Sr	88	0.010	ug/L	12.564	187	0.001
Y	89		ug/L		20	0.000
Zr	90	0.109	ug/L	14.516	572	0.004
Mo	98	0.035	ug/L	15.183	82	0.000
Ag	107	0.019	ug/L	17.643	80	0.000
Cd	111	-0.011	ug/L	135.579	8	-0.000
Cd	114		ug/L		31	0.000
> In	115		ug/L		74755	74755.488
Sn	120	0.137	ug/L	8.058	417	0.003
Sb	121	0.584	ug/L	15.827	1035	0.011
Sb	123		ug/L		776	0.008
Ba	135		ug/L		24	0.000
Ba	137	0.019	ug/L	122.024	43	0.000
Ho	165		ug/L		8	0.000
> Lu	175		ug/L		68649	68649.238
Tl	205	0.121	ug/L	21.396	129	0.001
Pb	208	0.023	ug/L	24.881	478	0.001
Bi	209		ug/L		14	-0.000
Th	232	0.103	ug/L	34.779	961	0.009
U	238	0.018	ug/L	20.080	300	0.002

Sample ID: QC Std 7

Report Date/Time: Wednesday, January 13, 2010 22:12:02

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	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	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: QC Std 7

Report Date/Time: Wednesday, January 13, 2010 22:12:02

Page 2

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	100.3			
|	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	99.3			
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
[	Sr	88				
|	Y	89				
|	Zr	90				
|	Mo	98				
|	Ag	107				
|	Cd	111				
|	Cd	114				
>	In	115	99.1			
|	Sn	120				
|	Sb	121				
|	Sb	123				
[	Ba	135				
|	Ba	137				
|	Ho	165				
>	Lu	175	97.9			
|	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

Sample ID: QC Std 7

Report Date/Time: Wednesday, January 13, 2010 22:12:02

Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Wednesday, January 13, 2010 22:58:59

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 6.163

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	50.079	ug/L	8.201	6131	0.036
Be	9	50.763	ug/L	2.319	2483	0.015
B	11	100.047	ug/L	3.181	4970	0.029
Na	23	5359.599	ug/L	12.231	6593091	38.570
Mg	24	5079.810	ug/L	3.394	4245601	24.970
Al	27	5333.591	ug/L	1.833	6314019	37.168
P	31	5020.101	ug/L	1.283	296281	1.728
K	39	4813.586	ug/L	8.119	10549855	59.823
Ca	43	5000.568	ug/L	1.942	20804	0.120
> Sc	45		ug/L		169870	169870.043
Ti	47	49.901	ug/L	1.440	9724	0.056
V	51	49.070	ug/L	3.847	78885	0.502
Cr	52	50.434	ug/L	0.393	90753	0.521
Cr	53		ug/L		149373	0.013
Mn	55	50.929	ug/L	0.657	147035	0.860
Fe	57	5039.342	ug/L	0.869	291622	1.701
Co	59	50.142	ug/L	0.307	104348	0.614
Ni	60	52.159	ug/L	0.815	22709	0.133
Cu	63		ug/L		48957	0.287
Cu	65	50.530	ug/L	0.993	23538	0.138
Zn	66	50.620	ug/L	1.188	12521	0.108
Zn	67		ug/L		9096	0.007
Zn	68		ug/L		9498	0.076
> Ge	74		ug/L		115554	115553.954
As	75	47.656	ug/L	3.660	14149	0.121
Se	77		ug/L		7299	0.013
Se	82	50.620	ug/L	2.871	1401	0.012
Kr	83		ug/L		44	-0.000
Sr	88	50.066	ug/L	2.975	220689	2.976
Y	89		ug/L		75	0.001
Zr	90	48.410	ug/L	3.552	116791	1.572
Mo	98	48.546	ug/L	4.081	50655	0.683
Ag	107	47.952	ug/L	1.841	79060	1.066
Cd	111	49.026	ug/L	2.935	19151	0.258
Cd	114		ug/L		45721	0.616
> In	115		ug/L		74152	74151.761
Sn	120	49.039	ug/L	2.475	86753	1.168
Sb	121	48.909	ug/L	5.099	66416	0.893
Sb	123		ug/L		51149	0.688
Ba	135		ug/L		19817	0.286
Ba	137	49.413	ug/L	2.009	33448	0.483
Ho	165		ug/L		11	0.000
> Lu	175		ug/L		69207	69206.587
Tl	205	49.518	ug/L	1.666	29362	0.423
Pb	208	50.537	ug/L	0.329	214831	3.099
Bi	209		ug/L		56	0.001
Th	232	50.681	ug/L	1.498	293042	4.229
U	238	52.504	ug/L	1.438	316866	4.576

Sample ID: QC Std 6

Report Date/Time: Wednesday, January 13, 2010 23:01:46

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Diff	Dup. Rel.	% Diff
Li	7		100.158								
Be	9		101.526								
B	11		100.047								
Na	23		107.192								
Mg	24		101.596								
Al	27		105.616								
P	31		100.402								
K	39		96.272								
Ca	43		100.011								
Sc	45						99.2				
Ti	47		99.802								
V	51		98.139								
Cr	52		100.868								
Cr	53										
Mn	55		101.858								
Fe	57		100.787								
Co	59		100.284								
Ni	60		104.318								
Cu	63										
Cu	65		101.060								
Zn	66		101.240								
Zn	67										
Zn	68										
Ge	74						98.2				
As	75		95.312								
Se	77										
Se	82		101.241								
Kr	83										
Sr	88		100.132								
Y	89										
Zr	90		96.819								
Mo	98		97.092								
Ag	107		95.904								
Cd	111		98.052								
Cd	114										
In	115						98.3				
Sn	120		98.078								
Sb	121		97.818								
Sb	123										
Ba	135										
Ba	137		98.826								
Ho	165										
Lu	175						98.7				
Tl	205		99.035								
Pb	208		101.073								
Bi	209										
Th	232		101.361								
U	238		105.008								

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Wednesday, January 13, 2010 23:01:46

Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Wednesday, January 13, 2010 23:05:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 7.164

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.033	ug/L	146.192	27	0.000
Be	9	-0.020	ug/L	100.403	3	-0.000
B	11	2.049	ug/L	16.710	164	0.001
Na	23	-15.921	ug/L	16.808	25690	-0.115
Mg	24	0.025	ug/L	10044.904	3334	0.000
Al	27	3.643	ug/L	22.340	5001	0.025
P	31	-0.569	ug/L	318.707	2695	-0.000
K	39	-5.066	ug/L	150.950	374861	-0.063
Ca	43	-16.911	ug/L	40.233	333	-0.000
> Sc	45		ug/L		170634	170634.094
Ti	47	0.093	ug/L	45.486	197	0.000
V	51	-2.000	ug/L	47.098	-9914	-0.020
Cr	52	0.003	ug/L	1603.125	2246	0.000
Cr	53		ug/L		138774	-0.053
Mn	55	0.031	ug/L	64.535	1022	0.001
Fe	57	8.060	ug/L	23.551	3133	0.003
Co	59	0.017	ug/L	16.226	144	0.000
Ni	60	0.023	ug/L	71.694	121	0.000
Cu	63		ug/L		185	0.000
Cu	65	-0.016	ug/L	75.986	94	-0.000
Zn	66	0.073	ug/L	54.872	76	0.000
Zn	67		ug/L		6988	-0.011
Zn	68		ug/L		634	-0.001
> Ge	74		ug/L		115613	115612.789
As	75	-0.742	ug/L	67.205	-86	-0.002
Se	77		ug/L		5813	-0.000
Se	82	0.629	ug/L	17.600	5	0.000
Kr	83		ug/L		35	-0.000
Sr	88	0.011	ug/L	22.147	189	0.001
Y	89		ug/L		20	0.000
Zr	90	0.119	ug/L	32.140	594	0.004
Mo	98	0.026	ug/L	25.720	72	0.000
Ag	107	0.009	ug/L	82.112	64	0.000
Cd	111	0.012	ug/L	141.714	17	0.000
Cd	114		ug/L		35	0.000
> In	115		ug/L		74218	74217.685
Sn	120	0.136	ug/L	17.838	411	0.003
Sb	121	0.545	ug/L	24.286	975	0.010
Sb	123		ug/L		770	0.008
Ba	135		ug/L		22	0.000
Ba	137	0.008	ug/L	94.053	36	0.000
Ho	165		ug/L		5	-0.000
> Lu	175		ug/L		68611	68611.392
Tl	205	0.082	ug/L	30.080	106	0.001
Pb	208	0.011	ug/L	22.721	429	0.001
Bi	209		ug/L		10	-0.000
Th	232	0.097	ug/L	35.943	928	0.008
U	238	0.017	ug/L	15.605	291	0.001

Sample ID: QC Std 7

Report Date/Time: Wednesday, January 13, 2010 23:08:01

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		99.7			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		98.2			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		98.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		97.9			
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

Sample ID: QC Std 7

Report Date/Time: Wednesday, January 13, 2010 23:08:01

Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Wednesday, January 13, 2010 23:36:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 6.169

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	50.801	ug/L	6.024	6201	0.036
Be	9	49.971	ug/L	1.894	2437	0.014
B	11	100.510	ug/L	1.061	4976	0.029
Na	23	5403.890	ug/L	10.937	6631521	38.889
Mg	24	5178.197	ug/L	4.615	4313656	25.453
Al	27	5163.183	ug/L	2.686	6093014	35.981
P	31	5020.295	ug/L	0.381	295319	1.728
K	39	4969.661	ug/L	6.765	10838119	61.763
Ca	43	5013.358	ug/L	1.978	20786	0.120
> Sc	45		ug/L		169318	169317.855
Ti	47	50.616	ug/L	1.083	9829	0.057
V	51	49.200	ug/L	4.446	78832	0.503
Cr	52	50.363	ug/L	2.275	90330	0.520
Cr	53		ug/L		147194	0.004
Mn	55	51.478	ug/L	1.014	148132	0.869
Fe	57	5007.191	ug/L	0.461	288828	1.690
Co	59	49.894	ug/L	0.993	103497	0.611
Ni	60	52.124	ug/L	0.269	22619	0.133
Cu	63		ug/L		49327	0.290
Cu	65	50.108	ug/L	0.769	23267	0.137
Zn	66	50.753	ug/L	0.818	12400	0.108
Zn	67		ug/L		8865	0.006
Zn	68		ug/L		9529	0.077
> Ge	74		ug/L		114140	114139.676
As	75	47.305	ug/L	3.739	13875	0.120
Se	77		ug/L		6965	0.010
Se	82	49.785	ug/L	1.893	1361	0.012
Kr	83		ug/L		40	-0.000
Sr	88	49.941	ug/L	1.590	220599	2.968
Y	89		ug/L		76	0.001
Zr	90	48.478	ug/L	2.046	117202	1.574
Mo	98	48.333	ug/L	3.161	50540	0.680
Ag	107	47.929	ug/L	3.136	79166	1.065
Cd	111	49.607	ug/L	1.759	19418	0.261
Cd	114		ug/L		45539	0.613
> In	115		ug/L		74277	74276.651
Sn	120	49.069	ug/L	1.344	86978	1.169
Sb	121	48.831	ug/L	4.081	66463	0.892
Sb	123		ug/L		50317	0.675
Ba	135		ug/L		19601	0.278
Ba	137	48.826	ug/L	1.041	33623	0.477
Ho	165		ug/L		12	0.000
> Lu	175		ug/L		70399	70399.407
Tl	205	49.358	ug/L	1.221	29772	0.422
Pb	208	50.442	ug/L	0.610	218123	3.093
Bi	209		ug/L		58	0.001
Th	232	49.541	ug/L	1.237	291387	4.134
U	238	51.378	ug/L	0.249	315423	4.478

Sample ID: QC Std 6

Report Date/Time: Wednesday, January 13, 2010 23:39:09

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: QC Std 6

Report Date/Time: Wednesday, January 13, 2010 23:39:09

Page 2

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Li	7	101.603				
|	Be	9	99.941				
|	B	11	100.510				
|	Na	23	108.078				
|	Mg	24	103.564				
|	Al	27	102.241				
|	P	31	100.406				
|	K	39	99.393				
|	Ca	43	100.267				
>	Sc	45		98.9			
|	Ti	47	101.232				
|	V	51	98.400				
|	Cr	52	100.726				
|	Cr	53					
|	Mn	55	102.956				
|	Fe	57	100.144				
|	Co	59	99.787				
|	Ni	60	104.248				
|	Cu	63					
|	Cu	65	100.216				
[	Zn	66	101.506				
|	Zn	67					
|	Zn	68					
>	Ge	74		97.0			
|	As	75	94.610				
|	Se	77					
|	Se	82	99.570				
|	Kr	83					
[	Sr	88	99.883				
|	Y	89					
|	Zr	90	96.956				
|	Mo	98	96.666				
|	Ag	107	95.859				
|	Cd	111	99.213				
|	Cd	114					
>	In	115		98.5			
|	Sn	120	98.137				
|	Sb	121	97.661				
|	Sb	123					
[	Ba	135					
|	Ba	137	97.653				
|	Ho	165					
>	Lu	175		100.4			
|	Tl	205	98.715				
|	Pb	208	100.885				
|	Bi	209					
|	Th	232	99.082				
[	U	238	102.756				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Wednesday, January 13, 2010 23:39:09

Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Wednesday, January 13, 2010 23:42:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 7.170

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
|	Li 7	0.004	ug/L	577.610	23	0.000
|	Be 9	-0.020	ug/L	101.133	3	-0.000
|	B 11	1.668	ug/L	39.216	145	0.000
|	Na 23	-14.697	ug/L	34.615	27026	-0.106
|	Mg 24	1.625	ug/L	151.367	4668	0.008
|	Al 27	3.095	ug/L	78.376	4334	0.022
|	P 31	2.034	ug/L	38.022	2831	0.001
|	K 39	-4.404	ug/L	164.787	374177	-0.055
|	Ca 43	-22.510	ug/L	33.549	308	-0.001
>	Sc 45		ug/L		169663	169662.598
|	Ti 47	0.087	ug/L	112.123	195	0.000
|	V 51	0.137	ug/L	1130.564	-6161	0.001
|	Cr 52	-0.124	ug/L	18.852	2011	-0.001
|	Cr 53		ug/L		134238	-0.075
|	Mn 55	0.029	ug/L	50.106	1010	0.000
|	Fe 57	4.841	ug/L	24.340	2931	0.002
|	Co 59	0.007	ug/L	117.785	122	0.000
|	Ni 60	-0.002	ug/L	1660.019	110	-0.000
|	Cu 63		ug/L		153	-0.000
|	Cu 65	-0.014	ug/L	83.973	95	-0.000
|	Zn 66	0.043	ug/L	41.580	68	0.000
|	Zn 67		ug/L		6859	-0.012
|	Zn 68		ug/L		653	-0.001
>	Ge 74		ug/L		115080	115080.150
|	As 75	0.571	ug/L	255.485	298	0.001
|	Se 77		ug/L		5576	-0.002
|	Se 82	0.206	ug/L	175.727	-7	0.000
|	Kr 83		ug/L		42	-0.000
|	Sr 88	0.008	ug/L	39.908	179	0.001
|	Y 89		ug/L		22	0.000
|	Zr 90	0.127	ug/L	12.799	617	0.004
|	Mo 98	0.034	ug/L	30.057	80	0.000
|	Ag 107	0.018	ug/L	40.555	80	0.000
|	Cd 111	0.017	ug/L	35.737	19	0.000
|	Cd 114		ug/L		36	0.000
>	In 115		ug/L		74753	74753.201
|	Sn 120	0.127	ug/L	25.188	398	0.003
|	Sb 121	0.549	ug/L	20.280	987	0.010
|	Sb 123		ug/L		760	0.008
|	Ba 135		ug/L		19	0.000
|	Ba 137	0.012	ug/L	70.263	39	0.000
|	Ho 165		ug/L		3	-0.000
>	Lu 175		ug/L		70025	70024.901
|	Tl 205	0.072	ug/L	36.263	102	0.001
|	Pb 208	-0.003	ug/L	81.886	376	-0.000
|	Bi 209		ug/L		14	-0.000
|	Th 232	0.104	ug/L	34.873	990	0.009
|	U 238	0.011	ug/L	19.465	263	0.001

Sample ID: QC Std 7

Report Date/Time: Wednesday, January 13, 2010 23:45:23

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	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	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		99.1			
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		97.8			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		99.1			
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 MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Wednesday, January 13, 2010 23:45:23

Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, January 14, 2010 00:13:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 6.175

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	51.343	ug/L	8.913	6319	0.037
Be	9	51.647	ug/L	3.754	2541	0.015
B	11	100.480	ug/L	4.177	5019	0.029
Na	23	5186.421	ug/L	5.365	6420158	37.324
Mg	24	5005.907	ug/L	0.700	4208955	24.606
Al	27	4822.096	ug/L	3.867	5743323	33.604
P	31	4961.103	ug/L	1.199	294563	1.708
K	39	5020.332	ug/L	9.784	11037229	62.392
Ca	43	4913.224	ug/L	0.822	20569	0.118
> Sc	45		ug/L		170903	170902.760
Ti	47	50.909	ug/L	0.869	9976	0.057
V	51	47.255	ug/L	2.876	76195	0.483
Cr	52	50.639	ug/L	0.879	91660	0.523
Cr	53		ug/L		149022	0.006
Mn	55	51.383	ug/L	1.052	149228	0.868
Fe	57	4951.768	ug/L	1.924	288268	1.671
Co	59	49.965	ug/L	0.684	104604	0.611
Ni	60	52.575	ug/L	0.085	23027	0.134
Cu	63		ug/L		49484	0.289
Cu	65	50.443	ug/L	0.588	23640	0.138
Zn	66	50.713	ug/L	0.736	12618	0.108
Zn	67		ug/L		9006	0.006
Zn	68		ug/L		9559	0.076
> Ge	74		ug/L		116234	116233.779
As	75	48.771	ug/L	4.122	14564	0.124
Se	77		ug/L		7488	0.014
Se	82	49.706	ug/L	2.958	1384	0.012
Kr	83		ug/L		39	-0.000
Sr	88	50.265	ug/L	0.968	222253	2.987
Y	89		ug/L		84	0.001
Zr	90	47.883	ug/L	1.676	115909	1.555
Mo	98	48.288	ug/L	1.255	50552	0.679
Ag	107	48.471	ug/L	1.567	80145	1.077
Cd	111	49.565	ug/L	2.209	19419	0.261
Cd	114		ug/L		45908	0.617
> In	115		ug/L		74350	74350.053
Sn	120	48.860	ug/L	0.272	86703	1.164
Sb	121	48.883	ug/L	2.640	66619	0.893
Sb	123		ug/L		51211	0.686
Ba	135		ug/L		19971	0.284
Ba	137	49.099	ug/L	0.253	33783	0.480
Ho	165		ug/L		9	0.000
> Lu	175		ug/L		70345	70345.154
Tl	205	49.465	ug/L	0.368	29813	0.423
Pb	208	50.351	ug/L	0.814	217551	3.087
Bi	209		ug/L		48	0.000
Th	232	50.200	ug/L	0.648	295027	4.189
U	238	52.157	ug/L	0.329	319947	4.546

Sample ID: QC Std 6

Report Date/Time: Thursday, January 14, 2010 00:16:31

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Li	7	102.686				
|	Be	9	103.294				
|	B	11	100.480				
|	Na	23	103.728				
|	Mg	24	100.118				
|	Al	27	95.487				
|	P	31	99.222				
|	K	39	100.407				
|	Ca	43	98.264				
>	Sc	45		99.8			
|	Ti	47	101.818				
|	V	51	94.509				
|	Cr	52	101.278				
|	Cr	53					
|	Mn	55	102.767				
|	Fe	57	99.035				
|	Co	59	99.929				
|	Ni	60	105.151				
|	Cu	63					
|	Cu	65	100.885				
|	Zn	66	101.426				
|	Zn	67					
|	Zn	68					
>	Ge	74		98.7			
|	As	75	97.542				
|	Se	77					
|	Se	82	99.411				
|	Kr	83					
|	Sr	88	100.529				
|	Y	89					
|	Zr	90	95.766				
|	Mo	98	96.576				
|	Ag	107	96.943				
|	Cd	111	99.130				
|	Cd	114					
>	In	115		98.6			
|	Sn	120	97.719				
|	Sb	121	97.767				
|	Sb	123					
|	Ba	135					
|	Ba	137	98.199				
|	Ho	165					
>	Lu	175		100.3			
|	Tl	205	98.929				
|	Pb	208	100.702				
|	Bi	209					
|	Th	232	100.400				
|	U	238	104.315				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Thursday, January 14, 2010 00:16:31

Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, January 14, 2010 00:19:57

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 7.176

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.032	ug/L	143.207	27	0.000
Be	9	-0.027	ug/L	87.595	3	-0.000
B	11	1.839	ug/L	21.389	155	0.001
Na	23	-19.873	ug/L	15.656	21016	-0.143
Mg	24	-0.016	ug/L	19205.761	3334	-0.000
Al	27	3.320	ug/L	93.712	4668	0.023
P	31	-2.157	ug/L	117.973	2618	-0.001
K	39	11.090	ug/L	88.313	411861	0.138
Ca	43	-10.685	ug/L	8.902	361	-0.000
> Sc	45		ug/L		171802	171801.648
Ti	47	0.119	ug/L	112.105	203	0.000
V	51	-2.258	ug/L	50.224	-10429	-0.023
Cr	52	0.032	ug/L	119.099	2312	0.000
Cr	53		ug/L		137395	-0.066
Mn	55	0.028	ug/L	14.283	1022	0.000
Fe	57	8.151	ug/L	24.666	3160	0.003
Co	59	0.012	ug/L	71.706	135	0.000
Ni	60	0.024	ug/L	184.648	123	0.000
Cu	63		ug/L		181	0.000
Cu	65	-0.013	ug/L	121.656	96	-0.000
Zn	66	0.044	ug/L	69.293	69	0.000
Zn	67		ug/L		7008	-0.011
Zn	68		ug/L		602	-0.001
> Ge	74		ug/L		116141	116140.699
As	75	0.323	ug/L	368.883	230	0.001
Se	77		ug/L		6035	0.001
Se	82	0.293	ug/L	146.828	-4	0.000
Kr	83		ug/L		41	-0.000
Sr	88	0.010	ug/L	8.734	186	0.001
Y	89		ug/L		14	-0.000
Zr	90	0.127	ug/L	23.361	619	0.004
Mo	98	0.036	ug/L	19.058	83	0.001
Ag	107	0.014	ug/L	45.776	72	0.000
Cd	111	0.000	ug/L	8562.402	13	0.000
Cd	114		ug/L		32	0.000
> In	115		ug/L		75043	75043.115
Sn	120	0.122	ug/L	12.022	392	0.003
Sb	121	0.541	ug/L	21.728	980	0.010
Sb	123		ug/L		750	0.007
Ba	135		ug/L		17	0.000
Ba	137	0.013	ug/L	137.676	39	0.000
Ho	165		ug/L		8	0.000
> Lu	175		ug/L		69465	69465.173
Tl	205	0.081	ug/L	31.784	106	0.001
Pb	208	0.004	ug/L	112.615	405	0.000
Bi	209		ug/L		11	-0.000
Th	232	0.101	ug/L	24.163	964	0.008
U	238	0.014	ug/L	15.980	280	0.001

Sample ID: QC Std 7

Report Date/Time: Thursday, January 14, 2010 00:22:45

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	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	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
|	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
>	Sc	45			100.4		
|	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			98.7		
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115			99.5		
|	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 MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, January 14, 2010 00:22:45

Page 3

ICPMS#4 - Summary Report

Sample ID: 1202011703

Sample Date/Time: Thursday, January 14, 2010 00:26:12

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 940082|1|skj

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\1202011703.177

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li 7	0.079	ug/L	112.602	32	0.000
Be 9	-0.020	ug/L	203.173	3	-0.000
B 11	0.773	ug/L	37.624	101	0.000
Na 23	-14.749	ug/L	10.209	27026	-0.106
Mg 24	-3.159	ug/L	22.003	667	-0.016
Al 27	1.123	ug/L	128.432	2000	0.008
P 31	-7.670	ug/L	3.560	2267	-0.003
K 39	6.609	ug/L	242.467	397473	0.082
Ca 43	26.832	ug/L	36.720	509	0.001
> Sc 45		ug/L		169826	169826.235
Ti 47	0.333	ug/L	19.638	242	0.000
V 51	-12.373	ug/L	13.760	-27905	-0.127
Cr 52	3.004	ug/L	3.548	7501	0.031
Cr 53		ug/L		275733	0.757
Mn 55	0.356	ug/L	7.721	1950	0.006
Fe 57	15.246	ug/L	5.434	3530	0.005
Co 59	-0.005	ug/L	102.411	99	-0.000
Ni 60	-0.169	ug/L	16.890	38	-0.000
Cu 63		ug/L		108	-0.000
Cu 65	-0.076	ug/L	20.627	66	-0.000
Zn 66	0.974	ug/L	12.632	296	0.002
Zn 67		ug/L		15550	0.064
Zn 68		ug/L		1292	0.005
> Ge 74		ug/L		114851	114850.720
As 75	2.044	ug/L	79.387	727	0.005
Se 77		ug/L		16483	0.093
Se 82	-0.098	ug/L	248.704	-15	-0.000
Kr 83		ug/L		48	0.000
Sr 88	0.008	ug/L	34.668	171	0.000
Y 89		ug/L		27	0.000
Zr 90	0.164	ug/L	32.614	680	0.005
Mo 98	0.001	ug/L	1311.947	44	0.000
Ag 107	-0.002	ug/L	195.602	43	-0.000
Cd 111	-0.008	ug/L	99.674	9	-0.000
Cd 114		ug/L		11	-0.000
> In 115		ug/L		71744	71743.712
Sn 120	0.219	ug/L	19.543	541	0.005
Sb 121	0.154	ug/L	25.738	430	0.003
Sb 123		ug/L		340	0.002
Ba 135		ug/L		25	0.000
Ba 137	-0.002	ug/L	195.675	28	-0.000
Ho 165		ug/L		9	0.000
> Lu 175		ug/L		66619	66618.636
Tl 205	-0.031	ug/L	26.296	39	-0.000
Pb 208	-0.024	ug/L	26.033	273	-0.001
Bi 209		ug/L		13	-0.000
Th 232	0.005	ug/L	155.506	388	0.000
U 238	-0.027	ug/L	0.980	27	-0.002

Sample ID: 1202011703

Report Date/Time: Thursday, January 14, 2010 00:29:01

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		99.2			
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		97.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		95.1			
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 MassOut of Limits Message
V 51Sample is out of limits (<-PQL)

QC Action

QC Action Line: Continue

Sample ID: 1202011703
Report Date/Time: Thursday, January 14, 2010 00:29:01
Page 3

ICPMS#4 - Summary Report

Sample ID: 1202011704

Sample Date/Time: Thursday, January 14, 2010 00:32:28

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 940082[1]skj

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\1202011704.178

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	53.212	ug/L	6.806	6506	0.038
Be	9	55.451	ug/L	2.319	2710	0.016
B	11	113.350	ug/L	3.110	5618	0.033
Na	23	2153.448	ug/L	18.439	2680470	15.497
Mg	24	1933.112	ug/L	5.774	1615991	9.502
Al	27	1932.643	ug/L	4.730	2285580	13.468
P	31	1990.829	ug/L	0.436	119065	0.685
K	39	1907.424	ug/L	7.296	4404193	23.705
Ca	43	1950.110	ug/L	1.310	8350	0.047
> Sc	45		ug/L		169773	169772.507
Ti	47	43.745	ug/L	2.515	8538	0.049
V	51	33.573	ug/L	1.918	51897	0.343
Cr	52	52.327	ug/L	2.840	93990	0.541
Cr	53		ug/L		299220	0.897
Mn	55	49.346	ug/L	1.318	142390	0.833
Fe	57	1951.733	ug/L	1.504	114481	0.659
Co	59	48.888	ug/L	1.173	101672	0.598
Ni	60	49.425	ug/L	0.823	21509	0.126
Cu	63		ug/L		48843	0.287
Cu	65	49.719	ug/L	1.156	23148	0.136
Zn	66	48.533	ug/L	2.458	12211	0.103
Zn	67		ug/L		18809	0.089
Zn	68		ug/L		9859	0.077
> Ge	74		ug/L		117520	117519.589
As	75	50.698	ug/L	4.346	15305	0.129
Se	77		ug/L		18330	0.105
Se	82	48.428	ug/L	1.300	1363	0.012
Kr	83		ug/L		53	0.000
Sr	88	49.344	ug/L	2.638	209448	2.933
Y	89		ug/L		41	0.000
Zr	90	48.649	ug/L	2.099	113036	1.580
Mo	98	48.460	ug/L	1.947	48704	0.682
Ag	107	49.572	ug/L	0.485	78700	1.102
Cd	111	49.005	ug/L	0.862	18435	0.258
Cd	114		ug/L		42877	0.600
> In	115		ug/L		71384	71384.083
Sn	120	48.168	ug/L	1.958	82057	1.147
Sb	121	51.829	ug/L	2.858	67780	0.947
Sb	123		ug/L		52314	0.730
Ba	135		ug/L		18273	0.269
Ba	137	47.304	ug/L	1.082	31354	0.462
Ho	165		ug/L		11	0.000
> Lu	175		ug/L		67766	67766.377
Tl	205	45.323	ug/L	2.764	26323	0.388
Pb	208	49.839	ug/L	1.263	207447	3.056
Bi	209		ug/L		160231	2.364
Th	232	48.445	ug/L	1.049	274277	4.042
U	238	50.671	ug/L	2.101	299393	4.416

Sample ID: 1202011704

Report Date/Time: Thursday, January 14, 2010 00:35:17

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		99.2			
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		99.8			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		94.7			
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 MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011704

Report Date/Time: Thursday, January 14, 2010 00:35:17

Page 3

ICPMS#4 - Summary Report

Sample ID: 244129001

Sample Date/Time: Thursday, January 14, 2010 00:38:42

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940082|1|skj

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\244129001.179

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.148	ug/L	55.418	41	0.000
Be	9	0.014	ug/L	209.627	5	0.000
B	11	24.786	ug/L	3.065	1275	0.007
Na	23	102.205	ug/L	17.003	169339	0.736
Mg	24	2.878	ug/L	147.860	5668	0.014
Al	27	11.260	ug/L	30.587	14007	0.078
P	31	-13.429	ug/L	11.197	1924	-0.005
K	39	133.087	ug/L	4.418	663038	1.654
Ca	43	55.066	ug/L	8.246	623	0.001
> Sc	45		ug/L		169454	169453.699
Ti	47	0.615	ug/L	11.870	295	0.001
V	51	-10.688	ug/L	12.559	-24929	-0.109
Cr	52	2.617	ug/L	3.158	6806	0.027
Cr	53		ug/L		259351	0.665
Mn	55	1.147	ug/L	3.551	4208	0.019
Fe	57	26.348	ug/L	8.081	4156	0.009
Co	59	0.001	ug/L	34.732	110	0.000
Ni	60	-0.069	ug/L	10.596	81	-0.000
Cu	63		ug/L		1003	0.005
Cu	65	0.856	ug/L	5.433	497	0.002
Zn	66	1.278	ug/L	5.928	377	0.003
Zn	67		ug/L		14552	0.053
Zn	68		ug/L		1282	0.005
> Ge	74		ug/L		117018	117018.483
As	75	4.926	ug/L	53.164	1600	0.013
Se	77		ug/L		14693	0.075
Se	82	-0.274	ug/L	33.215	-20	-0.000
Kr	83		ug/L		49	0.000
Sr	88	0.118	ug/L	4.707	647	0.007
Y	89		ug/L		82	0.001
Zr	90	0.273	ug/L	26.244	942	0.009
Mo	98	0.014	ug/L	59.628	58	0.000
Ag	107	0.003	ug/L	287.228	52	0.000
Cd	111	0.010	ug/L	96.300	16	0.000
Cd	114		ug/L		23	-0.000
> In	115		ug/L		72539	72539.256
Sn	120	0.089	ug/L	12.504	321	0.002
Sb	121	0.163	ug/L	26.170	447	0.003
Sb	123		ug/L		365	0.002
Ba	135		ug/L		193	0.003
Ba	137	0.432	ug/L	7.717	315	0.004
Ho	165		ug/L		6	-0.000
> Lu	175		ug/L		67633	67633.072
Tl	205	0.318	ug/L	19.945	241	0.003
Pb	208	0.045	ug/L	5.731	565	0.003
Bi	209		ug/L		72	0.001
Th	232	0.123	ug/L	48.271	1058	0.010
U	238	-0.019	ug/L	7.983	77	-0.002

Sample ID: 244129001

Report Date/Time: Thursday, January 14, 2010 00:41:30

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		99.0			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		99.4			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		96.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		96.5			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message
V 51Sample is out of limits (<-PQL)

QC Action

QC Action Line: Continue

Sample ID: 244129001
Report Date/Time: Thursday, January 14, 2010 00:41:30
Page 3

ICPMS#4 - Summary Report

Sample ID: 244129002

Sample Date/Time: Thursday, January 14, 2010 00:44:55

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940082|1|skj

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\244129002.180

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.198	ug/L	16.871	47	0.000
Be	9	-0.034	ug/L	91.949	2	-0.000
B	11	24.252	ug/L	1.296	1262	0.007
Na	23	70.021	ug/L	22.310	131612	0.504
Mg	24	6.011	ug/L	83.997	8336	0.030
Al	27	8.731	ug/L	59.869	11005	0.061
P	31	-14.214	ug/L	2.340	1898	-0.005
K	39	114.498	ug/L	12.850	629932	1.423
Ca	43	39.428	ug/L	29.964	565	0.001
> Sc	45		ug/L		171146	171146.404
Ti	47	0.448	ug/L	23.797	266	0.001
V	51	-9.483	ug/L	31.000	-23109	-0.097
Cr	52	2.683	ug/L	4.348	6995	0.028
Cr	53		ug/L		261873	0.664
Mn	55	0.464	ug/L	4.148	2277	0.008
Fe	57	12.616	ug/L	14.625	3404	0.004
Co	59	-0.011	ug/L	37.305	87	-0.000
Ni	60	-0.145	ug/L	9.172	48	-0.000
Cu	63		ug/L		1100	0.005
Cu	65	0.955	ug/L	7.108	548	0.003
Zn	66	1.419	ug/L	4.495	411	0.003
Zn	67		ug/L		14532	0.053
Zn	68		ug/L		1353	0.005
> Ge	74		ug/L		116685	116685.440
As	75	2.061	ug/L	21.157	745	0.005
Se	77		ug/L		15073	0.079
Se	82	0.185	ug/L	138.751	-7	0.000
Kr	83		ug/L		47	-0.000
Sr	88	0.078	ug/L	3.924	474	0.005
Y	89		ug/L		51	0.001
Zr	90	0.010	ug/L	81.934	323	0.000
Mo	98	-0.011	ug/L	59.958	32	-0.000
Ag	107	-0.002	ug/L	119.001	45	-0.000
Cd	111	-0.014	ug/L	126.426	7	-0.000
Cd	114		ug/L		17	-0.000
> In	115		ug/L		72389	72388.652
Sn	120	0.023	ug/L	20.959	207	0.001
Sb	121	-0.019	ug/L	57.161	205	-0.000
Sb	123		ug/L		176	-0.000
Ba	135		ug/L		107	0.001
Ba	137	0.246	ug/L	11.092	191	0.002
Ho	165		ug/L		10	0.000
> Lu	175		ug/L		67393	67393.265
Tl	205	0.066	ug/L	24.688	95	0.001
Pb	208	0.034	ug/L	21.726	517	0.002
Bi	209		ug/L		19	0.000
Th	232	0.004	ug/L	183.917	390	0.000
U	238	-0.027	ug/L	2.495	28	-0.002

Sample ID: 244129002

Report Date/Time: Thursday, January 14, 2010 00:47:43

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		100.0			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		99.1			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		96.0			
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 MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244129002

Report Date/Time: Thursday, January 14, 2010 00:47:43

Page 3

ICPMS#4 - Summary Report

Sample ID: 244129003

Sample Date/Time: Thursday, January 14, 2010 00:51:09

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940082|1|skj

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\244129003.181

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li 7	0.171	ug/L	49.542	43	0.000
Be 9	0.002	ug/L	2250.584	4	0.000
B 11	25.501	ug/L	4.483	1294	0.007
Na 23	95.055	ug/L	6.302	158880	0.684
Mg 24	3.317	ug/L	61.280	6001	0.016
Al 27	19.784	ug/L	23.065	23687	0.138
P 31	-14.314	ug/L	6.737	1850	-0.005
K 39	151.742	ug/L	14.536	693465	1.886
Ca 43	63.538	ug/L	19.012	649	0.002
> Sc 45		ug/L		167352	167352.288
Ti 47	0.921	ug/L	10.128	349	0.001
V 51	-16.442	ug/L	34.496	-34515	-0.168
Cr 52	4.216	ug/L	2.913	9489	0.044
Cr 53		ug/L		296280	0.904
Mn 55	0.839	ug/L	2.855	3289	0.014
Fe 57	23.944	ug/L	9.124	3969	0.008
Co 59	-0.001	ug/L	939.239	104	-0.000
Ni 60	-0.084	ug/L	29.127	73	-0.000
Cu 63		ug/L		966	0.005
Cu 65	0.798	ug/L	6.036	464	0.002
Zn 66	1.274	ug/L	5.229	372	0.003
Zn 67		ug/L		17513	0.080
Zn 68		ug/L		1428	0.006
> Ge 74		ug/L		115714	115714.001
As 75	2.292	ug/L	34.028	805	0.006
Se 77		ug/L		18041	0.105
Se 82	0.009	ug/L	3590.045	-12	0.000
Kr 83		ug/L		45	-0.000
Sr 88	0.115	ug/L	6.593	613	0.007
Y 89		ug/L		90	0.001
Zr 90	0.014	ug/L	92.272	323	0.000
Mo 98	-0.012	ug/L	16.609	30	-0.000
Ag 107	-0.004	ug/L	74.650	40	-0.000
Cd 111	-0.006	ug/L	108.322	10	-0.000
Cd 114		ug/L		10	-0.000
> In 115		ug/L		70262	70262.172
Sn 120	0.038	ug/L	2.532	226	0.001
Sb 121	-0.049	ug/L	14.946	160	-0.001
Sb 123		ug/L		145	-0.001
Ba 135		ug/L		174	0.002
Ba 137	0.381	ug/L	9.223	276	0.004
Ho 165		ug/L		11	0.000
> Lu 175		ug/L		66257	66257.296
Tl 205	0.007	ug/L	21.326	60	0.000
Pb 208	0.043	ug/L	17.047	544	0.003
Bi 209		ug/L		16	0.000
Th 232	-0.011	ug/L	42.698	302	-0.001
U 238	-0.026	ug/L	3.188	32	-0.002

Sample ID: 244129003

Report Date/Time: Thursday, January 14, 2010 00:53:58

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	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	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		97.8			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		98.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		93.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		94.5			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message
V 51Sample is out of limits (<-PQL)

QC Action

QC Action Line: Continue

Sample ID: 244129003
Report Date/Time: Thursday, January 14, 2010 00:53:58
Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, January 14, 2010 01:03:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 6.183

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	54.054	ug/L	7.865	6684	0.039
Be	9	54.404	ug/L	1.709	2689	0.016
B	11	102.776	ug/L	1.784	5158	0.030
Na	23	5285.394	ug/L	6.672	6583484	38.036
Mg	24	4784.615	ug/L	2.882	4041435	23.519
Al	27	4956.095	ug/L	1.787	5930757	34.537
P	31	5022.535	ug/L	1.258	299641	1.729
K	39	4726.667	ug/L	6.340	10469617	58.743
Ca	43	4993.198	ug/L	1.531	20997	0.120
> Sc	45		ug/L		171720	171720.277
Ti	47	50.252	ug/L	2.562	9901	0.057
V	51	46.767	ug/L	12.247	75741	0.478
Cr	52	51.355	ug/L	1.451	93360	0.531
Cr	53		ug/L		185776	0.217
Mn	55	50.873	ug/L	0.826	148462	0.859
Fe	57	4918.367	ug/L	1.767	287701	1.660
Co	59	49.242	ug/L	1.286	103576	0.603
Ni	60	51.387	ug/L	1.834	22613	0.131
Cu	63		ug/L		49370	0.287
Cu	65	50.285	ug/L	1.281	23677	0.137
Zn	66	50.995	ug/L	1.436	12739	0.109
Zn	67		ug/L		11291	0.025
Zn	68		ug/L		9826	0.078
> Ge	74		ug/L		116713	116713.004
As	75	47.997	ug/L	3.833	14396	0.122
Se	77		ug/L		9243	0.029
Se	82	49.667	ug/L	0.910	1388	0.012
Kr	83		ug/L		53	0.000
Sr	88	50.793	ug/L	1.051	221163	3.019
Y	89		ug/L		75	0.001
Zr	90	48.629	ug/L	1.588	115910	1.579
Mo	98	49.098	ug/L	1.003	50615	0.691
Ag	107	48.440	ug/L	1.541	78882	1.077
Cd	111	50.398	ug/L	1.785	19445	0.265
Cd	114		ug/L		45460	0.621
> In	115		ug/L		73214	73214.255
Sn	120	49.120	ug/L	1.331	85826	1.170
Sb	121	49.164	ug/L	2.926	65970	0.898
Sb	123		ug/L		50449	0.686
Ba	135		ug/L		19535	0.279
Ba	137	49.021	ug/L	1.248	33522	0.479
Ho	165		ug/L		16	0.000
> Lu	175		ug/L		69911	69911.013
Tl	205	45.072	ug/L	1.671	27004	0.385
Pb	208	50.469	ug/L	0.732	216724	3.094
Bi	209		ug/L		49	0.000
Th	232	49.962	ug/L	0.401	291835	4.169
U	238	51.665	ug/L	1.350	314986	4.503

Sample ID: QC Std 6

Report Date/Time: Thursday, January 14, 2010 01:06:24

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: QC Std 6

Report Date/Time: Thursday, January 14, 2010 01:06:24

Page 2

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Li	7	108.108				
|	Be	9	108.808				
|	B	11	102.776				
|	Na	23	105.708				
|	Mg	24	95.692				
|	Al	27	98.140				
|	P	31	100.451				
|	K	39	94.533				
|	Ca	43	99.864				
>	Sc	45		100.3			
|	Ti	47	100.504				
|	V	51	93.533				
|	Cr	52	102.709				
|	Cr	53					
|	Mn	55	101.746				
|	Fe	57	98.367				
|	Co	59	98.483				
|	Ni	60	102.774				
|	Cu	63					
|	Cu	65	100.571				
[	Zn	66	101.990				
|	Zn	67					
|	Zn	68					
>	Ge	74		99.2			
|	As	75	95.995				
|	Se	77					
|	Se	82	99.335				
|	Kr	83					
[	Sr	88	101.585				
|	Y	89					
|	Zr	90	97.257				
|	Mo	98	98.196				
|	Ag	107	96.881				
|	Cd	111	100.796				
|	Cd	114					
>	In	115		97.1			
|	Sn	120	98.241				
|	Sb	121	98.327				
|	Sb	123					
[	Ba	135					
|	Ba	137	98.043				
|	Ho	165					
>	Lu	175		99.7			
|	Tl	205	90.143				
|	Pb	208	100.938				
|	Bi	209					
|	Th	232	99.924				
|	U	238	103.331				

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 7

Sample Date/Time: Thursday, January 14, 2010 01:09:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 7.184

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.017	ug/L	177.865	25	0.000
Be	9	0.012	ug/L	327.701	5	0.000
B	11	2.355	ug/L	15.203	182	0.001
Na	23	-16.779	ug/L	24.751	25023	-0.121
Mg	24	-0.405	ug/L	781.826	3000	-0.002
Al	27	3.336	ug/L	77.151	4668	0.023
P	31	-4.013	ug/L	3.748	2524	-0.001
K	39	-1.009	ug/L	660.235	388206	-0.013
Ca	43	-13.492	ug/L	90.975	351	-0.000
Sc	45		ug/L		172813	172812.519
Ti	47	-0.064	ug/L	184.254	169	-0.000
V	51	-0.479	ug/L	630.898	-7317	-0.005
Cr	52	0.468	ug/L	16.305	3106	0.005
Cr	53		ug/L		152091	0.015
Mn	55	0.011	ug/L	190.521	976	0.000
Fe	57	5.943	ug/L	19.178	3049	0.002
Co	59	0.015	ug/L	47.180	142	0.000
Ni	60	0.049	ug/L	37.789	134	0.000
Cu	63		ug/L		194	0.000
Cu	65	0.001	ug/L	3845.607	103	0.000
Zn	66	0.072	ug/L	28.025	76	0.000
Zn	67		ug/L		7765	-0.005
Zn	68		ug/L		675	-0.001
Ge	74		ug/L		116154	116154.172
As	75	-0.316	ug/L	384.040	38	-0.001
Se	77		ug/L		7047	0.010
Se	82	0.414	ug/L	86.411	-1	0.000
Kr	83		ug/L		41	-0.000
Sr	88	0.009	ug/L	45.781	182	0.001
Y	89		ug/L		18	0.000
Zr	90	0.154	ug/L	15.910	680	0.005
Mo	98	0.036	ug/L	27.095	82	0.001
Ag	107	0.018	ug/L	29.126	79	0.000
Cd	111	0.017	ug/L	114.668	19	0.000
Cd	114		ug/L		35	0.000
In	115		ug/L		74485	74484.752
Sn	120	0.115	ug/L	21.658	375	0.003
Sb	121	0.535	ug/L	28.075	963	0.010
Sb	123		ug/L		768	0.008
Ba	135		ug/L		18	0.000
Ba	137	-0.000	ug/L	747.307	30	-0.000
Ho	165		ug/L		5	-0.000
Lu	175		ug/L		69306	69306.080
Tl	205	0.688	ug/L	13.466	466	0.006
Pb	208	-0.000	ug/L	4433.730	386	-0.000
Bi	209		ug/L		14	0.000
Th	232	0.170	ug/L	31.544	1356	0.014
U	238	0.016	ug/L	20.015	293	0.001

Sample ID: QC Std 7

Report Date/Time: Thursday, January 14, 2010 01:12:39

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: QC Std 7

Report Date/Time: Thursday, January 14, 2010 01:12:39

Page 2

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		100.9			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
L Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		98.7			
As	75					
Se	77					
Se	82					
L Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		98.8			
Sn	120					
Sb	121					
L Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		98.9			
Tl	205					
Pb	208					
Bi	209					
Th	232					
L U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, January 14, 2010 01:12:39

Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, January 14, 2010 01:53:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 6.191

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	57.756	ug/L	6.895	7067	0.041
Be	9	56.317	ug/L	3.933	2754	0.016
B	11	108.648	ug/L	4.327	5390	0.031
Na	23	5008.770	ug/L	4.819	6167963	36.045
Mg	24	4945.775	ug/L	5.012	4133048	24.311
Al	27	5156.152	ug/L	5.925	6101407	35.932
P	31	5000.604	ug/L	1.237	295190	1.721
K	39	4829.980	ug/L	1.273	10582545	60.027
Ca	43	4980.693	ug/L	1.323	20730	0.120
> Sc	45		ug/L		169914	169914.475
Ti	47	49.265	ug/L	1.923	9604	0.055
V	51	49.140	ug/L	4.421	79062	0.503
Cr	52	50.589	ug/L	1.266	91038	0.523
Cr	53		ug/L		183097	0.212
Mn	55	50.226	ug/L	3.439	145013	0.848
Fe	57	4883.089	ug/L	2.387	282664	1.648
Co	59	48.954	ug/L	1.299	101895	0.599
Ni	60	51.333	ug/L	1.256	22352	0.131
Cu	63		ug/L		48705	0.286
Cu	65	49.591	ug/L	2.723	23102	0.135
Zn	66	50.697	ug/L	0.672	12530	0.108
Zn	67		ug/L		11010	0.024
Zn	68		ug/L		9535	0.076
> Ge	74		ug/L		115455	115454.829
As	75	47.248	ug/L	2.081	14018	0.120
Se	77		ug/L		9590	0.032
Se	82	49.822	ug/L	4.583	1377	0.012
Kr	83		ug/L		43	-0.000
Sr	88	51.209	ug/L	1.305	219605	3.044
Y	89		ug/L		69	0.001
Zr	90	47.702	ug/L	2.765	111971	1.549
Mo	98	48.441	ug/L	1.592	49183	0.681
Ag	107	48.743	ug/L	2.006	78174	1.083
Cd	111	49.766	ug/L	1.350	18913	0.262
Cd	114		ug/L		44663	0.619
> In	115		ug/L		72115	72114.792
Sn	120	48.837	ug/L	1.780	84050	1.163
Sb	121	48.308	ug/L	4.280	63851	0.882
Sb	123		ug/L		49531	0.684
Ba	135		ug/L		19113	0.277
Ba	137	48.780	ug/L	1.395	32865	0.477
Ho	165		ug/L		12	0.000
> Lu	175		ug/L		68883	68882.700
Tl	205	43.334	ug/L	3.566	25577	0.371
Pb	208	50.441	ug/L	1.972	213397	3.093
Bi	209		ug/L		58	0.001
Th	232	50.095	ug/L	1.544	288277	4.180
U	238	51.692	ug/L	1.600	310494	4.505

Sample ID: QC Std 6

Report Date/Time: Thursday, January 14, 2010 01:56:21

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7	115.512				
Be	9	112.633				
B	11	108.648				
Na	23	100.175				
Mg	24	98.916				
Al	27	102.102				
P	31	100.012				
K	39	96.600				
Ca	43	99.614				
> Sc	45		99.3			
Ti	47	98.529				
V	51	98.280				
Cr	52	101.177				
Cr	53					
Mn	55	100.452				
Fe	57	97.662				
Co	59	97.908				
Ni	60	102.666				
Cu	63					
Cu	65	99.182				
Zn	66	101.394				
Zn	67					
Zn	68					
> Ge	74		98.1			
As	75	94.496				
Se	77					
Se	82	99.643				
Kr	83					
Sr	88	102.417				
Y	89					
Zr	90	95.404				
Mo	98	96.882				
Ag	107	97.487				
Cd	111	99.531				
Cd	114					
> In	115		95.6			
Sn	120	97.674				
Sb	121	96.615				
Sb	123					
Ba	135					
Ba	137	97.561				
Ho	165					
> Lu	175		98.3			
Tl	205	86.668				
Pb	208	100.881				
Bi	209					
Th	232	100.191				
U	238	103.384				

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
QC Std 6	Li	7CCV is out of limits (+/- 10%)
QC Std 6	Be	9CCV is out of limits (+/- 10%)
QC Std 6	Tl	205CCV is out of limits (+/- 10%)

Sample ID: QC Std 6

Report Date/Time: Thursday, January 14, 2010 01:56:21

Page 3

QC Action

QC Action Line: Continue

Sample ID: QC Std 6

Report Date/Time: Thursday, January 14, 2010 01:56:21

Page 4

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, January 14, 2010 01:59:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 7.192

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.020	ug/L	218.117	25	0.000
Be	9	0.029	ug/L	216.538	5	0.000
B	11	2.296	ug/L	32.472	174	0.001
Na	23	-18.397	ug/L	59.447	22355	-0.132
Mg	24	-1.132	ug/L	124.899	2334	-0.006
Al	27	1.986	ug/L	112.146	3000	0.014
P	31	-2.475	ug/L	47.185	2546	-0.001
K	39	-3.368	ug/L	170.529	373148	-0.042
Ca	43	-6.392	ug/L	53.198	371	-0.000
> Sc	45		ug/L		168239	168238.970
Ti	47	-0.084	ug/L	153.500	161	-0.000
V	51	-2.508	ug/L	64.659	-10656	-0.026
Cr	52	0.688	ug/L	20.361	3404	0.007
Cr	53		ug/L		153117	0.044
Mn	55	0.016	ug/L	127.823	965	0.000
Fe	57	5.981	ug/L	17.980	2971	0.002
Co	59	0.011	ug/L	45.349	129	0.000
Ni	60	0.015	ug/L	63.444	116	0.000
Cu	63		ug/L		178	0.000
Cu	65	-0.016	ug/L	289.718	93	-0.000
Zn	66	0.087	ug/L	91.309	79	0.000
Zn	67		ug/L		7730	-0.004
Zn	68		ug/L		660	-0.001
> Ge	74		ug/L		115162	115161.529
As	75	-0.718	ug/L	46.140	-80	-0.002
Se	77		ug/L		7229	0.012
Se	82	0.018	ug/L	2814.039	-12	0.000
Kr	83		ug/L		45	-0.000
Sr	88	0.013	ug/L	18.974	194	0.001
Y	89		ug/L		14	0.000
Zr	90	0.156	ug/L	29.484	674	0.005
Mo	98	0.039	ug/L	17.096	85	0.001
Ag	107	0.015	ug/L	63.614	72	0.000
Cd	111	0.007	ug/L	43.190	15	0.000
Cd	114		ug/L		30	0.000
> In	115		ug/L		73412	73412.481
Sn	120	0.105	ug/L	23.692	352	0.002
Sb	121	0.494	ug/L	25.674	894	0.009
Sb	123		ug/L		752	0.008
Ba	135		ug/L		20	0.000
Ba	137	-0.003	ug/L	226.199	28	-0.000
Ho	165		ug/L		5	-0.000
> Lu	175		ug/L		68996	68995.948
Tl	205	0.820	ug/L	16.070	541	0.007
Pb	208	-0.003	ug/L	199.610	370	-0.000
Bi	209		ug/L		15	0.000
Th	232	0.178	ug/L	31.772	1399	0.015
U	238	0.015	ug/L	7.578	282	0.001

Sample ID: QC Std 7

Report Date/Time: Thursday, January 14, 2010 02:02:35

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: QC Std 7

Report Date/Time: Thursday, January 14, 2010 02:02:35

Page 2

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	98.3			
|	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	97.8			
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
[	Sr	88				
|	Y	89				
|	Zr	90				
|	Mo	98				
|	Ag	107				
|	Cd	111				
|	Cd	114				
>	In	115	97.4			
|	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

Sample ID: QC Std 7

Report Date/Time: Thursday, January 14, 2010 02:02:35

Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, January 14, 2010 02:43:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 6.199

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	68.118	ug/L	6.724	7901	0.049
Be	9	61.565	ug/L	4.757	2854	0.018
B	11	114.881	ug/L	0.243	5403	0.033
Na	23	5050.267	ug/L	9.634	5894151	36.344
Mg	24	5282.392	ug/L	11.877	4188015	25.965
Al	27	4890.988	ug/L	1.148	5491546	34.084
P	31	5002.995	ug/L	1.336	280036	1.722
K	39	4874.901	ug/L	2.164	10124889	60.585
Ca	43	4880.351	ug/L	0.334	19264	0.117
Sc	45		ug/L		161098	161097.566
Ti	47	49.409	ug/L	1.300	9132	0.056
V	51	46.609	ug/L	2.847	70751	0.477
Cr	52	51.932	ug/L	0.853	88566	0.537
Cr	53		ug/L		189490	0.311
Mn	55	50.908	ug/L	0.389	139386	0.860
Fe	57	4939.009	ug/L	0.441	271091	1.667
Co	59	49.581	ug/L	1.319	97855	0.607
Ni	60	51.474	ug/L	0.579	21254	0.131
Cu	63		ug/L		46394	0.287
Cu	65	50.232	ug/L	1.018	22193	0.137
Zn	66	50.236	ug/L	0.886	11994	0.107
Zn	67		ug/L		10811	0.026
Zn	68		ug/L		9274	0.077
Ge	74		ug/L		111538	111537.518
As	75	49.801	ug/L	2.674	14268	0.127
Se	77		ug/L		11120	0.049
Se	82	50.401	ug/L	1.561	1346	0.012
Kr	83		ug/L		43	-0.000
Sr	88	51.015	ug/L	0.368	211883	3.032
Y	89		ug/L		78	0.001
Zr	90	47.826	ug/L	1.309	108738	1.553
Mo	98	48.364	ug/L	0.838	47557	0.680
Ag	107	47.956	ug/L	1.012	74484	1.066
Cd	111	49.657	ug/L	0.470	18277	0.262
Cd	114		ug/L		42928	0.614
In	115		ug/L		69839	69839.156
Sn	120	48.089	ug/L	0.370	80160	1.145
Sb	121	47.740	ug/L	3.198	61119	0.872
Sb	123		ug/L		47385	0.676
Ba	135		ug/L		18076	0.269
Ba	137	47.539	ug/L	1.428	31192	0.465
Ho	165		ug/L		14	0.000
Lu	175		ug/L		67083	67083.147
Tl	205	44.215	ug/L	1.039	25419	0.378
Pb	208	50.728	ug/L	1.212	209012	3.110
Bi	209		ug/L		51	0.001
Th	232	50.151	ug/L	0.927	281074	4.185
U	238	51.909	ug/L	0.623	303656	4.524

Sample ID: QC Std 6

Report Date/Time: Thursday, January 14, 2010 02:46:22

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: QC Std 6

Report Date/Time: Thursday, January 14, 2010 02:46:22

Page 2

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7	136.236				
Be	9	123.130				
B	11	114.881				
Na	23	101.005				
Mg	24	105.648				
Al	27	96.851				
P	31	100.060				
K	39	97.498				
Ca	43	97.607				
> Sc	45		94.1			
Ti	47	98.818				
V	51	93.218				
Cr	52	103.865				
Cr	53					
Mn	55	101.816				
Fe	57	98.780				
Co	59	99.162				
Ni	60	102.948				
Cu	63					
Cu	65	100.465				
Zn	66	100.472				
Zn	67					
Zn	68					
> Ge	74		94.8			
As	75	99.602				
Se	77					
Se	82	100.801				
Kr	83					
Sr	88	102.030				
Y	89					
Zr	90	95.653				
Mo	98	96.727				
Ag	107	95.912				
Cd	111	99.314				
Cd	114					
> In	115		92.6			
Sn	120	96.178				
Sb	121	95.479				
Sb	123					
Ba	135					
Ba	137	95.078				
Ho	165					
> Lu	175		95.7			
Tl	205	88.431				
Pb	208	101.456				
Bi	209					
Th	232	100.302				
U	238	103.818				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Li	7CCV is out of limits (+/- 10%)
QC Std 6	Be	9CCV is out of limits (+/- 10%)
QC Std 6	B	11CCV is out of limits (+/- 10%)
QC Std 6	Ti	205CCV is out of limits (+/- 10%)

Sample ID: QC Std 6

Report Date/Time: Thursday, January 14, 2010 02:46:22

Page 3

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, January 14, 2010 02:49:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 7.200

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.035	ug/L	104.498	26	0.000
Be	9	0.012	ug/L	90.407	4	0.000
B	11	2.338	ug/L	22.292	169	0.001
Na	23	-17.356	ug/L	28.815	22686	-0.125
Mg	24	-0.635	ug/L	294.065	2667	-0.003
Al	27	2.071	ug/L	144.822	3001	0.014
P	31	-5.311	ug/L	48.715	2285	-0.002
K	39	-16.459	ug/L	27.766	332158	-0.205
Ca	43	-12.614	ug/L	107.004	331	-0.000
> Sc	45		ug/L		161540	161540.307
Ti	47	-0.095	ug/L	19.766	152	-0.000
V	51	-0.472	ug/L	459.375	-6821	-0.005
Cr	52	1.446	ug/L	4.105	4532	0.015
Cr	53		ug/L		159702	0.124
Mn	55	0.061	ug/L	34.258	1048	0.001
Fe	57	4.955	ug/L	49.946	2794	0.002
Co	59	0.012	ug/L	26.878	128	0.000
Ni	60	0.007	ug/L	344.437	108	0.000
Cu	63		ug/L		169	0.000
Cu	65	-0.040	ug/L	62.974	79	-0.000
Zn	66	0.066	ug/L	109.059	72	0.000
Zn	67		ug/L		7610	-0.003
Zn	68		ug/L		585	-0.001
> Ge	74		ug/L		111716	111716.267
As	75	1.520	ug/L	27.556	559	0.004
Se	77		ug/L		8677	0.027
Se	82	0.249	ug/L	94.138	-5	0.000
Kr	83		ug/L		42	-0.000
Sr	88	0.012	ug/L	31.045	181	0.001
Y	89		ug/L		14	0.000
Zr	90	0.166	ug/L	11.597	663	0.005
Mo	98	0.064	ug/L	13.165	104	0.001
Ag	107	0.012	ug/L	50.214	65	0.000
Cd	111	0.029	ug/L	74.265	22	0.000
Cd	114		ug/L		32	0.000
> In	115		ug/L		69740	69740.035
Sn	120	0.122	ug/L	35.589	364	0.003
Sb	121	0.483	ug/L	18.077	837	0.009
Sb	123		ug/L		699	0.007
Ba	135		ug/L		13	-0.000
Ba	137	0.003	ug/L	280.538	30	0.000
Ho	165		ug/L		6	0.000
> Lu	175		ug/L		65565	65564.770
Tl	205	0.712	ug/L	15.638	454	0.006
Pb	208	-0.002	ug/L	256.354	359	-0.000
Bi	209		ug/L		9	-0.000
Th	232	0.183	ug/L	27.547	1358	0.015
U	238	0.014	ug/L	24.461	266	0.001

Sample ID: QC Std 7

Report Date/Time: Thursday, January 14, 2010 02:52:36

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		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		94.9			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		92.5			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		93.5			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, January 14, 2010 02:52:36

Page 3

ICPMS#4 - Summary Report

Sample ID: 1202011705

Sample Date/Time: Thursday, January 14, 2010 03:14:51

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 940082|1|skj

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\1202011705.204

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	4.942	ug/L	7.230	600	0.004
Be	9	0.147	ug/L	94.204	11	0.000
B	11	22.404	ug/L	3.020	1114	0.006
Na	23	22366.813	ug/L	6.356	26285898	160.962
Mg	24	3576.800	ug/L	6.105	2868791	17.582
Al	27	25.843	ug/L	19.029	30032	0.180
P	31	36.495	ug/L	2.712	4651	0.013
K	39	5038.467	ug/L	6.163	10564714	62.618
Ca	43	11844.800	ug/L	1.574	46730	0.284
> Sc	45		ug/L		162922	162921.542
Ti	47	3.068	ug/L	8.982	734	0.003
V	51	-21.530	ug/L	41.961	-42126	-0.220
Cr	52	15.142	ug/L	0.548	27629	0.156
Cr	53		ug/L		302845	0.993
Mn	55	0.727	ug/L	4.139	2892	0.012
Fe	57	51.406	ug/L	6.168	5375	0.017
Co	59	0.067	ug/L	12.763	237	0.001
Ni	60	0.335	ug/L	17.411	246	0.001
Cu	63		ug/L		1264	0.007
Cu	65	0.834	ug/L	1.071	468	0.002
Zn	66	2.635	ug/L	2.199	657	0.006
Zn	67		ug/L		16637	0.083
Zn	68		ug/L		1575	0.008
> Ge	74		ug/L		107412	107412.388
As	75	4.279	ug/L	61.868	1288	0.011
Se	77		ug/L		23044	0.164
Se	82	0.446	ug/L	63.990	-0	0.000
Kr	83		ug/L		44	-0.000
Sr	88	94.019	ug/L	1.620	365110	5.588
Y	89		ug/L		6292	0.096
Zr	90	0.042	ug/L	41.149	359	0.001
Mo	98	1.843	ug/L	3.110	1733	0.026
Ag	107	-0.004	ug/L	55.762	38	-0.000
Cd	111	-0.029	ug/L	87.901	1	-0.000
Cd	114		ug/L		11	-0.000
> In	115		ug/L		65324	65323.901
Sn	120	0.438	ug/L	7.913	832	0.010
Sb	121	-0.022	ug/L	52.921	182	-0.000
Sb	123		ug/L		174	0.000
Ba	135		ug/L		7850	0.122
Ba	137	21.276	ug/L	1.576	13385	0.208
Ho	165		ug/L		198	0.003
> Lu	175		ug/L		64249	64249.480
Tl	205	0.062	ug/L	43.432	88	0.001
Pb	208	-0.032	ug/L	10.871	233	-0.002
Bi	209		ug/L		13	0.000
Th	232	-0.012	ug/L	6.223	282	-0.001
U	238	0.621	ug/L	4.869	3658	0.054

Sample ID: 1202011705

Report Date/Time: Thursday, January 14, 2010 03:17:41

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		95.2			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		91.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		86.6			
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 MassOut of Limits Message
V 51Sample is out of limits (<-PQL)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1202011706

Sample Date/Time: Thursday, January 14, 2010 03:21:09

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 940082|1|skj

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\1202011706.205

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	76.725	ug/L	4.123	8933	0.055
Be	9	63.789	ug/L	2.089	2970	0.018
B	11	143.406	ug/L	3.068	6757	0.041
Na	23	22806.040	ug/L	1.430	26593335	164.123
Mg	24	5354.946	ug/L	8.272	4258688	26.322
Al	27	1752.433	ug/L	12.436	1977155	12.212
P	31	1869.404	ug/L	1.435	106667	0.644
K	39	6817.784	ug/L	2.294	14068455	84.731
Ca	43	13654.696	ug/L	1.352	53425	0.328
> Sc	45		ug/L		161761	161761.477
Ti	47	44.257	ug/L	1.722	8230	0.050
V	51	28.960	ug/L	17.456	41734	0.296
Cr	52	59.335	ug/L	2.352	101274	0.613
Cr	53		ug/L		296325	0.966
Mn	55	45.234	ug/L	1.376	124444	0.764
Fe	57	1836.569	ug/L	1.745	102798	0.620
Co	59	44.942	ug/L	1.798	89056	0.550
Ni	60	45.906	ug/L	1.745	19041	0.117
Cu	63		ug/L		43846	0.270
Cu	65	46.697	ug/L	2.847	20717	0.128
Zn	66	50.657	ug/L	1.588	11394	0.108
Zn	67		ug/L		18168	0.101
Zn	68		ug/L		9259	0.082
> Ge	74		ug/L		105087	105087.182
As	75	77.544	ug/L	3.435	20862	0.197
Se	77		ug/L		21638	0.155
Se	82	19.169	ug/L	7.487	475	0.005
Kr	83		ug/L		49	0.000
Sr	88	145.265	ug/L	1.436	551735	8.634
Y	89		ug/L		6232	0.097
Zr	90	49.329	ug/L	1.316	102592	1.602
Mo	98	49.928	ug/L	0.879	44926	0.702
Ag	107	48.453	ug/L	3.453	68834	1.077
Cd	111	10.319	ug/L	1.838	3483	0.054
Cd	114		ug/L		7880	0.123
> In	115		ug/L		63900	63900.047
Sn	120	49.042	ug/L	1.267	74781	1.168
Sb	121	213.589	ug/L	1.660	249403	3.901
Sb	123		ug/L		191318	2.992
Ba	135		ug/L		23921	0.374
Ba	137	66.729	ug/L	0.551	41666	0.652
Ho	165		ug/L		253	0.004
> Lu	175		ug/L		63853	63852.688
Tl	205	80.070	ug/L	4.640	43779	0.685
Pb	208	39.066	ug/L	1.597	153301	2.395
Bi	209		ug/L		56	0.001
Th	232	48.690	ug/L	0.101	259764	4.063
U	238	51.474	ug/L	0.461	286620	4.486

Sample ID: 1202011706

Report Date/Time: Thursday, January 14, 2010 03:23:59

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		94.5			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		89.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		84.7			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		91.1			
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

Sample ID: 1202011706

Report Date/Time: Thursday, January 14, 2010 03:23:59

Page 3

ICPMS#4 - Summary Report

Sample ID: 1202011707

Sample Date/Time: Thursday, January 14, 2010 03:27:25

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 94008211skj

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\1202011707.206

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	1.032	ug/L	1.705	134	0.001
Be	9	0.032	ug/L	211.217	5	0.000
B	11	6.648	ug/L	10.706	351	0.002
Na	23	4674.040	ug/L	4.562	5190408	33.637
Mg	24	669.234	ug/L	1.795	506490	3.290
Al	27	6.638	ug/L	30.139	7669	0.046
P	31	-2.590	ug/L	54.647	2311	-0.001
K	39	1078.712	ug/L	3.547	2398235	13.406
Ca	43	2477.594	ug/L	3.936	9471	0.060
> Sc	45		ug/L		153070	153069.572
Ti	47	0.608	ug/L	14.063	265	0.001
V	51	-8.080	ug/L	9.207	-18423	-0.083
Cr	52	3.254	ug/L	2.719	7157	0.034
Cr	53		ug/L		176849	0.290
Mn	55	0.151	ug/L	4.056	1229	0.003
Fe	57	8.648	ug/L	5.992	2841	0.003
Co	59	0.011	ug/L	26.689	118	0.000
Ni	60	-0.080	ug/L	26.525	69	-0.000
Cu	63		ug/L		265	0.001
Cu	65	0.051	ug/L	66.531	113	0.000
Zn	66	0.724	ug/L	9.042	214	0.002
Zn	67		ug/L		8749	0.012
Zn	68		ug/L		802	0.001
> Ge	74		ug/L		104489	104489.251
As	75	2.719	ug/L	79.253	838	0.007
Se	77		ug/L		10201	0.047
Se	82	0.001	ug/L	42489.260	-11	0.000
Kr	83		ug/L		39	-0.000
Sr	88	18.398	ug/L	1.156	72236	1.093
Y	89		ug/L		1243	0.019
Zr	90	-0.044	ug/L	13.000	178	-0.001
Mo	98	0.368	ug/L	9.055	381	0.005
Ag	107	0.002	ug/L	196.330	47	0.000
Cd	111	-0.022	ug/L	14.418	3	-0.000
Cd	114		ug/L		11	-0.000
> In	115		ug/L		65956	65955.560
Sn	120	0.010	ug/L	140.159	167	0.000
Sb	121	0.435	ug/L	5.885	734	0.008
Sb	123		ug/L		546	0.006
Ba	135		ug/L		1588	0.025
Ba	137	4.174	ug/L	1.010	2633	0.041
Ho	165		ug/L		39	0.001
> Lu	175		ug/L		63876	63875.804
Tl	205	1.562	ug/L	14.956	906	0.013
Pb	208	-0.032	ug/L	30.523	233	-0.002
Bi	209		ug/L		10	-0.000
Th	232	0.081	ug/L	28.005	777	0.007
U	238	0.117	ug/L	11.152	828	0.010

Sample ID: 1202011707

Report Date/Time: Thursday, January 14, 2010 03:30:14

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	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		89.4			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		88.8			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		87.5			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		91.1			
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

Sample ID: 1202011707

Report Date/Time: Thursday, January 14, 2010 03:30:14

Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, January 14, 2010 03:39:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 6.208

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	74.346	ug/L	6.627	8075	0.053
Be	9	61.392	ug/L	1.926	2667	0.018
B	11	116.961	ug/L	1.464	5152	0.034
Na	23	4876.433	ug/L	3.367	5334519	35.093
Mg	24	4892.036	ug/L	4.048	3630486	24.047
Al	27	4896.211	ug/L	4.246	5147450	34.120
P	31	5026.558	ug/L	1.270	263538	1.730
K	39	4977.455	ug/L	2.865	9679120	61.859
Ca	43	4879.609	ug/L	0.568	18043	0.117
> Sc	45		ug/L		150912	150911.878
Ti	47	48.736	ug/L	0.605	8441	0.055
V	51	43.953	ug/L	5.944	62164	0.450
Cr	52	50.694	ug/L	0.937	81037	0.524
Cr	53		ug/L		171334	0.270
Mn	55	50.127	ug/L	1.146	128580	0.847
Fe	57	4860.108	ug/L	0.570	249921	1.641
Co	59	48.459	ug/L	0.976	89585	0.593
Ni	60	51.062	ug/L	1.657	19753	0.130
Cu	63		ug/L		43366	0.286
Cu	65	49.229	ug/L	2.206	20372	0.134
Zn	66	50.406	ug/L	1.649	11069	0.107
Zn	67		ug/L		9830	0.024
Zn	68		ug/L		8531	0.077
> Ge	74		ug/L		102604	102603.590
As	75	48.197	ug/L	2.262	12703	0.123
Se	77		ug/L		9863	0.046
Se	82	49.835	ug/L	2.414	1224	0.012
Kr	83		ug/L		46	0.000
Sr	88	50.090	ug/L	1.116	195382	2.977
Y	89		ug/L		70	0.001
Zr	90	46.999	ug/L	3.500	100358	1.526
Mo	98	47.684	ug/L	2.486	44038	0.671
Ag	107	47.602	ug/L	0.638	69437	1.058
Cd	111	49.186	ug/L	0.539	17001	0.259
Cd	114		ug/L		39896	0.608
> In	115		ug/L		65585	65585.455
Sn	120	48.443	ug/L	1.197	75832	1.154
Sb	121	47.937	ug/L	4.132	57627	0.875
Sb	123		ug/L		44498	0.676
Ba	135		ug/L		17188	0.267
Ba	137	46.753	ug/L	1.713	29401	0.457
Ho	165		ug/L		10	0.000
> Lu	175		ug/L		64295	64295.367
Tl	205	45.862	ug/L	1.950	25272	0.392
Pb	208	50.430	ug/L	2.141	199122	3.092
Bi	209		ug/L		41	0.000
Th	232	50.508	ug/L	1.037	271288	4.214
U	238	52.410	ug/L	0.338	293845	4.568

Sample ID: QC Std 6

Report Date/Time: Thursday, January 14, 2010 03:42:42

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	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	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7	148.692				
Be	9	122.783				
B	11	116.961				
Na	23	97.529				
Mg	24	97.841				
Al	27	96.955				
P	31	100.531				
K	39	99.549				
Ca	43	97.592				
> Sc	45		88.2			
Ti	47	97.473				
V	51	87.905				
Cr	52	101.387				
Cr	53					
Mn	55	100.254				
Fe	57	97.202				
Co	59	96.917				
Ni	60	102.124				
Cu	63					
Cu	65	98.459				
Zn	66	100.812				
Zn	67					
Zn	68					
> Ge	74		87.2			
As	75	96.394				
Se	77					
Se	82	99.670				
Kr	83					
Sr	88	100.180				
Y	89					
Zr	90	93.998				
Mo	98	95.368				
Ag	107	95.203				
Cd	111	98.371				
Cd	114					
> In	115		87.0			
Sn	120	96.887				
Sb	121	95.873				
Sb	123					
Ba	135					
Ba	137	93.505				
Ho	165					
> Lu	175		91.7			
Tl	205	91.725				
Pb	208	100.860				
Bi	209					
Th	232	101.016				
U	238	104.821				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	7CCV is out of limits (+/- 10%)
QC Std 6	Be	9	9CCV is out of limits (+/- 10%)
QC Std 6	B	11	11CCV is out of limits (+/- 10%)
QC Std 6	V	51	51CCV is out of limits (+/- 10%)

Sample ID: QC Std 6

Report Date/Time: Thursday, January 14, 2010 03:42:42

Page 3

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, January 14, 2010 03:46:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100113\QC Std 7.209

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.049	ug/L	75.599	25	0.000
Be	9	0.066	ug/L	87.201	6	0.000
B	11	2.568	ug/L	16.008	166	0.001
Na	23	-17.610	ug/L	19.683	20682	-0.127
Mg	24	-0.787	ug/L	99.391	2334	-0.004
Al	27	0.088	ug/L	1270.572	667	0.001
P	31	-4.365	ug/L	45.315	2165	-0.002
K	39	-7.160	ug/L	182.115	324664	-0.089
Ca	43	-12.831	ug/L	73.051	306	-0.000
> Sc	45		ug/L		149508	149508.485
Ti	47	-0.078	ug/L	102.715	144	-0.000
V	51	-0.203	ug/L	111.519	-5942	-0.002
Cr	52	1.085	ug/L	12.296	3638	0.011
Cr	53		ug/L		145662	0.109
Mn	55	0.045	ug/L	25.609	930	0.001
Fe	57	2.447	ug/L	37.782	2462	0.001
Co	59	0.012	ug/L	81.752	117	0.000
Ni	60	0.034	ug/L	17.961	111	0.000
Cu	63		ug/L		173	0.000
Cu	65	-0.021	ug/L	67.318	81	-0.000
Zn	66	0.028	ug/L	72.725	58	0.000
Zn	67		ug/L		7097	-0.003
Zn	68		ug/L		569	-0.001
> Ge	74		ug/L		103357	103356.653
As	75	1.299	ug/L	32.656	458	0.003
Se	77		ug/L		7776	0.025
Se	82	0.221	ug/L	107.969	-6	0.000
Kr	83		ug/L		40	-0.000
Sr	88	0.015	ug/L	21.558	182	0.001
Y	89		ug/L		14	0.000
Zr	90	0.146	ug/L	30.954	578	0.005
Mo	98	0.040	ug/L	39.785	76	0.001
Ag	107	0.022	ug/L	58.974	75	0.000
Cd	111	0.005	ug/L	102.729	12	0.000
Cd	114		ug/L		27	0.000
> In	115		ug/L		65157	65157.334
Sn	120	0.112	ug/L	24.133	323	0.003
Sb	121	0.523	ug/L	25.884	829	0.010
Sb	123		ug/L		670	0.008
Ba	135		ug/L		21	0.000
Ba	137	-0.004	ug/L	41.229	25	-0.000
Ho	165		ug/L		4	-0.000
> Lu	175		ug/L		63323	63323.026
Tl	205	0.755	ug/L	19.253	461	0.006
Pb	208	-0.004	ug/L	120.040	338	-0.000
Bi	209		ug/L		9	-0.000
Th	232	0.176	ug/L	28.277	1270	0.015
U	238	0.020	ug/L	8.937	285	0.002

Sample ID: QC Std 7

Report Date/Time: Thursday, January 14, 2010 03:48:56

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	0.9999
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		87.3			
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		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		86.4			
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 MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, January 14, 2010 03:48:56

Page 3

Daily Performance Report

Sample ID: Sample

Sample Date/Time: Thursday, January 14, 2010 11:51:22

Sample Description:

Method File: C:\elandata\Method\daily2.mth

Dataset File: c:\elandata\Dataset\090811\Sample.356

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	1250.1	1250.055	27.661	2.2
Mg	24.0	18900.3	18900.295	145.654	0.8
Co	58.9	47612.8	47612.816	381.058	0.8
Rh	102.9	90147.1	90147.139	463.368	0.5
In	114.9	120298.0	120298.011	1009.425	0.8
Pb	208.0	42306.4	42306.353	263.865	0.6
[> Ba	137.9	97823.1	97823.144	541.480	0.6
[Ba++	69.0	1811.1	0.019	0.001	3.4
[> Ce	139.9	116201.1	116201.083	352.735	0.3
[CeO	155.9	2803.1	0.024	0.000	1.1
Bkgd	220.0	6.4	6.400	2.702	42.2

Current Optimization File Data

Current Value	Description
0.86	Nebulizer Gas Flow
9.00	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	13	8.5	1144.7
Co	59	13	8.8	36254.6
In	115	13	9.5	87651.1

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	603	2060	0.684
Be	9.0	9.0	2052	2045	0.748
Mg	24.0	24.0	5687	2075	0.706
Mg	25.0	25.0	5949	2080	0.755
Mg	26.0	25.9	6154	2085	0.706
Co	58.9	58.9	14166	2140	0.711
Rh	102.9	102.9	24865	2230	0.693
In	114.9	114.9	27774	2255	0.708
Ce	139.9	139.9	33851	2310	0.665
Pb	206.0	205.9	49933	2500	0.700
Pb	207.0	207.0	50101	2380	0.613
Pb	208.0	208.0	50448	2570	0.632
U	238.1	238.0	57691	2510	0.647

ICPMS#4 - Summary Report

Sample ID: Blank

Sample Date/Time: Thursday, January 14, 2010 21:54:56

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\100114\Blank.139

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		242632	
[	Ni	60	ug/L		35	
[>	Ge	74	ug/L		121181	
|	As	75	ug/L		218	
|	Se	77	ug/L		3775	
|	Se	82	ug/L		-6	
[	Kr	83	ug/L		41	
[>	Lu	175	ug/L		70811	
[	Tl	205	ug/L		136	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Simple Linear	
As	75Simple Linear	
Se	77Simple Linear	
Se	82Simple Linear	
Kr	83Simple Linear	
Lu	175Simple Linear	
Tl	205Simple Linear	

QC Calculated Values

	Analyte Mass	QC Std	% Recovery	Int Std	% Recovery	Spike % 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 MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Thursday, January 14, 2010 21:55:37

Page 1

ICPMS#4 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Thursday, January 14, 2010 21:59:00

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\100114\Standard 1.140

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	10.000	ug/L	3.695	604	0.002
[> Sc	45		ug/L		240701	240700.628
[Ni	60	10.000	ug/L	2.277	4538	0.019
[> Ge	74		ug/L		118932	118931.548
[As	75	10.000	ug/L	11.573	3096	0.024
[Se	77		ug/L		5018	0.011
[Se	82	10.000	ug/L	6.737	286	0.002
[Kr	83		ug/L		41	0.000
[> Lu	175		ug/L		68854	68853.567
[Tl	205	10.000	ug/L	0.747	12080	0.174

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

Sample ID: Standard 1

Report Date/Time: Thursday, January 14, 2010 21:59:38

Page 1

ICPMS#4 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Thursday, January 14, 2010 22:03:01

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\100114\Standard 2.141

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	99.966	ug/L	1.784	5893	0.024
[> Sc	45		ug/L		244506	244506.433
[Ni	60	99.973	ug/L	1.321	44563	0.182
[> Ge	74		ug/L		121014	121014.293
[As	75	100.028	ug/L	0.880	30390	0.249
[Se	77		ug/L		7496	0.031
[Se	82	100.029	ug/L	1.126	3053	0.025
[Kr	83		ug/L		43	0.000
[> Lu	175		ug/L		69886	69885.895
[Tl	205	99.978	ug/L	0.626	118809	1.698

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

Sample ID: Standard 2

Report Date/Time: Thursday, January 14, 2010 22:03:40

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Thursday, January 14, 2010 22:07:03

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\100114\QC Std 1.142

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	51.024	ug/L	1.536	3062	0.012
[>	Sc 45		ug/L		248724	248724.125
[	Ni 60	52.069	ug/L	1.595	23625	0.095
[>	Ge 74		ug/L		123205	123205.242
[	As 75	47.813	ug/L	4.546	14907	0.119
[	Se 77		ug/L		6615	0.023
[	Se 82	49.022	ug/L	2.790	1520	0.012
[	Kr 83		ug/L		45	0.000
[>	Lu 175		ug/L		70724	70724.375
[	Tl 205	48.597	ug/L	1.145	58507	0.825

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be 9	102.049				
[>	Sc 45		102.5			
[	Ni 60	104.138				
[>	Ge 74		101.7			
[	As 75	95.627				
[	Se 77					
[	Se 82	98.044				
[	Kr 83					
[>	Lu 175		99.9			
[	Tl 205	97.193				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Thursday, January 14, 2010 22:07:42

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Thursday, January 14, 2010 22:11:08

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\100114\QC Std 2.143

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	-0.004	ug/L	1087.637	5	-0.000
|>	Sc 45		ug/L		254204	254204.080
[	Ni 60	0.012	ug/L	242.431	43	0.000
[>	Ge 74		ug/L		127379	127378.659
|	As 75	0.009	ug/L	11871.007	231	0.000
|	Se 77		ug/L		4253	0.002
|	Se 82	0.103	ug/L	126.785	-3	0.000
[	Kr 83		ug/L		43	0.000
[>	Lu 175		ug/L		71935	71934.727
[	Tl 205	0.064	ug/L	9.232	217	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[Be 9					
|> Sc 45		104.8			
[Ni 60					
[> Ge 74		105.1			
| As 75					
| Se 77					
| Se 82					
[Kr 83					
[> Lu 175		101.6			
[Tl 205					

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Thursday, January 14, 2010 22:11:49

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Thursday, January 14, 2010 22:15:13

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\100114\QC Std 3.144

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.516	ug/L	26.225	36	0.000
>	Sc 45		ug/L		248404	248404.383
[	Ni 60	2.178	ug/L	5.470	1022	0.004
>	Ge 74		ug/L		124251	124250.964
[	As 75	5.160	ug/L	33.122	1825	0.013
|	Se 77		ug/L		5542	0.013
|	Se 82	5.079	ug/L	3.469	153	0.001
[	Kr 83		ug/L		45	0.000
>	Lu 175		ug/L		69404	69404.220
[	Tl 205	1.037	ug/L	3.805	1356	0.018

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be 9	103.123			
>	Sc 45		102.4		
[	Ni 60	108.915			
>	Ge 74		102.5		
[	As 75	103.191			
|	Se 77				
|	Se 82	101.579			
[	Kr 83				
>	Lu 175		98.0		
[	Tl 205	103.718			

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 3

Report Date/Time: Thursday, January 14, 2010 22:15:52

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, January 14, 2010 22:19:16

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\100114\QC Std 4.145

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.017 ug/L	116.638	6	0.000
[>	Sc	45	ug/L		242939	242939.010
[	Ni	60	3.303 ug/L	3.595	1497	0.006
[>	Ge	74	ug/L		118785	118785.033
[	As	75	-1.507 ug/L	74.902	-234	-0.004
[	Se	77	ug/L		5859	0.018
[	Se	82	-1.106 ug/L	27.117	-39	-0.000
[	Kr	83	ug/L		90	0.000
[>	Lu	175	ug/L		68617	68617.081
[	Tl	205	-0.034 ug/L	35.911	93	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9			
[>	Sc	45	100.1		
[	Ni	60	122.338		
[>	Ge	74	98.0		
[	As	75			
[	Se	77			
[	Se	82			
[	Kr	83			
[>	Lu	175	96.9		
[	Tl	205			

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 4

Report Date/Time: Thursday, January 14, 2010 22:19:55

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Thursday, January 14, 2010 22:23:20

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\100114\QC Std 5.146

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	18.845	ug/L	1.523	1097	0.005
> Sc	45		ug/L		240640	240639.654
Li	60	22.347	ug/L	0.841	9831	0.041
> Ge	74		ug/L		118984	118983.657
As	75	20.724	ug/L	6.562	6360	0.052
Se	77		ug/L		6081	0.020
Se	82	21.277	ug/L	2.972	634	0.005
Kr	83		ug/L		75	0.000
> Lu	175		ug/L		68986	68985.521
TI	205	17.452	ug/L	1.840	20583	0.296

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	
TI	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	94.225				
> Sc	45		99.2			
Li	60	98.444				
> Ge	74		98.2			
As	75	103.619				
Se	77					
Se	82	106.386				
Kr	83					
> Lu	175		97.4			
TI	205	87.258				

QC Out Of Limits

Measurement Type Analyte

Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Thursday, January 14, 2010 22:23:59

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, January 14, 2010 22:27:24

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\100114\QC Std 6.147

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	50.334 ug/L	1.303	3028	0.012
[>	Sc	45	ug/L		249355	249354.657
[	Ni	60	51.632 ug/L	0.934	23487	0.094
[>	Ge	74	ug/L		124395	124395.197
[	As	75	49.160 ug/L	3.861	15470	0.123
[	Se	77	ug/L		7370	0.028
[	Se	82	49.381 ug/L	1.407	1546	0.012
[	Kr	83	ug/L		49	0.000
[>	Lu	175	ug/L		71384	71383.627
[	Tl	205	47.862 ug/L	0.946	58165	0.813

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9	100.668			
[>	Sc	45		102.8		
[	Ni	60	103.263			
[>	Ge	74		102.7		
[	As	75	98.319			
[	Se	77				
[	Se	82	98.763			
[	Kr	83				
[>	Lu	175		100.8		
[	Tl	205	95.724			

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Thursday, January 14, 2010 22:28:04

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, January 14, 2010 22:31:30

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\100114\QC Std 7.148

Concentration Results *

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.013	ug/L	197.874	6	0.000
[>	Sc 45		ug/L		253946	253945.584
[	Ni 60	0.000	ug/L	21763.972	37	0.000
[>	Ge 74		ug/L		129008	129007.929
|	As 75	-0.038	ug/L	3798.624	224	-0.000
|	Se 77		ug/L		4873	0.007
|	Se 82	-0.094	ug/L	264.981	-9	-0.000
[	Kr 83		ug/L		48	0.000
[>	Lu 175		ug/L		71668	71668.395
[	Tl 205	0.059	ug/L	23.660	209	0.001

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be 9				
[>	Sc 45	104.7			
[	Ni 60				
[>	Ge 74	106.5			
|	As 75				
|	Se 77				
|	Se 82				
[	Kr 83				
[>	Lu 175	101.2			
[	Tl 205				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, January 14, 2010 22:32:10

Page 1

ICPMS#4 - Summary Report

Sample ID: 1202011703

Sample Date/Time: Thursday, January 14, 2010 22:35:37

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 940082|1|skj

Method File: c:\elandata\Method\be,ni,as,se,tl.mth

Dataset File: c:\elandata\dataset\100114\1202011703.149

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be 9	-0.029	ug/L	158.634	3	-0.000
[> Sc 45		ug/L		241709	241709.466
[Ni 60	0.012	ug/L	154.776	40	0.000
[> Ge 74		ug/L		122245	122245.050
[As 75	0.253	ug/L	971.257	292	0.001
[Se 77		ug/L		14916	0.091
[Se 82	-0.316	ug/L	72.981	-16	-0.000
[Kr 83		ug/L		53	0.000
[> Lu 175		ug/L		66075	66075.120
[Tl 205	-0.033	ug/L	16.209	90	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[Be 9					
[> Sc 45		99.6			
[Ni 60					
[> Ge 74		100.9			
[As 75					
[Se 77					
[Se 82					
[Kr 83					
[> Lu 175		93.3			
[Tl 205					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011703

Report Date/Time: Thursday, January 14, 2010 22:36:18

Page 1

ICPMS#4 - Summary Report

Sample ID: 1202011704

Sample Date/Time: Thursday, January 14, 2010 22:39:45

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 940082|1|skj

Method File: c:\elandata\Method\be,ni,as,se,tl.mth

Dataset File: c:\elandata\dataset\100114\1202011704.150

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be 9	51.493	ug/L	1.949	3098	0.012
[> Sc 45		ug/L		249348	249348.466
[Ni 60	50.374	ug/L	0.498	22917	0.092
[> Ge 74		ug/L		124642	124642.308
[As 75	46.941	ug/L	4.080	14809	0.117
[Se 77		ug/L		16381	0.100
[Se 82	51.075	ug/L	1.970	1602	0.013
[Kr 83		ug/L		46	0.000
[> Lu 175		ug/L		67161	67161.181
[Tl 205	44.238	ug/L	0.922	50594	0.751

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[Be 9					
[> Sc 45		102.8			
[Ni 60					
[> Ge 74		102.9			
[As 75					
[Se 77					
[Se 82					
[Kr 83					
[> Lu 175		94.8			
[Tl 205					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011704

Report Date/Time: Thursday, January 14, 2010 22:40:27

Page 1

ICPMS#4 - Summary Report

Sample ID: 244129001

Sample Date/Time: Thursday, January 14, 2010 22:43:52

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940082[1]skj

Method File: c:\elandata\Method\be,ni,as,se,tl.mth

Dataset File: c:\elandata\dataset\100114\244129001.151

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	-0.041	ug/L	62.068	2	-0.000
>	Sc 45		ug/L		249817	249816.609
[	Ni 60	0.124	ug/L	22.588	93	0.000
>	Ge 74		ug/L		125693	125693.462
|	As 75	-0.033	ug/L	4305.691	216	-0.000
|	Se 77		ug/L		12829	0.071
|	Se 82	-0.215	ug/L	88.182	-13	-0.000
[	Kr 83		ug/L		47	0.000
>	Lu 175		ug/L		67997	67997.143
[	Tl 205	0.174	ug/L	3.464	331	0.003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[Be 9					
> Sc 45		103.0			
[Ni 60					
> Ge 74		103.7			
| As 75					
| Se 77					
| Se 82					
[Kr 83					
> Lu 175		96.0			
[Tl 205					

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244129001

Report Date/Time: Thursday, January 14, 2010 22:44:32

Page 1

ICPMS#4 - Summary Report

Sample ID: 244129002

Sample Date/Time: Thursday, January 14, 2010 22:47:58

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940082|1|skj

Method File: c:\elandata\Method\be,nl,as,se,tl.mth

Dataset File: c:\elandata\dataset\100114\244129002.152

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	-0.035	ug/L	73.372	3	-0.000
|> Sc	45		ug/L		247112	247111.718
[Ni	60	0.042	ug/L	27.950	55	0.000
[> Ge	74		ug/L		124712	124711.904
| As	75	-1.263	ug/L	33.721	-169	-0.003
| Se	77		ug/L		13148	0.074
| Se	82	-0.357	ug/L	55.071	-17	-0.000
[Kr	83		ug/L		53	0.000
[> Lu	175		ug/L		67315	67315.232
[Tl	205	0.024	ug/L	70.924	157	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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		101.8			
[Ni	60					
[> Ge	74		102.9			
| As	75					
| Se	77					
| Se	82					
[Kr	83					
[> Lu	175		95.1			
[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

Sample ID: 244129002

Report Date/Time: Thursday, January 14, 2010 22:48:38

Page 1

ICPMS#4 - Summary Report

Sample ID: 244129003

Sample Date/Time: Thursday, January 14, 2010 22:52:04

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940082|1|skj

Method File: c:\elandata\Method\be,ni,as,se,tl.mth

Dataset File: c:\elandata\dataset\100114\244129003.153

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	-0.023	ug/L	112.375	3	-0.000
|>	Sc 45		ug/L		245928	245927.636
[	Ni 60	0.120	ug/L	17.983	90	0.000
|>	Ge 74		ug/L		123573	123573.069
|	As 75	-2.610	ug/L	37.670	-582	-0.007
|	Se 77		ug/L		16965	0.106
|	Se 82	-0.331	ug/L	108.978	-16	-0.000
[	Kr 83		ug/L		49	0.000
|>	Lu 175		ug/L		66281	66281.412
[	Tl 205	-0.026	ug/L	28.797	98	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[Be 9					
|> Sc 45		101.4			
[Ni 60					
|> Ge 74		102.0			
| As 75					
| Se 77					
| Se 82					
[Kr 83					
|> Lu 175		93.6			
[Tl 205					

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244129003

Report Date/Time: Thursday, January 14, 2010 22:52:45

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, January 14, 2010 23:00:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be,nl,as,se,tl.mth

Dataset File: c:\elandata\dataset\100114\QC Std 6.155

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	50.188	ug/L	1.455	3077	0.012
|> Sc	45		ug/L		254134	254134.400
[Ni	60	51.771	ug/L	0.962	24003	0.094
[> Ge	74		ug/L		126064	126063.704
| As	75	48.264	ug/L	2.097	15393	0.120
| Se	77		ug/L		8244	0.034
| Se	82	49.167	ug/L	2.633	1560	0.012
[Kr	83		ug/L		51	0.000
[> Lu	175		ug/L		71241	71240.573
[Tl	205	46.896	ug/L	0.603	56884	0.797

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[Be	9	100.376				
|> Sc	45		104.7			
[Ni	60	103.541				
[> Ge	74		104.0			
| As	75	96.527				
| Se	77					
| Se	82	98.333				
[Kr	83					
[> Lu	175		100.6			
[Tl	205	93.793				

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Thursday, January 14, 2010 23:00:57

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, January 14, 2010 23:04:23

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\100114\QC Std 7.156

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	-0.016	ug/L	259.933	4	-0.000
|>	Sc 45		ug/L		258627	258626.506
|	Ni 60	0.008	ug/L	259.091	41	0.000
[>	Ge 74		ug/L		129123	129122.901
|	As 75	-0.774	ug/L	213.654	-15	-0.002
|	Se 77		ug/L		5041	0.008
|	Se 82	-0.248	ug/L	46.789	-14	-0.000
|	Kr 83		ug/L		54	0.000
[>	Lu 175		ug/L		72126	72125.679
|	Tl 205	0.161	ug/L	12.832	336	0.003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[Be 9					
|> Sc 45		106.6			
| Ni 60					
[> Ge 74		106.6			
| As 75					
| Se 77					
| Se 82					
| Kr 83					
[> Lu 175		101.9			
| Tl 205					

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, January 14, 2010 23:05:04

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, January 14, 2010 23:29:07

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\100114\QC Std 6.162

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	50.414	ug/L	0.921	3075	0.012
>	Sc 45		ug/L		252815	252814.669
[	Ni 60	52.266	ug/L	1.138	24106	0.095
>	Ge 74		ug/L		124644	124644.314
|	As 75	46.343	ug/L	3.874	14623	0.116
|	Se 77		ug/L		8392	0.036
|	Se 82	48.073	ug/L	2.443	1508	0.012
[	Kr 83		ug/L		52	0.000
>	Lu 175		ug/L		69748	69747.552
[	Tl 205	46.209	ug/L	1.017	54875	0.785

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be 9	100.828				
>	Sc 45		104.2			
[	Ni 60	104.531				
>	Ge 74		102.9			
|	As 75	92.686				
|	Se 77					
|	Se 82	96.146				
[	Kr 83					
>	Lu 175		98.5			
[	Tl 205	92.418				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Thursday, January 14, 2010 23:29:46

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, January 14, 2010 23:33:12

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\100114\QC Std 7.163

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	-0.015	ug/L	102.561	4	-0.000
[> Sc	45		ug/L		257169	257168.722
[Ni	60	-0.003	ug/L	382.236	36	-0.000
[> Ge	74		ug/L		128419	128418.949
[As	75	-0.362	ug/L	238.696	116	-0.001
[Se	77		ug/L		5152	0.009
[Se	82	-0.269	ug/L	18.746	-15	-0.000
[Kr	83		ug/L		51	0.000
[> Lu	175		ug/L		72343	72343.464
[Tl	205	0.223	ug/L	11.218	414	0.004

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[Be	9					
[> Sc	45		106.0			
[Ni	60					
[> Ge	74		106.0			
[As	75					
[Se	77					
[Se	82					
[Kr	83					
[> Lu	175		102.2			
[Tl	205					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, January 14, 2010 23:33:53

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, January 14, 2010 23:57:59

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\100114\QC Std 6.169

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	53.664	ug/L	0.494	3068	0.013
>	Sc 45		ug/L		236968	236967.986
[	Ni 60	50.776	ug/L	2.240	21952	0.092
>	Ge 74		ug/L		116396	116396.451
|	As 75	47.062	ug/L	1.094	13863	0.117
|	Se 77		ug/L		8252	0.040
|	Se 82	48.056	ug/L	0.947	1408	0.012
[	Kr 83		ug/L		49	0.000
>	Lu 175		ug/L		66851	66851.410
[	Tl 205	47.315	ug/L	1.461	53858	0.804

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be 9	107.328				
>	Sc 45		97.7			
[	Ni 60	101.551				
>	Ge 74		96.1			
|	As 75	94.125				
|	Se 77					
|	Se 82	96.111				
[	Kr 83					
>	Lu 175		94.4			
[	Tl 205	94.630				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Thursday, January 14, 2010 23:58:39

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, January 15, 2010 00:02:05

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\100114\QC Std 7.170

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	-0.051	ug/L	52.055	2	-0.000
[>	Sc 45		ug/L		240156	240155.890
[	Ni 60	0.008	ug/L	138.180	39	0.000
[>	Ge 74		ug/L		119567	119567.485
[	As 75	0.061	ug/L	1182.282	233	0.000
[	Se 77		ug/L		5371	0.014
[	Se 82	-0.148	ug/L	175.457	-10	-0.000
[	Kr 83		ug/L		48	0.000
[>	Lu 175		ug/L		69741	69740.517
[	Tl 205	0.202	ug/L	4.221	374	0.003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be 9				
[>	Sc 45		99.0		
[	Ni 60				
[>	Ge 74		98.7		
[	As 75				
[	Se 77				
[	Se 82				
[	Kr 83				
[>	Lu 175		98.5		
[	Tl 205				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Friday, January 15, 2010 00:02:46

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, January 15, 2010 00:22:41

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\100114\QC Std 6.175

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	53.657	ug/L	2.292	2982	0.013
[>	Sc 45		ug/L		230325	230325.333
[	Ni 60	51.188	ug/L	1.124	21510	0.093
[>	Ge 74		ug/L		112737	112736.545
[	As 75	48.333	ug/L	1.076	13785	0.120
[	Se 77		ug/L		8144	0.041
[	Se 82	48.963	ug/L	2.647	1389	0.012
[	Kr 83		ug/L		49	0.000
[>	Lu 175		ug/L		67021	67020.539
[	Tl 205	47.726	ug/L	1.387	54451	0.811

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be 9	107.314				
[>	Sc 45		94.9			
[	Ni 60	102.377				
[>	Ge 74		93.0			
[	As 75	96.666				
[	Se 77					
[	Se 82	97.927				
[	Kr 83					
[>	Lu 175		94.6			
[	Tl 205	95.452				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Friday, January 15, 2010 00:23:21

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, January 15, 2010 00:26:47

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\100114\QC Std 7.176

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be 9	0.009	ug/L	593.721	5	0.000
] > Sc 45		ug/L		233348	233348.047
[Ni 60	0.006	ug/L	105.914	36	0.000
] > Ge 74		ug/L		117105	117104.914
[As 75	-0.385	ug/L	61.629	98	-0.001
[Se 77		ug/L		5240	0.014
[Se 82	-0.162	ug/L	242.452	-11	-0.000
[Kr 83		ug/L		41	0.000
] > Lu 175		ug/L		67954	67953.590
[Tl 205	0.150	ug/L	10.522	304	0.003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[Be 9					
] > Sc 45		96.2			
[Ni 60					
] > Ge 74		96.6			
[As 75					
[Se 77					
[Se 82					
[Kr 83					
] > Lu 175		96.0			
[Tl 205					

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Friday, January 15, 2010 00:27:28

Page 1

ICPMS#4 - Summary Report

Sample ID: 1202011705

Sample Date/Time: Friday, January 15, 2010 00:35:04

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 940082|1|skj

Method File: c:\elandata\Method\be,ni,as,se,tl.mth

Dataset File: c:\elandata\dataset\100114\1202011705.178

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.127	ug/L	39.290	11	0.000
> Sc	45		ug/L		220722	220721.932
Ni	60	0.552	ug/L	3.495	254	0.001
> Ge	74		ug/L		106933	106933.122
As	75	0.682	ug/L	190.954	374	0.002
Se	77		ug/L		15967	0.118
Se	82	-0.101	ug/L	300.532	-8	-0.000
Kr	83		ug/L		44	0.000
> Lu	175		ug/L		61393	61392.581
Tl	205	0.018	ug/L	87.450	137	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45		91.0			
Ni	60					
> Ge	74		88.2			
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175		86.7			
Tl	205					

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011705

Report Date/Time: Friday, January 15, 2010 00:35:47

Page 1

ICPMS#4 - Summary Report

Sample ID: 1202011706

Sample Date/Time: Friday, January 15, 2010 00:39:14

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 940082|1|skj

Method File: c:\elandata\Method\be,ni,as,se,tl.mth

Dataset File: c:\elandata\dataset\100114\1202011706.179

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	55.958	ug/L	2.083	2965	0.013
> Sc	45		ug/L		219646	219645.972
Ni	60	48.991	ug/L	0.888	19632	0.089
> Ge	74		ug/L		105343	105342.688
As	75	80.107	ug/L	1.624	21224	0.200
Se	77		ug/L		14951	0.111
Se	82	19.538	ug/L	4.880	515	0.005
Kr	83		ug/L		56	0.000
> Lu	175		ug/L		61616	61615.540
TI	205	83.171	ug/L	1.859	87160	1.413

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	
TI	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		90.5			
Ni	60					
> Ge	74		86.9			
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175		87.0			
TI	205					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011706

Report Date/Time: Friday, January 15, 2010 00:39:57

Page 1

ICPMS#4 - Summary Report

Sample ID: 1202011707

Sample Date/Time: Friday, January 15, 2010 00:43:23

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 94008211skj 5 EAQ 1/25/10

Method File: c:\elandata\Method\be,nl,as,se,tl.mth

Dataset File: c:\elandata\dataset\100114\1202011707.180

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.041	ug/L	98.580	6	0.000
> Sc	45		ug/L		217747	217746.517
Ni	60	0.113	ug/L	1.934	77	0.000
> Ge	74		ug/L		108702	108702.100
As	75	-0.583	ug/L	168.389	36	-0.001
Se	77		ug/L		6922	0.033
Se	82	-0.020	ug/L	680.092	-6	-0.000
Kr	83		ug/L		34	-0.000
> Lu	175		ug/L		67579	67578.815
Tl	205	1.126	ug/L	2.402	1423	0.019

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45		89.7			
Ni	60					
> Ge	74		89.7			
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175		95.4			
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

Sample ID: 1202011707

Report Date/Time: Friday, January 15, 2010 00:44:04

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, January 15, 2010 00:51:37

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\100114\QC Std 6.182

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	53.199	ug/L	2.819	2814	0.013
[> Sc	45		ug/L		219273	219273.368
[Ni	60	51.377	ug/L	1.485	20551	0.094
[> Ge	74		ug/L		108100	108100.202
[As	75	47.697	ug/L	1.625	13046	0.119
[Se	77		ug/L		6719	0.031
[Se	82	49.717	ug/L	2.448	1353	0.013
[Kr	83		ug/L		42	0.000
[> Lu	175		ug/L		67112	67111.628
[Tl	205	48.137	ug/L	1.067	54996	0.818

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	106.398				
[> Sc	45		90.4			
[Ni	60	102.753				
[> Ge	74		89.2			
[As	75	95.393				
[Se	77					
[Se	82	99.434				
[Kr	83					
[> Lu	175		94.8			
[Tl	205	96.273				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Friday, January 15, 2010 00:52:17

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, January 15, 2010 00:55:43

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\100114\QC Std 7.183

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	-0.011	ug/L	385.995	4	-0.000
[> Sc	45		ug/L		220756	220755.603
[Ni	60	0.012	ug/L	180.158	37	0.000
[> Ge	74		ug/L		110434	110433.979
[As	75	-0.175	ug/L	394.468	150	-0.000
[Se	77		ug/L		4374	0.008
[Se	82	-0.032	ug/L	791.144	-6	-0.000
[Kr	83		ug/L		43	0.000
[> Lu	175		ug/L		67009	67009.478
[Tl	205	0.291	ug/L	2.832	461	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	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				91.0						
[Ni	60										
[> Ge	74				91.1						
[As	75										
[Se	77										
[Se	82										
[Kr	83										
[> Lu	175				94.6						
[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

Sample ID: QC Std 7

Report Date/Time: Friday, January 15, 2010 00:56:24

Page 1

ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Thursday, January 21, 2010 09:41:58

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default2\Sample.1718

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		1601.7		1601.690		53.319		3.3
Mg	24.0		24720.2		24720.171		248.944		1.0
Co	58.9		67841.5		67841.517		645.780		1.0
Rh	102.9		121539.2		121539.231		542.480		0.4
In	114.9		179498.9		179498.858		386.714		0.2
Pb	208.0		196661.1		196661.051		1475.462		0.8
[> Ba	137.9		170816.9		170816.910		695.460		0.4
[Ba++	69.0		2258.3		0.013		0.000		1.5
[> Ce	139.9		209506.3		209506.283		745.756		0.4
[CeO	155.9		4420.2		0.021		0.000		1.1
Bkgd	220.0		14.0		14.000		2.622		18.7

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
8.75	Lens Voltage
1450.00	ICP RF Power
-1718.75	Analog Stage Voltage
1200.00	Pulse Stage Voltage
275.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	8.5	3991.2
Co	59	21	9.8	64642.3
In	115	21	11.5	167168.1

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	583	2050	0.637
Be	9.0	9.0	2043	2070	0.611
Mg	24.0	24.0	5697	2070	0.617
Mg	25.0	25.0	5937	2070	0.609
Mg	26.0	26.0	6184	2070	0.624
Co	58.9	58.9	14190	2105	0.603
Rh	102.9	102.9	24873	2165	0.598
In	114.9	114.9	27799	2185	0.596
Ce	139.9	139.9	33871	2200	0.614
Pb	206.0	206.0	49948	2270	0.653
Pb	207.0	207.0	50159	2235	0.651
Pb	208.0	208.0	50451	2260	0.695
U	238.1	238.0	57724	2275	0.694

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Thursday, January 21, 2010 16:05:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\Blank.070

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9		ug/L		13	
Sc	45		ug/L		1329035	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Thursday, January 21, 2010 16:05:19

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Thursday, January 21, 2010 16:06:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\Standard 1.071

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	10.000	ug/L	0.899	3515	0.003
Sc	45		ug/L		1259526	1259526.444

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Thursday, January 21, 2010 16:08:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\Standard 2.072

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	99.986	ug/L	0.657	34425	0.027
45		ug/L		1255255	1255254.771	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[Be	9					
45						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Thursday, January 21, 2010 16:10:00

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\QC Std 1.073

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	51.482	ug/L	2.477	17811	0.014
>	Sc	45		ug/L		1261163	1261163.489

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	102.963				
>	Sc	45		94.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Thursday, January 21, 2010 16:10:10

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Thursday, January 21, 2010 16:11:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\QC Std 2.074

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.016	ug/L	81.887	19	0.000
Sc	45		ug/L		1349921	1349920.828

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
Sc	45		101.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Thursday, January 21, 2010 16:11:52

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Thursday, January 21, 2010 16:13:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\QC Std 3.075

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.513	ug/L	3.843	190	0.000
Sc	45		ug/L		1259817	1259816.615

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Dil	Duplicate	Rel. % Difference
Be	9		102.508								
Sc	45				94.8						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, January 21, 2010 16:14:59

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\QC Std 4.076

Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.051		ug/L	35.738	28	0.000
Sc	45			ug/L		1180354	1180353.753	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Di	Duplicate	Rel. % Difference
[	Be	9										
Sc	45				88.8							

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 4

Report Date/Time: Thursday, January 21, 2010 16:15:09

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Thursday, January 21, 2010 16:16:38

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\QC Std 5.077

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	19.575	ug/L	1.518	6486	0.005
Sc	45		ug/L		1206162	1206162.221

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9	97.873				
Sc	45		90.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Thursday, January 21, 2010 16:16:49

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, January 21, 2010 16:18:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\QC Std 6.078

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.209	ug/L	1.513	17826	0.014
Sc	45		ug/L		1268741	1268740.637

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9	102.419				
Sc	45		95.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, January 21, 2010 16:19:59

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\QC Std 7.079

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.012	ug/L	133.470	18	0.000
>	Sc	45		ug/L		1333049	1333048.865

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		100.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, January 21, 2010 16:20:11

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202011703

Sample Date/Time: Thursday, January 21, 2010 16:21:40

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 940082|1|ba|

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\1202011703.080

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.001	ug/L	189.083	13	0.000
Sc	45		ug/L		1247422	1247422.189

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		93.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011703

Report Date/Time: Thursday, January 21, 2010 16:21:51

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202011704

Sample Date/Time: Thursday, January 21, 2010 16:23:20

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 940082|1|baj

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\1202011704.081

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	55.135	ug/L	2.495	19282	0.015
Sc	45		ug/L		1274913	1274913.357

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
Sc	45		95.9			

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: 244129001

Sample Date/Time: Thursday, January 21, 2010 16:25:02

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940082|1|baj

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\244129001.082

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.011	ug/L	51.673	17	0.000
Sc	45		ug/L		1310877	1310876.753

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Be	9					
Sc	45		98.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 244129002

Sample Date/Time: Thursday, January 21, 2010 16:26:43

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940082|1|baj

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\244129002.083

Concentration Results

Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.012		ug/L	89.680	17	0.000
Sc	45			ug/L		1293733	1293732.526

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
Be	9					
Sc	45		97.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244129002

Report Date/Time: Thursday, January 21, 2010 16:26:56

Page 1

ICPMS#5 - Summary Report

Sample ID: 244129003

Sample Date/Time: Thursday, January 21, 2010 16:28:26

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 940082|1|baj

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\244129003.084

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.005	ug/L	263.313	15	0.000
Sc	45		ug/L		1290173	1290173.340

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		97.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, January 21, 2010 16:35:15

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\QC Std 6.088

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.384	ug/L	1.662	17894	0.014
Sc	45		ug/L		1269459	1269458.745

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Be	9	102.768				
Sc	45		95.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Thursday, January 21, 2010 16:35:26

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, January 21, 2010 16:36:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\QC Std 7.089

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.017	ug/L	68.991	20	0.000
Sc	45		ug/L		1365106	1365105.805

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		102.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, January 21, 2010 16:37:08

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, January 21, 2010 16:53:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\QC Std 6.097

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.311	ug/L	0.804	17928	0.014
Sc	45		ug/L		1273422	1273422.437

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9	102.622				
Sc	45		95.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Thursday, January 21, 2010 16:53:55

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, January 21, 2010 16:55:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\QC Std 7.098

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.018	ug/L	52.479	20	0.000
Sc	45		ug/L		1345791	1345791.027

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		101.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, January 21, 2010 16:55:37

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202011705

Sample Date/Time: Thursday, January 21, 2010 17:04:47

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 940082|1|baj

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\1202011705.100

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.110	ug/L	17.881	50	0.000
Sc	45		ug/L		1251736	1251735.943

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		94.2			

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011705

Report Date/Time: Thursday, January 21, 2010 17:05:00

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202011706

Sample Date/Time: Thursday, January 21, 2010 17:06:32

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 940082|1|ba|

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\1202011706.101

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	55.184	ug/L	1.617	19062	0.015
Sc	45		ug/L		1259050	1259050.144

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
Sc	45		94.7			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011706

Report Date/Time: Thursday, January 21, 2010 17:06:45

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202011707

Sample Date/Time: Thursday, January 21, 2010 17:08:17

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 940082[5]ba]

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\1202011707.102

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.027	ug/L	97.666	21	0.000
>	Sc	45		ug/L		1212258	1212258.477

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		91.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202011707

Report Date/Time: Thursday, January 21, 2010 17:08:31

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, January 21, 2010 17:10:00

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\QC Std 6.103

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	53.971	ug/L	1.571	17533	0.015
Sc	45		ug/L		1184102	1184102.141

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9	107.942				
Sc	45		89.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, January 21, 2010 17:11:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100121\QC Std 7.104

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.013	ug/L	38.420	17	0.000
Sc	45		ug/L		1240107	1240106.621

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		93.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, January 21, 2010 17:11:53

Page 1

=====
Analysis BegunLogged In Analyst: Administrator
Spectrometer Model: FIMS-100, S/N B050-9550Technique: AA FIMS-MHS
Autosampler Model: S10Sample Information File: C:\data-AA\Administrator\Sample Information\011510W1.SIF
Batch ID:
Results Data Set: 011510W1
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
Sample ID: Calib Blank
Analyst:Autosampler Location: 1
Date Collected: 1/15/2010 09:16:24
Data Type: Original-----
Replicate Data: Calib Blank

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.00]	0.0002	0.0010	0.0002	09:17:25	Yes
2		[0.00]	0.0002	0.0007	0.0002	09:18:00	Yes
Mean:		[0.00]	0.0002				
SD:		0.00	0.0000				
%RSD:		0.00	8.01				

Auto-zero performed.

Sequence No.: 2
Sample ID: S0.2
Analyst:Autosampler Location: 2
Date Collected: 1/15/2010 09:18:19
Data Type: Original-----
Replicate Data: S0.2

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.2]	0.0017	0.0071	0.0019	09:19:19	Yes
2		[0.2]	0.0017	0.0064	0.0019	09:19:55	Yes
Mean:		[0.2]	0.0017				
SD:		0.0	0.0000				
%RSD:		0.0	0.99				

Standard number 1 applied. [0.2]

Correlation Coef.: 1.000000 Slope: 0.00855 Intercept: 0.00000

Sequence No.: 3
Sample ID: S0.5
Analyst:Autosampler Location: 3
Date Collected: 1/15/2010 09:20:14
Data Type: Original-----
Replicate Data: S0.5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.5]	0.0048	0.0207	0.0050	09:21:15	Yes
2		[0.5]	0.0048	0.0207	0.0050	09:21:50	Yes
Mean:		[0.5]	0.0048				
SD:		0.0	0.0000				
%RSD:		0.0	0.57				

Standard number 2 applied. [0.5]

Correlation Coef.: 0.998771 Slope: 0.00966 Intercept: -0.00008

Sequence No.: 4
Sample ID: S2.0
Analyst:Autosampler Location: 4
Date Collected: 1/15/2010 09:22:09
Data Type: Original

Replicate Data: S2.0

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[2.0]	0.0201	0.0875	0.0203	09:23:11	Yes
2		[2.0]	0.0201	0.0873	0.0203	09:23:46	Yes
Mean:		[2.0]	0.0201				
SD:		0.0	0.0000				
%RSD:		0.0	0.07				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999884 Slope: 0.01013 Intercept: -0.00018

=====

Sequence No.: 5

Sample ID: S5.0

Analyst:

Autosampler Location: 5

Date Collected: 1/15/2010 09:24:06

Data Type: Original

Replicate Data: S5.0

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[5.0]	0.0499	0.2176	0.0501	09:25:07	Yes
2		[5.0]	0.0497	0.2164	0.0499	09:25:42	Yes
Mean:		[5.0]	0.0498				
SD:		0.0	0.0002				
%RSD:		0.0	0.35				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999970 Slope: 0.01000 Intercept: -0.00011

=====

Sequence No.: 6

Sample ID: S10.0

Analyst:

Autosampler Location: 6

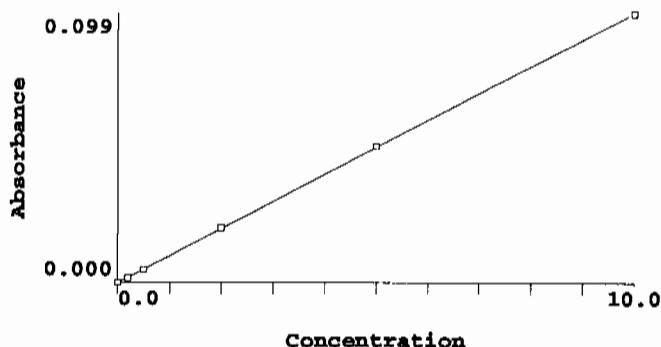
Date Collected: 1/15/2010 09:26:02

Data Type: Original

Replicate Data: S10.0

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[10.0]	0.0998	0.4385	0.1000	09:27:03	Yes
2		[10.0]	0.0987	0.4334	0.0988	09:27:37	Yes
Mean:		[10.0]	0.0992				
SD:		0.0	0.0008				
%RSD:		0.0	0.79				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999987 Slope: 0.00994 Intercept: -0.00004

-----
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	0.004	0.00	8.0
S0.2	0.0017	0.2	0.176	0.00	1.0
S0.5	0.0048	0.5	0.487	0.00	0.6
S2.0	0.0201	2.0	2.028	0.00	0.1

Sequence No.: 11

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 1/15/2010 09:35:39

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.007	-0.007	-0.0001	-0.0008	0.0001	09:36:40	Yes
2	0.004	0.004	-0.0000	0.0007	0.0002	09:37:14	Yes
Mean:	-0.001	-0.001	-0.0001				
SD:	0.008	0.008	0.0001				
%RSD:	642.9	642.9	140.21				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12

Sample ID: IDL1

Analyst: JXL

Autosampler Location: 12

Date Collected: 1/15/2010 09:37:34

Data Type: Original

Replicate Data: IDL1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.005	-0.005	-0.0001	-0.0001	0.0001	09:38:35	Yes
2	-0.005	-0.005	-0.0001	-0.0004	0.0001	09:39:10	Yes
Mean:	-0.005	-0.005	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	9.669	9.669	5.11				

Sequence No.: 13

Sample ID: IDL2

Analyst: JXL

Autosampler Location: 13

Date Collected: 1/15/2010 09:39:30

Data Type: Original

Replicate Data: IDL2

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.003	-0.003	-0.0001	-0.0005	0.0001	09:40:32	Yes
2	-0.011	-0.011	-0.0002	-0.0009	0.0000	09:41:07	Yes
Mean:	-0.007	-0.007	-0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	73.70	73.70	45.70				

Sequence No.: 14

Sample ID: IDL3

Analyst: JXL

Autosampler Location: 14

Date Collected: 1/15/2010 09:41:28

Data Type: Original

Replicate Data: IDL3

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.005	-0.005	-0.0001	-0.0003	0.0001	09:42:28	Yes
2	-0.002	-0.002	-0.0001	0.0002	0.0001	09:43:03	Yes
Mean:	-0.003	-0.003	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	55.40	55.40	24.41				

Sequence No.: 15

Sample ID: IDL4

Analyst: JXL

Autosampler Location: 15

Date Collected: 1/15/2010 09:43:22

Data Type: Original

Replicate Data: IDL4

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
------	------------	----------	---------	------	------	------	------

Replicate Data: 1202015313|941565|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.180	2.180	0.0216	0.0933	0.0218	09:53:56	Yes
2	2.153	2.153	0.0214	0.0916	0.0215	09:54:31	Yes
Mean:	2.167	2.167	0.0215				
SD:	0.019	0.019	0.0002				
%RSD:	0.860	0.860	0.86				

Sequence No.: 21

Sample ID: 244574002|941565|1

Analyst: JXL

Autosampler Location: 21

Date Collected: 1/15/2010 09:54:50

Data Type: Original

Replicate Data: 244574002|941565|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.013	0.013	0.0001	0.0007	0.0003	09:55:51	Yes
2	0.019	0.019	0.0001	0.0010	0.0003	09:56:26	Yes
Mean:	0.016	0.016	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	25.20	25.20	34.76				

Sequence No.: 22

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 1/15/2010 09:56:46

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.260	5.260	0.0522	0.2264	0.0524	09:57:46	Yes
2	5.244	5.244	0.0521	0.2254	0.0523	09:58:21	Yes
Mean:	5.252	5.252	0.0522				
SD:	0.012	0.012	0.0001				
%RSD:	0.222	0.222	0.22				

QC value within limits for Hg 253.7 Recovery = 105.04%
All analyte(s) passed QC.

Sequence No.: 23

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 1/15/2010 09:58:40

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.014	0.014	0.0001	0.0014	0.0003	09:59:41	Yes
2	0.015	0.015	0.0001	0.0014	0.0003	10:00:15	Yes
Mean:	0.014	0.014	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	4.580	4.580	6.58				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 24

Sample ID: 1202015314|941565|1

Analyst: JXL

Autosampler Location: 22

Date Collected: 1/15/2010 10:00:35

Data Type: Original

Replicate Data: 1202015314|941565|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.019	0.019	0.0001	0.0008	0.0003	10:01:36	Yes
2	0.014	0.014	0.0001	-0.0001	0.0003	10:02:11	Yes

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.036	0.036	0.0003	0.0037	0.0005	10:11:16	Yes
2	0.042	0.042	0.0004	0.0044	0.0006	10:11:52	Yes
Mean:	0.039	0.039	0.0003				
SD:	0.005	0.005	0.0000				
%RSD:	11.69	11.69	13.17				

Sequence No.: 30

Sample ID: 1202015294|941556|1

Analyst: JXL

Autosampler Location: 28

Date Collected: 1/15/2010 10:12:11

Data Type: Original

Replicate Data: 1202015294|941556|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.005	0.005	0.0000	0.0002	0.0002	10:13:12	Yes
2	0.012	0.012	0.0001	0.0004	0.0002	10:13:47	Yes
Mean:	0.008	0.008	0.0000				
SD:	0.005	0.005	0.0000				
%RSD:	56.54	56.54	118.15				

Sequence No.: 31

Sample ID: 1202015295|941556|1

Analyst: JXL

Autosampler Location: 29

Date Collected: 1/15/2010 10:14:06

Data Type: Original

Replicate Data: 1202015295|941556|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.089	2.089	0.0207	0.0897	0.0209	10:15:06	Yes
2	2.085	2.085	0.0207	0.0896	0.0209	10:15:41	Yes
Mean:	2.087	2.087	0.0207				
SD:	0.003	0.003	0.0000				
%RSD:	0.134	0.134	0.13				

Sequence No.: 32

Sample ID: 1202015296|941556|5

Analyst: JXL

Autosampler Location: 30

Date Collected: 1/15/2010 10:16:00

Data Type: Original

Replicate Data: 1202015296|941556|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.011	0.011	0.0001	0.0011	0.0002	10:17:01	Yes
2	0.012	0.012	0.0001	0.0011	0.0002	10:17:36	Yes
Mean:	0.012	0.012	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	1.491	1.491	2.41				

Sequence No.: 33

Sample ID: 1202012266|941568|1

Analyst: JXL

Autosampler Location: 31

Date Collected: 1/15/2010 10:17:55

Data Type: Original

Replicate Data: 1202012266|941568|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.010	0.010	0.0001	0.0004	0.0002	10:18:56	Yes
2	0.011	0.011	0.0001	0.0007	0.0002	10:19:31	Yes
Mean:	0.011	0.011	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	5.778	5.778	9.85				

Sequence No.: 34

Sample ID: CCV

Autosampler Location: 7

Date Collected: 1/15/2010 10:19:50

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.281	5.281	0.0524	0.2264	0.0526	10:20:51	Yes
2	5.250	5.250	0.0521	0.2249	0.0523	10:21:26	Yes
Mean:	5.265	5.265	0.0523				
SD:	0.022	0.022	0.0002				
%RSD:	0.412	0.412	0.41				

QC value within limits for Hg 253.7 Recovery = 105.31%
All analyte(s) passed QC.

=====

Sequence No.: 35

Autosampler Location: 8

Sample ID: CCB

Date Collected: 1/15/2010 10:21:45

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.014	0.014	0.0001	0.0010	0.0003	10:22:46	Yes
2	0.015	0.015	0.0001	0.0008	0.0003	10:23:21	Yes
Mean:	0.014	0.014	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	2.873	2.873	4.13				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

=====

Sequence No.: 36

Autosampler Location: 32

Sample ID: 1202015317|941568|1

Date Collected: 1/15/2010 10:23:40

Analyst: JXL

Data Type: Original

Replicate Data: 1202015317|941568|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.010	0.010	0.0001	0.0010	0.0002	10:24:41	Yes
2	0.012	0.012	0.0001	0.0011	0.0002	10:25:16	Yes
Mean:	0.011	0.011	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	8.824	8.824	14.62				

=====

Sequence No.: 37

Autosampler Location: 33

Sample ID: 1202015318|941568|1

Date Collected: 1/15/2010 10:25:36

Analyst: JXL

Data Type: Original

Replicate Data: 1202015318|941568|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.139	2.139	0.0212	0.0928	0.0214	10:26:37	Yes
2	2.125	2.125	0.0211	0.0917	0.0213	10:27:12	Yes
Mean:	2.132	2.132	0.0211				
SD:	0.010	0.010	0.0001				
%RSD:	0.447	0.447	0.45				

=====

Sequence No.: 38

Autosampler Location: 34

Sample ID: 244105001|941568|1

Date Collected: 1/15/2010 10:27:31

Analyst: JXL

Data Type: Original

Replicate Data: 244105001|941568|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.013	0.013	0.0001	0.0008	0.0003	10:28:33	Yes

Replicate Data: 244105003|941568|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.002	0.002	-0.0000	0.0004	0.0002	10:38:14	Yes
2	0.002	0.002	-0.0000	0.0004	0.0002	10:38:48	Yes
Mean:	0.002	0.002	-0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	16.22	16.22	14.63				

Sequence No.: 44

Autosampler Location: 40

Sample ID: 244110001|941568|1

Date Collected: 1/15/2010 10:39:08

Analyst: JXL

Data Type: Original

Replicate Data: 244110001|941568|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.002	0.002	-0.0000	0.0005	0.0002	10:40:09	Yes
2	-0.001	-0.001	-0.0001	0.0002	0.0001	10:40:44	Yes
Mean:	0.000	0.000	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	681.6	681.6	60.70				

Sequence No.: 45

Autosampler Location: 41

Sample ID: 244110002|941568|1

Date Collected: 1/15/2010 10:41:03

Analyst: JXL

Data Type: Original

Replicate Data: 244110002|941568|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.003	0.003	-0.0000	0.0008	0.0002	10:42:04	Yes
2	0.002	0.002	-0.0000	0.0007	0.0002	10:42:39	Yes
Mean:	0.002	0.002	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	32.79	32.79	38.22				

Sequence No.: 46

Autosampler Location: 7

Sample ID: CCV

Date Collected: 1/15/2010 10:42:59

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.248	5.248	0.0521	0.2301	0.0523	10:43:59	Yes
2	5.260	5.260	0.0522	0.2286	0.0524	10:44:34	Yes
Mean:	5.254	5.254	0.0522				
SD:	0.008	0.008	0.0001				
%RSD:	0.158	0.158	0.16				

QC value within limits for Hg 253.7 Recovery = 105.09%

All analyte(s) passed QC.

Sequence No.: 47

Autosampler Location: 8

Sample ID: CCB

Date Collected: 1/15/2010 10:44:53

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.004	0.004	-0.0000	0.0004	0.0002	10:45:54	Yes
2	0.002	0.002	-0.0000	0.0005	0.0001	10:46:29	Yes
Mean:	0.003	0.003	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	56.91	56.91	103.66				

QC value within limits for Hg 253.7 Recovery = Not calculated

Replicate Data: 244130003|941574|1

Repl	SampleConc	StdConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.002	0.002	-0.0000	0.0008	0.0002	11:05:13	Yes
2	0.002	0.002	-0.0000	0.0005	0.0002	11:05:48	Yes
Mean:	0.002	0.002	-0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	1.151	1.151	1.13				

Sequence No.: 58

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 1/15/2010 11:06:08

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.184	5.184	0.0515	0.2261	0.0517	11:07:09	Yes
2	5.138	5.138	0.0510	0.2250	0.0512	11:07:44	Yes
Mean:	5.161	5.161	0.0513				
SD:	0.032	0.032	0.0003				
%RSD:	0.620	0.620	0.62				

QC value within limits for Hg 253.7 Recovery = 103.22%

All analyte(s) passed QC.

Sequence No.: 59

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 1/15/2010 11:08:02

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.001	0.001	-0.0000	0.0003	0.0001	11:09:03	Yes
2	0.004	0.004	-0.0000	0.0009	0.0002	11:09:38	Yes
Mean:	0.002	0.002	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	95.78	95.78	108.36				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 60

Sample ID: 244133001|941574|1

Analyst: JXL

Autosampler Location: 52

Date Collected: 1/15/2010 11:09:57

Data Type: Original

Replicate Data: 244133001|941574|1

Repl	SampleConc	StdConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.004	0.004	-0.0000	0.0013	0.0002	11:10:58	Yes
2	0.002	0.002	-0.0000	0.0005	0.0002	11:11:33	Yes
Mean:	0.003	0.003	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	47.94	47.94	88.07				

Sequence No.: 61

Sample ID: 244133002|941574|1

Analyst: JXL

Autosampler Location: 53

Date Collected: 1/15/2010 11:11:53

Data Type: Original

Replicate Data: 244133002|941574|1

Repl	SampleConc	StdConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.008	0.008	0.0000	0.0016	0.0002	11:12:54	Yes
2	0.002	0.002	-0.0000	0.0008	0.0002	11:13:29	Yes
Mean:	0.005	0.005	0.0000				

#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.002	-0.002	-0.0001	0.0005	0.0001	11:22:32	Yes
2	-0.003	-0.003	-0.0001	0.0004	0.0001	11:23:07	Yes
Mean:	-0.002	-0.002	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	50.04	50.04	18.01				

Sequence No.: 67

Sample ID: 1202013375|941551|1

Analyst: JXL

Autosampler Location: 59

Date Collected: 1/15/2010 11:23:27

Data Type: Original

Replicate Data: 1202013375|941551|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.605	1.605	0.0159	0.0720	0.0161	11:24:29	Yes
2	1.594	1.594	0.0158	0.0713	0.0160	11:25:03	Yes
Mean:	1.599	1.599	0.0159				
SD:	0.008	0.008	0.0001				
%RSD:	0.489	0.489	0.49				

Sequence No.: 68

Sample ID: 1202015284|941551|1

Analyst: JXL

Autosampler Location: 60

Date Collected: 1/15/2010 11:25:23

Data Type: Original

Replicate Data: 1202015284|941551|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.002	-0.002	-0.0001	0.0005	0.0001	11:26:25	Yes
2	-0.003	-0.003	-0.0001	0.0001	0.0001	11:27:00	Yes
Mean:	-0.002	-0.002	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	47.24	47.24	16.98				

Sequence No.: 69

Sample ID: 1202015287|941551|5

Analyst: JXL

Autosampler Location: 61

Date Collected: 1/15/2010 11:27:20

Data Type: Original

Replicate Data: 1202015287|941551|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.002	0.002	-0.0000	0.0007	0.0001	11:28:22	Yes
2	0.001	0.001	-0.0000	0.0006	0.0001	11:28:57	Yes
Mean:	0.001	0.001	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	48.40	48.40	16.91				

Sequence No.: 70

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 1/15/2010 11:29:17

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.198	5.198	0.0516	0.2283	0.0518	11:30:18	Yes
2	5.190	5.190	0.0515	0.2279	0.0517	11:30:53	Yes
Mean:	5.194	5.194	0.0516				
SD:	0.006	0.006	0.0001				
%RSD:	0.115	0.115	0.12				

QC value within limits for Hg 253.7 Recovery = 103.88%
All analyte(s) passed QC.

Sequence No.: 71

Autosampler Location: 8

Sample ID: CCB
Analyst:

Date Collected: 1/15/2010 11:31:12
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	-0.0000	0.0004	0.0001	11:32:13	Yes
2	0.012	0.012	0.0001	0.0017	0.0003	11:32:48	Yes
Mean:	0.007	0.007	0.0000				
SD:	0.008	0.008	0.0001				
%RSD:	115.5	115.5	325.93				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 72

Sample ID: 1202014292|941142|1
Analyst: JXL

Autosampler Location: 62
Date Collected: 1/15/2010 11:33:07
Data Type: Original

Replicate Data: 1202014292|941142|1

Repl #	SampleConc ug/L	StndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	-0.0000	0.0006	0.0001	11:34:09	Yes
2	0.002	0.002	-0.0000	0.0007	0.0002	11:34:44	Yes
Mean:	0.002	0.002	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	37.98	37.98	21.54				

Sequence No.: 73

Sample ID: 1202014293|941142|1
Analyst: JXL

Autosampler Location: 63
Date Collected: 1/15/2010 11:35:03
Data Type: Original

Replicate Data: 1202014293|941142|1

Repl #	SampleConc ug/L	StndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.108	2.108	0.0209	0.0932	0.0211	11:36:05	Yes
2	2.086	2.086	0.0207	0.0926	0.0209	11:36:39	Yes
Mean:	2.097	2.097	0.0208				
SD:	0.016	0.016	0.0002				
%RSD:	0.762	0.762	0.76				

Sequence No.: 74

Sample ID: 244038001|941142|1
Analyst: JXL

Autosampler Location: 64
Date Collected: 1/15/2010 11:36:59
Data Type: Original

Replicate Data: 244038001|941142|1

Repl #	SampleConc ug/L	StndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	-0.0000	0.0005	0.0002	11:38:00	Yes
2	-0.004	-0.004	-0.0001	-0.0002	0.0001	11:38:35	Yes
Mean:	0.000	0.000	-0.0000				
SD:	0.006	0.006	0.0001				
%RSD:	>999.9%	>999.9%	132.86				

Sequence No.: 75

Sample ID: 244038002|941142|1
Analyst: JXL

Autosampler Location: 65
Date Collected: 1/15/2010 11:38:55
Data Type: Original

Replicate Data: 244038002|941142|1

Repl #	SampleConc ug/L	StndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.005	0.005	0.0000	0.0011	0.0002	11:39:56	Yes
2	-0.001	-0.001	-0.0001	0.0001	0.0001	11:40:31	Yes

Mean: 0.002 0.002 -0.0000
SD: 0.004 0.004 0.0000
%RSD: 197.7 197.7 194.05

Sequence No.: 76

Sample ID: 244038003|941142|1

Analyst: JXL

Autosampler Location: 66

Date Collected: 1/15/2010 11:40:51

Data Type: Original

Replicate Data: 244038003|941142|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.001	-0.001	-0.0001	0.0003	0.0001	11:41:52	Yes
2	-0.003	-0.003	-0.0001	0.0002	0.0001	11:42:27	Yes
Mean:	-0.002	-0.002	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	50.82	50.82	16.42				

Sequence No.: 77

Sample ID: 244038004|941142|1

Analyst: JXL

Autosampler Location: 67

Date Collected: 1/15/2010 11:42:47

Data Type: Original

Replicate Data: 244038004|941142|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.002	-0.002	-0.0001	0.0002	0.0001	11:43:48	Yes
2	0.002	0.002	-0.0000	0.0008	0.0002	11:44:24	Yes
Mean:	0.000	0.000	-0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	>999.9%	>999.9%	60.34				

Sequence No.: 78

Sample ID: 244129001|941142|1

Analyst: JXL

Autosampler Location: 68

Date Collected: 1/15/2010 11:44:43

Data Type: Original

Replicate Data: 244129001|941142|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.006	-0.006	-0.0001	-0.0003	0.0001	11:45:45	Yes
2	-0.001	-0.001	-0.0001	0.0006	0.0001	11:46:19	Yes
Mean:	-0.003	-0.003	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	95.99	95.99	42.14				

Sequence No.: 79

Sample ID: 244129002|941142|1

Analyst: JXL

Autosampler Location: 69

Date Collected: 1/15/2010 11:46:39

Data Type: Original

Replicate Data: 244129002|941142|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.002	-0.002	-0.0001	0.0002	0.0001	11:47:41	Yes
2	-0.003	-0.003	-0.0001	0.0001	0.0001	11:48:16	Yes
Mean:	-0.003	-0.003	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	25.83	25.83	9.72				

Sequence No.: 80

Sample ID: 244129003|941142|1

Analyst: JXL

Autosampler Location: 70

Date Collected: 1/15/2010 11:48:36

Data Type: Original

Replicate Data: 244129003|941142|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.001	-0.001	-0.0001	0.0005	0.0001	11:49:37	Yes
2	0.000	0.000	-0.0000	0.0005	0.0001	11:50:12	Yes
Mean:	0.000	0.000	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	317.1	317.1	18.35				

Sequence No.: 81

Sample ID: 244418001|941142|1

Analyst: JXL

Autosampler Location: 71

Date Collected: 1/15/2010 11:50:32

Data Type: Original

Replicate Data: 244418001|941142|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.133	0.133	0.0013	0.0073	0.0015	11:51:33	Yes
2	-0.004	-0.004	-0.0001	0.0000	0.0001	11:52:08	Yes
Mean:	0.065	0.065	0.0006				
SD:	0.097	0.097	0.0010				
%RSD:	149.3	149.3	160.14				

Sequence No.: 82

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 1/15/2010 11:52:28

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.272	5.272	0.0524	0.2304	0.0525	11:53:29	Yes
2	5.208	5.208	0.0517	0.2289	0.0519	11:54:03	Yes
Mean:	5.240	5.240	0.0520				
SD:	0.045	0.045	0.0005				
%RSD:	0.867	0.867	0.87				

QC value within limits for Hg 253.7 Recovery = 104.80%
All analyte(s) passed QC.

Sequence No.: 83

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 1/15/2010 11:54:22

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.001	0.001	-0.0000	0.0005	0.0001	11:55:23	Yes
2	-0.004	-0.004	-0.0001	-0.0003	0.0001	11:55:59	Yes
Mean:	-0.002	-0.002	-0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	195.5	195.5	56.85				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 84

Sample ID: 1202014294|941142|1

Analyst: JXL

Autosampler Location: 72

Date Collected: 1/15/2010 11:56:18

Data Type: Original

Replicate Data: 1202014294|941142|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.006	-0.006	-0.0001	0.0002	0.0001	11:57:20	Yes
2	-0.008	-0.008	-0.0001	-0.0002	0.0001	11:57:54	Yes
Mean:	-0.007	-0.007	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	18.36	18.36	11.13				

Sequence No.: 85

Sample ID: 1202014295|941142|1

Analyst: JXL

Autosampler Location: 73

Date Collected: 1/15/2010 11:58:15

Data Type: Original

Replicate Data: 1202014295|941142|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.061	2.061	0.0204	0.0912	0.0206	11:59:16	Yes
2	2.068	2.068	0.0205	0.0917	0.0207	11:59:51	Yes
Mean:	2.064	2.064	0.0205				
SD:	0.005	0.005	0.0000				
%RSD:	0.243	0.243	0.24				

Sequence No.: 86

Sample ID: 1202014296|941142|5

Analyst: JXL

Autosampler Location: 74

Date Collected: 1/15/2010 12:00:12

Data Type: Original

Replicate Data: 1202014296|941142|5

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.001	0.001	-0.0000	0.0009	0.0001	12:01:13	Yes
2	0.001	0.001	-0.0000	0.0004	0.0001	12:01:48	Yes
Mean:	0.001	0.001	-0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	2.562	2.562	1.09				

Sequence No.: 87

Sample ID: 1202012215|941132|1

Analyst: JXL

Autosampler Location: 75

Date Collected: 1/15/2010 12:02:08

Data Type: Original

Replicate Data: 1202012215|941132|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.002	-0.002	-0.0001	0.0005	0.0001	12:03:09	Yes
2	-0.002	-0.002	-0.0001	0.0005	0.0001	12:03:44	Yes
Mean:	-0.002	-0.002	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	15.61	15.61	5.05				

Sequence No.: 88

Sample ID: 1202014271|941132|1

Analyst: JXL

Autosampler Location: 76

Date Collected: 1/15/2010 12:04:04

Data Type: Original

Replicate Data: 1202014271|941132|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.004	-0.004	-0.0001	0.0002	0.0001	12:05:05	Yes
2	-0.006	-0.006	-0.0001	-0.0000	0.0001	12:05:40	Yes
Mean:	-0.005	-0.005	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	31.77	31.77	16.59				

Sequence No.: 89

Sample ID: 1202014272|941132|1

Analyst: JXL

Autosampler Location: 77

Date Collected: 1/15/2010 12:06:00

Data Type: Original

Replicate Data: 1202014272|941132|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.060	2.060	0.0204	0.0904	0.0206	12:07:02	Yes

2	2.062	2.062	0.0205	0.0907	0.0206	12:07:37	Yes
Mean:	2.061	2.061	0.0204				
SD:	0.002	0.002	0.0000				
%RSD:	0.076	0.076	0.08				

Sequence No.: 90

Autosampler Location: 78

Sample ID: 244206001|941132|1

Date Collected: 1/15/2010 12:07:57

Analyst: JXL

Data Type: Original

Replicate Data: 244206001|941132|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.003	0.003	-0.0000	0.0007	0.0002	12:08:58	Yes
2	0.000	0.000	-0.0000	0.0006	0.0001	12:09:34	Yes
Mean:	0.002	0.002	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	113.6	113.6	67.90				

Sequence No.: 91

Autosampler Location: 79

Sample ID: 1202012212|941132|1

Date Collected: 1/15/2010 12:09:54

Analyst: JXL

Data Type: Original

Replicate Data: 1202012212|941132|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.561	1.561	0.0155	0.0688	0.0156	12:10:55	Yes
2	1.547	1.547	0.0153	0.0676	0.0155	12:11:30	Yes
Mean:	1.554	1.554	0.0154				
SD:	0.010	0.010	0.0001				
%RSD:	0.625	0.625	0.63				

Sequence No.: 92

Autosampler Location: 80

Sample ID: 1202014273|941132|1

Date Collected: 1/15/2010 12:11:50

Analyst: JXL

Data Type: Original

Replicate Data: 1202014273|941132|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.003	0.003	-0.0000	0.0007	0.0002	12:12:51	Yes
2	0.000	0.000	-0.0000	0.0004	0.0001	12:13:26	Yes
Mean:	0.002	0.002	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	128.2	128.2	78.24				

Sequence No.: 93

Autosampler Location: 81

Sample ID: 1202014276|941132|5

Date Collected: 1/15/2010 12:13:46

Analyst: JXL

Data Type: Original

Replicate Data: 1202014276|941132|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.003	-0.003	-0.0001	0.0004	0.0001	12:14:47	Yes
2	-0.002	-0.002	-0.0001	0.0002	0.0001	12:15:22	Yes
Mean:	-0.002	-0.002	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	10.01	10.01	3.62				

Sequence No.: 94

Autosampler Location: 7

Sample ID: CCV

Date Collected: 1/15/2010 12:15:42

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.141	5.141	0.0511	0.2246	0.0512	12:16:43	Yes
2	5.072	5.072	0.0504	0.2218	0.0505	12:17:18	Yes
Mean:	5.107	5.107	0.0507				
SD:	0.049	0.049	0.0005				
%RSD:	0.953	0.953	0.95				

QC value within limits for Hg 253.7 Recovery = 102.13%

All analyte(s) passed QC.

Sequence No.: 95

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 1/15/2010 12:17:37

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.004	0.004	-0.0000	0.0010	0.0002	12:18:38	Yes
2	-0.001	-0.001	-0.0001	0.0003	0.0001	12:19:12	Yes
Mean:	0.001	0.001	-0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	246.3	246.3	113.92				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Miscellaneous

Prep LogBook

Analyst: FGA Verified by: _____

Batch: 940079

Lab SOP: GL-MA-E-006 REV# 9

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix	Spike Amount	Spike Units
MB	1202011703		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER		
LCS	1202011704		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER	.5	mL
SAMPLE	244129001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER		
SAMPLE	244129002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER		
SAMPLE	244129003		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER		
SAMPLE	244141001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER		
SAMPLE	244141002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER		
SAMPLE	244145001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER		
SAMPLE	244208001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER		
SAMPLE	244208002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER		
SAMPLE	244213001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER		
SAMPLE	244217001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER		
SAMPLE	244217002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER		
SAMPLE	244226001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER		
SAMPLE	244226002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER		
SAMPLE	244236001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER		
SAMPLE	244236002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER		
SAMPLE	244236003		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER		
SAMPLE	244236004		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER		
SAMPLE	244236005		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER		
SAMPLE	244240001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER		
DUP	1202011705	244240001	SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER		
MS	1202011706	244240001	SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER		
SDILT	1202011707	244240001	SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER		
SAMPLE	244240002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER		

Comments

Reagent/Solvent Lot ID	Amount	Description
1252838	2.5 mL	HYDROCHLORIC ACID
1252836	1 mL	Nitric Acid CONC.

Prep Data Logbook Version 1:1

GEL Laboratories LLC

Page#

Prep LogBook

Analyst: FGA
 Batch: 940083
 Lab SOP: GL-MA-E-006 REV# 9

Verified by: _____

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202011708		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
LCS	1202011709		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244129001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244129002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244129003		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244141001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244141002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244145001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
DUP	1202011710	244145001	SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
MS	1202011711	244145001	SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
SDILT	1202011712	244145001	SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244208001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244208002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244213001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244217001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244217002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244226001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244226002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244236001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244236002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244236003		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244236004		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244236005		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244240001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244240002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	.25	mL

Comments

Reagent/Solvent	Lot ID	Amount	Description
1252838		2.5 mL	HYDROCHLORIC ACID
1252836		1 mL	Nitric Acid CONC.

Prep Data Logbook Version 1.1

GEL Laboratories LLC

Page# _____

Prep LogBook

Analyst: TXB3 Verified by: _____

Batch: 941141

Lab SOP: GL-MA-E-010 REV# 23

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202014292		SW846 7470A Prep	14-JAN-2010 11:30	<2	20 mL	20 mL	1		
LCS	1202014293		SW846 7470A Prep	14-JAN-2010 11:30	<2	20 mL	20 mL	1	.2	mL
SAMPLE	244038001		SW846 7470A Prep	14-JAN-2010 11:30	<2	20 mL	20 mL	1		
SAMPLE	244038002		SW846 7470A Prep	14-JAN-2010 11:30	<2	20 mL	20 mL	1		
SAMPLE	244038003		SW846 7470A Prep	14-JAN-2010 11:30	<2	20 mL	20 mL	1		
SAMPLE	244038004		SW846 7470A Prep	14-JAN-2010 11:30	<2	20 mL	20 mL	1		
SAMPLE	244129001		SW846 7470A Prep	14-JAN-2010 11:30	<2	20 mL	20 mL	1		
SAMPLE	244129002		SW846 7470A Prep	14-JAN-2010 11:30	<2	20 mL	20 mL	1		
SAMPLE	244129003		SW846 7470A Prep	14-JAN-2010 11:30	<2	20 mL	20 mL	1		
SAMPLE	244418001		SW846 7470A Prep	14-JAN-2010 11:30	<2	20 mL	20 mL	1		
DUP	1202014294	244418001	SW846 7470A Prep	14-JAN-2010 11:30	<2	20 mL	20 mL	1		
MS	1202014295	244418001	SW846 7470A Prep	14-JAN-2010 11:30	<2	20 mL	20 mL	1		
SDILT	1202014296	244418001	SW846 7470A Prep	14-JAN-2010 11:30	<2	20 mL	20 mL	1		

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
WHG100114-06	500 uL	Mercury Working 2nd Source 5.0/ICV
WHG100114-01a	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG100114-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG100114-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG100114-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG100114-04	500 uL	Mercury Working 1st Source CAL 5.0/CCV

Comments Digestion Start Date: 14-JAN-10 11:30
Digestion End Date: 14-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% IN 5% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Standard Logbook

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
---------	---------------	---------	---------------

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 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

Standard Logbook

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 :** H2O/tr HF
Supplier: ENVIRONMENTAL EXPRESS
Description: SILICON 1000mg/L H2O/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091212-11 **Opened:** 12-DEC-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 12-DEC-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 12-DEC-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: O2SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091212-60 **Opened:** 12-DEC-09 **Amount :** .5 mL
Name: ICPMS High Range Standar **Received:** 12-DEC-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 12-DEC-10 **Lot Number :** 1018064
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A

Standard Logbook

Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091212-61 **Opened:** 12-DEC-09 **Amount :** 5 mL
Name: ICPMS High Range Standard **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 ICSEA **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

Standard Logbook

Serial ID: UI091216-01 **Opened:** 16-DEC-09 **Lot Number :** 1018095
Name: METALSPIKE-1 **Received:** 16-DEC-09
Type: Source Material **Expires:** 16-DEC-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: UI091216-06 **Opened:** 16-DEC-09 **Lot Number :** 1018096
Name: METALSPIKE-2 **Received:** 16-DEC-09
Type: Source Material **Expires:** 16-DEC-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: 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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
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 IGV/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 IGV/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 IGV/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 IGV/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

Standard Logbook

Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI091217-13 Opened: 17-DEC-09 Amount : 250 mL
 Name: ICP-MS ICSAB Master C Received: 17-DEC-09 Catalog Number : 160033-03
 Type: Source Material Expires: 17-DEC-10 Lot Number : 1016926
 Employee: Paul Boyd Solvent : +/- 0.5% in 2% HNO3
 Supplier: 02SI
 Description: ICPMS ICSAB Master C
 Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI100114-40 Opened: 14-JAN-10 Amount : 500 mL
 Name: ICP HIGH RANGE STD-A Received: 14-JAN-10 Catalog Number : 160211-05-03
 Type: Source Material Expires: 14-JAN-11 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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
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: UI100114-41 **Opened:** 14-JAN-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 14-JAN-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 14-JAN-11 **Lot Number :** 1018160
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: O2SI
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: UI1246651-A **Opened:** 23-DEC-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 23-DEC-09 **Lot Number :** 1018097
Type: Source Material **Expires:** 23-DEC-10
Employee: Bryan Davis
Supplier: O2si
Description: ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI1246654-B **Opened:** 23-DEC-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 23-DEC-09 **Lot Number :** 1017644
Type: Source Material **Expires:** 23-DEC-10
Employee: Bryan Davis
Supplier: O2si
Description: MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: 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: IHG100114-01 **Opened:** 14-JAN-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 14-JAN-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 15-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: IHG100114-02 **Opened:** 14-JAN-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 14-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Intermediate **Expires:** 15-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: WHG100114-01a **Opened:** 14-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 14-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 21-JAN-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100114-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Standard Logbook

Serial ID: WHG100114-02 **Opened:** 14-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 14-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 21-JAN-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100114-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG100114-03 **Opened:** 14-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 14-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 21-JAN-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100114-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG100114-04 **Opened:** 14-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **Received:** 14-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 21-JAN-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100114-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100114-05 **Opened:** 14-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **Received:** 14-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 21-JAN-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100114-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Standard Logbook

Serial ID: WHG100114-06 **Opened:** 14-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORK5.OICV **Received:** 14-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 21-JAN-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 2nd Source 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100114-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100114-13 **Opened:** 14-JAN-10 **Pipet Id :** Hg1289245
Name: MHGLIQLCSMSSPIKE **Received:** 14-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 21-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: WI100118-42 **Opened:** 18-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 19-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1256122
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.
WI100118-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100118-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100118-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100118-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100118-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100118-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100118-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100118-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100118-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100118-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100118-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100118-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100118-43 **Opened:** 18-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 19-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1256122
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: WI100118-44 **Opened:** 18-JAN-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 19-JAN-10 **Solvent :** 3%HCL and 1 %HNO3-1256122
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: WI100118-45 **Opened:** 18-JAN-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 19-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1256122
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: WI100118-46 **Opened:** 18-JAN-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 19-JAN-10 **Solvent :** 3%HCL AND 1%HNO3-1256122
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: WI100118-47 **Opened:** 18-JAN-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 19-JAN-10 **Solvent :** 3%HCL &1%HNO3-1256122
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.	Allquot	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: WMS100112-04B **Opened:** 12-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 12-JAN-10 **Balance Id :** 40245216
Type: Working **Expires:** 13-JAN-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl- 1238829
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Serial ID: WMS100113-04 **Opened:** 13-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 13-JAN-10 **Balance Id :** 4025216
Type: Working **Expires:** 14-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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100113-04A **Opened:** 13-JAN-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 13-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 14-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.
WMS100112-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100112-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100112-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100112-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100112-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100112-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100112-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100112-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100112-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100112-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100113-05 **Opened:** 13-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 13-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 14-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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100113-06 **Opened:** 13-JAN-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 13-JAN-10 **Pipet Id :** 3820544
Type: Working **Expires:** 14-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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100113-07 **Opened:** 13-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICESA **Received:** 13-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 14-JAN-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1253206
Supplier: GEL
Description: ICPMS ICESA
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	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: WMS100113-08 **Opened:** 13-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICESAB **Received:** 13-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 14-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1253206
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICESAB
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100113-70 **Opened:** 13-JAN-10 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 13-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 14-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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100114-04 **Opened:** 14-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 14-JAN-10 **Balance Id :** 4025216
Type: Working **Expires:** 15-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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100114-04A **Opened:** 14-JAN-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 14-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 15-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.
WMS100114-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100114-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100114-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100114-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100114-05 **Opened:** 14-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 14-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 15-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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100114-06 **Opened:** 14-JAN-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 14-JAN-10 **Pipet Id :** 3820544
Type: Working **Expires:** 15-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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100114-07 **Opened:** 14-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 14-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 15-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

Standard Logbook

Serial ID: WMS100114-08 **Opened:** 14-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 14-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 15-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
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: WMS100121-04 **Opened:** 21-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 21-JAN-10 **Balance Id :** 4025216
Type: Working **Expires:** 22-JAN-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1256053
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Serial ID: WMS100121-04A **Opened:** 21-JAN-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 21-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 22-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100121-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100121-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100121-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100121-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100121-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100121-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100121-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100121-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100121-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100121-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Serial ID: WMS100121-05 **Opened:** 21-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 21-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 22-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Serial ID: WMS100121-06 **Opened:** 21-JAN-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 21-JAN-10 **Pipet Id :** 3820544
Type: Working **Expires:** 22-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Serial ID: WMS100121-07 **Opened:** 21-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 21-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 22-JAN-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1256053
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: WMS100121-08 **Opened:** 21-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 21-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 22-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L

Serial ID: 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: Hydroxylamine 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

Standard Logbook

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-K2S2O8-MER Received: 06-NOV-09
 Type: Reagent/Solvent Expires: 06-NOV-10
 Employee: Tara Griffin
 Supplier: J.T BAKER
 Description: Potassium Persulfate Concentrate.
 Comments: None

Serial ID: 1234385-C Opened: 25-NOV-09 Balance Id : BAL-002
 Name: B-K2S2O8-MER Received: 25-NOV-09
 Type: Reagent/Solvent Expires: 25-MAY-10
 Employee: Tara Griffin
 Supplier: GEL
 Description: 5% Potassium Persulfate
 Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1215906	B-K2S2O8-MER	N/A	50 g	1000 mL	N/A

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

Standard Logbook

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: 1252836 Opened: 08-JAN-10 Lot Number : H20053 L
 Name: I-HNO3 Received: 08-JAN-10
 Type: Reagent/Solvent Expires: 08-JAN-11
 Employee: Francena Armstrong
 Supplier: BAKER
 Description: Nitric Acid CONC.
 Comments: None

Serial ID: 1252838 Opened: 08-JAN-10 Lot Number : H41032
 Name: I-HCL Received: 08-JAN-10 Preservative_Id : 5 none
 Type: Reagent/Solvent Expires: 08-JAN-11
 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

Standard Logbook

Description: 2%HNO3/1%HCl Solution (Type I Water)

Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	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: 1256053 Opened: 18-JAN-10 Solvent : Type I Water

Name: B-2%HNO3/1%HCl-ICPMS Received: 18-JAN-10

Type: Reagent/Solvent Expires: 25-JAN-10

Employee: Paul Boyd

Supplier: GEL

Description: 2%HNO3/1%HCl Solution (Type I Water)

Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
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: 1256122 Opened: 18-JAN-10 Amount : 20 L

Name: B-ICP-RINSE SOLN Received: 18-DEC-10 Lot Number : H04040+G34050

Type: Reagent/Solvent Expires: 24-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 10-1132**

Method/Analysis Information

Product: Cyanide, Total

Analytical Batch: 940234 and 940238 **Method:** SW846 9012A

Prep Batch : 940233 and 940236 **Method:** SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
244128001	RE12-10-7634
244128002	RE12-10-7648
244128003	RE12-10-7638
244128004	RE12-10-7639
244128005	RE12-10-7633
244128006	RE12-10-7647
244128007	RE12-10-7644
244128008	RE12-10-7637
244128009	RE12-10-7635
244128010	RE12-10-7642
244128011	RE12-10-7649
244128012	RE12-10-7650
244128013	RE12-10-7641
244128014	RE12-10-7643
244128015	RE12-10-7640
244128016	RE12-10-7645
244128017	RE12-10-7646
244128018	RE12-10-7636
244128019	RE12-10-7657
244128020	RE12-10-7658
1202012043	Method Blank (MB)
1202012044	244224019(RE16-10-410) Sample Duplicate (DUP)
1202012045	244224020(RE16-10-414) Sample Duplicate (DUP)
1202012046	244224019(RE16-10-410) Matrix Spike (MS)
1202012047	244224020(RE16-10-414) Matrix Spike (MS)
1202012048	244224019(RE16-10-410) Matrix Spike Duplicate (MSD)
1202012049	244224020(RE16-10-414) Matrix Spike Duplicate (MSD)
1202012050	Laboratory Control Sample (LCS)
1202012054	Method Blank (MB)
1202012055	244128015(RE12-10-7640) Sample Duplicate (DUP)
1202012056	244128016(RE12-10-7645) Sample Duplicate (DUP)
1202012057	244128015(RE12-10-7640) Matrix Spike (MS)
1202012058	244128016(RE12-10-7645) Matrix Spike (MS)
1202012059	244128015(RE12-10-7640) Matrix Spike Duplicate (MSD)
1202012060	244128016(RE12-10-7645) Matrix Spike Duplicate (MSD)
1202012061	Laboratory Control Sample (LCS)

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

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement

The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Designation

The following samples were selected for QC analysis: 244224019 (RE16-10-410), 244224020 (RE16-10-414)- Batch 940234, 244128015 (RE12-10-7640) and 244128016 (RE12-10-7645)- Batch 940238.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The spike duplicate recovery falls outside of the client specified acceptance limits. Since both the spike recovery and the RPD between the spike and spike duplicate fall within acceptance limits, the data is reported. 1202012049 (RE16-10-414)- Batch 940234.

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. 1202012044 (RE16-10-410), 1202012045 (RE16-10-414)- Batch 940234, 1202012056 (RE12-10-7645) and 244128016 (RE12-10-7645)- Batch 940238.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times

All samples in this SDG met the specified holding time.

Sample Preservation/Integrity

All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions

The following samples in this sample group were diluted due to high concentration: 1202012050 (LCS)- Batch 940234 and 1202012061 (LCS)- Batch 940238.

Sample Re-analysis

The samples in this SDG did not require re-analysis.

Miscellaneous Information**Data Exception (DER) Documentation**

The following DER was generated for this SDG: 780336 1202012049 (RE16-10-414)- Batch 940234.

Additional Comments

Additional comments were not required for this SDG.

Electronic Packaging Comment

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

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

Certification Statement

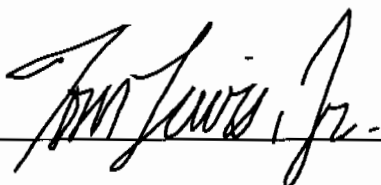
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

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

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

Reviewer: _____



Date: _____

01Feb10

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: 10-1132 GEL Work Order: 244128

The Qualifiers in this report are defined as follows:

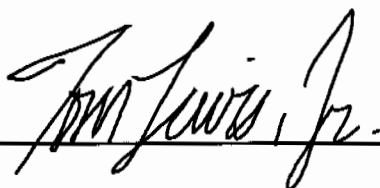
- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

A handwritten signature in black ink, appearing to read "Tom Lewis, Jr.", is written over a horizontal line.

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7637
Sample ID: 244128008
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 9.73%

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	73.9	272	ug/kg	1	AXC2	01/14/10	1159	940234	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7635
Sample ID: 244128009
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 14.6%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
<i>SW9012A Cyanide, Total Federal "Dry Weight Corrected"</i>										
Cyanide, Total	U	ND	79.6	293	ug/kg	1	AXC2 01/14/10	1200	940234	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7642
Sample ID: 244128010
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 11.4%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total Federal "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	75.3	277	ug/kg	1	AXC2	01/14/10	1201	940234	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7649
Sample ID: 244128011
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 22%

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	83.8	308	ug/kg	1	AXC2	01/14/10	1202	940234	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7650
Sample ID: 244128012
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 13%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total Federal "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	78.2	287	ug/kg	1	AXC2	01/14/10	1203	940234	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7641
Sample ID: 244128013
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 14.4%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total Federal "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	76.4	281	ug/kg	1	AXC2	01/14/10	1204	940234	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7643
Sample ID: 244128014
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 16.3%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total Federal "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	81.2	299	ug/kg	1	AXC2	01/14/10	1205	940234	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm 111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: January 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7640
Sample ID: 244128015
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 7.63%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total Federal "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	68.2	251	ug/kg	1	AXC2	01/14/10	1112	940238	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1529	940236

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7645
Sample ID: 244128016
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 10.4%

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	65.5	241	ug/kg	1	AXC2	01/14/10	1116	940238	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1529	940236

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7646
Sample ID: 244128017
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 10.5%

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	74.5	274	ug/kg	1	AXC2	01/14/10	1123	940238	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1529	940236

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7636
Sample ID: 244128018
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 9.79%

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	69.8	257	ug/kg	1	AXC2	01/14/10	1124	940238	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1529	940236

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7657
Sample ID: 244128019
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 10.1%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total Federal "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	70.1	258	ug/kg	1	AXC2	01/14/10	1124	940238	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1529	940236

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7658
Sample ID: 244128020
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 10.4%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total Federal "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	74.4	274	ug/kg	1	AXC2	01/14/10	1125	940238	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1529	940236

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7634
Sample ID: 244128001
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 10.3%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total Federal "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	72.9	268	ug/kg	1	AXC2	01/14/10	1149	940234	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7648
Sample ID: 244128002
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 5.2%

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	71.7	264	ug/kg	1	AXC2	01/14/10	1150	940234	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7638
Sample ID: 244128003
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 11.4%

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	J	198	76.7	282	ug/kg	1	AXC2	01/14/10	1151	940234	1
----------------	---	-----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7639
Sample ID: 244128004
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 14.8%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total Federal "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	76.8	282	ug/kg	1	AXC2	01/14/10	1152	940234	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7633
Sample ID: 244128005
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 16.1%

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	J	263	76.5	281	ug/kg	1	AXC2	01/14/10	1153	940234	1
----------------	---	-----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7647
Sample ID: 244128006
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 17.2%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total Federal "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	74.6	274	ug/kg	1	AXC2	01/14/10	1157	940234	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 22, 2010

Client SDG: 10-1132

Client Sample ID: RE12-10-7644
Sample ID: 244128007
Matrix: R
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client
Moisture: 9.98%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total Federal "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	71.3	262	ug/kg	1	AXC2	01/14/10	1158	940234	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/13/10	1551	940233

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 22, 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: 244128

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Flow Injection Analysis											
Batch	940234										
QC1202012044	244224019	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A		AXC2	01/14/10	12:10
QC1202012045	244224020	DUP									
Cyanide, Total		J	251	J	150	ug/kg	50.4 ^	(+/-366)		01/14/10	12:14
QC1202012050	LCS										
Cyanide, Total	67900				81500	ug/kg		120 (46%-145%)		01/14/10	11:45
QC1202012043	MB										
Cyanide, Total				U	250	ug/kg				01/14/10	11:40
QC1202012046	244224019	MS									
Cyanide, Total	6530	U	ND		5810	ug/kg		88.9 (50%-130%)		01/14/10	12:11
QC1202012047	244224020	MS									
Cyanide, Total	7040	J	251		6500	ug/kg		88.7 (50%-130%)		01/14/10	12:14
QC1202012048	244224019	MSD									
Cyanide, Total	6280	U	ND		5350	ug/kg	8.28	85.1 (0%-30%)		01/14/10	12:12
QC1202012049	244224020	MSD									
Cyanide, Total	6780	J	251		5070	ug/kg	24.7	71.1 (0%-30%)		01/14/10	12:15
Batch	940238										
QC1202012055	244128015	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A		AXC2	01/14/10	11:13
QC1202012056	244128016	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			01/14/10	11:20
QC1202012061	LCS										
Cyanide, Total	67900				83500	ug/kg		123 (46%-145%)		01/14/10	11:09
QC1202012054	MB										
Cyanide, Total				U	250	ug/kg				01/14/10	11:09
QC1202012057	244128015	MS									
Cyanide, Total	5410	U	ND		5410	ug/kg		100 (50%-130%)		01/14/10	11:14
QC1202012058	244128016	MS									
Cyanide, Total	5080	U	ND		4570	ug/kg		90 (50%-130%)		01/14/10	11:21
QC1202012059	244128015	MSD									
Cyanide, Total	5410	U	ND		5630	ug/kg	3.92	104 (0%-30%)		01/14/10	11:15
QC1202012060	244128016	MSD									
Cyanide, Total	5270	U	ND		4990	ug/kg	8.79	94.7 (0%-30%)		01/14/10	11:22

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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 244128

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
B	For General Chemistry and Organic analysis the target analyte was detected in the associated blank.										
BD	Results are either below the MDC or tracer recovery is low										
C	Analyte has been confirmed by GC/MS analysis										
D	Results are reported from a diluted aliquot of the sample										
E	General Chemistry--Concentration of the target analyte exceeds the instrument calibration range										
E	Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria										
E	Organics--Concentration of the target analyte exceeds the instrument calibration range										
F	Estimated Value										
H	Analytical holding time was exceeded										
J	Value is estimated										
M	M if above MDC and less than LLD										
M	Matrix Related Failure										
N	Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor										
N/A	RPD or %Recovery limits do not apply.										
ND	Analyte concentration is not detected above the detection limit										
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%										
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: 22-JAN-2010 12:19

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1132

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	14-JAN-2010 11:02:40	OM_1-14-2010_10-54-00	144	150	96	(90%-110%)	Yes
CCV	14-JAN-2010 11:16:58	OM_1-14-2010_10-54-00	102	100	102	(90%-110%)	Yes
CCV	14-JAN-2010 11:29:23	OM_1-14-2010_10-54-00	103	100	103	(90%-110%)	Yes
CCV	14-JAN-2010 11:41:48	OM_1-14-2010_10-54-00	101	100	101	(90%-110%)	Yes
CCV	14-JAN-2010 11:54:19	OM_1-14-2010_10-54-00	102	100	102	(90%-110%)	Yes
CCV	14-JAN-2010 12:06:47	OM_1-14-2010_10-54-00	101	100	101	(90%-110%)	Yes
CCV	14-JAN-2010 12:16:37	OM_1-14-2010_10-54-00	102	100	102	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	14-JAN-2010 11:04:30	OM_1-14-2010_10-54-00	-2.39	5	Yes
CCB	14-JAN-2010 11:18:49	OM_1-14-2010_10-54-00	-2.39	5	Yes
CCB	14-JAN-2010 11:31:13	OM_1-14-2010_10-54-00	-1.98	5	Yes
CCB	14-JAN-2010 11:43:38	OM_1-14-2010_10-54-00	-1.93	5	Yes
CCB	14-JAN-2010 11:56:09	OM_1-14-2010_10-54-00	-1.85	5	Yes
CCB	14-JAN-2010 12:08:38	OM_1-14-2010_10-54-00	-3.03	5	Yes
CCB	14-JAN-2010 12:18:29	OM_1-14-2010_10-54-00	-2.1	5	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5
 Batch: 940236
 Lab SOP: GL-OC-E-067 REV# 13

Verified by: _____

Type	Sample Id	Lot Id	Spike Amount	Spike Units
LCS	1202012061	URF1200957-01	.25	g
MS	1202012057	URF1184831-02	.025	mL
MS	1202012058	URF1184831-02	.025	mL
MSD	1202012059	URF1184831-02	.025	mL
MSD	1202012060	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202012054		SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.5 g	25 mL	50	SOIL
LCS	1202012061		SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.25 g	25 mL	100	SOIL
SAMPLE	244116001		SW846 9010C Distillation	13-JAN-2010 15:29	> 12	0.522 g	25 mL	47.89272	SOLID
SAMPLE	244116002		SW846 9010C Distillation	13-JAN-2010 15:29	> 12	0.544 g	25 mL	45.95588	SOLID
SAMPLE	244128015		SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.54 g	25 mL	46.2963	SOIL
DUP	1202012055	244128015	SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.52 g	25 mL	48.07692	SOIL
MS	1202012057	244128015	SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.5 g	25 mL	50	SOIL
MSD	1202012059	244128015	SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.5 g	25 mL	50	SOIL
SAMPLE	244128016		SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.58 g	25 mL	43.10345	SOIL
DUP	1202012056	244128016	SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.54 g	25 mL	46.2963	SOIL
MS	1202012058	244128016	SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.55 g	25 mL	45.45455	SOIL
MSD	1202012060	244128016	SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	244128017		SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	244128018		SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	244128019		SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	244128020		SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	244139001		SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	244139002		SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	244139003		SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	244139004		SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	244139005		SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.5 g	25 mL	50	SOIL
SAMPLE	244139006		SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	244139007		SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	244139008		SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	244222001		SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.5 g	25 mL	50	SOIL
SAMPLE	244222002		SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	244222003		SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	244222004		SW846 9010B Prep	13-JAN-2010 15:29	> 12	0.5 g	25 mL	50	SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description	Comments
091211-C	25 mL	0.25N Sodium Hydroxide Solution	
WCN100113-07	.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	

Prep LogBook

Analyst: AXS5
 Batch: 940233
 Lab SOP: GL-GC-E-067 REV# 13

Verified by:

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202012043		SW846 9010B Prep	13-JAN-2010 15:51	>12	0.5 g	25 mL	50	.25	g
LCS	1202012050		SW846 9010B Prep	13-JAN-2010 15:51	>12	0.25 g	25 mL	100	.025	mL
SAMPLE	244125001		SW846 9010B Prep	13-JAN-2010 15:51	>12	0.54 g	25 mL	46.2963	.025	mL
SAMPLE	244125002		SW846 9010B Prep	13-JAN-2010 15:51	>12	0.54 g	25 mL	46.2963	.025	mL
SAMPLE	244125003		SW846 9010B Prep	13-JAN-2010 15:51	>12	0.57 g	25 mL	43.85965	.025	mL
SAMPLE	244125004		SW846 9010B Prep	13-JAN-2010 15:51	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	244128001		SW846 9010B Prep	13-JAN-2010 15:51	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	244128002		SW846 9010B Prep	13-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244128003		SW846 9010B Prep	13-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244128004		SW846 9010B Prep	13-JAN-2010 15:51	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	244128005		SW846 9010B Prep	13-JAN-2010 15:51	>12	0.53 g	25 mL	47.16981	.025	mL
SAMPLE	244128006		SW846 9010B Prep	13-JAN-2010 15:51	>12	0.55 g	25 mL	45.45455	.025	mL
SAMPLE	244128007		SW846 9010B Prep	13-JAN-2010 15:51	>12	0.53 g	25 mL	47.16981	.025	mL
SAMPLE	244128008		SW846 9010B Prep	13-JAN-2010 15:51	>12	0.51 g	25 mL	49.01961	.025	mL
SAMPLE	244128009		SW846 9010B Prep	13-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244128010		SW846 9010B Prep	13-JAN-2010 15:51	>12	0.51 g	25 mL	49.01961	.025	mL
SAMPLE	244128011		SW846 9010B Prep	13-JAN-2010 15:51	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	244128012		SW846 9010B Prep	13-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244128013		SW846 9010B Prep	13-JAN-2010 15:51	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	244128014		SW846 9010B Prep	13-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244224019		SW846 9010B Prep	13-JAN-2010 15:51	>12	0.51 g	25 mL	49.01961	.025	mL
DUP	1202012044	244224019	SW846 9010B Prep	13-JAN-2010 15:51	>12	0.57 g	25 mL	43.85965	.025	mL
MS	1202012046	244224019	SW846 9010B Prep	13-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
MSD	1202012048	244224019	SW846 9010B Prep	13-JAN-2010 15:51	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	244224020		SW846 9010B Prep	13-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
DUP	1202012045	244224020	SW846 9010B Prep	13-JAN-2010 15:51	>12	0.52 g	25 mL	48.07692	.025	mL
MS	1202012047	244224020	SW846 9010B Prep	13-JAN-2010 15:51	>12	0.52 g	25 mL	48.07692	.025	mL
MSD	1202012049	244224020	SW846 9010B Prep	13-JAN-2010 15:51	>12	0.54 g	25 mL	46.2963	.025	mL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description	Comments
091211-C	25 mL	0.25N Sodium Hydroxide Solution	
WCN100113-07	.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	

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	1/14/2010 10:55:31	OM_1-14-2010_10-54-00
150 ppb		1	axc2	1/14/2010 10:56:23	OM_1-14-2010_10-54-00
100 ppb		1	axc2	1/14/2010 10:57:15	OM_1-14-2010_10-54-00
50 ppb		1	axc2	1/14/2010 10:58:08	OM_1-14-2010_10-54-00
10 ppb		1	axc2	1/14/2010 10:59:01	OM_1-14-2010_10-54-00
CRDL 5.0 ppb		1	axc2	1/14/2010 10:59:55	OM_1-14-2010_10-54-00
ICAL-00		1	axc2	1/14/2010 11:00:49	OM_1-14-2010_10-54-00
ICV		1	axc2	1/14/2010 11:02:40	OM_1-14-2010_10-54-00
ICB		1	axc2	1/14/2010 11:04:30	OM_1-14-2010_10-54-00
CRDL		1	axc2	1/14/2010 11:06:20	OM_1-14-2010_10-54-00
		1	axc2	1/14/2010 11:08:09	OM_1-14-2010_10-54-00
1202012054	940238	1	axc2	1/14/2010 11:09:03	OM_1-14-2010_10-54-00
1202012061	940238	25	axc2	1/14/2010 11:09:56	OM_1-14-2010_10-54-00
244116001	940238	1	axc2	1/14/2010 11:10:49	OM_1-14-2010_10-54-00
244116002	940238	1	axc2	1/14/2010 11:11:43	OM_1-14-2010_10-54-00
244128015	940238	1	axc2	1/14/2010 11:12:36	OM_1-14-2010_10-54-00
1202012055	940238	1	axc2	1/14/2010 11:13:28	OM_1-14-2010_10-54-00
1202012057	940238	1	axc2	1/14/2010 11:14:21	OM_1-14-2010_10-54-00
1202012059	940238	1	axc2	1/14/2010 11:15:14	OM_1-14-2010_10-54-00
244128016	940238	1	axc2	1/14/2010 11:16:06	OM_1-14-2010_10-54-00
CCV		1	axc2	1/14/2010 11:16:58	OM_1-14-2010_10-54-00
CCB		1	axc2	1/14/2010 11:18:49	OM_1-14-2010_10-54-00
1202012056	940238	1	axc2	1/14/2010 11:20:37	OM_1-14-2010_10-54-00
1202012058	940238	1	axc2	1/14/2010 11:21:29	OM_1-14-2010_10-54-00
1202012060	940238	1	axc2	1/14/2010 11:22:21	OM_1-14-2010_10-54-00
244128017	940238	1	axc2	1/14/2010 11:23:13	OM_1-14-2010_10-54-00
244128018	940238	1	axc2	1/14/2010 11:24:04	OM_1-14-2010_10-54-00
244128019	940238	1	axc2	1/14/2010 11:24:56	OM_1-14-2010_10-54-00
244128020	940238	1	axc2	1/14/2010 11:25:50	OM_1-14-2010_10-54-00
244139001	940238	1	axc2	1/14/2010 11:26:43	OM_1-14-2010_10-54-00
244139002	940238	1	axc2	1/14/2010 11:27:37	OM_1-14-2010_10-54-00
244139003	940238	1	axc2	1/14/2010 11:28:30	OM_1-14-2010_10-54-00
CCV		1	axc2	1/14/2010 11:29:23	OM_1-14-2010_10-54-00
CCB		1	axc2	1/14/2010 11:31:13	OM_1-14-2010_10-54-00
244139004	940238	1	axc2	1/14/2010 11:33:03	OM_1-14-2010_10-54-00
244139005	940238	1	axc2	1/14/2010 11:33:56	OM_1-14-2010_10-54-00
244139006	940238	1	axc2	1/14/2010 11:34:49	OM_1-14-2010_10-54-00
244139007	940238	1	axc2	1/14/2010 11:35:42	OM_1-14-2010_10-54-00
244139008	940238	1	axc2	1/14/2010 11:36:34	OM_1-14-2010_10-54-00
244222001	940238	1	axc2	1/14/2010 11:37:27	OM_1-14-2010_10-54-00
244222002	940238	1	axc2	1/14/2010 11:38:19	OM_1-14-2010_10-54-00
244222003	940238	1	axc2	1/14/2010 11:39:11	OM_1-14-2010_10-54-00
244222004	940238	1	axc2	1/14/2010 11:40:04	OM_1-14-2010_10-54-00
1202012043	940234	1	axc2	1/14/2010 11:40:55	OM_1-14-2010_10-54-00
CCV		1	axc2	1/14/2010 11:41:48	OM_1-14-2010_10-54-00
CCB		1	axc2	1/14/2010 11:43:38	OM_1-14-2010_10-54-00
1202012050	940234	25	axc2	1/14/2010 11:45:26	OM_1-14-2010_10-54-00
244125001	940234	1	axc2	1/14/2010 11:46:20	OM_1-14-2010_10-54-00
244125002	940234	1	axc2	1/14/2010 11:47:14	OM_1-14-2010_10-54-00
244125003	940234	1	axc2	1/14/2010 11:48:07	OM_1-14-2010_10-54-00
244125004	940234	1	axc2	1/14/2010 11:49:01	OM_1-14-2010_10-54-00
244128001	940234	1	axc2	1/14/2010 11:49:54	OM_1-14-2010_10-54-00
244128002	940234	1	axc2	1/14/2010 11:50:48	OM_1-14-2010_10-54-00
244128003	940234	1	axc2	1/14/2010 11:51:40	OM_1-14-2010_10-54-00
244128004	940234	1	axc2	1/14/2010 11:52:33	OM_1-14-2010_10-54-00
244128005	940234	1	axc2	1/14/2010 11:53:27	OM_1-14-2010_10-54-00
CCV		1	axc2	1/14/2010 11:54:19	OM_1-14-2010_10-54-00
CCB		1	axc2	1/14/2010 11:56:09	OM_1-14-2010_10-54-00

244128006	940234	1	axc2	1/14/2010	11:57:57	OM_1-14-2010_10-54-00
244128007	940234	1	axc2	1/14/2010	11:58:50	OM_1-14-2010_10-54-00
244128008	940234	1	axc2	1/14/2010	11:59:42	OM_1-14-2010_10-54-00
244128009	940234	1	axc2	1/14/2010	12:00:34	OM_1-14-2010_10-54-00
244128010	940234	1	axc2	1/14/2010	12:01:27	OM_1-14-2010_10-54-00
244128011	940234	1	axc2	1/14/2010	12:02:19	OM_1-14-2010_10-54-00
244128012	940234	1	axc2	1/14/2010	12:03:13	OM_1-14-2010_10-54-00
244128013	940234	1	axc2	1/14/2010	12:04:07	OM_1-14-2010_10-54-00
244128014	940234	1	axc2	1/14/2010	12:05:01	OM_1-14-2010_10-54-00
244224019	940234	1	axc2	1/14/2010	12:05:54	OM_1-14-2010_10-54-00
CCV		1	axc2	1/14/2010	12:06:47	OM_1-14-2010_10-54-00
CCB		1	axc2	1/14/2010	12:08:38	OM_1-14-2010_10-54-00
1202012044	940234	1	axc2	1/14/2010	12:10:27	OM_1-14-2010_10-54-00
1202012046	940234	1	axc2	1/14/2010	12:11:20	OM_1-14-2010_10-54-00
1202012048	940234	1	axc2	1/14/2010	12:12:14	OM_1-14-2010_10-54-00
244224020	940234	1	axc2	1/14/2010	12:13:06	OM_1-14-2010_10-54-00
1202012045	940234	1	axc2	1/14/2010	12:14:00	OM_1-14-2010_10-54-00
1202012047	940234	1	axc2	1/14/2010	12:14:53	OM_1-14-2010_10-54-00
1202012049	940234	1	axc2	1/14/2010	12:15:45	OM_1-14-2010_10-54-00
CCV		1	axc2	1/14/2010	12:16:37	OM_1-14-2010_10-54-00
CCB		1	axc2	1/14/2010	12:18:29	OM_1-14-2010_10-54-00

Original Run Filename: OM_1-14-2010_10-54-00.OMN created 1/14/2010 10:54:00
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_1-14-2010_10-54-00.OMN last modified 1/14/2010 12:19:33
 Current Run Author's Signature: [axc2]
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
 Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE		Detection Time	ADF	MDF	Description
			Conc. (ug/L)	Area (Vs)				
WCN100114-01	1	S1	200	7.48	1/14/2010@10:55:31			200 ppb
WCN100114-02	1	S2	150	5.59	1/14/2010@10:56:23			150 ppb
WCN100114-03	1	S3	100	3.94	1/14/2010@10:57:15			100 ppb
WCN100114-04	1	S4	50.0	2.00	1/14/2010@10:58:08			50 ppb
WCN100114-05	1	S5	10.0	0.469	1/14/2010@10:59:01			10 ppb
WCN100114-06	1	S6	5.00	0.298	1/14/2010@10:59:55			CRDL 5.0 ppb
WCN100114-08	1	S7	0.00	0.0276	1/14/2010@11:00:49			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99969 > 0.99500					
Message			Pass					
Action			Continue					
WCN100114-07	1	S8	144	5.43	1/14/2010@11:02:40			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			-4.0 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-4.0 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100114-08	1	S7	-2.39	0.0170	1/14/2010@11:04:30			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-2.39 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-2.39 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100114-06	1	S6	5.34	0.303	1/14/2010@11:06:20			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			5.34 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			5.34 > 2.50					
Message			Pass					
Action			None					
200 ppb LCR	1	57	202	7.58	1/14/2010@11:08:09			
1202012054|940238|MB	1	1	1.30	0.153	1/14/2010@11:09:03			
1202012061||LCS	1	2	33.4	1.34	1/14/2010@11:09:56		25.00	
244116001	1	3	6.39	0.342	1/14/2010@11:10:49			
244116002	1	4	0.106	0.109	1/14/2010@11:11:43			
244128015	1	5	-1.62	0.0455	1/14/2010@11:12:36			
1202012055||DUP	1	6	-1.75	0.0404	1/14/2010@11:13:28			
1202012057||MS	1	7	100	3.81	1/14/2010@11:14:21			
1202012059||MSD	1	8	104	3.96	1/14/2010@11:15:14			
244128016	1	9	-0.910	0.0717	1/14/2010@11:16:06			
WCN100114-03	1	S3	102	3.87	1/14/2010@11:16:58			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			1.8 < 10.0					

Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			1.8 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100114-08	1	S7	-2.39	0.0167	1/14/2010@11:18:49			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-2.39 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-2.39 > -5.00					
Message			CCB Passed					
Action			Continue					
1202012056|DUP	1	10	-0.493	0.0871	1/14/2010@11:20:37			
1202012058|MS	1	11	90.0	3.44	1/14/2010@11:21:29			
1202012060|MSD	1	12	94.7	3.61	1/14/2010@11:22:21			
244128017	1	13	-1.46	0.0513	1/14/2010@11:23:13			
244128018	1	14	-1.12	0.0640	1/14/2010@11:24:04			
244128019	1	15	-1.52	0.0489	1/14/2010@11:24:56			
244128020	1	16	-2.13	0.0264	1/14/2010@11:25:50			
244139001	1	17	-1.07	0.0658	1/14/2010@11:26:43			
244139002	1	18	-1.49	0.0501	1/14/2010@11:27:37			
244139003	1	19	0.660	0.130	1/14/2010@11:28:30			
WCN100114-03	1	S3	103	3.90	1/14/2010@11:29:23			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			2.5 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			2.5 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100114-08	1	S7	-1.98	0.0321	1/14/2010@11:31:13			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.98 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.98 > -5.00					
Message			CCB Passed					
Action			Continue					
244139004	1	20	-1.96	0.0327	1/14/2010@11:33:03			
244139005	1	21	-1.59	0.0465	1/14/2010@11:33:56			
244139006	1	22	-1.55	0.0481	1/14/2010@11:34:49			
244139007	1	23	-1.64	0.0447	1/14/2010@11:35:42			
244139008	1	24	-1.79	0.0391	1/14/2010@11:36:34			
244222001	1	25	-2.10	0.0276	1/14/2010@11:37:27			
244222002	1	26	-1.40	0.0533	1/14/2010@11:38:19			
244222003	1	27	-1.88	0.0358	1/14/2010@11:39:11			
244222004	1	28	-0.452	0.0886	1/14/2010@11:40:04			
1202012043|940234|MB	1	29	-3.18	-0.0123	1/14/2010@11:40:55			
WCN100114-03	1	S3	101	3.86	1/14/2010@11:41:48			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			1.5 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			1.5 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100114-08	1	S7	-1.93	0.0340	1/14/2010@11:43:38			CCB
Known Conc:			0.00					

DQM Test: > + Concentration Limit							
Result:		-1.93 < 5.00					
Message		CCB Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		-1.93 > -5.00					
Message		CCB Passed					
Action		Continue					
1202012050||LCS	1	30	32.6	1.31	1/14/2010@11:45:26	25.00	
244125001	1	31	-0.502	0.0867	1/14/2010@11:46:20		
244125002	1	32	0.569	0.126	1/14/2010@11:47:14		
244125003	1	33	-0.0243	0.104	1/14/2010@11:48:07		
244125004	1	34	1.69	0.168	1/14/2010@11:49:01		
244128001	1	35	-0.730	0.0783	1/14/2010@11:49:54		
244128002	1	36	-1.69	0.0429	1/14/2010@11:50:48		
244128003	1	37	3.51	0.235	1/14/2010@11:51:40		
244128004	1	38	1.26	0.152	1/14/2010@11:52:33		
244128005	1	39	4.68	0.279	1/14/2010@11:53:27		
WCN100114-03	1	S3	102	3.87	1/14/2010@11:54:19		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:		1.8 < 10.0					
Message		CCV Passed					
Action		Continue					
DQM Test: < - Percent Relative Difference							
Result:		1.8 < 10.0					
Message		CCV Passed					
Action		Continue					
WCN100114-08	1	S7	-1.85	0.0367	1/14/2010@11:56:09		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:		-1.85 < 5.00					
Message		CCB Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		-1.85 > -5.00					
Message		CCB Passed					
Action		Continue					
244128006	1	40	-1.40	0.0536	1/14/2010@11:57:57		
244128007	1	41	-1.05	0.0664	1/14/2010@11:58:50		
244128008	1	42	-1.26	0.0588	1/14/2010@11:59:42		
244128009	1	43	0.198	0.113	1/14/2010@12:00:34		
244128010	1	44	-1.36	0.0549	1/14/2010@12:01:27		
244128011	1	45	0.346	0.118	1/14/2010@12:02:19		
244128012	1	46	-1.25	0.0589	1/14/2010@12:03:13		
244128013	1	47	0.413	0.121	1/14/2010@12:04:07		
244128014	1	48	0.264	0.115	1/14/2010@12:05:01		
244224019	1	49	0.108	0.109	1/14/2010@12:05:54		
WCN100114-03	1	S3	101	3.86	1/14/2010@12:06:47		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:		1.3 < 10.0					
Message		CCV Passed					
Action		Continue					
DQM Test: < - Percent Relative Difference							
Result:		1.3 < 10.0					
Message		CCV Passed					
Action		Continue					
WCN100114-08	1	S7	-3.03	-0.00668	1/14/2010@12:08:38		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:		-3.03 < 5.00					
Message		CCB Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		-3.03 > -5.00					
Message		CCB Passed					
Action		Continue					

1202012044	DUP	1	50	-0.496	0.0870	1/14/2010@12:10:27			
1202012046	MS	1	51	89.0	3.40	1/14/2010@12:11:20			
1202012048	MSD	1	52	85.2	3.26	1/14/2010@12:12:14			
244224020		1	53	3.43	0.232	1/14/2010@12:13:06			
1202012045	DUP	1	54	2.05	0.181	1/14/2010@12:14:00			
1202012047	MS	1	55	92.3	3.52	1/14/2010@12:14:53			
1202012049	MSD	1	56	74.8	2.87	1/14/2010@12:15:45			
WCN100114-03		1	S3	102	3.89	1/14/2010@12:16:37			CCV
Known Conc:				100					
DQM Test: > + Percent Relative Difference									
Result:				2.2 < 10.0					
Message				CCV Passed					
Action				Continue					
DQM Test: < - Percent Relative Difference									
Result:				2.2 < 10.0					
Message				CCV Passed					
Action				Continue					
WCN100114-08		1	S7	-2.10	0.0275	1/14/2010@12:18:29			CCB
Known Conc:				0.00					
DQM Test: > + Concentration Limit									
Result:				-2.10 < 5.00					
Message				CCB Passed					
Action				Continue					
DQM Test: < - Concentration Limit									
Result:				-2.10 > -5.00					
Message				CCB Passed					
Action				Continue					

Analyte Properties Table for OM_1-14-2010_10-54-00.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.48	0.544	0.4	1/14/2010	10:56:34
2	150	1	5.59	0.409	1.2	1/14/2010	10:57:26
3	100	1	3.94	0.293	-3.5	1/14/2010	10:58:18
4	50.0	1	2.00	0.145	-2.1	1/14/2010	10:59:11
5	10.0	1	0.469	0.0327	1.7	1/14/2010	11:00:05
6	5.00	1	0.298	0.0216	-2.1	1/14/2010	11:00:58
7	0.00	1	0.0276	0.00183		1/14/2010	11:01:52

Peak Area(V.s)

7.48

0.00

TCYANIDE concentration, ug/L

200

Area = 0.0370 * Conc + 0.107
Conc = 27.0 * Area - 2.85
Correlation Coefficient (r) = 0.99969

No Weighting

Miscellaneous

DATA EXCEPTION REPORT

Mo.Day Yr. 14-JAN-10	Division: Federal	Quality Criteria: SOP	Type: Process
Instrument Type: LACHAT Flow Injection Analyzer	Test / Method: SW846 9012A	Matrix Type: Solid	Client Code: LANL
Batch ID: 940234	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 244125(10-1130),244128(10-1132),244224(10-1156) Application Issues: Failed Recovery for MSD/PSD			
Specification and Requirements		DER Disposition:	
Exception Description: 1. Failed recovery for MSD: QC 1202012049MSD		1. The spike duplicate recovery falls outside of the client specified acceptance limits. Since both the spike recovery and the RPD between the spike and spike duplicate fall within acceptance limits, the data is reported.	

Originator's Name:

Ashley Earl

14-JAN-10

Data Validator/Group Leader:

Elzbieta Szulc

21-JAN-10

General Chemistry Analysis

Case Narrative

**General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1132-1**

Method/Analysis Information

Product: Cyanide, Total

Analytical Batch: 939574 **Method:** SW846 9012A

Prep Batch : 939573 **Method:** SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
244129001	RE12-10-7659
244129002	RE12-10-7661
244129003	RE12-10-7660
1202010616	Method Blank (MB)
1202010617	244041001(NPDES03A130-10-10006) Sample Duplicate (DUP)
1202010618	244038001(RE52-10-9514) Sample Duplicate (DUP)
1202010620	244041001(NPDES03A130-10-10006) Matrix Spike (MS)
1202010621	244038001(RE52-10-9514) Matrix Spike (MS)
1202010623	244041001(NPDES03A130-10-10006) Matrix Spike Duplicate (MSD)
1202010624	244038001(RE52-10-9514) Matrix Spike Duplicate (MSD)
1202010626	Laboratory Control Sample (LCS)

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

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information**Method Blank (MB) Statement**

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

The following samples were selected for QC analysis: 244038001 (RE52-10-9514) and 244041001 (NPDES03A130-10-10006).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The spike recovery falls outside of the established acceptance limits due to matrix interference: 1202010620 (NPDES03A130-10-10006).

Matrix Spike Duplicate (MSD) Recovery Statement

The spike duplicate recovery falls outside of the established acceptance limits due to matrix interference: 1202010623 (NPDES03A130-10-10006).

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. 1202010617 (NPDES03A130-10-10006) and 1202010618 (RE52-10-9514).

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 CCV failure: 244129003 (RE12-10-7660).

Miscellaneous Information

Data Exception (DER) Documentation

The following DER was generated for this SDG: 779837 1202010620 (NPDES03A130-10-10006) and 1202010623 (NPDES03A130-10-10006).

Additional Comments

Additional comments were not required for this SDG.

Electronic Packaging Comment

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

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

Certification Statement

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

Review Validation:

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

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

Reviewer:  Date: 02Feb10

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: 10-1132-1 GEL Work Order: 244129

The Qualifiers in this report are defined as follows:

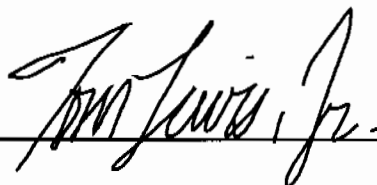
- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

A handwritten signature in black ink, appearing to read "Tom Lewis, Jr.", is written over a horizontal line.

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 15, 2010

Client SDG: 10-1132-1

Client Sample ID: RE12-10-7659
Sample ID: 244129001
Matrix: W
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	01/12/10	1218	939574	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/11/10	1322	939573

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 15, 2010

Client SDG: 10-1132-1

Client Sample ID: RE12-10-7661
Sample ID: 244129002
Matrix: W
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	01/12/10	1219	939574	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/11/10	1322	939573

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: January 15, 2010

Client SDG: 10-1132-1

Client Sample ID: RE12-10-7660
Sample ID: 244129003
Matrix: W
Collect Date: 05-JAN-10 12:00
Receive Date: 08-JAN-10
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	01/12/10	1341	939574	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/11/10	1322	939573

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 15, 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: 244129

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Flow Injection Analysis											
Batch	939574										
QC1202010617	244041001	DUP									
Cyanide, Total		U	ND	U	ND	ug/L	N/A		AXC2	01/12/10	12:14
QC1202010618	244038001	DUP									
Cyanide, Total		J	1.96	U	ND	ug/L	200 ^			01/12/10	12:04
QC1202010626	LCS										
Cyanide, Total	50.0				48.8	ug/L	97.6	(90%-110%)		01/12/10	11:54
QC1202010616	MB										
Cyanide, Total				U	5.00	ug/L				01/12/10	11:53
QC1202010620	244041001	MS									
Cyanide, Total	100	U	ND		33.0	ug/L	33 *	(60%-127%)		01/12/10	12:14
QC1202010621	244038001	MS									
Cyanide, Total	100	J	1.96		101	ug/L	99	(60%-127%)		01/12/10	12:05
QC1202010623	244041001	MSD									
Cyanide, Total	100	U	ND		34.1	ug/L	3.28	34.1 *	(0%-20%)	01/12/10	12:15
QC1202010624	244038001	MSD									
Cyanide, Total	100	J	1.96		105	ug/L	3.88	103	(0%-20%)	01/12/10	12:06

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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 244129

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%										
R	Sample results are rejected										
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.										
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
Y	QC Samples were not spiked with this compound										
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.										
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.										
d	5-day BOD--The 2:1 depletion requirement was not met for this sample										
h	Preparation or preservation holding time was exceeded										

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 15-JAN-2010 11:04

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1132-1

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	12-JAN-2010 11:16:16	OM_1-12-2010_11-08-12	145	150	97	(90%-110%)	Yes
CCV	12-JAN-2010 11:42:58	OM_1-12-2010_11-08-12	96.9	100	97	(90%-110%)	Yes
CCV	12-JAN-2010 11:55:19	OM_1-12-2010_11-08-12	97.9	100	98	(90%-110%)	Yes
CCV	12-JAN-2010 12:07:50	OM_1-12-2010_11-08-12	97.1	100	97	(90%-110%)	Yes
CCV	12-JAN-2010 12:20:19	OM_1-12-2010_11-08-12	96.9	100	97	(90%-110%)	Yes
CCV	12-JAN-2010 13:37:09	OM_1-12-2010_13-35-37	95.1	100	95	(90%-110%)	Yes
CCV	12-JAN-2010 13:49:37	OM_1-12-2010_13-35-37	96.4	100	96	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	12-JAN-2010 11:18:06	OM_1-12-2010_11-08-12	-1.77	5	Yes
CCB	12-JAN-2010 11:44:47	OM_1-12-2010_11-08-12	1.24	5	Yes
CCB	12-JAN-2010 11:57:09	OM_1-12-2010_11-08-12	1.11	5	Yes
CCB	12-JAN-2010 12:09:40	OM_1-12-2010_11-08-12	1.77	5	Yes
CCB	12-JAN-2010 12:22:09	OM_1-12-2010_11-08-12	1.19	5	Yes
CCB	12-JAN-2010 13:39:00	OM_1-12-2010_13-35-37	1.81	5	Yes
CCB	12-JAN-2010 13:51:27	OM_1-12-2010_13-35-37	1.51	5	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5
 Batch: 939573
 Lab SOP: GL-GC-E-067 REV# 13

Verified by: _____

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202010616		EPA 335.4	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.0125	mL
LCS	1202010626		EPA 335.4	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
SAMPLE	244017002		EPA 335.4	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
SAMPLE	244032002		SW846 9010B Prep	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
DUP	1202010619	244032002	SW846 9010B Prep	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
MS	1202010622	244032002	SW846 9010B Prep	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
MSD	1202010625	244032002	SW846 9010B Prep	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
SAMPLE	244038001		SW846 9010B Prep	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
DUP	1202010618	244038001	SW846 9010B Prep	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
MS	1202010621	244038001	SW846 9010B Prep	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
MSD	1202010624	244038001	SW846 9010B Prep	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
SAMPLE	244038002		SW846 9010B Prep	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
SAMPLE	244038003		SW846 9010B Prep	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
SAMPLE	244038004		SW846 9010B Prep	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
SAMPLE	244041001		EPA 335.4	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
DUP	1202010617	244041001	EPA 335.4	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
MS	1202010620	244041001	EPA 335.4	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
MSD	1202010623	244041001	EPA 335.4	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
SAMPLE	244069002		EPA 335.4	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
SAMPLE	244080002		EPA 335.4	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
SAMPLE	244129001		SW846 9010B Prep	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
SAMPLE	244129002		SW846 9010B Prep	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
SAMPLE	244129003		SW846 9010B Prep	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
SAMPLE	244141001		SW846 9010B Prep	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
SAMPLE	244141002		SW846 9010B Prep	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
SAMPLE	244145001		SW846 9010B Prep	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL

Prep Data Logbook Version 1:1

GEL Laboratories LLC

Page# _____

Prep LogBook

Analyst: AXSS
 Batch: 939573
 Lab SOP: GL-GC-E-067 REV# 13

Verified by: _____

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
SAMPLE	244208001		SW846 9010B Prep	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.0125	mL
SAMPLE	244208002		SW846 9010B Prep	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
SAMPLE	244213001		SW846 9010B Prep	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
SAMPLE	244217001		SW846 9010B Prep	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL
SAMPLE	244217002		SW846 9010B Prep	11-JAN-2010 13:22	>12	25 mL	25 mL	1	.025	mL

Comments

Reagent/Solvent Lot ID	Amount	Description
091211-C	25 mL	0.25N Sodium Hydroxide Solution
WCN100111-07	.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

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	1/12/2010 11:09:07	OM_1-12-2010_11-08-12
150 ppb		1	axc2	1/12/2010 11:10:00	OM_1-12-2010_11-08-12
100 ppb		1	axc2	1/12/2010 11:10:52	OM_1-12-2010_11-08-12
50 ppb		1	axc2	1/12/2010 11:11:45	OM_1-12-2010_11-08-12
10 ppb		1	axc2	1/12/2010 11:12:38	OM_1-12-2010_11-08-12
CRDL 5.0 ppb		1	axc2	1/12/2010 11:13:32	OM_1-12-2010_11-08-12
ICAL-00		1	axc2	1/12/2010 11:14:26	OM_1-12-2010_11-08-12
ICV		1	axc2	1/12/2010 11:16:16	OM_1-12-2010_11-08-12
ICB		1	axc2	1/12/2010 11:18:06	OM_1-12-2010_11-08-12
CRDL		1	axc2	1/12/2010 11:19:56	OM_1-12-2010_11-08-12
1202011987	940215	1	axc2	1/12/2010 11:21:45	OM_1-12-2010_11-08-12
1202011994	940215	25	axc2	1/12/2010 11:22:38	OM_1-12-2010_11-08-12
244137001	940215	1	axc2	1/12/2010 11:23:31	OM_1-12-2010_11-08-12
244137002	940215	1	axc2	1/12/2010 11:24:25	OM_1-12-2010_11-08-12
244137003	940215	1	axc2	1/12/2010 11:25:17	OM_1-12-2010_11-08-12
244137004	940215	1	axc2	1/12/2010 11:26:10	OM_1-12-2010_11-08-12
244207004	940215	1	axc2	1/12/2010 11:27:03	OM_1-12-2010_11-08-12
1202011988	940215	1	axc2	1/12/2010 11:27:55	OM_1-12-2010_11-08-12
1202011990	940215	1	axc2	1/12/2010 11:28:48	OM_1-12-2010_11-08-12
1202011992	940215	1	axc2	1/12/2010 11:29:40	OM_1-12-2010_11-08-12
CCV		1	axc2	1/12/2010 11:30:33	OM_1-12-2010_11-08-12
CCB		1	axc2	1/12/2010 11:32:23	OM_1-12-2010_11-08-12
244218001	940215	1	axc2	1/12/2010 11:34:11	OM_1-12-2010_11-08-12
1202011989	940215	1	axc2	1/12/2010 11:35:02	OM_1-12-2010_11-08-12
1202011991	940215	1	axc2	1/12/2010 11:35:54	OM_1-12-2010_11-08-12
1202011993	940215	1	axc2	1/12/2010 11:36:46	OM_1-12-2010_11-08-12
244218002	940215	1	axc2	1/12/2010 11:37:38	OM_1-12-2010_11-08-12
244218003	940215	1	axc2	1/12/2010 11:38:32	OM_1-12-2010_11-08-12
244218004	940215	1	axc2	1/12/2010 11:39:25	OM_1-12-2010_11-08-12
244218005*	940215	1	axc2	1/12/2010 11:40:19	OM_1-12-2010_11-08-12
244224001	940215	1	axc2	1/12/2010 11:41:12	OM_1-12-2010_11-08-12
244224002	940215	1	axc2	1/12/2010 11:42:05	OM_1-12-2010_11-08-12
CCV		1	axc2	1/12/2010 11:42:58	OM_1-12-2010_11-08-12
CCB		1	axc2	1/12/2010 11:44:47	OM_1-12-2010_11-08-12
244224003	940215	1	axc2	1/12/2010 11:46:36	OM_1-12-2010_11-08-12
244224004	940215	1	axc2	1/12/2010 11:47:29	OM_1-12-2010_11-08-12
244224005	940215	1	axc2	1/12/2010 11:48:22	OM_1-12-2010_11-08-12
244224006	940215	1	axc2	1/12/2010 11:49:14	OM_1-12-2010_11-08-12
244224007	940215	1	axc2	1/12/2010 11:50:07	OM_1-12-2010_11-08-12
244224008	940215	1	axc2	1/12/2010 11:50:59	OM_1-12-2010_11-08-12
244224009	940215	1	axc2	1/12/2010 11:51:51	OM_1-12-2010_11-08-12
244224010	940215	1	axc2	1/12/2010 11:52:44	OM_1-12-2010_11-08-12
1202010616	939574	1	axc2	1/12/2010 11:53:35	OM_1-12-2010_11-08-12
1202010626	939574	1	axc2	1/12/2010 11:54:27	OM_1-12-2010_11-08-12
CCV		1	axc2	1/12/2010 11:55:19	OM_1-12-2010_11-08-12
CCB		1	axc2	1/12/2010 11:57:09	OM_1-12-2010_11-08-12
244017002	939574	1	axc2	1/12/2010 11:58:59	OM_1-12-2010_11-08-12
244032002	939574	1	axc2	1/12/2010 11:59:53	OM_1-12-2010_11-08-12
1202010619	939574	1	axc2	1/12/2010 12:00:46	OM_1-12-2010_11-08-12
1202010622	939574	1	axc2	1/12/2010 12:01:40	OM_1-12-2010_11-08-12
1202010625	939574	1	axc2	1/12/2010 12:02:33	OM_1-12-2010_11-08-12
244038001	939574	1	axc2	1/12/2010 12:03:27	OM_1-12-2010_11-08-12
1202010618	939574	1	axc2	1/12/2010 12:04:19	OM_1-12-2010_11-08-12
1202010621	939574	1	axc2	1/12/2010 12:05:12	OM_1-12-2010_11-08-12
1202010624	939574	1	axc2	1/12/2010 12:06:05	OM_1-12-2010_11-08-12
244038002	939574	1	axc2	1/12/2010 12:06:58	OM_1-12-2010_11-08-12
CCV		1	axc2	1/12/2010 12:07:50	OM_1-12-2010_11-08-12
CCB		1	axc2	1/12/2010 12:09:40	OM_1-12-2010_11-08-12

244038003	939574	1	axc2	1/12/2010	12:11:28	OM_1-12-2010_11-08-12
244038004	939574	1	axc2	1/12/2010	12:12:21	OM_1-12-2010_11-08-12
244041001	939574	1	axc2	1/12/2010	12:13:13	OM_1-12-2010_11-08-12
1202010617	939574	1	axc2	1/12/2010	12:14:05	OM_1-12-2010_11-08-12
1202010620	939574	1	axc2	1/12/2010	12:14:57	OM_1-12-2010_11-08-12
1202010623	939574	1	axc2	1/12/2010	12:15:52	OM_1-12-2010_11-08-12
244069002	939574	1	axc2	1/12/2010	12:16:45	OM_1-12-2010_11-08-12
244080002	939574	1	axc2	1/12/2010	12:17:39	OM_1-12-2010_11-08-12
244129001	939574	1	axc2	1/12/2010	12:18:33	OM_1-12-2010_11-08-12
244129002	939574	1	axc2	1/12/2010	12:19:26	OM_1-12-2010_11-08-12
CCV		1	axc2	1/12/2010	12:20:19	OM_1-12-2010_11-08-12
CCB		1	axc2	1/12/2010	12:22:09	OM_1-12-2010_11-08-12
244129003*	939574	1	axc2	1/12/2010	12:23:58	OM_1-12-2010_11-08-12
244141001*	939574	1	axc2	1/12/2010	12:24:51	OM_1-12-2010_11-08-12
244141002*	939574	1	axc2	1/12/2010	12:25:44	OM_1-12-2010_11-08-12
244145001*	939574	1	axc2	1/12/2010	12:26:37	OM_1-12-2010_11-08-12
244208001*	939574	1	axc2	1/12/2010	12:27:30	OM_1-12-2010_11-08-12
244208002*	939574	1	axc2	1/12/2010	12:28:23	OM_1-12-2010_11-08-12
244213001*	939574	1	axc2	1/12/2010	12:29:15	OM_1-12-2010_11-08-12
244217001*	939574	1	axc2	1/12/2010	12:30:07	OM_1-12-2010_11-08-12
244217002*	939574	1	axc2	1/12/2010	12:30:59	OM_1-12-2010_11-08-12
CCV		1	axc2	1/12/2010	12:31:52	OM_1-12-2010_11-08-12

Author: axc2

Date : 1/12/2010

Original Run Filename: OM_1-12-2010_11-08-12.OMN created 1/12/2010 11:08:12
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_1-12-2010_11-08-12.OMN last modified 1/12/2010 12:32:57
 Current Run Author's Signature: [axc2]
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
 Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE		Detection Time	ADF	MDF	Description
			Conc. (ug/L)	Area (Vs)				
WCN100112-01	1	S1	200	7.94	1/12/2010@11:09:07			200 ppb
WCN100112-02	1	S2	150	6.02	1/12/2010@11:10:00			150 ppb
WCN100112-03	1	S3	100	3.87	1/12/2010@11:10:52			100 ppb
WCN100112-04	1	S4	50.0	2.13	1/12/2010@11:11:45			50 ppb
WCN100112-05	1	S5	10.0	0.488	1/12/2010@11:12:38			10 ppb
WCN100112-06	1	S6	5.00	0.309	1/12/2010@11:13:32			CRDL 5.0 ppb
WCN100112-08	1	S7	0.00	0.00873	1/12/2010@11:14:26			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99970 > 0.99500					
Message			Pass					
Action			Continue					
WCN100112-07	1	S8	145	5.76	1/12/2010@11:16:16			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			-3.6 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-3.6 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100112-08	1	S7	-1.77	0.00574	1/12/2010@11:18:06			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.77 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.77 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100112-06	1	S6	5.80	0.303	1/12/2010@11:19:56			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			5.80 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			5.80 > 2.50					
Message			Pass					
Action			None					
1202011987|940215|MB	1	1	-1.57	0.0133	1/12/2010@11:21:45			
1202011994|LCS	1	2	30.1	1.26	1/12/2010@11:22:38		25.00	
244137001	1	3	1.04	0.116	1/12/2010@11:23:31			
244137002	1	4	-0.267	0.0647	1/12/2010@11:24:25			
244137003	1	5	0.553	0.0969	1/12/2010@11:25:17			
244137004	1	6	0.0801	0.0783	1/12/2010@11:26:10			
244207004	1	7	0.151	0.0811	1/12/2010@11:27:03			
1202011988|DUP	1	8	-0.229	0.0662	1/12/2010@11:27:55			
1202011990|MS	1	9	86.3	3.47	1/12/2010@11:28:48			
1202011992|MSD	1	10	83.3	3.35	1/12/2010@11:29:40			
WCN100112-03	1	S3	98.8	3.96	1/12/2010@11:30:33			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-1.2 < 10.0					

Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			-1.2 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100112-08	1	S7	1.80	0.146	1/12/2010@11:32:23		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			1.80 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			1.80 > -5.00				
Message			CCB Passed				
Action			Continue				
244218001	1	11	2.38	0.169	1/12/2010@11:34:11		
1202011989|DUP	1	12	3.58	0.216	1/12/2010@11:35:02		
1202011991|MS	1	13	90.1	3.62	1/12/2010@11:35:54		
1202011993|MSD	1	14	94.2	3.78	1/12/2010@11:36:46		
244218002	1	15	7.26	0.361	1/12/2010@11:37:38		
244218003	1	16	6.17	0.318	1/12/2010@11:38:32		
244218004	1	17	3.93	0.230	1/12/2010@11:39:25		
244218005	1	18	7.79	0.381	1/12/2010@11:40:19		
244224001	1	19	1.11	0.119	1/12/2010@11:41:12		
244224002	1	20	0.132	0.0804	1/12/2010@11:42:05		
WCN100112-03	1	S3	96.9	3.88	1/12/2010@11:42:58		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			-3.1 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			-3.1 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100112-08	1	S7	1.24	0.124	1/12/2010@11:44:47		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			1.24 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			1.24 > -5.00				
Message			CCB Passed				
Action			Continue				
244224003	1	21	6.68	0.338	1/12/2010@11:46:36		
244224004	1	22	0.274	0.0860	1/12/2010@11:47:29		
244224005	1	23	6.44	0.328	1/12/2010@11:48:22		
244224006	1	24	2.57	0.176	1/12/2010@11:49:14		
244224007	1	25	6.77	0.341	1/12/2010@11:50:07		
244224008	1	26	0.952	0.113	1/12/2010@11:50:59		
244224009	1	27	5.13	0.277	1/12/2010@11:51:51		
244224010	1	28	1.33	0.127	1/12/2010@11:52:44		
1202010616|939574|MB	1	29	-1.88	0.00114	1/12/2010@11:53:35		
1202010626|LCS	1	30	48.8	1.99	1/12/2010@11:54:27		
WCN100112-03	1	S3	97.9	3.92	1/12/2010@11:55:19		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			-2.1 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			-2.1 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100112-08	1	S7	1.11	0.119	1/12/2010@11:57:09		CCB
Known Conc:			0.00				

DQM Test: > + Concentration Limit						
Result:	1.11 < 5.00					
Message	CCB Passed					
Action	Continue					
DQM Test: < - Concentration Limit						
Result:	1.11 > -5.00					
Message	CCB Passed					
Action	Continue					
244017002	1	31	91.7	3.68	1/12/2010@11:58:59	
244032002	1	32	2.39	0.169	1/12/2010@11:59:53	
1202010619	DUP	1	33	-0.641	0.0500	1/12/2010@12:00:46
1202010622	MS	1	34	96.7	3.88	1/12/2010@12:01:40
1202010625	MSD	1	35	106	4.23	1/12/2010@12:02:33
244038001	1	36	1.96	0.152	1/12/2010@12:03:27	
1202010618	DUP	1	37	-0.657	0.0494	1/12/2010@12:04:19
1202010621	MS	1	38	101	4.04	1/12/2010@12:05:12
1202010624	MSD	1	39	105	4.21	1/12/2010@12:06:05
244038002	1	40	2.36	0.168	1/12/2010@12:06:58	
WCN100112-03	1	S3	97.1	3.89	1/12/2010@12:07:50	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					
WCN100112-08	1	S7	1.77	0.145	1/12/2010@12:09:40	CCB
Known Conc:			0.00			
DQM Test: > + Concentration Limit						
Result:	1.77 < 5.00					
Message	CCB Passed					
Action	Continue					
DQM Test: < - Concentration Limit						
Result:	1.77 > -5.00					
Message	CCB Passed					
Action	Continue					
244038003	1	41	-1.09	0.0323	1/12/2010@12:11:28	
244038004	1	42	-1.38	0.0208	1/12/2010@12:12:21	
244041001	1	43	-0.838	0.0423	1/12/2010@12:13:13	
1202010617	DUP	1	44	-1.41	0.0196	1/12/2010@12:14:05
1202010620	MS	1	45	33.0	1.37	1/12/2010@12:14:57
1202010623	MSD	1	46	34.1	1.42	1/12/2010@12:15:52
244069002	1	47	15.1	0.669	1/12/2010@12:16:45	
244080002	1	48	53.7	2.19	1/12/2010@12:17:39	
244129001	1	49	1.22	0.123	1/12/2010@12:18:33	
244129002	1	50	-1.56	0.0139	1/12/2010@12:19:26	
WCN100112-03	1	S3	96.9	3.89	1/12/2010@12:20:19	CCV
Known Conc:			100			
DQM Test: > + Percent Relative Difference						
Result:	-3.1 < 10.0					
Message	CCV Passed					
Action	Continue					
DQM Test: < - Percent Relative Difference						
Result:	-3.1 < 10.0					
Message	CCV Passed					
Action	Continue					
WCN100112-08	1	S7	1.19	0.122	1/12/2010@12:22:09	CCB
Known Conc:			0.00			
DQM Test: > + Concentration Limit						
Result:	1.19 < 5.00					
Message	CCB Passed					
Action	Continue					
DQM Test: < - Concentration Limit						
Result:	1.19 > -5.00					
Message	CCB Passed					
Action	Continue					

244129003	1	51	-1.28	0.0250	1/12/2010@12:23:58			
244141001	1	52	-1.79	0.00481	1/12/2010@12:24:51			
244141002	1	53	-1.59	0.0126	1/12/2010@12:25:44			
244145001	1	54	-1.29	0.0245	1/12/2010@12:26:37			
244208001	1	55	-2.04	-0.00515	1/12/2010@12:27:30			
244208002	1	56	-1.71	0.00813	1/12/2010@12:28:23			
244213001	1	57	-1.90	3.21e-4	1/12/2010@12:29:15			
244217001	1	58	-2.17	-0.0101	1/12/2010@12:30:07			
244217002	1	59	-1.27	0.0253	1/12/2010@12:30:59			
WCN100112-03	1	S3	17.8	0.775	1/12/2010@12:31:52			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-82.2 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-82.2 < 10.0					
Message			CCV Failed					
Action			Stop Run					

Analyte Properties Table for OM_1-12-2010_11-08-12.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

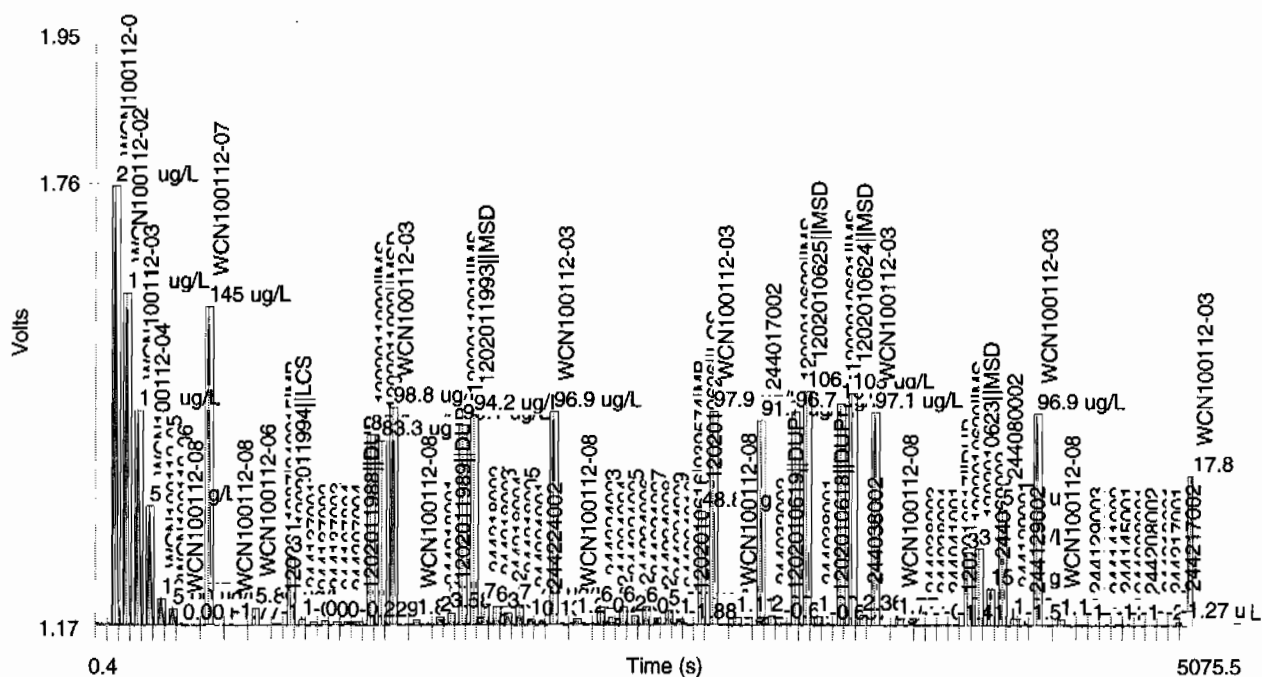
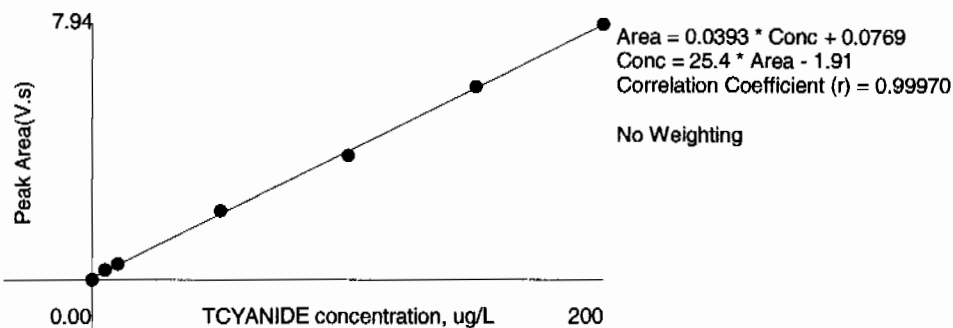


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.94	0.578	-0.0	1/12/2010	11:10:10
2	150	1	6.02	0.438	-0.8	1/12/2010	11:11:02
3	100	1	3.87	0.285	3.3	1/12/2010	11:11:55
4	50.0	1	2.13	0.156	-4.6	1/12/2010	11:12:48
5	10.0	1	0.488	0.0340	-3.9	1/12/2010	11:13:41
6	5.00	1	0.309	0.0212	-12.9	1/12/2010	11:14:35
7	0.00	1	0.00873	7.24e-4		1/12/2010	11:15:29

Figure 1: TCYANIDE



This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	1/12/2010 13:37:09	OM_1-12-2010_13-35-37
CCB		1	axc2	1/12/2010 13:39:00	OM_1-12-2010_13-35-37
244218005	940215	1	axc2	1/12/2010 13:40:49	OM_1-12-2010_13-35-37
244129003	939574	1	axc2	1/12/2010 13:41:43	OM_1-12-2010_13-35-37
244141001	939574	1	axc2	1/12/2010 13:42:36	OM_1-12-2010_13-35-37
244141002	939574	1	axc2	1/12/2010 13:43:29	OM_1-12-2010_13-35-37
244145001	939574	1	axc2	1/12/2010 13:44:21	OM_1-12-2010_13-35-37
244208001	939574	1	axc2	1/12/2010 13:45:14	OM_1-12-2010_13-35-37
244208002	939574	1	axc2	1/12/2010 13:46:07	OM_1-12-2010_13-35-37
244213001	939574	1	axc2	1/12/2010 13:46:59	OM_1-12-2010_13-35-37
244217001	939574	1	axc2	1/12/2010 13:47:52	OM_1-12-2010_13-35-37
244217002	939574	1	axc2	1/12/2010 13:48:45	OM_1-12-2010_13-35-37
CCV		1	axc2	1/12/2010 13:49:37	OM_1-12-2010_13-35-37
CCB		1	axc2	1/12/2010 13:51:27	OM_1-12-2010_13-35-37

Original Run Filename: OM_1-12-2010_13-35-37.OMN created 1/12/2010 13:35:37
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_1-12-2010_13-35-37.OMN last modified 1/12/2010 13:52:31
 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		Detection Time	ADF	MDF	Description
			Conc. (ug/L)	Area (Vs)				
WCN100112-03	1	S3	95.1	3.81	1/12/2010@13:37:09			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-4.9 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-4.9 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100112-08	1	S7	1.81	0.146	1/12/2010@13:39:00			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			1.81 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.81 > -5.00					
Message			CCB Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
244218005[940215]	1	18	5.84	0.305	1/12/2010@13:40:49			
244129003[939574]	1	51	-0.821	0.0429	1/12/2010@13:41:43			
244141001	1	52	-1.42	0.0195	1/12/2010@13:42:36			
244141002	1	53	-1.44	0.0185	1/12/2010@13:43:29			
244145001	1	54	-1.06	0.0334	1/12/2010@13:44:21			
244208001	1	55	-1.93	-6.36e-4	1/12/2010@13:45:14			
244208002	1	56	-1.96	-0.00202	1/12/2010@13:46:07			
244213001	1	57	-0.831	0.0425	1/12/2010@13:46:59			
244217001	1	58	-1.36	0.0216	1/12/2010@13:47:52			
244217002	1	59	-1.65	0.0104	1/12/2010@13:48:45			
WCN100112-03	1	S3	96.4	3.87	1/12/2010@13:49:37			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-3.6 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-3.6 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100112-08	1	S7	1.51	0.135	1/12/2010@13:51:27			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			1.51 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.51 > -5.00					
Message			CCB Passed					
Action			Continue					

Analyte Properties Table for OM_1-12-2010_13-35-37.OMN

Property	Channel 1 TCYANIDE
----------	-----------------------

Concentration Units	ug/L
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

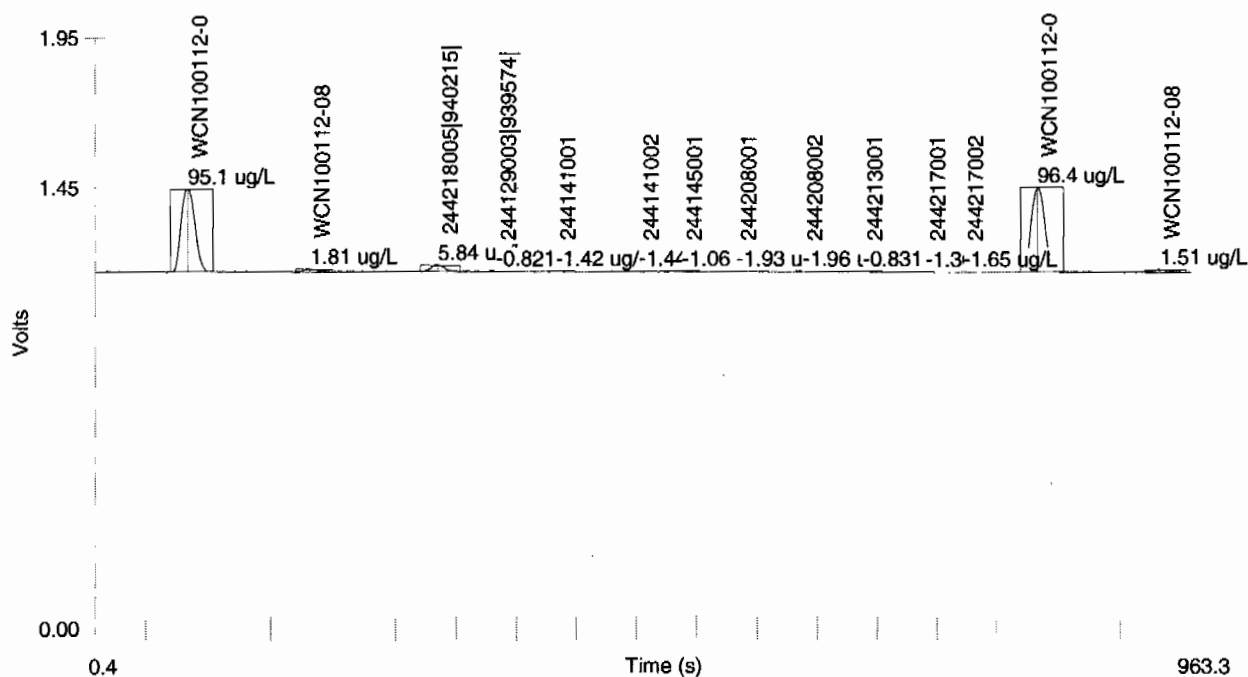
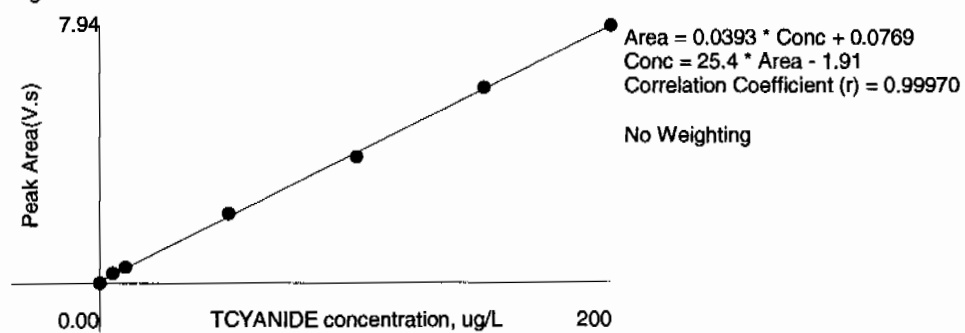


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.94	0.578	-0.0	1/12/2010	11:10:10
2	150	1	6.02	0.438	-0.8	1/12/2010	11:11:02
3	100	1	3.87	0.285	3.3	1/12/2010	11:11:55
4	50.0	1	2.13	0.156	-4.6	1/12/2010	11:12:48
5	10.0	1	0.488	0.0340	-3.9	1/12/2010	11:13:41
6	5.00	1	0.309	0.0212	-12.9	1/12/2010	11:14:35
7	0.00	1	0.00873	7.24e-4		1/12/2010	11:15:29

Figure 1: TCYANIDE



Miscellaneous

DATA EXCEPTION REPORT

Mo.Day Yr. 13-JAN-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: LACHAT Flow Injection Analyzer	Test / Method: EPA 335.4	Matrix Type: Liquid	Client Code: BOSH, BRKL, EASV, ESHL,
Batch ID: 939574	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 244017,244032,244038(10-1119-1),244041(10-1121),244069,244080,244129(10-1132-1),244141(10-1145-1),244145(10-1128-1),244208(10-1159-1),244213(10-1154),244217(10-1152) Application Issues: Failed Recovery for MS/PS Failed Recovery for MSD/PSD			
Specification and Requirements		DER Disposition:	
Exception Description:			
1. Failed Recovery for MS/MSD: QC 1202010620MS QC 1202010623MSD		1. The matrix spike falls outside of the required acceptance limits due to matrix interference. The matrix spike duplicate verified the result with a passing RPD.	

Originator's Name:

Ashley Earl 13-JAN-10

Data Validator/Group Leader:

Elzbieta Szulc 13-JAN-10